

**INTERNATIONAL REGISTRATION** no. 704835

**MADE IN ITALY** 



EXPERIENCE, QUALITY AND PROFESSIONALISM SINCE 1974

## THE EVOLUTION OF OUR PRODUCTION







































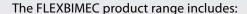


The knowledge acquired in that field enabled the company to specialize itself in the production of dispensing systems for lubricants, developing over the years a broad range of lubrication equipment.

The first product manufactured by Flexbimec was the pneumatic pump which very quickly became well - known for its easy handling and for its reliability.

And so the company's focus still is the production of high quality pumps which nowadays are present worldwide, even in the most specialized markets.

Thanks to a continuous and careful technical development, Flexbimec is able to offer a range of reliable and market - oriented products for the supply and the monitoring of lubricants.



- grease supply equipment;
- oil supply and electronic, computer based oil monitoring equipment;
- diesel supply and electronic, computer based diesel monitoring equipment;
- compressed air supply and washing equipment;
- equipment for the mixing and dosing of fluids;
- equipment for the collection, handling and storage of waste fluids, particularly of waste oils.

Flexbimec equipment is used in various applications such as in car, motorbike and commercial vehicle workshops, for industrial and agricultural machinery maintenance, in car wash sites, or in boat and ship maintenance.

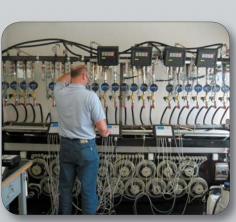
Besides of manufacturing the products, FLEXBIMEC is also projecting, installing and maintaining turnkey facilities for the handling and monitoring of lubricants in









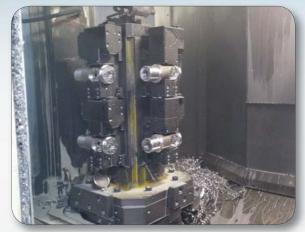


















car, motorbike and commercial vehicle workshops. Until now Flexbimec has done more than 500 of those lubrication facilities based on the individual requirements of its customers.

The products are distributed through a worldwide network of dealers with a continuously growing export rate.

The total surface of 63.000 m<sup>2</sup> and 7.000 m<sup>2</sup> covered area enable Flexbimec to grant the complete production and logistic handling of all it's range of equipment.

Also there are special areas for technical training, showroom and the testing of new products included.

Flexbimec has a modern organization with a quality assurance system according to **UNI EN ISO 9001:2015** and a range of meters with certification **MID MI-005 according to Directive 2014/32/EU.** 

Service and consulting are other strong arguments of the company: the customer is continuously accompanied by technically qualified staff in order to identify each of his requirements and to offer satisfying solutions to him.

Flexbimec has issued this new catalogue as a guide for your requirements regarding lubrication equipment, starting from the most simple accessory up to complete, computerized fluid monitoring systems.

Our company is sure that the variety of the innovative product range which has been developed by a continuous research of the user requirements, will help you to select and to install the equipment most suitable to simplify your daily work.













## CONTENT



	Prieumatic grease pumps	Page 9 - 16
	Pneumatic and manual grease supply kits	Page 17 - 27
	Grease nipples / couplers	Page 28
	Grease guns and cartridges	
GREASE	Accessories for grease lubrication	
	Digital grease flow meters	
	Accessories for grease pumps and kits	
	Hose reels and hoses for grease	
	Tiose reels and rioses for grease	rage 30 - 37
	Pneumatic oil pumps	Page 38 - 48
	Accessories for pneumatic oil pumps	Page 49 - 50
	Electric oil pumps	
	Manual oil pumps for oil and antifreeze	
	Pneumatic and manual oil dispensing units	
	Oil control guns and accessories	
	Electronic and mechanical oil flow meters	
	Pulsers	9
	Hose reels and hoses for oil	
OIL		
	Suction guns / push type grease guns	
	Graduated measures	
	Mobile and stationary oil dispensing kits	
	Oil supply stations	
	Spill containment pallets/ Drum lifts and cradle	
	Oil storage tanks / storage units for drums and tanks	
	Storage containers for drums and tanks	
	Heaters / tank fittings / hose storage rack	Page 102
SERVICE COLUMNS AND SERVICE STANDS	Service columns and service stands	Page 103 - 107
PIPEWORK	Pipework components	Page 108 - 111
	Electronic fluid monitoring and dosing systems	Page 112 - 118
MONITORING	Level gauges for oil	
moniformita	Components for the automation of installations	Page 120
	Waste oil drainers	
	Waste oil suction units	Page 126 - 127
	Combined waste oil drainers and suction units	
	Mobile and stationary waste oil suction systems	
WASTE OIL	Automatic waste oil suction system	
	Pneumatic diaphragm pumps	Page 136
	Waste oil treatment accessories	
	Pneumatic and electric brake bleeders	Page 138 - 139
	Waste oil storage tanks	Page 140
	Pneumatic diesel pumps and diesel transfer kits	Page 142
	Electric diesel pumps and kits	
	Electric diesel supply units	
DIESEL	Diesel dispensing nozzles and accessories	_
UILUL	Diesel filters and foot valves	
	Diesel flow meters	_
	Hose reels for diesel	9
	1103C 1CC13101 G1C3C1	rage 132 137

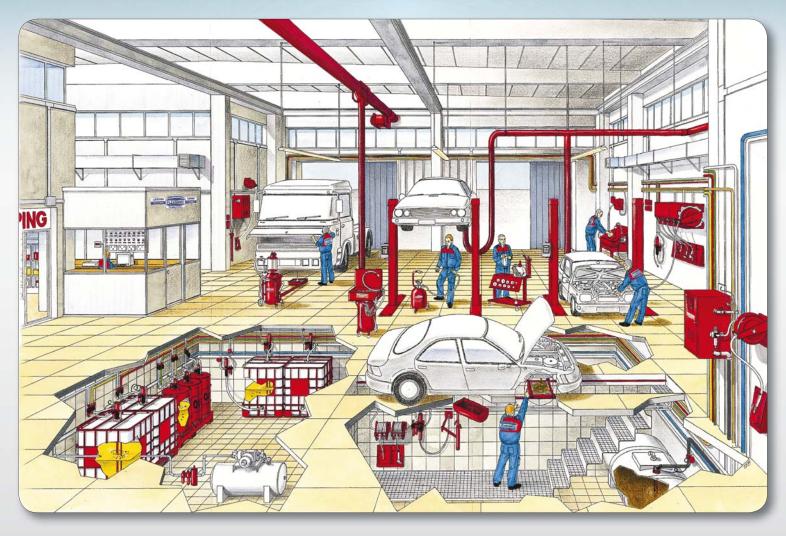
## **CONTENT**



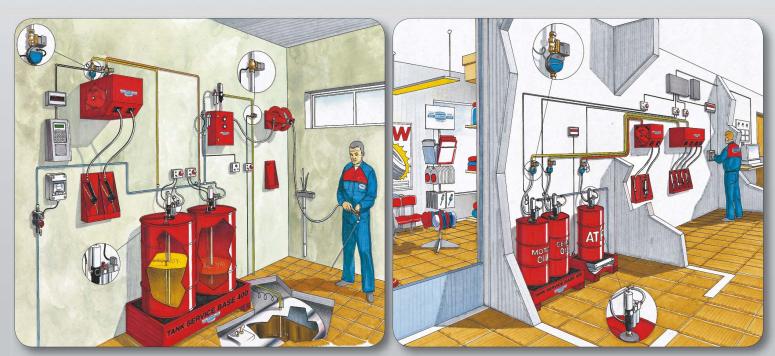
	Pneumatic and electric petrol pumps	Page 158
	Pneumatic and electric petrol dispensing kitskits	
	Mobile petrol suction units	
	Petrol dispensing nozzles / petrol flow meters	
PETROL		
TEIROE	Hose reels for petrol	
	Jerrycans	Page 103
PORTABLE STORAGE TANKS	Portable storage tanks for diesel – petrol – AdBlue®/DEF/AUS32	Page 164
	Manual and electric transfer pumps for AdBlue®/DEF/AUS32	
AdBlue®/DEF/AUS32	Pneumatic and electric AdBlue®/DEF/AUS32 dispensing kits	
Addide /DEF/A0332	AdBlue®/ DEF/AUS32 flow meter and kits Mid approved	
	AdBlue®/ DEF/AUS32 flow meters and nozzles	Page 173 - 174
WINDSHIELD WASHER FLUID	Windshield washer fluid dispensing kits	Page 175
	Pneumatic stainless steel pumps	Page 176 - 177
	Accessories for pneumatic stainless steel pumps	
OTHER FLUIDS	Manual stainless steel pumps / plastic chemical pumps	_
	Electric stainless steel pumps	
	Pressure sprayers and foamers	Page 182 - 185
WASHING	Washing and spraying accessories	
	Parts cleaners	
	Tyre inflators	Page 193
	Compressed air accessories	_
COMPRESSED AIR	Compressed air treatment components	
	Compressed air pipework components and accessories	
	Hose reels for compressed air	
	Introduction for choosing the suitable equipment	Page 200 - 203
	Automatic rewind, spring - driven hose reels	
	Vacuum / suction hose reels	
	Manual hose reels	•
	Motor operated hose reels	
HOSE REELS	Hose reels for welding	
	Exhaust extraction hose reels and hoses	
	Swivel joints and conections curves	
	Hose reel accessories	
	Hoses	_
FLUID MIXING	Fluid mixing equipment DOSAMIX 8400	Page 230 - 231
END - OF - LIFE VEHICLE DRAINAGE	End - of - life vehicle drainage equipment	Page 232 - 236
FILTRATION SYSTEMS	Mobile filtration units for diesel and oils	Page 237
TROLLEYS	Trolleys	Page 238
PART NUMBER INDEX	Part number index	Page 239 - 242



## FLEXBIMEC TECHNOLOGY AND EXPERIENCE FOR YOUR NEEDS



## YOUR SPECIALISTS IN LUBRICATION EQUIPMENT





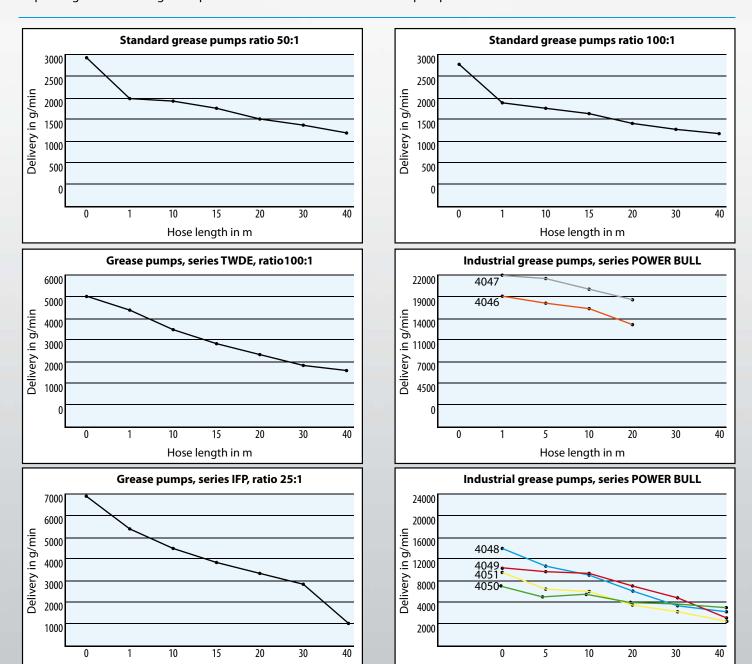
FLEXBIMEC pneumatic grease pumps are a well - proven product line since many years. The brass and aluminum alloy pneumatic motor assures a reliable use and a simple maintenance. The pumping system includes a rod in hardened steel, suitable also for heavy duty applications. The gaskets and seals are suitable for the use with almost all multipurpose greases on the basis of mineral oil from viscosity NLGI 00 up to NLGI 3.

The choice of the suitable pump for the individual application depends a lot on the type and the characteristics of the lubricant that shall be pumped.

Pumping grease means to move a high viscosity fluid which at the dispensing point presents a dense condition.

The VISCOSITY of a fluid describes its capability to resist the movements of its particles.

The COMPRESSION RATIO describes the ratio between the surface of the piston inside of the pump motor and the surface of the piston that is pumping the fluid. The bigger this value is, the higher is the outlet pressure of the fluid. Since greases are mixtures of mineral oils and soaps (dense, inorganic substances) and therefore have a high viscosity, it is necessary to use pumps for the dispensing that have a high compression ratio such as 50:1 – or 100:1 – pumps.



The charts are only indications and cannot consider all factors affecting the pumping result such as viscosity, temperature, dimension of hose or pipe, pumping distance, etc.

Test conditions:

Hose length in m

lithium grease NLGI 0 – ambient temperature 22°C - inlet pressure (compressed air) 8 bar – Free 1/2" for 50:1 and 100:1 - pumps, standard series, 1" for pump series Power Bull and TWDE

Grease

Hose length in m



# PNEUMATIC PISTON GREASE PUMPS STANDARD SERIES

Pneumatic pumps for the dispensing of grease at short and medium distances or for high pressure lubrication.



Art. no. 4018

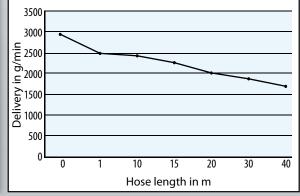






Art. no.	4018	4020	4060	4080			
Compressed air supply		Pressure min 2 - max 8 bar					
Compression ratio		50	):1				
Outlet pressure		400	bar				
Delivery		2900 g/min					
Connection compressed air	1/4" BSP (F)						
Connection lubricant outlet	1/4" BSP (M)						
Max air consumption with 8 bar pressure		78 l/	min 'min				
Length suction tube	335 mm	450 mm	750 mm	950 mm			
Diameter suction tube		28 1	mm				
Dimensions LxWxH (mm)	95x95x690 95x95x780 95x95x1005 95x			95x95x1250			
Suitable for pails / drums of	16 kg	18 - 25 kg	50 kg	180 kg			
Weight	3.8 kg	4.2 kg	5 kg	5.6 kg			





See accessories on pages 30 – 37!

The a. m. performance values are based upon the following test conditions: lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet 1/2".



Max outlet pressure 800 bar

For 16 kg - pails

# PNEUMATIC PISTON GREASE PUMPS STANDARD SERIES

## Pneumatic pumps for the dispensing of grease at long distances or for high pressure lubrication.





For **18/25 kg**- pails

5 kg

5.6 kg



Art. no. 4061

100:1 Compression ratio

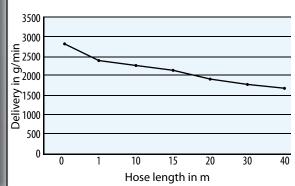


Art. no.	4019	4021	4061	4081	
Compressed air supply		Pressure min	2 - max 8 bar		
Compression ratio		10	0:1		
Outlet pressure		800	bar		
Delivery		2700	g/min		
Connection compressed air	1/4" BSP (F)				
Connection lubricant outlet		1/4" B	SP (M)		
Max air consumption with 8 bar pressure		1101	l/min		
Length suction tube	335 mm	450 mm	750 mm	950 mm	
Diameter suction tube	28 mm				
Dimensions LxWxH (mm)	95x95x690	95x95x780	95x95x1005	95x95x1250	
Suitable for pails / drums of	16 kg	18 - 25 kg	50 kg	180 kg	

4.2 kg

Art. no. 4021





See accessories on pages 30 – 37!

Weight

Art. no. 4019

The a. m. performance values are based upon the following test conditions:

3.8 kg

lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet 1/2".

Pag. 11 Grease

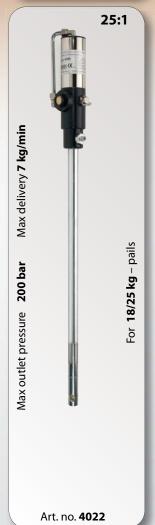


# PNEUMATIC PISTON GREASE PUMPS SERIES IFP

Pneumatic pumps for the transfer of grease or high viscosity oils at a constant pressure. Suitable also for the use as grease refilling pumps for centralized lubrication systems.

7:1 Compression ratio 45:1 Compression ratio

25:1 Compression ratio



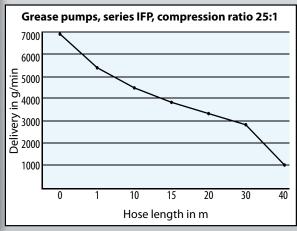








Art. no.	4043	4022	4062	4082	4083	
Compressed air supply		Pressu	re min 2 - ma	x 8 bar		
Compression ratio	7:1		25:1		45:1	
Outlet pressure	56 bar		200 bar		360 bar	
Delivery	9800 g/min		6900 g/min			
Connection compressed air	3/8" BSP (F)		1/4" E	BSP (F)		
Connection lubricant outlet	3/4" BSP (M)		1/2" B	SP (M)		
Max air consumption with 8 bar pressure	165 l/min		78 l	/min		
Length suction tube	950 mm	450 mm	750 mm	950	mm	
Diameter suction tube	33 mm	28 mm				
Dimensions LxWxH (mm)	95x95x1250	95x95x690	95x95x780	x95x780 95x95x1005		
Suitable for pails / drums of	180 kg	18 - 25 kg 50 kg 180 kg				
Weight	6 kg	4.2 kg	5.0 kg	5.6 kg	5.8 kg	



See accessories on pages 30 – 37!

The a.m. performance values are based upon the following test conditions: lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet 3/4".



100:1

Compression

# PNEUMATIC PISTON GREASE PUMPS TWDE SERIES

Pneumatic pumps for the dispensing of grease – particularly high viscosity grease - or for high pressure lubrication at long distances. These pumps combine a high compression ratio with an innovative constructional concept that permits to increase the delivery of the pump considerably. In the TWD Evolution series the escape of compressed air is facilitated by the use of a double distributor which at the same time reduces the formation of condensation water inside of the pump motor.

250:1 Compression ratio



Art. no. 4019TWDE

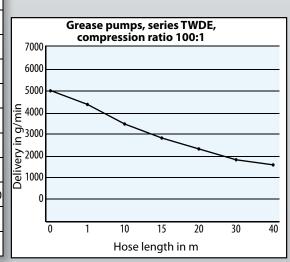








Art. no.	4019 TWDE	4021TWDE	4061TWDE	4081TWDE	4025	
Compressed air supply		Pressure min	2 - max 8 bar	•	Max 5 bar	
Compression ratio		10	0:1		250:1	
Outlet pressure		800	bar		1100 bar	
Delivery		5000 g/min				
Connection compressed air		3/8" BSP (F)				
Connection lubricant outlet			1/2" BSP (M)			
Max air consumption with 8 bar pressure			165 l/min			
Length suction tube	335 mm	450 mm	750 mm	950	mm	
Diameter suction tube			28 mm			
Dimensions LxWxH (mm)	95x95x690	95x95x690			130x130x1250	
Suitable for pails / drums of	16 kg 18 - 25 kg 50 kg 180 kg				) kg	
Weight	3.9 kg	4.3 kg	5.1 kg	5.7 kg	9.0 kg	



See accessories on pages 30 – 37!

The a.m. performance values are based upon the following test conditions: lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet 1/2".

Pag. 13 Grease



## PNEUMATIC PISTON GREASE PUMPS INDUSTRIAL PUMP SERIES "POWER BULL"

Heavy duty pneumatic pumps, industrial pump series "Power Bull", designed for the supply of grease under demanding conditions. Particularly suitable for the grease distribution in pipeworks and installations where a simultaneous supply of grease is required on different dispensing points at high pressure and/or with a high delivery.

The high quality of the materials used in order to realize the innovative constructional concept of the pneumatic motors of this series, guarantees the following characteristics and advantages:

- Efficiency of a continuous flow,
- Low loudness,
- Limited number of piston strokes,
- Low vibrations,
- Easy handling and interchangeability of components,
- System of condensation water draining, to avoid the pulverization into the surrounding area,
- Wide variety of accessories.

The pumps are available in various models with different compression ratios and delivery performances so that they offer a solution for all principal requirements in applications.



Art. no. 4046	Grease type NLGI					
m	0	1	2	3	Pressure	
1	19.00 18.00 18		18.00	18.00	104 bar	
5	18.00 16		<b>5</b>   18.00   16.00   13.20	13.20	11.00	96 bar
10	17.50 14.90		12.60	9.10	70 bar	
20	13.80	11.10	7.60	6.90	49 bar	

Art. no. 4047		Grease type NLGI					
m	0	1	2	3	Pressure		
1	22.00	21.00	21.00	21.00	56 bar		
5	21.50	20.00	16.90	14.20	38 bar		
10	20.00	18.40	15.00	12.10	20 bar		
20	18.60	17.00	10.20	7.40	14 bar		

Art. no. 4048	Grease type NLGI					
m	0	1	2	3	Pressure	
1	15.00	12.70	11.60	9.30	240 bar	
5	14.60	10.30	8.50	5.30	200 bar	
10	10.50	0 8.00 6.20	6.20	3.80	165 bar	
20	8.60	5.20	4.10	3.10	140 bar	
30	<b>30</b> 6.50 4.4	4.40	3.80	2.20	130 bar	
40	5.30	4.10	3.40	1.70	110 bar	
50	4.20	3.80	6.00	0.80	85 bar	
70	3.00	2.50	1.80	0.30	60 bar	

Art. no. 4049		Grease type NLGI					
m	0	1	2	3	Pressure		
1	13.10	9.60	8.60	7.80	400 bar		
5	12.90	9.00	7.90	5.60	360 bar		
10	12.20	8.20	6.70	4.00	240 bar		
20	10.60	6.40	4.80	2.30	220 bar		
30	8.80	4.70	3.10	2.10	180 bar		
40	8.00	3.20	2.50	1.70	150 bar		
50	7.60	2.80	2.20	1.40	110 bar		
70	7.20	2.50	1.90	0.90	85 bar		

Art. no. 4050	Grease type NLGI				
m	0	1	2	3	Pressure
1	7.00	6.30	5.70	5.10	720 bar
5	6.80	5.80	5.20	4.10	680 bar
10	6.40	10 5.30 4.7	4.70	3.50	420 bar
20	5.90	4.30	3.50	2.10	400 bar
30	4.80	3.30	2.90	1.90	370 bar
40	4.50	2.90	2.50	1.70	340 bar
50	<b>50</b> 4.30		2.20	1.60	250 bar
70	4.00	2.20	2.10	1.30	180 bar

### **Grease type NLGI 0**

		Art. no. Pump								
	m	4046	4046 4047 4048 4049 4050							
	1	19.00	22.00	15.00	13.00	7.00	4.80			
	5	18.00	21.50	14.60	12.50	6.80	4.60			
length	10	17.50	20.00	10.50	11.60	6.40	4.20			
euĉ	20	13.80	18.60	8.60	10.00	5.90	3.70			
Hosel	30			6.50	8.60	4.80	3.60			
유	40			5.30	6.00	4.50	3.30			
	50			4.20	5.40	4.30	3.10			
	70			3.00	4.00	4.00	2.80			

### **Grease type NLGI 2**

				Art. no	. Pump		
	m	4046	4047	4048	4049	4050	4051
	1	18.00	21.00	11.60	8.60	5.70	3.60
	5	13.20	16.90	8.50	7.90	5.20	3.40
length	10	12.60	15.00	6.20	6.70	4.70	3.10
enç	20	7.60	10.20	4.10	4.80	3.50	2.30
sel	30			3.80	3.10	2.90	1.90
Hose	40			3.40	2.50	2.50	1.65
	50			6.00	2.20	2.20	1.45
	70			2.00	1.90	2.10	1.36

The a.m. performance values refer to the pump delivery expressed in kg/min

## **Grease type NLGI 1**

				Art. no	. Pump		
	m	4046	4047	4048	4049	4050	4051
	1	18.00	21.00	12.70	9.60	6.30	4.10
	5	16.00	20.00	10.30	9.00	5.80	3.90
Jth	10	14.90	18.40	8.00	8.20	5.30	3.10
length	20	11.10	17.00	5.20	6.40	4.30	2.60
sel	30			4.40	4.70	3.30	3.05
Hose	40			4.10	3.20	2.90	2.30
	50			3.80	2.80	2.60	2.00
	70			1.80	2.50	2.20	1.85

## **Grease type NLGI 3**

				Art. no	. Pump		
	m	4046	4047	4048	4049	4050	4051
	1	18.00	21.00	9.30	7.80	5.10	3.00
	5	11.00	14.20	5.30	5.60	4.10	2.70
yth	10	9.10	12.10	3.80	4.00	3.50	2.30
length	20	6.90	7.40	3.10	2.30	2.10	1.40
sel	30			2.20	2.10	1.90	1.30
Hose	40			1.70	1.70	1.70	1.10
	50			0.80	1.40	1.60	1.05
	70			0.30	0.90	1.30	0.90

The a. m. performance values are based upon the following test conditions: compressed air pressure 8 bar - temperature  $24^{\circ}\text{C}$  – rubber outlet hose Ø 1" for the art. nos. 4048 - 4049 - 4050 - 4051 and rubber outlet hose Ø 1'1/2'' for the art. nos. 4046 and 4047.



# PNEUMATIC PISTON GREASE PUMPS INDUSTRIAL PUMP SERIES "POWER BULL"













Art. no.	4046	4047	4048	4049	4050	4051 4052
Compressed air supply			Pressure min	2 - max 8 bar		
Compression ratio	13:1	7:1	30:1	50:1	90:1	75:1
Max outlet pressure	104 bar	56 bar	240 bar	400 bar	720 bar	600 bar
Delivery	19000 g/min	22000 g/min	15000 g/min	12000 g/min	6000 g/min	4900 g/min
Max frequence strokes/min	60	120	150	120	60	60
Connection compressed air			1/2″B	SP (F)		
Connection lubricant outlet			1" BS	P (M)		
Max air consumption with 8 bar pressure	1.80 m <sup>3</sup> /min	1.92 m <sup>3</sup> /min	1.86 m <sup>3</sup> /min	1.92 m <sup>3</sup> /min	1.80 m <sup>3</sup> /min	1.80 m <sup>3</sup> /min
Diameter pneumatic piston	160 mm	125 mm	100 mm	125 mm	160 mm	160 mm
Diameter suction tube	70x50 mm	70x50 mm	50x22 mm	50x22 mm	50x22 mm	50x22 mm
Suitable for pails / drums of	180 kg					
Weight	26 kg	22 kg	18 kg	22 kg	24 kg	24 kg



Art. no. 7180/12 Art. no. 7150/12

## Maintenance advise

In order to avoid a slowing-down or even a blocking of the pump due to a freezing of generated condensation water closing the air outlet of the motor, we recommend the installation of the above shown air treatment units at the compressed air connection of the pump.

See accessories on pages 30 - 37!

The a. m. performance values are based upon the following test conditions: lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet.



## MOTOMATIC® System Patent no. 32188 C/80

In the year 1986 the innovative MOTOMATIC® – system has been developed and patented.

Motomatic® is a pneumatic pumping system which is characterized by the use of a single motor which can be applied on various suction tubes. The pumping system is activated by connecting the motor – which is provided with a quick coupling - to the installed suction tubes that differ depending on the lubricant that shall be pumped.

This solution offers a significant practical and economical advantage for whom must pump greases, oils, antifreeze or diesel, since it allows the user to leave the various suction tubes installed in the drums and to use the same pneumatic motor for pumping the required lubricant.

Bull versions enable to match 3 different sizes pneumatic motors with 2 different suction tubes to provide 6 different pumping solutions. For more details kindly request the Data Sheet.





Art. no.	5000	5040	5060	5081	5080	5011	5031	5032
Compressed air supply	2 - 8 bar	-	-	-	-	-	-	-
Compression ratio	-	50:1	50:1	15:1	50:1	1:1	3:1	3:1
Outlet pressure	-	400 bar	400 bar	120 bar	400 bar	8 bar	24 bar	24 bar
Delivery	-	2900 g/min	2900 g/min	7000 g/min	2900 g/min	48 l/min	23 l/min	23 l/min
Connection compressed air	1/4" BSP (F)	-	-	-	-	-	-	-
Connection lubricant outlet	-	1/4"BSP (M)	1/4"BSP (M)	1/2"BSP (M)	1/4"BSP (M)	3/4"BSP (M)	1/2"BSP (M)	1/2"BSP (M)
Max air consumption with 8 bar pressure	115 l/min	-	-	-	-	-	-	-
Length suction tube	-	450 mm	750 mm	950 mm				
Diameter suction tube	-	28 mm	28 mm	28 mm	28 mm	55 mm	40 mm	40 mm
Dimensions LxWxH (mm)	95x95x420	30x31x550	30x31x850	30x31x1050	30x31x1050	30x31x1050	30x31x1050	30x31x1050
Suitable for pails / drums of	-	20 kg	50 kg	180 kg	180 kg	208 l	208 l	208 l
Weight	3.5 kg	1 kg	1.3 kg	1.5 kg	1.5 kg	2.1 kg	1.9 kg	1.9 kg

See accessories on pages 30 – 37!

The a. m. performance values are based upon the following test conditions:

lithium grease NLGI 0 and hydraulic oil ISO 32 at 22°C -- Compressed air pressure 8 bar -- free flow outlet.



Complete pneumatic grease supply kit, suitable for any kind of inside or outside use. Max pressure achievable: 400 bar.



## Art. no. 4922

Portable and mobile pneumatic grease supply kit with 16 kg – steel pail, consisting of:

- Pneumatic grease pump, art. no. 4018;
- Pressure regulator, art. no. 7200;
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503;
- High pressure grease control gun, with 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate ø 230 mm;
- Steel pail with 2 wheels and carrying handle.

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4922	400 bar	2400 g/min	1/4"BSP (F)	2-8 bar	11 kg	240x390x930





## Art. no. **4921**

Portable pneumatic grease supply kit for 18/25 kg - pails, consisting of:

- Pneumatic grease pump, art. no. 4020
- Pressure regulator, art. no. 7200
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205
- High pressure Z swivel, art.no. 4221
- Follower plate, ø 310 260 mm, art. no. 4314\*
- Metal drum cover, ø 330 290 mm, art. no. 4302\*

\*See accessories on page 34 for pails/drums in different dimensions!

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4921	400 bar	2400 g/min	1/4"BSP (F)	2-8 bar	11 kg	240x240x890





Complete mobile pneumatic grease supply kit, suitable for 18/25 kg – pails in any kind of inside or outside use. Max pressure achievable: 400 bar.



## Art. no. 4920C

Mobile pneumatic grease supply kit for 18/25 kg - pails, consisting of:



- Pneumatic grease pump, art. no. 4020;
- Pressure regulator, art. no. 7200;
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503;
- High pressure grease control gun, 300 mm steel braid; outlet hose ø ext. 10 mm and 4 - jaws - hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, ø 310 260 mm, art. no. 4314\*;
- Metal drum cover, ø 330 290 mm, art. no. 4302\*;
- Trolley with 2 wheels, art. no. 4350.



Mobile pneumatic grease supply kit such as art. no. 4920C,

but without art. nos. 7200 and 4221.



\*See accessories on page 34 for pails/drums in different dimensions!

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4920C	400 bar	2400 g/min	1/4"BSP (F)	2 - 8 bar	13 kg	510x690x690





Mobile pneumatic grease supply kit such as art. no. 4920C, but with trolley art. no. 4351.

## **OPTIONAL**

Art. no. 4701

Metal 20 kg – pail (empty).



Art. no. <b>4920CE</b>

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4920CE	400 bar	2400 g/min	1/4"BSP (F)	2-8 bar	13 kg	510x690x690





Complete mobile pneumatic grease supply kits, suitable for 50 kg – drums in any kind of inside or outside use. Max pressure achievable: 400 bar.



### Art. no. 4960C

Mobile pneumatic grease supply kit for 50 kg - drums, consisting of:

- Pneumatic grease pump, art. no. 4060;
- Pressure regulator, art. no. 7200;
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503;
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, ø 390 325 mm, art. no. 4317\*;
- Metal drum cover, ø 400 360 mm, art. no. 4305\*;
- -Trolley with 2 wheels, art. no. 4350

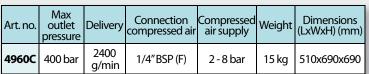
### Art. no. 4960

Mobile pneumatic grease supply kit such as art. no. 4960C, but without art. nos. 7200 and 4221.

## Art. no. 4950

Mobile pneumatic grease supply kit such as art. no. 4960, with 4 swivel wheels square trolley.

\*See accessories on page 34 for pails/drums in different dimensions!





50 kg





## Art. no. 4980C

Mobile pneumatic grease supply kit for 50 kg - drums, consisting of:

- Pneumatic grease pump, art. no. 4060;
- Pressure regulator, art. no. 7200;
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503;
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, ø 390 325 mm, art. no. 4317\*;
- Metal drum cover, ø 400 360 mm, art. no. 4305\*;
- Trolley with 4 wheels, art. no. 4360.

## Art. no. 4980

Mobile pneumatic grease supply kit such as art. no. 4980C,

but without art. nos. 7200 and 4221.

\*See accessories on page 34 for pails/drums in different dimensions!



Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4980C	400 bar	2400 g/min	1/4"BSP (F)	2-8 bar	18 kg	600x600x1050



Pag. 19 Grease



Complete mobile pneumatic grease supply kits, suitable for 180 kg – drums in any kind of inside or outside use. Max pressure achievable: 400 bar.



### Art. no. 4990C

Mobile pneumatic grease supply kit for 180 kg - drums, consisting of:

- Pneumatic grease pump, art. no. 4080;
- Pressure regulator and air filter with moisture separator, art. no. 7180;
- 3 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4503;
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 - jaws - hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, ø 590 540 mm, art. no. 4319;
- Metal drum cover, ø 600 560 mm, art. no. 4308;
- Trolley with 4 wheels, art. no. 4380.

## Art. no. **4990**

Mobile pneumatic grease supply kit such as art. no. 4990C, but without art. nos. 7180 and 4221.

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4990C	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	22 kg	900x830x1400



180 ka





Mobile pneumatic grease supply kit for 180 kg - drums, consisting of:

- Pneumatic grease pump, art. no. 4080;
- Pressure regulator and air filter with moisture separator, art. no. 7180;
- Open hose reel, art. no. 9016;
- 15 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4515;
- 2 m connection hose SAE 100 R2 AT, 1/4", art. no. 4502;
- High pressure grease control gun, 300 mm steel braid outlet hose Ø ext. 10 mm and 4 - jaws - hydraulic coupler, art. no. 4205;
- Follower plate, ø 590 540 mm, art. no. 4319;
- Metal drum cover, ø 600 560 mm, art. no. 4308;
- Trolley with 4 wheels and mounting bracket for hose reel, art. no. 4380/P.



Art. no. **4338**4 wheels kit suitable also for the use on rough surfaces.

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4910	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	72 kg	900x870x1400





Art. no. 4911

Mobile pneumatic grease supply kit for 180 kg - drums, consisting of:

- Pneumatic grease pump, art. no. 4080;
- Pressure regulator and air filter with moisture separator, art. no. 7180;
- Open hose reel, art. no. 9016;
- 15 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4515;
- 2 m connection hose SAE 100 R2 AT, 1/4", art. no. 4502;
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, ø 590 540 mm, art. no. 4319;
- Metal drum cover, ø 600 560 mm, art. no. 4308;
- Heavy duty trolley with 4 wheels and grate, art. no. 4389.

Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
4911	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	90 kg	900x1030x1400



Grease Pag. 20

Art. no. 4911

Art. no. 4910



Complete stationary pneumatic grease supply kit, suitable for 50 kg – and 180 kg – drums in any kind of inside or outside use. Max pressure achievable: 400 bar.

50/180 kg



#### Art. no. 4961 - 4981

Stationary pneumatic grease supply kits, consisting of:

	Art. no. <b>4961</b>	Art. no. <b>4981</b>
Pneumatic grease pump	Art. no. 4060	Art. no. 4080
Metal drum cover	Art. no. 4305 Ø 400-360 mm	Art. no. 4308 Ø 600-560 mm
High pressure hose SAE 100 R2 AT, 1/4", length 4 m	Art. no. 4504	Art. no. 4504
Follower plate	Art. no. 4317 Ø 390x325 mm	Art. no. 4319 Ø 590x540 mm
High pressure grease control gun with steel braid outlet hose ø ext. 10 mm and 4 - jaws - hydraulic coupler	Art. no. 4205	Art. no. 4205
Pressure regulator and air filter with moisture separator	Art. no. 7180	Art. no. 7180
High pressure Z – swivel	Art. no. 4221	Art. no. 4221

		For drums of	For drums of Max outlet pressure Deliv		Connection compressed air	Compressed air supply	Weight
	4961	50 kg	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	14 kg
	4981	180 kg	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	16 kg



## Art. no. 4995

Stationary pneumatic grease supply kit for 180 kg – drums with hose reel for wall or pillar installation, consisting of:

- Pneumatic grease pump, art. no. 4080;
- Pressure regulator and air filter with moisture separator, art. no. 7180;
- Open hose reel, art. no. 9016;
- 15 m high pressure hose SAE 100 R2 AT, 1/4", art. no. 4515;
- 2 m connection hose SAE 100 R2 AT, 1/4", art. no. 4502;
- High pressure grease control gun, 300 mm steel braid outlet hose ø ext. 10 mm and 4 jaws hydraulic coupler, art. no. 4205;
- High pressure Z swivel, art. no. 4221;
- Follower plate, Ø 590 540 mm, art. no. 4319;
- Metal drum cover, ø 600 560 mm, art. no. 4308.

Art. no.	Max outlet pressure	re Delivery compressed air su		Compressed air supply	Weight
4995	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	36 kg



## Art. no. **8558**

Stationary pneumatic grease supply kit for 180 kg – drums with hose reel, installed on a "Tank Service Base" unit. Compared to a system installed on the wall, the system which is mounted on the "Tank Service Base" unit also includes a safety pallet for the drum storage with a self-supporting structure forming a "lubrication island" that can be placed in any location of a workshop.

The composition is the same as the one of art. no. 4995, but completed by a "Tank Service Base" unit for 1 drum with the self-supporting structure consisting of 2 steel rails and 2 steel panels for the installation of the components (art. no. 8525).



Optional: Art. no. 4699 Metal 180 kg – drum (empty)

I	Art. no.	Max outlet pressure	Delivery	Connection compressed air	Compressed air supply	Weight	Dimensions (LxWxH) (mm)
I	8558	400 bar	2400 g/min	1/4" BSP (F)	2 - 8 bar	78 kg	830x880x2360



Pag. 21 Grease





### Art. no. 4999

Mobile extrusion unit for grease with a 4 - wheels base, a pump lifting device and a grease compacting system that works based on a pneumatic circuit which is activated by a control valve.

This unit is used when the grease has a high degree of viscosity or is very dense due to low temperature and therefore is difficult to pump. The kit includes also a pneumatic 50:1 – grease pump of the standard series. Versions for pails and drums available.

## Art. no. 4999/200INP

Staionary extrusion unit for grease with bedplate, consisting of a special pump lifting device suitable for pneumatic grease pumps, series "**Power Bull**", and a grease compacting system that works based on a pneumatic circuit which is activated by a control valve.

This unit is used when the grease has a high degree of viscosity or is very dense due to low temperature and therefore is difficult to pump. For the use with grease pumps Art. nos. 4046 - 4047 - 4048 - 4049 - 4050 - 4051.

The kit includes the pneumatic grease pump 50:1 Art. no. 4049. Suitable for the use with  $180\ kg$  – drums.



Art. no.	4999/30	4999/60	4999/200	4999/200INP	
Pump models	4020	4020 4060 4080			
Compression ratio	50:1				
Max outlet pressure	400 bar				
Pressure pneumatic circuit	1 – 3 bar				
Pressure performance compacting system		1 bar = 50 l	kg pressure		
Suitable for drums of	18 kg	50 kg	180	) kg	
Dimensions (LxWxH) (mm)	1090 x 630 x 1750 1090 x 630 x 1900			1090 x 630 x 1900	
Weight	85 kg 110 kg 170 kg 220 kg			220 kg	



## PNEUMATIC GREASE SPRAYER KITS LOW LEVEL PUMP STOP KIT FOR GREASE



Art. no. 4997/20 Art. no. 4997/60

Mobile pneumatic grease sprayer kits, suitable for the application of grease or similar lubricants on mechanical parts or surfaces for protective purposes. For example these kits are suitable also for applying underseal agents for protective undercoating.

The kits consist of a 25:1 – pneumatic grease pump, metal drum cover, follower plate, 3 m - high pressure hose SAE 100 R2 AT, 1/4", for grease and 3 m – hose for air, with thermo - retractable cover, control gun including lance with twin outlet for the injection of air and spraying nozzles.

Art. no.	4997/20	4997/60	
Compression ratio	25:1		
Max outlet pressure	150 bar		
Compressed air supply	3 – 6	5 bar	
For pails / drum of	18-25 kg 50 kg		
Weight	85 kg 110 kg		



### Art. no. 4322

Low level pump stop kit for grease, suitable for 180 kg – drums, consisting of:

- Metal drum cover, ø 600 mm, with connection cables junction box;
- Follower plate, ø 590 mm, with rubber edge;
- Probe with contactless sensor;
- Solenoide valve for compressed air;
- Acoustic alarm device;
- Electronic control switch with transformer 230 VAC 24 VDC, switch ON/OFF START, indicator lamp in case of empty drum and bypass push button which allows to continue the grease flow again after the pump has been stopped.



Pag. 23 Grease

## **MANUAL GREASE SUPPLY KITS**





## Art. no. 4425

Manual lever action grease pump, suitable for 18/25 kg - pails. Standard suction tube length 360 mm; can be supplied also in different lengths on demand.

### Art. no. 4426

Similar to art. no. 4425, but with suction tube length 335 mm for 16 kg – pails.

Art. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	
4425	250 bar	8 g	1/4" BSP (M)	2 kg	
4426	250 bar	8 g	1/4" BSP (M)	2 kg	



### Art. no. 5125

Portable, manual grease supply kit for 18/25 kg – pails, consisting of:

- Manual lever action grease pump, art. no. 4425;
- Metal drum cover, ø 290 330 mm, art. no. 074302;
- Follower plate, ø 310 260 mm, art. no. 4314;
- 1.5 m rubber hose R1T, ø 1/4";
- Ball valve and rigid outlet pipe with 4 jaws hydraulic coupler, art.no. 4218.

Art. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	Dimensions (LxWxH) (mm)
5125	250 bar	8 g	1/4" BSP (M)	5 kg	340x340x630





## Art. no. **5190**

Manual grease supply kit, consisting of metal 16 kg – pail with 2 wheels, pedal action pump, follower plate, ø 230 mm, art. no. 07 5131, 1.5 m – rubber hose R1T, ø 1/4", ball valve and rigid outlet pipe with 4 – jaws – hydraulic coupler.

Art.	. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	Dimensions (LxWxH) (mm)
51	90	150 bar	7 g	1/4" BSP (M)	8 kg	510x580x880



## **MANUAL GREASE SUPPLY KITS**





### Art. no. 5100

Portable, manual grease supply kit, consisting of metal 16 kg – pail, lever action grease pump, follower plate, Ø 230 mm, art. no. 07 5131, 1.5 m - rubber hose R1T, Ø 1/4", ball valve and rigid outlet pipe with 4 – jaws – hydraulic coupler.



**MADE IN ITALY!** 

Art. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	Dimensions (LxWxH) (mm)
5100	250 bar	8 g	1/4" BSP (M)	5.5 kg	240x490x630





## Art. no. **5105**

Portable, manual grease supply kit, consisting of metal 16 kg – pail with 2 wheels, lever action grease pump, follower plate, Ø 230 mm, art. no. 07 5131, 1.5 m - rubber hose, Ø 1/4", ball valve and rigid outlet pipe with 4 – jaws – hydraulic coupler.



Art. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	Dimensions (LxWxH) (mm)
5105	250 bar	8 g	1/4" BSP (M)	7.5 kg	250x540x630





## Art. no. **5115**

Manual grease supply kit, consisting of metal 16 kg – pail with 2 wheels, lever action grease pump, follower plate,  $\emptyset$  230 mm, art. no. 07 5131, 1.5 m - rubber hose,  $\emptyset$  1/4", ball valve and rigid outlet pipe with 4 – jaws – hydraulic coupler.

Mounted on a trolley, art. no. 4350, with fixation bracket.

Art. no.	Max outlet pressure	Delivery per stroke	Connections	Weight	Dimensions (LxWxH) (mm)
5115	250 bar	8 g	1/4" BSP (M)	8 kg	510x580x880



Pag. 25 Grease

## MANUAL GREASE SUPPLY KITS



**Grease Power 750** is a manual grease supply kit, composed by a spring - loaded pump combined with a special control gun, dispensing the grease in pressure degrees up to 750 bar.

This system can be used in 3 different ways, offering the following results:

- 1. Delivery of 0.3 g of grease per squeeze with up to 750 bar pressure when the switch of the control gun is on "high pressure" position. Ideal for unblocking dirty or resinified grease nipple valves.
- 2. Delivery of 1.1 g of grease per squeeze when switch of the control gun is on "high volume" position. For normal grease supply operations.
- 3. Keeping the lever of the control gun pushed and pressing simultaneously the pump rod down by foot, a continuous grease flow at low pressure can be created.

This grease supply kit - thanks to its compactness and its independence from any pneumatic or electric supply - is the ideal, mobile equipment for any application in the field of lubrication.



### Art. no. 5110

Portable, manual grease supply kit, consisting of:

- Metal 5 kg pail with cover;
- Manual, spring loaded piston grease pump;
- Follower plate;
- 1.5 m rubber hose, ø 1/2" mm;
- Control gun with selection switch and rigid outlet pipe with 4 jaws hydraulic coupler.



Art. no.	Max outlet pressure	Max delivery per stroke	Ø suction tube	Length suction tube	Weight	Dimensions (LxWxH) (mm)	AH .
5110	750 bar	8 g	28 mm	310 mm	6.5 kg	350x240x550	





### Art. no. **5111**

Portable, manual grease supply kit, suitable for 18/25 kg - pails, consisting of:

- Manual, spring driven piston grease pump;
- Follower plate, 310 260 mm, art. no. 4314;
- 1.5 m rubber hose, ø 1/2" mm;
- Metal drum cover, ø 290 330 mm, art. no. 4302;
- Control gun with selector lever and rigid outlet pipe with 4 jaws hydraulic coupler.



OPTIONAL Art. no. **4215** Extension with quick change coupling, length 130 mm, to be connected with hydraulic coupler.

Art. no.	Max outlet pressure	Max delivery per stroke	Ø suction tube	Length suction tube	Weight	Dimensions (LxWxH) (mm)
5111	750 bar	8 g	28 mm	370 mm	5.8 kg	350x480x630





# MANUAL GREASE GUN FILLER PUMPS / MANUAL AND PNEUMATIC GREASE REFILLING KITS FOR CENTRALIZED LUBRICATION SYSTEMS



Art. no. **5126** Art. no. **5127** Art. no. **5128** 

Manual grease gun filler pump kit, consisting of manual lever action grease pump, metal drum cover, follower plate and rigid pipe with adapter for the connection of grease guns. Suitable for grease up to a viscosity of NLGI 2.



Art. no.	Delivery	Ø suction tube	Length suction tube	Ø drum cover	Ø follower plate	Ø pails/ drums	Suitable for pails/drums of	Weight
5126	30 g/stroke	40 mm	335 mm	283 mm	275 mm	240-283 mm	18 kg	5 kg
5127	30 g/stroke	40 mm	450 mm	330 mm	310 mm	290-330 mm	20 kg	6 kg
5128	30 g/stroke	40 mm	750 mm	400 mm	390 mm	360-400 mm	50 kg	8 kg



Art. no. **5129** 

Art. no. 5130

Art. no. 5131

Manual grease transfer kit for the refilling in centralized lubrication systems, consisting of manual lever action grease pump, metal drum cover, follower plate, 2 m – rubber hose ø 1/2", with quick coupling and curved filling spout with connector to quick coupling. Suitable for grease up to a viscosity of NLGI 2.

Art. no.	Delivery	Ø suction tube	Length suction tube		Ø follower plate	Ø pails/ drums	Suitable for pails/drums of	Weight
5129	30 g/stroke	40 mm	335 mm	283 mm	275 mm	240-283 mm	18 kg	6 kg
5130	30 g/stroke	40 mm	450 mm	330 mm	310 mm	290-330 mm	20 kg	7 kg
5131	30 g/stroke	40 mm	750 mm	400 mm	390 mm	360-400 mm	50 kg	9 kg



Art. no. 4923

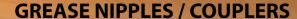
Art. no. **4963** 

Art. no. **4983** 

Pneumatic grease transfer kit for the refilling in centralized lubrication systems, consisting of pneumatic 25:1 - grease pump, metal drum cover, follower plate, 2 m – rubber hose ø 1/2" and quick coupling. Suitable for grease up to a viscosity of NLGI 3.

Art. no.	Delivery	Ø suction tube	Length suction tube	Ø drum cover	Ø follower plate	Ø pails/drums	Suitable for pails/drums of	Weight
4923	7000 g/min	28 mm	450 mm	330 mm	350 mm	290-330 mm	20 kg	10 kg
4963	7000 g/min	28 mm	750 mm	400 mm	390 mm	360-400 mm	50 kg	14 kg
4983	7000 g/min	28 mm	950 mm	600 mm	590 mm	560-600 mm	180 kg	16 kg

Pag. 27 Grease







**LubTools** is the Flexbimec brand specialized in the supply of manual lubrication equipment.

**LubTools** is offering a wide range of articles including grease nipples in galvanized and stainless steel, automatic lubricators, suction guns, lever and push type grease guns, funnels, measures and jerrycans.

In order to see the complete range and to choose the required items, please see our separate LubTools catalogue.

















































Art. no. **4400** Art. no. **4400/4** 

Lever action grease gun, suitable for the use with bulk grease or with grease cartridges. With steel braid outlet hose  $\emptyset$  ext. 10 mm x 300 mm length, M 10x1, and 4 – jaws – hydraulic coupler. Suitable for grease up to a viscosity of NLGI 2.

Art. no.	Max delivery	Max outlet pressure	Capacity grease cartridge	grease	L. suitable grease cartridge	Weight	Dimensions (LxWxH) (mm)
4400	1.2 g/stroke	400 bar	600 g	56 mm	430 mm	1.70 kg	150x480x60
4400/4	1.2 g/stroke	400 bar	400 g	54 mm	320 mm	1.70 kg	110x370x60





Art. no. **4450** Art. no. **4450/4** 

Pneumatic grease gun, suitable for the use with bulk grease or with grease cartridges. With steel braid outlet hose  $\emptyset$  ext. 10 mm x 300 mm length, M 10x1, and 4 – jaws – hydraulic coupler. It is a single action mechanism (non-continuous grease supply): when activating the trigger, the internal piston moves and supplies grease; when the trigger is released, the piston returns in its initial position. By repeating this procedure the grease can be dispensed. Compressed air pressure: 4 – 8 bar. Suitable for grease up to a viscosity of NLGI 2.

Art. no.	Max delivery	Max outlet pressure	Capacity grease cartridge	grease	L. suitable grease cartridge	Weight	Dimensions (LxWxH) (mm)
4450	1.2 g/stroke	300 bar	600 g	56 mm	430 mm	2 kg	240x550x70
4450/4	1.2 g/stroke	300 bar	400 g	54 mm	340 mm	2 kg	240x470x70





Art. no. 4408

Lever action grease gun with thermoplastic flexible outlet hose L 300 mm and 4-jaws-hydraulic coupler.

For 400g DIN 1284 cartridge or bulk grease.

Easy to handle with just one hand.

Art. no.	Max delivery	Max outlet pressure	grease	grease	L. suitable grease cartridge	Weight	Dimensions (LxWxH) (mm)
4408	0.8 g/stroke	200 bar	400 g	54 mm	500 mm	1.7 kg	220x360x60





Art. no. **4452** Art. no. **4452/4** 

Electric grease gun with 18 VDC (12VDC for Art. no. 4452) - battery, suitable for the use with bulk grease or with grease cartridges. With steel braid outlet hose  $\emptyset$  ext. 10 mm x 300 mm length, M 10x1, and 4 – jaws – hydraulic coupler. The grease is dispensed continuously; by pushing the trigger of the grease gun, the internal gears start moving and the grease is supplied. When the trigger is released again, the grease flow stops. Battery charger: 18 VDC (1300 mAH), time for recharging: 1 hour (according to the ROHS – directive). Battery recharger: 230 Vac (18 VDC, 50 Hz). Supplied in a plastic case with a lever grease gun head for the use as lever grease gun.

Suitable for grease up to a viscosity of NLGI 2.

Art. no.	Max delivery	Max outlet pressure	Capacity grease cartridge	Ø suitable grease cartridge	L. suitable grease cartridge	Weight	Dimensions (LxWxH) (mm)
4452	8 g/stroke	300 bar	600 g	56 mm	430 mm	7.5 kg	540x500x110
4452/4	8 g/stroke	300 bar	400 g	54 mm	320 mm	7.5 kg	540x410x110





Art. no. **4405** Cartridge with lithium grease, NLGI 2, with 600 g capacity. Ø 56 mm, L 300 mm. According DIN 51502 K 2 K-20. Packaging unit: 15 pcs.

Art. no. **4406** Cartridge with lithium grease, NLGI 2, with 400 g capacity. Ø 52 mm, L 235 mm. According DIN 1284. Packaging unit: 15 pcs.

Pag. 29 Grease



## **ACCESSORIES FOR GREASE LUBRICATION**

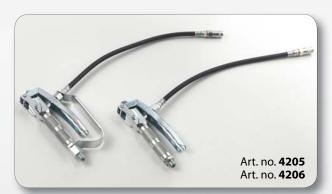


### Art. no. 4200

High pressure grease control gun, steel body, inlet connection 1/4" BSP (M), outlet connection M 10x1.

### Art. no. 4201

High pressure grease control gun art.no. 4200, but additionally equipped with a trigger quard.



### Art. no. 4205

High pressure grease control gun with 300 mm – steel braid rubber outlet hose  $\emptyset$  ext. 10 mm and 4 - jaws - hydraulic coupler.

#### Art. no. 4206

High pressure grease control gun art.no. 4205, but additionally equipped with a trigger guard.



### Art. no. 4208

High pressure grease control gun with rigid outlet pipe and 4 – jaws – hydraulic coupler.

## Art. no. 4207

High pressure grease control gun art.no. 4208, but additionally equipped with a trigger guard.



## Art. no. 4209

High delivery grease control gun for the transfer of grease, with rigid outlet,  $\emptyset$  20 mm. Working pressure up to 200 bar, burst pressure 350 bar.

## Art. no. 4204

Grease control gun for the transfer of grease, with rigid outlet,  $\emptyset$  16 mm. Working pressure up to 180 bar, burst pressure 320 bar.



## Art. no. 4221

High pressure rotating "Z" – swivel, connections 1/4" BSP (M – F). For the installation between hose and control gun. Allows a complete  $360^{\circ}$  - rotation on the 3 axes, also under pressure.

### Art. no. 4228

Straight high pressure rotating swivel, connections 1/4" BSP (M – F). For the installation between hose and control gun. Allows a complete  $360^{\circ}$  - rotation on the 1 axe, also under pressure.



## **ACCESSORIES FOR GREASE LUBRICATION**





Art. no. **4220** - Hydraulic 4 – jaws - coupler, standard version, steel body, height 36 mm, for hydraulic-type grease nipples according DIN 71412, connection M 10x1.

Art. no. **4224** - Giant button head coupler, steel body, for button head grease nipples with Ø 22 mm according DIN 3404; connection M 10x1.

Art. no. **4225** - Hydraulic 4 – jaws – coupler, steel body, for hydraulic-type grease nipples according to DIN 71412, connection M 10x1, with 90° - curved swivel adapter.

Art. no. **4226** - Button head coupler, steel body, for button head grease nipples with Ø 15 mm according to DIN 3404; connection M 10x1.

Art. no. **4227** - Reverse button head coupler, steel body, for button head grease nipples with ø 15 mm according to DIN 3404; connection M 10x1.

Art. no. **4251** - Pointed coupler, steel body, for flush-type grease nipples according to DIN 3405; connection M 10x1.

Art. no. **4252** - Pin pointed coupler, steel body, for flush-type grease nipples according to DIN 3405; connection M 10x1.

Art. no. **4253** - Hollow-type coupler, steel body, for ball-type and hydraulic-type grease nipples according to DIN 71412; connection M 10x1. Art. no. **4254** - Bayonet coupler, steel body, for bayonet grease nipples; connection M 10x1.

Art. no. **4255** - Hydraulic 4 – jaws – coupler, heavy duty version, steel body, height 48 mm, with ball valve, for hydraulic-type grease nipples according DIN 71412, connection M 10x1. Suitable also for applications with oil.

All couplers are available also with thread G 1/8" (F) on demand.



Art. no. **4215** - Extension pipe for hydraulic 4 – jaws – couplers, length 130 mm, with quick coupling and connection M 10x1.

Art. no. **4216** - Double steel braid rubber outlet hose 1/4", SAE 100 R2 AT, length 400 mm; connections M 10x1 – 1/4" BSP (M).

Art. no. **4217** - Steel braid rubber outlet hose ø ext. 10 mm, length 400 mm, max. working pressure 400 bar, burst pressure 1000 bar; connections M 10x1.

Art. no. **4217/1000 -** Steel braid rubber outlet hose ø ext. 10 mm, length 1000 mm, max. working pressure 400 bar, burst pressure 1000 bar; connections M 10x1.

Art. no. **4217+4220** - Steel braid rubber outlet hose ø ext. 10 mm, length 400 mm, max. working pressure 400 bar, burst pressure 1000 bar with hydraulic 4 – jaws – coupler; connections M 10x1.

Art. no. **4218** - Angled rigid outlet pipe, length 200 mm, with hydraulic 4 – jaws – coupler; connections M 10x1.

Art. no. **4219** - Angled rigid outlet pipe, length 130 mm; connections M 10x1.

All outlet pipes and hoses are available also with thread G 1/8" (F) on demand.



### Art. no. **4216 + 4233**

Double steel braid rubber outlet hose 1/4", length 400 mm, connection 1/4" (M), with quick coupling to be connected on grease containers in centralized lubrication systems for refilling.

Art. no. 4234

Angled rigid outlet pipe, connection 1/2" (M), with quick coupling, for the grease refilling of lever grease guns through grease gun filler pumps.

Art. no. 4235

Curved rigid outlet pipe, connection ø 1/2" (M), for the refilling of grease containers in centralized lubrication systems.

Art. no. 4233

Quick coupling, connection 1/4" (F), suitable for the refilling of grease containers in centralized lubrication systems.

Pag. 31 Grease

## DIGITAL GREASE FLOW METERS



Digital flow meters based on the oval gears measuring principle. The flow meters are instruments equipped with an electronic component that permits by the use of a sensor to measure the flow of grease passing through it and transmitting then a signal on a liquid crystal display. The use of this instrument is suitable in all grease supply systems and enables the user to control and to measure the grease flow. Not approved for legal transactions.



## Art. no. 4286

Digital oval gears grease flow meter, series "Grease Control", with grease control gun, rigid outlet pipe and hydraulic 4 – jaws – coupler.

The calibration of the meter can also be made by the user.

Equipped with 2 batteries of 1.5 VDC.

### Art. no. 4289

Digital oval gears grease flow meter, series "Grease Control", suitable for the use as inline meter.

The calibration of the meter can also be made by the user.

Equipped with 2 batteries of 1.5 VDC.

### **TECHNICAL DATA**

Art. no.	4286	4289
Connections	1/4" BSP (M)	1/8" BSP (F)- 10x1 (F)
Delivery min – max	0.20 - 2 kg/min	0.20 - 2 kg/min
Temperature	min +2°C – max +50°C	min +2°C – max +50°C
Max pressure	400 bar	400 bar
Precision	+/- 0.3% *	+/- 0.3% *
Total max (resettable)	999.9 kg	999.9 kg
Total max (non resettable)	9999 kg	9999 kg
Weight	1.4 kg	1.2 kg

<sup>\*</sup>Basic calibration made in factory with grease NLGI 0



### Art. no. 4236

Digital oval gears grease flow meter, series "Grease Gate", with preset function of the desired grease quantity to be supplied. With grease control gun, rigid outlet pipe and hydraulic 4 – jaws – coupler.

The preset function introduces a certain degree of automation since it becomes possible to predetermine the dosages and to stop the grease flow automatically once the preselected value has been reached.

The calibration of the meter can also be made by the user.

### **TECHNICAL DATA**

Art. no.	4236
Connections	1/4" BSP (M)
Delivery min – max	0.10 - 2 kg/min
Temperature	+ 2°C / + 50°C
Max pressure	300 bar
Precision	+/- 0.5%*
Lowest preselection value	0.010 kg
Total max (resettable)	999.9 kg
Total max (non resettable)	9999 kg
Weight	1.7 kg

<sup>\*</sup>Basic calibration made in factory with grease NLGI 0

## **DIGITAL GREASE FLOW METERS**



Digital flow meters based on the oval gears measuring principle. The flow meters are instruments equipped with an electronic component that permits by the use of a sensor to measure the flow of grease passing through it and transmitting then a signal on a liquid crystal display. The use of this instrument is suitable in all grease supply systems and enables the user to control and to measure the grease flow. Not approved for legal transactions.



## Art. no. 4285

Digital oval gears grease flow meter, with grease control gun and rigid outlet pipe, for the measurement of regular quantities in grease transfer applications at relatively low pressure.

The calibration of the meter can also be made by the user.

## **TECHNICAL DATA**

Art. no.	4285
Connections	1/2" BSP (M)
Delivery min – max	0.05 – 5 kg/min
Temperature	+2°C / + 50°C
Max pressure	70 bar
Precision	+/- 1% *
Total max (resettable)	999.9 kg
Total max (non resettable)	9999 kg
Weight	1.4 kg

<sup>\*</sup>Basic calibration made in factory with grease NLGI 0



## Art. no. 4287

Digital oval gears grease flow meter, with grease control gun and rigid outlet pipe, for the measurement of high quantities in grease transfer applications with pneumatic pumps of the series "Power Bull" at relatively low pressure.

The calibration of the meter can also be made by the user.

## **TECHNICAL DATA**

Art. no.	4287
Connections	1" BSP (M)
Delivery min – max	0.5 – 20 kg/min
Temperature	+2°C / + 50°C
Max pressure	150 bar
Precision	+/- 1% *
Total max (resettable)	999.9 kg
Total max (non resettable)	9999 kg
Weight	3 kg

<sup>\*</sup>Basic calibration made in factory with grease NLGI 0

Pag. 33 Grease



## ACCESSORIES FOR GREASE PUMPS AND KITS STANDARD SERIES



Art. no. **4302** 

Art. no. **4305** 

Art. no. 43025 Art. no. 4308

Art. no. 4305/TP

Art. no. 4308/TP

Metal drum cover, available in different dimensions to suit to the various types of grease drums, including butterfly screws for the fixation of the cover on the drum as well as bung adapter for the fixation of the pump in vertical position.

Art. no.	Suitable for external drum diameters of	Bore suitable for suction tube diameter of	Suitable for drums of	Weight
4301	240 - 283 mm	28 mm	18 kg	2.4 kg
4302	290 - 330 mm	28 mm	20 kg	2.6 kg
4302S	310 - 350 mm	28 mm	25 kg	2.6 kg
4305	360 - 400 mm	28 mm	50 kg	2.8 kg
4305L	348 - 388 mm	28 mm	50 kg	2.8 kg
4305S	410 - 450 mm	28 mm	50 kg	2.8 kg
4305/TP	360 - 400 mm	40 mm	50 kg	2.8 kg
4308	560 - 600 mm	28 mm	180 kg	3.2 kg
4308/TP	560 - 600 mm	40 mm	180 kg	3.2 kg



Follower plate with rubber edge, available in different dimensions to suit to the various types of grease drums. The follower plate causes a constant grease level inside of the drum and helps to avoid any air pockets inside of the grease close to the suction tube as well as any disposals of grease on the inner surface of the drum.

	Art. no.	Total diameter follower plate	Diameter metal disc			Weight
I	4310	205 mm	150 mm	28 mm	5 kg	0.7 kg
	4311	275 mm	230 mm	28 mm	18 kg	0.9 kg
	4312	350 mm	285 mm	28 mm	20 kg	1.5 kg
	4312S	340 mm	286 mm	28 mm	25 kg	1.6 kg
	4314	310 mm	260 mm	28 mm	20 kg	1.3 kg
	4315	330 mm	260 mm	28 mm	20 kg	1.2 kg
	4317	390 mm	325 mm	28 mm	50 kg	1.7 kg
	4317/TP	390 mm	325 mm	40 mm	50 kg	1.7 kg
	4319	590 mm	540 mm	28 mm	180 kg	4.0 kg
	4319/TP	590 mm	540 mm	40 mm	180 kg	4.0 kg



Art. no. **4328** 

Plastic bung adapter for fixation of pumps, 2" BSP (M) x 28 mm.

Art. no. 4340

Plastic bung adapter for fixation of pumps, 2" BSP (M) x 40 mm.



Art. no. **4341** 

Plastic lock ring for bung adapter, 2" BSP (M), for art. nos. 4328 and 4340.

Art. no. 4326

Hose, length 1200 mm, with connector for compressed air. This hose can be connected to the follower plates for 180 kg – drums and allows to set compressed air pressure under the follower plate when it has reached the low level in order to take it out of the drum again more easily.



## ACCESSORIES FOR GREASE PUMPS AND KITS POWER BULL SERIES



### Art. no. 4309

Metal drum cover, including metal bung adapter and metal counter-ring, suitable for the use of pneumatic grease pumps of series "Power Bull" on 180 kg – drums.

Total diameter 600 mm, diameter of bore for suction tube in bung adapter of 50 mm. Suitable for art. nos. 4048 – 4049 – 4050 – 4051 – 4052.

### Art. no. 4309/70

Metal drum cover such as art. no. 4309, but including bung adapter with diameter of bore for suction tube of 70 mm.

Suitable for art. nos. 4046 and 4047.



#### Art. no. 4320

Follower plate with rubber edge, for applications with pneumatic grease pumps of series "Power Bull" on 180 kg – drums. The follower plate causes a constant grease level inside of the drum and helps to avoid any air pockets inside of the grease close to the suction tube as well as any disposals of grease on the inner surface of the drum.

Total diameter of follower plate 590 mm, diameter of metal disc 540 mm, diameter of bore for suction tube 50 mm. Suitable for art. nos. 4048 – 4049 – 4050 – 4051 – 4052.

## Art. no. **4320/70**

Follower plate such as art. no. 4320, but diameter of bore for suction tube 70 mm. Suitable for art. nos. 4046 and 4047.



Art. no. 4342/50

Art. no. 4342/70

### Art. no. 4343/50

Metal bung adapter for the fixation of pumps, series "Power Bull", 2" BSP (M)  $\times$  50 mm, on drums. Suitable for art. nos. 4048 - 4049 - 4050 - 4051 - 4052.

## Art. no. 4343/70

Metal bung adapter for fixation of pumps, series "Power Bull", 2" BSP (M) x 70 mm, on drums. Suitable for art. nos. 4046 and 4047.

## Art. no. 4343/71

Metal lock ring for bung adapter, 2" BSP (M), for art. no. 4343/70.

## Art. no. 4342/50

Metal flange plate for fixation of pumps, series "Power Bull", with suction tube diameter 50 mm, without bung adapter. Suitable for art. nos. 4048 – 4049 – 4050 – 4051 – 4052.

### Art. no. 4342/70

Metal flange plate for fixation of pumps, series "Power Bull", with suction tube diameter 70 mm, without bung adapter. Suitable for art. nos. 4046 and 4047.

Pag. 35 Grease



## **RUBBER HOSES AND FITTINGS FOR GREASE**

High pressure rubber hoses SAE 100 R2 AT – EN 853 – DIN 20022 – 15 N, with female, straight BSP – connections, suitable for the supply of grease. Ideal for the connection on pumps or hose reels.

Internal structure and coating: oil-resistant, synthetic rubber.

Reinforcement: 2 steel wire braided, highly resistant layers.

Cover coat: black synthetic rubber, oil-resistant and resistant to atmospheric influences.



## **HOW TO ORDER**

Length	Ø 1/4" Art. no.	Ø 3/8″ Art. no.	Ø 1/2" Art. no.	Ø 3/4" Art. no.	Ø 1" Art. no.	Ø 1'1/4" Art. no.
1 m	4501	47001	4801	28901	289501	281401
1.5 m	45015	47015	48015	289015	2895015	2814015
2 m	4502	4702	4802	28902	289502	281402
3 m	4503	4703	4803	28903	289503	281403
5 m	4505	4705	4805	28905	289505	281405
6 m	4506	4706	4806	28906	289506	281406
10 m	4510	4710	4810	28910	289510	281410
15 m	4515	4715	4815	28915	289515	281415
20 m	4520	4720	4820	28920	289520	281420
25 m	-	4725	4825	28925	289525	281425
30 m	-	4730	4830	28930	289530	281430
35 m	-	4735	4835	28935	289535	281435
40 m	-	4740	4840	28940	289540	281440

## **TECHNICAL DATA**

## Other lengths available on demand!

Nominal diameter	Ø 1/4"	Ø 3/8"	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1'1/4"
Internal diameter	6.4 mm	9.5 mm	12.7 mm	19 mm	25.4 mm	31.8 mm
Wire braid diameter	12.7 mm	16.7 mm	19.8 mm	25.4mm	33.3 mm	40.5 mm
External diameter	15 mm	19 mm	22.2 mm	27.7 mm	35.6 mm	43.5 mm
Working pressure	400 bar	330 bar	275 bar	105 bar	88 bar	63 bar
Burst pressure	1600 bar	1320 bar	1100 bar	420 bar	350 bar	250 bar
Min bending radius	100 mm	130 mm	180 mm	240 mm	300 mm	420 mm
Working temperature	min –40°C. max +100°C					
Weight	0.36 kg/m	0.53 kg/m	0.63 kg/m	0.61 kg/m	0.94 kg/m	1.19 kg/m



	Art. no. <b>9911</b>	1/2" x 3/8"
Type <b>A</b>	Art. no. <b>9912</b>	1/2" x 1/4"
Double male connection adapter, BSP, galvanized steel.	Art. no. <b>4223</b>	1/4" x 1/4"
Type <b>B</b> Male – female swivel connection adapter, BSP, galvanized steel.	Art. no. <b>4229</b>	1/4" x 1/4"
	Art. no. <b>9905</b>	1/2"x 1/4"
Type <b>C</b> Male – female connection adapter, BSP, galvanized steel.	Art. no. <b>9906</b>	1/2" x 3/8"
, , , , , , , , , , , , , , , , , , ,	Art. no. <b>4231</b>	1/4" x 1/4"
Type <b>D</b> 90°- curved male – female connection adapter, BSP, galvanized	Art. no. <b>4232</b>	1/4" x 1/4"

Grease Pag. 36

steel.

## **HOSE REELS FOR GREASE**





Automatic, spring – driven hose reel, standard series, in painted steel, including rubber hoses SAE 100 R2 AT with female connection threads, suitable for the supply of grease at high pressure.

OPTIONAL: hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Ø hose	Length hose	Max working pressure	Reel width	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9016+4510	1/4"	10 m	400 bar	120 mm	450mm	9767	17 kg	250x550x450
9016+4710	3/8"	10 m	330 bar	120 mm	450mm	9767	20 kg	250x550x450
9016+4810	1/2"	10 m	275 bar	120 mm	450mm	9767	18 kg	250x550x450
9016+4515	1/4″	15 m	400 bar	120 mm	450mm	9767	18 kg	250x550x450
9016+4715	3/8"	15 m	330 bar	120 mm	450mm	9767	21 kg	250x550x450
9016+4815	1/2"	15 m	275 bar	120 mm	450mm	9767	20 kg	250x550x450
9021+4520	1/4″	20 m	400 bar	150 mm	450mm	9768	26 kg	260x550x450
9021+4720	3/8"	20 m	330 bar	150 mm	450mm	9768	28 kg	260x550x450
9021+4820	1/2"	20 m	275 bar	150 mm	450mm	9768	27 kg	260x550x450



Automatic, spring – driven hose reel, adjustable arms series, in painted steel, including rubber hoses SAE 100 R2 AT with female connection threads, suitable for the supply of grease at high pressure. OPTIONAL: hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Ø hose	Length hose	Max working pressure	Reel width	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9090+4510	1/4"	10 m	400 bar	120 mm	450mm	9767	20 kg	250x550x450
9090+4710	3/8"	10 m	330 bar	120 mm	450mm	9767	20 kg	250x550x450
9090+4810	1/2"	10 m	275 bar	120 mm	450mm	9767	22 kg	250x550x450
9091+4515	1/4"	15 m	400 bar	120 mm	450mm	9767	25 kg	250x550x450
9091+4520	1/4"	20 m	400 bar	120 mm	450mm	9767	26 kg	250x550x450
9092+4720	3/8"	20 m	400 bar	120 mm	450mm	9767	27 kg	250x550x450
9093+4725	3/8"	25 m	330 bar	150 mm	450mm	9768	31 kg	280x550x450
9083+4530	1/4"	30 m	400 bar	150 mm	540mm	9777	42 kg	250x590x600
9083+4730	3/8"	30 m	330 bar	150 mm	540mm	9777	44 kg	250x590x600
9083+4830	1/2"	30 m	275 bar	150 mm	540mm	9777	45 kg	250x590x600



Automatic, spring – driven hose reel, enclosed series, in painted steel, including rubber hoses SAE 100 R2 AT with female connection threads, suitable for the supply of grease at high pressure. OPTIONAL: hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Ø hose	Length hose	Max working pressure	Reel width	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9013+4510	1/4″	10 m	400 bar	120 mm	450mm	9778	20 kg	250x550x450
9013+4710	3/8"	10 m	330 bar	120 mm	450mm	9778	20 kg	250x550x450
9013+4810	1/2"	10 m	275 bar	120 mm	450mm	9778	20 kg	250x550x450
9013+4515	1/4″	15 m	400 bar	120 mm	450mm	9778	23 kg	250x550x450
9013+4715	3/8"	15 m	330 bar	120 mm	450mm	9778	23 kg	250x550x450
9013+4815	1/2"	15 m	275 bar	120 mm	450mm	9778	24 kg	250x550x450
9023+4520	1/4″	20 m	400 bar	150 mm	450mm	9778	26 kg	280x550x450
9023+4720	3/8"	20 m	330 bar	150 mm	450mm	9778	26 kg	280x550x450
9023+4820	1/2"	20 m	275 bar	150 mm	450mm	9778	27 kg	280x550x450

For other hose reel models please see chapter "Hose reels" on page 200!

Pag. 37 Grease





**FLEXBIMEC** produces a wide range of pneumatic oil pumps that offers an appropriate solution for any kind of fluid viscosity, required delivery, pumping distance, necessary outlet pressure, ambient temperature as well as for simultaneous fluid supplies and any type of storage container.

In the following charts the essential data for selecting the adequate pump for the individual requirements are shown.

For more detailed information please see the following pages.

## **Compression ratio 1:1**



Art. no.	Delivery	
2040	48 l/min	
2043	35 l/min	
2043L	35 l/min	
2044	35 l/min	
2047	35 l/min	
2047/L	35 l/min	
2049	35 l/min	
1045	35 l/min	

These pumps are recommended for the use

- at pumping distances up to 15 m,
- with low viscosity fluids.

## **Compression ratio 3:1**



Art. no.	Delivery	
2020	24 l/min	
2030	24 l/min	
2073	17 l/min	
2074	17 l/min	
2032	21 l/min	
2033	21 l/min	
2020TWDE	28 l/min	
2030TWDE	28 l/min	

These pumps are recommended for the use

- at pumping distances up to 100 m,
- with low and medium viscosity fluids.

See pages 41 and 43!

## Compression ratio 5:1



Delivery			
15 l/min			
15 l/min			
13 l/min			
13 l/min			
13 l/min			
18 l/min			
22 l/min			
22 l/min			
20 l/min			
	15 l/min 15 l/min 13 l/min 13 l/min 13 l/min 13 l/min 22 l/min 22 l/min	15 l/min 15 l/min 13 l/min 13 l/min 13 l/min 13 l/min 22 l/min 22 l/min	15 l/min 15 l/min 13 l/min 13 l/min 13 l/min 13 l/min 22 l/min 22 l/min

These pumps are recommended for the use

- at pumping distances up to 200 m,
- with low and medium viscosity fluids,
- with high viscosity fluids at shorter pumping distances.

See pages 42 and 43!

See page 40!

Legend Windshield washer fluid Oil SAE 0/40 Oil SAE 90 Oil SAE 240 Waste oil Antifreeze

Oil Pag. 38



The **FLEXBIMEC** oil pump range is completed by the industrial pump series "**Power Bull**" with high delivery pumps for the supply of fluid lubricants in demanding conditions. These pumps are particularly recommended for the distribution of medium or high viscosity oils in applications or pipeworks where a simultaneous supply in different distribution points at high pressure and high delivery is required. The elevated quality of the used materials and the innovative constructional concept of the pneumatic motors of this line assure the following characteristics and advantages:

- Efficiency of a constant flow,
- Low noise level,
- Limited number of piston strokes,
- Low vibrations,
- Easy maintenance and interchangeability of components,
- Included overpressure control valve,
- Included drain device for condensation water in order to avoid a spraying into the surrounding area.

### Series "Tapir"



Art. no. 2012 Art. no. 2013 Art. no. 2016

Art.no.	Ratio	Delivery		
2012	6:1	32 l/min		
2013	2:1	48 l/min		
2014	5:1	18 l/min		
2015	5:1	18 l/min		
2016	6:1	32 l/min		

These pumps are recommended

- to achieve high deliveries in the use with low viscosity fluids (art. no. 2013),
- for the use with low and medium viscosity fluids at pumping distances of more than 300 m,
- for the use with high viscosity fluids at long pumping distances (art. nos. 2012 and 2016)
- for simultaneous fluid supplies.

See page 45!

### **Industrial pump series "Power Bull" Single acting models**



Art. no. 2056 Art. no. 2055 Art. no. 2096 Art. no. 2098 Art. no. 2097

Art.no.	Ratio	Delivery		
2055	10:1	27 l/min		
2056	16:1	15 l/min		
2096	4:1	50 l/min		
2097	10:1	40 l/min		
2098	1.5:1	122 l/min		

# These pumps are recommended

- to achieve very high deliveries in the use with low viscosity fluids (art. no. 2098),
- for the use with low and medium viscosity fluids at pumping distances of more than 300 m,
- for the use with high viscosity fluids at long pumping distances (art. nos. 2055, 2056, 2096, 2097),
- for simultaneous fluid supplies.

See page 47!

### **Industrial pump series "Power Bull" Double acting models**



Art. no. 2092 Art. no. 2093 Art. no. 2094

Art.no.	Ratio	Delivery		
2057	10:1	27 l/min		
2058	16:1	15 l/min		
2088	4:1	64 l/min		
2091	6:1	42 l/min		
2092	7:1	40 l/min		
2093	4:1	62 l/min		
2094	6:1	55 l/min		

- These pumps are recommended to achieve high deliveries in the use with low viscosity fluids,
- for the use with low and medium viscosity fluids at pumping distances of more than 300 m,
- for the use with high viscosity fluids at long pumping distances,
- for simultaneous fluid supplies.

See pages 46 and 48!

#### Legend

Windshield washer fluid Oil SAE 0/40 Oil SAE 90 Oil SAE 240 Waste oil Antifreeze



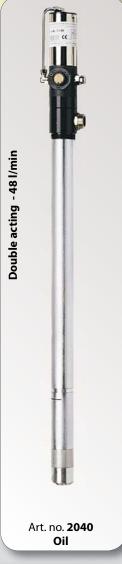
Pneumatic pumps for the transfer of low viscosity oils and antifreeze at high delivery and short pumping distances.

Compression ratio



Art. no. 2043
Oil
Waste oil
Art. no. 2049
Pure antifreeze





Art. no.	2040	2043 2049	2044 2047	2043/L 2047/L		
Compressed air supply		Pressure min	2 - max 8 bar			
Compression ratio	1.4:1		1.3 : 1			
Outlet pressure	10 bar		9 bar			
Delivery	48 l/min		35 l/min			
Connection compressed air	1/4"BSP (F)					
Connection lubricant outlet		3/4" B	SP (M)			
Max air consumption with 8 bar pressure		210	l/min			
Length suction tube	950 mm	250 mm	-	950 mm		
Diameter suction tube		55 (	mm			
Suitable for drums of	208	Spec.	Spec.	208 I		
Weight	6.6 kg	4.4 kg	4.5 kg	5.2 kg		
Dimensions (LxWxH) (mm)	95x95x1180	95x95x530	110x110x530	95x95x1180		

The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at 22°C -- Compressed air pressure 8 bar -- free flow outlet.





Art. no. **7180** 

Art. no. **7150** 

#### OPTIONAL

#### Maintenance advise

- It is recommended to use rubber hoses with a diameter of min. 3/4".
- For a continuous use of the pump it is recommended to install a compressed air treatment unit, composed of pressure regulator with manometer and moisture separator (art. no. 7180) or pressure regulator with manometer, moisture separator and lubricator (art. nos. 7150) at the compressed air inlet of the pump.
- Any installed valves, curves, filters, ball valves or flow meters will reduce the delivery of the pump.

See accessories on pages 49 – 50 and 58 - 69!



Pneumatic pumps for the supply of low and medium viscosity oils and antifreeze for the use in mobile kits or in pipeworks.

3:1 Compression ratio







Art. no.	2030	2020	2020130	2073 2074	2032 2033	2032130 2033130
Compressed air supply			Pressure min	2 - max 8 bar		
Compression ratio			3	:1		
Outlet pressure			24	bar		
Delivery		23.7 l/min		16.7 l/min	20.5	l/min
Connection compressed air		1/4" BSP (F)				
Connection lubricant outlet			1/2"B	SP (M)		
Max air consumption with 8 bar pressure			210	l/min		
Length suction tube	750 mm	950 mm	1300 mm	950	mm	1300 mm
Diameter suction tube		40 mm 45 mr				mm
Suitable for drums of	60 l	208 l	1000 l	208 I	208 l	1000 l
Weight	5 kg	5.7 kg	5.9 kg	5.6 kg	5.2 kg	5.4 kg
Dimensions (LxWxH) (mm)	95x95x1070	95x95x1270	95x95x1500	95x95x1270	95x95x530	95x95x1500

The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at 22°C -- Compressed air pressure 8 bar -- free flow outlet

See accessories on pages 49 - 50 and 58 - 69!







Pag. 41 Oil



Pneumatic pumps for the supply of medium and high viscosity oils for the use in mobile kits or in pipeworks.

5:1 Compression ratio

Art. no. 2075







Art. no.	2035	2025 2025130	2061 2061130	2075/L	2076 2076130
Compressed air supply		Pressu	ire min 2 - max	x 8 bar	
Compression ratio			5:1		
Outlet pressure			40 bar		
Delivery	15 l	/min	18 l/min	13 I	/min
Connection compressed air	1/4" BSP (F)				
Connection lubricant outlet			1/2" BSP (M)		
Max air consumption with 8 bar pressure			210 l/min		
Length suction tube	750 mm	950/13	00 mm	950 mm	950/1300 mm
Diameter suction tube			40 mm		
Suitable for drums of	60 l	60 l 208/1000 l 208 l 20			208/1000 l
Weight	5.2 kg 5.8 kg 5.4 kg 4.5 kg 5 k				5 kg
Dimensions (LxWxH) (mm)	95x95x1070	95x95x1270	95x95x1270	95x95x1270	95x95x950

Art. no. 2204 L 950 mm
Art. no. 2204/14 L 1500 mm

Art. no. 2205
Ø 1" 1.5 m

Art. no. 2076130
IBC 1000 I



The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at  $22^\circ\text{C}$  — Compressed air pressure 8 bar — free flow outlet

See accessories on pages 49 – 50 and 58 - 69!



Pneumatic oil pumps with double compressed air outlet distributor, assuring higher delivery rates compared to the standard versions.

# **SERIE TWDE**











Art. no.	2020TWDE	2030TWDE	2025TWDE	2035TWDE	2075/LTWDE
Compressed air supply		Press	ure min 2 - max	8 bar	
Compression ratio	3:1	3:1	5:1	5:1	5:1
Outlet pressure	24 bar	24 bar	40 bar	40 bar	40 bar
Delivery	28 l/min	28 l/min	22 l/min	22 l/min	17 l/min
Connection compressed air	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)
Connection lubricant outlet	1/2" BSP (M)	1/2" BSP (M)	1/2"BSP (M)	1/2" BSP (M)	1/2"BSP (M)
Max air consumption with 8 bar pressure	230 l/min	230 l/min	260 l/min	260 l/min	230 l/min
Length suction tube	950 mm	650 mm	950 mm	650 mm	950 mm
Diameter suction tube	40 mm	40 mm	40 mm	40 mm	32 mm
Suitable for drums of	208 I	60 l	208 I	60 l	208 I
Weight	5.5 kg	5 kg	5.7 kg	5.3 kg	4 kg
Dimensions (LxWxH) (mm)	95x95x1270	95x95x1070	95x95x1270	95x95x1070	95x95x1270

The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at  $22^\circ\text{C}$  -- Compressed air pressure 8 bar -- free flow outlet

See accessories on pages 49 – 50 and 58 - 69!



- It is recommended to use rubber hoses with a diameter of min. 3/4".
- For a continuous use of the pump it is recommended to install a compressed air treatment unit, composed of pressure regulator with manometer and moisture separator (art. no. 7180) or pressure regulator with manometer, moisture separator and lubricator (art. nos. 7150) at the compressed air inlet of the pump.
- Any installed valves, curves, filters, ball valves or flow meters will reduce the delivery of the pump.

Pag. 43 Oil



Pneumatic pumps for the supply of oils, approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005, comply with the requirements of OIML R117-1 (DIN 19217) too.

**SERIES MID** 







Art. no. 2050 - 2051

Automatic air separator kits, suitable to separate the air eventually present in the suction line from the oil, available with (= art. no. 2051) or without (= art. no. 2050) automatic pump stop device, approved according to OIML R117-1; includes also manometer for the control of the outlet pressure and non-return valve.

By installing the air separator at the fluid outlet of a pump can be achieved the working conditions needed to meet the requirements of the directive MID MI-005 in combination with an oil flow meter that must also be approved for legal transactions.

Art. no. **2050** Air separator kit without automatic pump stop device

Art. no. **2051** Air separator kit with automatic pump stop device (stopping the pump as soon as air is sucked into the suction line due to

an empty drum or tank)

Art. no.	2023	2024	2063	2064	2063130	2064130
Compressed air supply		Pro	essure min	2 - max 8 l	oar	
Compression ratio			3	:1		
Outlet pressure			20	bar		
Delivery			Min 0.5 - M	lax 5 l/min		
Connection compressed air		1/4" BSP (F)				
Connection lubricant outlet	1/2" BSP (M)					
Max air consumption with 8 bar pressure			210	/min		
Length suction tube		950	mm		1500	) mm
Diameter suction tube	40 mm					
Suitable for drums of	208   1000					00 I
Weight	8.5 kg 8.6 kg 8.8 kg 8.9 kg 9 kg 9.1				9.1 kg	
Dimensions (LxWxH) (mm)		95x1200x1300 95x1200x1400				

The a.m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at 22°C -- Compressed air pressure 8 bar -- free flow outlet

Art. no. **2023** Art. no. **2063** 

Double acting pneumatic pumps, for the mounting directly in 208 l – drums (= art. no. 2023, based on pump art. no. 2020) or as wall-mounted pump kits (= art. no. 2063, based on pump art. no. 2032) with air separator kit art.no. 2050 (without automatic pump stop) **according to OIML R117-1**, approved for the use in legal transactions.

Art. no. **2024** Art. no. **2064** 

Double acting pneumatic pumps, for the mounting directly in 208 I – drums (= art. no. 2024, based on pump art. no. 2020) or as wall-mounted pump kits (= art. no. 2064, based on pump art. no. 2032) with air separator kit art. no. 2051 (with automatic pump stop, stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank) **according to OIML R117-1**, approved for the use in legal transactions.

See accessories on pages 49 – 50 and 58 - 69!



Pneumatic pumps for the supply of medium and high viscosity oils for the use in mobile kits or in pipeworks.

**SERIES TAPIR** 



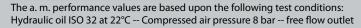








Art. no.	2013	2015	2012	2014	2016
Compressed air supply		Pressu	ure min 2 - max	8 bar	
Compression ratio	2:1	5:1	6:1	5:1	6:1
Outlet pressure	16 bar	40 bar	48 bar	40 bar	48 bar
Delivery	48 l/min	18 l/min	32 l/min	18 l/min	32 l/min
Connection compressed air	1/4" B	1/4" BSP (F) 1/2" BSP (F)			1/2"BSP (F)
Connection lubricant outlet			3/4" BSP (M)		
Max air consumption with 8 bar pressure	220	l/min	260 l/min	220 l/min	260 l/min
Length suction tube			950 mm		
Diameter suction tube	55 mm		40 ı	mm	
Suitable for drums of	208				
Weight	8.5 kg 8.2 kg 12 kg 8.2 kg 12 kg				
Dimensions (LxWxH) (mm)	95x95x1270 95x95x1500				



See accessories on pages 49 – 50 and 58 - 69!







# **PNEUMATIC PISTON OIL PUMPS DOUBLE ACTING DRUM PUMPS**

Heavy duty pneumatic pumps, industrial pump series "Power Bull", designed for the supply of oil under demanding conditions. Particularly suitable for the oil distribution in pipeworks and installations where a simultaneous supply of oil is required on different dispensing points at high pressure and/or with a high delivery.

**SERIES POWER BULL** 









Art. no.	2057	2058	2088	2091		
Compressed air supply		Pressure min	1 - max 8 bar			
Compression ratio	10:1	16:1	4:1	6:1		
Delivery	27 l/min	15 l/min	64 l/min	42 l/min		
Outlet pressure	80 bar	128 bar	32 bar	48 bar		
Max frequence strokes/min	150	120	150	120		
Max air consumption with 8 bar pressure	2.05 m <sup>3</sup> /min	1.92 m³/min	2.05 m <sup>3</sup> /min	1.92 m³/min		
Diameter pneumatic piston	100 mm	125 mm	100 mm	125 mm		
Diameter suction tube	50 x 40 mm	50 x 40 mm	55 x 50 mm	55 x 50 mm		
Connection lubricant outlet		1"BS	P (M)			
Connection compressed air	1/2" BSP (F)					
Suitable for drums of	208					
Weight	15 kg	16 kg	16 kg	17 kg		

See accessories on pages 49 - 50 and 58 - 69!





Art. no. 7180/12 Art. no. 7150/12

OPTIONAL

Maintenance advise
In order to avoid a slowing-down or even a
blocking of the pump due to a freezing of
generated condensation water closing the air outlet of the motor, we recommend the installation of the above shown air treatment units at the compressed air connection of the pump.



# PNEUMATIC PISTON OIL PUMPS SINGLE ACTING WALL MOUNTED PUMPS

Heavy duty pneumatic pumps, industrial pump series "Power Bull", designed for the supply of oil under demanding conditions. Particularly suitable for the oil distribution in pipeworks and installations where a simultaneous supply of oil is required on different dispensing points at high pressure and/or with a high delivery.

**SERIES POWER BULL** 









Art. no.	2055	2056	2096	2097	2098
Compressed air supply		Press	sure min 1 - max	8 bar	
Compression ratio	10:1	16:1	6:1	10:1	1.5 : 1
Delivery	27 l/min	15 l/min	56 l/min	46 l/min	122 l/min
Outlet pressure	80 bar	128 bar	48 bar	80 bar	12 bar
Max frequence strokes/min	150	120			
Max air consumption with 8 bar pressure	2.05 m <sup>3</sup> /min	1.80 m³/min 1.92 m³/m			1.92 m <sup>3</sup> /min
Diameter pneumatic piston	100 mm	125 mm	125 mm	160 mm	125 mm
Diameter suction tube	50 x 40 mm	50 x 40 mm	80 x 70 mm	80 x 70 mm	110 x 100 mm
Connection lubricant outlet			1" BSP (M)		
Connection compressed air		1/2" BSP (F)			
Application		Wall mounted pump			
Weight	15 kg	16 kg	20 kg	23 kg	21 kg





See accessories on pages 49 – 50 and 58 - 69!

Oil

The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at 22°C -- Compressed air pressure 8 bar -- free flow outlet



# PNEUMATIC PISTON OIL PUMPS DOUBLE ACTING WALL MOUNTED PUMPS

Heavy duty pneumatic pumps, industrial pump series "Power Bull", designed for the supply of oil under demanding conditions. Particularly suitable for the oil distribution in pipeworks and installations where a simultaneous supply of oil is required on different dispensing points at high pressure and/or with a high delivery.

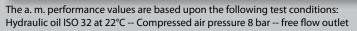
**SERIES POWER BULL** 







Art. no.	2092	2093	2094		
Compressed air supply	Pı	ressure min 1 - max 8 b	ar		
Compression ratio	7:1	4:1	6:1		
Delivery	40 l/min	62 l/min	55 l/min		
Outlet pressure	56 bar	32 bar	48 bar		
Max frequence strokes/min	120	120	60		
Max air consumption with 8 bar pressure	1.92 m <sup>3</sup> /min	1.92 m <sup>3</sup> /min	1.80 m <sup>3</sup> /min		
Diameter pneumatic piston	125 mm	125 mm	160 mm		
Diameter suction tube	55 x 50 mm	80 x 70 mm	80 x 70 mm		
Connection lubricant outlet	1" BSP (M)				
Connection compressed air	1/2" BSP (F)				
Application	Wall mounted pump				
Weight	15 kg	20 kg	32 kg		





See accessories on pages 49 – 50 and 58 - 69!



# ACCESSORIES FOR PNEUMATIC OIL PUMPS SERIES "POWER BULL"



#### Art. no. 2214/50

Wall bracket in galvanized steel, suitable for the installation of pneumatic oil pumps, series "Power Bull", art. nos. 2055 – 2056. Dimensions: 290 x 290 x 250 mm – ø cylinder 50 mm. Distances between fixation holes: 230 x 205 mm.

#### Art. no. 2214/55

Wall bracket in galvanized steel, suitable for the installation of pneumatic oil pumps, series "Power Bull", art. no. 2092. Dimensions:  $290 \times 290 \times 250 \text{ mm} - \emptyset$  cylinder 55 mm. Distances between fixation holes:  $230 \times 205 \text{ mm}$ .

#### Art. no. 2214/80

Wall bracket in galvanized steel, suitable for the installation of pneumatic oil pumps, series "Power Bull", art. nos. 2093 - 2094 - 2096 - 2097. Dimensions:  $290 \times 290 \times 250 \text{ mm} - \emptyset$  cylinder 80 mm. Distances between fixation holes:  $230 \times 205 \text{ mm}$ .

#### Art. no. 2214/110

Wall bracket in galvanized steel, suitable for the installation of pneumatic oil pumps, series "Power Bull", art. no. 2098. Dimensions:  $290 \times 290 \times 250 \text{ mm} - \emptyset$  cylinder 110 mm. Distances between fixation holes:  $230 \times 205 \text{ mm}$ .



#### Art. no. 2216

Suction tube in galvanized steel,  $\emptyset$  55 mm, length 950 mm, with 90° - curved connection 1' 1/4" BSP (M), with foot valve. Suitable for the use of wall-mounted pneumatic oil pumps, series "Power Bull", with 208 I – drums.

#### Art. no. 2218

Rubber suction hose SAE 100 R1 AT, ø 1' 1/4", connections 1' 1/4" BSP (F-F), length 1500 mm.

Suction tubes and suction hoses in other lengths available on demand!



#### Art. no. 4343/50

Metal bung adapter for the fixation of pumps, series "Power Bull", on drums or tanks. Connection 2" BSP (M) x 50 mm. Suitable for art. nos. 2057 – 2058.

#### Art. no. 4343/55

Metal bung adapter for the fixation of pumps, series "Power Bull", on drums or tanks. Connection 2" BSP (M) x 55 mm. Suitable for art. nos. 2088 – 2091.



#### Art. no. 4342/50

Metal flange plate for fixation of pumps, series "Power Bull", with suction tube diameter 50 mm, without bung adapter. Suitable for art. nos. 2055 - 2056 – 2057 - 2058.

#### Art. no. 4342/55

Metal flange plate for fixation of pumps, series "Power Bull", with suction tube diameter 55 mm, without bung adapter. Suitable for art. nos. 2088 – 2091 - 2092.



#### Art. no. **7180/12** Art. no. **7150/12**

Compressed air treatment unit, composed of pressure regulator with manometer and moisture separator (art. no. 7180/12) or pressure regulator with manometer, condensation water separator and lubricator (art. no. 7150/12). Connections: BSP 1/2".

Pag. 49 Oil



# **ACCESSORIES FOR PNEUMATIC OIL PUMPS**



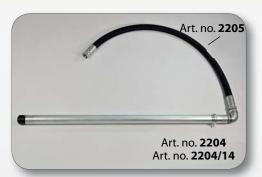
#### Art. no. 2203

Wall bracket in galvanized steel, suitable for the installation of pneumatic oil pumps, standard series.

Dimensions: 170 x 140 x 235 mm.

Distances between fixation holes: 140 x 200 mm.





#### Art. no. 2204

Suction tube in galvanized steel,  $\emptyset$  40 mm, length 950 mm, with 90° - curved connection 1" BSP (M), with foot valve. Suitable for the use of wall-mounted pneumatic oil pumps, standard series, with 208 I – drums.

#### Art. no. 2204/14

Suction tube in galvanized steel,  $\emptyset$  40 mm, length 1100 mm, with 90° - curved connection 1″ BSP (M), with foot valve. Suitable for the use of wall-mounted pneumatic oil pumps, standard series, with 1000 l – IBC -tanks.

#### Art. no. 2205

Rubber suction hose SAE 100 R1 AT, ø 1", connections 1" BSP (F-F), length 1500 mm.

Suction tubes and suction hoses in other lengths available on demand!



#### Art. no. 4340

Plastic bung adapter for the fixation of pumps on drums, connection 2" BSP (M) x 40 mm.

#### Art. no. **4341**

Plastic lock ring, 2", for bung adapter art. no. 4340.



#### Art. no. 2212

Steel mounting plate, for the fixation of pneumatic pumps and accessories on 1000 I – IBC – tanks. Prepared for bung adapter for the fixation of pumps, connection thread 3/4" BSP (F).

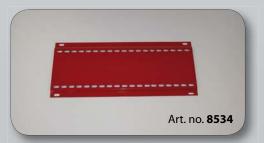
Dimensions: 270 x 270 mm.



#### Art. no. **2217**

Connection adapter for 1000 I - IBC - tanks in PP, Ø 70 mm, connection 1"BSP (M).





#### Art. no. 8534

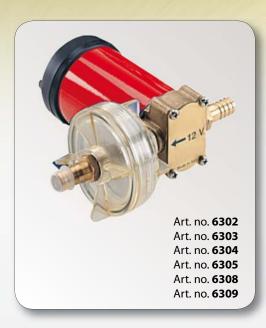
Metal rack for wall mounting of pumps, length 1350 mm.



# PNEUMATIC AND ELECTRIC OIL PUMPS



#### Portable pneumatic and electric pumps, suitable for the transfer of small fluid quantities.



Electric gear pump for an intermittent use, for the transfer of hydraulic low viscosity oil, antifreeze (A), diesel (D), water (W).

Protection category IP55. Pump body in brass, gears in bronze and pump shaft in stainless steel.

Electric cable and crocodile clamps not included.



Art. no.	Voltage	Current drain	Allowed Fluids	Delivery	Outlet pressure	Connections	Weight	Dimensions (LxWxH) (mm)
6302	12 Vdc	6 A	A - D - W	15 l/min	2 bar		1.5 kg	165x160x80
6303	12 Vac	5 A	Oil	1 l/min	4 bar		2.5 kg	165x166x80
6304	24 Vdc	3 A	A - D - W	15 l/min	2 bar	3/8"	1.5 kg	165x160x80
6305	12 Vdc	11 A	Oil	6 l/min	4 bar	BSP (F)	4 kg	180x230x83
6308	24.Vds	3 A	Oil	1 l/min	4 bar		2.5 kg	165x166x80
6309	24 Vdc	6 A	Oil	6 l/min	4 bar		4 kg	180x230x83



Electric gear pump for an intermittent use, for the transfer of hydraulic low viscosity oil, antifreeze (A), diesel (D), water (W).

Pump body in brass, gears in bronze and pump shaft in stainless steel. With metal cover, ON-/OFF switch and 1 m - cable with alligator clamps for battery connection. Protection category IP55.



I	Art. no.	Voltage	Current drain	Allowed Fluids	Delivery	Outlet pressure	Connections	Weight	Dimensions (LxWxH) (mm)
l	6312	12 Vdc	6 A	A - D - W	15 l/min	2 bar	3/8"	2.5 kg	165x160x80
l	6314	12 Vac	11 A	Oil	6 l/min	4 bar		4.5 kg	185x240x85
I	6324	24.7/4-	3 A	A - D - W	15 l/min	2 bar	BSP (F)	2.5 kg	165x160x80
	6326	24 Vdc	6 A	Oil	6 l/min	4 bar		4.5 kg	185x240x85



Pneumatic rotary gear pump for the transfer of hydraulic low viscosity oil, antifreeze, diesel, water.

Pump body in brass (art. no. 6559) or in stainless steel (art. no. 1058), gears in bronze, seals in Viton® and pump shaft in stainless steel.



Art. no.	Compressed air supply	Outlet pressure	Delivery	Connections	Weight	Dimensions (LxWxH) (mm)
6559	4 bar	4 bar 4 bar		3/8"	1 E ka	165,160,00
1058	4 Dar	4 bar	10.5 l/min	BSP (F)	1.5 kg	165x160x80







Electric gear pump, self-priming, protection category IP 55, for the supply of oil, antifreeze, diesel, water at medium pressure; guarantees a constant flow and a low noise level.

Pump body in stainless steel, gears in bronze and pump shaft in stainless steel.

Includes a bypass valve preset on 15 bar pressure and 1.5 m - electric cable with SCHUKO plug.



Art. no. 6123 Gear pump as 6122 with IXEF pump body, connections Ø 1/2".

Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery I/min	Connections	Weight
6125	110 Vac - 60 Hz			2760		10.5	3/8" BSP (F)	7.5 kg
6122	230 Vac - 50 Hz	0.55 kw	3.8 A		15 bar			
6128	400 Vac - 50 Hz	0.55 KW	3.0 A	2700			23. (1)	
6123	230 Vac - 50 Hz				4 bar	15	1/2"BSP (F)	7 kg



Electric, self-priming gear pump for the supply of oil, antifreeze, diesel, water at medium pressure; guarantees a constant flow and a low noise level. Pump body in stainless steel, gears in bronze and pump shaft in stainless steel.

Kit includes a bypass valve preset on 15 bar pressure, an inline oil filter, a manometer for outlet pressure control, a 1.5 m - electric cable with SCHUKO plug and an electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed. Protection category IP 55.



Art. no.	Voltage	Power	Current drain		Outlet pressure	Delivery l/min	Connections	Weight
6141	230 Vac - 50 Hz		3.8 A	2760	1 <i>C</i> box	10.5	3/8"	11 F les
6129	400 Vac - 50 Hz			2/60	15 bar	10.5	BSP (F)	11.5 kg

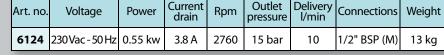


Electric, self-priming gear pump for the supply of oil, approved according to the requirements of OIML R117-1 (DIN 19217).

#### Consisting of:

- electric, self-priming 230 VAC gear pump, art. no. 6122;
- automatic air separator kit, art. no. 2054, suitable to separate the air eventually present in the suction line from the oil, with automatic pump stop device, approved according to OIML R117-1; includes also manometer for the control of the outlet pressure and non-return valve;
- control box with push button and electric connection cable;
- double electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- bypass valve preset on 15 bar pressure;
- 1.5 m electric cable with SCHUKO plug. Protection category IP 55.

Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery I/min	Connections	Weight
6124	230 Vac - 50 Hz	0.55 kw	3.8 A	2760	15 bar	10	1/2" BSP (M)	13 kg







Electric, self-priming gear pump, for the supply of oil under demanding conditions at medium pressure and with long pumping distances; guarantees a constant flow and delivery, even after long pumping distances or with simultaneous supplies.

Available with motors in 230 Vac, 400 Vac and 110 Vac.

Includes a bypass valve preset on 28 bar pressure.

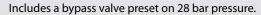
Electric cable with plug not included.

	, ,							
Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery I/min	Connections IN - OUT	Weight
6133	110 Vac - 60 Hz		9.6 A					28 kg
6135	230 Vac - 50 Hz	1.5 Kw	9.0 A	1400		34		20 kg
6138	400 Vac - 50 Hz		9 A		28 bar		1"BSP (M) - 1"BSP (M)	30 kg
6145	230 Vac - 50 Hz	2.2 kw	12.5 A	2760		53		30 Kg
6149	400 Vac - 50 Hz	∠.∠ KW	10 A			<i>J</i> 3		32 kg



#### Kit **6136**

Electric gear pump, art. no. 6135, equipped with kit art.no. 7373 consisting of pressure accumulator, inline oil filter, non-return valve, manometer, connection adapters and an electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed. The pressure accumulator guarantees a constant oil flow by avoiding continuous starts and stops of the motor that could cause damages in case of dispensing small quantities.



Electric cable with plug not included.

Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery I/min	Connections IN - OUT	Weight
6136	230 Vac - 50 Hz	1.5 kw	9.6 A	1400	28 bar	34	1"BSP (M) - 3/4"BSP (M)	33 kg



#### Kit 3049

Encased oil supply kit, composed of: electric gear pump, art. no. 6136, metal and lockable cover, art. no. 7376, and safety switch of protection category IP 55, art. no. 7370, with 3 m – cable and plug.

#### Kit **3050**

Encased oil supply kit, such as art. no. 3049, but including electric gear pump, art. no. 6145, with delivery 53 l/min. Ideal for pipework installations.



Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery I/min	Connections IN - OUT	Weight
3049	-230 Vac - 50 Hz	1.5 kw	9.6 A	1400		34 1// DCD (MA) 1// DCD (MA)		37 kg
3050		2.2 kw	12.5 A	2760	28 bar 53		1"BSP (M) - 1"BSP (M)	39 kg

# MANUAL PUMPS FOR OIL AND ANTIFREEZE



Manual lever action drum pumps, available as single action or double action versions, made of carbon steel with components in aluminium and seals in Viton®.

Main fields of application: transfers and dispenses of small quantities of oil or antifreeze from drums.



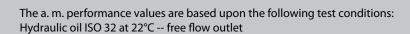






# TECHNICAL DATA

Art. no.	5403	5405	5410	5420	
Delivery/min.	12 I	241	81	16 I	
Delivery/stroke	0.25 l	0.48	0.13 l	0.23 l	
Connection lubricant outlet					
Length suction tube		1000	mm		
Dimensions LxWxH (mm)		80x80	80x80x1350		
Suitable for drums of	2081				
Weight	2.3 kg	2.3 kg	2.2 kg	2.2 kg	





Art. no. **2824**Digital flow meter art. no. 2629 (see page 61!) with connection adapter for manual pumps, 1 m - outlet hose and rigid outlet with automatic anti-drip nozzle.



Example for application on pump.

# MANUAL PUMPS FOR OIL AND DIESEL



Manual lever action and rotary drum pumps, made of carbon steel with components in aluminium.

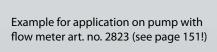
Main fields of application: transfers and dispenses of small quantities of oil or diesel as well as gear oil (art. no. 5303) from drums.













# Art no

Art. no.	5409	5400	5450	5300	5301 5303	
Delivery/min.	12 l	91	13.5 l	23 I	20 l/min	
Delivery/stroke (rotation)	0.25 l	0.11 l	0.40 l	0.32 l	0.25 l	
Connection lubricant outlet	3/4" BSP (M)					
Length suction tube			1000 mm			
Dimensions LxWxH (mm)	100x100x944	100x100x944	120x120x1110	300x220x1070	300x220x1070	
Suitable for drums of	60/208 l	208 I				
Weight	1.8 kg	1.3 kg	2.2 kg	3.8 kg	4.2 kg	

The a. m. performance values are based upon the following test conditions: Hydraulic oil ISO 32 at 22°C -- free flow outlet



Art. no. **5303** 

Rotary drum pump, art. no. 5301, with 1.5 m - outlet hose, ball valve and curved, rigid gear oil outlet pipe; suitable for the use with gear oil.

# MANUAL OIL DISPENSING UNITS



Manual oil dispensing units, consisting of a portable container with or without wheels and a lever action pump suitable for transfers and dispenses of small quantities of oil, in applications where no other power supply is available.



#### Art. no. 5200

Portable oil dispensing unit, consisting of lever action oil pump, metal 16 l – container, 1.5 m – hose with curved rigid outlet pipe.

Art. no.	Delivery/ min	Delivery/stroke	Capacity container	Weight	Dimensions (LxWxH) (mm)
5200	8 I	0.13 l	16 l	7.3 kg	250x320x660





#### Art. no. 5216

Mobile oil dispensing unit, consisting of lever action oil pump, metal 16 I – container, 1.5 m – hose with curved, rigid outlet pipe and trolley with 2 wheels.

Art. no.		Delivery/ min	Delivery/stroke	Capacity container	Weight	Dimensions (LxWxH) (mm)
	5216	8 I	0.13 l	16 l	10 kg	500x460x880





#### Art. no. **5423**

Mobile oil dispensing unit, suitable for the use with gear oils, consisting of lever action oil pump, metal 24 l – container with 2 wheels and level indicator, 1.5 m – hose with curved, rigid gear oil outlet pipe and anti-drip shut-off valve, particularly suitable for ATF – filling.

Art. no.		Delivery/ min	Delivery/stroke	Capacity container	Weight	Dimensions (LxWxH) (mm)
	5423	8 I	0.13 l	24	12 kg	380x410x770





Mobile oil dispensing unit, suitable for the use with gear oils, consisting of lever action oil pump suitable for drums up to 60 l, trolley with 3 wheels and pump holder, 1.5 m – hose with curved, rigid gear oil outlet pipe, particularly suitable for ATF filling.



Art. no.	Delivery/ min	Delivery/stroke	Suitable for drums of	Weight	Dimensions (LxWxH) (mm)
5434	8 I	0.13 l	up to 60 l	14 kg	600x380x1010



# PNEUMATIC OIL DISPENSING UNITS



Pneumatic oil dispensing units, consisting of a portable container with or without wheels that must be pressurized with compressed air, permitting an oil supply until the overpressure is carried to end. Suitable for transfers and dispenses of small quantities of oil.



#### Art. no. 3327

Mobile oil dispensing unit, consisting of 24 I – container with 2 wheels, level indicator, manometer, wide filling funnel, 1.6 m – rubber hose, oil control gun, art. no. 2185, with rigid outlet and automatic anti-drip nozzle. Max pressure 7 bar.

Art. no.	Max pressure	Capacity container	Weight	Dimensions (LxWxH) (mm)
3327	7 bar	24	9.8 kg	350x400x950





#### Art. no. 3396

Mobile oil dispensing unit, consisting of 24 I – container with 2 wheels, level indicator, manometer, wide filling funnel, 1.6 m – rubber hose, oil control gun with digital flow meter, art. no. 2626, with rigid outlet and automatic anti-drip nozzle. Max pressure 7 bar.

Art. no.	Max pressure	Capacity container	Weight	Dimensions (LxWxH) (mm)
3396	7 bar	24	12 kg	350x400x950





#### Art. no. 3358

Mobile oil dispensing unit, consisting of 40 l – container with 2 wheels, level indicator, manometer, wide filling funnel, 1.6 m – rubber hose, oil control gun, art. no. 2185, with rigid outlet and automatic anti-drip nozzle. Max pressure 5 bar.

Art. no.	Max pressure	Capacity container	Weight	Dimensions (LxWxH) (mm)
3358	5 bar	40 l	18 kg	350x400x950







Mobile oil dispensing unit, consisting of 40 l – container with 2 wheels, level indicator, manometer, wide filling funnel, 1.6 m – rubber hose, oil control gun with digital flow meter, art. no. 2626, with rigid outlet and automatic anti-drip nozzle. Max pressure 5 bar.



Art. no.	Max pressure	Capacity container	Weight	Dimensions (LxWxH) (mm)
3359	5 bar	40 I	18.5 kg	380x400x1010



# **OIL CONTROL GUNS AND ACCESSORIES**





#### Art. no. 2180

Oil control gun, body in anodized aluminium, impact resistant, with trigger guard, cartridge filter, connections 1/2" BSP (F), max flow 50 l/min, max pressure 100 bar.

#### Art. no. 2181

Oil control gun with 1/2'' BSP (M) inlet swivel, flexible rubber outlet, Ø 1/2'', with 90° stem and automatic anti-drip nozzle.

#### Art. no. 2182

Oil control gun, with 1/2'' BSP (M) inlet swivel, flexible rubber outlet, Ø 1/2'', with  $90^\circ$  stem and manual anti-drip nozzle.

#### Art. no. **2185**

Oil control gun with 1/2" BSP (M) inlet swivel, rigid outlet,  $\emptyset$  12 mm and automatic anti-drip nozzle.

Control guns for the use with antifreeze and windshield washer fluid are also available on demand!



#### Art. no. 2154

Oil control gun, body in anodized aluminium, with trigger guard, cartridge filter, connections 3/4" BSP (F), max flow 100 l/min, max pressure 70 bar.

#### Art. no. 2155

Oil control gun as Art. no. 2154 with 3/4" BSP (M) inlet swivel, rigid outlet, Ø 3/4", with connections 3/4" BSP (M).

#### Art. no. **2156**

Oil control gun as Art. no. 2155 with automatic anti-drip nozzle.

#### Art. no. **2157**

Oil control gun as art. no 2154 with 3/4'' BSP (M) inlet swivel, flexible rubber outlet, Ø 3/4'', with connections 3/4'' BSP (M) and automatic anti-drip nozzle.



#### Art. no. **2159**

High delivery oil control gun, body in anodized aluminium, connections 1" BSP (F), max. flow 150 l/min, max. pressure 100 bar.

#### Art. no. 2162

High delivery oil control gun, body in anodized steel, with 1" BSP (M) inlet swivel, flexible rubber outlet,  $\emptyset$  1", with connections 1" BSP (M) and automatic anti-drip nozzle.

#### Art. no. 2161

High delivery oil control gun, body in anodized steel, with 1" BSP (M) inlet swivel, rigid outlet, Ø 20 mm, and automatic anti-drip nozzle.



# **OIL CONTROL GUNS AND ACCESSORIES**



Art. no. <b>2114</b>	Automatic anti-drip nozzle, suitable for outlets of $\emptyset$ 12 mm. Connection 10x1 (F).
Art. no. <b>2116</b>	Manual anti-drip nozzle with screw regulation, suitable for outlets of Ø 12 mm. Connection 10x1 (F).
Art. no. <b>2117</b>	Automatic anti-drip nozzle, suitable for outlets of Ø 16 mm. Connection 16x1 (F).
Art. no. <b>2119</b>	Manual anti-drip nozzle with screw regulation. Connection 1/2" BSP (M).
Art. no. <b>2121</b>	Manual anti-drip nozzle, suitable for outlets of $\emptyset$ 12 mm. Connection 10x1 (F).
Art. no. <b>2143</b>	Automatic anti-drip nozzle. Connection 1" BSP (F).



Art. no. <b>2104</b>	Straight flexible rubber outlet, length 300 mm, with manual anti-drip nozzle with screw regulation. Connection 1/2" BSP (M).
Art. no. <b>2108</b>	Curved rigid outlet, Ø 12 mm, with automatic anti-drip nozzle.
Art. no. <b>2110</b>	Standard rigid outlet, Ø 12 mm, with automatic anti-drip nozzle.
Art. no. <b>2115</b>	Rigid outlet, Ø 16 mm, with automatic anti-drip nozzle.
Art. no. <b>2132</b>	Flexible rubber outlet, Ø 1/2", with curved rigid 90° stem and automatic anti-drip nozzle. Connection 1/2" BSP (M).
Art. no. <b>2133</b>	Flexible rubber outlet, Ø 1/2", with curved rigid 90° stem and manual anti-drip nozzle with screw regulation. Connection 1/2" BSP (M).
Art. no. <b>2140</b>	Inline oil flow control tube, with transparent insert.
Art. no. <b>2142</b>	Flexible outlet, Ø $1/2$ ", with curved rigid 90° stem and manual anti-drip nozzle. Connection $1/2$ " BSP (M).



Art. no. **1107** Inlet swivel, in stainless steel AISI 304, connections 1/2" BSP (M), max static pressure 200 bar.

Inlet swivel, in galvanized steel, connections 1/2" BSP (M), max static

Art. no. 2107/33

Inlet swivel 3/4" BSP (M) – 3/4" BSP (M).



Art. no. **2107/34** Inlet swivel 3/4" BSP (M) – 1" BSP (F).

pressure 200 bar.

Art. no. 2106

Art. no. **2107/10** Inlet swivel 1"BSP (M) – 1"BSP (F).

Art. no. **2107/35** Inlet swivel 3/4" BSP (M) – 1" BSP (M).

Art. no. **2107/36** Inlet swivel 1" BSP (M) – 1" BSP (M).

Pag. 59

Oil



Electronic device developed for the metering of fluids, particularly in applications where an immediate control of the supplied fluid is required.

The function is based upon the oval gears measuring system combined with a probe that is measuring electromagnetic pulses monitored by an electronic component which indicates the quantity of each individual fluid dispense (single operation), the quantity of a sum of dispenses (partial totalizer) and the total of all dispenses ever made (absolute totalizer).

The Flexbimec flow meters are high quality measuring devices for the quantity control of lubricant dispenses. In all model series, "Oil Gate", "Oil Bit Plus" and "Oil HFlow" it is possible to display 3 different totals which show the quantities of the carried out fluid dispenses in the desired mode. In the series "Oil DT" simultaneously 2 different totals (single operation and absolute total) are visible on the display.

#### Quantity of each individual operation (single operation):

The lubricant is supplied directly from the storage container and passes through the flow meter where the dispensed quantity is displayed as soon as the trigger of the control gun is manually released.

#### Quantity of a sum of dispenses (partial totalizer):

This mode accumulates a number of individual operations and can be reset to zero periodically. It enables the user to display a daily, weekly or monthly quantity of dispenses.

#### Quantity of all dispenses ever made (absolute totalizer):

In this mode all dispenses made since the first use of the flow meter are displayed as an inventory value that cannot be reset to zero and so show a balancing of the fluid consumption.

#### Preset of the quantity:

In the flow meter models with preset function a small, but effective element of automation is added which permits the user to predetermine the desired dispensing quantity and to stop the flow automatically once the preset quantity has been reached.

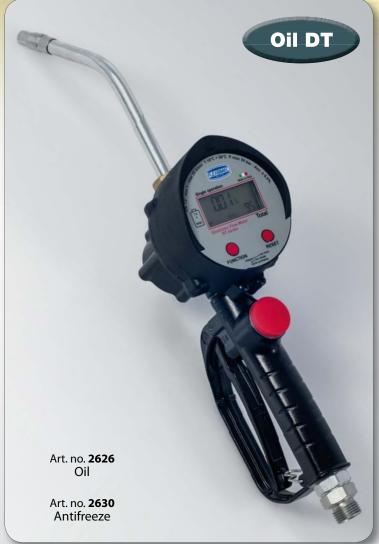
The flow meters are factory calibrated with hydraulic oil ISO 32. Anyway, they can easily be re-calibrated by the user according to the lubricant type used.

Also it is possible to change the measuring unit from liters quickly into gallons, pints or quarts using the push buttons of the display.

The series "MID MI-005" is a product line of flow meters for the supply of oils which are **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**.







#### Art. no. 2626

Electronic oval gears flow meter for oil, series "Oil DT", with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). The new series "Oil DT" features the following advantages compared to the previous series:

- Control gun (art. no. 2180) includes a trigger guard, allows an easier maintenance, offers the possibility of a gradual oil supply through the trigger, and permits to open the valve with a minimum effort;
- Flow meter with enlarged display, with simultaneous visibility of 2 different totals (single operation and absolute total);
- Possibility of changing the measuring unit (liters, quarts, pints, gallons);
- Improved accuracy and repeatability of the measurement;
- Pressure drop.

#### Art. no. 2630

Electronic oval gears flow meter for antifreeze, series "Oil DT", with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

Art. no. 2707

Protection rubber cover (optional).



Art. no. **2706** 

Protection rubber giants cover (optional). Provided a increased safety against the shocks thanks to the extended vanes of the extra size bumper.

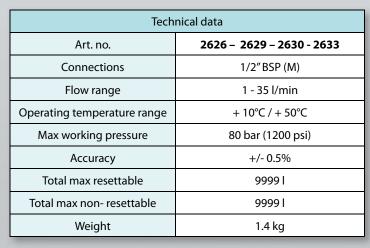


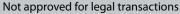
#### Art. no. **2629**

Electronic oval gears flow meter for oil, series "Oil DT", suitable for inline applications, connections 1/2" BSP.

#### Art. no. **2633**

Electronic oval gears flow meter for oil, series "**Oil DT**", with control gun, flexible rubber outlet, Ø 1/2", with curved rigid  $90^{\circ}$  stem, automatic antidrip nozzle and inlet swivel 1/2" BSP (M).







Pag. 61 Oil







#### Art. no. 2826

Electronic oval gears flow meter for oil, series "Oil Bit Plus", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

The flow meters of the "Oil Bit Plus" series offer the following additional advantages compared to those of the "Oil DT" series:

- Rubber protection guard for the meter included,
- Higher measurement accuracy due to three decimal digits.

#### Art. no. 2830

Electronic oval gears flow meter for antifreeze, series "Oil Bit Plus", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

#### Art. no. 2829

Electronic oval gears flow meter for oil, series "**Oil Bit Plus**", suitable for inline applications, connections 1/2" BSP.



#### Art. no. 2831

Electronic oval gears flow meter for oil, series "**Oil Bit Plus**", with control gun, rubber protection guard, trigger guard, straight flexible rubber outlet, Ø 1/2", with manual anti-drip nozzle with screw regulation and inlet swivel 1/2" BSP (M).

Technical data				
Art. nos.	2826 - 2829 - 2830 - 2831			
Connections	1/2" BSP (M)			
Flow range (I/min)	1 - 35			
Operating temperature range	+ 10°C / + 50°C			
Max working pressure	80 bar (1200 psi)			
Accuracy	+/- 0.5%			
Total max resettable	9999 I			
Total max non - resettable	9999 I			
Weight	1.5 kg			

Not approved for legal transactions





Art. no. 2937

Electronic oval gears **preset** flow meter for oil, series "**Oil Gate**", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

The preset function is adding a small, but effective element of automation which permits the user to predetermine the desired dispensing quantity and to stop the flow automatically once the preset quantity has been reached.

Re-calibration by the user is possible.

Art. no. 2942

Electronic oval gears **preset** flow meter for antifreeze, series "**Oil Gate**", with control gun, rubber protection guard, trigger guard, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).



Art. no. **2836** 

Electronic oval gears **preset** flow meter for oil, series "**Oil Gate**", with control gun, rubber protection guard, trigger guard, flexible rubber outlet,  $\emptyset$  1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).



Technical	data
Art. nos.	2836 – 2937 – 2942
Connections	1/2" BSP (F)
Flow range (I/min)	1 - 35
Operating temperature range	+ 10°C / + 50°C
Max working pressure	80 bar (1200 psi)
Accuracy	+/- 0.5%
Total max. resettable	9999 I
Total max. non- resettable	99991
Weight	1.6 kg

Not approved for legal transactions

Pag. 63 Oil





Art. no. 2854

Electronic oval gears high delivery flow meter for oil, series "Oil HFlow", with control gun 1" BSP, trigger guard, rigid outlet Ø 20 mm, automatic anti-drip nozzle and 1" BSP (M) inlet swivel.

This high volume series allows to accelerate the oil supplies by the use of a flow meter that guarantees high accuracy measurement even at high flow rates.



	Technical data							
Art. nos.	2851 2854 2855		2852					
Connections		1" BSP		1' 1/4" BSP				
Flow range (I/min)	20 - 120	20	- 80	20 - 150				
Operating temperature range		+ 10°C	/ + 50°C					
Max working pressure	75 bar (1125 psi)			75 bar (1125 psi)				
Accuracy	·	+/-(	0.5%	•				
Total max resettable		99991						
Total max non- resettable	9999991 99991		999999 I					
Weight	1.6 kg	3.9 kg	3.9 kg	1.8 kg				





Art. no. 2851

Electronic oval gears high delivery flow meter for oil, series "Oil Electronic oval gears high delivery flow meter for oil, series "Oil HFlow", with **HFlow**", suitable for inline applications, connections 1" BSP (F).

Art. no. 2852

Electronic oval gears high delivery flow meter for oil, series "Oil **HFlow**", suitable for inline applications, connections 1'1/4" BSP (F).

Art. no. 2855

control gun 1" BSP, trigger guard, flexible rubber outlet Ø 3/4", automatic anti-drip nozzle and 1" BSP (M) inlet swivel.

# MID MI-005 APPROVED OIL FLOW METER



The European Directive 2014/32/EU, better known as Directive MID (Measuring Instruments Directive), is a community

norm responding to reasons of public interest, safety and order, environment protection as well as preventing consumer from false measurement, of levying taxes and duties and of fair trading. All these application, which directly and indirectly affect the daily life of citizens in many ways, may require certified measuring systems subject to legal verification.

The MID MI-005 involves measuring systems for continuous and dynamic measurement of quantities of liquids other than water, particularly lubricant oils.

The Flexbimec oil flow meter series  $\boldsymbol{\text{MID MI-005}}$  comply with metrological standards

and requirements concerning accuracy as defined in the a.m. Directive and can be used therefore as approved meters also in legal transactions.



CE test certificate no: MID 89\_B\_1
MID certificate no: CE M16 0476





### MID-Oil Counter - Art. no. 2545

Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control pipe with sight glass, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M).

This flow meter fully comply the requirements of the **OIML R117-1** (Dynamic measuring systems for liquids other than water – Part 1: Metrological and technical requirements, edition 2007) and **Welmec 7.2** software guide, May 2011.

Operating condition	ons for the use
Viscosity range of lubricants	94-185 mPa*s
Flow range	0.5 – 10 l/min
Min. measurable quantity	0.5
Accuracy class	0.5 (MID MI-005 – OIML R117-1)
Operating temperature range	+ 5°C / + 40°C
Working pressure range	1 – 20 bar
Display resolution degree	0.005 l
Mechanical environment category	M1
Electromagnetic enviroment category	E2
Checksum code	cksum E57E
Protection class	IP 64
Underlying CE directives	2004/108/CE 2006/95/CE
Underlying CE norms	CEI EN 61000-4-2 CEI EN 61000-4-2 A1 CEI EN 61000-4-2 A2 CEI EN 61000-4-3
Single operations data storing capacity	2000 record data
Composition of storable single operations data	<ul> <li>Serial number of single delivery;</li> <li>Year of delivery;</li> <li>Month and day of delivery;</li> <li>Time of delivery;</li> <li>Dispensed quantity of single operation;</li> <li>Absolute total of dispensed quantities.</li> </ul>

Pag. 65 Oil





#### Art. no. 2710

Mechanical oval gears flow meter, with body in aluminium, for oil and antifreeze, with two totalizers.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
2710	1/2"BSP (F)	15	+10°C/+50°C	50	+/-0.5%	999.91	9999991	0.68 kg



#### Art. no. 2712

Mechanical oval gears flow meter, for oil and antifreeze, with control gun, rigid outlet, Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Composed of art. nos. 2710 and 2105.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
2712	1/2"BSP (M)	15	+10°C/+50°C	50	+/-0.5%	999.91	999999 I	1.1 kg



#### Art. no. 2703

Mechanical, analogical flow meter for oil and antifreeze, with two totalizers, suitable for inline applications.

Art	t. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
27	703	1/2" BSP (F)	15	+10°C/+50°C	70	+ / - 0.5%	0-10 l	9999 I	0.86 kg



### Art. no. 2608

Mechanical, analogical flow meter for oil and antifreeze, with control gun, rigid outlet Ø 12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Composed of art. nos. 2703 and 2105.

I	Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
	2608	1/2" BSP (F)	15	+10°C/+50°C	70	+/-0.5%	0-10 l	9999 I	1.6 kg



#### Art. no. 2508

Mechanical, analogical preset flow meter for oil, with integrated control gun, trigger guard, rigid outlet  $\emptyset$  12 mm, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M). Preset values 0 – 60 l. This model with integrated control gun, but without preset function is available on demand as well (art. no. 2507).

ı	Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Total max resettable	Total max non resettable	Weight
ı	2508	1/2"BSP (M)	15	+10°C/+50°C	70	+ / - 0.5%	0-16 l 0-60 l	9999 I	1.6 kg





#### Art. no. 2954

Electronic oval gears flow meter with pulse transmitter, suitable for oil and antifreeze. Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

ı	Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
	2954	1/2"BSP (F)	35	+5°C/+50°C	70	+/-0.5%	78/I	0.6 kg



#### Art. no. 8730 - 8731

Electronic oval gears flow meter with pulse transmitter, suitable for oil, diesel and antifreeze, including a solenoid valve, an inline 150  $\mu$ m filter and a wall bracket.

Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
8730	1/2"BSP (F)	35	+5°C / +110°C	100	+ / - 0.5%	78/I	1.5 kg
8731	1"BSP (F)	80	+5°C / +110°C	100	+ / - 0.5%	78/l	2.5 kg



#### Art. no. 2716

Electronic oval gears flow meter with pulse transmitter, body in IXEF.

Suitable for the use with water-based fluids and AdBlue® (DEF).

Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

	Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
ı	2716	1/2"BSP (F)	35	+5°C/+50°C	30	+/-0.5%	78/l	0.4 kg



#### Art. no. 2717

Electronic oval gears flow meter with pulse transmitter, body in IXEF, including a stainless steel solenoid valve.

Suitable for the use with water-based fluids and AdBlue® (DEF).

Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

ı	Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
ı	2717	1/2"BSP (F)	35	+5°C/+50°C	30	+/-0.5%	78/I	0.6 kg



#### Art. no. 2853

Electronic oval gears high delivery flow meter with pulse transmitter, suitable for oil, diesel and antifreeze.

Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
2853	1"BSP (F)	70	+5°C/+50°C	70	+ / - 0.5%	39/l	1.6 kg

Pag. 67 Oil

# **RUBBER HOSES AND FITTINGS FOR OIL**



High pressure rubber hoses SAE 100 R1 AT, with female, straight BSP – connections, suitable for the supply of oil, diesel, petrol and water. Ideal for the connection on pumps or hose reels.

Internal structure and coating: synthetic rubber, resistant to oil, diesel, petrol and hydraulic fluids. Reinforcement: 1 steel wire braided, highly resistant layer.



#### **HOW TO ORDER**

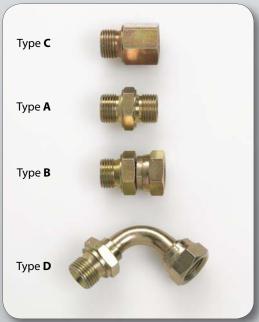
Length	Ø 1/ 2″ Art. no.	Ø 3/4" Art. no.	Ø 1″ Art. no.	Ø 1'1/4" Art. no.
0.5 m	287005	289005	2895005	281401
1 m	28701	28901	289501	2814005
1.5 m	287015	289015	2895015	2814015
2 m	28702	28902	289502	281402
3 m	28703	28903	289503	281403
5 m	28705	28905	289505	281405
6 m	28706	28906	289506	281406
7 m	28707	28907	289507	281410
10 m	28710	28910	289510	281415
15 m	28715	28915	289515	281420
20 m	28720	28920	289520	281425
25 m	28725	28925	289525	281430
30 m	28730	28930	289530	281435
40 m	28740	28940	289540	281440

### Other lengths available on demand!

Type A Double male connection adapter, BSP,

#### **TECHNICAL DATA**

TECHNICAL DATA				
Nominal diameter	1/2"	3/4"	1″	1'1/4"
Internal diameter	12.7 mm	19 mm	25 mm	31.8 mm
Wire braid diameter	18.3 mm	25.4 mm	33.3 mm	40.5 mm
External diameter	20.6 mm	27.7 mm	35.6 mm	43.5 mm
Working pressure	160 bar	105 bar	88 bar	63 bar
Test pressure	385 bar	255 bar	190 bar	120 bar
Burst pressure	640 bar	420 bar	350 bar	250 bar
Min. bending radius	180 mm	240 mm	300 mm	420 mm
Working temperature	min -40°C max +100°C	min -40°C max +100°C	min -40°C max +100°C	min -40°C max +100°C
Weight	0.430 kg/m	0.610 kg/m	0.940 kg/m	1.19 kg/m



galvanized steel.		Art. no. 9911 Art. no. 9912 Art. no. 9915 Art. no. 9924 Art. no. 9925 Art. no. 9927 Art. no. 9948	1/2" x 3/4" 1" x 3/4" 3/4" x 3/4" 1" x 1"
Type <b>B</b> Male – female swivel connection steel.	on adapter, BSP, galvanized	Art. no. <b>9901</b>	1/2" x 1/2"
Type <b>C</b> Male – female connection adapt	,, 9	Art. no. <b>9905</b> Art. no. <b>9906</b> Art. no. <b>9902</b> Art. no. <b>9903</b>	
Type <b>C</b> Female – female connection ada	apter, BSP, galvanized steel.	Art. no. <b>9916</b>	1/2" x 1/2"
Type <b>D</b> 90°- curved male – female connective steel.	tion adapter, BSP, galvanized	Art. no. <b>9939</b>	1/2" x 1/2"

Art. no. **9910** 1/2" x 1/2"





Automatic, spring – driven hose reel, standard series, in painted steel, including rubber hoses SAE 100 R1 AT with female connection threads, suitable for the supply of oil and antifreeze.

On demand the hose reels can also be supplied with a **spring brake kit**; please add suffix "/**HB**" to the article number (f. ex. 9016/HB)!



Art. no.	Ø hose	Length hose	Max working pressure	wiath	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9016+28708	1/2″	8 m	160 bar	120 mm	450 mm	9767	18 kg	244x490x480
9016+28710	1/2″	10 m	160 bar	120 mm	450 mm	9767	18 kg	244x490x480
9016+28715	1/2"	15 m	160 bar	120 mm	450 mm	9767	20 kg	244x490x480
9021+28720	1/2"	20 m	160 bar	150 mm	450 mm	9768	27 kg	274x490x480





Automatic, spring – driven hose reel, adjustable arms series, in painted steel, including rubber hoses SAE 100 R1 AT with female connection threads, suitable for the supply of oil and antifreeze.

On demand the hose reels can also be supplied with a **spring brake kit**; please add suffix "/**HB**" to the article number (f. ex. 9090/HB)!



Art. no.	Ø hose	Length hose	Max working pressure	Reel width	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9090+28708	1/2″	8 m	160 bar	120 mm	450 mm	9767	18 kg	244x490x480
9090+28710	1/2″	10 m	160 bar	120 mm	450 mm	9767	18 kg	244x490x480
9091+28715	1/2"	15 m	160 bar	120 mm	450 mm	9767	20 kg	244x490x480
9092+28720	1/2″	20 m	160 bar	150 mm	450 mm	9768	27 kg	244x490x480
9093+28725	1/2″	25 m	160 bar	150 mm	450 mm	9768	32 kg	274x490x480





Automatic, spring – driven hose reel, enclosed series, in painted steel, including rubber hoses SAE 100 R1 AT with female connection threads, suitable for the supply of oil and antifreeze.

On demand the hose reels can also be supplied with a **spring brake kit**; please add suffix "/**HB**" to the article number (f. ex. 9013/HB)!



Art. r	no.	Ø hose	Length hose	Max working pressure	wiath	Ø reel	Art. no. suitable swivel bracket	Weight	Dimensions (LxWxH) (mm)
9013+2	8708	1/2″	8 m	160 bar	120 mm	450 mm	9778	31 kg	130x550x450
9013+2	8710	1/2"	10 m	160 bar	120 mm	450 mm	9778	31 kg	130x550x450
9013+2	8715	1/2″	15 m	160 bar	120 mm	450 mm	9778	33 kg	130x550x450
9023+2	8720	1/2″	20 m	160 bar	150 mm	450 mm	9778	36 kg	160x550x450

For other hose reel models please see chapter "Hose reels" on page 200!

Pag. 69 Oil



# **SUCTION GUNS / PUSH TYPE GREASE GUNS / OILERS**





#### Art. no. 5604 OIL TEST - Sample recovery pump

This device is used for taking samples of oil from machines or mechanical systems by sucking it out with the included suction pump into a small plastic bottle which then can be sent to a laboratory for analyzing its quality.

The small plastic bottle with connection adapter is available on demand.



#### Art. no. 5650

Suction gun, single acting, capacity 800 ml, Ø tube 57 mm, with flexible outlet. Suitable for the use with oil, fuel, antifreeze and windshield washer fluid.

#### Art. no. 5670 - 5671

Suction gun, in brass, single acting, Ø tube 50 mm, with straight rigid outlet. Suitable for the use with oil, fuel, antifreeze and windshield washer fluid.

Art. no. 5670 capacity 500 ml Art. no. 5671 capacity 1000 ml

#### Art. no. 5658 - 5659

Suction gun, in aluminium, double acting,  $\emptyset$  tube 55 mm, with two plastic hoses for suction and discharge. Suitable for the use with oil, fuel, petrol, antifreeze and windshield washer fluid.

Art. no. 5658 capacity 500 ml Art. no. 5659 capacity 1000 ml



#### Art. no. 5675 - 5676 - 5677

Push type grease gun, in galvanized steel, with pointed coupler (for grease nipples DIN 3405) and hollow-type coupler (for grease nipples DIN 71412), connection M 10x1. Suitable for the use with grease and oil.

Art. no. 5675 capacity 80 ml Art. no. 5675 capacity 150 ml

Art. no. 5675 capacity 300 ml

#### Art. no. **5680**

Push type grease gun, in plastic, capacity 50 ml, with hollow-type coupler (for grease nipples DIN 71412), connection M 10x1. Suitable for the use with grease and oil.



### Art. no. **5678 - 5679**

Suction gun, single acting, with transparent, graduated plastic tube, plastic hose and metal outlet pipe. Suitable for the use with oil, fuel, antifreeze and windshield washer fluid.

Art. no. 5678 capacity 500 ml Art. no. 5679 capacity 1000 ml



#### Art. no. 5688 - 5689

Precision pump action oiler, container in high density polyethylene with level indicator, with rotating brass pump and rigid brass outlet. The rotating pump permits the use of the oiler in any position.

Art. no. 5688 capacity 300 ml Art. no. 5689 capacity 500 ml

# **GRADUATED MEASURES**







Art. no. 3408

Graduated measure, in high density polyethylene, with funnel type outlet and flexible extension.

Art. no. 3408/1 Capacity 1 l

Art. no. 3408/2 Capacity 2 I

Art. no. 3408/3 Capacity 3 I

Art. no. 3408/5 Capacity 5 I



Art. no. 3425-3426-3427-3428-3429-3430

Graduated, transparent measure, in oil and acid resistant polyethylene, stackable and unbreakable. Temperature range:  $-10^{\circ}$  C -  $+120^{\circ}$  C.

Art. no. 3425 Capacity 0.25 l - scale graduation 5 ml

Art. no. 3426 Capacity 0.50 l - scale graduation 10 ml

Art. no. 3427 Capacity 1 I - scale graduation 10 ml

Art. no. 3428 Capacity 2 I - scale graduation 20 ml

Art. no. 3429 Capacity 3 I - scale graduation 50 ml

Art. no. 3430 Capacity 5 l- scale graduation 100 ml



Art. no. 3447 - 3448 - 3449

Graduated measure, in high density polyethylene, with funnel type outlet, flexible extension with cap, protection cover. Suitable for the use with oil, fuel, antifreeze, windshield washer fluid, break fluid, battery fluid.

Art. no. 3447 Capacity 1 I

Art. no. 3448 Capacity 2 l

Art. no. 3449 Capacity 5 l



Graduated measure, in metal.

Suitable for the use with oil, fuel, antifreeze, windshield washer fluid, break fluid, battery fluid.

With rigid plastic outlet:

Art. no. 3408/05R Capacity 0.5 l

Art. no. 3408/1R Capacity 1 l

Art. no. 3408/2R Capacity 2 l



With flexible metal outlet:

Art. no. **3408/1FMS** Capacity 1 l

Art. no. 3408/2FMS Capacity 2 l

Pag. 71 Oil



# MOBILE AND STATIONARY OIL DISPENSING KITS



#### Art. no. 2302

Wall-mounted dispensing bar, suitable for oil and antifreeze, equipped with 1 spring operated spigot with splash guard filter and drain valve for drip tray. Inlet connections 3/4" BSP (F). The unit is prepared for the installation of 2 more spigots.

Optional: Plastic measures (see page 71!) and flow meters (art. no. 2629; see page 61!) are available as accessories on demand!

Art. no.	Weight	Dimensions (LxWxH) (mm)	W
2302	11 kg	500x300x500	L



#### Art. no. 2301

Spring operated spigot, in galvanized steel, with splash guard filter, max pressure 8 bar, for the use with oil and antifreeze.





#### Art. no. 2363

Drum dispensing bar for 208 I - drums, suitable for oil and antifreeze,

- 1:1 pneumatic pump, double acting, art. no. 2043/L (see page 40!);
- spring operated spigot, in galvanized steel, with splash guard filter, with prolongation tube for pump connection and connection adapters, art. no. 2303;
- pressure regulator and air filter with moisture separator, art. no. 7180;
- drip tray and bung adapter for fixation on drum.

Optional: Plastic measures (see page 71!) and plastic cans are available as accessories on demand!



Spring operated spigot, in galvanized steel, with splash guard filter, max. pressure 8 bar, with prolongation tube for pump connection and connection adapters.





#### Art. no. 8545

Oil dispensing kit, suitable for the dispensing of 2 oil types from 208 I - drums, with spill containment pallet, consisting of:

- Tank Service Base for 2 drums of 208 l, art. no. 8533, with metal mounting rack;
- 2 pcs. of pneumatic 1:1 oil pumps, art. no. 2044 (see page 40!);
- 2 pcs. of suction tube with bung adapters for drums, art. no. 2204;
- 2 pcs. of suction hoses for connection pump suction tube, art. no. 2205;
- 1 pc. of wall-mounted dispensing bar, art. no. 2302, equipped with 2 spigots, art. no. 2301;
- 2 pcs. of pressure regulators with manometer and condensation water separator, art. no. 7180;
- 2 pcs. of connection hoses for the connection of pump and dispensing bar.

#### Optional:

- 2 pcs. of electronic oil flow meters, art. no. 2629, to be installed on the dispensing bar (see page 61!);
- 2 plastic measures (see page 71!) or plastic cans.

# FLEXBIMEC

# **MOBILE AND STATIONARY OIL DISPENSING KITS**



#### Art. no. 2980C

Stationary pneumatic oil dispensing kit for 208 l - drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Oil control gun with 1/2" BSP (M) inlet swivel, rigid outlet and automatic anti-drip nozzle, art. no. 2185;
- Pressure regulator with manometer and condensation water separator, art. no. 7180.



#### Art. no. 2982

Stationary pneumatic oil dispensing kit with electronic oil flow meter, for 208 I - drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.



### Art. no. 2987MID

Stationary pneumatic oil dispensing kit, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 5:1 oil pump, art. no. 2061 (see page 44!);
- Wall bracket in painted steel, for the fixation of the pump;
- Air separator kit with automatic pump stop device (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank), art .no. 2051, approved according to OIML R117-1 (see page 44!);
- manometer for outlet pressure control;
- Suction tube in galvanized steel,  $\emptyset$  40 mm, length 950 mm, with 90° curved connection 1″ BSP (M), with foot valve, at. no. 2204, and bung adapter 2″ BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 l drums;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic oval gears flow meter for oil, approved for legal transactions **according to MID MI-005**, **Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

Pag. 73 Oil



# **MOBILE AND STATIONARY OIL DISPENSING KITS**



#### Art. no. 2971

Mobile pneumatic oil dispensing kit with electronic oil flow meter, for 60 l - drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2030 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Trolley with 4 wheels, art. no. 4360;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

Art. no.	Weight	Dimensions (LxWxH) (mm)	
2971	29 kg	600x600x1050	





#### Art. no. 2971MID

Mobile pneumatic oil dispensing kit, with electronic oil flow meter, for 60 l – drums, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2030 (see page 41!);
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Trolley with 4 wheels, art. no. 4360;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic oval gears flow meter for oil, approved for legal transactions according to **MID MI-005, Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

	Art. no.	Weight	Dimensions (LxWxH) (mm)
2	971MID	32 kg	600x600x1050







#### Art. no. 5463

Mobile pneumatic oil dispensing kit with metal 65 l – container, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2030 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Metal container with 3 wheels, capacity 65 l, with level indicator;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic flow meter for oil, with control gun, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

	Art. no.	Weight	Dimensions (LxWxH) (mm)
ı	5463	31 kg	600x550x1330





#### Art. no. 5463MID

Mobile pneumatic oil dispensing kit, with metal 65 l – container, **approved for legal transactions** according to the European Directive 2014/32/UE, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2030 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Metal container with 3 wheels, capacity 65 l, with level indicator;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

Art. no.	Weight	Dimensions (LxWxH) (mm)
5463MID	35 kg	600x550x1330



Pag. 75 Oil

## MEC

#### MOBILE AND STATIONARY OIL DISPENSING KITS



#### Art. no. 2912

Mobile pneumatic oil dispensing kit, for 208 I – drums, with heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

Art. no.	Weight	Dimensions (LxWxH) (mm)
2912	42 kg	790x900x1400





#### Art. no. 2991

Mobile pneumatic oil dispensing kit with standard trolley, for 208 l - drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Trolley with 4 wheels, art. no. 4380;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic flow meter for oil, with control gun, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

#### Art. no. 2993

Mobile pneumatic oil dispensing kit, such as art. no. 2991, but with oil control gun without oil flow meter and without pressure regulator with manometer and condensation water separator, art. no. 7180.

Art. no	Weight	Dimensions (LxWxH) (mm)
2991	36 kg	900x830x1400
2993	35 kg	900x830x1400







#### Art. no. 2991X

Mobile pneumatic oil dispensing kit with standard trolley, for 208 I – drums, with air separator kit, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41);
- Air separator kit, art. no. 2052;
- Manometer for outlet pressure control;
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- -Trolley with 4 wheels, art. no. 4380;
- 3 m rubber hose Ø 1/2", art. no. 28703:
- Electronic flow meter for oil, with control gun, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

#### Art. no. 2991XB

Mobile pneumatic oil dispensing kit with standard trolley, for 208 l – drums, such as art. no. 2991X, but with air separator kit with automatic pump stop device, art. no. 2053 (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank).

Art. no.	Weight	Dimensions (LxWxH) (mm)
2991X	38 kg	900x830x1400
2991XB	39 kg	900x830x1400





#### Art. no. 2991MID

Mobile pneumatic oil dispensing kit with standard trolley, for 208 I – drums, with air separator, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Trolley with 4 wheels, art. no. 4380;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

Art. no.	Weight	Dimensions (LxWxH) (mm)
2991MID	39 kg	900x830x1400



Pag. 77 Oil





#### Art. no. 2910

Mobile pneumatic oil dispensing kit, for 208 I – drums, with hose reel and standard trolley, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Trolley with 4 wheels and grate, art. no. 4380;
- Open hose reel, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1 m rubber connection hose Ø 1/2", art. no. 28701;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

#### **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



Art. no. **4338**Wheels kit,
consisting of 4
heavy duty wheels
for trolleys, suitable
also for the use on
rough surfaces.







#### Art. no. 2914

Mobile pneumatic oil dispensing kit, for 208 l - drums, with hose reel and heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- Open hose reel, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1 m rubber connection hose Ø 1/2", art. no. 28701;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

#### **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Weight	Dimensions (LxWxH) (mm)
2914	90 kg	790x900x1400







#### Art. no. 2914X

Mobile pneumatic oil dispensing kit, for 2081 – drums, with hose reel and heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, with air separator kit, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Air separator kit, art. no. 2052;
- Manometer for outlet pressure control;
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- Open hose reel, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1 m rubber connection hose Ø 1/2", art. no. 28701;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

#### Art. no. 2914XB

Mobile pneumatic oil dispensing kit with heavy duty trolley, for 208 I – drums, such as art. no. 2914X, but with air separator kit with automatic pump stop device, art. no. 2053 (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank).

Art. no.	Weight	Dimensions (LxWxH) (mm)
2914X	93 kg	790x900x1400
2914XB	94 kg	790x900x1400





#### Art. no. 2914MID

Mobile pneumatic oil dispensing kit with with hose reel and heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, for 208 I - drums, with air separator, approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Air separator kit with automatic pump stop device (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank), art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- Open hose reel, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1 m rubber connection hose Ø 1/2", art. no. 28701;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger quard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150.

Art. no.	Weight	Dimensions (LxWxH) (mm)	
2914MID	94 kg	790x900x1400	



The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the Directive MID MI-005 and can be used therefore as approved system also in legal transactions.

# FLEXBIMEC

#### MOBILE AND STATIONARY OIL DISPENSING KITS



#### Art. no. 2918

Mobile electric oil dispensing kit, for 208 I – drums, with hose reel and heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, consisting of:

- Electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- Control box with push button and electric connection cable;
- Double electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- Electronic flow meter for oil, with control gun, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61);
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1" BSP (M), with foot valve, art. no. 2204;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205.

#### Optional:

- Air separator kit with manometer for outlet pressure control;
- Air separator kit with automatic pump stop device (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank).

Art. no.	Weight	Dimensions (LxWxH) (mm)
2918	47 kg	790x900x1400





#### Art. no. 2918MID

Mobile electric oil dispensing kit, for 208 I – drums, with hose reel and heavy duty trolley equipped with bigger wheels suitable also for the use on rough surfaces, with air separator kit, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- Air separator kit with automatic pump stop device (stopping the pump as soon as air is sucked into the suction line due to an empty drum or tank), art .no. 2051, approved according to OIML R117-1 (see page 44!);
- Control box with push button and electric connection cable;
- Double electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Heavy duty trolley with 4 wheels and grate, art. no. 4389;
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1" BSP (M), with foot valve, art. no. 2204;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

Art. no.	Weight	Dimensions (LxWxH) (mm)	
2918MID	47 kg	790x900x1400	







Art. no. 3000

Art. no. 3005

Combined, mobile oil dispensing and waste oil suction unit, mounted on a heavy duty trolley with grate and brake for the wheels.

The waste oil can be sucked by means of a Venturi system which creates a vacuum inside of a transparent bowl of 10 I capacity which allows the immediate control of quality and quantity of the sucked oil.

This bowl is installed on a metal collection container with 24 I capacity that can be discharged through a discharge hose by pressurizing the unit. Inside of the container an overfill safety probe is installed which will activate an acoustic and optical signal once the maximum level has been reached in order to inform the user that the unit must be discharged.

The dispensing of new oil is made by means of a pneumatic pump mounted into the drum, with 3 m – hose and electronic flow meter with control gun.







#### **TECHNICAL DATA**

Dimensions: 700x1100x1100 mm

Weight: 106 kg

Capacity waste

oil collection container: 24 l

Capacity waste oil

collection bowl: 10 l

Depressurization speed: 20 sec. at 8 bar Waste oil suction speed: 2.5 l a 60°C

Pressure for container

discharge: 2 bar
Voltage overfill safety probe: 9 Vdc
Delivery pneumatic pump: 18 l/min
Compressed air supply: 3-7 bar
Max outlet pressure oil: 22 bar





Pag. 81 Oil

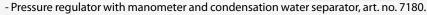




#### Art. no. 2992

Stationary pneumatic oil dispensing kit, for 208 I - drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);



#### OPTIONAL

- Wall mounted gun holder with drip tray, art. no. 9784;
- Pivoting wall bracket for hose reel, art. no. 9767 (only suitable for single installations);
- Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

#### Art. no. 2992/10

Same as art. no. 2992, but with open hose reel art. no. 9016 and 10 m – hose, art. no. 28710.

#### Art. no. 2992/20

Same as art. no. 2992, but with open hose reel art. no. 9021 and 20 m – hose, art. no. 28720.



#### Art. no. 2984

Stationary pneumatic oil dispensing kit, for 208 l – drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Open hose reel, adjustable arms series, art. no. 9081;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

#### OPTIONAL

- Wall mounted gun holder with drip tray, art. no. 9784;
- Pivoting wall bracket for hose reel, art. no. 9767 (only suitable for single installations);
- Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



Art. no. **9784**Wall mounted gun holder with drip tray.



## MOBILE AND STATIONARY OIL DISPENSING KITS MID APPROVED





#### Art. no. 2992MID

Stationary pneumatic oil dispensing kit, for 208 I – drums, approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1 m rubber connection hose Ø 1/2", art. no. 28701;
- Electronic oval gears flow meter for oil, approved for legal transactions according to **MID MI-005**, **Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150;
- Wall mounted gun holder with drip tray, art. no. 9784.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

#### **OPTIONAL**

- Pivoting wall bracket for hose reel, art. no. 9767 (only suitable for single installations);
- Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



#### Art. no. **2984MID**

Stationary pneumatic oil dispensing kit, for 208 I – drums, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 5:1 oil pump, art. no. 2061 (see page 44!);
- Wall bracket in painted steel, for the fixation of the pump;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1"BSP (M), with foot valve, at. no. 2204, and bung adapter 2"BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 l – drums;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- manometer for outlet pressure control;
- Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic oval gears flow meter for oil, approved for legal transactions according to **MID MI-005**, **Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2"BSP (M), art. no. 2545 (see page 65!);
- Pressure regulator with manometer, condensation water separator and lubricator, art. no. 7150;

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

#### **OPTIONAL**

- Pivoting wall bracket for hose reel, art. no. 9767 (only suitable for single installations);
- Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Pag. 83 Oil





#### Art. no. 2994

Stationary pneumatic oil dispensing kit, for 208 I – drums, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Enclosed hose reel, art. no. 9013;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- -2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

#### **OPTIONAL**

- Wall mounted gun holder with drip tray, art. no. 9784
- Pivoting wall bracket for hose reel, art. no. 9778 (only suitable for single installations)
- Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

#### Art. no. 2994/10

Same as art. no. 2992, but with enclosed hose reel art. no. 9013 and 10 m – hose, art. no. 28710.

#### Art. no. 2994/20

Same as art. no. 2992, but with enclosed hose reel art. no. 9023 and 20 m – hose, art. no. 28720.







#### Art. no. **2934**

Stationary pneumatic oil dispensing kit, for 208 l – drums, consisting of:

- 3 pcs. of pneumatic double acting 3:1 oil pumps, art. no. 2020 (see page 41!);
- 3 pcs. of plastic bung adapters for the fixation of pumps on drums, art. no. 4340;
- 3 pcs. of enclosed hose reels, art. no. 9013;
- 3 pcs. of 15 m rubber hoses 1/2", art. no. 28715;
- 3 pcs. of 2 m rubber connection hoses 1/2", art. no. 28702;
- 3 pcs. of electronic flow meters for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- 3 pcs. of wall mounted gun holders with drip tray, art. no. 9784;
- 3 pcs. of pressure regulators with manometer and condensation water separator, art. no. 7180;
- 4 pcs. of plastic casing elements for hose reel battery, art. nos. 9780, 9781, 9779;
- 1 pc. of mounting panels for hose reels, art. no. 8534.

#### **OPTIONA**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.







# MOBILE AND STATIONARY OIL DISPENSING KITS MID APPROVED





#### Art. no. 2985MID

Stationary pneumatic oil dispensing kit, for 208 I – drums, **approved for legal transactions** according to the European Directive 2014/32/EU, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Pneumatic double acting 5:1 oil pump, art. no. 2061 (see page 44!);
- Wall bracket in painted steel, for the fixation of the pump;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1"BSP (M), with foot valve, at. no. 2204, and bung adapter 2"BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 l drums:
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic oval gears flow meter for oil, approved for legal transactions according to **MID MI-005**, **Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

#### Art. no. 2985

Same as art. no. 2985MID, but non – approved version without air separator kit, and with electronic flow meter for oil, art. no. 2626 (see page 61!).



#### Art. no. **2974MID**

Stationary electric oil dispensing kit, for 208 l – drums, approved for legal transactions according to the **European Directive 2014/32/EU**, better known as **Measurement Instrument Directive MID MI-005**, consisting of:

- Electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- Control box with push button and electric connection cable;
- Double electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- Wall bracket in painted steel, for the fixation of the pump;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1" BSP (M), with foot valve, art. no. 2204, and bung adapter 2" BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 l drums;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!);
- Wall mounted gun holder with drip tray, art. no. 9784.

The configuration of components in this kit comply with all metrological standards and requirements concerning accuracy defined in the **Directive MID MI-005** and can be used therefore as approved system also in legal transactions.

Pag. 85 Oil





#### Art. no. 8210

Pneumatic oil dispensing kit, for the installation on top of 1000 I – IBC -tanks, consisting of:

- Pneumatic double acting 3:1 oil pump, art. no. 2020130 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1.5 m rubber connection hose Ø 1/2", art. no. 287015;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180;
- Gun holder with drip tray, art. no. 9784;
- Metal mounting frame, art. no. 9785.

#### Art. no. 8250

Same as art. no. 8210, but including an empty 1000 I - IBC – tank, art. no. 8215.

#### **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.





Oil

#### Art. no. 8208

Art. no. 8210

Pneumatic oil dispensing kit, for the installation on the side of 1000 l - IBC -tanks, consisting of:

- Pneumatic single acting 5:1 oil pump, art. no. 2075 (see page 42!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Pressure regulator with manometer, art. no. 7200;
- Electronic flow meter for oil, with control gun, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61!);
- 3 m rubber hose Ø 1/2", art. no. 28703;
- Suction hose 1" with connection adapter for IBC tanks;
- Metal mounting bracket, art. no. 9785.

#### Art. no. 8209

Pneumatic oil dispensing kit, for the installation on the side of 1000 l – IBC –tanks. Same components as art. no. 8208, but with pneumatic 6:1 – single acting oil pump,

series Tapir, delivery of 32 l/min (see page 45!).

Pag. 86



Art. no. 8206

## MOBILE AND STATIONARY OIL DISPENSING KITS



Pneumatic oil dispensing kit, for the installation on top of double wall steel tanks, series art. nos. 8217 (see page 100!), consisting of:

- Pneumatic double acting 5:1 oil pump, art. no. 2075 (see page 42!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Pressure regulator with manometer and condensation water separator, art. no. 7180;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- 0.5 m rubber connection hose Ø 1/2", art. no. 287005;
- Metal mounting frame, art. no. 9787;
- Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715.

### Art. no. 8206MID

Same as art. no. 8206, but kit approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005, with air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!), manometer for outlet pressure control and electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).



#### Art. no. 8204

Electric oil dispensing kit, for the installation on top of double wall steel tanks, series art. nos. 8217 (see page 100!), consisting of:

- Electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- Control box with push button and electric connection cable;
- Double electronic pressure switch that starts the pump once the control gun is activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- -0.5 m rubber connection hose Ø 1/2", art. no. 287005;
- Metal mounting frame, art. no. 9787;
- -Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715.

#### Art. no. 8207

Pneumatic oil dispensing kit with 1000 l – double wall tank, consisting of:

- Pneumatic double acting 5:1 oil pump, art. no. 2075 (see page 42!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Pressure regulator with manometer and condensation water separator, art. no. 7180;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- 0.5 m rubber connection hose Ø 1/2", art. no. 287005;
- 1000 l double wall steel tank, art. no. 8217/1000 (see page 100!);
- Metal mounting frame, art. no. 9787;
- Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715.

#### Art. no. 8207MID

Same as art. no. 8207, but kit approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005, with air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!), manometer for outlet pressure control and electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005, Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).



Kit with 1000 I – double wall tank such as art. no. 8207, but with electric oil dispensing kit, art. no. 8204.

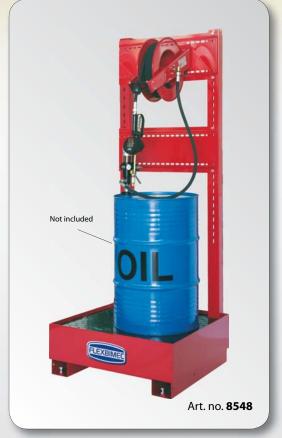
#### Art. no. 8205MID

Kit with 1000 I - double wall tank such as art. no. 8207MID, but with electric oil dispensing kit, approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005.





Pneumatic oil dispensing kits for 1 or 2 oil types. The use of the included spill containment pallet with metal mounting rack allows to create quickly an autonomous dispensing unit that can be put in any place of the workshop. Also it can be moved at any time if it becomes necessary.



#### Art. no. 8548

Stationary pneumatic oil supply station, for 208 I – drums, consisting of:

- Tank Service Base for 1 drum of 208 l, art. no. 8525, with metal mounting rack;
- Pneumatic double acting 3:1 oil pump, art. no. 2020 (see page 41!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715
- 2 m rubber connection hose Ø 1/2", art. no. 28702
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.

#### Art. no. 8548/10

Same as above, but with open hose reel art. no. 9016 and with 10 m – hose, art. no. 28710.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8548	69 kg	830x880x2360





#### Art. no. 8549

Stationary pneumatic oil supply station, for 2 x 208 l - drums, consisting of:

- Tank Service Base for 2 drums of 208 l, art. no. 8533, with metal mounting rack;
- 2 pcs. of pneumatic double acting 3:1 oil pumps, art. no. 2020 (see page 41!);
- 2 pcs. of plastic bung adapters for the fixation of pumps on drums, art. no. 4340;
- 2 pcs. of open hose reels, standard series, art. no. 9016;
- 2 pcs. of 15 m rubber hoses 1/2", art. no. 28715;
- 2 pcs. of 2 m rubber connection hoses 1/2", art. no. 28702;
- 2 pcs. of electronic flow meters for oil, with control gun, rubber protection guard, trigger guard, rigid outlet, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2826 (see page 62!);
- 2 pcs. of pressure regulators with manometer and condensation water separator, art. no. 7180.

#### Art. no. 8549/10

Same as above, but with open hose reel art. no. 9016 and with 10 m - hose, art. no. 28710.

Ar	rt. no.	Weight	Dimensions (LxWxH) (mm)
8	549	106 kg	1350x880x2360





## OIL SUPPLY STATIONS MID APPROVED



Pneumatic oil dispensing kits for 1 or 2 oil types. The use of the included spill containment pallet with metal mounting rack allows to create quickly an autonomous dispensing unit that can be put in any place of the workshop. These oil supply stations are approved for legal transactions according to the European Directive 2014/32/EU, better known as Measurement Instrument Directive MID MI-005. They include an air separator kit, approved according to OIML R117-1, with or without automatic pump stop device and an electronic oval gears flow meter for oil, also approved according to MID MI-005. The configuration of components in these kits meets all metrological standards and requirements concerning accuracy defined in the Directive MID MI-005 and can be used therefore as approved system also in legal transactions.



#### Art. no. 8547MID

Stationary pneumatic oil supply station, for 60 l – drums consisting of:

- Pneumatic double acting 5:1 oil pump;
- Wall bracket in painted steel, for the fixation of the pump;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Tank Service Base for 1 drum of 60 l, with metal mounting rack;
- Suction tube in galvanized steel, Ø 40 mm, length 650 mm, with 90° curved connection 1"BSP (M), with foot valve and bung adapter 2"BSP (M) x 40 mm, art. no. 4340, suitable for the use in 60 l drums;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1.5 m rubber connection hose Ø 1/2", art. no. 287015;
- Electronic oval gears flow meter for oil, approved for legal transactions **according to MID MI-005, Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

#### Art. no. 8548MID

Same as above, but with components suitable for the use of 208 I – drums.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8547MID	68 kg	480x500x1600
8548MID	82 kg	830x880x2360





#### Art. no. 8549MID

Stationary pneumatic oil supply station, for 2 x 208 l – drums consisting of:

- 2 pcs. of pneumatic double acting 5:1 oil pump;
- 2 pcs. of wall bracket in painted steel, for the fixation of the pump;
- 2 pcs. of air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- 2 pcs. of manometer for outlet pressure control;
- 1 pc. of Tank Service Base for 2 drums of 208 l, art. no. 8533, with metal mounting rack;
- 2 pcs. of suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1" BSP (M), with foot valve, and bung adapter 2" BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 I drums;
- 2 pcs. of 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- 2 pcs. of open hose reel, adjustable arms series, art. no. 9090;
- 2 pcs. of 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 pcs. of 1.5 m rubber connection hose Ø 1/2", art. no. 287015;
- 2 pcs. of electronic oval gears flow meter for oil, approved for legal transactions **according to MID MI-005**, **Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

Art. no.	Weight	Dimensions (LxWxH) (mm)
8549MID	118 kg	1350x880x2360



Pag. 89 Oil



# OIL SUPPLY STATIONS MID APPROVED





#### Art. no. 8542MID

Stationary electric oil supply station, for 208 l - drums consisting of:

- Electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- Control box with push button and electric connection cable with plug;
- Double electronic pressure switch that starts the pump once the control gun is activated and stops
  it again due to the pressure increase in the circuit once the gun is closed;
- Wall bracket in painted steel, for the fixation of the pump;
- Air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- Manometer for outlet pressure control;
- Tank Service Base for 1 drum of 208 l, art. no. 8525, with metal mounting rack;
- Suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1"BSP (M), with foot valve, art. no. 2204, and bung adapter 2"BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 l drums;
- 1.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- Open hose reel, adjustable arms series, art. no. 9090;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 1.5 m rubber connection hose Ø 1/2", art. no. 287015;
- Electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005,
   Directive 2014/32/EU, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

#### Art. no. 8542

Same as art. no. 8542MID, but non – approved version without air separator kit and manometer for outlet pressure, and with electronic flow meter for oil, art. no. 2626 (see page 61!).



#### Art. no. **8543MID**

Stationary electric oil supply station, for 2 x 208 l – drums consisting of:

- 2 pcs. of electric, self-priming 230 VAC gear pump for the supply of oil, art. no. 6122; (see page 52!);
- 2 pcs. of control box with push button and electric connection cable with plug;
- 2 pcs. of double electronic pressure switch that starts the pump once the control gun is
  activated and stops it again due to the pressure increase in the circuit once the gun is closed;
- 2 pcs. of wall bracket in painted steel, for the fixation of the pump;
- 2 pcs. of air separator kit, art. no. 2050, approved according to OIML R117-1 (see page 44!);
- 2 pcs. of manometer for outlet pressure control;
- 1 pc. of Tank Service Base for 2 drums of 208 l, art. no. 8533, with metal mounting rack;
- 2 pcs. of suction tube in galvanized steel, Ø 40 mm, length 950 mm, with 90° curved connection 1"
   BSP (M), with foot valve, art. no. 2204, and bung adapter 2" BSP (M) x 40 mm, art. no. 4340, suitable for the use in 208 I drums;
- 2 pcs. of 1,.5 m rubber suction hose 1", connections 1" BSP (F-F), art. no. 2205;
- 2 pcs. of open hose reel, adjustable arms series, art. no. 9090;
- 2 pcs. of 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 pcs. of 1.5 m rubber connection hose Ø 1/2", art. no. 287015;
- 2 pcs. of electronic oval gears flow meter for oil, approved for legal transactions according to MID MI-005,

**Directive 2014/32/EU**, with control gun, rubber protection guard, trigger guard, oil flow control tube with transparent insert, flexible rubber outlet, Ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2545 (see page 65!).

#### Art. no. **8543**

Same as art. no. 8543MID, but non – approved version without air separator kit and manometer for outlet pressure, and with electronic flow meter for oil, art. no. 2626 (see page 61!).





# AIR SEPARATOR DEVICES MID APPROVED





Automatic air separator devices, suitable to separate the air eventually present in the suction line from the oil, available with (= art. no. 2051) or without (= art. no. 2050) automatic pump stop system, **approved according to OIML R117-1**; includes also manometer for the control of the outlet pressure and non-return valve.

By installing the air separator at the fluid outlet of a pump can be achieved the working conditions needed to comply with the requirements of the **Directive MID MI-005** in combination with an oil flow meter that must also be approved for legal transactions.

#### Art. no. 2050

Air separator device for air-operated pump.

#### Art. no. 2051

Air separator device for air-operated pump with automatic stop at empty drum.

#### Art. no. 2054

Air separator device for 230 Vac pump with pressure and safety switch for pump switch-off at empty drum.

#### Art. no. 1150

Stainless Steel AISI 303 air separator device for air-operated pump with automatic pump switch-off at empty drum.

#### Art. no. 1151

Device as art. 1150 for 12 Vdc pump.

#### Art. no. 1152

Stainless Steel AISI 303 air separator device for 230 Vac pump with pressure and safety switch for pump switch-off at empty drum.

#### **APPLICATION EXAMPLES**









Art. no.	Material	Flow range	Working pressure	Connections IN – OUT	Connection air discharge	Weight	Dimensions (L-W-H) (mm)
2050						3 kg	190x110x310
2051	Brass / Aluminium	0.5 - 10 l/min				4 kg	190x110x370
2054			1 - 20 bar	1/2" BSP (F - M)	3/4" BSP (M)	4 kg	
1150			1 - 20 bai	1/2 B3F (F - WI)	3/4 B3F (IVI)	4.2 kg	190x110x360
1151	AISI 303	0.5 - 10 l/min				4.5 kg	190011000
1152						3.8 ka	

Pag. 91 Oil

#### **OIL SUPPLY STATIONS**



Pneumatic oil dispensing kits for 1 or 2 oil types. The use of the included spill containment pallet with metal mounting rack allows to create quickly an autonomous dispensing unit that can be put in any place of the workshop. Also it can be moved at any time if it becomes necessary.



#### Art. no. 8621

Pneumatic oil dispensing and storage cabinet, one drum - version, for 208 I – drums, consisting of:

- Tank Service Base for 1 drum of 208 l, art. no. 8525;
- Metal, lockable cabinet for 1 drum of 208 l, art. no. 8681;
- Pneumatic double acting 5:1 oil pump, art. no. 2076 (see page 42!);
- Plastic bung adapter for the fixation of pumps on drums, art. no. 4340;
- Open hose reel, standard series, art. no. 9016;
- 15 m rubber hose Ø 1/2", art. no. 28715;
- 2 m rubber connection hose Ø 1/2", art. no. 28702;
- Electronic flow meter for oil, with control gun, rubber protection guard, trigger guard, flexible outlet, ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61!);
- Pressure regulator with manometer and condensation water separator, art. no. 7180.



Art. no.	Weight	Dimensions (LxWxH) (mm)	I
8621	230 kg	830x880x2360	ľ





#### Art. no. 8634

Pneumatic oil dispensing and storage cabinet, 2 drums - version, for 208 l – drums, consisting of:

- Tank Service Base for 2 drums of 208 l, art. no. 8533;
- Metal, lockable cabinet for 2 drums of 208 l, art. no. 8682;
- 2 pcs. of pneumatic double acting 5:1 oil pumps, art. no. 2076 (see page 42!);
- 2 pcs. of plastic bung adapters for the fixation of pumps on drums, art. no. 4340;
- 2 pcs. of open hose reels, standard series, art. no. 9016;
- 2 pcs. of 15 m rubber hoses 1/2", art. no. 28715;
- 2 pcs. of 2 m rubber connection hoses 1/2", art. no. 28702;
- 2 pcs. of electronic flow meters for oil, with control gun, rubber protection guard, trigger guard, flexible outlet, ø 1/2", with curved rigid 90° stem, automatic anti-drip nozzle and inlet swivel 1/2" BSP (M), art. no. 2626 (see page 61!);
- 2 pcs. of pressure regulators with manometer and condensation water separator, art. no. 7180.



Art. no.	Weight	Dimensions (LxWxH) (mm)
8634	290 kg	1350x880x2360







Art. no. 8684

**MULTISERVICE LUBE DRUM BOX** - Multifunctional oil dispensing unit for 2 oil types, with storage space for 2 drums of 208 I and for the pumping equipment inside of the cabinet. The lockable doors can be opened completely and the included spill containment pallet with grate prevents an eventual spillage of oil into the ground. At the external angles of the containment pallet are mounted 4 detachable feet that allow the lifting of the unit if it must be moved. In the upper part a vertically mounted, perforated panel allows the storage of various tools. The upper surface of the cabinet is provided as a supporting surface and it is divided into 2 parts that can be lifted separately from behind in order to enable the user to facilitate the drum change operations. On top of the upper surface a rubber protection sheet is applied so that it can be used as the worktop of a workbench.

Workbench height: 1160 mm.

The unit includes the following components:

- 2 pcs. of pneumatic pumps with accessories installed inside of the drum storage space;
- 2 pcs. of silencers to diminish the typical noise emission of the pneumatic pumps;
- 2 pcs. of enclosed hose reels, art. no. 9013, with 15 m hose Ø 1/2", art. no. 28715;
- 2 pcs. of electronic flow meters for oil with control gun, art. no. 2826 (see page 62!).





Art. no.	Weight	Dimensions (LxWxH) (mm)
8684	370 kg	1500x900x2222





Art. no. 8685

 $\begin{tabular}{ll} \textbf{MULTISERVICE LUBE TANK BOX} & - & \textbf{Multifunctional oil dispensing unit for 2 oil types, with additional useability as workbench.} \end{tabular}$ 

The unit consists of the following essential components:

- 2 pcs. of incorporated metal tanks of 235 I capacity each, with lateral level indicators;
- 1 pc. of spill containment pallet;
- 2 pcs. of pneumatic 1:1 oil pumps, art. no. 2044 (see page 40!), with accessories;
- 2 pcs. of pressure regulator with manometer and condensation water separator, art. no. 7180;
- Metal cabinet with lockable doors that can be opened completely;
- Vertically mounted, perforated panel for the storage of various tools;
- Worktop surface (height 90 cm) with rubber protection sheet;
- 2 pcs. of enclosed hose reels, art. no. 9013, with 15 m hose Ø 1/2", art. no. 28715;
- 2 pcs. of electronic flow meters for oil with control gun, art. no. 2826 (see page 62!);
- 2 pcs. of tubular anti-drip gun holders, adjustable in 2 different positions;
- Detachable feet that allow the lifting of the unit if it must be moved.







According to the regulations the storage of lubricant or fuel drums in industrial or workshop environments requires suitable containers which can collect the fluids in case of eventual leakages and prevent that those can pollute the surrounding environment. The series TANK SERVICE BASE has been designed:

- to serve as a containment for eventually leaking fluids;
- to facilitate the transport of the drums;
- to create autonomous and easy-to-handle oil supply units.



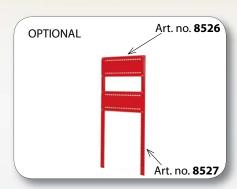
### Art. no. **8524**Tank Service Base 200

Spill containment pallet in painted steel, with pallet feet, suitable for the storage of 1 drum of 208 l. Sump capacity: 208 l. Prepared for the installation of a mounting rack consisting of steel posts (art. no. 8527) and steel panels (art. no. 8526) suitable for the installation of equipment.

### Art. no. **8524/SE Tank Service Base 200**

Spill containment pallet in painted steel, suitable for the storage of 1 drum of 208 l.

Sump capacity: 208 l.
Economic version without
possibility of installing a mounting
rack on it and without pallet feet
for the transport with pallet truck.
Transport can be done by forklift.



Art. no.	Weight	Dimensions (LxWxH) (mm)	AH .
8524	55 kg	920x830x340	
8524/SE	44 kg	920x830x305	



Art. no. 8532/SE

#### **Tank Service Base 400**

Spill containment pallet in painted steel, suitable for the storage of 2 drums of 208 l. Sump capacity: 286 l.

Economic version without possibility of installing a mounting rack on it and without pallet feet for the transport with pallet truck. Transport can be done by forklift.

Art. no.	Weight	Dimensions (LxWxH) (mm)	MH W
8532/SE	51 kg	1350x830x305	/r



Art. no. **8532** 

#### **Tank Service Base 400**

Spill containment pallet in painted steel, with pallet feet, suitable for the storage of 2 drums of 208 l. Sump capacity: 286 l.

Prepared for the installation of a mounting rack consisting of steel posts (art. no. 8527) and steel panels (art. no. 8534) suitable for the installation of equipment.



Art. no.	Weight	Dimensions (LxWxH) (mm)	H
8532	65 kg	1350x830x340	



Mounting shelves consisting of spill containment pallets, series Tank Service Base, and special mounting racks for equipment. These units are used:

- to create lubrication units according to the individual requirements;
- to achieve autonomous units that can easily be transported with a pallet truck or forklift and can be put at any place of a workshop;
- to avoid the pollution of the surrounding environment in case of eventual leakages, thanks to the included spill containment pallet.



#### Art. no. 8525

Mounting shelf, consisting of:

- spill containment pallet for 1 drum of 208 l, art. no. 8524;
- 2 pcs. of steel posts, art. no. 8527;
- 2 pcs. of steel panels, art. no. 8526.



Art. no.	Weight	Dimensions (LxWxH) (mm)
8525	86 kg	830x880x2300





#### Art. no. **8533**

Mounting shelf, consisting of:

- spill containment pallet for 2 drums of 208 l, art. no. 8532;
- 2 pcs. of steel posts, art. no. 8527;
- 2 pcs. of steel panels, art. no. 8534.



Art. no.	Weight	Dimensions (LxWxH) (mm)
8533	103 kg	1350x830x2300



Pag. 95 Oil







#### **Drum lift ERCOLINO 250**

Accessory for all spill containment pallets of series Tank Service Base; fixation by an extendable clamping device. Allows to lift a drum from the ground and to position it on the spill containment pallet in a safe and easy way.

Max. lifting height over ground: 320 mm.

Max. lifting weight: 220 kg.

Each rotation of the crank corresponds to a 3 mm lifting of the drum.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8214	34 kg	960x380x1310





#### Art. no. 8220

Mobile version of drum lift **ERCOLINO 250** which allows the fixation of a drum by an extendable clamping device for lifting and its positioning on a spill containment pallet.

Max. lifting height over ground: 320 mm.

Max. lifting weight: 220 kg.

Each rotation of the crank corresponds to a 3 mm lifting of the drum.

Distance between the lift forks: 660 mm.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8220	40 kg	970x760x1320





#### Art. no. 4379

Cradle for the transport of 208 I – drums, including an arresting device.

Art. no.	Weight	Dimensions (LxWxH) (mm)
4379	18 kg	1350x830x250







Art. no. **8529** Art. no. **8539** 

Mobile spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage of 208 l - drums, for the mobile lubricant supply.

Equipped with 4 swivelling wheels with brake as well as with tubular frame handle for a convenient transport even in areas of reduced space.

Art. no.	Suitable for	Sump capacity	Weight	Dimensions (LxWxH) (mm)
8529	1 drum of 208 l	210	65 kg	860x860x1170
8539	2 drums of 208 l	340 l	83 kg	850x1340x1170







#### Art. no. **8530**

Spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage of one 1000 l - IBC - tank; sump capacity: 1000 l.

#### Art. no. 8530/SP

Same as art. no. 8530, but suitable for the mounting of posts (art. no. 8527) and panels (art. no. 8534) for the installation of any equipment.

Art. no.	Weight	Dimensions (LxWxH) (mm
8530	155 kg	1220x1320x710





#### Art. no. **8531**

Spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage of two 1000 l – IBC – tanks; sump capacity: 1500 l.

Art. no.	Weight	Dimensions (LxWxH) (mm)	H
8531	190 kg	1500x2200x380	1





#### Art. no. **8536**

Spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage up to 4 drums of 180 kg; sump capacity: 270 l.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8536	120 kg	1780x1250x180







#### Art. no. 8564

Spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage up to 4 drums of 208 l; sump capacity: 335 l.

Spill containment pallet in painted steel, with grate in galvanized steel, suitable for the storage up to 8 drums of 208 l; sump capacity: 680 l.

Art. no.	Suatable for	Weight	Dimensions (LxWxH) (mm)
8564	4 drums of 208 l	94 kg	1340x1250x300
<b>8565</b> 8 drums of 208 l		202 kg	2720x1250x300







Metal barrel rack, stackable, for the horizontal storage of up to 3 drums of 60 l. Suitable for the storage on spill containment pallets art. no. 8564 or art. no. 8565.

Metal barrel rack, stackable, for the horizontal storage of up to 2 drums of 208 l. Suitable for the storage on spill containment pallets art. no. 8564 or art. no. 8565.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8566	37 kg	1335x600x810
8567	32 kg	1335x600x810





#### Art. no. 8568

Metal barrel rack, stackable, for the horizontal storage of up to 3 drums of 208 l. Suitable for the storage on spill containment pallet art. no. 8565.

Art. no.	Weight	Dimensions (LxWxH) (mm)	H
8568	67 kg	1960x600x810	





#### Art. no. 8569

Metal barrel rack, stackable, for the horizontal storage of up to 3 drums of 208 l. Suitable to be put up on the floor.

#### Art. no. 8563

Spill containment pallet in galvanized steel plate, without grate, to be placed under the metal barrel rack art. no. 8569. Sump capacity: 270 l.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8569	36 kg	1500x550x850
8563	48 kg	1390x1160x170







Gravity cock, in polyethylene, connection thread 3/4" BSP (M), with adapter 2" BSP (M), with manual shut-off valve, suitable for the use with horizontally placed drums of 60 l or 208 l.

#### Art. no. 2271

Gravity cock, in brass, connection thread 3/4" BSP (M), with automatic shutoff valve, suitable for the use with horizontally placed drums of 60 l or 208 l.







#### Art. no. 8571

Spill containment pallet in high density polyethylene, with grate in polyethylene, suitable for the storage of 2 drums of 208 l, with pallet feet. Sump capacity: 370 l.



Art. no.	Max load capacity	Weight	Dimensions (LxWxH) (mm)
8571	665 kg	51 kg	1418 x 1018 x 515





#### Art. no. 8572

Spill containment pallet in high density polyethylene, with grate in polyethylene, suitable for the storage of up to 4 drums of 208 l, with pallet feet. Sump capacity: 590 l.

Art. no.	Max load capacity	Weight	Dimensions (LxWxH) (mm)
8572	1000 kg	67 kg	1418 x 1418 x 515





#### Art. no. 8573

Spill containment pallet in high density polyethylene, with grate in polyethylene, suitable for the storage of one  $1000 \, \text{l} - \text{lBC} - \text{tank}$ , with pallet feet. Sump capacity:  $1150 \, \text{l}$ .

Art. no.	Max load capacity	Weight	Dimensions (LxWxH) (mm)
8573	1500 kg	94 kg	1418 x 1418 x 985





#### Art. no. **8574**

Spill containment pallet in high density polyethylene, with grate in polyethylene, suitable for the storage of two 1000 I - IBC - tanks, with pallet feet. Sump capacity: 1400 I.



Art. no.	Max load capacity	Weight	Dimensions (LxWxH) (mm)
8574	2500 kg	105 kg	2380 x 1418 x 748





# OIL STORAGE TANKS / STORAGE UNITS FOR DRUMS AND TANKS



Art. no. 8217

Double wall tank, external tank in galvanized steel and internal tank in high density polyethylene, suitable for the storage of lubricating oils and diesel. Including 4 connections in 2" on top of the tank, mechanical level indicator, optical leakage detector for eventual leakages in the internal tank, carrying handles and pallet feet for the lifting and the transport with a pallet truck or a forklift from all 4 sides. Approved for indoor installations (\*as well art. no. 8217/340 is approved for transportation in accordance with ADR 6.5.4.4.1b).





Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
8217/340*	340 l	55 kg	770x1280x660
8217/400	400 l	50 kg	700x730x1170
8217/750	750 l	66 kg	770x980x1460
8217/1000	1000 l	89 kg	770x1280x1460
8217/1500	1500 l	151 kg	700x1630x1870





Art. no. **8580** 

Art. no. **8581** 

Art. no. **8582** 

Storage unit in painted steel, including spill containment pallet with grate in galvanized steel, suitable for the outdoor storage of 208 I – drums of oils and greases. The roof element of the unit can be opened in order to assure a good access and to facilitate the drum change. The doors can be locked.







Art. no. 8583

Storage unit in painted steel, including spill containment pallet with grate in galvanized steel, suitable for the outdoor storage of one 1000 I – IBC – tank. The roof element of the unit can be opened in order to assure a good access and to facilitate the tank change. The doors can be locked.

Art. no.	Weight	Dimensions (LxWxH) (mm)
8583	364 kg	1350x1660x1900





#### STORAGE CONTAINERS FOR DRUMS AND TANKS



Containers in galvanized sheet steel, wall thickness 6/10, provided for the use as a lubricants storage container with the following characteristics:

- two-wing front or lateral doors, 2300 mm (width) x 2200 mm (height), with safety lock and key, or sliding door at the long side;
- floor plate with grate, bores 76 x 34 mm;
- collecting drip pan, height 130 mm, wall thickness 20/10;
- loading rack;
- ventilation grilles.

On demand: with integrated lighting.



Art. no.	Description	Dimensions (mm)
8591		3000 x 2000 x 2400h
8592	Container in galvanized sheet steel with two-wing front doors	4000 x 2000 x 2400h
8593		5000 x 2300 x 2400h
8594		7000 x 2300 x 2400h
8591/S		3000 x 2000 x 2400h
8592/S	Container in galvanized sheet steel with two-wing sliding doors at the long side	4000 x 2000 x 2400h
8593/S		5000 x 2300 x 2400h
8594/S		7000 x 2300 x 2400h

Internal dimensions: - 100 mm in length and width, - 400 mm in height.



Heat insulated containers with panels of 30 mm wall thickness, provided for the use as a lubricants storage container with the following characteristics:

- two-wing front or lateral doors, 2020 mm (width) x 1950 mm (height), with safety lock and key, or sliding door at the long side;
- floor plate with grate, bores 76 x 34 mm;
- collecting drip pan, height 130 mm, wall thickness 20/10;
- loading rack;
- ventilation grilles, in PVC, 230 x 200 mm.

On demand: lighting and power supply kit, with neon roof light, 36 W, bivalent power socket 10 - 16 A + T, residual current protective device 8 M with 3 differentials (overall – lighting – power socket).





Art. no.	Description	Description Dimensions (mm)	
8595		3000 x 2400 x 2400h	
8596	8596  8597  B598  Heat insulated container in galvanized sheet steel with twowing front doors  8599	4000 x 2400 x 2400h	
8597		5000 x 2400 x 2400h	
8598		7000 x 2400 x 2400h	
8599		8000 x 2400 x 2400h	
8595/S		3000 x 2400 x 2400h	
8596/S	Heat insulated container in	4000 x 2400 x 2400h	
8597/S	galvanized sheet steel with two- wing sliding doors at the long	5000 x 2400 x 2400h	
8598/S	side	7000 x 2400 x 2400h	
8599/S		8000 x 2400 x 2400h	

Internal dimensions: - 100 mm in length and width, - 400 mm in height.

Pag. 101 Oil



### **HEATERS / TANK FITTINGS / HOSE STORAGE RACK**



#### Art. no. 7394

Heating belt for 208 I – drums, 230 VAC, 1 kW, in siliconized and vulcanized, stretchable fabric, including thermostat and 1.5 m – connection cable.

Art. no.	Working temperature	Minimum insulation layers	Voltage	Power	Dimensions (mm)	
7394	+ 30°C / + 180°C	0.4 mm	230 VAC	1000 W	1100x100	



#### Art. no. 7395

Electric immersion heater, suitable for oils and diesel.

Self-regulating, prevents the separation of paraffins at low temperature.

Voltage: 230 VAC. Power: 0.22 kW.

Art. no. 7396

Same as art. no. 7395, but power 1.5 kW.



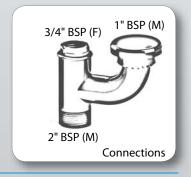
#### Art. no. 7816

Hose storage rack, in aluminium, for wall mounting. Suitable for a safe and proper storage of supply or suction hoses.



#### Art. no. **7397**

Installation kit for tanks, suitable for the mounting of a ventilation tube and of an overflow protection valve by using the same fitting.





#### Art. no. 7813

Preservation cover stem  $\emptyset$  600 mm polypropylene copolymer, for closing drums with a movable cover.

Ideal for outdoor storage, protects from the elements, prevents water infiltration, reduces alterations of the painted surfaces.

It is equipped with n. 4 internal flaps 5 mm.

Art. no.	Int. Ø	Weight	
7813	600 mm	0.978 kg	

#### **SERVICE COLUMNS AND SERVICE STANDS**



Columns and stands in painted steel for the installation of equipment such as hose reels and other, provided for the installation in a workshop. These systems are very convenient because they permit to optimize the use of the available space for the installation of any dispensing, suction and control equipment or power supply devices.

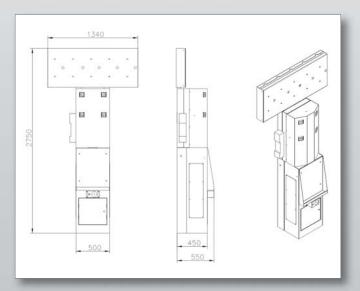
These units can be designed, manufactured and painted according to our customers' requirements.

On the following pages will be shown some examples of possible versions, such as single row service column, double row service column, open service stand and service stand with cabinet.









The dimensions refer on the column version for 5 hose reels; the width will vary depending on the number of hose reels required.

#### **SERVICE COLUMNS AND SERVICE STANDS**

Art. no. 9001

The single post service column (totem) is a convenient, solid and multifunctional working equipment for workshops; it meets the contemporary demands for the improvement of working conditions and safety, combining those with a notable esthetical aspect and a high functionality.

Due to its self – supporting structure it can be set up in any place of the workshop, offering various possibilities of personalization through the selection of its components. The service column allows to concentrate various components and equipment in only one point, such as for example:

- from 2 to 6 encased hose reels, art. no. 9013, for the supply with oils, antifreeze etc. or for the suction of waste oil can be installed on the upper mounting panel of the column which already is supplied with the necessary holes for the fixation. There can be mounted hose reels with hoses of max. 15 m length (oils, antifreeze etc.) or 7 m length (recommended length for waste oil suction),
- the installed hose reels can be transformed into a hose reel battery to improve the esthetical aspect of the unit by using the plastic casing elements to be applied between each hose reel as well as on the extreme left and right one (art. nos. 9780 9781 9779; see page 227!),
- 2 hose reels art. no. 9400 + 3615 (see page 198!) with 15 m hose, suitable for the use with air and/or water (low pressure) can be installed in the interior of the upper part of the column,
- 2 electric cable reels with 15 m electric cable and flash light (art. nos. available on demand!) can be installed in the interior of the upper part of the column,
- 2 electric switchboards, art. nos. 7380 7381 7382 (depending on the composition of the equipment) can be installed on the side of the column,
- 2 connections for compressed air (one on each side) with quick couplings, pressure regulators with manometer, condensation water separator with or without lubricator (art. Nos. 7180 – 7150; see page 195!) can be installed on the column,
- 1 full width drip tray with gun holders is mounted in the center of the column; the tray also includes hooks for the fixation of control guns and hoses,
- Cabinet with lockable door at the bottom of the column; this cabinet is provided for the installation of a waste oil suction unit (art. nos. 8300 8302 8303) inside, with a pump activating switch and a vacuum gauge in the lower center of the column,
- Other electronic components, f. ex. the control units of an electronic monitoring system, can also be installed on the column.

The single post service column consists of components in painted steel, it has a max. height of 2750 mm and the sizes of the column (L x W) are 500 x 450 mm.

It has a self – supporting structure so that the equipment can also be set up in locations with walls that are not suitable for installing such equipment (f. ex. gypsum plasterboard, glass wall) or where no walls are close.

This system is highly adaptable to the individual requirements of the customer. It is also possible to integrate components that have not been included in the initial installation at a later date.

It can be supplied in any colour according to the RAL - colour record in order to blend well with the colours of other equipment in the workshop and to be in accordance with the CI of the different car manufacturers.

The set up of the service column is easy and convenient and can be done quickly. Also eventual modifications or amendments can be made later without any problem due to the various openings which are reclosable at any time with the included metal covers.

### **SERVICE COLUMNS AND SERVICE STANDS**



In order to facilitate the selection of the necessary components we recommend to choose among the following service column kits:

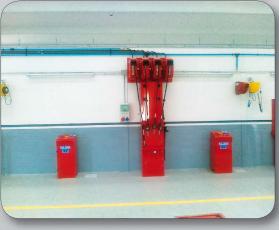
Description	Art. no.	9001/4P	9001/4B	9001/45	9001/4M
Quantity of included single post service columns with drip tray Quantity of included encased hose	9001	1	1	1	1
reels for oils and antifreeze with 15 m – hose in ½"	9013+28715	3	3	3	3
Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	2	2	2	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	-
Quantity of included electric waste oil suction systems	8303	-	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	-	-	-
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	-	-	2	2
Quantity of included electric cable reels with flash light		ı	1	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9780+9781	-	-	1	1

Description	Art. no.	9001/5P	9001/5B	9001/5\$	9001/5M
Quantity of included single post service columns with drip tray Quantity of included encased hose	9001	1	1	1	1
reels for oils and antifreeze with 15	9013+28715	4	4	4	4
m – hose in ½"  Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	3	3	3	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	ı
Quantity of included electric waste oil suction systems	8303	ı	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	1	ı	1
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	1	1	2	2
Quantity of included electric cable reels with flash light		ı	1	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9780+9781	-	-	1	1

Description	Art. no.	9001/6P	9001/6B	9001/6S	9001/6M
Quantity of included single post service columns with drip tray Quantity of included encased hose	9001	1	1	1	1
reels for oils and antifreeze with 15	9013+28715	5	5	5	5
m – hose in ½"  Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	4	4	4	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	-
Quantity of included electric waste oil suction systems	8303	-	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	-	-	-
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	-	-	2	2
Quantity of included electric cable reels with flash light		-	-	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9780+9781	-	-	1	1







# FLEXBIMEC

### **SERVICE COLUMNS AND SERVICE STANDS**

#### Art. no. 9005

The double post service stand is a convenient, solid and multifunctional working equipment for workshops; it meets the contemporary demands for the improvement of working conditions and safety, combining those with a notable esthetical aspect and a high functionality.

Due to the installation of the hose reels on the lower side of the crossbeam of the stand frame the use from both sides is possible. The required space in width is limited to only 490 mm.

Due to its self – supporting structure the service stand can be set up in any place of the workshop, also in locations with walls that are not suitable for installing such equipment (f. ex. gypsum plasterboard, glass wall) or where no walls are close (f. ex. in the center of a workshop, between two working places with lifts or between two service pits).

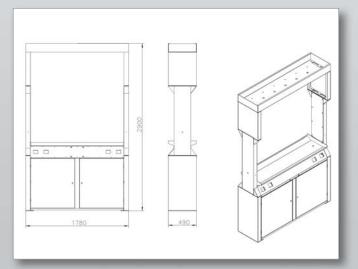
It is offering various possibilities of personalization through the selection of its components and allows to concentrate various components and equipment in only one point, such as for example:

- From 3 to 8 encased hose reels, art. no. 9013, for the supply with oils, antifreeze etc. or for the suction of waste oil can be installed on the lower side of the crossbeam which already is supplied with the necessary holes for the fixation. There can be mounted hose reels with hoses of max. 15 m length (oils, antifreeze etc.) or 7 m length (recommended length for waste oil suction). On demand also other versions for a different quantity of hose reels or with hose reels of other hose lengths are available,
- Metal shelves for the storage of spare parts, tools etc. in which can also be installed up to 4 hose reels for compressed air and/or water, art. no. 9400+3615 (see page 198!), or up to 4 electric cable reels with flash light (art. nos. available on demand!). These are mounted in between the drip tray and the floor and allow to use also the space between the two posts of the service stand.
- A metal cabinet with two lockable doors can be installed around the metal shelves. It consists of a metal ground plate, one or two (depending on the individual requirements) lateral plates, each with a door component and a central stop post (totally 4 doors) as well as a front plate (prepared to be mounted under the drip tray) with integrated roller guide assemblies for hoses or cables.
- The installed hose reels can be transformed into a hose reel battery to improve the esthetical aspect of the unit by using the plastic casing elements to be applied between each hose reel as well as on the extreme left and right one (art. nos. 9780 9781 9779; see page 227!).
- 2 electric switchboards, art. nos. 7380 7381 7382 (depending on the composition of the equipment) can be installed on the sides of the service stand.
- 2 connections for compressed air (one on each side) with quick couplings, pressure regulators with manometer, condensation water separator with or without lubricator (art. nos. 7180 – 7150; see page 195!) can be installed on the service stand.
- 1 full width drip tray with gun holders is mounted in between the two posts of the stand, under the hose reels. The tray is equipped with a grate which also includes hooks for the fixation of control guns and hoses. The external sides of the tray are declined so that the oil from oil filters which are eventually put on the grate can flow off.
- Other electronic components, f. ex. the control units of an electronic monitoring system, can also be installed on the service stand.

The double post service stand consists of components in painted steel, it has a max. height of 2800 mm and the sizes of the posts (L x W) are 80 x 490 mm. The system permits the connection to a pipe system arriving from above (wall or ceiling mounted pipes, compressed air pipes) or arriving from the ground.

It can be supplied in any colour according to the RAL - colour record in order to blend well with the colours of other equipment in the workshop and to be in accordance with the CI of the different car manufacturers.





The dimensions refer on the column version for 6 hose reels; the width will vary depending on the number of hose reels required.

### **SERVICE COLUMNS AND SERVICE STANDS**



In order to facilitate the selection of the necessary components we recommend to choose among the following service stand kits:

Description	Art. no.	9005/5P	9005/5B	9005/5\$	9005/5M
Quantity of included double post service stands with drip tray Quantity of included encased hose	9005	1	1	1	1
reels for oils and antifreeze with 15	9013+28715	4	4	4	4
m – hose in ½"  Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	3	3	3	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	-
Quantity of included electric waste oil suction systems	8303	-	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	-	-	-
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	-	-	2	2
Quantity of included electric cable reels with flash light		-	-	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9779	-	-	4	4

Description	Art. no.	9005/6P	9005/6B	9005/6S	9005/6M
Quantity of included single post service columns with drip tray	9005	1	1	1	1
Quantity of included encased hose reels for oils and antifreeze with 15 m – hose in ½"	9013+28715	5	5	5	5
Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	4	4	4	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	-
Quantity of included electric waste oil suction systems	8303	-	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	-	-	-
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	-	-	2	2
Quantity of included electric cable reels with flash light		-	-	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9779	-	-	5	5

Description	Art. no.	9005/7P	9005/7B	9005/7S	9007/7M
Quantity of included single post service columns with drip tray Quantity of included encased hose	9005	1	1	1	1
reels for oils and antifreeze with 15	9013+28715	6	6	6	6
m – hose in ½"  Quantity of included encased hose reels for waste oil suction with 7 m – hose in ½"	9013+28707	1	1	1	1
Quantity of included control guns with flow meter for oils	2826	5	5	5	-
Quantity of included control guns with flow meter for antifreeze	2830	1	1	1	-
Quantity of included electric waste oil suction systems	8303	-	1	1	1
Quantity of included pneumatic waste oil suction systems	3099	1	-	-	-
Quantity of included hose reels for compressed air and/or water	9400+3615	2	2	2	2
Quantity of included electric 230 VAC switchboards	7380	-	-	2	2
Quantity of included electric cable reels with flash light		-	-	2	2
Quantity of included oil monitoring systems	8872	-	-	-	1
Quantity of included plastic casing elements for hose reel battery	9779	-	-	6	6







#### PIPEWORK COMPONENTS



In the phase of the design and the installation of a centralized system for the distribution of fluids it is extremely important to select the appropriate pipework components in order to reach the best possible performances of the dispensing equipment and to optimize like that the productivity.

For the choice of the suitable pipework components therefore must be considered the distances between pumps and dispensing points, the required deliveries in liters per minute, the simultaneity of various dispenses, the level differences in the pipework, the characteristics of the dispensed liquid and the surrounding temperature.

Based on its experience of more than 500 designed and carried out centralized pipework installations, Flexbimec advises for the oil distribution high pressure steel pipes according to norm DIN 2391 and pipe connection elements according to DIN 2353, as well as high pressure shut-off valves, pressure reduction valves, pressure relief valves and non-return valves, rubber hoses according to SAE R1T for oils, antifreeze, diesel and similar liquids and high pressure rubber hoses according to SAE R2T for grease and water at high pressure.

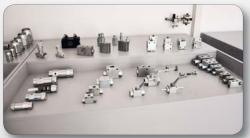
On the following pages are some recommendations of the essential components for professional pipework installations. For selecting the suitable hoses please see pages 36 and 68 of this catalogue.

If you would like to see our complete range of pipework components and fittings including all essential technical details, please ask for our specialized catalogue!

Our brand is also specialized in the production of valves and other hydraulic components.

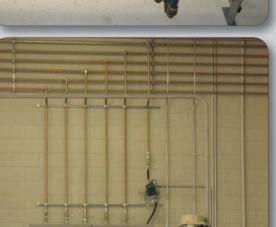
It offers a wide range of high quality products, among them pressure relief valves, non-return valves, differential control valves, unidirectional valves, compensator valves, straight and 90° - swivel joints, unidirectional and bidirectional flow regulator valves, high pressure ball valves, parachute valves with automatic shut-off, solenoid-actuated valves, etc.













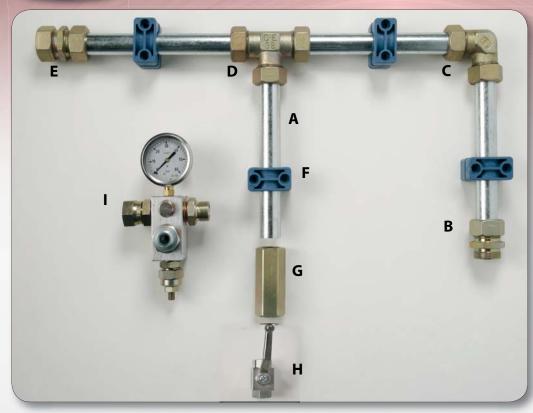






#### PIPEWORK COMPONENTS





- A Hydraulic rigid seamless steel pipe, DIN 2391, max working pressure 200 bar, wall thickness 2 mm.
- **B** Straight compression type fitting, DIN 2353.
- **C** Elbow compression type fitting, DIN 2353.
- **D** T compression type fitting, DIN 2353.
- E Intermediate compression type fitting, DIN 2353.
- **F** Fixation clamp.
- **G** Non-return valve.
- **H** Shut-off valve, M-F.
- Pressure relief valve.

Type	Ø 18	Ø 25	Ø 28	Ø 35	1/2"	3/4"	1″
Α	Art. no. 9818	Art. no. 9825	Art. no. 9828	Art. no. 9838	1	1	-
В	Art. no. 9839	Art. no. 9847	Art. no. 9851	Art. no. 9855	1	1	-
С	Art. no. 9840	Art. no. 9846	Art. no. 9850	Art. no. 9854	-	-	-
D	Art. no. 9858	Art. no. 9848	Art. no. 9852	Art. no. 9856	1	-	-
E	Art. no. 9859	Art. no. 9845	Art. no. 9849	Art. no. 9853	-	-	-
F	Art. no. 9841	Art. no. 9844	Art. no. 9842	Art. no. 9857	1	-	-
G	-	1	-	1	Art. no. 6641	Art. no. 6643	Art. no. 6640
Н	-	-	-	-	Art. no. 7241	Art. no. 7240	Art. no. 7239
I	-	-	-	-	Art. no. 2259	Art. no. 2260	Art. no. 2258





#### Art. no. 9843

Metal bar 28x30 mm, suitable for the mounting of fixation clamps (F).

Art. no. 9872

Metal L – bracket, suitable for the fixation overhang of rigid pipes.





#### Art. no. 9817

Adhesives for the indication of the different liquids, to be applied on the pipes. Dimensions: 150x30 mm. The standard versions available are:

- OIL 1
- OIL 2
- OIL 3
- WASTE OIL
- ANTIFREEZE
- WASTE ANTIFREEZE
- AIR
- WATER

Adhesives with different or customized descriptions are available as of a minimum order of 50 pieces.

#### PIPEWORK COMPONENTS





Pressure relief valve, suitable for lubricants pipeworks. Body in aluminium alloy and cartridge in galvanized steel.

Includes glycerin manometer with graduation 0-60 bar and regulation screw for the selection of the max. applicable pressure.

Connections (BSP): inlet F – outlet M.



Art. no.	Connections	Regulation range	Max flow rate	Max pressure
2259	1/2" BSP	from 5 to 50 bar	70 l/min	70 bar
2260	3/4" BSP	from 5 to 50 bar	80 l/min	70 bar
2258	1"BSP	from 5 to 50 bar	90 l/min	70 bar



Non-return valve with high pressure gate valve, suitable for lubricants pipeworks. Body in galvanized steel, on demand also in stainless steel. Opening pressure 0.5 bar (on demand also 4 bar or 8 bar). Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Max pressure	Max flow rate	Dimensions (mm)
6639	1/4" BSP	400 bar	30 l/min	58 x 21 x 19
6641	1/2" BSP	350 bar	90 l/min	71 x 33 x 30
6643	3/4" BSP	300 bar	130 l/min	83 x 40 x 36
6640	1"BSP	280 bar	180 l/min	106 x 57 x 50
6648	1' 1/4" BSP	260 bar	250 l/min	125 x 63 x 55



Pressure reduction valve with high pressure gate valve, suitable for lubricants pipeworks. Body in galvanized steel, on demand also in stainless steel.

Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Regulation range	Max pressure	Max flow rate
6650	1/2" BSP	from 5 to 50 bar	320 bar	45 l/min
6651	3/4" BSP	from 5 to 50 bar	300 bar	85 l/min
6652	1"BSP	from 5 to 50 bar	250 bar	140 l/min



Parachute valve for lubricants pipeworks: blocks automatically the flow of lubricants inside of the pipework in case of leakages caused by failures or cracks of pipe components. Body in galvanized steel.

Art. no.	Connections	Regulation range	Max pressure	Max flow rate
6670	1/2" BSP	from 10 to 70 l/min	350 bar	80 l/min
6671	3/4" BSP	from 30 to 140 l/min	350 bar	150 l/min
6672	1" BSP	from 40 to 170 l/min	350 bar	180 l/min



4-way flow diverter valve in cast iron, open center, with limited pressure drops. Made with 2 fixing holes  $\emptyset$  8.5 mm.

Art. no.	Connections	Max pressure	Max flow rate	Weight
6675	1/2" BSP	250 bar 90 l/min		1.9 kg
6676	3/4" BSP	160 bar	120 l/min	2.5 kg

# **PIPEWORK COMPONENTS**





High pressure ball valve, with full port and lever handle, suitable for lubricants pipeworks. Body in galvanized steel. Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Max flow rate	Max pressure
7244	1/4" BSP	30 l/min	500 bar
7242	3/8" BSP	50 l/min	500 bar
7241	1/2" BSP	80 l/min	500 bar
7240	3/4" BSP	120 l/min	350 bar
7239	1"BSP	160 l/min	350 bar
7238	1' 1/4" BSP	160 l/min	280 bar



Flow regulator valve, conical type, unidirectional. Body in galvanized steel. Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Regulation range	Max pressure	Max flow rate	
6654	1/2" BSP	from 0 to 50 l/min	350 bar	50 l/min	
6655	3/4" BSP	from 0 to 80 l/min	300 bar	80 l/min	
6656	1"BSP	from 0 to 110 l/min	250 bar	110 l/min	



Flow regulator valve, 90° - elbow type, unidirectional. Body in galvanized steel. Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Regulation range	Max pressure	Max flow rate	
6660	1/2" BSP	from 0 to 50 l/min	320 bar	50 l/min	
6661	3/4" BSP	from 0 to 80 l/min	300 bar	80 l/min 110 l/min	
6662	1"BSP	from 0 to 110 l/min	250 bar		



Swivel joint, straight type, with ball valve, self – lubricating. Body in galvanized steel, on demand also in stainless steel AISI 304. Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Max static pressure	Max dynamic pressure	Max flow rate 25 l/min	
6690	1/4" BSP	400 bar	300 bar		
6691	1/2" BSP	360 bar	220 bar	80 l/min	
6692	3/4" BSP	310 bar	200 bar	120 l/min 150 l/min	
6693	1"BSP	280 bar	150 bar		
6694	1' 1/4" BSP	250 bar	150 bar	200 l/min	



Swivel joint,  $90^{\circ}$  - type, with ball valve, self – lubricating. Body in galvanized steel, on demand also in stainless steel AISI 304. Connections (BSP): inlet F – outlet F.

Art. no.	Connections	Max static pressure	Max dynamic pressure	Max flow rate	
6695	1/4" BSP	400 bar	300 bar	25 l/min	
6696	1/2" BSP	360 bar	220 bar	80 l/min	
6697	3/4" BSP	310 bar 200 bar		120 l/min	
6698	1"BSP	280 bar	150 bar	150 l/min	
6699	1' 1/4" BSP	250 bar	150 bar	200 l/min	



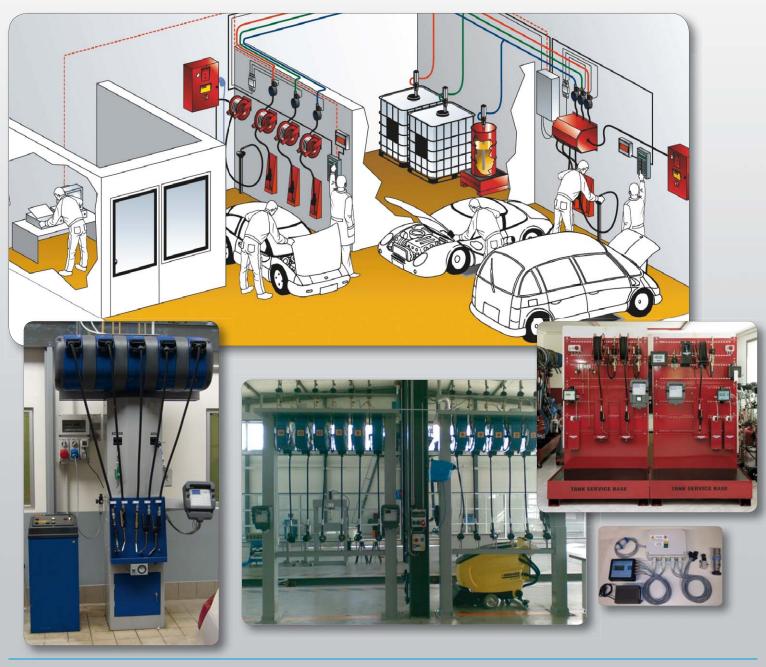
Electronic monitoring systems are highly customizable modular units for the control of the lubricant dispenses in a workshop. They enable the owner or the operator to get a precise, efficient and safe information on each single dispense, eliminating any possible deviation, caused by theft or non-authorized dispenses, in the purchased and sold oil quantity. The amortization of the financial investment in such a system therefore will quickly be achieved by a notable reduction in the consumption of lubricants that can be visualized in the periodical reports.

Besides that these systems also permit a continuous control of the lubricants inventory in a workshop, recording each reduction caused by dispenses immediately.

The use of these systems is easy, even for non-experts. They are connected with a usual PC with an operating system in Windows®. Each transaction can be printed out immediately or can be stored and printed out gradually in a summary of various dispenses.

For being able to carry out a dispense of oil the operator must first identify himself by entering his personal identification code on the keypad. Then he can also enter a job order number, the vehicle registration number, the mileage of the vehicle, and of course select the required product type, the quantity to be dispensed and the outlet to be used for the dispense. After the dispense all this data will automatically be stored, considering only the quantity that has really been dispensed.

The system assures an absolute security which is guaranteed by different password levels 1) for the operators, 2) for the supervisor and 3) for the workshop owner or the person responsible for the installation and configuration of the system.



Monitoring Pag. 112



FLUID KEEPER is a modular monitoring system which allows to control up to 16 different oil types or antifreeze, and up to 64 different dispensing points.

Each dispense of a lubricant made by the operators is electronically registrated, transmitted to a PC and administrated in a Windows® – based programme.

The level of each container is automatically and continuously updated and a message is sent if the (presetable) minimum level has been reached in a container or the system is blocked if another (presetable) "stop" level has been reached. In order to make a dispense the operator must:

- enter his personal 4 digits identification code;
- enter the internal job order number;
- indicate the vehicle registration number;
- select the oil type;
- enter the quantity to be dispensed.

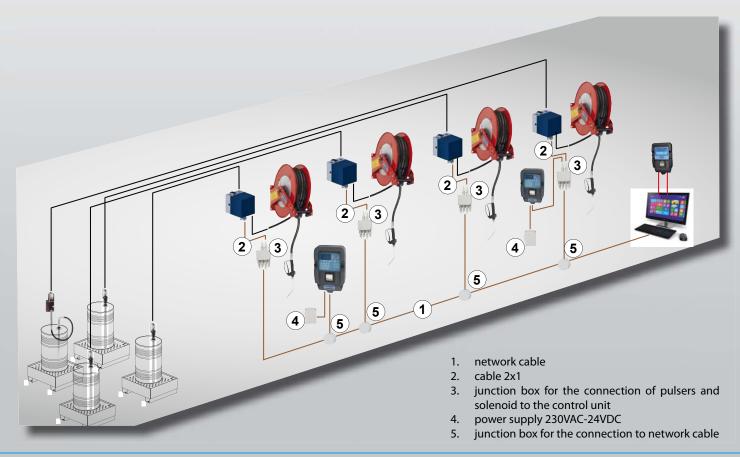
After a short waiting period (presetable) which allows the operator to take the corresponding control gun, it is possible to start the dispense by pulling the trigger. When the preset quantity has been reached the system automatically stops the dispense.

If the preset dispensing quantity should be higher than the really required quantity, it is possible to interrupt the dispense by releasing the trigger of the control gun. The system will automatically registrate eventual differences between the preset and the really dispensed quantity and transmit to the PC only the effective dispensing data.

All data can be extracted and printed out in periodical statistics based on operator, job order number, date, oil type, container or vehicle.

Furthermore the system permits the extension with additional components (optional), such as:

- ticket printer for a report on each individual dispense;
- bar code reader for scanning the data of each transaction;
- security sensors detecting the internal pressures of the pipework;
- remote display for the visualization of the dispensed quantity.



Pag. 113 Monitoring

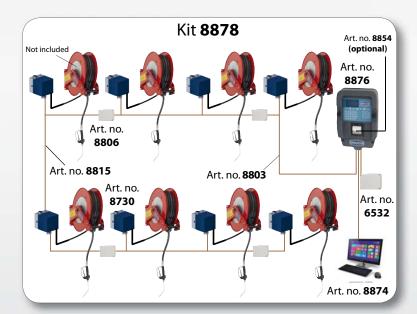


# **KIT 8878**

Example of a configuration for a FLUID KEEPER 8 MULTIDISPENSE system for 8 dispensing points.

# **Basic composition:**

- 8 pcs. art. no. 8730
- 1 pc. art. no. 8876
- 5 m of art. no. 8815
- 1 pc. of art. no. 8874
- 1 pc. art. no. 6532
- 4 pcs. art. no. 8806
- 20 m art. no. 8803









# **KIT 8873**

Example of a configuration for a FLUID KEEPER INOX MULTIDISPENSE system for 4 dispensing points.

# **Basic composition:**

- 4 pcs. art. no. 2717
- 1 pc. art. no. 6532
- 1 pc. art. no. 8876
- 2 pcs. art. no. 8806
- 5 m of art. no. 8815
- 5 m art. no. 8803
- 1 pc. of art. no. 8874

#### Art. no. 8730

Electronic oval gears flow meter with pulse transmitter, suitable for oil and antifreeze, including a 24 VDC - solenoid valve, an inline filter and a wall bracket. One unit must be installed close to each dispensing point of the system.

# Art. no. 8876

Control unit FLUID KEEPER 8 MULTIDISPENSE with alphanumerical keyboard and display. One control unit is necessary per 8 dispensing points.

# Art. no. **6532**

Transformer / stabilizer 230 VAC – 24 VDC, 7,5 A, IP 55, for the power supply of the control unit art. no. 8876. One transformer / stabilizer is necessary for each control unit.

# Art. no. 8806

Junction box for the connection of flow meters with pulse transmitter and control unit. One junction box is recommended per 2 flow meters with pulse transmitter.

# Art. no. 8854

Thermical printer (optional), can be connected to the CANBUS of the control unit. Required for printing a ticket of each individual dispense.

# Art. no. **8803**

Network cable (sold by the meter).

# Art. no. **8815**

Solenoid and pulse transmitter cable 2 x 1 PBFCEN/14 (sold by the meter).

# Art. no. 8874

CD with FLUID KEEPER 8 MULTIDISPENSE monitoring software for Windows® operating systems (XP, 7, 8) + interface unit with 230 VAC power supply module, cable and plug. One software and interface unit is necessary for the complete system.

#### Art. no. 2717

Electronic oval gears flow meter with pulse transmitter, IXEF body, including a 24 VDC - stainless steel solenoid valve, an inline filter and a wall bracket. One unit must be installed close to each dispensing point of the system.





Monitoring Pag. 114





An intuitive software allows easy system configuration and full monitoring of all activities enabling analysis over time of consumption of the various fluids.

The menu allows querying a database that collects the history of transactions for each operator.

The research, through a series of customizable filters, allows the visualization of the data requested:

- Date range
- Search by product
- Search for operator
- Search for number plate
- · Search by job



Simultaneously it displays the updated tank stocks for each type of fluid.

Among the settings you can select the operating mode of use:

- Free delivery, no dispensable quantity preselected
- Dispensing a predetermined quantity
- · Dispensing only by pre-orders
- Authorization of the dispensing only by PC, keyboard or both
- Individual setting.



At the same time shows total dispensed quantityes, for each type of fluid, divided by:

- Total daily
- Total monthly
- Total historical

The system allows you to preset complete orders or individual fields by the manager of the department that can be activated by the operator using a barcode reader.

The order, once processed, can be stored and repeated for subsequent transactions or non-replicable, to prevent fraudulent use.



The field "parameters mail" allows you to send automatically to one or more e-mail addresses the value of the level of the tanks at constant inventory control purposes.



The text in the email message is customizable and can be sent to the various suppliers of lubricants according to a pre-set level of fluid in the tanks so as to maintain a constant supplying.

# þ

**EXBIME** 

# **ELECTRONIC FLUID MONITORING SYSTEMS**

The system FLUID KEEPER 8 MULTIDISPENSE offers plenty of additional functions compared to the basic version. These are:

- Each control unit allows the monitoring of up to 8 dispensing points and the simultaneous dispense of lubricants in various of them;
- On the connected PC the required measuring unit (liters, gallons, pints, quarts) can quickly be chosen;
- Data entry with a bar code reader (optional) helps to avoid possible errors and to increase operations velocity;
- Wide monitoring of dispensing jobs and dispensing quantities: preset, free or serial mode;
- Management of suppliers: possibility to automatically send emails when predefined minimum levels in lubricants storage tanks have been reached; the operator can send emails to different email addresses and to different suppliers;
- Intuitive graphical interface software.



#### Art. no. 8876

Control unit FLUID KEEPER 8 MULTIDISPENSE with alphanumerical keyboard and display. One control unit is necessary per 8 dispensing points and allows also simultaneous dispensing in various dispensing points. There can be installed up to 8 control units in the system.

# Art. no. 8877

Alphanumerical keyboard with display without memory that can be installed optionally and allows to activate any of the connected dispensing points of the system. There can be installed up to 40 of these keyboards in the system.



#### Art. no. 8879

Control unit FLUID KEEPER 8 MOBILE with touch screen 7" (185 x 98 mm).



# Art. no. **8795**

Bar code reader for FLUID KEEPER 8 MULTIDISPENSE system. Allows to scan all data that can be read by the software. The bar code reader

must be connected to an alfanumerical keyboard unit, art. no. 8877. With only one quick transaction all necessary data can be read, avoiding like that any possible errors eventually occurring when entering the data manually on the keyboard.



Monitoring Pag. 116





Art. no. 8731

#### Art. no. 8730 - 8731

Electronic oval gears flow meter with pulse transmitter, suitable for oil and diesel, including a solenoid valve, an in-line 150  $\mu$ m filter and a wall bracket.



Art. no.	Connections	Max flow (l/min)	Operating temperature range	Max working pressure (bar)	Accuracy	Number of pulses	Weight
8730	1/2"BSP (F)	35	+5°C/+110°C	100	+/-0.5%	78/I	1.5 kg
8731	1"BSP (F)	80	+5°C / +110°C	100	+ / - 0.5%	78/I	2.5 kg



# Art. no. 8732

Electronic oval gears flow meter with pulse transmitter, suitable for oil and diesel, including a solenoid valve, an in-line 150  $\mu$ m filter, a built-in display and a wall bracket.

Art. no.	Connections	nections Max flow (I/min) Operatemper		Max working pressure (bar)	Accuracy	Number of pulses	Weight
8732	1/2"BSP (F)	35	+5°C/+110°C	100	+ / - 0.5%	78/l	1.6 kg



#### Art. no. 2717

Electronic oval gears flow meter with pulse transmitter, body in IXEF, including a stainless steel solenoid valve; suitable for the use with water-based fluids and AdBlue® (DEF). Appropriate to the use in combination with electronic oil monitoring systems by the use of an external receiver.

Art. no.	Connections	onnections Max flow (I/min) Operating temperature range		Max working pressure (bar)			Weight
2717	1/2"BSP (F)	35	+5°C/+50°C	30	+/-0.5%	78/l	0.6 kg



# Art. no. 8874

Self – installing CD with FLUID KEEPER 8 MULTIDISPENSE monitoring software for Windows® operating systems (XP, 7, 8) + interface unit with 230 VAC power supply module, cable and plug. One software and interface unit is necessary for the complete system.



# Art. no. 8760

Remote display connected to the pulse meter by cable to visualize the batch of dispensed fluid. The batch is set to zero after a settable time-out expiring.

# Art. no. **8761**

Remote display as art. no. 8760 connected to the pulse meter by cable and solenoid valve. The batch is set to zero once the valve will shut-off the fluid passage.



# Art. no. **8884**

Software FLUID KEEPER 8 MOBILE for Tablet in Windows® operating systems (7, 8). The Tablet can be used as a mobile keyboard and allows to activate and manage any of the connected dispensing points of the system.

The area must be covered by wireless signal through access point.

Pag. 117 Monitoring

# **ELECTRONIC FLUID DOSING SYSTEMS**

AUTOMATIC FILLS

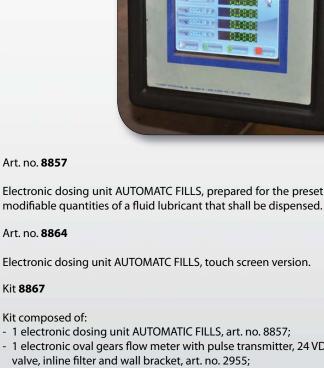
Art. no. 8864



The electronic dosing system **AUTOMATIC FILLS** allows the dosage of different, preset quantities of a fluid lubricant.

It is particularly suitable in applications where a continuous accuracy in the dosage is required such as in industrial production systems with automated, constant and continuous dispenses of oil. This dosing system is an essential component in assembly lines with repeated dispenses of a preset quantity and can be used with any kind of container.









Monitoring

Art. no. 2958

OPTIONAL: Oil control gun with push button for activation of dispense run.

# Art. no. 2958

Electronic dosing unit AUTOMATC FILLS, prepared for the preset of 4 different

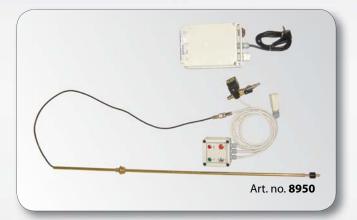
- 1 electronic oval gears flow meter with pulse transmitter, 24 VDC solenoid
- 1 transformer / stabilizer 230 VAC 12 VDC, art. no. 6528;
- 1 remote control switchboard, art. no. 7383.

# LEVEL GAUGES FOR OIL



The level gauges of series PUMPSTOP are suitable for the use with all pneumatic oil pumps. They stop the pump when the oil in a container is going to run out and like that prevent air to enter into the system which would create a mixture of oil and air that would cause wrong measurement results of the connected flow meters.

The kit is composed of a probe with level sensor, a solenoid valve for the shut-off of the compressed air, a transformer / stabilizer for the power supply and a warning light with horn (for art. nos. 8951, 8953). The probe is inserted into a drum through its 3/4" – opening and is also fixed there (in case of tanks using a suitable 3/4" – 2" adapter). When the minimum oil level is reached, an electric impulse is transmitted to the solenoid actuated shut-off valve which interrupts the compressed air supply, stops immediately the pneumatic oil pump and activates an acoustical and optical alarm.



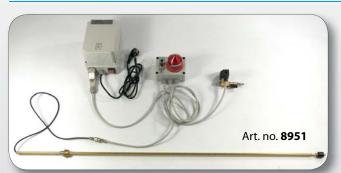
Art. no. 8950

#### **PUMPSTOP**

Low level pump stop kit, composed of:

- level probe, suitable for the use in 208 I drums and 1000 I - IBC - tanks, length 1200 mm, art. no. 8908:
- ON-OFF switch;
- bypass push button which allows to continue the oil flow again after it has been stopped;
- solenoid-actuated shut-off valve for the compressed air, art. no. 7362;
- transformer / stabilizer 230 VAC 24 VDC, art. no. 6528;
- electric connection cable, length 2 m.







Art. no. 8951

# **PUMPSTOP**

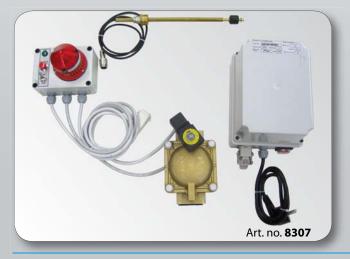
Low level pump stop kit, composed of:

- level probe, suitable for the use in 208 I drums and 1000 I - IBC tanks, length 1200 mm, art. no. 8908;
- ON-OFF switch;
- warning light with horn, art. no. 8920;
- bypass push button which allows to continue the oil flow again after it has been stopped;
- solenoid-actuated shut-off valve for the compressed air, art. no. 7362;
- transformer / stabilizer 230 VAC 24 VDC, art. no. 6528;
- electric connection cable, length 2 m.

Art. no. **8953** 

# **PUMPSTOP**

Kit as Art. no 8951 but with double sensor for indication of reserve and stop level Art. no. 8909.



Art. no. **8307** 

Overfill protection kit for waste oil, stops the oil flow immediately when the maximum filling level in a tank has been reached.

The kit is composed of:

- high level probe, with connection 3/4" BSP (M) and length 300 mm, art. no. 8905;
- warning light with horn, art. no. 8920;
- solenoid-actuated oil flow shut-off valve, with connection 1"BSP (M), art. no. 7365;
- electronic control switch;
- transformer / stabilizer 230 VAC 24 VDC, art. no. 6528.



Monitoring



# LEVEL GAUGES FOR OIL / COMPONENTS FOR THE AUTOMATION OF INSTALLATIONS



#### Art. no. 8309

Overfill protection kit for waste oil, stops the oil flow immediately when the maximum filling level in a tank has been reached.

#### The kit is composed of:

- high level probe, with **two sensors** for indication of maximum and stop level, with connection 3/4"BSP (M) and length 300 mm;
- warning light with horn, art. no. 8920;
- solenoid-actuated oil flow shut-off valve, with connection 1"BSP (M), art. no. 7365;
- electronic control switch;
- transformer / stabilizer 230 VAC 24 VDC, art. no. 6528.





# Art. no. 8753

Digital ultrasonic level indicator suitable for 208 I – drums.

Easy to install and easy to read; it is inserted into a drum through its 3/4" – opening and is also fixed there.

**Automatic measurement:** each 20 minutes it will check the level of the drum without showing values on display. When the level will reach a value between 20 and 10 l, the display will show a first warning alarm; under 10 l a second warning will be activated.

**Instantaneous measurement:** if the level is between 145 and 20 l the exact quantity of product is shown.



Feeding by AAA alcaline battery.



# Art. no. 8752

Mechanical level gauge with floater and analogical measuring scale, suitable for 60 and 208 l – drums.

Easy to install and easy to read; it is inserted into a drum through its 3/4" – opening and is also fixed there. On demand also available with measuring scale in gallons.





# Art. no. **7340**

Timer (daily/weekly) for the preset activation of solenoid valve art. no. 7360.

# Art. no. **7360**

Solenoid-actuated security valve, 24 VDC, connections 1/2" BSP, for the shut-off of the compressed air supply. If the valve is installed into the compressed air circuit, the compressed air from the air pipe is discharged at the end of the labor time. This can be done by hand or also automatically if the valve is connected with the timer, art. no. 7340.

Electric power supply through transformers / stabilizers art. nos. 6528 or 6529.



Monitoring Pag. 120

# **WASTE OIL EQUIPMENT**



The FLEXBIMEC waste oil equipment can be divided generally into 2 groups of articles: mobile units with a waste oil collection container and stationary systems.

The range of the mobile units consists of the classical waste oil gravity drainers for the use under lifts or in service pits, of the waste oil suction units with appropriate suction probes and adapters that can be inserted into the motor oil dip-stick tube of the vehicle, and of the combined systems of waste oil gravity drainers and suction units.

The suction process is made by depressurization using a Venturi system or by using a pneumatic or electric pump.

The waste oil can be discharged from the mobile collection containers by pressurizing them or by using pneumatic pumps into waste oil storage tanks.

The stationary waste oil unit combines and automates the waste oil suction and the discharge in only one, wall-mounted system.

This system has the following advantages:

- Elimination of any mobile equipment that could constrain the operators in their work;
- Simplification of the oil change operation which is limited to only the waste oil suction from the vehicle, the rest of the process is automated.













Pag. 121 Waste oil

# WASTE OIL DRAINERS





Art. no. **3185** Art. no. **3185/110** 

Mobile low level gravity waste oil drainer, suitable for the draining of motor oil, gear oil or differential oil from trucks and passenger cars.

Available with collection capacity of 70 l and 110 l, with anti splash grid and removable, lateral antisplash guard (optional). The unit can be discharged by gravity through the laterally mounted 3/4" drain valve or by using an evacuation pump with suction hose and female quick coupling to be connected to the male coupling installed on the drainer (see evacuation kit art. no. 2044 + 2264 on page 123!).





Art. no. 3185/20

Mobile low level gravity waste oil drainer such as above, but in height-reduced version, ideal for the use with passenger cars with sports chassis.

Art. no.	Collection capacity	Connections	Weight	Dimensions (LxWxH) (mm)
3185	70 l	3/4" BSP (F)	26 kg	800x560x180
3185/110	110	3/4" BSP (F)	38 kg	1400x560x180
3185/20	22 l	3/4" BSP (F)	18 kg	800x500x80





Art. no. **3186** Art. no. **3186/110** 

Pit gravity waste oil drainer, suitable for the draining of motor oil, gear oil or differential oil from trucks and passenger cars. Available with collection capacity of 70 l and 110 l, with anti splash grid and metal rollers. Suitable for the use in service pits between the pit rails. It is possible to adapt the width according to the pit dimensions. The unit can be discharged by gravity through the laterally mounted 3/4"drain valve or by using an evacuation pump with suction hose and female quick coupling to be connected to the male coupling installed on the drainer (see evacuation kit art. no. 2044 + 2264 on page 123!).



Art. no.	Collection capacity	Width adjustment range (mm)	Connections	Weight	Dimensions (LxWxH) (mm)	
3186	70 l	Min 900 - Max 1300	3/4" BSP (F)	27 kg	800x560x180	
3186/110	110 l	Min 900 - Max 1300	3/4" BSP (F)	39 kg	800x560x285	





Art. no. **3254** Art. no. **3254/110** 

Mobile low level gravity drainer, suitable for the draining of waste oils and antifreeze from trucks and passenger cars by using the included pump kit for the eventual refilling of the liquid into the motor or circuit after finishing the service.

Available with collection capacity of 70 I and 110 I, with anti splash grid.

The pump kit consists of a pneumatic 1.3:1 – pump, pressure regulator with manometer, suction hose and supply hose gun with rigid outlet pipe.



Art. no.	Compressed air supply	Outlet pressure		Collection capacity	Connections	Weight	Dimensions (LxWxH) (mm)
3254	2-4 bar	4 bar	10 l/min	701	1/2"BSP (F)	34 kg	800x560x180
3254/110	2-4 bar	4 bar	10 l/min	1101	1/2"BSP (F)	46 kg	800x560x285



# WASTE OIL DRAINERS





## Art. no. 3292

Waste oil draining kit for the installation in service pits, with metal collection bowl of 10 l capacity incl. removable anti splash grid and height-adjustable, telescopic tube with wall mounted swivel arm in galvanized steel.

#### Art. no. 3244

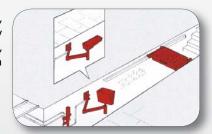
Waste oil draining kit for the installation in service pits, with metal collection bowl of 10 I capacity incl. removable anti splash grid, height-adjustable, telescopic tube with wall mounted swivel arm in galvanized steel and pneumatic 1:1 – pump, art. no. 2044, for the discharge of the collected waste oil and the transfer into a waste oil storage tank.

Art. no.	Diameter collection bowl	Capacity collection bowl	Max extension height collection bowl	Max extension length swivel arm	Connections	Weight
3292	400 mm	10 l	530 mm	1340 mm	1" BSP (F)	10 kg
3244	400 mm	10 l	530 mm	1340 mm	1" BSP (F)	20 kg



# Art. no. **3293**

Waste oil draining kit for the installation in service pits, with metal, trapezoidal collection bowl of 30 l capacity incl. removable anti splash grid and height-adjustable, telescopic tube with wall mounted swivel arm in galvanized steel.



Art. no. 3244

Art. no.	Dimensions collection bowl (LxWxH) Capacity collection bowl		Max extension height collection bowl	Max extension length swivel arm	Connections	Weight
3293	395x350x360 mm	30 l	530 mm	1340 mm	1" BSP (F)	15 kg



#### Art. no. 2046 - Art. no. 2044

Waste oil evacuation and transfer kit, consisting of a 1:1 – (art. no. 2044) or a 2:1 – (art. no. 2046) single acting pneumatic piston pump, wall bracket, 1.5 m - rubber suction hose Ø 1" and foot valve with stainless steel strainer.

# Art. no. 2043

Pneumatic 1:1 – single acting piston pump, suitable for the evacuation and the transfer of waste oil. Delivery approx. 35 l/min.

#### Art. no. 2264

Waste oil and waste antifreeze evacuation kit, consisting of hydraulic quick coupling with connection 1" BSP (F), hydraulic quick connector with connection 1" BSP (F) and connection adapter with connection 1" BSP (MM), with non-return valve. The kit is necessary to carry out the evacuation of waste oil drainers or waste oil suction units by connecting the hydraulic quick coupling to the suction hose of evacuation kits art. no. 2046 or art. no. 2044 (instead of the installed foot valve) and the quick connector to the waste oil drainer or waste oil suction unit to be discharged.

# Art. no. **2045**

Pneumatic 2:1 – single acting piston pump, with Viton® - gaskets, suction tube in brass, and foot valve in stainless steel, suitable for the evacuation and the transfer of waste oil and waste antifreeze. Delivery approx. 35 l/min.

Art no	Compressed air supply	Delivery	Compression ratio	Max outlet pressure	Connection compressed air	Connection lubricant outlet	Consumption compressed air	Weight
204	2 – 8 bar	30 l/min	2:1	16 bar	1/4" BSP (F)	3/4"BSP (M)	240 l/min	5 kg
204	2 – 8 bar	35 l/min	1:1	8 bar	1/4"BSP (F)	3/4"BSP (M)	210 l/min	4 kg
204	2 – 8 bar	35 l/min	1:1	8 bar	1/4"BSP (F)	3/4"BSP (M)	210 l/min	4 kg
204	2 – 8 bar	35 l/min	2:1	16 bar	1/4" BSP (F)	3/4"BSP (M)	240 l/min	5 kg

# **WASTE OIL DRAINERS**



Mobile waste oil gravity drainers, with metal collection bowl and height-adjustable, telescopic tube. The collection of the waste oil is made by using empty jerrycans or drums.



#### Art. no. 3177

Mobile waste oil gravity drainer, consisting of wide collection bowl in painted steel of 10 l capacity, art. no. 3290, incl. removable anti splash grid, height-adjustable, telescopic tube with 2" x 28 mm – bung adapter, shut-off valve and trolley for max. 60 l – drums, art. no. 4360.

#### **OPTIONAL:**

- metal crown drain adapter, permits to enlarge the collection diameter of the drain bowl (= art. no. 3299) (see page 125!).
- empty plastic can, capacity 20 l (= art. no. 3482).

Art. no.	Capacity collection bowl	Height adjustable up to	Ø collection bowl art. no. 3290	Ø metal crown drain adapter art. no. 3299	Weight	Dimensions (LxWxH) (mm)
3177	101	1600 mm	400 mm	590 mm	18 kg	700 x 700 x 1200





#### Art. no. 3178

Mobile waste oil gravity drainer, consisting of wide collection bowl in painted steel of 10 l capacity, art. no. 3290, incl. removable anti splash grid, height-adjustable, telescopic tube with 2"x 28 mm - bung adapter, shut-off valve and trolley for max. 208 l – drums, art. no. 4380.

# **OPTIONAL:**

- metal crown drain adapter, permits to enlarge the collection diameter of the drain bowl (= art. no. 3299) (see page 125!).
- mechanical level gauge with floater and analogical measuring scale, suitable for 208 I - drums (= art. no. 8752);
- empty metal drum, capacity 208 l (= art. no. 4699).



Art.	no.	Capacity collection bowl	lection adjustable bowl a		Ø metal crown drain adapter art. no. 3299	Weight	Dimensions (LxWxH) (mm)
31	78	101	1800 mm	400 mm	590 mm	31 kg	700 x 700 x 1200





Mobile waste oil gravity drainer, consisting of wide collection bowl in painted steel of 10 l capacity, art. no. 3290, incl. removable anti splash grid, height-adjustable, telescopic tube with 2" x 28 mm – bung adapter, shut-off valve and heavy duty trolley for max. 208 l – drums, art. no. 4389.

# **OPTIONAL:**

- metal crown drain adapter, permits to enlarge the collection diameter of the drain bowl (= art. no. 3299);
- mechanical level gauge with floater and analogical measuring scale, suitable for 208 I – drums (= art. no. 8752);
- empty metal drum, capacity 208 l (= art. no. 4699).



Art. no.	Capacity collection bowl	Height adjustable up to	Ø collection bowl art. no. 3290	Ø metal crown drain adapter art. no. 3299	Weight	Dimensions (LxWxH) (mm)
3173	101			590 mm	44 kg	700 x 700 x 1200



Waste oil Pag. 124

Art. no. 3173





#### Art. no. 3179

Mobile waste oil gravity drainer, suitable for the use under lifts, with collection container of 90 l capacity, level gauge, two fixed wheels and two castors, with wide collection bowl in painted steel of 10 l capacity incl. removable anti splash grid, 1.6 m discharge hose.



Metal crown drain adapter, permits the enlargement of the collection diameter of the drain bowl.

Ø 400 mm

Art. no.	Capacity collection bowl		Capacity collection container	Max. collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3179	101	1050-1600 mm	901	80 I	0.5 bar	28 kg	504x460x1200





# Art. no. 3191

Mobile waste oil gravity drainer, suitable for the use under lifts or in pits, with collection container of 90 l capacity, two fixed wheels and two castors, with wide collection bowl in painted steel of 10 l capacity incl. removable anti splash grid, level gauge and storage bowl. The unit can be discharged with a pneumatic 1:1 – pump (art. no. 2043), mounted on top of the container, through the included 1.6 m discharge hose.

# **OPTIONAL:**

-- metal crown drain adapter, permits to enlarge the collection diameter of the drain bowl (= art. no. 3299).



Art. no.	Capacity collection bowl	Height adjustable	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3191	101	1050-1600 mm	901	801	0.5 bar	35 kg	504x460x1200





Mobile waste oil gravity drainer, suitable especially for the waste oil collection from motorbikes.

Consisting of wide, rectangular collection bowl (dimensions 700 x 250 mm) of 80 mm height incl. removable anti splash grid, assuring an easy access between lift and motorbike, collection container of 65 I capacity, level gauge, two fixed wheels and two castors. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.





Art. no.	Capacity collection bowl	Height adjustable up to	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3183	10	1400 mm	65 l	501	0.5 bar	30 kg	430x570x1200



# **WASTE OIL SUCTION UNITS**



Waste oil suction units, consisting of a collection container with a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7 - 10 bar is connected on it. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than 60 - 80°C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply.



#### Art. no. 3024

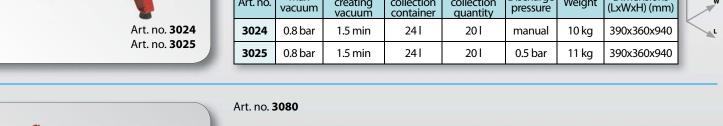
Mobile waste oil suction unit, with collection container of 24 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged manually by taking off the cap on top of the container.

# Art. no. 3025

Same as art. no. 3024, but the unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

	Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C
i	2995	5x3 mm	0.25 l/min	1.05 l/min
ı	2998	8x6 mm	1.4 l/min	2.52 l/min

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3024	0.8 bar	1.5 min	241	201	manual	10 kg	390x360x940
3025	0.8 bar	1.5 min	241	201	0.5 bar	11 kg	390x360x940





Mobile waste oil suction unit, with collection container of 90 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl.

The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C		
2995	5x3 mm	0.25 l/min	1.05 l/min		
2998	8x6 mm	1.4 l/min	2.52 l/min		

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3080	0.8 bar	1.5 min	90 I	80 I	0.5 bar	28 kg	504x460x900



Waste oil Pag. 126

# WASTE OIL SUCTION UNITS



Waste oil suction units, consisting of a collection container with a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7-10 bar is connected on it. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than  $60-80^{\circ}$ C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply.



#### Art. no. 3027

Mobile waste oil suction unit, with collection container of 241 capacity and transparent inspection chamber of 6.5 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

The transparent inspection chamber allows to check the quality and the quantity of the sucked oil.

In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another non-aggressive cleaning agent.



Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C
2995	5x3 mm	0.25 l/min	1.05 l/min
2998	8x6 mm	1.4 l/min	2.52 l/min

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3027	0.8 bar	1.5 min	24	20	0.5 bar	15 kg	390x360x950





Mobile waste oil suction unit, with collection container of 901 capacity and transparent inspection chamber of 101 capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

The transparent inspection chamber allows to check the quality and the quantity of the sucked oil.



In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another non-aggressive cleaning agent.

Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C		
2995	5x3 mm	0.25 l/min	1.05 l/min		
2998	8x6 mm	1.4 l/min	2.52 l/min		

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3090	0.8 bar	1.5 min	90 I	80 l	0.5 bar	32 kg	504x460x1340



Pag. 127 Waste oil

# FLEXBIMEC

# **COMBINED WASTE OIL DRAINERS AND SUCTION UNITS**

Combined units that can be used as waste oil gravity drainers, but also as waste oil suction units thanks to a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7 – 10 bar is connected on it. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than 60 – 80°C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply.



#### Art. no. 3195

Mobile, combined waste oil drainer and suction unit, with collection container of 80 l capacity, two fixed wheels and two castors, with wide collection bowl in painted steel of 10 l capacity incl. removable anti splash grid, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C		
2995	5x3 mm	0.25 l/min	1.05 l/min		
2998	8x6 mm	1.4 l/min	2.52 l/min		

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3195	0.8 bar	1.5 min	80 I	70 I	0.5 bar	32 kg	460x510x1200



# Art. no. 3198

Mobile, combined waste oil drainer and suction unit, with collection container of 80 l capacity, two fixed wheels and two castors, with wide collection bowl in painted steel of 10 l capacity incl. removable anti splash grid, transparent inspection chamber of 10 l capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

The transparent inspection chamber allows to check the quality and the quantity of the sucked oil.

In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another nonaggressive cleaning agent.

Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C
2995	5x3 mm	0.25 l/min	1.05 l/min
2998	8x6 mm	1.4 l/min	2.52 l/min

Art. no.	Max vacuum		Capacity collection container		Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3198	0.8 bar	1.5 min	80 I	70 I	0.5 bar	34 kg	460x510x1500

Waste oil Pag. 128



# **COMBINED WASTE OIL DRAINERS AND SUCTION UNITS**

Combined units that can be used as waste oil gravity drainers, but also as waste oil suction units. The suction process can be carried out by using a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7 – 10 bar is connected on it, or alternatively by the use of a pneumatic 1:1 – pump which is mounted at the side of the collection container. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than 60 – 80°C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply (unless the suction is made with the pneumatic pump).



# Art. no. 3085

Mobile, combined waste oil drainer and suction unit, with collection container of 90 l capacity, two fixed wheels and two castors, with pneumatic pump, wide collection bowl in painted steel of 10 l capacity incl. removable anti splash grid, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl.

The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

Art. no. suction probe		Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C		
2995	5x3 mm	0.25 l/min	1.05 l/min		
2998	8x6 mm	1.4 l/min	2.52 l/min		

Art. no.	Max vacuum	creating	Capacity collection container		Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3085	0.8 bar	1.5 min	90 I	80 I	0.5 bar	42 kg	480x510x1400





# Art. no. **3095**

Mobile, combined waste oil drainer and suction unit, with collection container of 90 I capacity, two fixed wheels and two castors, with pneumatic pump, wide collection bowl in painted steel of 10 I capacity incl. removable anti splash grid, transparent inspection chamber of 10 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

The transparent inspection chamber allows to check the quality and the quantity of the sucked oil. In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another nonaggressive cleaning agent.

Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C	
2995	5x3 mm	0.25 l/min	1.05 l/min	
2998	8x6 mm	1.4 l/min	2.52 l/min	

Pag. 129

Art. no.	Max vacuum	creating	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3095	0.8 bar	1.5 min	90 l	80 I	0.5 bar	44 kg	460x510x1500

# COMBINED WASTE OIL DRAINERS AND SUCTION UNITS

Combined units that can be used as waste oil gravity drainers under a lift or as low level drainers on the floor using the pantograph function, but also as waste oil suction units thanks to a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7 - 10 bar is connected on it. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than 60 - 80°C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply.



#### Art. no. 3182

Mobile, combined pantograph waste oil drainer and suction unit, with collection container of 90 I capacity, two fixed wheels and two castors, with rectangular collection bowl in painted steel of 10 I capacity incl. removable anti splash grid, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. Suitable for the use with passenger cars and motorbikes. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.



Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C	
2995	5x3 mm	0.25 l/min	1.05 l/min	
2998	8x6 mm	1.4 l/min	2.52 l/min	

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3182	0.8 bar	1.5 min	90 I	80 I	0.5 bar	43 kg	630x650x1700





Mobile, combined pantograph waste oil drainer and suction unit, with collection container of 90 I capacity, two fixed wheels and two castors, with rectangular collection bowl in painted steel of 10 I capacity incl. removable anti splash grid, transparent inspection chamber of 10 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl. Suitable for the use with passenger cars and motorbikes. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

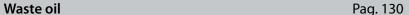
The transparent inspection chamber allows to check the quality and the quantity of the sucked oil. In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another non-aggressive cleaning agent.



Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C	
2995	5x3 mm 0.25 l/min		1.05 l/min	
2998	8x6 mm	1.4 l/min	2.52 l/min	

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	collection	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3190	0.8 bar	1.5 min	90 I	80 I	0.5 bar	45 kg	500x600x1500







# **COMBINED WASTE OIL DRAINERS AND SUCTION UNITS**

Combined units that can be used as waste oil gravity drainers under a lift or as low level drainers on the floor using the pantograph function, but also as waste oil suction units thanks to a pneumatic Venturi valve by which a vacuum of up to 0.8 bar inside of the container can be created when compressed air at a pressure of 7 – 10 bar is connected on it. The waste oil can be sucked with appropriate suction probes or suction adapters inserted in the dip-stick tube of the motor. For an ideal result the oil temperature should not be less than 60 – 80°C during the suction process. The unit can be used also autonomously since it does not require a continuous air supply.



#### Art. no. 3180

Mobile, combined pantograph waste oil drainer and suction unit, with collection container of 115 I capacity, two fixed wheels and two castors, with rectangular heavy duty collection bowl in painted steel of 50 I capacity incl. removable anti splash grid, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl.

Suitable for the use with passenger cars, motorbikes or trucks. The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.



Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C	
2995	5x3 mm	0.25 l/min	1.05 l/min	
2998	8x6 mm	1.4 l/min	2.52 l/min	

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	Max collection quantity	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3180	0.8 bar	1.5 min	115 l	100 l	0.5 bar	53 kg	630x650x1700





Mobile, combined pantograph waste oil drainer and suction unit, with collection container of 115 I capacity, two fixed wheels and two castors, with rectangular heavy duty collection bowl in painted steel of 50 I capacity incl. removable anti splash grid, transparent inspection chamber of 10 I capacity, including level gauge, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters and storage bowl.

Suitable for the use with passenger cars, motorbikes or trucks.

The unit can be discharged pneumatically by connecting it to compressed air through a discharge hose with curved outlet tube.

The transparent inspection chamber allows to check the quality and the quantity of the sucked oil.

In order to always keep a good visibility into the chamber, the unit is equipped with a device that permits to clean the internal surface by sucking a small quantity of diesel or another non-aggressive cleaning agent.



Art. no. suction probe	Ø suction probe	Suction speed at oil temperature 18°C	Suction speed at oil temperature 60°C	
2995	5x3 mm	0.25 l/min	1.05 l/min	
2998	8x6 mm	1.4 l/min	2.52 l/min	

Art. no.	Max vacuum	Time for creating vacuum	Capacity collection container	collection	Discharge pressure	Weight	Dimensions (LxWxH) (mm)
3192	0.8 bar	1.5 min	115 l	100 l	0.5 bar	55 kg	500x600x1700



Pag. 131 Waste oil



# MOBILE WASTE OIL SUCTION SYSTEMS

Waste oil suction units which allow to suck out the oil with appropriate suction probes or suction adapters inserted in the dipstick tube of the motor by means of a pneumatic rotary or piston pump, electric pump.

The oil suction process is also possible with these units if the oil temperature is equal to the ambient temperature (unless in case of low temperatures).



#### Art. no. 3020

OIL BLITZ – Mobile waste oil suction unit, composed of a pneumatic rotary gear pump, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters, storage bowl, two wheels trolley and 20 I – capacity plastic can for collection of the sucked oil.

Can be used also to suck out diesel from vehicle fuel tanks.

Art. no.	Max vacuum	Pressure compressed air	Compression ratio	Consumption compressed air	Outlet pressure	Weight	Dimensions (LxWxH) (mm)
3020	0.8 bar	1 - 4 bar	1:1	180 l/min	4 bar	17 kg	410x420x910





#### Art. no. 3172

Waste oil suction system such as art. no. 3099 (see on page 133!), but mounted on a heavy duty trolley, consisting of 1:1 - pneumatic piston pump, pressure regulator with manometer and condensation water separator, kit of suction probes in different diameters and suction adapters (see on page 137!), 3 m suction hose with shut-off valve and connections, vacuometer for the control of the suction process and 1.6 m - discharge hose with curved outlet tube.

On demand alternatively also a discharge hose with suitable connection to a pipework can be supplied.

Art. no.	Max vacuum	Pressure compressed air	Compression ratio	Consumption compressed air	Outlet pressure	Weight	Dimensions (LxWxH) (mm)	H
3172	0.8 bar	1-4 bar	1:1	140 l/min	4 bar	42 kg	790x900x1400	





OIL BLITZ - Mobile waste oil suction unit, composed of an electric rotary gear pump, suction hose, kit of suction probes in different diameters (see on page 137!), suction adapters, storage bowl, two wheels trolley and 20 I - capacity plastic can for collection of the sucked oil. Can be used also to suck out diesel from vehicle fuel tanks.



Art. no.	Voltage	Power	Protection category	Max vacuum	Weight	Dimensions (LxWxH) (mm)
3017	110 VAC - 60 Hz	0.53 Kw	IP 55	0.8 bar	17 kg	410x420x910
3018	230 VAC – 50 Hz	0.53 Kw	IP 55	0.8 bar	17 kg	410x420x910



Waste oil Pag. 132



# STATIONARY PNEUMATIC WASTE OIL SUCTION SYSTEMS

Pneumatic, wall-mounted pumps for the suction of waste oil by means of suitable suction probes. Particularly suitable in installations with centralized pipework for the suction of waste fluids and the distribution of new fluids.



# Art. no. 3099

Wall-mounted waste oil suction system, consisting of 1:1 - pneumatic piston pump, kit of suction probes in different diameters and suction adapters (see on page 137!), 3 m - suction hose with shut-off valve and connections, vacuometer for the control of the suction process and 1.6 m - discharge hose with curved outlet tube.

On demand alternatively also a discharge hose with suitable connection to a pipework can be supplied.



Noise insulating cabinet for wall-mounted pneumatic pumps.





Art. no.	Max vacuum	Pressure compressed air	Compression ratio	Consumption compressed air	Outlet pressure	Weight
3099	0.8 bar	1 - 4 bar	1:1	140 l/min	4 bar	11 kg



# Art. no. 3199

Wall-mounted waste oil suction system, consisting of 1:1 - pneumatic piston pump, pressure regulator with manometer and condensation water separator, art. no. 7180, kit of suction probes in different diameters and suction adapters (see on page 137!), automatic open hose reel, art. no. 9016, with 10 m – rubber suction hose in 1/2'' with shut-off valve and connections, vacuometer for the control of the suction process, 2 m - connection hose to the pump and 1.6 m - discharge hose with curved outlet tube.

On demand alternatively also a discharge hose with suitable connection to a pipework can be supplied.



Art. no.	Max vacuum	Pressure compressed air	Compression ratio	Consumption compressed air	Outlet pressure	Weight
3199	0.8 bar	1 - 4 bar	1:1	140 l/min	4 bar	32 kg

Pag. 133 Waste oil

# STATIONARY PNEUMATIC WASTE OIL SUCTION SYSTEMS



Pneumatic, wall-mounted pumps for the suction of waste oil by means of suitable suction probes. Particularly suitable in installations with centralized pipework for the suction of waste fluids and the distribution of new fluids.



#### Art. no. 8304

Encased, wall – mounted, electropneumatic suction unit for the use with waste oils and similar liquids, composed of a pneumatic 1:1 – piston pump, vacuometer, electronic unit for the control of the suction process, solenoid-actuated shut-off valve for the deactivation of the pump, push button for the activation of the suction process, power supply / transformer unit 230 VAC – 24 VDC, 1.5 m – suction hose and kit of suction probes in different diameters. The suction cycle is structured as follows:

- Switch-on of the pump;
- Suction of the liquid and transfer into a storage tank;
- Automatic switch-off of the pump after finishing the suction process.



Art. no.	Pressure compressed air	Voltage	Max vacuum	Compression ratio	Consumption compressed air	Outlet pressure	Weight
8304	2 - 4 bar	230 VAC - 50 Hz	0.8 bar	1:1	180 l/min	4 bar	14 kg



# Art. no. 8308

Waste oil suction unit, art. no. 8304, but with hose reel, art. no. 9090, with 10 m – suction hose Ø 1/2'' instead of 1.5 m – suction hose and with wall-mounted drip tray.





# Art. no. 8306

Waste oil suction unit, as art. no. 8304, but with pneumatic double diaphragm pump.



Aı	rt. no.	Pressure compressed air	Voltage	Max vacuum	Compression ratio	Consumption compressed air	Outlet pressure	Weight
8	306	2 - 7 bar	230 VAC - 50 Hz	0.8 bar	1:1	200 l/min	4 bar	16 kg

Waste oil Pag. 134





Centralized, wall mounted automatic waste oil suction unit with electropneumatic operating mode.



# Art. no. 8300

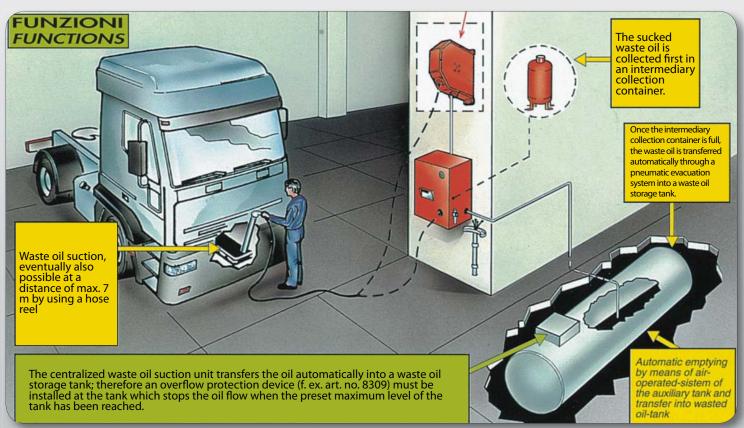
The operating mode is based on the use of a 24 l – collection container which has two functions or works in two phases:

**Phase 1:** with a Venturi system a vacuum of 0,8 bar is created and the waste oil can be sucked, even by eventually using hose reels (optional);

**Phase 2:** the 24 l – container is pressurized with compressed air at max. 2 bar to discharge the waste oil in it and to transfer it to a waste oil storage tank.

The centralized waste oil suction unit has the following advantages:

- Automatic creation of vacuum in the intermediary collection container and automatic discharge of the waste oil once this container is full into a waste oil storage tank. Thus, the unit is always ready for an immediate use, because the cycles of creating the vacuum in the container and those of its discharge are made automatically without any need of an intervention by the user such as necessary in similar suction systems.
- The system also allows a suction at a certain distance if it is connected to a hose reel with a max 7 m hose.
- The encased unit can be installed at the wall which helps to improve the use of the available space in the workshop.
- The waste oil suction unit art. no. 8300 has been designed to be used in more than one working place, but in different locations in the workshop, using always the same pipework leading to the waste oil storage tank.





Waste oil







# Art. no. 8318 - 8319

Pneumatic double diaphragm pump, selfpriming up to 5 m suction lift, working also in dry running condition, without any electric drive, suitable for the use also with fluids of higher viscosity and for fluids containing particles up to 3 mm size, body in PP, diaphragms in NBR + PTFE, balls in PTFE, o – rings in EPDM, seats in PP.

Art. no. 7818

Wall mounting bracket for pneumatic diaphragm pumps art. nos. 8318 – 8319.



Art. no.	Max flow rate	Max suction lift	Compressed air supply	Connection compressed air inlet	Connections fluid	Consumption compressed air	Weight	Dimensions (LxWxH) (mm)
8318	20 l/min	5 m	2 - 7 bar	1/4" (F)	3/8"(F)	160 l/min	1.1 kg	146x96x164
8319	50 l/min	5 m	2 - 7 bar	1/4" (F)	1/2"(F)	200 l/min	4 kg	222x156x233



# Art. no. 8320 - 8321

Pneumatic double diaphragm pump, suitable for the use in areas exposed to explosion hazards, approved in accordance with directive ATEX 94/9/EC - zone 2.

Working also in dry running condition, selfpriming up to 6 m suction lift, without any electric drive, suitable for the use also with fluids of higher viscosity and for fluids containing particles up to 7.5 mm size, body in aluminium, diaphragms in Hytrel® + PTFE,

Art. no. 7818

Wall mounting bracket for pneumatic diaphragm pumps art. nos. 8320 – 8321.

balls in PTFE, o – rings in Viton®, seats in aluminium.

os	Art. no.	
	7818	

Art. no.	Max flow rate	Max suction lift	Compressed air supply	Connection compressed air inlet	Connections fluid	Consumption compressed air	Weight	Dimensions (LxWxH) (mm)
8320	100 l/min	6 m	2 - 7 bar	3/8" (F)	3/4" (F)	250 l/min	7 kg	265x175x245
8321	165 l/min	6 m	2 - 7 bar	1/2" (F)	1" (F)	800 l/min	16 kg	370x222x364



# Art. no. 8322 - 8323 - 8324

Pneumatic double diaphragm pump, suitable for the use in areas exposed to explosion hazards, approved in accordance with directive ATEX 94/9/EC - zone 2.

Working also in dry running condition, selfpriming up to 6 m suction lift, without any electric drive, suitable for the use also with fluids of higher viscosity and for fluids containing particles up to 8.5 mm size, body in aluminium, diaphragms in Hytrel® + PTFE, balls in PTFE, o – rings in Viton®, seats in aluminium.

# Art. no. 7819

Wall mounting bracket for pneumatic diaphragm pumps art. nos. 8322 – 8323 – 8324.



A	Art. no.	Max flow rate	Max suction lift	Compressed air supply	Connection compressed air inlet	Connections fluid	Consumption compressed air	Weight	Dimensions (LxWxH) (mm)
	8322	250 l/min			1/2" (F)	1′1/4" (F)	900 l/min	16 kg	370x222x370
Г	8324	500 l/min	6 m	2 - 7 bar	3/4" (F)	1′1/2" (F)	1200 l/min	36 kg	595x345x560
Г	8323	680 l/min				2" (F)	2400 l/min	36 kg	595x345x572

Waste oil Pag. 136



# **WASTE OIL TREATMENT ACCESSORIES**



# Art. no. 6437

Electric, self-priming eccentrical pump for the suction and the supply of oil, waste oil, antifreeze, diesel at low pressure.

Pump body in aluminium, seals in NBR and pump shaft in brass, 3 m cable with SCHUKO plug. Protection category IP 55.

Art. no.	Voltage	Power	Current drain	Rpm	Outlet pressure	Delivery l/min	Conn.	Weight	Dimensions (LxWxH) (mm)	
6437	230VAC - 50 Hz	0.52 Kw	7.5 A	1360	1.5 bar	15	1" BSP (F)	8.5 kg	150x340x210	



Art. no. **6437** 

Art. no. <b>011</b>	diameters and lengths and 2 suction adapters, with plastic probes holder.
Art. no. <b>2995</b>	Flexible suction probe, ø 5 mm, length 800 mm.
Art. no. <b>2996</b>	Flexible suction probe, ø 6 mm, length 800 mm.
Art. no. <b>2997</b>	Flexible suction probe, ø 7 mm, length 1500 mm.
Art. no. <b>2998</b>	Flexible suction probe, ø 8 mm, length 800 mm.
Art. no. <b>2986</b>	Rigid suction probe, ø 6 mm, length 800 mm.
Art. no. <b>2127</b>	Suction adapter for Volkswagen vehicles.
Art. no. <b>2130</b>	Suction adapter for Mercedes vehicles.

Complete kit of 5 suction probes of different



# Art. no. 3422

Art no 011

Multi-purpose drain pan, in polyethylene, suitable for collecting waste oil, antifreeze or for cleaning parts, capacity 8 l, with anti – splash lip, large handles and pouring spout.

# Art. no. 3423

Multi-purpose drain pan, in polyethylene, suitable for collecting waste oil, antifreeze or for cleaning parts, capacity 16 l, with anti – splash lip, large handles and pouring spout.

# Art. no. 3424

Waste oil and antifreeze drain pan with storage container, in polyethylene, capacity 10 l, with large handle for transportation, hermetically closing plug and drain vent.



#### Art. no. 7810

Oil absorbent roll, suitable for covering big surfaces. It can easily be cut into the required form and can also be used for absorbing in case of big cleanups or for reasons of precaution in risk zones where leakages could happen. Dimensions:  $40\,\mathrm{cm}\,\mathrm{x}\,26\,\mathrm{m}$ . Absorbency per roll:  $117\,\mathrm{l}$ . Weight:  $6\,\mathrm{kg}$ .

# Art. no. 7811

Oil absorbent mat pads, suitable in case of accidental leaks and spills. Packed in a dispenser box to guarantee a quick and easy access. The mat pads can also be used for take off small spills or to clean parts and machinery. Dimensions:  $400 \times 520$  mm.

Packaging: in dispenser box of 100 pads. Absorbency per dispenser box: 142 l.

Weight: 6.4 kg.

Pag. 137 Waste oil

# PNEUMATIC AND ELECTRIC BRAKE BLEEDERS



Pneumatic brake bleeding unit with two chambers which are hermetically separated by an elastic diaphragm. One chamber of the container contains the brake fluid, the other chamber serves as reservoir for the compressed air. Max. working pressure 2 bar. The diaphragm permits to separate the brake fluid and the compressed air, avoiding like that the risk of an emulsion.



Art. no. 3406

Pneumatic brake bleeding unit, with pressure regulator, 3 m spiral fluid supply hose, for the bleeding of brakes and clutches, including those with ABS. Container capacity: 9 l.

The unit includes also the following accessories:

- 2 plastic jerrycans for the collection of the brake fluid, art. no. 3485,
- 2 plastic bleeding hoses, art. no. 3481,
- 1 plastic funnel, art. no. 3486.











#### Art. no. 3495

Mobile brake bleeding unit, consisting of:

- trolley with 4 castors, art. no. 4357,
- pneumatic brake bleeding unit, art. no. 3406,
- kit of bleeding adapters for passenger cars and trucks, art. no. 3490
- 2 plastic jerrycans for the collection of the brake fluid, art. no. 3485,
- 2 plastic bleeding hoses, art. no. 3481,
- 1 plastic funnel, art. no. 3486.



Art. no.	Weight	Dimensions (LxWxH) (mm)		
3495	30 kg	500x610x1130		





Mobile, electric brake bleeding unit, allows to change easily and autonomously brake fluid and transmission fluid by pressing out eventually contained air bubbles or dirt particles, also suitable for vehicles with ABS. Suitable for containers up to 12 l.



Art. no.	Weight	Dimensions (LxWxH) (mm)	AH
3416	9.5 kg	400 x 360 x 930	

Waste oil Pag. 138

Art. no. 3416

# **BRAKE BLEEDER PLUGS**







# Art. no. 3491

Kit of brake bleeding adapters, suitable for the most popular passenger cars (does not include universal bleeding adapter), consisting of:

Art. nos. 3451 - 3452 - 3453 - 3454 - 3455 - 3456 - 3457 - 3458 - 3459 - 3461 - 3462 - 3469.

#### Art. no. 3493

Kit of brake bleeding adapters, suitable for various passenger cars and trucks, consisting of:

Art. nos. 3460 - 3463 - 3465 - 3466 - 3467 3468 - 3470 - 3471 - 3472- 3473.

# Art. no. 3490

Complete kit, consisting of all 24 brake bleeding adapters, suitable for passenger cars and trucks, including also universal brake bleeding adapter.

Technical	data bleedin	g adapters
Pos.	Art. no.	External diameter
1	3451	26 mm
2	3452	25 mm
3	3453	28.5 mm
4	3454	47 mm
5	3455	51 mm
6	3456	56 mm
7	3457	67 mm
8	3458	44 mm
9	3459	62 mm
11	3461	80 mm
12	3462	72 mm
19	3469	47.2 mm

data bleedin	g adapters
Art. no.	External diameter
3460	30 mm
3463	52 mm
3465	80 mm
3466	91 mm
3467	36 mm
3468	30 mm
3470	79 mm
3471	48 mm
3472	48 mm
3473	62.5 mm
	3460 3463 3465 3466 3467 3468 3470 3471 3472



# Art. no. 3476

Special brake bleeding adapter for KIA and CHRYSLER vehicles.



# Art. no. **3475**

Universal pressure bleeding adapter.



# Art. no. **3474**

Universal screw brake bleeding adapter, suitable for the use in most of the existing passenger cars and trucks.



Pag. 139 Waste oil

# **WASTE OIL STORAGE TANKS**



Waste fluids storage tanks, made in plastic or in steel, compliant with the valid norms regulating the storage of waste fluids (Italian directive 392/96 according to European directives 75/349 EEC and 87/101 EEC.



Art. no. 7008 - 300 | - Art. no. 7009 - 260 | - Art. no. 7010 - 500 |

Waste oil storage tank, with double wall in polyethylene (one internal in contact with the oil and one external which serves as a spill containment and security container for the internal one).

The tank is equipped with a wide dome with raisable cover. In its interior there is a removable basket for the drain of oil filters and the opening for charging and discharging the tank.

At the rim of the dome a mechanical level gauge is installed that permits the control of the filling level and a transparent indicator on the side of the external tank allows to detect eventual leakages of the internal tank immediately.

The tank is available in different colours for the storage of different liquids, such as mineral oils, vegetable oils, break fluid, oil-based emulsions or antifreeze.

Art. no.	Capacity (I)	Weight	Dimensions (LxWxH) (mm)
7008	300	26 kg	820x820x1080
7009	260	23 kg	800x800x1170
7010	500	37 kg	960x960x1240





#### Art. no. 8217

Double wall tank, external tank in galvanized steel and internal tank in high density polyethylene, suitable for the storage of waste oil. Including 4 connections in 2" on top of the tank, mechanical level indicator, optical leakage detector for eventual leakages in the internal tank, carrying handles and pallet feet for the lifting and the transport with a pallet truck or a forklift from 4 sides. Approved for indoor installations.

Art. no.	Capacity (I)	Weight	Dimensions (LxWxH) (mm)	
8217/400	400	50 kg	700x730x1170	
8217/750	750	66 kg	770x980x1460	
8217/1000	1000	89 kg	770x1280x1460	
8217/1500	1500	151 kg	770x1630x1870	



On demand are available also the same models, but approved for transportation in accordance with ADR 6.5.4.4.1b.



Storage tank for the external use, made of first class carbon steel, equipped with:

- spill containment tray in painted steel with a collection capacity of 100 % of the tank content,
- stable, anti-slip tray base,
- dome with ø 400 mm, including connections,
- external finishing with anti-rust priming and gloss finish.

# OPTIONAL

Galvanized porch roof.





Waste oil Pag. 140



# FLEXBIMEC offers you a complete line of products for the dispensing and monitoring of diesel:

- Pneumatic pumps
- Electric pumps in 12 VDC, 24 VDC and 230 VAC with medium or high delivery
- Diesel supply units and dispensing kits
- Mechanical and electronic flow meters
- Computerized systems for the monitoring and the administration of dispenses
- Storage tanks
- Level gauges
- Control guns
- Hoses and hose reels
- Filters
- Other accessories

The broad product range permits the user to select from the simple diesel dispensing equipment up to complete diesel monitoring systems.





























# PNEUMATIC DIESEL PUMPS AND DIESEL TRANSFER KITS

Portable and wall-mounted pneumatic and electric pumps for the transfer of diesel. The indicated delivery figures refer on a free flow outlet.



#### Art. no. 6557

35 l/min

Pneumatic, rotary vane pump for the transfer of diesel, with filter and bypass valve, body in aluminium.

Art. no.	Compressed air supply	Air consumption	Outlet pressure	Max delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6557	4 bar	160 l/min	4 bar	35 l/min	3/4" BSP (F)	5 kg	140x150x190





#### Art. no. 6556

35 l/min

Diesel transfer kit, composed of pneumatic, rotary vane pump, art. no. 6557, suction tube with foot valve suitable for 208 I – drums, bung adapter for the fixation of the pump on the drum, 4 m – delivery hose Ø 3/4″ and manual aluminium nozzle.



Art. no.	Compressed air supply	Air consumption	Outlet pressure	Max delivery	Connection threads	Weight
<b>6556</b> 4 bar		160 l/min	4 bar	35 l/min	3/4" BSP (F)	12 kg



# Art. no. 6772

30 l/min

Diesel transfer kit, composed of pneumatic 1:1 - piston pump, standard series, with wall bracket (art. no. 2044), pressure regulator with manometer and air filter, 1.5 m rubber suction hose Ø 1" BSP with foot valve and filter, electronic in-line turbine flow meter (art. no. 2823), 4 m - rubber delivery hose Ø 3/4" and automatic nozzle with inlet swivel (art. no. 6725).

**Optional:** diesel/water separating cartridge filter (art. no. 6600), see page 150.

Art. no.	Compressed air supply	Compression ratio	Max outlet pressure	Max delivery	Outlet connection threads	Weight
6772	2 – 8 bar	1:1	8 bar	30 l/min	3/4" BSP	13 kg

Diesel Pag. 142

# **ELECTRIC DIESEL TRANSFER KITS**



Electric, centrifugal transfer pumps for diesel and fuel oil, suitable for the direct mounting on drums or tanks. These non-selfpriming pumps, protection category IP 44, include motors with thermal circuit breaker, integrated siphon protection device, ON-/OFF switch and an integrated connection thread M 64 x 4 and BSP 2". On the shaft a small manual pump is mounted which serves for the filling of the suction hose as well as for a manual pumping if there is no electric power supply available.



Diesel transfer kit, composed of electric 12 VDC, 24 VDC or 230 VAC pump, 3 m – cable with alligator clamps for battery connection (12 VDC and 24 VDC) or 2 m – cable with earth contact type plug (230 VAC), 1.6 m – suction hose with foot filter, 4 m – rubber delivery hose Ø 3/4" with anti-kink spring, hose tails and manual plastic nozzle.

Optional: Electronic turbine flow meter (art. no. 2823).

Art. no.	Voltage	Power	Current drain	Delivery	Connection threads	Weight
6766	12VDC	150 W	12.5 A	31 l/min	3/4"BSP	3.2 kg
6768	24VDC	24 VDC 180 W		34 l/min	3/4"BSP	3.2 kg
6769	230 VAC / 50 Hz	250 W	1.2 A	38 l/min	3/4"BSP	3.6 kg



Diesel transfer kit, composed of electric 12 VDC, 24 VDC or 230 VAC pump, 3 m – cable with alligator clamps for battery connection (12 VDC and 24 VDC) or 2 m – cable with earth contact type plug, 1.6 m – suction hose with foot filter, 4 m – rubber delivery hose Ø 3/4" with anti-kink spring, hose tails and automatic dispensing nozzle with inlet swivel.

Optional: Electronic turbine flow meter (art. no. 2823).

Art. no.	Voltage	Power	Current drain	Delivery	Connection threads	Weight
6770	12 VDC	150 W	12.5 A	31 l/min	3/4"BSP	4.1 kg
6771	24 VDC	180 W	7.5 A	34 l/min	3/4"BSP	4.1 kg
6773	230 VAC / 50 Hz	250 W	1.2 A	38 l/min	3/4"BSP	4.5 kg



Electric, hybrid transfer pumps for diesel, fuel oil, bio-diesel (with suitable hoses), antifreeze (with or without water), suitable for the direct mounting on drums or tanks. These pumps are selfpriming, protection category IP 54, with ON-/OFF switch and an integrated connection thread BSP 2".

# Art. no. **6782**

Diesel transfer kit, composed of electric 230 VAC pump, 4 m – cable with earth contact type plug, 1.6 m – suction hose with foot filter, 4 m – rubber delivery hose Ø 3/4″, high delivery automatic nozzle with inlet swivel, with electronic in-line turbine flow meter (art. no. 2823).

# Art. no. **6783**

Diesel transfer kit, same as art. no. 6782, but without electronic in-line turbine flow meter.

Art. no.	rt. no. Voltage Power		Current drain	Delivery	Connection threads	Weight	
6782	230 VAC / 50 Hz	950 W	4.5 A	80 l/min	1"BSP	4.5 kg	
6783	230 VAC / 50 Hz	950 W	4.5 A	85 l/min	1"BSP	4.1 kg	

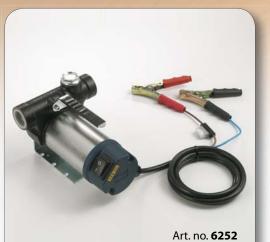
Pag. 143 Diesel

# **ELECTRIC DIESEL PUMPS 12/24 VDC**





43 l/min



Art. no. **6254** 

Art. no. 6252 Art. no. 6254

Electric vane pump, 12 VDC and 24 VDC, selfpriming, for the transfer of diesel, with transport handle, ON-/OFF-switch and 2 m - cable with alligator clamps for battery connection.

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6252	12 VDC	216 W	18 A	2800	43 l/min	1" BSP (F)	4.5 kg	140x150x200
6254	24 VDC	240 W	9 A	2800	43 l/min	1" BSP (F)	4.5 kg	140x150x200



60 l/min

85 l/min



Art. no. 6253 Art. no. **6255** 

Electric vane pump, 12 VDC and 24 VDC, selfpriming, for the transfer of diesel, with transport handle, ON-/OFF-switch and 4 m – cable with alligator clamps for battery connection.

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6253	12 VDC	240 W	30 A	4200	60 l/min	1" BSP (F)	5.6 kg	130x150x300
6255	24 VDC	240 W	15 A	4200	60 l/min	1" BSP (F)	5.6 kg	130x150x300





Art. no. 6256 Art. no. 6257

Electric vane pump, 12 VDC and 24 VDC, selfpriming, for the transfer of diesel, with transport handle, ON-/OFF-switch and 4 m - cable with alligator clamps for battery connection. Bypass valve included in pump body.



Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6256	12 VDC	400 W	40 A	2000	85 l/min	1" BSP (F)	10.4 kg	190x350x280
6257	24 VDC	400 W	25 A	2000	85 l/min	1" BSP (F)	10.4 kg	190x350x280

Diesel Pag. 144

Art. no. 6256 Art. no. 6257

# **ELECTRIC DIESEL PUMPS 12/24 VDC**





# Art. no. 6230

30 l/min

Electric eccentric pump, 12 VDC, selfpriming, for the transfer of diesel, encased, with transport handle, suction foot valve with filter, ON-/OFF-switch and 2 m – cable with alligator clamps for battery connection.

Delivery 30 I/min at free flow outlet.

This pump can also work with 24 VDC and a delivery of 30 l/min for max 15 min.

The max suction lift is 3 m, the bypass is set at 1 bar.

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6230	12 VDC	192 W	16 A	1300	30 l/min	hose tails ø 25 mm	7 kg	300x120x200





Art. no. **6246** Art. no. **6249** 

Diesel transfer kit, mounted on wall bracket. Available with motor in 12 VDC or 24 VDC.

Composed of mechanical flow meter (art. no. 2860), selfpriming electric vane pump (art. nos. 6252 or 6254) with built-in bypass valve and inlet strainer, ON-/OFF switch, 2 m – cable with alligator clamps for battery connection, suction foot valve with filter (art. no. 6647), 4 m - rubber delivery hose 3/4″ and manual aluminium nozzle.



Optional: automatic nozzle with inlet swivel (art. no. 6725).

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6246	12 VDC	220 W	18 A	2800	43 l/min	1" BSP (F)	14 kg	430x160x340
6249	24 VDC	240 W	9 A	2800	43 l/min	1" BSP (F)	14 kg	430x160x340





Art. no. **6247** Art. no. **6248** 

# **MINI DIESEL 40E**

Encased diesel supply unit with electric pump (12 VDC/24 VDC), composed of:

- Electric diesel pump with a delivery of 43 l/min;
- 4 m delivery hose;
- 2 m suction hose;
- Automatic nozzle with inlet swivel;
- Mechanical flow meter;
- Suction foot valve with filter.

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6247	12 VDC	220 W	18 A	2000	42 1/22:2	1" DCD (F)	10 1	420,200,470
6248	24 VDC	240 W	9 A	2800	43 I/min	1" BSP (F)	19 kg	420x300x470



Pag. 145 Diesel





# Art. no. 6435

Electric vane pump, selfpriming, 230 VAC, for the transfer of diesel. Rotor in sintered steel and vanes in acetal resin. The pump has a built-in bypass valve; protection category IP 55. Delivery 60 I/min.

60 l/min

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6435	230 VAC	370 W	1.5 A	2800	60 l/min	1" BSP (F)	7 kg	170x190x230





Art. no. **6218** Art. no. **6219** 

Electric vane pump, selfpriming, 230 VAC or 400 VAC, for the transfer of diesel. Rotor in sintered steel and vanes in acetal resin.

The pump has a built-in bypass valve; protection category IP 55. The low number of rotations of the motor permits a constant flow without turbulences, a low noise and less abrasion of the components. Delivery 65 l/min at 900 rpm.

65 l/min

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6218	400 VAC	550 W	2.5 A	900	65 l/min	1"BSP (F)	15 kg	200x240x300
6219	230 VAC	700 W	6.2 A	900	65 l/min	1"BSP (F)	15 kg	200x240x300





# Art. no. 6220

Electric vane pump, selfpriming, 230 VAC, for the transfer of diesel. Rotor in sintered steel and vanes in acetal resin.

The pump has a built-in bypass valve; protection category IP 55. Delivery 100 l/min at 1420 rpm.

100 l/min

Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6220	230 VAC	550 W	6.2 A	1420	100 l/min	1" BSP (F)	15 kg	200x240x300



**Diesel** Pag. 146





#### Art. no. 6738

Diesel transfer kit, with electric 230 VAC – pump, mounted on wall bracket.

Composed of selfpriming electric pump with built-in bypass valve and inlet strainer, ON-/OFF switch, 2 m – cable with plug and fuse, mechanical flow meter (art. no. 2860), 4 m - rubber delivery hose Ø 3/4", 2 m – suction hose Ø 25 mm, suction foot valve with filter (art. no. 6647) and automatic nozzle with inlet swivel (art. no. 6725).

55 l/min

	Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
I	6738	230 VAC	370 W	1.5 A	2800	55 l/min	1" BSP (F)	18 kg	400x400x290





# Art. no. 6739

Diesel transfer kit, with electric 230 VAC – pump, mounted on wall bracket.

Composed of selfpriming electric pump with built-in bypass valve and inlet strainer, ON-/OFF switch, 2 m – cable with plug and fuse, mechanical flow meter (art. no. 2865), 4 m – rubber delivery hose Ø 3/4″, 2 m – suction hose Ø 25 mm, suction foot valve with filter (art. no. 6647) and automatic nozzle with inlet swivel (art. no. 6726).

100 l/min

I	Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
ı	6739	230 VAC	750 W	6.2 A	1400	100 l/min	1" BSP (F)	22 kg	400x400x290





# Art. no. 6755

Diesel transfer kit, with electric 230 VAC – pump, mounted on wall bracket (art. no. 6739), but equipped with automatic rewind, spring – driven hose reel, adjustable arms series, in painted steel (art. no. 9095) with 8 m - rubber delivery hose Ø 1", 2 m – connection hose to pump and diesel/water separating cartridge filter (art. no. 6600).



Art. no.	Voltage	Power	Current drain	Rpm	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6755	230 VAC	750 W	6.2 A	1400	80 l/min	1"BSP (F)	42 kg	400x400x290



# **ELECTRIC DIESEL SUPPLY UNITS**



Compact, encased diesel supply units equipped with electric pump in 12 VDC, 24 VDC, 230 VAC or with pneumatic pump. Easy to install and prepared for an immediate use these units are suitable for stationary installations as well as for mobile applications on trucks or pickups.



Art. no. **6247** Art. no. **6248** 

# **MINI DIESEL 40E**

Encased diesel supply unit with electric pump (12 VDC/24 VDC), composed of:

- Electric diesel pump with a delivery of 43 l/min;
- 4 m delivery hose;
- 2 m suction hose;
- Automatic nozzle with inlet swivel;
- Mechanical flow meter;
- Suction foot valve with filter.

Art. no. 6741

# **MINI DIESEL 50E**

Encased diesel supply unit with electric pump (230 VAC), composed of:

- Electric diesel pump with a delivery of 55 l/min;
- 4 m delivery hose;
- 2 m suction hose;
- Automatic nozzle with inlet swivel;
- Mechanical flow meter;
- Suction foot valve with filter.

Art. no. 6750

# **MINI DIESEL 40P**

Encased diesel supply unit with pneumatic pump, composed of:

- Pneumatic, rotary diesel pump with a delivery of 42 l/min;
- 4 m delivery hose;
- 2 m suction hose;
- Automatic nozzle with inlet swivel;
- Mechanical flow meter;
- Suction foot valve with filter.

# Art. no. **6605** C

Self-supporting column for Mini Diesel units.



Mod.	Volts	Watt	Ampere	rpm	Delivery	Ports	Weight	Dimensions (LxWxH) (mm)
6247	12 Vcc	220 W	18 A		43 l/min		19 kg	
6248	24 Vcc	240 W	9 A	2800	0 43 1/111111	1" BSP (F)	19 Kg	420x300x470
6741	230 Vac	370 W	1.5 A		55 l/min		32 kg	

Art. no.	Compressed air supply	Delivery (at free flow outlet)	Delivery (with hose and nozzle)	Outlet pressure	Weight	Dimensions (LxWxH) (mm)
6750	1-4 bar	42 l/min	37 l/min	4 bar	19 kg	420x300x470



Diesel Pag. 148



# **DIESEL DISPENSING NOZZLES AND ACCESSORIES**



# Art. no. 6700

Manual diesel dispensing nozzle, body in aluminium, with plastic hose tail Ø 25 mm and dispensing outlet with Ø ext. 25 mm, with latch for locking of trigger.

Max flow rate 80 l/min.

The nozzle can also be used for the dispensing of oils with a max. pressure of 3.5 bar.

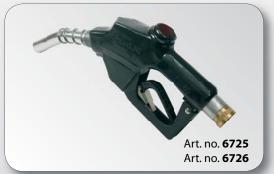
# Art. no. 6701

Same as art. no. 6700, but with inlet swivel 1" BSP (M-F).



#### Art. no. 6702

Manual diesel dispensing nozzle, body in aluminium with plastic handle protector, with inlet swivel 1" BSP (M-F) and dispensing outlet with ø ext. 25 mm, with latch for locking of trigger. Max flow rate 150 l/min.



# Art. no. 6725

Automatic diesel dispensing nozzle, body in aluminium with rubber protection, with inlet swivel 1" BSP (M–F) and dispensing outlet with  $\emptyset$  ext. 24 mm. Max flow rate 60 l/min.

# Art. no. **6726**

Automatic diesel dispensing nozzle, body in aluminium with rubber protection, with inlet swivel 1" BSP (M–F) and dispensing outlet with ø ext. 29 mm.

Max flow rate 120 l/min.



# Art. no. **6721**

Automatic diesel dispensing nozzle, high delivery version, body in aluminium, with inlet swivel 1'1/2" BSP (M–F) and dispensing outlet with ø ext. 39 mm, with latch for locking of trigger. Max flow rate 280 l/min.



Art. no. **2107/34** 

Inlet swivel 3/4" BSP (M) – 1" BSP (F).

Art. no. **2107/10** 

Inlet swivel 1" BSP (M) – 1" BSP (F).

Art. no. **2107/35** 

Inlet swivel 3/4" BSP (M) - 1" BSP (M).

Art. no. 2107/36

Inlet swivel 1" BSP (M) – 1" BSP (M).

Art. no. **2107/33** Inlet swivel 3/4" BSP (M) – 3/4" BSP (M).

Pag. 149 Diesel

# **DIESEL FILTERS AND FOOT VALVES**





#### Art. no. 6600

In-line filter for diesel and petrol with 30 microns – cartridge for the absorption of water that is eventually present in the storage tank. The water could particularly become dangerous for the diesel motors of the latest generation. The filter continuously absorbs the water which after some time will cause a reduction of the delivery and also a loss of head of the diesel supply unit. Therefore the waterlogged cartridge must be replaced then. The filter can be installed on the suction side as well as on the delivery side of the diesel supply unit.

# Art. no. 6603

Replacement cartridge, 30 microns, for filter art. no. 6600.

Art. no.	Max flow rate	Working pressure	Burst pressure	Filtration degree	Connection threads	Dimensions (LxWxH) (mm)
6600	70 l/min	3.5 bar	10 bar	30 microns	1'1/4"BSP (F)	100x280x95





Art. no. **6607** - In-line filter for diesel, oil and petrol with 10 microns – cartridge for the absorption of water that is eventually present in the storage tank. The water could particularly become dangerous for the diesel motors of the latest generation. The filter continuously absorbs the water which after some time will cause a reduction of the delivery and also a loss of head of the diesel supply unit. Therefore the waterlogged cartridge must be replaced then. The filter can be installed on the suction side as well as on the delivery side of the diesel supply unit.

# Art. no. 6608

Replacement cartridge, 10 microns, for filter art. no. 6607.

Art. no.	Max flow rate	Working pressure	Burst pressure	Filtration degree		Dimensions (LxWxH) (mm)
6607	110 l/min	10 bar	30 bar	10 microns	1" BSP (F)	114x285x135





# Art. no. 6613

In-line filter for diesel, oil and petrol with 10 microns – spin-on cartridge. The filter can be installed on the suction side as well as on the delivery side of the diesel supply unit.

# Art. no. 6614

Replacement cartridge, 10 microns, for filter art. no. 6613.

I	Art. no.	Max flow rate	Working pressure	Burst pressure	Filtration degree		Dimensions (LxWxH) (mm)
ı	6613	60 l/min	10 bar	30 bar	10 microns	1" BSP (F)	100x44x98





Art. no. **2265** Art. no. **2268** 

# Art. no. **2267 – 2265 – 2268** In-line (Y – type) filter with st

In-line (Y – type) filter with strainer, body in brass and strainer in stainless steel.

# Art. no. 2861

In-line (Y – type) filter with strainer, body in plastic and strainer in stainless steel.

Art. no.	Working pressure	Burst pressure	Filtration degree	Connection threads	Dimensions (LxWxH) (mm)
2267	10 bar	30 bar	400 microns	1/2" BSP (F)	57x40x24
2265	10 bar	30 bar	400 microns	3/4" BSP (F)	70x52x31
2268	10 bar	30 bar	400 microns	1" BSP (F)	96x68x48
2861	10 bar	20 bar	300 microns	1"BSP (F)	100x80x52





Art. no. 6611 - Plastic suction filter with hose tail ø 25 mm.

Art. no. 6621 - Plastic hose tail ø 25 mm - 3/4" BSP (M).

Art. no. 6622 - Plastic hose tail ø 25 mm – 1" BSP (M).

Art. no. 6623 - Plastic hose tail ø 20 mm – 3/4" BSP (M).

Pag. 150

Art. no. **6642** - Suction non-return foot valve, body in plastic, with filter, connection 1" BSP (F).

Art. no. **6647** - Suction non-return foot valve, body in brass, with filter in stainless steel. Connection 1" BSP (M), ø 47.5 mm, total height 91.5 mm.



Diesel





# Art. no. 2866

Mechanical nutating – disk flow meter for diesel, body in aluminium, with 3 – digits partial meter (max. 999 l; resettable to zero) and 6 – digits totalizer (non resettable). The meter can easily be calibrated and it can also be used for gravity applications. The upper part can be rotated so that every different flow direction is possible.

# Art. no. 2865

Same as art. no. 2866, but with 4 – digits partial meter (max. 9999 l; resettable to zero) and 8 – digits totalizer (non resettable).

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2865 - 2866	20 – 120 l/min	10 bar	20 bar	+/- 0.5%	0.01 l	1" BSP (F)	1.4 kg

<sup>\*</sup> Accuracy in % of flow range after calibration



#### Art. no. 2860

Mechanical nutating – disk flow meter for diesel, body in aluminium, with 3 – digits partial meter (max. 999 l; resettable to zero) and 6 – digits totalizer (non resettable). The meter can easily be calibrated and it can also be used for gravity applications.

# Art. no. **2863**

Same as art. no. 2860, but with 4 – digits partial meter (max. 9999 l; resettable to zero) and 7 – digits totalizer (non resettable).

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2860 - 2863	20 – 120 l/min	10 bar	30 bar	+/- 1%	0.1 l	1" BSP (F)	2 kg

<sup>\*</sup> Accuracy in % of flow range after calibration



#### Art. no. 2869

Electronic oscillating - disk flow meter for diesel, body in aluminium, with 6 – digits partial meter (resettable to zero) and 6 – digits totalizer (non resettable).

The meter includes also a flow rate indicator.

The upper part can be rotated so that every different flow direction is possible.

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2869	5 – 120 l/min	3.5 bar	28 bar	+ - 0.5%	0.01 l	1" BSP (F)	1.1 kg

<sup>\*</sup> Accuracy in % of flow range after calibration



# Art. nos. 2851 - 2852

Electronic, oval gears flow meter for diesel, body in aluminium, with 3 different totals (single operation, partial totalizer and absolute totalizer). The 4 – digits partial meter (max. 9999 l) is resettable to zero, the 6 – digits totalizer is non resettable.

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2851	20 – 120 l/min	25 bar	75 bar	+/- 0.5%	0.01 l	1" BSP (F)	1.6 kg
2852	20 – 150 l/min	25 bar	75 bar	+/- 0.5%	0.01 l	1' 1/4" BSP (F)	1.8 kg

<sup>\*</sup> Accuracy in % of flow range after calibration



# Art. no. **2823**

Electronic turbine flow meter for diesel, body in reinforced polyamide, suitable for in-line applications, with 5 – digits partial meter (resettable to zero) and 6 – digits totalizer (non resettable). The meter includes also a flow rate indicator. The display can be rotated in 4 different positions.

	Art. no.	Flow range	Max working pressure	Accuracy*	Resolution	Connection threads	Weight
2823		5 – 120 l/min	20 bar	+/- 1%	0.01 l	1" BSP (M)	0.4 kg

<sup>\*</sup> Accuracy in % of flow range after calibration





#### Art. no. 9024+28808

Automatic rewind, spring-driven hose reel, enclosed series, in painted steel, with 8 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9024+28808	20 bar	1"BSP (M) – 3/4"BSP (F)	20 mm	3/4" – 8 m	150 mm	28 kg	160x550x450





# Art. no. 9095+28810

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 10 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9095+289608

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 8 m - rubber hose Ø 1", suitable for the supply of diesel.

# Optional Art. no. 9768

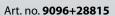
Swivel bracket

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

l	Art. no. Ma press		Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose Width reel		Weight	Dimensions (LxWxH) (mm)
	9095+28810	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 10 m	150 mm	27 kg	270x530x490
	9095+289608	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1" – 8 m	150 mm	28 kg	270x530x490





Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 15 m - rubber hose  $\emptyset$  3/4", suitable for the supply of diesel.



Swivel bracket

# Art. no. 9096+289612

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 12 m - rubber hose Ø 1", suitable for the supply of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	1
9096+28815	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 15 m	200 mm	33 kg	310x530x490	
9096+289612	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1" – 12 m	200 mm	35 kg	310x530x490	



Art. no. **9096+28815** Art. no. **9096+289612** 







#### Art. no. 9546+28808

Automatic rewind, spring-driven hose reel, enclosed series, in stainless steel AISI 304, with 8 m rubber hose Ø 3/4", suitable for the supply of diesel.

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9546+28808	20 bar	1"BSP (M) – 3/4"BSP (F)	20 mm	3/4"-8 m	150 mm	28 kg	160x550x450





# Art. no. 9595+28810

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 10 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9595+289608

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 8 m - rubber hose Ø 1", suitable for the supply of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Drocciiro	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9595+28810	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 10 m	150 mm	27 kg	270x530x490
9595+289608	20 bar	1"BSP (M) -	20 mm	1″-8 m	150 mm	28 kg	270x530x490





Art. no. 9596+28815 Art. no. 9596+289612 Art. no. 9584+289615

# Art. no. 9596+28815

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 15 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. **9596+289612**

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 12 m - rubber hose Ø 1", suitable for the supply of diesel.

# Art. no. 9584+289615

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 15 m - rubber hose Ø 1", suitable for the supply of diesel.



Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9596+28815	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 15 m	200 mm	33 kg	310x530x490
9596+289612	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1" – 12 m	200 mm	35 kg	310x530x490
9584+289615	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1" – 15 m	300 mm	42 kg	410x530x490







# Art. no. 9030+28812

Automatic rewind, spring-driven hose reel, heavy duty series, in painted steel, with 12 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9030+289608

Automatic rewind, spring-driven hose reel, heavy duty series, in painted steel, with 8 m - rubber hose  $\emptyset$  1", suitable for the supply of diesel.



Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9030+28812	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 12 m	150 mm	34 kg	550x450x300
9030+289608	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1″-8 m	150 mm	32 kg	550x450x300





#### Art. no. 9097+28818

Automatic rewind, spring-driven hose reel, adjustable arms series, in painted steel, with 18 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9097+289615

Automatic rewind, spring-driven hose reel, adjustable arms series, in painted steel, with 15 m - rubber hose Ø 1", suitable for the supply of diesel.



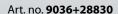
Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Optional	)
	•
	Art. no. <b>9769</b>

Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9097+28818	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 18 m	300 mm	42 kg	590x450x460
9097+289615	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1" – 15 m	300 mm	40 kg	590x450x460





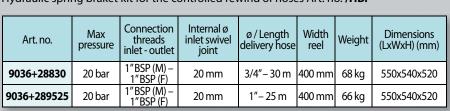
Automatic rewind, spring-driven hose reel, heavy duty series, in painted steel, with 30 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9036+289525

Automatic rewind, spring-driven hose reel, heavy duty series, in painted steel, with 25 m - rubber hose Ø 1", suitable for the supply of diesel.



Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.







Diesel Pag. 154





# Art. no. 9529+28812

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 12 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9529+289608

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 8 m - rubber hose Ø 1", suitable for the supply of diesel.



Swivel bracket

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9529+28812	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 12 m	150 mm	34 kg	550x450x300
9529+289608	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1″-8 m	150 mm	32 kg	550x450x300



# Art. no. 9525+28818

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 18 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9525+289615

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 15 m - rubber hose Ø 1", suitable for the supply of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	
9525+28818	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 18 m	300 mm	42 kg	590x450x460	l
9525+289615	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1"-15 m	300 mm	41 kg	590x450x460	1



Swivel bracket



# Art. no. 9536+28830

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 30 m - rubber hose Ø 3/4", suitable for the supply of diesel.

# Art. no. 9536+289625

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, with 25 m - rubber hose Ø 1", suitable for the supply of diesel.

# OPTIONAL

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Pag. 155

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9536+28830	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	3/4" – 30 m	400 mm	68 kg	550x540x520
9536+289625	20 bar	1"BSP (M) – 1"BSP (F)	20 mm	1″-25 m	400 mm	66 kg	550x540x520





# Art. no. 9031+289708

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 8 m - rubber hose Ø 1'1/4'' (Ø int. 32 mm), suitable for the supply of high volumes of diesel.

# Art. no. 9531+289708

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 8 m - rubber hose Ø 1'1/4'' (Ø int. 32 mm), suitable for the supply of high volumes of diesel.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	
9031+289708	10 bar	1'1/4"BSP (M) – 1'1/4"BSP (F)	30 mm	1′1/4″/8 m	200 mm	32 kg	330x530x490	AH
9531+289708	10 bar	1'1/4"BSP (M) – 1'1/4"BSP (F)	30 mm	1′1/4″/8 m	200 mm	32 kg	330x530x490	K



# Art. no. 9038+289715

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 15 m - rubber hose Ø 1'1/4" (ø int. 32 mm), suitable for the supply of high volumes of diesel.

# Art. no. 9038+289720

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 20 m - rubber hose Ø 1'1/4'' (ø int. 32 mm), suitable for the supply of high volumes of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	AH /
9038+289715	10 bar	1' 1/4"BSP (M) – 1'1/4"BSP (F)	30 mm	1′1/4″ – 15 m	400 mm	67 kg	550x530x490	
9038+289720	10 bar	1′ 1/4″BSP (M) – 1′1/4″BSP (F)	30 mm	1′1/4″-20 m	400 mm	78 kg	550x530x490	



# Art. no. 9039+2899715

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, with 15 m - rubber hose  $\emptyset$  1'1/2" ( $\emptyset$  int. 38 mm), suitable for the supply of high volumes of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	H
9039+2899715	10 bar	1′ 1/2″BSP (M) – 1′ 1/2″BSP (F)	36 mm	1′1/2″- 15 m	400 mm	80 kg	550x530x490	

Diesel Pag. 156



# ELECTRIC AND AUTOMATIC REWIND, SPRING-DRIVEN HOSE REELS FOR DIESEL



#### Art. no. 9079+289720

Hose reel, in painted steel, with electric motor for hose rewind, with 20 m - rubber hose Ø 1'1/4" (ø int. 32 mm), suitable for the supply of high volumes of diesel. The motor is connected to an external reduction gear with clutch torque limiter. The hose can be unwinded manually, whereas the rewind is made by activating an electric 12 VDC motor by means of a small control switchboard. The hose reel is supplied with a high frequency transmitter (433,9 MHz) with remote control to enable also an activation from a distance (= art. no. 8412).

#### Art. no. 9079+2899715

Same as above, but with 15 m - rubber hose Ø 1'1/2" (ø int. 38 mm).

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	AH
9079+289720	10 bar	1′ 1/4″BSP (M) – 1′ 1/4″BSP (F)	30 mm	1′1/4″ – 20 m	400 mm	78 kg	800x620x630	K
9079+2899715	10 bar	1′ 1/2″BSP (M) – 1′ 1/2″BSP (F)	36 mm	1′1/2″ – 15 m	400 mm	85 kg	800x620x630	



#### Art. no. 9538+289715

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 15 m - rubber hose Ø 1'1/4'' (ø int. 32 mm), suitable for the supply of high volumes of diesel.

#### Art. no. 9538+289720

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 20 m - rubber hose Ø 1'1/4'' (ø int. 32 mm), suitable for the supply of high volumes of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.

Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	AH .
9538+289715	10 bar	1' 1/4" BSP (M) – 1"1/4" BSP (F)	30 mm	1′1/4″ – 15 m	400 mm	67 kg	550x530x490	
9538+289720	10 bar	1′ 1/4″BSP (M) – 1′ 1/4″BSP (F)	30 mm	1′1/4″ - 20 m	400 mm	78 kg	550x530x490	



# Art. no. 9539+2899715

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in stainless steel AISI 304, with 15 m - rubber hose Ø 1'1/2'' (ø int. 38 mm), suitable for the supply of high volumes of diesel.

# **OPTIONAL**

Hydraulic spring braket kit for the controlled rewind of hoses Art. no. /HB.



Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)	H
9539+2899715	10 bar	1′ 1/2″BSP (M) – 1′ 1/2″BSP (F)	36 mm	1′1/2″-15 m	400 mm	80 kg	550x530x490	K



# PNEUMATIC AND ELECTRIC PETROL PUMPS



# Art. no. 6561

Pneumatic, selfpriming rotary vane pump for the transfer of petrol, with body in cast iron with anticorrosive coating and plastic rotor. Earth cable to enable an electrostatic discharge on demand. The pump is constructed in accordance with directive ATEX 94/9/EC.



Art. no.	Compressed air supply		Max delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6561	1 – 4 bar	4 bar	35 l/min	3/4" BSP (F)	3 kg	140x150x190





# Art. no. 6930

Pneumatic 1:1 – piston pump, suitable for the suction and the transfer of petrol. Earth cable to enable an electrostatic discharge on demand. The pump is constructed in accordance with directive ATEX 94/9/EC.



Art. no.	Compressed air supply	Max outlet pressure	Max delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6930	2 – 6 bar	6 bar	25 l/min	3/4" BSP (F)	8 kg	530x120x90





# Art. no. **6931**

Electric, selfpriming 12 VDC – rotary vane pump (on demand also available in 230 VAC) for the transfer of petrol, with painted body in cast iron with anticorrosive coating, anti-noise filter (electromagnetic compatibility EMC), thermal protection, non-return valve, pressure relief valve, built-in bypass valve and 2 m – cable with alligator clamps for battery connection. The pump is constructed in accordance with directive ATEX 94/9/EC – IECEx (group II – category 2-G Ex d IIA T4 Gb).



Art. no.	Voltage	Power	Current drain	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6931	12 VDC	250 W	50 l/min	21 A	1" BSP (F)	7 kg	195x355x270



Petrol Pag. 158



# PNEUMATIC AND ELECTRIC PETROL DISPENSING KITS



# Art. no. 6933

Wall-mounted petrol transfer kit, composed of 1:1 - pneumatic piston pump, pressure regulator with lubricator, wall bracket, suction hose with foot valve, 3 m – rubber supply hose Ø 3/4" with static wire, automatic nozzle with inlet swivel. Earth cable to enable an electrostatic discharge on demand. The pump is constructed in accordance with directive ATEX 94/9/EC.



Art. no.	Compressed air supply	Air consumption	Max outlet pressure	Max delivery	Connection threads	Weight
6933	1 – 4 bar	120 l/min	4 bar	25 l/min	3/4" BSP (F)	15 kg



# Art. no. 6934

Petrol transfer kit, composed of 1:1 - pneumatic rotary vane pump, pressure regulator with lubricator, suction tube of 950 mm length with non-return valve, bung adapter, 3 m – rubber hose Ø 3/4" with static wire, automatic nozzle with inlet swivel. Earth cable to enable an electrostatic discharge on demand. The pump is constructed in accordance with directive ATEX 94/9/EC.



Art. no.	Compressed air supply	Air consumption	Max outlet pressure	Max delivery	Connection threads	Weight
6934	4 bar	160 l/min	4 bar	35 l/min	3/4" BSP (F)	12 kg



# Art. no. **6935**

Petrol transfer kit, composed of electric, selfpriming 12 VDC – rotary vane pump (on demand also available in 230 VAC), with painted body in cast iron with anticorrosive coating, anti-noise filter (electromagnetic compatibility EMC), thermal protection, non-return valve, pressure relief valve, built-in bypass valve, 2 m – cable with alligator clamps for battery connection, nozzle holster with lock and ON-/OFF-lever, telescopic suction tube in galvanized steel, 3 m – rubber hose Ø 3/4" with static wire, manual aluminium nozzle with inlet swivel (on demand also automatic nozzle available!) and in-line filter with 30 microns – cartridge for the absorption of water that is eventually present in the storage tank. The pump is constructed in accordance with directive ATEX 94/9/EC – IECEx (group II – category 2 – G Ex d IIA T4 Gb).



	Art. no.	Voltage	Power	Current drain	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
I	6935	12 VDC	250 W	21 A	50 l/min	1"BSP (F)	10 kg	400x500x460

Pag. 159 Petrol

# **MOBILE PETROL SUCTION UNITS**





# Art. no. 3115

Mobile suction unit for petrol, equipped with pneumatic, rotary gear pump in stainless steel, pressure regulator with lubricator, suction hose, kit of suction probes in different diameters, storage bowl, two wheels trolley and 20 I - plastic can for collection of the sucked petrol. The unit is equipped with an earth cable to enable an electrostatic discharge and is constructed in accordance with directive ATEX 94/9/EC.





Art. no.	Max vacuum	Inlet pressure	Compression ratio pump	Air consumption	Outlet pressure	Weight	Dimensions (LxWxH) (mm)
3115	0,8 bar	3 bar	1:1	200 l/min	3 bar	17 kg	410x420x910





# Art. no. **6938**

Mobile suction unit for petrol, equipped with pneumatic 1:1 - piston pump, pressure regulator with lubricator, trolley with 2 fixed wheels and 2 castors, 20 I - metal jerrycan, for the collection of the sucked petrol, suction hose, kit of suction probes in different diameters and storage bowl. The unit is equipped with an earth cable to enable an electrostatic discharge and is constructed in accordance with directive ATEX 94/9/EC.



Art. no. 6938

Art. no.	Compressed air supply	Max outlet pressure	Max delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6938	2 – 6 bar	6 bar	25 l/min	3/4" BSP (F)	19 kg	600x600x1050





# PETROL DISPENSING NOZZLES / PETROL FLOW METERS



# Art. no. 6728

Automatic shut-off dispensing nozzle for petrol, with rubber protection, connection 3/4" BSP (F). Max flow rate 50 l/min.



# Art. no. 6702/B

Manual dispensing nozzle for petrol, body in aluminium with plastic handle protector, with inlet swivel 1" BSP (M-F) and dispensing outlet with ø ext. 25 mm, with latch for locking of trigger. Max flow rate 150 l/min.



# Art. nos. 2867 - 2868

Mechanical nutating – disk flow meter for petrol, kerosene and diesel, with 3 (Art. no. 2867) or 4 (Art. no. 2868) – digits partial meter (max. 9999 l; resettable to zero) and 8 – digits totalizer (non resettable). The meter can easily be calibrated and it can also be used for gravity applications. The upper part can be rotated so that different flow directions are possible. The flow meter is constructed in accordance with directive ATEX 99/92/EC – IECEX (group II – category 2

- G IIB T6) and so is suitable also for the use in environments with a high explosion risk.

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2867 2868	20 – 120 l/min	3.5 bar	28 bar	+/- 1%	0.01 l	1" BSP (F)	0.6 kg

<sup>\*</sup> Accuracy in % of flow range after calibration



# Art. no. 2869

Electronic oscillating - disk flow meter for petrol, body in aluminium, with 6 – digits partial meter (resettable to zero) and 6 – digits totalizer (non resettable). The meter includes also a flow rate indicator. The upper part can be rotated so that 4 different flow directions are possible.

Art. no.	Flow range	Max working pressure	Burst pressure	Accuracy*	Resolution	Connection threads	Weight
2869	5 – 120 l/min	3.5 bar	28 bar	+ - 0,5%	0.01 l	1" BSP (F)	1.1 kg

<sup>\*</sup> Accuracy in % of flow range after calibration

Pag. 161 Petrol





# Art. no. 9595/EX+289408

Automatic rewind, spring-driven hose reel, adjustable arms series, in stainless steel AISI 304, in accordance with directive ATEX 94/9/EC – group II – category 2, with 8 m - rubber hose Ø 1" (Ø int. 25 mm), suitable for the supply of petrol in accordance with norm EN 1761:1994.



Swivel bracket



Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø / Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9595/EX +289408	18 bar	1"BSP (M) – 1"BSP (F)	20 mm	1″-8 m	150 mm	29 kg	290x460x450





# Art. no. 9525/EX+289415

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, in accordance with directive ATEX 94/9/EC – group II – category 2, with 15 m - rubber hose Ø 1" (ø int. 25 mm), suitable for the supply of petrol in accordance with norm EN 1761:1994.



Swivel bracket



Art.	no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9525 +289		18 bar	1" BSP (M) – 1" BSP (F)	20 mm	1" – 15 m	300 mm	38 kg	460x590x450





# Art. no. 9536/EX+289425

Automatic rewind, spring-driven hose reel, adjustable arms series, in stainless steel AISI 304, in accordance with directive ATEX 94/9/EC – group II – category 2, with 25 m - rubber hose Ø 1" (ø int. 25 mm), suitable for the supply of petrol in accordance with norm EN 1761:1994.





Art. no.	Max pressure	Connection threads inlet - outlet	Internal ø inlet swivel joint	ø/Length delivery hose	Width reel	Weight	Dimensions (LxWxH) (mm)
9536/EX +289425	18 bar	1" BSP (M) – 1" BSP (F)	20 mm	1" – 25 m	400 mm	61 kg	520x550x540







# Art. no. 8231

Jerrycan in polyethylene, suitable for the storage of petrol, with flexible outlet. With UN – approval.

l	Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
ı	8231/5	5 l	0.5 kg	260x140x240
	8231/10	10 l	0.65 kg	300x170x260
	8231/20	20	1.2 kg	350x190x380





#### Art. no. 8235

Jerrycan in painted sheet steel, suitable for the storage of petrol, internally painted. With UN – approval.

# Optional:

- Art. no. 8231/T: Rigid dispensing outlet with quick connection coupling
- Art. no. 8231/F: Flexible dispensing outlet with quick connection coupling

Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
8235/5	5 l	1.9 kg	230x120x330
8235/10	10 l	2.9 kg	370x280x170
8235/20	20	4.2 kg	350x160x470





# Art. no. 8237

Jerrycan in stainless sheet steel, suitable for the storage of petrol, wall thickness 0.8 mm. With UN – approval.

Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)	
8237/10	10 l	2.9 kg	350x170x280	
8237/20	20	4.2 kg	350x170x473	





# Art. no. 8224/95

Mobile petrol dispensing kit, consisting of 95 l – container, in high density polyethylene, electricly conductive to enable an electrostatic discharge, filling cap with air vent valve, integral grip and carry handles, 2 pneumatic tyres ø 300 mm, manual, single acting lever pump (constructed in accordance with directive ATEX 94/9/EC – Ex Il 2/2 G c T3), delivery 25 l/min, 3 m – statically conductive rubber supply hose, manual dispensing nozzle, nozzle holder and earth cable for an electrostatic discharge.

Suitable for transportation according to ADR 1.1.3.1c).

Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)		
8224/95	95 l	25 kg	1000x590x430		





# PORTABLE STORAGE TANKS FOR DIESEL – PETROL – AdBlue®/DEF/AUS32



Art. no. **8223/220** Art. no. **8223/430**  Art. no. **8223/220** Art. no. **8223/430** 

Portable diesel storage tank in polyethylene (wall thickness 5 mm), suitable for the transport in trucks or pick-ups, with ADR – approval (according to ADR 1.1.3.1.c), including refill tube, air vent valve, level gauge, forklift pockets and handles for transport (empty), equipped with electric, selfpriming vane pump 12 VDC (on demand also 24 VDC) with a delivery of 40 l/min, ON-/OFF-switch, automatic diesel dispensing nozzle, 4 m – rubber delivery hose and 2 m – cable with alligator clamps for battery connection. Includes a lockable plastic cover.

Optional: electronic diesel flow meter (art. no. 2823).

Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)		
8223/220	220 l	28 kg	800x600x700		
8223/430	430 l	58 kg	1200x800x750		





Art. no. 8224/120 Art. no. 8224/190

Portable petrol storage tank in high density polyethylene, electricly conductive to enable an electrostatic discharge, suitable for the transport in trucks or pick-ups, with ADR – approval (according to ADR 1.1.3.1.c), including refill tube, air vent valve, level gauge, forklift pockets and handles for transport (empty), equipped with electric, selfpriming rotary vane pump 12 VDC (on demand also 24 VDC) with a delivery of 40 l/min. (constructed in accordance with directive ATEX 94/9/EC – IECEX (group II – category 2 – G Ex d IIA T4 Gb)), 4 m – cable with alligator clamps for battery connection, 4 m – statically conductive rubber supply hose, automatic petrol dispensing nozzle and nozzle holder. Includes a lockable plastic cover.

On demand also available with manual dispensing pump.



	Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)		
	8224/120	120 l	26 kg	800x600x470		
Ī	8224/190	190 l	38 kg	800x600x610		





Art. no. **8225/125** Art. no. **8225/200** Art. no. **8225/430** Art. no. **8225/600** 

Portable storage tank for AdBlue®/DEF/AUS32 in high density polyethylene, suitable for the transport in trucks or pick-ups (ADR – approval not required), including refill tube, air vent valve, level gauge, forklift pockets and handles for transport (empty), equipped with electric, selfpriming diaphragm pump 12 VDC (on demand also 24 VDC) with a delivery of 30 l/min, ON-/OFF-switch, automatic diesel dispensing nozzle, 4 m – delivery hose in EPDM, and 4 m – cable with alligator clamps for battery connection. Includes a lockable plastic cover. Optional: electronic flow meter, suitable for AdBlue®/DEF/AUS32 (art. no. 2822).

Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)		
8225/125	125 l	25 kg	800x620x470		
8225/200	200 l	26 kg	800x620x610		
8225/430	430 l	44 kg	1160x760x730		
8225/600	600 l	52 kg	1160x800x1020		





# AdBlue®/DEF/AUS32 MANUAL TRANSFER PUMPS

AdBlue® (Diesel Exhaust Fluid (DEF)) is a solution of synthetically produced urea in de-mineralized water which is used to reduce the emissions of nitrogen oxides from the exhaust systems of diesel vehicles. The average consumption of AdBlue is approx. 5 % of the diesel consumption. It is injected into the exhaust system of heavy diesel vehicles constructed according to norm EURO VI. These vehicles are equipped with a dedicated AdBlue® tank which requires special equipment for the refilling.



#### Art. no. 5496

Lever action pump in stainless steel, seals in PTFE, suitable for the use in drums or in 1000 l – IBC – tanks, with 4 m – delivery hose, rigid dispensing outlet and bung adapter for fixation on drum or tank. Delivery 8 l/min.

Art. no.	Delivery/stroke	Delivery	Connection threads	Weight	
5496	0.13 l	8 l/min	3/4" BSP	2 kg	



# Art. no. **5491**

Rotary action PVC pump, suitable for the use in drums, seals in PTFE, metal parts in stainless steel, curved dispensing outlet (ø ext. 1") and bung adapter for fixation on drum.

Art. no. Delivery/rotation		Delivery	Connection threads	Weight
5491	0.25 l	15 l/min	1' BSP	1.8 kg



# Art. no. 5493

Lever action polypropylene pump, suitable for the use in drums, with  $2\ m-PVC$  delivery hose, rigid dispensing outlet and bung adapter for fixation on drum or tank.

Suitable also for the use with waterbased fluids, detergents, soaps, antifreeze, windshield washer fluids, lubricants.

Art. no.	Delivery/stroke	Delivery	Connections	Weight	
5493	0.5 l	12 l/min	PTG 19	1.6 kg	

Pag. 165 AdBlue®



# AdBlue®/DEF/AUS32 ELECTRIC TRANSFER PUMPS



# Art. no. 6160

Electric, selfpriming vane pump for the supply of AdBlue® at low pressure; guarantees a constant flow and a low noise level.

Pump body in stainless steel AISI 304, rotor in special rubber.

Connection threads 3/4" (F) BSP. Protection category IP 55.

Cable L. 1.5 m with plug included.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)
6160	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	9 kg	240x290x180





# Art. no. 6132

Electric, selfpriming gear pump for the supply of AdBlue®; guarantees a constant flow and a low noise level.

Pump body in stainless steel AISI 304, gears in Kevlar®.

Connection threads 3/8" (F) BSP. Protection category IP 55.

Cable L. 1.5 m with plug included.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)
6132	230 VAC – 50 Hz	5.3 A	1360	0.55 Kw	15 bar	11 l/min	7.5 kg	150x300x190





# Art. no. 6155

Electric, selfpriming diaphragm pump, 230 VAC, for the supply of AdBlue® at low pressure. Pump body in **plastic material**, with ON-/OFF switch, 2 m – cable with plug. Connections: hose tails ø 19 mm (3/4").

The pump is available on demand also with 120 VAC – motor.

Max operating time: 20 min.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)	1
6155	230 VAC – 50 Hz	1.95 A	1400	0.4 Kw	1.5 bar	34 l/min	7 kg	350x180x280	-





Art. no. **6153** Art. no. **6154** 

Electric, selfpriming diaphragm pump, 12 VDC and 24 VDC, for the supply of AdBlue® at low pressure. Pump body in plastic material, with ON-/OFF switch,  $4\ m$  – cable with alligator clamps for battery connection. Connections: hose tails ø 19 mm (3/4").

Max operating time: 20 min.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)	4
6153	12 VDC	22 A	2800	0.26 Kw	1.5 bar	36 l/min	3.6 kg	350x160x280	8
6154	24 VDC	13 A	2800	0.31 Kw	1.5 bar	36 l/min	3.6 kg	350x160x280	ı

AdBlue® Pag. 166



# AdBlue®/DEF/AUS32 ELECTRIC DISPENSING KITS



# Art. no. 6745

Electric AdBlue® dispensing kit, composed of 230 VAC – electric pump (art. no. 6160) with body in stainless steel and rotor in special rubber, delivery 25 l/min, suitable for the use in 1000 l – IBC – tanks, with bung adapter, metal mounting frame with gun holder, plastic suction tube, length 1100 mm with 0.8 m - connection hose to pump, 3 m – EPDM delivery hose 1/2" and electronic oval gears flow meter for AdBlue®, with control gun and rigid outlet Ø 16 mm (art. no. 2735).

# Art. no. 6745/200

Same kit as art. no. 6745, but with suitable components for the use with 208 I – plastic drums.



# Art. no. **6745/60**

Same kit as art. no. 6745, but with suitable components for the use with 60 l – plastic drums.

Art. no.	Art. no. Voltage		Rpm	Power	Outlet pressure	Delivery	Weight
6745	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	22 kg
6745/200	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	22 kg
6745/60	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	22 kg

Art. no. **6745/200** Art. no. **6745/60** 

# Art. no. **6744**



Electric AdBlue® dispensing kit, composed of 230 VAC – electric pump (art. no. 6160) with body in stainless steel and rotor in special rubber, delivery 25 l/min, suitable for the use in 1000 l – IBC – tanks, with bung adapter, metal mounting frame with gun holder, plastic suction tube, length 1100 mm with 0.8 m - connection hose to pump, automatic rewind, spring – driven hose reel, adjustable arms series, in stainless steel, with 15 m – EPDM delivery hose 1/2" and electronic oval gears flow meter for AdBlue®, with control gun and rigid outlet ø 16 mm.

# Art. no. **6743**

Art. no. 6744

Same kit as art. no. 6744, but with automatic dispensing nozzle for AdBlue® instead of manual dispensing nozzle with electronic flow meter.



Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight
6744	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	48 kg
6743	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	48 kg

Pag. 167 AdBlue®



# AdBlue®/DEF/AUS32 PNEUMATIC DISPENSING KITS



Art. no. **6747** Art. no. **6752** 

Pneumatic AdBlue® dispensing kit, composed of pneumatic piston pump with wetted parts in stainless steel (art. no. 6747: with 3:1 – pump model, art. no. 6752: with 1:1 – pump model), suitable for the use in drums or in 1000 I – IBC – tanks, pressure regulator with manometer and air filter, bung adapter, 3 m – EPDM delivery hose Ø 1/2" and electronic oval gears flow meter for AdBlue®, with control gun and rigid outlet ø 16 mm.

# Art. no. 6748

Same kit as art. no. 6747, but with dispensing nozzle without electronic flow meter.

# Art. no. **6753**

Same kit as art. no. 6752, but with automatic dispensing nozzle for AdBlue® instead of manual dispensing nozzle with electronic flow meter.



Art. no.	Compressed air supply	Max outlet pressure	Max delivery	Weight
6747	3-8 bar	24 bar	15 l/min	8 kg
6752	3-8 bar	8 bar	35 l/min	9 kg
6753	3-8 bar	8 bar	35 l/min	10 kg



# Art. no. 6751

Pneumatic AdBlue® dispensing kit, composed of 3:1 – pneumatic piston pump with wetted parts in stainless steel (art. no. 1050), suitable for the use in 1000 I – IBC – tanks, delivery 15 l/min, with bung adapter, metal mounting frame with gun holder, pressure regulator with manometer and air filter, automatic rewind, spring – driven hose reel, adjustable arms series, in stainless steel, with 15 m – EPDM delivery hose Ø 1/2" and electronic oval gears flow meter for AdBlue®, with control gun and rigid outlet Ø 16 mm.

Art. no.	Compressed air supply	Compression ratio	Max outlet pressure	Max delivery	Weight
6751	3-8 bar	3:1	24 bar	15 l/min	34 kg

AdBlue® Pag. 168



# AdBlue®/DEF/AUS32 FLOW METER MID APPROVED

The **European Directive 2014/32/EU**, better known as Directive **MID** (Measuring Instruments Directive), is a community norm responding to reasons of public interest, safety and order, environment protection as well as preventing consumer from false measurement, of levying taxes and duties and of fair trading.

All these application, which directly and indirectly affect the daily life of citizens in many ways, may require certified measuring systems subject to legal verification.

The **MID MI-005** involves measuring systems for continuous and dynamic measurement of quantities of liquids other than water, among those also AdBlue®/DEF/AUS32.

The Flexbimec AdBlue® flow meter series "MIDBlue" comply with Metrological Standards and requirements concerning accuracy as defined in the a.m. Directive and can be used therefore as approved meters also in legal transactions.







# MIDBlue Counter - Art. no. 2736

Electronic oval gears flow meter for AdBlue\*, **approved for legal transactions according to MID MI-005, Directive 2014/32/EU**, with plastic control gun, fluid flow control pipe with sight glass, rigid outlet Ø 12 mm with automatic anti-drip nozzle in stainless steel, inlet swivel adaptor in stainless steel 1/2" BSP (M), rubber protection guard.

OPERATING CONDI	TIONS FOR THE USE		
Fluid type	AdBlue® AUS32		
Flow range	0.5 – 10 l/min		
Min measurable quantity	0.5 l		
Accuracy class	0.5 (MID MI-005 – OIML R117-1)		
Operating temperature range	+ 5°C / + 40°C		
Working pressure range	1 – 4 bar		
Display resolution degree	0.005 l		
Mechanical environment category	M1		
Electromagnetic enviroment category	E2		
Checksum code	cksum E57E		
Protection class	IP 64		
Underlying CE directives	2004/108/CE 2006/95/CE		
Underlying CE norms	CEI EN 61000-4-2 CEI EN 61000-4-2 A1 CEI EN 61000-4-2 A2 CEI EN 61000-4-3		
Quantity of storable single operations data	2000 record data		
Single operations data storing capacity	H) Serial number of each delivery; I) Year of delivery; J) Month and day of delivery; K) Time of delivery; L) Dispensed quantity for single operation; M) Absolute total of dispensed quantities.		

Pag. 169 AdBlue®



# AdBlue®/DEF/AUS32 PNEUMATIC AND ELECTRIC DISPENSING KITS



AdBlue\* dispensing kits equipped with flow meter **approved according to MID MI-005**, automatic air separator kit (suitable to separate the air eventually present in the suction line) and pulsation dumper **approved according to OIML R117-1**.

The AdBlue dispensing kits comply with all metrological standards and requirements concerning accuracy defined in the **Directive** 2014/32/EU and can be used therefore as approved meters also in legal transactions.

The following kits include a wall bracket suitable for wall or on tanks installation.



#### Art. no. 6752MID

Encased AdBlue<sup>a</sup> dispensing kit, composed by pneumatic piston pump with body in stainless steel art. no. 1045, air separator kit **approved according to OIML R117-1** art. no. 1150, pump pulsation damper, pressure regulator with manometer and air filter, L. 3 m – EPDM delivery hose Ø 1/2" and electronic oval gears flow meter for AdBlue<sup>a</sup> **approved for legal transactions according to MID MI-005**.

Art. no.	Compressed air supply	Max outlet pressure	Delivery	Weight
6752MID	2-4 bar	4 bar	10 l/min	12 kg

The pressure and delivery values are self limiting in order to fully comply the requirements of the certificate.



# Art. no. **6732MID**

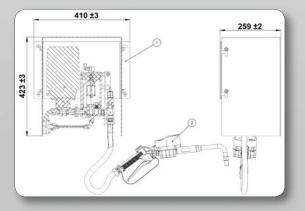
Encased AdBlue® dispensing kit, composed by 230Vac – 550W electric pump with body in stainless steel art. no. 6132, air separator kit **approved according to OIML R117-1** art. no. 1152, pump pulsation damper, pressure accumulator, L. 3 m – EPDM delivery hose Ø 1/2" and electronic oval gears flow meter for AdBlue® **approved for legal transactions according to MID MI-005.** 

# Art. no. 6731MID

Encased AdBlue® dispensing kit, such as art. no. 6732MID, but including 12Vdc electric pump and air separator kit **approved according to OIML R117-1** art. no. 1151.

Art. no.	Voltage	Α	Max outlet pressure	Delivery	Weight
6732MID	230V 50 Hz	5.3	4 6 6 11	10 1/22:22	13 kg
6731MID	12Vcc	6	4 bar	10 l/min	10 kg

The pressure and delivery values self limiting in order to fully comply the requirements of the certificate.







AdBlue® Pag. 170



# AdBlue®/DEF/AUS32 PNEUMATIC AND ELECTRIC SUPPLY UNITS





Art. no. 6754MID

# MIDBlue P Unit - Art. no. 6754MID

AdBlue<sup>®</sup> pneumatic supply unit, composed by pneumatic piston pump with body in stainless steel art. no. 1045, air separator kit **approved according to OIML R117-1** art. no. 1150, pump pulsation damper, pressure

regulator with manometer and air filter, spring retractable hose-reel with L. 8 m delivery hose ø 1/2" and electronic oval gears flow meter for AdBlue\* approved for legal transactions according to MID MI-005.



Art. no.	Compressed air supply	Max outlet pressure	Delivery	Weight
6754MID	2-4 bar	4 bar	10 l/min	36 kg

The pressure and delivery values are self limiting in order to fully comply the requirements of the certificate.



# MIDBlue E Unit - Art. no. 6733MID

AdBlue® electric supply unit, composed by 230Vac – 550W electric pump with body in stainless steel art. no. 6132, air separator kit **approved according to OIML R117-1** art. no. 1152, pump pulsation damper, pressure accumulator, spring retractable hose-reel with L. 8 m delivery hose Ø 1/2" and electronic

oval gears flow meter for AdBlue® approved for legal transactions according to MID MI-005.



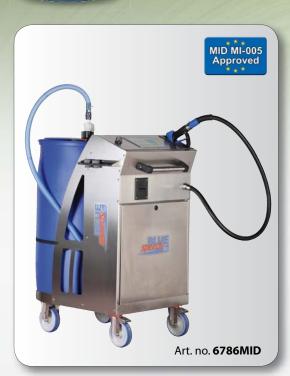
Art. no.	Voltage	Α	Max outlet pressure	Delivery	Weight
6733MID	230V 50 Hz	5.3	4 bar	10 l/min	38 kg

The pressure and delivery values are self limiting in order to fully comply the requirements of the certificate.

Pag. 171 AdBlue®



# AdBlue®/DEF/AUS32 ELECTRIC SUPPLY UNITS



# Speedy Blue 200 MID - Art. no. 6786MID

AdBlue\* mobile filling system for 208 I drum, with electronic oval gears flow meter **approved for legal transactions according to MID MI-005.** 

Compact dimensions, stainless steel body, 2 m delivery hose, automatic quick connection gun and printer to report delivery information.

The unit is fully independent by main electricity thanks to an internal 12 Vdc high performance battery.

A multifunctional board displays the following information:

- Preselection of quantity to be dispensed or free flow delivery.
- Details of last deliveries.



Speedy Blue 60 MID - Art. no. 6787MID

AdBlue\* mobile filling system, as above, for 60 l drum.

Art. no.	Delivery	Max outlet pressure	Current drain	Weight	Dimensions (LxWxH) (mm)
6786MID	10 l/min	4 bar	26.4	55 kg	650x900x1150
6787MID			36 A	40 kg	450x720x1050



The pressure and delivery values are self limiting in order to fully comply the requirements of the certificate.



# Speedy Blue 200 - Art. no. 6786

AdBlue® mobile filling system for 208 I drum.

Compact dimensions, stainless steel body, 2 m delivery hose, automatic quick connection gun and printer to report delivery information.

The unit is fully independent by main electricity thanks to an internal 12 Vdc high performance battery.

A multifunctional board displays the following information:

- Preselection of quantity to be dispensed or free flow delivery.
- Details of last deliveries.

**Speedy Blue 60** - Art. no. **6787** 

AdBlue\* mobile filling system, as above, for 60 I drum.



Art. no.	Delivery	Max outlet pressure	Current drain	Weight	Dimensions (LxWxH) (mm)
6786	10 l/min	4.1	36 A	55 kg	650x900x1150
6787	10 l/min	4 bar		40 kg	450x720x1050



AdBlue® Pag. 172







# Art. no. 2735

Electronic oval gears flow meter for AdBlue®, body in plastic with high density glass fibre IXEF, gears in PPS and PTFE, with plastic control gun, inlet swivel in stainless steel 1/2" BSP (M) and plastic rigid outlet, ø 16 mm, with automatic anti-drip nozzle in stainless steel.

Art. no.	Max working pressure	Max flow rate	Accuracy	Connection threads	Weight	Dimensions (LxWxH) (mm)
2735	25 bar	35 l/min	+/- 0.5%	1/2" BSP (M)	1.2 kg	95x95x460





# Art. no. 2166

Plastic dispensing nozzle for AdBlue® with rigid outlet ø 16 mm, connection threads 1/2" BSP (F).

Art. no.	Max working pressure	Flow range	Connection threads	Weight	Dimensions (LxWxH) (mm)
2166	20 bar	1-30 l/min	1/2" BSP (F)	0.4 kg	203x320x34





# Art. no. 2715

Electronic oval gears flow meter for AdBlue®, body in plastic with high density glass fibre IXEF, gears in PPS and PTFE.

Art. no.	Max working pressure	Max flow rate	Accuracy	Connection threads	Weight	Dimensions (LxWxH) (mm)
2715	20 bar	30 l/min	+/- 0.5%	1/2" BSP (F)	0.8 kg	95x90x105





# Art. no. 2822

Electronic turbine flow meter for AdBlue®, body in reinforced polyamide, suitable for inline applications, with 5 - digits partial meter (resettable to zero) and 6 - digits totalizer (non resettable). The meter includes also a flow rate indicator. The display can be rotated in 4 different positions.

Art. no.	Max working pressure	Max flow rate	Accuracy	Connection threads	Weight	Dimensions (LxWxH) (mm)
2822	20 bar	100 l/min	+/-1%	1" BSP (M)	0.4 kg	100x54x74



**AdBlue®** 



# AdBlue®/DEF/AUS32 DISPENSING NOZZLES AND ACCESSORIES



# Art. no. 6709

Plastic filling nozzle for AdBlue®, internal components in stainless steel, with Viton® seals, wetted parts and rigid dispensing outlet (ø 18.8 mm) in stainless steel, plastic connection and lockable trigger.

Art. no.	Max working pressure	Flow range	Connections	Weight
6709	3 bar	1-40 l/min	1"BSP (F)	0.3 kg



# Art. no. 6729

Automatic filling nozzle for AdBlue®, body with rubber protection, with Viton® seals, wetted parts and rigid dispensing outlet (ø 19 mm) in stainless steel, swivel hose tail ø 19 mm.

Art. no.	Max working pressure	Flow range	Connections	Weight
6729	5 bar	1-35 l/min	Hose tail ø 19 mm	2.5 kg



# Art. no. 6723

Automatic filling nozzle for AdBlue®, body with rubber protection, Viton® seals, swivel adapter 3/4" BSP (M), with special spout kit and tank magnetic adaptor.

Art. no.	Max working pressure	Flow range	Connections	Weight
6723	5 bar	1-35 l/min	3/4" BSP (M)	2.2 kg



# Art. no. **6724**

Automatic filling nozzle, with full-proof adapter on AdBlue® filler neck, in accordance with ISO 22241-5, swivel adapter 3/4" BSP (M).

Art. no.	Max working pressure	Flow range	Connections	Weight
6724	2 bar	1-10 l/min	3/4" BSP (M)	1.5 kg



# Art. no. 2253

Plastic suction tube, ø 40 mm, length 1100 mm, with bung adapter 2" BSP for fixation on drums or tanks and 90° - elbow adapter ø 25 mm for hose connection. Suitable for 1000 l – IBC – tanks.

# Art. no. 2897

EPDM delivery hose, ø 3/4" (sold by the meter).



AdBlue®

# FLEXBIMEC

# WINDSHIELD WASHER FLUID DISPENSING KITS



# Art. no. 1313

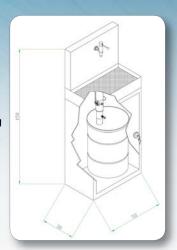
Windshield washer fluid dispensing unit, composed of:

- Self-supporting cabinet in painted steel, provided for the storage of  $1 \times 60 \, l$  drum inside, with lockable door;
- Pneumatic 1:1 piston pump with wetted parts in stainless steel AISI 304 (art. no. 1045) with plastic suction tube for 60 I drums and bung adapter for the fixation of the pump on the drum;
- Pressure regulator for compressed air;
- Dispensing bar with 1 spring operated spigot in stainless steel with splash guard filter, max. pressure 8 bar, and drain valve for drip tray.

# Optional:

Graduated, transparent measure, in polyethylene, stackable and unbreakable.

- Art. no. 3425: capacity 0.25 l, scale graduation 5 ml;
- Art. no. 3426: capacity 0.5 l, scale graduation 10 ml;
- Art. no. 3427: capacity 1 l, scale graduation 10 ml;
- Art. no. 3428: capacity 2 l, scale graduation 20 ml;
- Art. no. 3429: capacity 3 l, scale graduation 50 ml;
- Art. no. 3430: capacity 5 l, scale graduation 100 ml.







#### Art. no. 1312

Windshield washer fluid dispensing kit, composed of:

- Pneumatic 1:1 piston pump with wetted parts in stainless steel AISI 304 (art. no. 1071) with two-parts plastic suction tube, suction foot valve with strainer and bung adapter for the fixation of the pump on the drum;
- Pressure regulator for compressed air;
- Windshield washer fluid dispensing bar, wall-mounted, with 1 spring operated spigot in stainless steel with splash guard filter, max. pressure 8 bar, and drain valve for drip tray;
- 3 m rubber hose Ø 1/2".

# Optional:

Various models and sizes of measures in polyethylene are available as accessory.



# Art. no. 3379

Mobile pneumatic windshield washer fluid dispensing kit with stainless steel AISI 304, 65 I – container, consisting of:

- Pneumatic 1:1 pump, art. no. 1045 (see page 176!);
- Stainless steel container with 4 wheels, capacity 65 I, with level indicator;
- 3 m rubber hose Ø 1/2";
- Electronic flow meter, with control gun, rigid outlet and inlet swivel 1/2" BSP (M), art. no. 2735;
- Pressure regulator with manometer and condensation water separator, art. no. 7180.





Pneumatic pumps, standard series, with suction shaft in stainless steel AISI 304 and EPDM gaskets for the supply of fluids with particular chemical characteristics. It is recommended to check the compatibility of the fluid with the materials of the wetted pump components before









Art. no.	1045	1049	1071	1072	1050
Compressed air supply	Compressed air Min 2 Max 8 bar				
Compression ratio	1:1	3:1	1:1	1:1	3:1
Outlet pressure	8 bar	24 bar	8 bar	8 bar	24 bar
Delivery	35 l/min	15 l/min	35 l/min	35 l/min	15 l/min
Connection compressed air			1/4" BSP (F)		
Connection lubricant outlet	3/4" BSP (F)	1/2"BSP (M)	3/4" BSP (F)	3/4" BSP (F)	1/2"BSP (M)
Max air consumption with 8 bar pressure			210 l/min		
Length suction tube	260 mm   260 mm   1000 mm/ 1000 mm   1000			1000 mm	
Gaskets	EPDM				
Weight	5 kg	4 kg	5.2 kg	7 kg	4.2 kg



# **OPTIONAL**

- It is recommended to use rubber hoses with a diameter of min. 3/4".
  For a continuous use of the pump it is
- For a continuous use of the pump it is recommended to install a compressed air treatment unit, composed of pressure regulator with manometer and air filter (art. no. 7180) or pressure regulator with manometer, air filter and lubricator (art. nos. 7150) at the compressed air inlet of the pump.

  Any installed valves, curves, filters, ball valves or flow meters will reduce the delivery of the pump.

Stainless steel Pag. 176

# **PNEUMATIC STAINLESS STEEL PUMPS**



Heavy duty pneumatic pumps, particularly designed for the supply of fluids under demanding conditions and where a high delivery is required. With suction shaft in stainless steel AISI 304 and PTFE seals, suitable for the supply of fluids with particular chemical characteristics. It is recommended to check the compatibility of the fluid with the materials of the wetted pump components before use.







Art. no.	1079	1081	1082	1083	1085
Compressed air supply	Con	npressed air	Min 1 Max 8	bar	
Compression ratio	4:1	8:1	12:1	16:1	8:1
Outlet pressure	32 bar	64 bar	96 bar	128 bar	64 bar
Delivery	35 l/min	30 l/min	27 l/min	15 l/min	30 l/min
Connection compressed air	3/8" BSP (F)	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)
Connection lubricant outlet			3/4" BSP (F)		
Max air consumption with 8 bar pressure	280 l/min	2050 l/min	1920 l/min	1800 l/min	2050 l/min
Length suction tube	260 mm	355 mm	355 mm	355 mm	655 mm
Diameter pneumatic piston	80 mm	100 mm	125 mm	160 mm	100 mm
Gaskets		PTFE			
Weight	12 kg	15 kg	16 kg	19 kg	16 kg



Art. no. **2214** 

Wall bracket in galvanized steel, suitable for the installation of heavy duty pneumatic pumps.



Art. no. 1104/15

Art. no. 1104/12

# ACCESSORIES FOR PNEUMATIC STAINLESS STEEL PUMPS



# Art. no. 2203

Wall bracket in galvanized steel, suitable for the installation of pneumatic pumps art. nos. 1045 and 1049.

Dimensions: 170 x 140 x 235 mm.

Distances between fixation holes: 140 x 200 mm.



Suction tube in stainless steel, ø 40 mm, length 950 mm, connection 1" BSP (M), with foot valve. Suitable for the use in combination with wall-mounted pneumatic stainless steel pumps, standard series, with 208 l - drums.

#### Art. no. 1104/07

Suction tube in stainless steel, ø 40 mm, length 650 mm, connection 1" BSP (M), with foot valve. Suitable for the use in combination with wall-mounted pneumatic stainless steel pumps, standard series, with 60 I - drums.

# Art. no. 1104/12

Suction tube in stainless steel, ø 40 mm, length 1200 mm, connection 1" BSP (M), with foot valve. Suitable for the use in combination with wall-mounted pneumatic stainless steel pumps, standard series, with tanks.

# Art. no. 1104/15

Suction tube in stainless steel, ø 40 mm, length 1500 mm, connection 1" BSP (M), with foot valve. Suitable for the use in combination with wall-mounted pneumatic stainless steel pumps, standard series, with tanks.

# Art. no. 1106

Art. no. 1113

Suction tube in plastic material, ø 28 mm, supplied in two parts with length 650 mm and 950 mm, connection 1" BSP (M), with foot valve. Suitable for the use in combination with wall-mounted pneumatic stainless steel pumps, standard series, with drums or tanks.



Art. no. 1104/07

no. **1106** 

no. 1104

Low pressure hoses in synthetic rubber, GPH type, with double female stainless steel connections (swivel nuts), suitable for the use with AdBlue®/DEF/AUS32, water (at low pressure and high temperature), chemical fluids, acids, glycol, compressed air (at low pressure). Internal structure in conductive black rubber, coating in black rubber, highly resistant to abrasion, heat, ozone and atmospheric influences. Reinforcement with highly resistant synthetic cord. In accordance with norm BS 2050:1978 (= Specification for electric resistance of conducting and antistatic products made from flexible polymeric material).

Art. no.	Nominal diameter	Internal diameter	External diameter			Min bending radius	Working temperature	Weight
2898XX	1/2"	13 mm	21 mm	20 bar	60 bar	100 mm	min -40°C max +120°C	0.26 kg/m
2899XX	3/4"	19 mm	30 mm	20 bar	60 bar	112 mm	min -40°C max +120°C	0.57 kg/m

XX stands for the required hose length in meters (f. ex. 289815 = 15 m).



Art. no. 1107 Inlet swivel, in stainless steel AISI 304, connection threads 1/2" BSP (M). Art. no. 1108 Non-return valve in stainless steel AISI 304, suitable for in-line installations, connection threads 1/2" BSP (F). Inlet swivel, in stainless steel AISI 304, Art. no. 1109 connection threads 3/4" BSP (M) - 1/2" BSP (M). Inlet swivel, in stainless steel AISI 304, Art. no. 1110 connection threads 3/4" BSP (M) – hose tail ø 20 mm. Art. no. 1111 Hose tail in stainless steel AISI 316, ø 20 mm, connection thread 3/4" BSP (M). Hose tail in stainless steel AISI 316, ø 20 mm, connection thread 1/2" BSP (M). Art. no. 1112

Art. no. 1114 Quick coupling in stainless steel AISI 316, connection thread 1/2" BSP (M).

Quick coupling in stainless steel AISI 316, connection thread 1/2" BSP (F).

Stainless steel Pag. 178



# MANUAL STAINLESS STEEL PUMPS / PLASTIC CHEMICAL PUMPS

Manual pumps with suction tube in stainless steel AISI 304, suitable for the transfer of fluids with particular chemical characteristics. It is recommended to check the compatibility of the fluid with the materials of the wetted pump components before use.



#### Art. no. 5480 RINOX 80

Lever action, single acting drum pump in stainless steel, delivery 8 l/min, with curved rigid outlet, bung adapter for the fixation on drum and seals in Viton®.

# Art. no. 5495 RINOX 95

Lever action, single acting drum pump in stainless steel, delivery 8 l/min, with curved rigid outlet, bung adapter for the fixation on drum and seals in PTFE.



# Art. no. 5496

Lever action, single acting drum pump in stainless steel, art. no. 5495, delivery 8 l/min, with 4 m – delivery hose and rigid outlet in stainless steel, bung adapter for the fixation on drum and gaskets in PTFE.

Art. no.	Delivery/ min	Delivery/ stroke	Length suction tube	Weight	Dimensions (LxWxH) (mm)	H
5480						N.
5495	81	0.13	1000 mm	2 kg	410x80x1350	
5496						







# Art. no. **5416**

Lift action pump for chemicals, body and suction tube in white nylon, gaskets in PTFE, piston in stainless steel, suction tube length 1000 mm for the use in 60 l – or 208 l - drums, including bung adapter 2" BSP and rigid outlet spout. Suitable for the use with various chemicals solvents, detergents, antifreeze, water-based fluids, windshield washer fluid and other.

# Art. no. 5417

Siphon pump, in polypropylene, gaskets in Viton®, with two-parts suction tube, length 1000 mm for the use in 601- or 2081- drums, including bung adapter 2"BSP and 1 m - plastic flexible outlet hose. Suitable for the use with various chemicals solvents, detergents, antifreeze, waterbased fluids, windshield washer fluid and other.

Art. no.	5416	5417		
Delivery/stroke 0.2 l				
Connection fluid outlet	3/4" BSP (M)	Hose tail ø 20 mm		
Length suction tube	1000 mm			
Dimensions (LxWxH) (mm)	100x90x850			
Suitable for drums of	60/208 l			
Weight	1.2 kg			

Pag. 179 Stainless steel

# **ELECTRIC STAINLESS STEEL PUMPS**



Electric and pneumatic selfpriming pumps, with pump body in stainless steel and PTFE – or Viton® seals, for the supply of fluids with particular chemical characteristics. It is recommended to check the compatibility of the fluid with the materials of the wetted pump components before use.



#### Art. no. 1058

Pneumatic, selfpriming rotary gear pump for the transfer of various fluids and chemical fluids. Pump body in stainless steel AISI 304, gears in bronze (on demand also in nylon 12 – glass fiber), gaskets in Viton® and pump shaft in stainless steel. Ideal for spraying applications or for keeping a circulation of a fluid in a closed circuit, f. ex. in parts washers.



Art. no.	Compressed air supply	Air consumption	Outlet pressure	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
1058	4 bar	200 l/min	4 bar	10.5 I/min	3/8"BSP (F)	1.5 kg	165x160x80





# Art. no. 1052 - Art. no. 1053 - Art. no. 1054 - Art. no. 1055 - Art. no. 1056

Electric gear pump, selfpriming, 12 VDC, 24 VDC or 230 VAC, particularly suitable for the use of chemical fluids or in applications where the use of wetted parts in stainless steel is required. Resistant to most acid and alkaline solutions. Suitable also for the transfer of battery acid. Includes an in-line filter. Body and shaft in stainless steel AISI 316, gears in PTFE, gaskets in elastomeric fluorine.

Art. no.	Voltage	Current drain	Outlet pressure	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
1052	12 VDC	5 A	1.5 bar	14 l/min	3/8"BSP (F)	1.5 kg	165x160x80
1053	12 VDC	5 A	4 bar	12 l/min	3/8"BSP (F)	1.9 kg	192x170x103
1054	24 VDC	3 A	1.5 bar	14 l/min	3/8"BSP (F)	1.5 kg	165x160x80
1055	24 VDC	3 A	4 bar	12 l/min	3/8"BSP (F)	1.9 kg	192x170x103
1056	230 VAC	0.8 A	6 bar	10 l/min	3/8"BSP (F)	7.5 kg	279x166x192



Art. no. 1064 - Art. no. 1065 - Art. no. 1066

Pneumatic double diaphragm pump, for the transfer of fluids and chemicals. Pump body and seats in stainless steel AISI 316, electropolished with an average abrasiveness of 2.7 microns, diaphragms in Hytrel® + PTFE.

Selfpriming up to 6 m suction lift, working also unlimitedly in dry running condition, approved in accordance with directive ATEX 94/9/EC – zones 1 and 2.

Art. no.	Compressed air supply	Consumption compressed air	Max outlet pressure	Max flow rate	Connections compressed air inlet	Weight	Dimensions (LxWxH) (mm)	AH
1064	2-7 bar	200 l/min	7 bar	50 l/min	1/4" BSP (F)	6 kg	225x156x230	K
1065	2-7 bar	250 l/min	7 bar	100 l/min	3/8" BSP (F)	9 kg	250x175x250	
1066	2-7 bar	350 l/min	7 bar	160 l/min	1/2" BSP (F)	20 kg	360x220x365	

Stainless steel Pag. 180

# **ELECTRIC STAINLESS STEEL PUMPS**



Electric, selfpriming pumps, with pump body in stainless steel AISI 304, for the supply of fluids with particular chemical characteristics. It is recommended to check the compatibility of the fluid with the materials of the wetted pump components before use.



# Art. no. 6160

Electric, selfpriming vane pump for the transfer of fluids and aggressive liquids at low pressure; guarantees a constant flow and a low noise level.

Pump body in stainless steel AISI 304, rotor in NBR, on demand also available in EPDM or polyurethane.

Connection threads 3/4" (F) BSP.

Protection category IP 55.

Cable L. 1.5 m with plug included.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)
6160	230 VAC – 50 Hz	5.3 A	1360	0.75 Kw	4 bar	25 l/min	9 kg	240x290x180





# Art. no. 6132

Electric, selfpriming gear pump for the transfer of fluids and aggressive liquids; guarantees a constant flow and a low noise level.

Pump body in stainless steel AISI 304, gears in Kevlar®.

Connection threads 3/8" (F) BSP.

Protection category IP 55.

Cable L. 1.5 m with plug included.

Art. no.	Voltage	Current drain	Rpm	Power	Outlet pressure	Delivery	Weight	Dimensions (LxWxH) (mm)
6132	230 VAC – 50 Hz	5.3 A	1360	0.55 Kw	15 bar	11 l/min	7.5 kg	150x300x190





# Art. no. 6446

Electric, centrifugal pump for the supply of water based fluids. Pump body and rotor in stainless steel AISI 304.

Art. no	. Voltage	Current drain	Power	Outlet pressure	Delivery	Connection threads	Weight	Dimensions (LxWxH) (mm)
6446	230 VAC – 50 Hz	5 A	0.75 Kw	4 bar	160 l/min	1'1/4" BSP (F)	11 kg	296x206x186

# PRESSURE SPRAYERS IN PAINTED STEEL



Sprayers with container in painted steel for the spraying of detergents and low viscosity lubricating oils. The units can be used autonomously after a pressurization of the container with compressed air at 3 – 7 bar pressure. The delivery depends on the used nozzle. All units are equipped with a security valve calibrated at max. 7 bar. It is recommended to pressurize the container again when 4/5 of the total capacity have been dispensed.



# Art. no. 3316

Portable pressure sprayer in painted steel, with container of 16 l capacity, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.



Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3316	7 bar	161	1/4" BSP (M)	8.5 kg	400x310x700





Mobile pressure sprayer in painted steel, with container of 24 l capacity and two wheels, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.



Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)	W
3325	7 bar	241	1/4" BSP (M)	11 kg	370x340x820	N <sub>L</sub>



# Art. no. **3350**

Mobile pressure sprayer in painted steel, with container of 40 l capacity and two wheels, equipped with level gauge, antisplash funnel,  $7.5\ m$  – spiral hose, spray gun and lance with nozzle.



Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3350	5 bar	40 l	1/4" BSP (M)	15 kg	400x430x1020

Washing Pag. 182

Art. no. 3350

Art. no. **3325** 





Sprayers with container in stainless steel for the spraying of detergents. The units can be used autonomously after a pressurization of the container with compressed air at 3 – 7 bar pressure. The delivery depends on the used nozzle. All units are equipped with a security valve calibrated at max. 7 bar. It is recommended to pressurize the container again when 4/5 of the total capacity have been dispensed.



#### Art. no. 3318

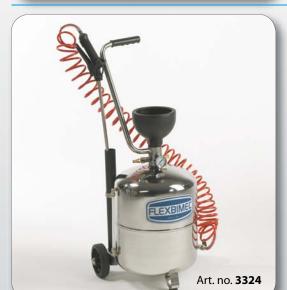
Portable pressure sprayer in stainless steel AISI 304, with container of 16 I capacity, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

#### Art. no. 3318/316

Portable pressure sprayer in stainless steel AISI 316, with container of 16 I capacity, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3318	7 bar	16 l	1/4" BSP (M)	11 kg	350x340x810
3318/316	7 bar	16 l	1/4" BSP (M)	11 kg	350x340x810





#### Art. no. 3324

Mobile pressure sprayer in stainless steel AISI 304, with container of 24 I capacity and two wheels, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

#### Art. no. 3324/316

Mobile pressure sprayer in stainless steel AISI 316, with container of 24 I capacity and two wheels, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

ı	Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
ı	3324	7 bar	24	1/4" BSP (M)	11 kg	370x340x820
ı	3324/316	7 bar	24	1/4" BSP (M)	11 kg	370x340x820





## Art. no. 3340

Mobile pressure sprayer in stainless steel AISI 304, with container of 40 I capacity and two wheels, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

#### Art. no. 3340/316

Mobile pressure sprayer in stainless steel AISI 316, with container of 40 I capacity and two wheels, equipped with level gauge, antisplash funnel, 7.5 m – spiral hose, spray gun and lance with nozzle.

ı	Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
۰	3340	5 bar	40 l	1/4" BSP (M)	15 kg	400x430x1020
	3340/316	5 bar	40 l	1/4" BSP (M)	15 kg	400x430x1020



Pag. 183 Washing



# PRESSURE SPRAYERS/FOAMERS IN STAINLESS STEEL



#### Art. no. 3323

Portable pressure sprayer and foamer in stainless steel AISI 304, with container of 24 I capacity, equipped with level gauge, antisplash funnel, 5 m – polyurethane hose, diameter 8 x 12 mm, spray gun and lance with nozzle.

Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3323	7 bar	24	1/4" BSP (M)	11 kg	400x310x700





#### Art. no. 3345

Portable pressure sprayer and foamer in stainless steel AlSI 304, with container of 40 I capacity, equipped with level gauge, antisplash funnel, 5 m – polyurethane hose, diameter  $8 \times 12 \text{ mm}$ , spray gun and lance with nozzle.

On demand also available in stainless steel AISI 316.

Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3345	5 bar	40 l	1/4" BSP (M)	16 kg	400x430x1020





# Art. no. **3352**

Mobile pressure sprayer in stainless steel AISI 304, with container of 24 I capacity and two wheels, equipped with level gauge, 7.5 m – spiral hose, spray gun, lance with nozzle and with detachable wide cover that enables the user to check and to clean easily the internal surface of the container.

## Art. no. **3354**

Same as art. no. 3352, but with 40 I - container.



Art. no.	Max inlet pressure	Capacity container	Connection threads	Weight	Dimensions (LxWxH) (mm)
3352	7 bar	24	1/4" BSP (M)	12 kg	450x450x900
3354	5 bar	40 l	1/4" BSP (M)	16 kg	450x450x1050



Washing Pag. 184



# PRESSURE SPRAYERS/FOAMERS IN STAINLESS STEEL



#### Art. no. 3320

Mobile pressure sprayer, composed of two wheels trolley with transportation base for plastic cans, pneumatic 1:1 – stainless steel piston pump, suction hose, 10 m – polyurethane hose, diameter 8 x 12 mm, rack for hose storage during transportation, spray gun and lance with nozzle.



Art. no.	Compressed - air supply	Compression ratio	Outlet pressure max	Connection threads	Weight	Dimensions (LxWxH) (mm)
3320	2 - 8 bar	1:1	8 bar	1/4" BSP (M)	19 kg	430x440x900





Art. no. 3385

#### **FOAMER SPRAYER HYDRA**

Foamer and sprayer unit HYDRA, wall-mounting version, designed for the mixture of water with detergents and for the generation of foam at low pressure.

These systems are an alternative to the classical pressure sprayers and offer the following advantages:

- Suction of the detergent directly from the can with the pure fluid guarantees a high autonomy in work;
- The included switchboard allows an accurate adjustment of the mixing proportion between detergent and water.

The unit is composed of a pneumatic 3:1 – stainless steel piston pump, spraying gun, spray lance with nozzle, 10 m – polyurethane hose, diameter 8 x 12 mm, with connections in stainless steel, cabinet in stainless steel AISI 304 and wall-mounting bracket.

ı	Art. no.	Compressed - air supply	Outlet pressure	Weight	Dimensions (LxWxH) (mm)
ı	3385	2-5 bar	6-15 bar	19.5 kg	400x160x600





Art. no. 3374

Foaming unit in stainless steel AISI 316, including 14 spraying/rinsing/foaming nozzles in different diameters and colours, for the adjustment of the mixing proportion between detergent and water and 2 m – PVC – suction hose for the suction of the used detergent from the can.

Connected to the water pipe system through a medium/high pressure pump (not included), this unit allows the generation of foam and subsequent rinsing by adjusting the position of the provided control lever.



Art. no.	Working pressure	Max inlet pressure	Max temperature water	Weight	Dimensions (LxWxH) (mm)
3374	3 - 250 bar	350 bar	80 ℃	2.5 kg	100x65x80



Pag. 185 Washing



# WASHING AND SPRAYING ACCESSORIES



Art. nos. 3326 - 3326M - 3326L

Spray gun with lance, suitable for the use with pressure sprayers, with tube in stainless steel and plastic, fan-shaped nozzle.

Art. no. 3329

Spray gun with twin lance, suitable for the dispensing of two different fluids, with tube and internal components in stainless steel, plastic, fan-shaped nozzle and cone in stainless steel.

Art. no.	Max working pressure	Max flow	Max working temperature	Connection threads	Lance length	Weight
3326	15 bar		50°C	1/2" BSP (F)	600 mm	0.31 kg
3326M					750 mm	0.35 kg
3326L		30 l/min	30 C		900 mm	0.39 kg
3329	10 bar			1/8" BSP (F)	630 mm	0.35 kg



#### Art. no. 7550

Rilsan® spiral hose, diameter 8 x 6 mm, length 7.5 m, connection threads 1/4" BSP (MM).

#### Art. no. **7553**

Rilsan® twin spiral hose, diameter 8 x 5 mm, length 10 m, connection threads 1/8" BSP (MM). Suitable for the connection to spray gun with twin lance (art. no. 3329).



## Art. no. **6871**

Plastic fan-shaped nozzle, suitable for the use with pressure sprayers,  $\emptyset$  1.1 mm, with 110° flat-fan pattern, including strainer in stainless steel and plastic impact protection.

#### Art. no. 6872

Stainless steel foam nozzle, delivery 16 l/min, connection 1/2" BSP (M), max. pressure 25 bar.

#### Art. no. 6873

Stainless steel foam nozzle, delivery 10 l/min, connection 1/2" BSP (M), max. pressure 25 bar.

#### Art. no. 6874

Plastic (PPS and GF) foam nozzle, delivery 17 l/min (at 3 bar), with 55° flat-fan pattern.

#### Art. no. 6875

Plastic fan-shaped nozzle, suitable for the use with pressure sprayers,  $\emptyset$  1.1 mm, with 110° flat-fan pattern, max. pressure 15 bar.

#### Art. no. **6876**

Stainless steel fan-shaped nozzle, suitable for the use with pressure sprayers,  $\emptyset$  1.1 mm, with 110° flat-fan pattern, max. pressure 25 bar.

#### Art. no. 6877

Super foam head nozzle (PP and GF), with flat-fan pattern, max. pressure 15 bar, connection 1/2" BSP (M).



## Art. no. 7704

Highly concentrated alcaline detergent, suitable for the generation of foam, in 20 l – plastic can.

Effective for cleaning car bodies or the canvas of trucks from tenacious dirt. Ideal also for washing fueling vehicles and the floors of garages, workshops or factory buildings. The fluid is biphasic as a concentrate, but it is homogenous in dilutions with water.

APPEARANCE: biphasic fluid; COLOUR OF SUPERIOR PHASE: green; SPECIFIC WEIGHT SUPERIOR PHASE: 1.010 +/- 0.01 g/ml; SPECIFIC WEIGHT IN INFERIOR PHASE: 1.275 +/- 0.01 g/ml; SOLUBILITY IN WATER: completely in the dilutions of use; PH – VALUE OF 1% SOL.: >13; BIODEGRADABILITY: more than 90%.

Washing Pag. 186



# WASHING AND SPRAYING ACCESSORIES



#### Art. no. 6801 - 6802 - 6805

Heavy duty water gun, suitable for the use with cold and hot water at low pressure, with trigger guard, and adjustable spraying nozzle. Body in brass and coating in blue rubber.

Art. no.	Max working pressure	Max flow	Max working temperature	Connection threads	Weight
6801	25 bar	60 l/min	90°C		0.94 kg
6802	12 bar	50 l/min	80°C	1/2" BSP (F)	0.44 kg
6805	25 bar	60 l/min	90°C		2.02 kg



## Art. no. 2101

Low pressure water gun handle, body in plastic (PP and GF), seals in Viton®, valve and spring in stainless steel AISI 316, connection threads 1/2" BSP (F).

#### Art. no. 2166

Dispensing gun for windshield washer fluid, body in plastic (PP and GF), seals in Viton®, valve and spring in stainless steel AISI 316, connection threads 1/2" BSP (F).

## Art. no. 2109

Dispensing gun for water at low pressure (max 30 bar), body in brass with coating in oilresistant rubber, connection threads 3/8" BSP (F).

#### Art. no. 6878

Water gun art. no. 2101, with rigid outlet and foaming nozzle in plastic (PP and GF), suitable for low pressure applications (3 – 6 bar), connection threads 1/2" BSP (F).

#### Art. no. **7406**

Low pressure wash gun (max 20 bar), with regulating screw, body in nickel-plated aluminium, connection threads 1/2" BSP (F).

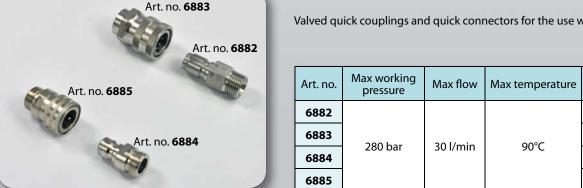
#### Art. no. 2183

Dispensing nozzle, body in anodized aluminium, impact resistant, with trigger guard, cartridge filter, Viton® gaskets, connections 1/2" BSP (F), with 1/2" BSP (M) inlet swivel in stainless steel and rigid plastic outlet, Ø 16 mm.



#### Art. no. 6882 - 6883 - 6884 - 6885

Valved quick couplings and quick connectors for the use with water at high pressure.



Washing

Connection

threads

3/8" BSP (M)

3/8" BSP (F)

1/2" BSP (M)

1/2" BSP (F)

Weight

0.05 kg

0.11 kg

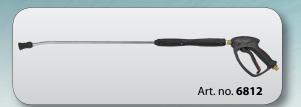
0.05 kg

0.11 kg



Art. no. 6857

# **WASHING AND SPRAYING ACCESSORIES**



#### Art. no. **6812** Complete wa

Complete wash gun with lance for hot water high pressure cleaners, with extension and stainless steel nozzle.

#### Art. no. 6853

High pressure wash lance in stainless steel, double pipe.

#### Art. no. 6857

High pressure wash lance in stainless steel.

#### Art. no. 6816-6817

Wash gun for hot water high pressure cleaners.

#### Art. no. 6818

Art. no. **6816** 

High pressure wash lance in stainless steel.

#### Art. no. 6819

High pressure wash lance in stainless steel, double pipe.



Art.	Max working pressure	Max flow	T. Max	Nozzle	Connection threads	Length extension	Weight
6812	160 bar	30 l/min	100°C		3/8" BSP (M)	700 mm	0.92 kg
6853			40 l/min			1050 mm	1.06 kg
6857	280 bar	40 l/min		Ø 0.45 – 25°	1/4" BSP (M)	900 mm	0.60 kg
6818			160°C			700 mm	
6819	220 bar	30 l/min					0.95 kg
6817	220 bar	30 I/MIN		-	1/4" BSP (M)	-	0.55 kg

# Art. no. 6821 Art. no. 6823 Kit 6820

#### Kit **6820**

Foaming kit, composed of high pressure cleaner wash gun, high pressure wash lance with extension (art. no. 6822) and foam lance with 1 I - plastic container (art. no. 6823).

#### Art no 6821

Wash gun for hot water high pressure cleaners with quick coupling.

# Art. no. **6822**

High pressure wash lance in stainless steel with extension, length 700 mm, and stainless steel nozzle (0.45 – 25°).

#### Art. no. 6823

Foam lance with 1 l - plastic container for detergent and foam delivery regulating screw.

Art. no.	Max working pressure	Max flow	Max temperature	Connection threads	Weight
6821	310 bar	40 l/min	160°C	M 22 x 1.5	0.90 kg
6822	250 bar	40 I/MIN	160 C	Quick coupling	0.60 kg
6823	160 bar	20 l/min	60°C	Quick coupling	0.57 kg



#### Art. no. **6800**

Wash gun for high pressure cleaners, with nozzle for straight water jet.

# Art. no. **6830**

Art. no. 6840

Wash gun with lance for high pressure cleaners, water jet adjustable through knob, with brass nozzle.

Art. no.	Max working pressure	Max flow	T. Max	Nozzle	Connection threads	Weight
6830	250 bar - 3625 psi		100°C		1/2"BSP (M)	1.60 kg
6800	60 bar - 850 psi	30 l/min	6006	Ø 1.5 – 25°		1.50 kg
6840	50 bar - 700 psi		60°C			1.50 kg

Washing Pag. 188





Wall-mounted chamois leather wringer, with wall bracket.

Art. no.	Diameter roller	Weight	Dimensions (LxWxH) (mm)	W
7740	40 mm	4.5 kg	300x420x160	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\



#### Art. no. **7741**

Wall-mounted chamois leather wringer, with wall bracket and tub with discharge valve in painted steel.

Art. no.	Diameter roller	Weight	Dimensions (LxWxH) (mm)	
7741	40 mm	13.5 kg	300x420x350	





#### Art. no. **7742**

Chamois leather wringer with self-supporting column for the fixation on the floor and tub with discharge valve in painted steel.

Art. no.	Diameter roller	Weight	Dimensions (LxWxH) (mm)	
7742	40 mm	22 kg	300x420x1020	





## Art. no. **7743**

Chamois leather wringer with self-supporting column for the fixation on the floor and tub with discharge valve in stainless steel.

A	Art. no.	Diameter roller	Weight	Dimensions (LxWxH) (mm)	W
	7743	40 mm	22 kg	300x420x1020	Nr.







Mobile parts cleaner in painted steel, with closed circuit of detergent fluid, consisting of storage container with 65 l capacity with two wheels and two castors, cleaning basin with closable and removable cover, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts, blow gun with rigid outlet. The system enables a continuous fluid circulation by pressurizing the container with compressed air at max. 0.5 bar.

Note: please use only suitable detergents and degreasing agents for the parts cleaning.



4	Art. no.	Compressed air supply	Max pressure	Capacity cleaning basin	Capacity container	Weight	Dimensions (LxWxH) (mm)
	5903	0.5 bar	0.5 bar	60 l	65 l	42 kg	560x700x1000





#### Art. no. 5908

Mobile parts cleaner in painted steel, with closed circuit of detergent fluid, consisting of cleaning basin with closable and removable cover, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts, blow gun with rigid outlet and shelf for the placing of plastic cans or drums, with 4 castors.

The system enables a continuous fluid circulation by the use of a pneumatic rotary pump in stainless steel (art. no. 1058).

Note: please use only suitable detergents and degreasing agents for the parts cleaning.

Art. no.	Compressed air supply	Max pressure	Capacity cleaning basin	Weight
Art. no. <b>5908</b>	Compressed air supply 1-4 bar		Capacity cleaning basin 60 l	Weight 36 kg



Dimensions (LxWxH) (mm)

560x700x810



#### Art. no. 5953

Mobile parts cleaner, with closed circuit of detergent fluid, consisting of cleaning basin in stainless steel AISI 304 with closable and removable cover, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts, blow gun with rigid outlet and shelf for the placing of plastic cans or drums, with 4 castors. The system enables a continuous fluid circulation by the use of a pneumatic rotary pump in stainless steel (art. no. 1058).

Note: please use only suitable detergents and degreasing agents for the parts cleaning.

Art. no.	Compressed air supply	Max pressure	Capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5953	4 bar	4 bar	60 l	36 kg	560x700x810



Washing Pag. 190





Stationary parts cleaner in painted steel, with closed circuit of detergent fluid, consisting of cleaning basin with 4 legs and closable and removable cover, hose with shower head, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts. The system enables a continuous fluid circulation at 0.5 bar pressure by the use of an electric immersion pump.

Note: please use only suitable detergents and degreasing agents for the parts cleaning.

	Voltage	Power	Current drain	Rpm	Protection category
Pump	230 Vac	60 W	0.40 A	2800	IP 54

Art. no.	Max pressure	Total capacity cleaning basin	Usable capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5904	0.5 bar	138 l	62 l	53 kg	500x700x1120





#### Art. no. 5905

Stationary parts cleaner in painted steel, with closed circuit of detergent fluid, consisting of cleaning basin with 4 legs and closable and removable cover, hose with shower head, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts, wooden footboard. The system enables a continuous fluid circulation at 0.5 bar pressure by the use of an electric immersion pump. The switch-on and switch-off of the pump is made through a pedal-operated switch.

Note: please use only suitable detergents and degreasing agents for the parts cleaning.

	Voltage	Power	Current drain	Rpm	Protection category
Pump	230 Vac	60 W	0.40 A	2800	IP 54

Α	rt. no.	Max pressure	Total capacity cleaning basin	Usable capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5	5905	0.5 bar	200 l	90 l	67 kg	500x1000x1120





#### Art. no. **5906**

Stationary parts cleaner in painted steel, with closed circuit of detergent fluid, consisting of cleaning basin with 4 legs and closable and removable cover, hose with shower head, fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts. The system enables a continuous fluid circulation by the use of a pneumatic rotary pump in stainless steel (art. no. 1058).



Note: please use only suitable detergents and degreasing agents for the parts cleaning.

Art. no.	Compressed air supply	Max pressure	Total capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5906	1 - 4 bar	4 bar	200 l	67 kg	500x1000x1120







Stationary parts cleaner in painted steel, provided for mounting on 208 I – original detergent drums.

The system enables a continuous fluid circulation by the use of a pneumatic rotary pump in stainless steel (art. no. 1058).

With fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts.

Optional:

Art. no. 4699

Empty, metal 208 I - drum.

Art. no.	Compressed air supply	Max pressure	Capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5945	1 – 4 bar	4 bar	50 l	36 kg	560x1000x300





#### Art. no. 5946

Stationary parts cleaner in painted steel, provided for mounting on 208  $\rm I$  – original detergent drums.

The system enables a continuous fluid circulation by the use of a pneumatic rotary pump in stainless steel (art. no. 1058).

With closable and removable cover, blow gun with rigid outlet and fluid-permeable cleaning brush which permits a continuous flow of the detergent and an accurate cleaning of parts.

On demand also available with 230 VAC / 50 Hz electric pump!

Optional:

Art. no. 4699

Empty, metal 208 I - drum.

Art. no.	Compressed air supply	Max pressure	Capacity cleaning basin	Weight	Dimensions (LxWxH) (mm)
5946	1 – 4 bar	4 bar	50 l	36 kg	560x700x300





## Art. no. 7705

Detergent for parts cleaners, in 20 I – plastic can.

To be used undilutedly, for a cleaning by degreasing in an immersion bath, by sprinkling in the basin or by brushing with the fluid-permeable cleaning brush. Rinsing not required.

The detergent has good degreasing properties, a medium evaporation rate, it does not damage the treated parts, it assures a drying without residues, has a low odor and irritation degree and a high flash point. Mineral greases, oils and protecting waxes are removed efficiently from painted surfaces, ferrous metals, aluminium and brass alloys, steel, glass, ceramics and plastic materials.

APPEARANCE AND COLOUR: clear, colourless liquid; PH – VALUE: not applicable (organic solvent); CONTENT OF PETROLS: <0.1 % weight ppm; SPECIFIC WEIGHT: 0.800 +/- 0.01 g/ml; CARBON CONTENT: not applicable; SOLUBILITY IN WATER: insoluble; FLASH POINT: >60°C; BOILING POINT: 185°C / 240°C (distillation range).

Washing Pag. 192





Portable, pneumatic tyre inflator with container of 16 I capacity, charging of compressed air manually, consisting of tyre inflating gun with pressure gauge (art. no. 7301) and 5 m – spiral hose.

The unit works autonomously once it has been pressurized with compressed air at max 7 bar pressure.



Weight	Dimensions (LxWxH) (mm)
10 kg	300x400x810





#### Art. no. 3524

Mobile, pneumatic tyre inflator with container of 24 l capacity, charging of compressed air manually, consisting of tyre inflating gun with pressure gauge (art. no. 7301) and 5 m - spiral hose.

The unit works autonomously once it has been pressurized with compressed air at max 7 bar pressure.

Weight	Dimensions (LxWxH) (mm)	H
12.5 kg	380x330x780	





## Art. no. **3526**

Portable, pneumatic tyre inflator with container of 16 I capacity, charging of compressed air manually or automatically by the use of a MF valve installed on the handle, consisting of tyre inflating gun with pressure gauge (art. no. 7301) and 5 m – spiral hose.

The unit works autonomously once it has been pressurized with compressed air at max 7 bar pressure.



Weight	Dimensions (LxWxH) (mm)	H
10 kg	300x400x810	

# **COMPRESSED AIR ACCESSORIES**





## Art. no. 7301

Tyre inflating gun with pressure gauge  $\emptyset$  60 mm, dual pressure scale (0 – 10 bar / 0 – 140 psi), pressure release button, clip-on connector, 300 mm – rubber hose, connection 1/4" BSP (M).

#### Art. no. 7304

Tyre inflating gun, Michelin type, with pressure gauge ø 80 mm in accordance with Directive 86/217/EC, dual pressure scale (0 - 10 bar / 0 - 140 psi), pressure release button, clip-on connector, 1500 mm – rubber hose, connection 1/4'' BSP (M).



#### Art. no. 7305

Tyre inflating gun with precision pressure gauge  $\emptyset$  80 mm, dual pressure scale (0 – 12 bar / 0 – 140 psi), air inlet safety system, clip-on connector, 500 mm – rubber hose, connection quick coupling 1/4".

#### Art. no. 7308

Tyre inflating gun, with digital pressure gauge, measuring units:  $bar - psi - kpa - kg/cm^2$ , dual pressure scale (0.2 – 12 bar / 0 - 140 psi), resolution +/- 0.02 bar, clip-on connector, 400 mm – rubber hose, connection quick coupling 1/4". Power supply: lithium batteries 3 V (1.5 V x 2).



## Art. no. 7306

Air blow gun, body in nickel-plated aluminium, with bayonet nut connector 1/4" BSP.

#### Art. no. 7307

Air blow gun with long rigid outlet, body in nickel-plated aluminium, with bayonet nut connector 1/4" BSP.



#### Art. no. 7330

Air blow gun, series Airset, ergonomic grip, body in technopolymer, nozzle in brass, outlet and internal springs in stainless steel, coating of the trigger in soft thermoplastic rubber to allow an accurate control of the air flow. Connection 1/4" BSP (F).

#### Art. no. 7331

Same as art. no. 7330, but with silencer to reduce the noise level.



# **COMPRESSED AIR TREATMENT COMPONENTS**



#### Art. no. 7200

Compressed air pressure regulator with manometer, air nipple 1/4" BSP (M) for hose connection and connection adapter 1/4" BSP (M – M) for the installation at the compressed air inlet of the pump.

Regulation range: 0 - 8 bar.



#### Art. no. 7180 - 7180/38 - 7180/12

Combined compressed air pressure regulator with manometer and air filter with automatic bleeding, with lockable regulating screw, air nipple for hose connection and connection adapter for the installation at the compressed air inlet of the pump.

Art. no.	7180	7180/38	7180/12
Connection threads	1/4" BSP (M)	3/8" BSP (M)	1/2" BSP (M)
Filtration degree (microns)	20	20	20
Regulation range	0 - 8 bar	0 - 8 bar	0 - 8 bar
Max air flow (I/min.)	850	1650	2310
Collection capacity condensate (cm <sup>3</sup> )	22 cc	55 cc	100 cc
Temperature range (°C)	5 - 50°C	5 - 50°C	5 - 50°C
Dimensions (LxWxH) (mm)	42x42x198	75x63x276	75x63x276



## Art. no. 7151 - 7151/38 - 7151/12

Air line lubricator, providing a proportional oil mist, enables a precise regulation of the lubricating oil even at low pressure. With adjustment screw and connection adapter for the installation at the compressed air inlet of the pump.

Art. no.	7151	7151/38	7151/12
Connection threads	1/4" BSP (M)	3/8" BSP (M)	1/2" BSP (M)
Max working pressure	8 bar	8 bar	8 bar
Max air flow (I/min.)	850	1650	2310
Capacity lubricator (cm <sup>3</sup> )	42 cc	76 cc	132 cc
Temperature range (°C)	5 - 50°C	5 - 50°C	5 - 50°C
Dimensions (LxWxH) (mm)	42x42x157	75x63x232	75x63x232



## Art. no. **7150 - 7150/38 - 7150/12**

Combined compressed air treatment kit, composed of pressure regulator with manometer, air filter with automatic bleeding, air line oil mist lubricator, lockable regulating screw, air nipple for hose connection and connection adapter for the installation at the compressed air inlet of the pump.

See technical data in the description of its components (art. nos. 7180 - 7180/38 - 7180/12 and art. nos. 7151 - 7151/38 - 7151/12).



# **COMPRESSED AIR PIPEWORK COMPONENTS AND ACCESSORIES**

Flexbimec provides a complete line of compressed air pipework components and accessories for the installation of a professional air pipework, adapted to the individual requirements of the customer. The pipes are made of electrostatic painted, extruded aluminium. They are calibrated and burred, and they are available in wall thicknesses of 1.5 mm and 2 mm for a max. pressure of 15 bar. All fittings are made of nickel-plated brass and are easy to install and to connect.











Calibrated pipes in extruded aluminium, in accordance with UNI 9006/1 and EN AW 6060 T6, suitable for the use with compressed air, water, inert gas or vacuum, with surface treatment in electrostatic painting in blue colour. Expansion coefficient: 0.024 mm/m°C).

Art. no. **9873** Diameter 20 mm, length 4 m. Art. no. **9874** Diameter 25 mm, length 4 m. Art. no. **9875** Diameter 32 mm, length 4 m.

On demand, pipes with Ø up to 80 mm.



Series	Description	Ø 20 mm x 1/2" M	Ø 25 mm x 3/4" M	Ø 32 mm x 1"M
9880	Straight male adapter	Art. no. <b>9880/20</b>	Art. no. 9880/25	Art. no. <b>9880/32</b>

Series	Description	Ø 20 mm x 1/2"F	Ø 25 mm x 3/4" F	Ø 32 mm x 1"F
9881	Straight female adapter	Art. no. 9881/20	Art. no. 9881/25	Art. no. <b>9881/32</b>

Series	Description	Ø 20 mm x 20 mm	Ø 25 mm x 25 mm	Ø 32 mm x 32 mm
9882	Intermediate straight connector	Art. no. 9882/20	Art. no. <b>9882/25</b>	Art. no. <b>9882/32</b>

Series	Description	Ø 20 mm x 20 mm	Ø 25 mm x 25 mm	Ø 32 mm x 32 mm
9883	Intermediate elbow connector 90°	Art. no. 9883/20	Art. no. <b>9883/25</b>	Art. no. 9883/32

Series	Description	Ø 20 mm x 20 mm	Ø 25 mm x 25 mm	Ø 32 mm x 32 mm
9879	Intermediate elbow connector 135°	Art. no. <b>9879/20</b>	Art. no. <b>9879/25</b>	Art. no. <b>9879/32</b>

Series	Description	Ø 20 mm x 1/2"F	Ø 25 mm x 3/4" F	Ø 32 mm x 1"F
9890	Elbow connector 90° for pipe/hose connection	Art. no. <b>9890/20</b>	Art. no. <b>9890/25</b>	Art. no. <b>9890/32</b>

Compressed air Pag. 196



# **COMPRESSED AIR PIPEWORK COMPONENTS AND ACCESSORIES**



Series	Description	Ø 20 mm x 20 mm	Ø 25 mm x 25 mm	Ø 32 mm x 32 mm
9884	Intermediate tee connector	Art. no. <b>9884/20</b>	Art. no. <b>9884/25</b>	Art. no. <b>9884/32</b>

Series	Description	Ø 20 mm x 1/2"F	Ø 25 mm x 3/4" F	Ø 32 mm x 1"F
9885	Elbow connector 90° with wall bracket	Art. no. <b>9885/20</b>	Art. no. <b>9885/25</b>	Art. no. <b>9885/32</b>

Series	Description	Ø 20 mm x 1/2"F	Ø 25 mm x 1/2" F
9886	2-ways manifold with wall bracket	Art. no. <b>9886/20</b>	Art. no. <b>9886/25</b>

Series	Description	1/2″F	3/4"F
9887	4-ways manifold with wall bracket	Art. no. 9887/20	Art. no. 9887/25



Series	Description	Ø 20 mm x 20 mm	Ø 25 mm x 25 mm	Ø 32 mm x 32 mm
9889	Intermediate ball valve	Art. no. <b>9889/20</b>	Art. no. <b>9889/25</b>	Art. no. <b>9889/32</b>

Series	Description	Ø 20 mm x 1/2" M	Ø 25 mm x 3/4" M
9888	Ball valve for pipe/hose connection	Art. no. 9888/20	Art. no. <b>9888/25</b>

Series	Description	Ø 20 mm	Ø 25 mm	Ø 32 mm
9877	Pipe clamp in steel M8	Art. no. <b>9877/20</b>	Art. no. <b>9877/25</b>	Art. no. <b>9877/32</b>

Series	Description	Ø 20 mm	Ø 25 mm	Ø 32 mm
9878	Pipe clamp in polymer M6	Art. no. <b>9878/20</b>	Art. no. <b>9878/25</b>	Art. no. <b>9878/32</b>

#### Art. no. 9871

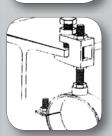
Metal wall support (height 165 mm, length 225 mm).

# Art. no. **9876**

Beam clip with M8 – thread, suitable for the use with pipe clamps art. no. 9877.









# HOSE REELS FOR COMPRESSED AIR, SERIES EASY ROLLER







Automatic rewind, spring-driven hose reel, with plastic enclosure (made of nylon and polypropylene) and pivoting wall bracket, suitable for the use with compressed air and water (temperature range:  $-10^{\circ}$ C  $- +60^{\circ}$ C) and for hoses of 8 x 12 mm (or 10 x 14 mm) with a max. length of 15 m (or 10 m). Inlet connection air: 1/4'' BSP.

Max working pressure: 20 bar.

The standard colour of the enclosure is red with yellow cover. Also available in blue with red cover, in dark grey or yellow (as images above).

#### Art. no. 9400+3610

Automatic rewind, spring-driven hose reel, series "Easy Roller", with polyurethane hose 8 x 12 mm and 10 m length. Standard connection threads 1/4" BSP.

#### Art. no. 9400+3615

Automatic rewind, spring-driven hose reel, series "Easy Roller", with polyurethane hose  $8 \times 12$  mm and 15 m length. Standard connection threads 1/4" BSP.

## Art. no. 9408

Automatic rewind, spring-driven hose reel, series "Easy Roller", with polyurethane hose 10 x 14 mm and 10 m length. Standard connection threads 3/8" BSP.

Art. no.	Hose length	Hose diameter	Connection threads	Max working pressure	Weight	Dimensions (LxWxH) (mm)	
9400+3610	10 m	0 v 12 mm	1 / 4" DCD (M)		8.1 kg		
9400+3615	15 m	8 x 12 mm	8 X 12 mm   1/4 BSP (W	1/4" BSP (M)	20 bar	0.21	220x310x380
9408	10 m	10 x 14 mm	3/8" BSP (M)	-	8.2 kg		







# HOSE REELS FOR COMPRESSED AIR, SERIES EASY ROLLER



#### Art. no. 9405

Automatic rewind, spring-driven hose reel, series "Easy Roller", with shaft and swivel in stainless steel AISI 303, pivoting wall bracket and 10 m – rubber hose 1/4" SAE 100 R1T.

Suitable for applications with a pressure up to 100 bar.

Standard colour blue, on demand also available in red.

Art. no.	Hose length	Hose diameter	Connection threads IN - OUT	Max working pressure	Weight	Dimensions (LxWxH) (mm)
9405	10 m	1/4"	1/2"BSP (M) – 1/4"RSP (F)	100 bar	10 kg	220x310x380



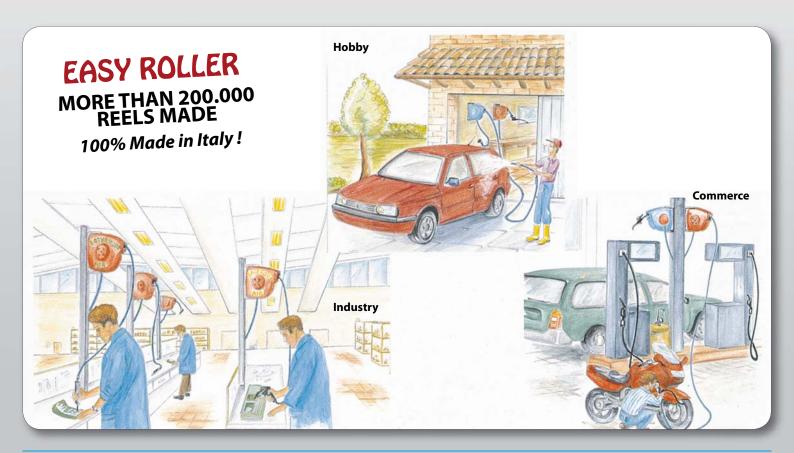
#### Art. no. 9409

Automatic rewind, spring-driven hose reel, series "Easy Roller", with shaft and swivel in stainless steel AISI 303, pivoting wall bracket and 5 m - low pressure synthetic rubber hose 1/2" (ø int. 13 mm x ø ext. 23 mm), suitable for the use with water (-30°C - +110°C).

The hose meets FDA food industry standards and thus is suitable for food industry applications.

Standard colour blue, on demand also available in red.

Art. no.	Hose length	Hose diameter	Connection threads IN - OUT	Max working pressure	Weight	Dimensions (LxWxH) (mm)
9409	5 m	1/2"	1/2"BSP (M) – 1/2"BSP (F)	15 bar	9 kg	220x310x380





Flexbimec manufactures a wide range of hose reels that guarantee a comfortable hose rewinding in all possible application fields and fluids such as:

- Lubricating oils and antifreeze
- Grease
- Compressed air
- Water at low or high pressure
- Fuels
- AdBlue®/DEF/AUS32

The use of hose reels provides more security in the workshop and increases the life of hoses since those are no longer rest upon the floor after use where they could be damaged.

In order to satisfy all application requirements the hose reels are available in two main materials:

- Epoxy powder-coat painted carbon steel
- Stainless steel AISI 304 (on demand also AISI 316)

The hose rewinding can be carried out:

- automatically by the use of a spring,
- manually by the use of a hand crank,
- by the use of a hydraulic motor,
- by the use of an electric motor.

The hose reel range can also be divided into 2 basic categories with regard on the hose diameter to be installed:

- Hose reels for hoses up to 1/2"
- Hose reels for hoses up to 1'1/2"

In order to be able to offer a suitable solution to any requirement existing in the market, various hose reel series have been developed.











The Flexbimec hose reel range consists of a big variety of versions that have been developed in order to meet the requirements of installation at the place of use. They can be classified according to their constructional characteristics, their form, their dimensions and materials into the following series:



#### Standard series

The most common, most economic and extremely approved version, suitable for hose diameters up to 1/2".





#### **Enclosed series**

Two metal enclosures provide an optimal protection of the hose and improve the esthetic effect of the installation.





#### Adjustable arms series EVO

In this version the outlet direction of the hose can be adjusted into various positions. Thus it permits a mounting of the hose reel also on the ceiling. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted.





#### **Heavy duty series**

The models of this series are suitable for applications under high mechanical demands.





#### **THIN REEL series**

Its innovative constructional design characterize the models of this series which is particularly suitable in applications with limited space in width thanks to its overall width of max. 150 mm, f. ex. for the installation inside of compact cabinets.



**Manual series** 

Manual Hose reel models.





#### **Special hose reels**

In this category can be found hose reels with special technical and/or constructive characteristics, such as those with electro-mechanical or hydraulic rewinding systems and hose reels with a hose guide system enabling a better rewinding.



All hose reels can be supplied without or with the requested hoses already mounted.

For an easier selection of the required hose reel model, please see the chart on catalogue page 202. Catalogue page 203 shall help you in choosing the suitable hose type and length.



The hose reel models which are marked with the ATEX symbol are available with the corresponding ATEX certificate, in accordance with directive ATEX 94/9/EC, art. 8.1. b) ii) – group II – category 2.

Pag. 201 Hose reels



	SERIE	Page	Ø Int.		Max installable hose length										
	SERIE	raye	w IIIC.	8 m	10 m	15 m	18 m	20 m	25 m	30 m	35 m	40 m	60 m	70 m	100 m
		204	1/4"	9016	9016	9016	9021	9021							
	STANDARD		3/8"	9016	9016	9016	9021	9021	9022						
			1/2"	9016	9016	9016	9021	9021							
		205	1/4"	9013	9013	9013	9023	9023							
	ENCLOSED		3/8"	9013	9013	9013	9023	9023	9025						
	ENCLOSED		1/2"	9013	9013	9013	9023	9023							
			3/4"	9024											
		207-208-209	1/4"	9074	9074	9074	9074	9074	9074	9074	9083	9086	9086	9088	9088
			3/8"	9074	9074	9074	9074	9074	9074	9074	9083	9086	9086	9088	9088
S			1/2"	9074	9074	9074	9074	9074	9074	9074	9083	9086	9086	9088	9088
핆		213	3/4"	9085	9085	9085	9085	9085	9085	9085	9085	9085			
REELS		212	1"	9099	9099	9099	9099	9099	9099	9099					
SE	ADJUSTABLE ARMS	206	1/4"	9090	9090	9090	9091	9091	9092						
ő	ADJUSTABLE ARIVIS		3/8"	9090	9090	9090	9091	9091	9092						
9			1/2"	9090	9090	9090	9092	9092	9093						
ᇳ		210-211	3/4"	9095	9095	9096	9097	9084	9098	9070					
STEEL	_		1"	9095	9096	9097	9098	9070							
S		214	1'1/4"	9031	9038	9038	9038	9038							
			1'1/2"	9039	9039	9039									
Ш	HEAVY DUTY	215	3/4"	9030	9030	9034	9034	9036	9036	9036					
z	HEAVY DOTT		1"	9030	9034	9034	9036	9036	9036						
PAINTED	«THINREEL»	216	1/2"	9504	9060	9060	9060	9060	9060						
4		221	1/2"	9072	9072	9072	9072	9072	9072	9072	9072	9072	9072	9072	9072
	HYDRAULIC REWINDING		3/4"	9075	9075	9075	9075	9075	9075	9075	9075	9075			
			1"	9075	9075	9075	9075	9075	9075	9075	9075	9075			
	ELECTRO-	220	1/2"	9076	9076	9076	9076	9076	9076	9076	9076	9076	9076	9076	9076
	MECHANICAL		3/4"	9079	9079	9079	9079	9079	9079	9079	9079	9079			
	REWINDING		1"	9079	9079	9079	9079	9079	9079	9079	9079	9079			
		218	1/4"	9251	9251	9251	9251	9251	9251	9252	9252	9252	9253	9253	9256
			3/8"	9251	9251	9251	9251	9251	9252	9252	9252	9253	9256	9256	
	MANUAL		1/2"	9251	9251	9251	9252	9252	9252	9253	9253	9256			
			3/4"	9254	9254	9254	9255	9255	9255						
			1"	9254	9254	9255	9255	9255							
	CEDIE	Page	Øilnt					Ma	x installab	le hose len	gth				

SEILLE	rage	Ø III.	8 m	10 m	15 m	18 m	20 m	25 m	30 m	35 m	40 m	60 m	70 m	100 m
	204	1/4"	9517	9517	9517	9522	9522							
STANDARD		3/8"	9517	9517	9517	9522	9522	9521						
		1/2"	9517	9517	9517	9522	9522							
	205	1/4"	9547	9547	9547	9548	9548							
ENGLOSED.		3/8"	9547	9547	9547	9548	9548	9549						
ENCLOSED		1/2"	9547	9547	9547	9548	9548							
_		3/4"	9546											
	207-208-209	1/4"	9574	9574	9574	9574	9574	9574	9574	9530	9586	9586	9589	9589
5		3/8"	9574	9574	9574	9574	9574	9574	9574	9530	9586	9586	9589	9589
5		1/2"	9574	9574	9574	9574	9574	9574	9574	9530	9586	9586	9589	9589
	213	3/4"	9585	9585	9585	9585	9585	9585	9585	9585	9585			
	212	1"	9599	9599	9599	9599	9599	9599	9599					
1	206	1/4"	9590	9590	9590	9591	9591	9592						
ADJUSTABLE ARMS		3/8"	9590	9590	9590	9591	9591	9592						
		1/2"	9590	9590	9590	9592	9592	9593						
7	210-211	3/4"	9595	9595	9596	9584	9534	9598	9570					
5		1"	9595	9596	9584	9598	9570							
	214	1'1/4"	9531	9538	9538	9538	9538							
		1'1/2"	9539	9539	9539									
HEAVY DUTY	215	3/4"	9529	9529	9525	9525	9536	9536	9536					
HEAVY DUTY		1"	9529	9525	9525	9536	9536	9536						
INCORAULIC	221	1/2"	9572	9572	9572	9572	9572	9572	9572	9572	9572	9572	9572	9572
HYDRAULIC REWINDING		3/4"	9575	9575	9575	9575	9575	9575	9575	9575	9575			
) KEWINDING		1"	9575	9575	9575	9575	9575	9575	9575	9575	9575			
ELECTRO-	220	1/2"	9576	9576	9576	9576	9576	9576	9576	9576	9576	9576	9576	9576
MECHANICAL		3/4"	9579	9579	9579	9579	9579	9579	9579	9579	9579			
ELECTRO- MECHANICAL REWINDING		1"	9579	9579	9579	9579	9579	9579	9579	9579	9579			
	219	1/4"	9551	9551	9551	9551	9551	9550	9550	9550	9550	9550	9550	
ח		3/8"	9551	9551	9551	9551	9551	9550	9550	9550	9550	9550	9550	
MANUAL SINGLE ARM SUPPORT		1/2"	9551	9551	9551	9550	9550	9550	9550	9550	9550			
SINGLE AKIVI SUPPOKI		3/4"	9558	9558	9558	9558	9558	9558	9558	9558				
		1"	9558	9558	9558	9558	9558							
	219	1/4"	9553	9553	9553	9553	9553	9552	9552	9552	9552	9552		
MANUAL		3/8"	9553	9553	9553	9553	9553	9552	9552	9552	9552	9552		
DOUBLE ARM		1/2"	9553	9553	9553	9552	9552	9552	9552	9552				
SUPPORT		3/4"	9559	9559	9559	9559	9559	9560						
		1"	9559	9559	9560	9560	9560							



In the following chart can be found the article numbers and descriptions of different hose types for the mounting on the reel as supply hoses in the most common lengths:

	Internal	Max working					HOSE L	ENGTH				
TEOIDTITE	hose Ø	pressure	8 m	10 m	15 m	20 m	25 m	30 m	35 m	40 m	50 m	60 m
	1/4"	400 bar	4508	4510	4515	4520						
	3/8"	330 bar		4710	4715	4720	4725	4730	4735	4740		
GREASE	1/2"	275 bar		4810	4815	4820	4825	4830	4835	4840		
	3/4"	215 bar		48810	48815	48820	48825	48830	48835	48840		
	1"	165 bar		488510	488515	488520	488525	488530	488535	488540		
	1/2"	160 bar	28708	28710	28715	28720	28725	28730	28735	28740	28750	28760
OIL	3/4"	105 bar	28908	28910	28915	28920	28925	28930	28935	28940		
	1"	88 bar	289508	289510	289515	289520	289525	289530				
COMPRESSED	3/8"	20 bar		3810	3815	3820	3825	3830	3835	3840	3850	3860
AIR	1/2"	20 bar		27710	27715	27720	27725	27730	27735	27740	27750	27760
	3/8"	20 bar		3810	3815	3820	3825	3830	3835	3840	3850	3860
WATER	1/2"	15 bar		18710	18715	18720	18725	18730	18735	18740	18750	18760
	3/4"	15 bar		18910	18915	18920	18925	18930	18935	18940		
	3/8"	330 bar		4710	4715	4720	4725	4730	4735	4740		
	3/8"	400 bar		4710AM	4715AM	4720AM	4725AM	4730AM	4735AM	4740AM		
DIESEL	3/4"	17 bar	28808	28810	28815	28820	28825	28830	28835	28840		
DILJLL	1"	17 bar	289608	289610	289615	289620	289625	289630				
	1'1/4"	10 bar	289708	289710	289715	289720	289725	289730				
	1'1/2"	10 bar	2899708	2899710	2899715	2899720	2899725	2899730				
ADBLUE®/	1/2"	10 bar	289808	289810	289815	289820	289825	289830	289835	289840	289850	289860
DEF/AUS32	3/4"	10 bar	289908	289910	289915	289890	289925	289930	289935	289940	289950	289960
PETROL	1"	16 bar	289408	289410	289415	289420	289425	289430				

In the following chart can be found the article numbers and descriptions of different hose types used as connection hoses and mounted at the hose reel inlet swivel joint in the most common lengths:

FLUID TYPE	Internal	Max working		Н	OSE LENGT	Н	
TEOIDTTTE	hose Ø	pressure	0.5 m	1 m	1.5 m	2 m	3 m
	1/4"	400 bar	45005	4501	45015	4502	4503
	3/8"	330 bar	47005	47001	47015	4702	4703
GREASE	1/2"	275 bar	48005	4801	48015	4802	4803
	3/4"	215 bar	488005	48810	48815	48820	48825
	1"	165 bar	4885005	488510	488515	488520	488525
	1/2"	160 bar	287005	28701	287015	28702	28703
OIL	3/4"	105 bar	289005	28901	289015	28902	28903
	1"	88 bar	2895005	289501	2895015	289502	289503
COMPRESSED	3/8"	20 bar	38005	3801	38015	3802	3803
AIR	1/2"	20 bar	270005	27701	277015	27702	27703
	3/8"	20 bar	38005	3801	38015	3802	3803
	1/2"	15 bar	187005	18701	187015	18702	18703
WATER	3/4"	15 bar	189005	18901	189015	18902	18903
	3/8"	330 bar	47005	4704	47015	4702	4703
	3/8"	400 bar	47005AM	4704AM	47015AM	4702AM	4703AM
	3/4"	16 bar	288005	28801	288015	28802	28803
DIESEL	1"	16 bar	2896005	289601	2896015	289602	289603
DIESEL	1'1/4"	10 bar	289708	289710	289715	289720	289725
	1'1/2"	10 bar	2899708	2899710	2899715	2899720	2899725
ADBLUE®/	1/2"	10 bar	2898005	289801	2898105	289802	289803
DEF/AUS32	3/4"	10 bar	2899005	289901	2899015	289902	289903
PETROL	1"	16 bar	2894005	289401	2894015	289402	289403



The hoses are supplied with swaged female connection threads (connecting nuts).

Example for reading the charts

FLUID

FLUID TYPE	Internal	Max working		Н	OSE LENG
12010 1112	hose Ø	pressure	0.5 m	1 m	1.5 m →
GREASE	1/4"	400 bar	45005	4501	45015
GNEASE →	3/8"	330 bar	47005	47001	47015
	1≰2"	275 <b>b</b> ar	48005	4801	48015
OIL	1/2\"	160 bax	287005	28701	287015

TOTAL LENGTH INCL. CONNECTION FITTING

DIAMETER MAX. WORKING PRESSURE

ART. NO. HOSE



Standard series

Ø max 1/2" - up to 20 m length

Ø max 3/8" - up to 25 m length

Art. nos. 9016-9021-9022

Automatic rewind, spring-driven hose reel, standard series, in painted steel, suitable for hoses of max 20 m length (Ø hose 1/2") or max 25 m length (Ø hose 3/8"). The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9016/HB)!







Pivoting wall mounting bracket



Art. nos. 9016-9021-9022

Art. nos. 9517-9521-9522

Automatic rewind, spring-driven hose reel, standard series, in stainless steel AISI 304, suitable for hoses of max 20 m length (Ø hose 1/2") or max 25 m length (Ø hose 3/8").

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.



On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9517/HB)!

(EX:) On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.



Art. no. **9765** 

Pivoting wall mounting bracket

Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9016				1/2"	15 m	13 kg	120 mm	9767	9951	250x570x450
9021	600 bar			1/2"	20 m	18 kg	150 mm	9768	9951	260x570x450
9022		1/2" (M) – 1/2" (F)	10 mm	3/8"	25 m	19 kg	150 mm	9768	9951	260x570x450
9517		1/2 (IVI) - 1/2 (F)	10 mm	1/2"	15 m	13 kg	120 mm	9760	9963	250x570x450
9521	200 bar			3/8"	25 m	19 kg	150 mm	9765	9963	260x570x450
9522				1/2"	20 m	18 kg	150 mm	9765	9963	260x570x450

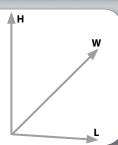


# (HB) Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









**Enclosed series** 

Ø max 1/2" - up to 20 m length

Ø max 3/8" - up to 25 m length

Art. nos. 9013 - 9023 - 9024 - 9025



Automatic rewind, spring-driven hose reel, enclosed series, in painted steel, suitable for hoses of max 20 m length (ø hose 1/2") or max 25 m length (ø hose 3/8").

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air, water and diesel.

Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information

at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9013/HB)!







Pivoting wall mounting bracket



Art. nos. 9546-9547-9548-9549

#### Art. nos. 9546-9547-9548-9549

Automatic rewind, spring-driven hose reel, enclosed series, in stainless steel AISI 304, suitable for hoses of max 20 m length (ø hose 1/2") or max 25 m length (ø hose 3/8"). The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure. Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9546/HB)!





Pivoting wall mounting bracket

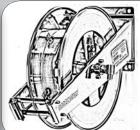
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9013	600 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	15 m	26 Kg	120 mm	9778	9951	
9023	600 bai	1/2 (IVI) - 1/2 (F)	10 mm	1/2	20 m	27 Kg		9778	9951	
9024	100 bar	1" (M) – 3/4" (F)	20 mm	3/4"	8 m	26 Kg	150 mm	9778	9969	130x550x450
9025	600 bar	1/2"(M) – 1/2"(F)	10 mm	3/8"	25 m	29 Kg	130 111111	9778	9951	130X330X430
9546	100 bar	1" (M) – 3/4" (F)	20 mm	3/4"	8 m	26 Kg		9754	9986	
9547				1/2"	15 m	26 Kg	120 mm	9754	9963	
9548	200 bar	1/2"(M) – 1/2"(F)	10 mm	1/2	20 m	27 Kg	150 mm	9754	9963	160x550x450
9549				3/8"	25 m	29 Kg	130 11111	9754	9963	160x550x450

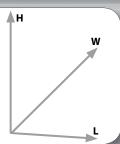


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 205 Hose reels



# Adjustable arms series EVO Ø max 1/2" – up to 25 m length

Art. nos. **9090-9091 9092-9093** 

#### Art. nos. 9090 - 9091 - 9092 - 9093

Automatic rewind, spring-driven hose reel, adjustable arms series EVO, in painted steel, suitable for hoses of max 25 m length and max diameter of 1/2". The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version galvanized steel, available on demand also in stainless steel AISI 304 or AISI 316). Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a spring brake kit (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9090/HB)!







#### Art. nos. 9590 - 9591 - 9592 - 9593

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO**, in stainless steel AISI 304, suitable for hoses of max 25 m length and maxdiameter of 1/2". The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version stainless steel AISI 304, available on demand also in stainless steel AISI 316). Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9590/HB)!







On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

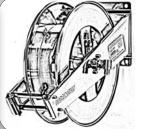
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 3/8" – 1/2"	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9090					15 m	12 kg	120 mm	9767	9951	240x550x450
9091	600 bar				20 m -15 m	13 kg	120 11111	9767	9951	240x550x450
9092	000 Dai				25 m –20 m	16 kg	150 mm	9768	9951	270x550x450
9093		1/2"(M) – 1/2"(F)	10 mm	1/2"	25 m	19 kg	200 mm	9758	9951	310x550x450
9590		1/2 (1/1) - 1/2 (F)	10 111111	1/2	15 m	12 kg	120 mm	9760	9963	240x550x450
9591	200 bar				20 m -15 m	13 kg	120 11111	9760	9963	240x550x450
9592	200 Dai				25 m –20 m	16 kg	150 mm	9765	9963	270x550x450
9593					25 m	19 kg	200 mm	9775	9963	310x550x450

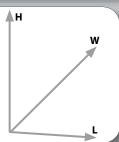


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









# Adjustable arms series

Ø max 1/2" - up to 35 m length



Automatic rewind, spring-driven hose reel, **adjustable arms series**, in painted steel, suitable for hoses of max 35 m length and max diameter of 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version galvanized steel, available on demand also in stainless steel AISI 304 or AISI 316). Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9074/HB)!



Art. no. **9777**Pivoting wall mounting bracket for Art. no. 9074 and Art. no. 9083.





#### Art. nos. 9574 - 9530

Automatic rewind, spring-driven hose reel, **adjustable arms series**, in stainless steel AISI 304, suitable for hoses of max 35 m length and max diameter of 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version stainless steel AISI 304, available on demand also in stainless steel AISI 316).

Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9574/HB)!



Art. no. **9770**Pivoting wall mounting bracket for Art. no. 9574
and Art. no. 9530.





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

Art. no	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9074	600 bar				30 m	25 kg		9777	9951	
9083	000 Dai	1/2"(M) – 1/2"(F)	10 mm	1/2"	35 m	26 kg	150 mm	9777	9951	260x590x600
9574	200 har	1/2 (IVI) - 1/2 (F)			30 m	25 kg		9770	9963	20083908000
9530	200 bar				35 m	26 kg		9770	9963	

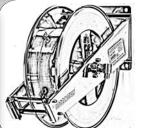


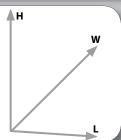
# **(HB)** Hydraulic spring brake kit

Art. nos. **9074 - 9083** 

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 207 Hose reels



# Adjustable arms series Ø max 1/2" – up to 60 m length



Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in painted steel, suitable for hoses of max 60 m length and max diameter of 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9086/HB)!





#### Art. no. 9586

Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in stainless steel AISI 304, suitable for hoses of max 60 m length and max diameter of 1/2". The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure. Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9586/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX  $94/9/EC-group\ II-category\ 2.$ 

Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Included swivel joint	Dimensions (LxWxH) (mm)
9086	600 bar	1/2"(M) – 1/2"(F)	10	1 /2"	60	50 V~	400	9951	F00vF00vF00
9586	200 bar	1/2 (IVI) – 1/2 (F)	10 mm	1/2″	60 m	50 Kg	400 mm	9963	590x590x590

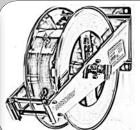


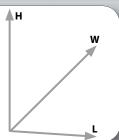
# **(HB)** Hydraulic spring brake kit

Art. no. 9586

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









# Adjustable arms series Ø max 1/2" – up to 100 m length

Art. no. 9088

Automatic rewind, spring-driven hose reel, **adjustable arms series** with triple spring, in painted steel, suitable for hoses of max 100 m length and max diameter of 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9088/HB)!





## Art. no. **9589**

Automatic rewind, spring-driven hose reel, **adjustable arms series** with triple spring, in stainless steel AISI 304, suitable for hoses of max 100 m length and max diameter of 1/2".

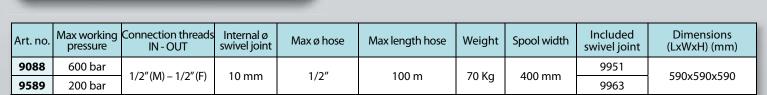
The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure. Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9589/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.



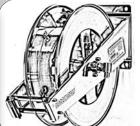


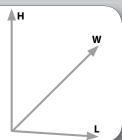
# **(HB)** Hydraulic spring brake kit

Art. no. 9589

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 209 Hose reels



# Adjustable arms series EVO Ø max 1" – up to 15 m length

#### Art. nos. 9095 - 9096 - 9097

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO**, in painted steel, suitable for hoses of max 18 m length in 3/4" and max 15 m length in 1".

This series is an upgraded version of the previous adjustable arms series. The wall bracket and the side frame are made in one single piece to increase the stability. A new type of spring is installed for the hose rewind. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version galvanized steel, available on demand also in stainless steel AISI 316). The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9095/HB)!



The wetted parts of the hose reel on demand are also available in stainless steel.



Pivoting wall mounting bracket



#### Art. nos. 9584 - 9595 - 9596

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO**, in stainless steel AISI 304, suitable for hoses of max 18 m length in 3/4" and max 15 m length in 1". This series is an upgraded version of the previous adjustable arms series. The wall bracket and the side frame are made in one single piece to increase the stability. A new type of spring is installed for the hose rewind. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version stainless steel AISI 304, available on demand also in stainless steel AISI 316). The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9584/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

Art. no. 9764 Art. no. 9765 Art. no. 9776 Pivoting wall

mounting bracket

Art. no	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 3/4" – 1"	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9095					10 m – 8 m	18 kg	150 mm	9768	9969	270x530x490
9096					15 m -12 m	22 kg	200 mm	9773	9969	310x530x490
9097	100 bar	1///// 1///	20 mm	1"	18 m -15 m	24 kg	300 mm	9769	9969	410x530x490
9595	100 Dai	1" (M) – 1" (F)	20 111111	1	10 m - 8 m	18 kg	150 mm	9765	9986	270x530x490
9596					15 m -12 m	22 kg	200 mm	9776	9986	310x530x490
9584					18 m -15 m	24 kg	300 mm	9764	9986	410x530x490

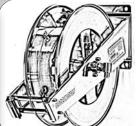


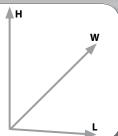
# (HB) Hydraulic spring brake kit

Art. nos. 9095-9096-9097

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









Art. nos. 9070-9084-9098

# **AUTOMATIC REWIND, SPRING - DRIVEN HOSE REELS**

# Adjustable arms series EVO Ø max 3/4" – up to 30 m length

Ø max 1" - up to 20 m length

Art. nos. 9070 - 9084 - 9098

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO** with twin spring, in painted steel, suitable for hoses of max 30 m length in 3/4" and max 20 m length in 1". The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version galvanized steel, available on demand also in stainless steel AISI 304 or AISI 316). Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9070/HB)!



Art. no. **9777**Pivoting wall mounting bracket for Art. no. 9098 - 9084.

Art. no. **9769**Pivoting wall mounting bracket for Art. no. 9070.





Art. nos. 9534 - 9570 - 9598

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO** with twin spring, in stainless steel AISI 304, suitable for hoses of max 30 m length in 3/4" and max 20 m length in 1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version stainless steel AISI 304, available on demand also in stainless steel AISI 316).

Please see catalogue pages 228 and 229 for the selection of the required hoses. On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9534/HB)!



Art. no. **9770**Pivoting wall mounting bracket for Art. no. 9598 - 9534.

Art. no. **9764**Pivoting wall mounting bracket for Art. no. 9570.



Ex

On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

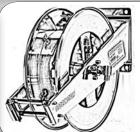
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 3/4" – 1"	Weight	Spool width	Suitable pivoting wall bracket		Dimensions (LxWxH) (mm)
9084					20 m - 15 m	27 kg	150 mm	9777	9969	270x590x600
9098					25 m - 18 m	30 kg	200 mm	9777	9969	320x590x700
9070	100 bar	1// (NA) 1// (E)	20 mm	1″	30 m - 20 m	32 kg	300 mm	9769	9969	460x590x700
9534	100 bar	1" (M) – 1" (F)			20 m - 15 m	27 kg	150 mm	9770	9986	270x590x600
9598					25 m - 18 m	30 kg	200 mm	9770	9986	320x590x700
9570					30 m - 20 m	32 kg	300 mm	9764	9986	460x590x700

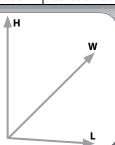


# (HB) Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 211 Hose reels



# Adjustable arms series Ø max 1" - up to 30 m length



#### Art. no. 9099

Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in painted steel, suitable for hoses of max 30 m length in 1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, diesel, compressed air and water at low pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9099/HB)!





#### Art. no. **9599**

Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in stainless steel AISI 304, suitable for hoses of max 30 m length in 1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, diesel, compressed air and water at low pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9599/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

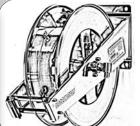
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Included swivel joint	Dimensions (LxWxH) (mm)		
9099	100 bar	1"(\) 1"(\)	20 mm	1"	20 m	EO Va	400 mm	9969	E00v6E0vE00		
9599	100 bar	100 bar 1"(M) – 1"(F)	20 mm	1"	30 m	n 50 Kg	50 Kg   400	400 11111	9986	590x650x590	

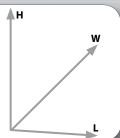


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









# Adjustable arms series Ø max 3/4" - up to 40 m length



#### Art. no. 9085

Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in painted steel, suitable for hoses of max 40 m length in 3/4".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9085/HB)!







#### Art. no. 9585

Automatic rewind, spring-driven hose reel, **adjustable arms series** with twin spring, in stainless steel AISI 304, suitable for hoses of max 40 m length in 3/4".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/**HB**" to the article number (f. ex. 9585/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

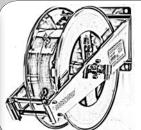
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Included swivel joint	Dimensions (LxWxH) (mm)
9085	100 bar	1"(NA) 1"(F)	20 mm	3/4"	40 m	50 Ka	400 mm	9969	590x650x590
9585	100 bar	00 bar 1"(M) – 1"(F)		3/4	40 m	30 Kg	400 mm	9986	290X020X290

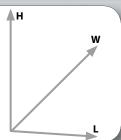


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 213 Hose reels



## **Adjustable arms series EVO-MY10**

Ø max 1'1/4" – up to 20 m length

Ø max 1'1/2" – up to 15 m length

Art. nos. 9031 - 9038 - 9039

Art. nos. 9031 - 9038 - 9039

Automatic rewind, spring-driven hose reel, **adjustable arms series-EVO**, in painted steel, suitable for applications with high delivery rates and for hoses of max 20 m length in 1'1/4" and max 15 m length in 1'1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version galvanized steel, available on demand also in stainless steel AISI 304 or AISI 316).

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9031/HB)!





Art. nos. 9531 - 9538 - 9539

Automatic rewind, spring-driven hose reel, **adjustable arms series EVO**, in stainless steel AISI 304, suitable for applications with high delivery rates and for hoses of max 20 m length in 1'1/4" and max 15 m length in 1'1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, diesel, compressed air and water. From the inlet swivel joint the fluid flows through an interchangeable hose connection adapter assembly on which the hose is mounted (standard version stainless steel AISI 304, available on demand also in stainless steel AISI 316). Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9531/HB)!





On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.

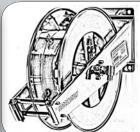
Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose	Weight	Spool width	Included swivel joint	Dimensions (LxWxH) (mm)	
9031		1/1/A"/NA) 1/1/A"/F)	2E mm	1′1/4″	8 m	18 kg	200 mm	9982	330x650x600	
9038		1′ 1/4″ (M) – 1′ 1/4″ (F)	25 mm	1 1/4	20 m	49 kg	400 mm	9982	590x650x600	
9039	20 bar	1'1/2"(M) – 1'1/2"(F)	32 mm	1′1/2″	15 m 50 k		400 111111	9983	39000300000	
9531	20 Dai	1'1/4"(M) 1'1/4"(E)	25 mm	1′1/4″	8 m	18 kg	200 mm	9982	330x650x600	
9538		1' 1/4" (M) – 1' 1/4" (F)		1 1/4	20 m	49 kg	400 mm	9982	590x650x600	
9539		1'1/2"(M) – 1'1/2"(F)	32 mm	1′1/2″	15 m	50 kg	400 11111	9983	39080308000	

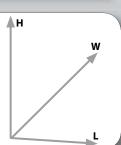


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.









# Heavy duty series Ø max 1" - up to 25 m length



Art. nos. 9030 - 9034 - 9036

Automatic rewind, spring-driven hose reel, heavy duty series, in painted steel, suitable for hoses of max 30 m length in 3/4" or max 25 m length in 1". The Art. nos. 9036 is equipped with a twin spring for the hose rewind.

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, diesel, compressed air and water at low pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.

On demand the hose reels can also be supplied with a **spring brake kit** (see information at the end of this page!); please add suffix "/HB" to the article number (f. ex. 9034/HB)!







Art. nos. 9529 - 9525 - 9536

Automatic rewind, spring-driven hose reel, heavy duty series, in stainless steel AISI 304, suitable for hoses of max 30 m length in 3/4" or max 25 m length in 1". The Art. nos. 9536 is equipped with a twin spring for the hose rewind.

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, diesel, compressed air and water at low pressure.



On demand these stainless steel hose reels can be supplied in accordance with directive ATEX 94/9/EC – group II – category 2.



Art. no	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint		Max length hose 3/4" – 1"	Weight	Spool width	Suitable pivoting wall bracket	Included swivel joint	Dimensions (LxWxH) (mm)
9030					12 m - 8 m	21 Kg	150 mm	9768	9969	295x530x450
9034			20	1″	18 m - 15 m	24 Kg	300 mm	9769	9969	440x530x450
9036	100 bar	1"(M) – 1"(F)			30 m - 25 m	36 Kg	400 mm	-	9969	540x530x540
9529	100 Dai	1 (171) – 1 (F)	20 mm		12 m - 8 m	21 Kg	150 mm	9765	9986	295x530x450
9525					18 m - 15 m	24 Kg	300 mm	9764	9986	440x530x450
9536					30 m - 25 m	36 Kg	400 mm	-	9986	540x530x540

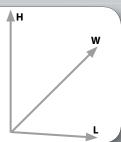


# **(HB)** Hydraulic spring brake kit

Safety device for the controlled rewind of hoses, installable on all spring-driven hose reel models, eliminating the dangers caused by an uncontrolled rewind or a sudden release of the hose when unwinded during its use.







Pag. 215 Hose reels



# Ø max 1/2" - 8 m length



#### Art. no. 9504

Automatic rewind, spring-driven hose reel, in painted steel, suitable for hoses of max 8 m length (ø hose 1/2") or max 15 m length (ø hose 1/4").

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.

#### Art. no. 9505

Hose reels as Art. no. 9504 with stainless steel shaft for AdBlue® and water-based fluids applications.





Art. no.	Max working pressure	Connection threads IN - OUT	Max length hose 1/2" – 1/4"	Spool width	Shaft	Weight	Dimensions (LxWxH) (mm)
9504	100 bar	1/2" (F) – 1/2" (F)	8 - 15 m	75 mm	Brass	O ka	394 x 146 x 332
9505	15 bar	1/2 (F) = 1/2 (F)	0 - 15111	75 111111	Stainless steel AISI 304	9 kg	394 X 140 X 332





# **Series THIN REEL**

Ø max 1/2" - 25 m length

## Art. no. 9060

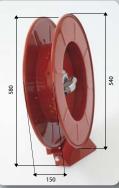
Automatic rewind, spring-driven hose reel, **series THIN REEL**, in painted steel, suitable for hoses of max 25 m length and max diameter of 1/2".

Its innovative constructional design characterize the models of this series which is particularly suitable in applications with limited space in width thanks to its overall width of max 150 mm, f. ex. for the installation inside of compact cabinets.

This hose reel is equipped with a swivelling bracket which allows a rotation of 90° so that a laterally installed reel can be used then forward-facing and can be repositioned easily again after use.

Please see catalogue pages 228 and 229 for the selection of the required hoses.





Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint		Max length hose	Spool width	Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9060	200 bar	1/2" (M) – 1/2" (M)	12 mm	1/2"	25 m	120 mm	9951	14 Kg	150x540x580



# **VACUUM / SUCTION HOSE REELS**





## Art. no. 9078

Automatic rewind, spring-driven hose reel, in painted steel, provided for the suction of

air or dust through suitable hoses with int.  $\emptyset$  50 mm (2") and a max length of 20 m. The hose reel is supplied without hose.

On demand the required hoses are also available.



Art. no.	Connection	Hose reel material	Weight	Dimensions (LxWxH) (mm)
9078	Int. ø 50 mm	Carbon steel	40 kg	600 x 700 x 800





# Art. no. **9578**

Automatic rewind, spring-driven hose reel, in stainless steel AISI 304, provided for the suction of air or dust through suitable hoses with int.  $\emptyset$  50 mm (2") and a max length of 20 m. The hose reel is supplied without hose.

On demand the required hoses are also available.



Art. no.	Connection	Hose reel material	Weight	Dimensions (LxWxH) (mm)
9578	Int. ø 50 mm	Stainless steel AISI 304	40 kg	600 x 700 x 800





# LS series Ø max 1/2" up to 50 m length and max Ø 1" up to 20 m length

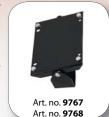


Art. nos. 9251 - 9252 - 9253 - 9256

Manual, hand crank hose reel, **LS series**, in black painted steel, suitable for hoses of max 50 m length in 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water at low and high pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.



Pivoting wall mounting bracket



Art. no. 9254

Manual, hand crank hose reel, **LS series**, in black painted steel, suitable for hoses of max 12 m length in 1" or max 15 m length in 3/4".

The hose reel is supplied without hoses and can be used with hoses for the supply of diesel, compressed air and water at low pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.



Pivoting wall mounting bracket

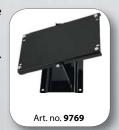


Art. no. 9255

Manual, hand crank hose reel, **LS series**, in black painted steel, suitable for hoses of max 20 m length in 1" or max 25 m length in 3/4".

The hose reel is supplied without hoses and can be used with hoses for the supply of diesel, compressed air and water at low pressure.

Please see catalogue pages 228 and 229 for the selection of the required hoses.



Pivoting wall mounting bracket

Art. no.	Max working pressure	Connection threads IN - OUT			Max length hose 1/4" - 3/8" - 1/2"	Spool width	Suitable pivoting wall bracket	Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9251					25 - 20 - 15 m	120 mm	9767		8 kg	200 v 520 v 400
9252	600 bar	1/2///// 1/2///5)	10 mm	1/2"	50 - 35 - 25 m	150 mm	9768	0051	9 kg	280 x 530 x 480
9253	600 bar	1/2" (M) – 1/2" (F)		.,_	70 - 50 - 35 m	200 mm	9773	9951	12 kg	320 x 530 x 480
9256					100 - 70 - 50 m	400 mm	9769		12 kg	320 X 330 X 460

Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint		Max length hose 3/4" – 1"	Spool width	Suitable pivoting wall bracket	Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9254	100 hau	1"(M) – 1"(M)	20	1"	15 - 12 m	200 mm	9773	0073	12 kg	320 x 530 x 480
9255	100 bar		20 mm	1"	25 - 20 m	400 mm	9769	9973	15 kg	480 x 530 x 480



## Ø max 1/2" - up to 50 m length and max Ø 1" up to 20 m length



#### Art. no. 9551

Manual, hand crank hose reel, in stainless steel AISI 304, with **single arm support**, suitable for hoses of max 20 m length in  $\emptyset$  3/8".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.



## Art. no. 9553

Manual, hand crank hose reel, in stainless steel AISI 304, with **double arm support**, suitable for hoses of max 20 m length in  $\emptyset$  3/8".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.



#### Art. nos. 9552 - 9559 - 9560

Manual, hand crank hose reel, in stainless steel AISI 304, with **double arm support**, suitable for hoses of max 35 m length in  $\emptyset$  1/2" and max 20 m length in  $\emptyset$  1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.



## Art. nos. **9550 - 9558**

Manual, hand crank hose reel, in stainless steel AISI 304, with **single arm support**, suitable for hoses of max 50 m length in  $\emptyset$  1/2" and max 20 m length in  $\emptyset$  1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, antifreeze, grease, compressed air and water.

Art. no.	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max. ø hose	Max length hose 1/4" - 3/8" - 1/2" 3/4" - 1"	Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9551					22 - 20 - 15 m		9 Kg	300x390x330
9553	200 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	22 - 20 - 15 m	0063	10 Kg	320x400x400
9550		1/2 (IVI) - 1/2 (F)	10111111	1/2	80 - 70 - 50 m	9963	15 Kg	370x500x460
9552					60 - 50 - 35 m		13 Kg	300x500x460
9558					35 m - 20 m		13 Kg	550x340x460
9559	100 bar	1" (M) – 3/4" (M)	20 mm	1″	20 m - 10 m	9986	14 Kg	500x270x460
9560					25 m - 20 m		15 Kg	500x270x460



## **MOTOR OPERATED HOSE REELS**





#### Art. nos. 9076 - 9576

Hose reel, available in painted or in stainless steel AISI 304, with **electric motor for hose rewind**. The motor is connected to an external reduction gear with clutch torque limiter. Suitable for hoses of max 100 m length in 1/2".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, grease, antifreeze, compressed air and water.

The hose can be unwinded manually, wheras the rewind is made by activating an electric 12 VDC motor by means of a small control switchboard.

Optional: High frequency transmitter (433.9 MHz) with remote control to enable also an activation from a distance (= Art. nos. **8412**).

Voltage	Power	Torque electric motor	Current drain	Protection category	Rpm	Max torque reduction gear
12 VDC	200 W	0.6 N/m	20 A	IP 54 S2	2800	65 N/m

Α	rt. no.	Hose reel material	Max working pressure	Connection threads IN - OUT	Internal diameter swivel joint	Max ø hose	Max length hose 1/4" – 3/8" – 1/2"	Spool width	Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9	9076	Painted steel	600 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	130 - 120 - 100 m	400 mm	9951	52 kg	800x620x630
9	9576	Stainless steel AISI 304	200 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	130 - 120 - 100 m	400 mm	9963	52 kg	800x620x630





#### Art. nos. 9079 - 9579

Hose reel, available in painted or in stainless steel AISI 304, with **electric motor for hose rewind**. The motor is connected to an external reduction gear with clutch torque limiter. Suitable for hoses of max 40 m length in 1".

The hose reel is supplied without hoses and can be used with hoses for the supply of diesel, compressed air and water.

The hose can be unwinded manually, wheras the rewind is made by activating an electric 12 VDC motor by means of a small control switchboard.

Optional: High frequency transmitter (433.9 MHz) with remote control to enable also an activation from a distance (= Art. nos. 8412).

## Technical data rewind system:

Voltage	Power	Torque electric motor	Current drain	Protection category	Rpm	Max torque reduction gear
12 VDC	200 W	0.6 N/m	20 A	IP 54 S2	2800	65 N/m

Art. no.	Hose reel material	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 3/4" – 1"		Included swivel joint	Weight	Dimensions (LxWxH) (mm)
9079	Painted steel	100 bar	1"(M) – 3/4"(F)	20 mm	1″	50 – 40 m	400 mm	9969	58 kg	800x620x630
9579	Stainless steel AISI 304	100 bar	1"(M) – 3/4"(F)	20 mm	1″	50 – 40 m	400 mm	9986	55 kg	800x620x630







### Art. nos. 9072-9075-9572-9575

Hose reel, available in painted or in stainless steel AISI 304, with hydraulic motor for hose rewind. Suitable for hoses of max 100 m length in 1/2" or max 40 m length in 1".

The hose reel is supplied without hoses and can be used with hoses for the supply of oils, grease, antifreeze, diesel, compressed air and water.

Art. no.	Hose reel material	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 1/4" – 3/8" – 1/2"	Spool width	Included swivel joint	Weight	Dimensions (LxWxH) (mm)	w
9072	Painted steel	600 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	130 - 120 - 100 m	400 mm	9951	50 kg	800x620x630	L
9572	Stainless steel AISI 304	200 bar	1/2"(M) – 1/2"(F)	10 mm	1/2"	130 - 120 - 100 m	400 mm	9963	50 kg	800x620x630	
Art. no.	Hose reel material	Max working pressure	Connection threads IN - OUT	Internal ø swivel joint	Max ø hose	Max length hose 3/4" – 1"	Spool width	Included swivel joint	Weight	Dimensions (LxWxH) (mm)	W
9075	Painted steel	100 bar	1"(M) – 3/4"(F)	20 mm	1″	50 – 40 m	400 mm	9969	50 kg	800x620x630	L
9575	Stainless steel AISI 304	100 bar	1"(M) – 3/4"(F)	20 mm	1"	50 – 40 m	400 mm	9986	50 kg	800x620x630	



## Art. no. 9089

Electro-hydraulic control kit, provided for the installation on the hydraulic motor of hose reels Art. nos. 9072-9075-9572-9575, composed of electric gear pump, electric control switchboard, 5 m inlet and outlet hoses,  $16\,l$  – container and pressure regulating valve.



Pressure regulating valve for the control of the rewind strength.

Art. no.	Rewind pressure	Adjustment range	Voltage	Capacity oil container	Weight
9089	20 bar	0.5 - 20 bar	230 Vac	16 l	16 kg

Pag. 221 Hose reels

## **HOSE REELS FOR WELDING**





## Art. no. 9270

Automatic rewind, spring-driven hose reel, in painted steel, provided for the installation of max 10 m – twin hose in 1/2", with hose inlet connection fittings, suitable to connect welding equipment.

The hose reel is supplied without hoses and can be used with twin hoses (blue - red) for welding gases oxygen and acetylene in SBR/EPDM according to norm EN 559:1994.

On demand also available in stainless steel AISI 304.

Art. no.	Hose reel material	Max working pressure	Connection threads IN - OUT	Max length hose	Max operating temperature	Weight	Dimensions (LxWxH) (mm)
9270	Painted steel	200 bar	1/2" BSP (M) – 1/2" BSP (F)	10 m	90°C	18 kg	280x610x640





#### Art. no. 9418

Automatic rewind, spring-driven hose reel, in painted steel, with 20 m – twin hose (blue - red) in  $5/16'' - 2 \times 8$  mm for welding gases oxygen and acetylene (in SBR/EPDM according to norm EN 559:1994 max 20 bar -  $90^{\circ}$ C), hose inlet connection fittings, shaft and swivel joint in brass; suitable to connect welding equipment.

On demand also available in stainless steel AISI 304.

Art. no	Hose reel material	Max working pressure	Connection threads IN - OUT	Max length hose	Max operating temperature	Weight	Dimensions (LxWxH) (mm)
9418	Painted steel	20 bar	3/8" BSP (F) – 3/8" BSP (F)	20 m	150 mm	32 kg	280x610x640





## **EXHAUST EXTRACTION HOSE REELS AND HOSES**



#### Art. no. 9210

Automatic rewind, spring-driven hose reel, in painted steel, provided for exhaust extraction, with crush proof hose in different diameters and lengths, hose stop bumper and beak nozzle with diaphragm lid.

Art. no.	Suitable for hose diameter	Max hose length
9210/7510	Ø 75 mm	10 m
9210/7515	Ø 75 mm	15 m
9210/10010	Ø 100 mm	10 m
9210/10015	Ø 100 mm	15 m
9210/12510	Ø 125 mm	10 m
9210/12515	Ø 125 mm	15 m
9210/15010	Ø 150 mm	10 m



## Art. no. **9212**

Automatic rewind, spring-driven hose reel, in painted steel, provided for exhaust extraction, with electric centrifugal fan, crush proof hose in different diameters and lengths, hose stop bumper and beak nozzle with diaphragm lid.

Art. no.	Suitable for hose diameter	Max hose length	Power	Voltage
9212/6010	Ø 60 mm	10 m	0.37 kW	380 VAC / 50 Hz
9212/7510	Ø 75 mm	10 m	0.75 kW	380 VAC / 50 Hz
9212/7515	Ø 75 mm	15 m	0.75 kW	380 VAC / 50 Hz
9212/10010	Ø 100 mm	10 m	0.75 kW	380 VAC / 50 Hz
9212/10015	Ø 100 mm	15 m	0.75 kW	380 VAC / 50 Hz
9212/12510	Ø 125 mm	10 m	0.75 kW	380 VAC / 50 Hz
9212/12515	Ø 125 mm	15 m	0.75 kW	380 VAC / 50 Hz
9212/15010	Ø 150 mm	10 m	1.1 kW	380 VAC / 50 Hz



## Art. no. **9214**

Miniset with electric centrifugal fan, double crush proof hose in different diameters and lengths, hose stop bumper and beak nozzle with diaphragm lid, provided for exhaust extraction, suitable for the use in 1 or 2 posts.

Art. no.	Suitable for hose diameter	Max hose length	Power	Voltage
9214/7510	Ø 75 mm	10 m	0.75 kW	380 VAC / 50 Hz
9214/7515	Ø 75 mm	15 m	0.75 kW	380 VAC / 50 Hz
9214/10010	Ø 100 mm	10 m	0.75 kW	380 VAC / 50 Hz
9214/10015	Ø 100 mm	15 m	0.75 kW	380 VAC / 50 Hz
9214/12510	Ø 125 mm	10 m	0.75 kW	380 VAC / 50 Hz
9214/12515	Ø 125 mm	15 m	0.75 kW	380 VAC / 50 Hz
9214/15010	Ø 150 mm	10 m	1.1 kW	380 VAC / 50 Hz



### Art. no. 9216 - Art. no. 9218

Wall mounted suction system for exhaust extraction for single or two work stations. It's inclusive of a fan with backward blade fan wheel , crush-proof hose in different diameters and lengths, hose stop bumper and beak nozzle with diaphragm lid.

Art. no.	Suitable for hose diameter	Max hose length	Power	Voltage
9216/75075	Ø 75 mm	7.5 m	0.75 kW	380 VAC / 50 Hz
9216/7510	Ø 75 mm	10 m	0.75 kW	380 VAC / 50 Hz
9216/100075	Ø 100 mm	7.5 m	0.75 kW	380 VAC / 50 Hz
9216/10010	Ø 100 mm	10 m	0.75 kW	380 VAC / 50 Hz
9218/75075	Ø 75 mm	7.5 m	1.1 kW	380 VAC / 50 Hz
9218/7510	Ø 75 mm	10 m	1.1 kW	380 VAC / 50 Hz
9218/100075	Ø 100 mm	7.5 m	1.1 kW	380 VAC / 50 Hz
9218/10010	Ø 100 mm	10 m	1.1 kW	380 VAC / 50 Hz

Pag. 223 Hose reels

## **SWIVEL JOINTS FOR HOSE REELS**





90° - high pressure swivel joints in galvanized steel for the use with painted hose reel models for hoses up to 1/2".

Art. no. 9950 Recommended for high pressure applications with grease.

Art. no. **9951** Recommended for usual pressure applications with grease or oils (this is the standard swivel joint mounted on all painted steel hose reels for the use with grease up to 1/2").

Art. no. **9952** Recommended for applications with mineral oils and compressed air (this is the standard swivel joint mounted on all painted steel hose reels for the use with oils up to 1/2").

Art. no. 9953 Recommended for applications with glycol and brake fluid.

Art. no.	Connection threads	Max working pressure	Max temperature	Internal ø inlet swivel joint	Gaskets
9950	1/4" BSP (M)	900 bar	60° C	3 mm	PUR
9951	1/2"BSP (M)	600 bar	60° C	10 mm	PUR
9952	1/2"BSP (M)	200 bar	60° C	12 mm	PUR
9953	1/2" BSP (M)	200 bar	150° C	10 mm	EPDM



 $90^{\circ}$  - high pressure swivel joints in galvanized steel for the use with painted steel hose reel models for hoses up to 1".

Recommended for high pressure applications with fluid lubricants.

Art. no.	Connection threads	Max working pressure *	Max temperature	Internal ø inlet swivel joint	Gaskets
9969	1"BSP (M)	100 bar	100° C	20 mm	FPM
9979	1" BSP (M)	200 bar	100° C	20 mm	FFKM

(\*) Static pressure



Straight high pressure swivel joint in galvanized steel. Recommended for high pressure applications with fluid lubricants.

Art. no.	Connection threads	Working pressure	Max pressure *	Max temperature	Gaskets
9958	3/8" BSP (M) – 3/4" BSP (M)	700 bar	1050 bar	60° C	NBR

(\*) Static pressure



Swivel joint, 90° - type, with ball valve, self – lubricating. Body in galvanized steel, on demand also in stainless steel AISI 304. Connections (BSP): inlet F – outlet F.

Art. no.	Connection threads	Max static pressure	Max dynamic pressure	Max flow rate
6696	1/2" BSP (M-F)	360 bar	220 bar	80 l/min
6697	3/4" BSP (M-F)	310 bar	200 bar	120 l/min
6698	1"BSP (M-F)	280 bar	150 bar	150 l/min
6699	1' 1/4" BSP (M-F)	250 bar	150 bar	200 l/min



Straight low pressure swivel joints in brass / free cutting steel. Recommended for applications with oils, diesel and compressed air.

Art. no.	Connection threads	Max working pressure	Max temperature	Internal ø inlet swivel joint	Gaskets
2107/34	3/4"BSP (M) - 1"BSP (F)	20 bar	60° C	20 mm	NBR
2107/35	3/4"BSP (M) - 1"BSP (M)	20 bar	60° C	20 mm	NBR
2107/09	1"BSP (M) - 1"BSP (M)	20 bar	60° C	20 mm	NBR
2107/10	1"BSP (M) - 1"BSP (F)	20 bar	60° C	20 mm	NBR
2107/11	1'1/4"BSP (M) - 1"BSP (M)	20 bar	60° C	25 mm	NBR

 $\label{eq:explanation: PUR: = Polyester Urethane Rubber (Vulkollan^*), EPDM: = Ethylene Propylene Diene Monomer, FPM: = Fluoro rubber (Viton^*), FFKM: = Perfluorinated rubber (Kalrez^*)}$ 

## **SWIVEL JOINTS FOR HOSE REELS**





90° - high pressure swivel joints in stainless steel for the use with hose reel models for hoses up to 1/2".

Recommended for applications with water, AdBlue®/DEF/AUS32, glycol, other fluids compatible with this type of steel and compressed air.

The standard swivel joint mounted on all stainless steel hose reels in 1/2" is Art. no. 9963.

Art. no.	Connection threads	Max working pressure	Max temperature	Internal ø inlet swivel joint	Gaskets	Material swivel joint body
9955	M 22 x 1.5	200 bar	150° C	10 mm	EPDM	Stainless steel AISI 303
9961	1/2"BSP (M)	400 bar	200° C	10 mm	FFKM	Stainless steel AISI 303
9962	1/2"BSP (M)	400 bar	200° C	10 mm	FFKM	Stainless steel AISI 316
9963	1/2"BSP (M)	200 bar	150° C	10 mm	EPDM	Stainless steel AISI 303
9964	1/2"BSP (F)	200 bar	150° C	10 mm	EPDM	Stainless steel AISI 303
9966	1/2"BSP (M)	600 bar	200° C	10 mm	FFKM	Stainless steel AISI 303
9967	1/2"BSP (M)	200 bar	150° C	12 mm	EPDM	Stainless steel AISI 303



 $90^{\circ}$  - high pressure swivel joints in stainless steel for the use with hose reel models for hoses up to 1".

Recommended for applications with water, AdBlue®/DEF/AUS32, glycol, other fluids compatible with this type of steel and compressed air.

The standard swivel joint mounted on all stainless steel hose reels in 1" is Art. no. 9986.

Art. no.	Connection threads	Max working pressure*	Max temperature	Internal ø inlet swivel joint	Gaskets	Material swivel joint body
9986	1"BSP (M)	100 bar	100°C	20 mm	FPM	Stainless steel AISI 303
9987	1"BSP (M)	200 bar	100°C	22 mm	FFKM	Stainless steel AISI 303
9981	1"BSP (M)	200 bar	100°C	22 mm	FFKM	Stainless steel AISI 316

(\*) Static pressure





Low pressure swivel joints, suitable for hose reels in 1'1/4'' and 1'1/2'', with fixed fluid shaft and swivelling support, gooseneck assembly and hose tail connections Ø 33 mm and Ø 38 mm.

Art. no.	Connection threads	Max working pressure	Max temperature	Internal ø inlet swivel joint	Gaskets	Material swivel joint body
9982	1'1/2"BSP (M)	10 bar	100°C	26 mm	FPM	Stainless steel AISI 303
9983	1'1/2"BSP(M)	10 bar	100°C	33 mm	FPM	Stainless steel AISI 303







Interchangeable gooseneck assemblies with hose tail connection or male BSP threads.

**Explanation:** 

**EPDM:** Etilene Propylene Diene Monomer

FPM: Fluoro rubber (Viton®)

FFKM: Perfluorinated rubber (Kalrez®)



# SWIVEL JOINTS AND OTHER HOSE CONNECTION COMPONENTS FOR HOSE REELS, SERIES EVO



Hose connection adapters with fluid shaft suitable for installation in hose reel series EVO in 1"; this special component facilitates the connection of the hose and assures a more effective fluid supply.

They are available in galvanized and stainless steel AISI 304. In combination with the swivel joints of catalogue pages 224 and 225 they enable the use of a painted steel hose reel model also for fluids that require wetted parts in stainless steel (f. ex. water, AdBlue®/DEF/AUS32), just by changing the components which are in contact with the fluid.

Art. no.	Inlet connection thread	Outlet connection thread	Internal diameter inlet swivel joint	Material swivel joint body	
9991	1"BSP (F)	3/4" BSP (M)	19 mm	Galvanized steel	
9992	1"BSP (F)	1"BSP (M)	20 mm	Galvanized steel	
9993	1"BSP (F)	3/4" BSP (M)	19 mm	Stainless steel AISI 303	
9994	1"BSP (F)	1"BSP (M)	20 mm	Stainless steel AISI 303	





Gooseneck assemblies with fluid shaft suitable for installation in hose reel series EVO in 1"; this special component facilitates the connection of the hose and assures a more effective fluid supply.

They are available in galvanized and stainless steel AISI 304. In combination with the swivel joints of catalogue pages 224 and 225 they enable the use of a painted steel hose reel model also for fluids that require wetted parts in stainless steel (f. ex. water, AdBlue\*/ DEF/AUS32), just by changing the components which are in contact with the fluid.

Art. no.	Inlet connection thread	Outlet connection thread	Internal diameter inlet swivel joint	Material swivel joint body
9947	1"BSP (F)	3/4"BSP (M)	19 mm	Galvanized steel
9948	1"BSP (F)	1"BSP (M)	20 mm	Galvanized steel
9949	1"BSP (F)	1'1/4"BSP (M)	25 mm	Galvanized steel
9996	1"BSP (F)	3/4"BSP (M)	19 mm	Stainless steel AISI 303
9997	1"BSP (F)	1"BSP (M)	20 mm	Stainless steel AISI 303





Interchangeable fluid shaft suitable for installation in hose reel series EVO in 1/2". They are available in galvanized and stainless steel AISI 304. In combination with the swivel joints of catalogue pages 224 and 225 they enable the use of a painted steel hose reel model also for fluids that require wetted parts in stainless steel (f. ex. water, AdBlue\*/DEF/AUS32), just by changing the components which are in contact with the fluid.

Art. no.	Inlet connection thread	Outlet connection thread	Internal diameter inlet swivel joint	Material swivel joint body
9988	3/4" BSP (F)	1/2"BSP (M)	12 mm	Galvanized steel
9989	3/4" BSP (F)	1/2"BSP (M)	12 mm	Stainless steel AISI 303





Plastic enclosures suitable for hose reel Art. no. 9013; by mounting these enclosures it is possible to create a hose reel battery, improving the esthetic effect.



Art. no. 9780

Right side cover, including all mounting accessories.

Art. no. 9781

Left side cover, including all mounting accessories.





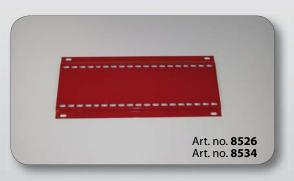


Art. no. 9779

Distance cover, for the mounting in between the hose reels, including all mounting accessories.







Art. no. **8526** Art. no. **8534** 

Hose reel mounting channel, for the mounting of hose reels on wall or ceiling. Length 880 mm (Art. no. 8526) Length 1350 mm (Art. no. 8534)



Hose stop bumpers.

Suitable for the adjustment of the desired hose length outside the reel and for stopping the hose at the required position when rewinding.

The following bumper models are included as a standard when the reel is purchased without hose:

Art. no. **9941** for hose reels Ø 1" in painted steel Art. no. **9943** for hose reels Ø 1/2" in stainless steel Art. no. **9944** for hose reels Ø 1/2" in painted steel

Hose stop bumpers in other dimensions are available, depending on the hose to be mounted on the reel.

Art. no.	ø hose	ø bumper (mm)
9940	3/4"	26
9941	1"	33
9942	1/4″	15
9943	3/8"	17
9944	1/2"	20







High pressure rubber hoses in accordance with SAE 100 R1AT, with swaged female BSP connection threads (swivel nuts), suitable for the supply of **oils** and **diesel** at high pressure.

Internal structure in oil-resistant, synthetic rubber, coating in rubber highly resistant to abrasion, ozone and atmospheric influences. Reinforcement: 1 steel wire braided, highly resistant layer.

Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
287XX	1/2"	12.7 mm	20.6 mm	160 bar	640 bar	180 mm	-40/+100°C	0.43 kg/m
289XX	3/4"	19.0 mm	27.7 mm	105 bar	420 bar	240 mm	-40/+100°C	0.61 kg/m
2895XX	1"	25.4 mm	35.6 mm	88 bar	350 bar	300 mm	-40/+100°C	0.94 kg/m

XX = stands for the required hose length in meters (f. ex. 28715 = 15 m).



High pressure rubber hoses in accordance with SAE 100 R2AT, with swaged female BSP connection threads (swivel nuts), suitable for the supply of **grease** and **water** at high pressure. Internal structure in oil-resistant, synthetic rubber, coating in rubber highly resistant to abrasion, ozone

and atmospheric influences. Reinforcement: 2 steel wire braided, highly resistant layers.

	Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
Ī	45XX	1/4"	6.4 mm	15 mm	400 bar	1600 bar	100 mm	-40/+100°C	0.36 kg/m
	47XX	3/8"	9.5 mm	19 mm	330 bar	1320 bar	130 mm	-40/+100°C	0.53 kg/m
	48XX	1/2"	12.7 mm	22.2 mm	275 bar	1100 bar	180 mm	-40/+100°C	0.63 kg/m
	488XX	3/4"	19 mm	29.3 mm	215 bar	850 bar	240 mm	-40/+100°C	0.92 kg/m
	4885XX	1"	25.4 mm	38.1 mm	165 bar	650 bar	300 mm	-40/+100°C	1.38 kg/m

XX= stands for the required hose length in meters (f. ex. 4515 = 15 m)



High pressure, **blue antistaining rubber hoses**, in accordance with SAE 100 R2AT, with swaged female BSP connection threads (swivel nuts), suitable for the supply of **water** at high pressure (f. ex. in combination with high pressure cleaners).

Internal structure in oil-resistant, synthetic rubber, coating in rubber highly resistant to abrasion, ozone and atmospheric influences. Reinforcement: 2 steel wire braided, highly resistant layers.

Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
46XXAM	5/16"	7.9 mm	15 mm	400 bar	1600 bar	85 mm	-10/+160°C	0.36 kg/m
47XXAM	3/8"	9.5 mm	18 mm	400 bar	1600 bar	90 mm	-10/+160°C	0.46 kg/m

**XX**= stands for the required hose length in meters (f. ex. 46**15AM** = 15 m)



Low pressure rubber hoses in accordance with SAE 100 R6 – DIN EN 854, with swaged female BSP connection threads (swivel nuts), suitable for the supply of **diesel** and **petrol** at low pressure. Internal structure in oil-resistant, synthetic rubber, coating in rubber highly resistant to abrasion, ozone and atmospheric influences. Reinforcement: 1 textile braided and 1 steel wire braided layer.

	Art. no.	Nominal ø	ominal ø Internal ø External ø		Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
	288XX	3/4"	19 mm	26 mm	17 bar	97 bar	140 mm	-40/+100°C	0.32 kg/m
	2896XX	<b>X</b> 1"	25 mm	32 mm	17 bar	97 bar	152 mm	-40/+100°C	0.43 kg/m
	2897XX	1'1/4"	32 mm	43 mm	10 bar	40 bar	185 mm	-40/+100°C	1.02 kg/m
2	8997XX	1'1/2"	38 mm	50 mm	10 bar	40 bar	225 mm	-40/+100°C	1.60 kg/m

XX= stands for the required hose length in meters (f. ex. 28815 = 15 m)





Low pressure synthetic rubber hoses with swaged female BSP connection threads (swivel nuts) in brass (on demand also in stainless steel), suitable for the use with **hot water** in food industry applications. Internal structure white, food industry – qualified synthetic rubber, coating in blue rubber highly resistant to abrasion, heat, ozone and atmospheric influences. Reinforcement with highly resistant synthetic cord. In accordance with FDA food industry standards.

P	Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
1	87XX	1/2"	12 mm	22 mm	15 bar	45 bar	100 mm	-35/+110°C	0.35 kg/m
1	89XX	3/4"	19 mm	31 mm	15 bar	45 bar	112 mm	-35/+110°C	0.51 kg/m

**XX**= stands for the required hose length in meters (f. ex. 18715 = 15 m)



Low pressure hoses in hydrocarbon resistant black rubber with swaged female BSP connection threads (swivel nuts), suitable for the use with **fuels** and **petrol** in accordance with **norm EN 1761:1994**. Smooth internal structure in black rubber, resistant to hydrocarbons with an aromatic content of not more than 60 % and unleaded petrol with a max MTBE - content of 5 %. Cover in conductive black rubber, highly resistant to abrasion, ozone and atmospheric influences. Reinforcement with highly resistant synthetic cord. Resistant to inflammability in accordance with code of practice for flammable fluids TRbF 131, part 2, no. 5.5.

Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
2894XX	1"	25 mm	38 mm	18 bar	81 bar	182 mm	-30/+70°C	0.85 kg/m

**XX**= stands for the required hose length in meters (f. ex. 289415 = 15 m)



Low pressure synthetic GPH rubber hoses (General Purpose Hoses) with swaged female BSP connection threads (swivel nuts) in stainless steel, suitable for the use with **AdBlue®/DEF/AUS32**, water at low and high temperatures, chemical fluids, acids, glycol and compressed air at low pressure. Internal structure in conductive black rubber, cover in black rubber, highly resistant to abrasion, heat, ozone and atmospheric influences. Reinforcement with highly resistant synthetic cord. In accordance with norm BS 2050:1978.

Art. no.	Nominal ø	Internal ø	External ø	External ø Working Burst pressure		Min bending radius	Working temperature (min/max)	Weight
2898XX	1/2"	13 mm	21 mm	20 bar	60 bar	100 mm	-40/+120°C	0.26 kg/m
2899XX	3/4"	19 mm	30 mm	20 bar	60 bar	112 mm	-40/+120°C	0.57 kg/m

XX = stands for the required hose length in meters (f. ex. 289815 = 15 m)



Low pressure, blue PVC – hoses with swaged female BSP connection threads (swivel nuts) in brass, suitable for the use with **compressed air** and **water** at low pressure.

Reinforcement with highly break resistant polyester cord.

Art. no.	Nominal ø	Internal ø	External ø	Working pressure	Burst pressure	Min bending radius	Working temperature (min/max)	Weight
38XX	3/8"	10 mm	16.5 mm	40 bar	120 bar	80 mm	-15 / +50°C	0.19 kg/m
277XX	1/2"	13 mm	20 mm	40 bar	120 bar	100 mm	-15 / +50°C	0.25 kg/m
399XX	3/4"	19 mm	28 mm	40 bar	120 bar	112 mm	-15 / +50°C	0.47 kg/m

**XX**= stands for the required hose length in meters (f. ex. 3815 = 15 m)

Pag. 229 Hose reels

# FLEXBIMEC

## **FLUID MIXING EQUIPMENT DOSAMIX 8400**

#### DOSAMIX - System for the dosing and proportional, automated mixing of antifreeze, lubricating oils or emulsions.

The system is basing upon the proportional dosing - regulated by solenoid valves - of two fluids that shall be mixed and whose flow is measured by two meters with pulse transmitters which are monitored by the electronic control unit that keeps a constant balance of the preset mixture percentages. The electronic control allows to adapt the configuration exactly to the individual installation requirements.

The system offers the following benefits:

- Wide range of presettable mixture percentages from 0.5 % 50 % with high accuracy of +/- 0.5 %.
- Constant concentrations with the possibility to store and to monitor 8 different mixing degrees.
- Manual dispense or dispense of preset quantities by using a keyboard or automatically through pulses activated by installed level gauges (min. max) installed in the storage containers of the mixed fluids.
- Optional use of "CONTINOUS" mode or "TIME PRESET" mode from min. 1 min. up to 12 hours.
- Automatic pump stop by means of installed level gauges which give a signal to interrupt the pump function as soon as the minimum level in the storage container of the mixed fluid has been reached.
- Monitoring by means of the "REPORT" function which starts the print of statistics comparing the really achieved dosage values with the preset values of all the preset transactions.



Art. no. 8403

Kit **DOSAMIX**, suitable for the mixture of a fluid with water in concentrations from 0.5 % until 50 %.

The kit is composed of:

- Mixing unit with keypad, Art. no. 8400
- Wall mounting bracket, Art. no. 8417
- Transformer / stabilizer 230 VAC 12 VDC for the power supply, Art. no. 6528
- 1:1 pneumatic pump, Art. no. 2047

The fluids must enter into the mixing unit with a pressure of min. 3 bar. In the standard version only 1 pump is included, so that it is necessary to make sure that the second fluid to be mixed is dispensed with sufficient pressure, otherwise another pump must be provided in the installation.







#### Art. no. 8407

The installation of the kit **DOSAMIX** on the mounting shelves of series Tank Service Base permit to create an autonomous unit for the mixture of a fluid with water in concentrations from 0.5 % until 50 %.

The kit is composed of:

- Mixing unit with keypad, Art. no. 8400
- Transformer / stabilizer 230 VAC 12 VDC for the power supply, Art. no. 6528
- 1:1 pneumatic pump, Art. no. 2047
- Mounting shelf with spill containment pallet, Art. no. 8525

#### Art. no. 8415

Storage kit for the ready mixed fluids, consisting of a double wall storage tank with 400 l capacity (Art. no. 8217/400), a 1:1 - pneumatic pump with a delivery of approx. 25 l/min, a high level and a low level probe.

The kit is supposed to be installed in between the mixing unit DOSAMIX and the dispensing point. Like that it serves as an intermediate storage container for the required, mixed fluid and it helps to increase the efficiency for refilling since the pump guarantees a fast dispense to the dispensing point.



## **FLUID MIXING EQUIPMENT DOSAMIX 8400**



Art. no. 7240 Art. no. 8601 Art. no. 8400 Art. no. 8408 Art. no. 8408
Electric signals distributor;
allows to expand the
mixing unit to handle up to
8 containers with different Ticket printer; allows to compare the real dispensed values with the preset values and control all dispenses. for mixing unit; serves for the adjustment of all functions. The dispenses Ball valve; enables or prevents the required fluid mixture to Art. no. 6643 Non-return valve, prevents the reflow of the fluid into enter into the corresponding pipe. can be activated fluid concentration manually, via remote control or by preset function. The figures percentages. the main pipe. Fluid pipework that leads to storage containers of which each can have a different percentage of the mixed can be controlled on the Art. no. 8400 keypad display. **Electronic mixing** unit; two fluids can be mixed proportionally in constant concentration percentages. Kit 8413 Level indication kit, Switchboard with cable consisting of solenoid-actuated shut-off valve connections to receive the electronic signals; and probe with high and low level sensor. When the serves for the control of the filling levels, of preset minimum level in the the fluid flows, of the solenoid shut-off valves preset minimum level in the storage containers has been reached, a fluid dispense from the mixing unit will automatically be started. As soon as the maxmum and of the pump. level has been reached, the Art. no. 2047 flow will automatically be Pneumatic pump: serves for the stopped again. dispense of the fluid to be mixed with water and to keep sufficient pressure in the pipework to quarantee an immediate fluid dispense into the storage containers when required. Art. no. 8952 Art. no. 8952

Low level pump stop kit, consisting of probe with low level sensor and solenoid-actuated shut-off valve that interrupts the compressed air supply of the pump and stops it as soon as the minimum level in the drum has been reached. Art. no. 7344 Solenoid-actuated shut-off valve for the regulation of the fluid flow. the drum has been reached.

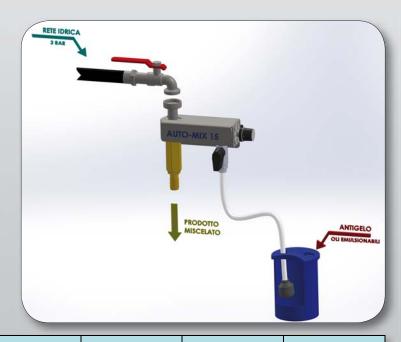
#### Art. no. 8420

Istantaneous dosing/mixing device for cooling, lubricants, emulsions and detergents.

Intended to be used to provide promptly emulsions and mixtures, assuring a mixing range concentrations, settable from 1% to 40%, achieved by the water supply flow at min 3 bar passing through a Venturi's device.

Percentage setting is made simply by turning a specific knob.





ı	Art. no.	Flow range	Pressure	Mixture percentage	Connections
	8420	min. 5 max 11 l/min	min. 3 bar	1 % ÷ 15 % 15 % ÷ 40 %	3/4" BSP (M)





The need to use specialized equipment for the dismantling and depollution of end-of-life vehicles is basing on the European directive 2000/53/EC. It regulates that all vehicle manufacturers and importers of new vehicles are obliged, together with all other affected economical operators of this sector - to take back the end-of-life vehicles from the market and to make sure that their components are dismantled and depolluted in a way that guarantees a respectful treatment of the environment and that until the end of 2006 the recycling and recovery rate of 85 % of the material weight and until 2015 a rate of 95 % must be achieved.

For the vehicle owners the take-back must be free of charge and it concerns all vehicles for the transport of max 9 passengers and a weight of max 3.5 t.

The directive defines the free-of-charge take-back of the vehicles like this:

- the vehicle must be delivered to a permitted treatment facility indicated by the vehicle manufacturer that takes it back free of charge,
- the vehicle must be complete or at least must include all essential components such as motor, gearbox, vehicle body, electronic components and catalyzer,
- the vehicle must not include contain any type of garbage.

#### **Environmental liability**

The environmental liability is an important factor of the FLEXBIMEC company philosophy. Actually it gets involved with a continuous environmental protection as one of its essential company targets.

#### **Depollution process**

When an "end-of-life" vehicle has been delivered to a suitable facility, it will be dismantled and depolluted in a proper way, including the following operations:

- Drainage of all fluids,
- Dismantling of the battery and of the tyres,
- Neutralization of the airbag system.

Each marketable part that is dismantled can be sold, except of the safety components which content pyrotechnic material (f. ex. airbags, seat belt pretensioner).

With its brand "Toolservice Fluid" FLEXBIMEC has developed a complete line of equipment for the dismantling and waste fluids drainage of end-of-life vehicles for professional users.











# Example of an installation for end-of-life vehicle drainage and dismantling



Collection tank for petrol, Art. no. 8229

Collection tank for diesel, Art. no. 8217

Vehicle ramp, Art. no. 3100

Metal staircase with working platform

Waste oil draining kit with wall mounted swivel arms, Art. no. 3106

Waste fluids suction kit, Art. no. 3122

Spill containment floor with grate

Tank drilling machine, Art. no. 3111 Brake fluid draining kit

Fuel suction pumps

Collection tanks for oils, antifreeze, brake fluid and windshield washer fluid, Art. nos. 7008 - 7009 – 7010









#### Art. no. 3100

Vehicle ramp in painted steel including staircase with working platform. Enables an optimum access to the vehicle from below as well as from above. With spill containment safety floor with galvanized grates for a collection of eventually leaking fluids.

Dimensions (LxWXH): 4900 x 2000 x 2000 mm.

Bearing capacity: 3000 kg.





## Art. no. **3111**

Pneumatic tank drilling machine, portable version.

Allows to carry out the evacuation of petrol or diesel in vehicles in an easy, fast and safe way by drilling through the tank.

The machine is equipped with an interchangeable, nonarcing drill bit, an in-line filter with strainer, a flow control tube with transparent insert and connections for the discharge of the fuel by gravity into a can or by the suitable suction equipment into a collection tank.

The drill bit is activated by using a special, pneumatic drill machine with a low number of rotations and with reversal of the rotating direction.



Conical silicone closing plugs, ø 7x12 mm, for sealing the drill holes.

Packaging unit: 100 pieces.







## Art. no. 3106

Waste oil gravity draining kit, consisting of two metal collection bowls of 10 I capacity each, including removable anti splash grid and height-adjustable, telescopic tube, ball valves and hydraulic connectors for the connection of the suitable suction equipment. With wall mounted swivel arms, for the installation on the vehicle ramp (Art. no. 3100).









Art. no. **3122** Art. no. **3123** Art. no. **3124** 

Pneumatic waste fluids suction kit, low version, composed of a solid mounting shelf in painted steel installed on a spill containment pallet, pneumatic suction pumps with accessories, vacuometer for the control of the suction process, automatic rewind, spring-driven hose reels with 5 m – suction hoses 3/4" (or alternatively 10 m – suction hoses 1/2"), hydraulic quick couplings, suction probes in different diameters, lance for boring through the radiator, couplings for the suction of brake fluid and 3 m - connection hoses to the collection tanks.

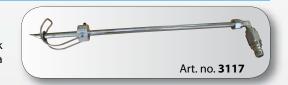
Dimensions (LxWxH): 1350 x 830 x 1700 mm.

Art. no. 3122 Suction kit for 2 fluids
Art. no. 3123 Suction kit for 3 fluids
Art. no. 3124 Suction kit for 4 fluids

In order to install the suitable pumps and accessories it is important to specify when ordering the fluid type to be evacuated by choosing among the following: motor oil, gear oil, hydraulic oil, windshield washer fluid, brake fluid, antifreeze, diesel, petrol.

Art. no. 3117

Radiator boring lance, with quick coupling for connection to a suction kit.





Art. no. 3129

Electronic airbag activating and blasting unit **BOOM-BAG**, enables a safe and easy dismantling of all airbags in a vehicle.

Suitable for all vehicle models. The unit can be used immediately and one operator is

sufficient to carry out the dismantling. The unit is packed in a plastic case and includes also an electric cable with alligator clamps for battery connection and a kit with cables and push terminals for the activation of single or double airbags.



Art. no.	Voltage	Protection category	Weight	Dimensions (LxWxH) (mm)
3129	12 VDC	IP 66	1 kg	210 x 95 x85





Electric glass cutter, for a safe and versatile cutting of the windshield glass of end-of-life vehicles.

- Electric mechanism with special high speed drill machine and diamond milling cutter,
- Conveyor in aluminium for the evacuation of the generated glass dust,
- Vacuum cleaner with stainless steel container, power 2000 W, collection capacity 80 l.













### Art. no. 3135

Mobile evacuation and recycling kit for air conditioning gas, consisting of an evacuation unit with a compressor that works with refrigerant gas types R12 and R134A, with a distillation system permitting the separation of the refrigerant from the oil, the filtration, the dehydration and the storage in 13 kg – standard gas cylinders. The kit includes also a pressure switch to enable a control when evacuation is finished and a protection against external pressure. Also included are a 250 ml – recipient for the collection of the oil eliminated from the gas, a 13 kg - gas cylinder, filling hoses of 1800 mm length and a 2 wheels - trolley.

Art. no	o. Voltage	Power	Weight	Dimensions (LxWxH) (mm)
3135	230 VAC – 50 Hz	180 W	50 kg	510x530x920





#### Art. no. 8226

Art. no. 3135

Diesel storage tank in reinforced painted steel, with self-supporting spill containment tray in steel, lifting plates, analogue level gauge and connections for the installation of the filling and dispensing equipment (f. ex. Art. no. 6772 – see photo!). Optionally the tank can be supplied with a roofing which can be fixed in 4 openings already provided in the spill containment tray.



Art. no.	Capacity	Diameter tank	Dimensions (LxWxH) (mm)
8226/490	490 l	950 mm	1010 x 1010 x 250
8226/1000	1000 l	1100 mm	1600 x 1250 x 250
8226/1300	1300 l	1100 mm	1800 x 1250 x 300
8226/2400	2400 l	1270 mm	2350 x 1400 x 380
8226/3000	3000 l	1430 mm	2450 x 1500 x 410
8226/5000	5000 l	1600 mm	3210 x 1750 x 475





## Art. no. **8229**

Petrol storage tank in painted steel, mounted in a wire protection cage, with spill containment pallet, hermetically sealed dome of Ø 300 mm with cover panel and counterflange of 10 mm wall thickness, refill tube and 2" – security valve.

The unit is equipped with a pneumatic, selfpriming rotary vane pump for the transfer of petrol, earth cable to enable an electrostatic discharge, pressure regulator, 3 m – rubber hose 3/4" with static wire and automatic dispensing nozzle.



Art. no.	Capacity	Weight	Dimensions (LxWxH) (mm)
8229	258 l	155 kg	920 x 830 x 1200



## **FILTRATION SYSTEMS**





### Art. no. 3040

Mobile filtration unit for diesel, for the absorption of water and the filtration of possible impurities.

The unit is composed of:

- 2 wheels trolley;
- electric pump 230 VAC / 50 Hz, max delivery 50 l/min;
- 30 microns filter;
- Suction hose with pre-filter and foot valve;
- Manual diesel dispensing nozzle in aluminium;
- Dispensing hose.



### Art. no. **6600**

In-line filter for diesel and petrol with 30 microns – cartridge for the absorption of water that is eventually present in the storage tank.

### Art. no. 6603

Replacement cartridge, 30 microns, for filter Art. no. 6600.

Art. no.	Voltage	Power	Delivery	Weight	Dimensions (LxWxH) (mm)
3040	230 VAC / 50 Hz	375 W	50 l/min	20 kg	410x420x910





## Art. no. 3041

Mobile filtration unit for oils.

The unit is composed of:

- 2 wheels trolley;
- electric pump 230 VAC / 50 Hz, max delivery 10.5 l/min, Art. no. 6122;
- 10 microns filter;
- Suction hose with pre-filter and foot valve;
- Manual diesel dispensing nozzle in aluminium;
- Dispensing hose.



## Art. no. 6607

In-line filter for oil with 10 microns – cartridge for the absorption of water.

## Art. no. **6608**

Replacement cartridge, 10 microns, for filter Art. no. 6607.

Art. no.	Voltage	Power	Delivery	Weight	Dimensions (LxWxH) (mm)
3041	230 VAC / 50 Hz	750 W	10.5 l/min	20 kg	410x420x910







Art. no. 4350

Trolley with 2 wheels and base, suitable for pails of 18 - 60 kg.



Art. no. 4379

Cradle for the transport of 208 I – drums, including an arresting device.



Art. no. 4351

Trolley with 2 wheels and tubular frame, suitable for pails of 20 – 25 kg.

Art. no. 4352

Trolley with 2 wheels and tubular frame, suitable for pails of 50 – 60 kg.



Art. no. 4380

Trolley with 2 wheels and two castors, standard version, suitable for 208 I – drums.



Art. no. 4360

Trolley with 2 wheels and 2 castors, suitable for pails of 20 – 60 kg.



Art. no. **4389** 

Trolley with 2 special rubber wheels and 2 swivelling rubber wheels with brakes, heavy duty version, provided for the use on rough surfaces, including spill containment base with steel grate. The trolley is also provided for the mounting of a hose reel.



Art. no. 4397

Trolley in stainless steel AISI 304 with two wheels, provided for the mounting of manual, hand crank hose reels.

Dimensions (LxWxH): 600 x 800 x 1250 mm.

Weight: 13 kg.



## Art. no. **4398**

Trolley in stainless steel AISI 304 with two wheels and two castors with brakes, provided for the mounting of manual, hand crank hose reels.

Dimensions (LxWxH): 700 x 900 x 1150 mm. Weight: 22 kg.

Trolleys Pag. 238



Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page
011	137	2020TWDE	38	2063130	44	2125	137	2629	61	2914MID	79
1045	38	2020TWDE	43	2064	44	2127	137	2630	61	2914X	79
1045	176	2023	44	2064130	44	2128	137	2633	61	2914XB	79
1049	176	2024	44	2073	38	2129	137	2703	66	2918	80
1050	176	2025	38	2073	41	2130	137	2706	61	2918MID	80
1052	180	2025	42	2074	38	2132	59	2707	61	2934	84
1053	180	2025130	42	2074	41	2133	59	2710	66	2937	63
1054	180	2025TWDE	38	2075	38	2140	59	2712	66	2942	63
1055	180	2025TWDE	43	2075/L	38	2142	59	2715	173	2954	67
1056	180	2030	38	2075/L	42	2143	59	2716	67	2958	118
1058	51	2030	41	2075/LTWDE	38	2154	58	2717	67	2971	74
1058	180	2030TWDE	38	2075/LTWDE	43	2155	58	2717	114	2971MID	74
1064	180	2030TWDE	43	2076	38	2156	58	2717	117	2974MID	85
1065	180	2032	38	2076	42	2157	58	2735	173	2980C	73
1066	180	2032	41	2076130	42	2159	58	2736	169	2982	73
1071	176	2032130	41	2076TWDE	38	2161	58	277XX	229	2984	82
1072	176	2033	38	2088	39	2162	58	2822	173	2984MID	83
1079	177	2033	41	2088	46	2166	173	2823	151	2985	85
1081	177	2033130	41	2091	39	2166	187	2826	62	2985MID	85
1082	177	2035130	38	2091	46	2180	58	2829	62	2986	137
1082	177	2035	42	2091	39	2181	58	2830	62	2987MID	73
1085 1104	177 178	2035TWDE	38	2092	48	2182	58	2830	62	2991	76
		2035TWDE	43	2093	39	2183	187	2831	62	2991MID	77
1104/07	178	2040	38	2093	48	2185	58	2836	63	2991X	77
1104/12	178	2040	40	2094	39	2203	50	2851	64	2991XB	77
1104/15	178	2043	38	2094	48	2203	178	2851	151	2992	82
1106	178	2043	40	2096	39	2204	50	2852	64	2992/10	82
1107	59	2043	123	2096	47	2204/14	50	2852	151	2992/20	82
1107	178	2043/L	40	2097	39	2205	50	2853	67	2992MID	83
1108	178	2043L	38	2097	47	2210	133	2854	64	2993	76
1109	178	2044	38	2098	39	2212	50	2855	64	2994	84
1110	178	2044	40	2098	47	2214	49	2860	151	2995	137
1111	178	2044	123	2101	187	2214	177	2861	150	2996	137
1112	178	2045	123	2104	59	2216	49	2863	151	2997	137
1113	178	2046	123	2106	59	2217	50	2865	151	2997/20	137
1114	178	2047	38	2107/09	224	2218	49	2866	151	2998	134
1150	91	2047	40	2107/10	149	2253	174	2867	161	2998	137
1151	91	2047/L	38	2107/10	224	2258	110	2868	161	3000	81
1152	91	2047/L	40	2107/11	224	2259	110	2869	151	3005	81
1312	175	2049	38	2107/33	149	2260	110	2869	161	3017	132
1313	175	2049	40	2107/34	149	2264	123	287XX	228	3018	132
187XX	229	2050	91	2107/34	224	2265	150	288XX	228	3020	132
189XX	229	2051	91	2107/35	59	2267	150	2894XX	229	3024	126
2012	39	2054	91	2107/35	149	2268	150	2895XX	228	3025	126
2012	45	2055	39	2107/35	224	2270	98	2896XX	228	3027	127
2013	39	2055	47	2107/36	59	2271	98	2897	174	3040	237
2013	45	2056	39	2107/36	149	2301	72	2897XX	228	3041	237
2014	39	2056	47	2108	59	2302	72	2898XX	229	3049 Kit	53
2014	45	2057	39	2109	187	2302	72	2898XX	178	3050 Kit	53
2015	39	2057	46	2110	59	2303	72	28997XX	228	3080	126
2015	45	2058	39	2114	59	2363	72	2899XX	229	3085	129
2016	39	2058	46	2115	59	2363	72	2899XX	178	3090	127
2016	45	2061	38	2116	59	2508	66	289XX	228	3095	129
2020	38	2061	42	2117	59	2545	65	2910	78	3099	133
2020	41	2061130	42	2119	59	2608	66	2912	76	3100	234
2020130	41	2063	44	2121	59	2626	61	2914	78	3106	234
2020130	41	2003	-1-1	2121	J	1 2020	UI	271T	70	3100	454

Pag. 239 Index



Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page
3111	234	3379	175	4083	12	4250/60	28	4379	238	5080	16
3115	160	3385	185	4200	30	4251	31	4380	238	5081	16
3117	235	3396	57	4201	30	4252	31	4389	238	5100	25
3118	234	3406	138	4204	30	4253	31	4397	238	5105	25
3122	235	3408	71	4205	30	4254	31	4398	238	5110	26
3123	235	3416	138	4206	30	4255	31	4400	29	5111	26
3124	235	3422	137	4207	30	4256	28	4400/4	29	5115	25
3129	235	3423	137	4208	30	4257	28	4405	29	5125	24
3130	235	3424	137	4209	30	4258	28	4406	29	5126	27
3135	236	3425	71	4215	31	4285	33	4408	29	5127	27
3172	132	3426	71	4216	31	4286	32	4425	24	5128	27
3173	124	3427	71	4216	31	4287	33	4426	24	5129	27
3177	124	3428	71	4217	31	4289	32	4450	29	5130	27
3178	124	3429	71	4217/1000	31	4301	34	4450/4	29	5131	27
3179	125	3430	71	4217+4220	31	4302	34	4452	29	5190	24
3180	131	3435	70	4218	31	4302S	34	4452/4	29	5200	56
3182	130	3436	70	4219	31	4305	34	45XX	228	5216	56
3183	125	3447	71	4220	31	4305/TP	34	4699	192	5300	55
3185	122	3448	71	4221	30	4305L	34	4699	192	5301	55
3185/110	122	3449	71	4223	36	43055	34	46XXAM	228	5303	55
3185/20	122	3474	139	4224	31	4308	34	47XX	228	5400	55
3186	122	3475	139	4225	31	4308/TP	34	47XXAM	228	5403	54
3186/110	122	3476	139	4226	31	4309	35	4885XX	228	5405	54
3190	130	3490	139	4227	31	4309/70	35	488XX	228	5409	55
3191	125	3491	139	4227	30	4309/70	34	48XX	228	5410	54
3191	131		139	4229		4310	34	4910	20	5416	179
		3493			36		-				
3195	128	3495	138	4231	36	4312	34	4911	20	5417	179
3198	128	3521	193	4232	36	43125	34	4920C	18	5420	54
3199	133	3524	193	4233	31	4314	34	4920CE	18	5423	56
3244	123	3526	193	4233	31	4315	34	4921	17	5434	56
3254	122	38XX	229	4234	31	4317	34	4922	17	5450	55
3254/110	122	399XX	229	4235	31	4317/TP	34	4923	27	5463	75 
3292	123	4018	10	4236	32	4319	34	4950	19	5463MID	75
3293	123	4019	11	4240	28	4319/TP	34	4960C	19	5480 RINOX 80	179
3316	182	4019TWDE	13	4240X	28	4320	35	4961	21	5491	165
3318	183	4020	10	4241	28	4320/70	35	4963	27	5493	165
3318/316	183	4021	11	4241/P	28	4322	23	4980C	19	5495 RINOX 95	179
3320	185	4021TWDE	13	4241/TC	28	4326	34	4981	21	5496	165
3323	184	4022	12	4241/TL	28	4328	34	4983	27	5496	179
3324	183	4025	13	4241A	28	4340	34	4990C	20	5604	70
3324/316	183	4043	12	42415	28	4340	50	4995	21	5650	70
3325	182	4046	15	4242	28	4341	34	4997/20	23	5658	70
3326	186	4047	15	4242A	28	4341	50	4997/60	23	5659	70
3326 L	186	4048	15	4242S	28	4342/50	35	4999/200	22	5670	70
3326 M	186	4049	15	4243	28	4342/50	49	4999/200INP	22	5671	70
3327	57	4050	15	4243A	28	4342/55	49	4999/30	22	5675	70
3329	186	4051	15	4243S	28	4342/70	35	4999/60	22	5676	70
3340	183	4052	15	4244	28	4343	49	5000	16	5677	70
3340/316	183	4060	10	4245	28	4343/50	35	5001	16	5678	70
3345	184	4061	11	4246	28	4343/70	35	5002	16	5679	70
3350	182	4061TWDE	13	4247	28	4343/71	35	5003	16	5680	70
3352	184	4062	12	4247A	28	4350	238	5011	16	5688	70
3354	184	4080	10	4248	28	4351	238	5031	16	5689	70
3358	57	4081	11	4249	28	4352	238	5032	16	5903	190
3359	57	4081TWDE	13	4250/120	28	4360	238	5040	16	5904	190
3374	185	40811WDE	12	4250/120	28	4379	96	5060	16	5905	191
JJ/4	100	4002	12	4230/240	20	73/7	90	3000	10	3903	ולו

Index Pag. 240



				·	_	1.	·				
Art. no.	Page										
5906	191	6561	158	6721	149	6872	186	7742	189	8529	97
5908	190	6600	150	6723	174	6873	186	7743	189	8530	97
5945	192	6603	150	6724	174	6874	186	7810	137	8530/SP	97
5946	192	6605 C	148	6725	149	6875	186	7811	137	8531	97
5953	190	6607	150	6726	149	6876	186	7813	102	8532	94
6122	52	6608	150	6728	161	6877	186	7816	102	8532/SE	94
6123	52	6611	150	6729	174	6878	187	7818	136	8533	95
6124	52	6613	150	6731MID	170	6882	187	7819	136	8534	50
6125	52	6614	150	6732MID	170	6883	187	8204	87	8534	227
6128	52	6621	150	6733MID	171	6884	187	8205	87	8536	97
6129	52	6622	150	6738	147	6885	187	8205MID	87	8539	97
6132	166	6623	150	6739	147	6930	158	8206	87	8542	90
6132	181	6639	110	6741	148	6931	158	8206MID	87	8542MID	90
6133	53	6640	110	6743	167	6933	159	8207	87	8543	90
6135	53	6641	110	6744	167	6934	159	8207MID	87	8543MID	90
6136 Kit	53	6642	150	6745	167	6935	159	8208	86	8545	72
6138	53	6643	110	6745/200	167	6938	160	8209	86	8545	72
6141	52	6647	150	6745/60	167	7008	140	8210	86	8547MID	89
6145	53	6648	110	6747	168	7009	140	8214	96	8548	88
6149	53	6650	110	6748	168	7010	140	8217	100	8548/10	88
6153	166	6651	110	6750	148	7150	40	8217	140	8548MID	89
6154	166	6652	110	6751	168	7150	176	8218	140	8549	88
6155	166	6654	111	6752	168	7150	195	8220	96	8549/10	88
6160	166	6655	111	6752MID	170	7150/12	49	8223/220	164	8549MID	89
6160	181	6656	111	6753	168	7151	195	8223/430	164	8558	21
6218	146	6660	111	6754MID	171	7180	40	8224/120	164	8563	98
6219	146	6661	111	6755	147	7180	176	8224/190	164	8564	98
6220	146	6662	111	6766	143	7180	195	8224/95	163	8565	98
6230	144	6670	110	6768	143	7180/12	49	8225/125	164	8566	98
6246	145	6671	110	6769	143	7200	195	8225/200	164	8567	98
6247	148	6672	110	6770	143	7238	111	8225/430	164	8568	98
6248	148	6675	110	6771	143	7239	111	8225/600	164	8569	98
6249	145	6676	110	6772	142	7240	111	8226	236	8571	99
6252	145	6690	111	6773	143	7241	111	8229	236	8572	99
6253	144	6691	111	6782	143	7242	111	8231	163	8573	99
6254	145	6692	111	6783	143	7244	111	8235	163	8574	99
6255	144	6693	111	6786	172	7301	194	8237	163	8580	100
6256	144	6694	111	6786MID	172	7304	194	8250	86	8581	100
6257	144	6695	111	6800	188	7305	194	8300	135	8582	100
6302	51	6696	111	6801	187	7306	194	8304	134	8583	100
6303	51	6696	224	6802	187	7307	194	8306	134	8591	101
6304	51	6696	224	6805	187	7308	194	8308	134	8591/S	101
6305	51	6697	111	6812	188	7330	194	8309	120	8592	101
6308	51	6697	224	6816	188	7331	194	8318	136	8592/S	101
6309	51	6697	224	6817	188	7340	120	8319	136	8593	101
6312	51	6698	111	6818	188	7360	120	8320	136	8593/S	101
6314	51	6698	224	6819	188	7394	102	8321	136	8594	101
6324	51	6698	224	6820 Kit	188	7395	102	8322	136	8594/S	101
6326	51	6699	111	6821	188	7396	102	8323	136	8595	101
6435	146	6699	224	6822	188	7406	187	8324	136	8595/S	101
6437	137	6699	224	6823	188	7550	186	8403	230	8596	101
6446	181	6700	149	6830	188	7553	186	8407	230	8596/S	101
6532	114	6701	149	6840	188	7704	186	8524	94	8597	101
6556	142	6702	149	6853	188	7704	192	8524/SE	94	8597/S	101
6557	142	6702/B	161	6857	188	7740	189	8525	94	8598	101
6559	51	6709	174	6871	186	7741	189	8526	227	8598/S	101

Pag. 241 Index



8399 101 9022 204 9096 210 9536 2813 155 9596-28131 513 9916 88 88 821 92 920 9024 2808 9096-28812 152 9536-28305 155 9596-281612 153 9916 88 88 843 92 9024 2808 102 9097 2818 152 9536-28305 155 9598 211 9924 88 88 843 92 9024 2808 102 9097 2818 154 9536-28305 155 9598 211 9925 88 88 848 99 9025 210 9097 2818 154 9097 2818 154 9098 211 9925 88 88 848 99 9025 215 9097 2818 154 9098 211 953624-289425 162 9599 212 9928 88 88 848 193 9025 215 9097 2818 154 9098 211 9538-282720 157 9781 227 9928 88 88 82 99 9030-2818 154 9098 211 9538-282720 157 9781 227 9928 88 88 9939 211 9538-282720 157 9781 227 9928 88 9939 2814 9939 28	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page	Art. no.	Page
859/5         101         023         205         996-8285         152         936+2880         155         9596+2880         133         9916         8.84           8041         929         9042+38808         132         9097         201         9536/674-289425         16.0         9999         212         997         88           8044         939         9025         205         997+28818         154         9538-28975         157         9781         227         9939         68           8048         939         9025         205         997+28816         154         9538-28975         157         7871         227         9939         68           8730         161         900+28908         154         9908         212         9539-289715         157         9817         227         9399         227           8730         167         9034         215         9214         223         9546         205         9843         109         9942         227           8731         177         9034-28280         154         9214         222         9546         205         9873         19         994         224           8731	_		1		1							
86214         92         9024         205         9996+289612         152         9536+289625         155         9996         211         9946         68           8044         92         9024+28808         152         9977         210         9536KR-289425         162         999         212         9923         68           8684         93         9030         215         9977-28816         154         9538-28715         157         9781         227         9928         68           8730         67         9010+28816         154         9989         212         9539-28715         157         9810         227         998         227           8730         67         9031         214         9999         212         9539         214         9781         229         9940         227           8730         67         9031         214         9210         223         9546         205         843         109         9941         227           8731         167         9036         215         9214         223         9546         205         843         109         9944         227           8731         179												
8634         92         9024 + 28808         152         9097         210         9536 EX+289425         162         9599         212         997         088           8684         93         9025         205         9097 + 28816         154         9538 - 28720         157         9780         222         9939         68           8730         174         9304 - 28812         154         9098 - 28212         157         9781         227         9939         68           8730         174         9304 - 28816         154         9210         222         9593 - 28972         157         971         109         9941         227           8730         177         9314 - 288708         156         9212         223         9546         205         9843         109         9942         227           8731         177         9334 - 28830         154         9216         223         9548         205         9872         109         9942         227           8731         177         9364 - 28830         154         9218         223         9548         205         9872         109         9974         226           8752         120 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
884         93         9025         265         997+28818         154         9538         214         9779         227         9278         68           8855         93         9030         215         9092+28815         14         9538+289715         177         731         227         9393         08           8730         114         9030+289108         154         9099         212         9539+289720         124         9744         82         940         227           8730         177         9031+289708         156         9212         223         9546+28808         133         981         109         942         227           8731         177         9034         215         9214         223         9546+28808         133         8871         197         944         227           8731         177         9036-28952         156         216         223         9546+28808         153         8871         199         944         227           8732         170         9036-28952         156         218         952         219         8974         196         948         28           8752         120         9036-28952<												
8865         93         9030         215         9097 + 289615         154         9538 - 289715         157         9780         227         9938         68           8730         67         9030 + 28908         114         9099         212         9393         214         784         82         9940         227           8730         17         9031 + 28908         154         9099         212         9393         214         784         82         9940         227           8730         177         9031 + 289708         156         912         223         9546         205         983         1099         941         227           8731         67         9014         215         914         223         9546 + 2880         33         971         1994         227           8731         17         9036         2895         156         9216         223         9547         205         987         199         943         227           8732         170         9036 - 28955         156         9250         218         959         219         987         199         948         68           8752         116         903					1.11							
8730         67         9304 - 28812         154         9098         211         9538 - 28872         157         9781         277         9999         212         9539 - 2914         7784         82.9         9401         227         8730         114         9030 + 28908         154         9999         212         9393 - 29971         175         7871         109         941         227           8730         177         9314 - 28708         156         9124 - 223         9546 + 28808         153         9871         199         942         227           8731         177         9034 - 2853         154         9218 - 223         9546 + 28808         153         9871         190         944         227           8732         170         9034 - 28853         154         9218 - 223         184         959         205         9874         196         948         226           8752         170         9034 - 28955         156         9251 - 221         188         9510 - 225         9874         196         948         262           8753         170         9034 - 28975         156         9253 - 218         958         219         987         199         950 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
8730         114         903 + 289608         154         9099         212         9539 + 2819         778         872         194         227           8730         67         9031 + 289708         156         9212 - 223         9539+289715         157         967         109         9941         227           8731         177         9034         215         9214         223         9546+28808         153         9671         197         9943         227           8731         177         9036-28830         154         9216         223         9547         205         9672         109         9943         227           8732         170         9036-28830         154         9216         223         9540         205         9874         196         9948         286           8753         100         9038         214         9521         218         9550         219         9676         197         9948         226           8760         117         9038-289715         156         9254         218         9552         219         9876         197         9951         224           8795         116         9039-2899715												
8730         67         931         214         9210         223         9534-2899715         157         9817         109         9941         227           8730         117         90314-28708         156         9212         223         9546         205         9843         109         9942         227           8731         177         9036         215         9214         223         9546+28808         153         9871         179         9943         227           8731         117         9036+28803         154         9218         223         9549         205         9873         166         9948         266           8752         120         9036+289525         154         9218         253         218         9550         219         9876         197         9948         226           8760         117         9038+289715         156         9253         218         9551         219         9876         197         9949         226           8761         117         9038+289715         156         9253         218         9552         219         9876         197         9951         224           8793												
8730         177         9031+289708         156         912         223         9546+28088         135         983         109         9942         227           8731         67         9034         215         9214         223         9546+28088         133         9871         109         9943         227           8732         117         9036+28830         154         9218         223         9548         205         9873         196         9948         286           8752         120         9036+28830         154         9215         218         9548         205         9874         196         9948         68           8753         120         9038+289715         156         9253         218         9550         219         9876         197         9948         226           8760         117         9038+289715         156         9253         218         9552         219         9876         197         9949         226           8791         116         9038+289715         156         9254         218         9552         219         9876         197         9951         224           8792         116												
8731         67         9034         215         9214         223         9546 + 28088         133         9871         197         9943         227           8731         117         9036 + 28300         154         9216         223         9548         205         9872         109         9944         227           8752         120         9036 + 289525         154         9251         218         9549         205         9874         196         9948         286           8753         120         9038 + 289755         156         9525         218         9550         219         9875         196         9948         226           8760         117         9038+289750         156         9254         218         9551         219         9877         197         9949         224           8761         116         9038+289750         156         9256         218         9553         219         9879         196         9951         224           8795         116         9039+2899715         156         9256         218         9553         219         9879         196         9952         224           8806         114 <td></td> <td>117</td> <td>9031+289708</td> <td></td> <td>9212</td> <td></td> <td></td> <td>205</td> <td></td> <td></td> <td></td> <td></td>		117	9031+289708		9212			205				
8731         117         9036         215         9216         223         9547         205         9872         109         9944         227           8732         117         9036 + 28830         154         9218         223         9548         205         9873         196         9947         226           8752         120         9038 - 289525         14         9252         218         9550         219         9875         196         948         226           8760         117         9038 - 289715         156         9253         218         9551         219         9876         197         9949         226           8761         117         9038 - 289715         156         9254         218         9552         219         9876         197         999         224           8803         114         9039 - 214         9255         218         9558         219         9879         196         952         224           8803         114         9070         216         9270         221         9599         219         9880         196         952         224           8804         114         9072         221<							9546 + 28808					
8732         117         9036 + 28830         154         9218         223         9548         205         9873         196         9947         226           8752         120         9036 + 289525         154         9251         218         9549         205         9874         196         9948         68           8760         117         9038 + 289715         156         9253         218         9551         219         9876         197         9949         226           8761         117         9038 + 289720         156         9254         218         9552         219         9876         197         9950         224           8795         116         9039         214         9255         218         9553         219         9878         197         9951         224           8806         114         9060         216         9270         222         9559         219         9880         196         9953         224           8815         114         9070         211         9409+3615         188         9570         211         9882         196         9953         224           8857         118         90		117	9036					205				
8752         120         9036 + 289525         154         9251         218         9599         205         9874         196         9948         226           8753         120         9038         214         9252         218         9550         219         9875         196         9948         226           8761         117         9038+289715         156         9254         218         9552         219         9877         197         9950         224           8795         116         9039+289715         156         9256         218         9553         219         9878         197         9951         224           8803         114         9039+289715         156         9256         218         9558         219         9879         196         9952         224           8806         114         9070         211         9400+3610         198         9560         219         9881         196         9952         224           8857         118         9074         207         9405         199         9572         221         9881         196         9961         225           8867 Kit         118         90	8732	117	9036 + 28830	154	9218	223	9548	205		196	9947	
8760         117         9038+289715         156         9253         218         9551         219         9876         197         9949         226           8761         117         9038+289720         156         9254         218         9552         219         9877         197         9950         224           8795         116         9039         214         9255         218         9558         219         9879         196         9952         224           8803         114         9060         216         9270         222         9559         219         9880         196         9953         224           8815         114         9070         211         9400+3610         198         9560         219         9881         196         9953         224           8854         114         9072         221         9408-51         199         9572         221         9881         196         9953         224           8867 kit         118         9074         220         9408         199         9575         221         9883         197         9962         225           8867 kit         118         9078	8752	120	9036 + 289525	154	9251	218	9549	205	9874	196	9948	68
8761         117         9038+289720         156         9254         218         9552         219         9878         197         9950         224           8795         116         9039         214         9255         218         9553         219         9878         197         9951         224           8803         114         9039+2899715         156         9256         218         9558         219         9879         196         9952         224           8806         114         9070         211         9400+3610         198         9560         219         9881         196         9955         225           8854         114         9072         221         9400+3615         198         9570         211         9882         196         9958         224           8857         118         9075         221         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9409         199         9575         221         9881         197         9961         225           8872 kit         114         9078	8753	120	9038	214	9252	218	9550	219	9875	196	9948	226
8795         116         9039         214         9255         218         9553         219         9878         197         9951         224           8803         114         9039+2899715         156         9256         218         9558         219         9879         196         9952         224           8806         114         9060         216         9270         222         9559         219         9880         196         9953         224           8815         114         9070         221         9400+3615         198         9570         211         9882         196         9958         224           8854         114         9072         221         9405         199         9572         221         9883         196         9961         225           8867         118         9074         207         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9408         199         9575         221         9881         197         9963         225           8867 Kit         114         9079         22	8760	117	9038+289715	156	9253	218	9551	219	9876	197	9949	226
8803         114         9039+2899715         156         9256         218         9558         219         9879         196         9952         224           8806         114         9060         216         9270         222         9559         219         9880         196         9953         224           8815         114         9070         211         9400+3615         198         9500         219         9881         196         9953         225           8854         118         9074         207         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9408         198         9574         207         9884         197         9962         225           8864         118         9076         220         9409         199         9575         221         9885         197         9963         225           8867 Kit         118         9076         220         9409         199         9575         221         9886         197         9963         225           8873 Kit         114         9079+289720	8761	117	9038+289720	156	9254	218	9552	219	9877	197	9950	224
8806         114         9060         216         9270         222         9559         219         9880         196         9953         224           8815         114         9070         211         9400+3610         198         9560         219         9881         196         9955         225           8854         114         9072         221         9400+3615         198         9570         211         9882         196         9958         224           8857         118         9074         207         9408         199         9575         221         9883         196         9961         225           8864 Mil         118         9075         221         9408         198         9574         207         9884         197         9962         225           8867 Kit         118         9075         221         9488         197         9963         225           8873 Kit         114         9079         220         9504         216         9578         217         9887         197         9963         225           8874         117         9079+289715         157         9517         204         9584	8795	116	9039	214	9255	218	9553	219	9878	197	9951	224
8815         114         9070         211         9400+3610         198         9560         219         9881         196         9955         225           8854         114         9072         221         9400+3615         198         9570         211         9882         196         9958         224           8857         118         9074         207         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9408         198         9574         207         9884         197         9962         225           8867 Kit         118         9076         220         9409         199         9575         221         9885         197         9962         225           8874         114         9078         217         9418         222         9576         220         9886         197         9963         225           8874         117         9079+289720         157         9517         204         9584         217         9887         197         9969         224           8876         116         9083 <t< td=""><td>8803</td><td>114</td><td>9039+2899715</td><td>156</td><td>9256</td><td>218</td><td>9558</td><td>219</td><td>9879</td><td>196</td><td>9952</td><td>224</td></t<>	8803	114	9039+2899715	156	9256	218	9558	219	9879	196	9952	224
8854         114         9072         221         9400+3615         198         9570         211         9882         196         9958         224           8857         118         9074         207         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9408         198         9574         207         9884         197         9962         225           8873 Kit         114         9078         217         9418         222         9576         220         9886         197         9963         225           8874         114         9079         220         9504         216         9578         217         9887         197         9964         225           8874         117         9079+289720         157         9505         216         9579         220         9888         197         9967         225           8876         114         9079+289715         157         9517         204         9584+289615         153         9890         197         9979         224           8877         116         9084	8806	114	9060	216	9270	222	9559	219	9880	196	9953	224
8857         118         9074         207         9405         199         9572         221         9883         196         9961         225           8864         118         9075         221         9408         198         9574         207         9884         197         9962         225           8867 Kit         118         9076         220         9409         199         9575         221         9885         197         9963         225           8873 Kit         114         9078         217         9418         222         9576         220         9886         197         9964         225           8874         114         9079         220         9504         216         9578         217         9887         197         9969         224           8874         117         9079+289720         157         9505         216         9579         220         9888         197         9969         224           8876         114         9079+2899715         157         9517         204         9584+289615         153         9890         196         9981         225           8877         116         9084	8815	114	9070	211	9400+3610	198	9560	219	9881	196	9955	225
8864       118       9075       221       9408       198       9574       207       9884       197       9962       225         8867 Kit       118       9076       220       9409       199       9575       221       9885       197       9963       225         8873 Kit       114       9078       217       9418       222       9576       220       9886       197       9964       225         8874       114       9079       220       9504       216       9578       217       9887       197       9967       225         8874       117       9079+289720       157       9505       216       9579       220       9888       197       9969       224         8876       114       9079+2899715       157       9517       204       9584+289615       153       9890       196       991       224         8876       116       9083       207       9521       204       9585       213       9901       68       9981       225         8877       116       9084       211       9522       204       9586       208       9902       68       9983       22	8854	114	9072	221	9400+3615	198	9570	211	9882	196	9958	224
8867 Kit         118         9076         220         9409         199         9575         221         9885         197         9963         225           8873 Kit         114         9078         217         9418         222         9576         220         9886         197         9964         225           8874         114         9079         220         9504         216         9578         217         9887         197         9969         224           8874         117         9079+289720         157         9505         216         9579         220         9888         197         9969         224           8876         114         9079+2899715         157         9517         204         9584         210         9889         197         9979         224           8876         116         9083         207         9521         204         9584+289615         153         9890         196         981         225           8877         116         9084         211         9522         204         9585         213         9901         68         9982         225           8878 Kit         114         9086	8857	118	9074	207	9405	199	9572	221	9883	196	9961	225
8873 Kit         114         9078         217         9418         222         9576         220         9886         197         9964         225           8874         114         9079         220         9504         216         9578         217         9887         197         9967         225           8874         117         9079+289720         157         9505         216         9579         220         9888         197         9969         224           8876         114         9079+2899715         157         9517         204         9584+289615         153         9890         196         9981         225           8876         116         9083         207         9521         204         9584+289615         153         9890         196         9981         225           8877         116         9084         211         9522         204         9585         213         9901         68         9982         225           8878 Kit         114         9086         208         9525 + 28818         155         9586         208         9902         68         9983         225           8879         116 <t< td=""><td>8864</td><td>118</td><td>9075</td><td>221</td><td>9408</td><td>198</td><td>9574</td><td>207</td><td>9884</td><td>197</td><td>9962</td><td>225</td></t<>	8864	118	9075	221	9408	198	9574	207	9884	197	9962	225
8874       114       9079       220       9504       216       9578       217       9887       197       9967       225         8874       117       9079+289720       157       9505       216       9579       220       9888       197       9969       224         8876       114       9079+2899715       157       9517       204       9584       210       9889       197       9979       224         8876       116       9083       207       9521       204       9584+289615       153       9890       196       9981       225         8877       116       9084       211       9522       204       9585       213       9901       68       9981       225         8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525+28818       155       9589       209       9903       68       9983       225         8879       116       9086       208       9525+28818       155       9589       209       9903       68       9986	8867 Kit	118	9076	220	9409	199	9575	221	9885	197	9963	225
8874       117       9079+289720       157       9505       216       9579       220       9888       197       9969       224         8876       114       9079+2899715       157       9517       204       9584       210       9889       197       9979       224         8876       116       9083       207       9521       204       9584+289615       153       9890       196       9981       225         8877       116       9084       211       9522       204       9585       213       9901       68       9982       225         8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9983       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       68       9	8873 Kit	114	9078	217	9418	222	9576	220	9886	197	9964	225
8876       114       9079+2899715       157       9517       204       9584       210       9889       197       9979       224         8876       116       9083       207       9521       204       9584+289615       153       9890       196       9981       225         8877       116       9084       211       9522       204       9585       213       9901       68       9982       225         8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9986       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       36       9988       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989	8874	114	9079	220	9504	216	9578	217	9887	197	9967	225
8876       116       9083       207       9521       204       9584+289615       153       9890       196       9981       225         8877       116       9084       211       9522       204       9585       213       9901       68       9982       225         8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9986       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       36       998       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991	8874	117	9079+289720	157	9505	216	9579	220	9888	197	9969	224
8877       116       9084       211       9522       204       9585       213       9901       68       9982       225         8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9986       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       36       9987       225         8951       119       9089       221       9525/EX+289415       162       9591       206       9905       36       9988       226         8953       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991 <td>8876</td> <td>114</td> <td>9079+2899715</td> <td>157</td> <td>9517</td> <td>204</td> <td>9584</td> <td>210</td> <td>9889</td> <td>197</td> <td>9979</td> <td>224</td>	8876	114	9079+2899715	157	9517	204	9584	210	9889	197	9979	224
8878 Kit       114       9085       213       9525       215       9586       208       9902       68       9983       225         8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9986       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       68       9988       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9	8876	116	9083	207	9521	204	9584+289615	153	9890	196	9981	225
8879       116       9086       208       9525 + 28818       155       9589       209       9903       68       9986       225         8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       68       9988       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       36       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68	8877	116	9084	211	9522	204	9585	213	9901	68	9982	225
8884       117       9088       209       9525 + 289615       155       9590       206       9905       36       9987       225         8950       119       9089       221       9525/EX+289415       162       9591       206       9905       68       9988       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912	8878 Kit	114	9085	213	1 1 1	215	9586	208	9902	68	9983	
8950       119       9089       221       9525/EX+289415       162       9591       206       9905       68       9988       226         8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912       36       9996       226	8879	116				155		209		68		225
8951       119       9090       206       9529       215       9592       206       9906       36       9989       226         8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912       36       9996       226	8884	117	9088	209	9525 + 289615	155	9590	206	9905	36	9987	225
8953       119       9091       206       9529 + 28812       155       9593       206       9906       68       9991       226         9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912       36       9996       226	8950	119	9089	221	9525/EX+289415	162	9591	206	9905	68	9988	226
9001       104       9092       206       9529 + 289608       155       9595       210       9910       68       9992       226         9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912       36       9996       226	8951	119	9090	206		215	9592	206	9906	36	9989	226
9005       106       9093       206       9530       207       9595 + 28810       153       9911       36       9993       226         9013       205       9095       210       9531       214       9595 + 289608       153       9911       68       9994       226         9016       204       9095 + 28810       152       9531 + 289708       156       9595/EX+289408       162       9912       36       9996       226	8953	119	9091	206	9529 + 28812	155	9593	206		68	9991	
9013 205 9095 210 9531 214 9595 + 289608 153 9911 68 9994 226 9016 204 9095 + 28810 152 9531 + 289708 156 9595/EX + 289408 162 9912 36 9996 226	9001	104		206	9529 + 289608	155	9595	210		68		
9016 204 9095 + 28810 152 9531 + 289708 156 9595/EX + 289408 162 9912 36 9996 226		106	9093	206	9530	207	9595 + 28810	153		36	9993	
				210		214		153				
9021 204 9095 + 289608 152 9534 211 9596 210 9912 68 9997 226		204	9095 + 28810	152		156	9595/EX+289408	162		36		
	9021	204	9095 + 289608	152	9534	211	9596	210	9912	68	9997	226

FLEXBIMEC INTERNATIONAL S.r.l. makes every effort to maintain the accuracy and quality of the information provided on this Catalogue. However, FLEXBIMEC cannot guarantee and assumes no legal liability or responsibility for the accuracy or completeness of the information provided. The information contained on this catalogue is for general guidance only. You should neither act, nor refrain from action, on the basis of any such information. You should take appropriate professional advice on your particular circumstances because the application of our equipment may vary depending on particular circumstances.

The copyright of all content on this catalogue is owned by FLEXBIMEC. No part of the catalogue may be changed, reproduced, stored in or transmitted on any website or medium without the prior written permission of FLEXBIMEC.

Requests to republish any material must be sent to info@flexbimec.com.

Index Pag. 242