

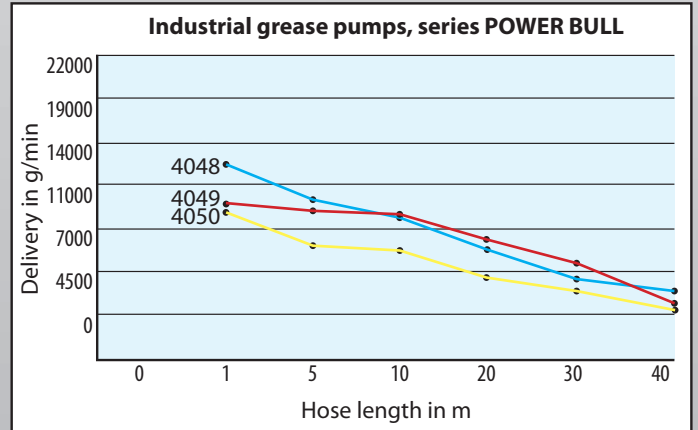
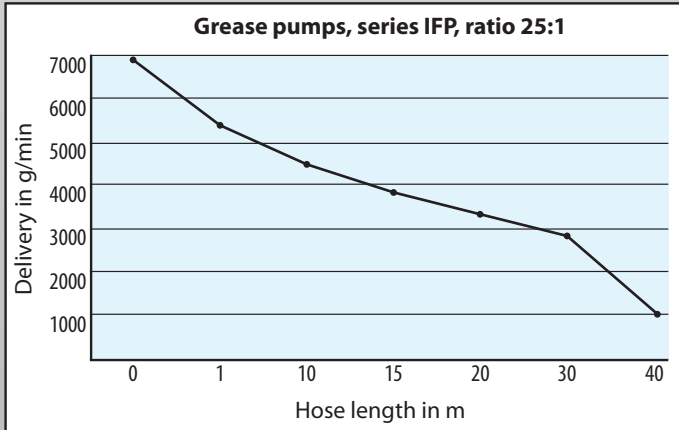
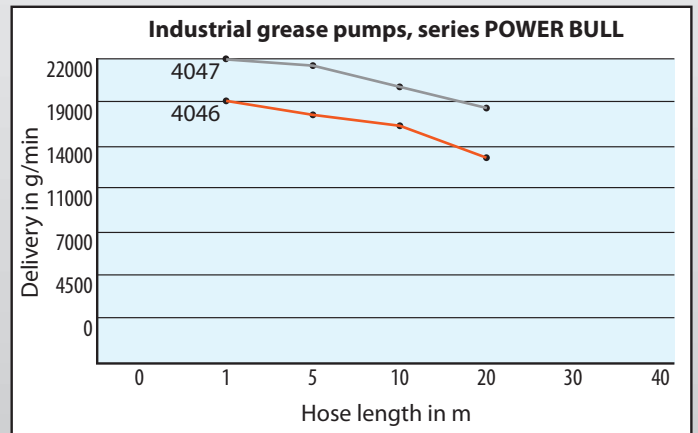
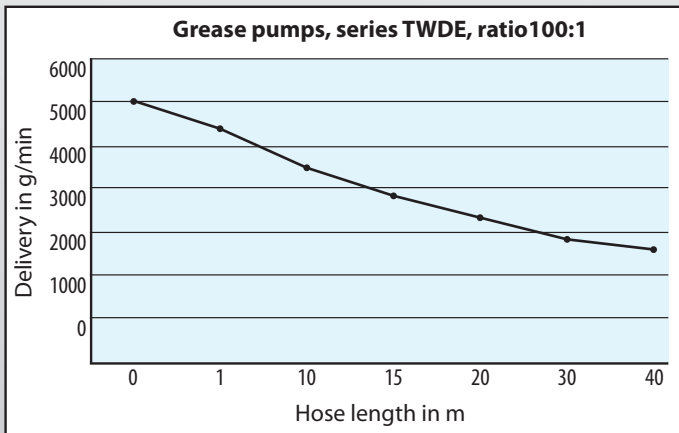
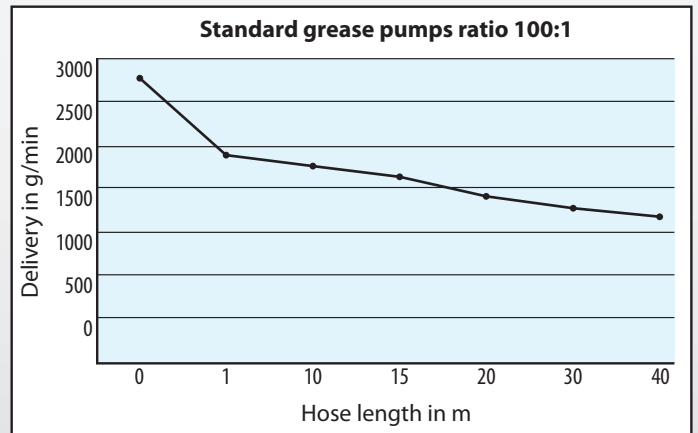
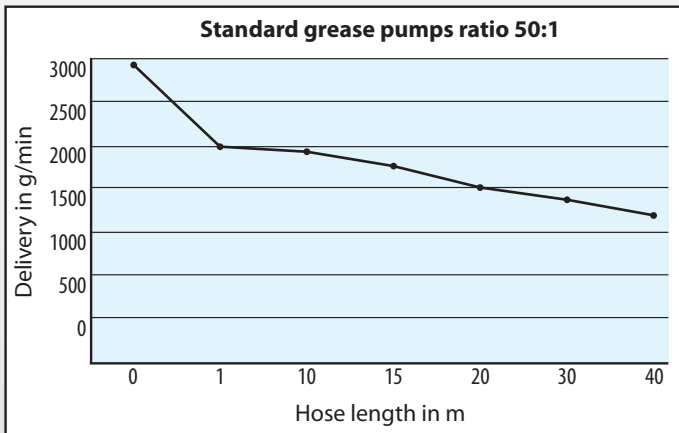
FLEXBIMEC pneumatic grease pumps are a well - proven product line since many years. The brass and aluminum alloy pneumatic motor assures a reliable use and a simple maintenance. The pumping system includes a rod in hardened steel, suitable also for heavy duty applications. The gaskets and seals are suitable 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:

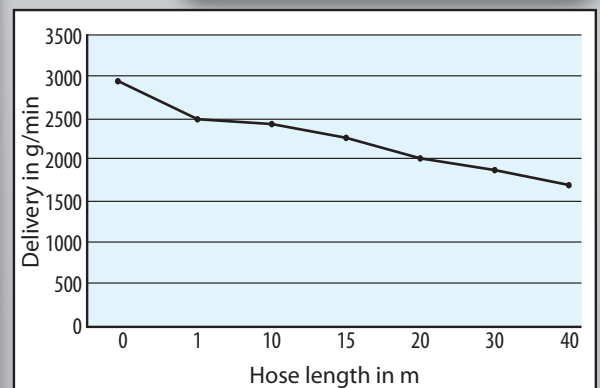
lithium grease NLGI 0 – ambient temperature 22°C - inlet pressure (compressed air) 8 bar – Free 1/2" for 50:1 and 100:1 - pumps, standard series, 1" for pump series Power Bull and TWDE

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

50:1 Compression ratio



Art. no.	4018	4020	4060	4080
Compressed air supply	Pressure min 2 bar, max 8 bar			
Compression ratio	50:1	50:1	50:1	50:1
Outlet pressure	400 bar	400 bar	400 bar	400 bar
Delivery	2900 g/min	2900 g/min	2900 g/min	2900 g/min
Connection compressed air	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)
Connection lubricant outlet	1/4" BSP (M)	1/4" BSP (M)	1/4" BSP (M)	1/4" BSP (M)
Max air consumption with 8 bar pressure	78 l/min	78 l/min	78 l/min	78 l/min
Length suction tube	335 mm	450 mm	750 mm	950 mm
Diameter suction tube	28 mm	28 mm	28 mm	28 mm
Dimensions LxWxH (mm)	95x95x690	95x95x780	95x95x1005	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

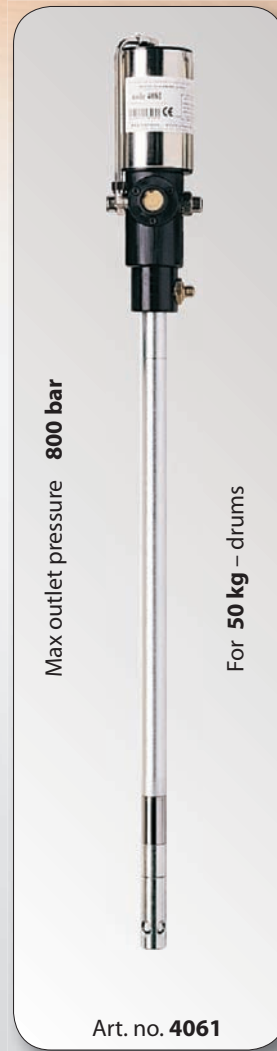
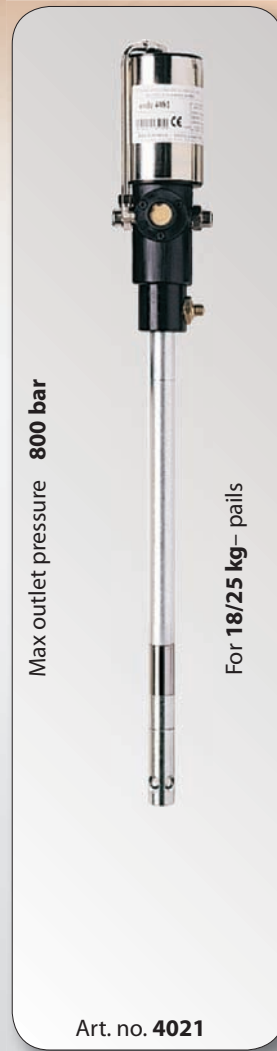


See accessories on pages 30 – 37!

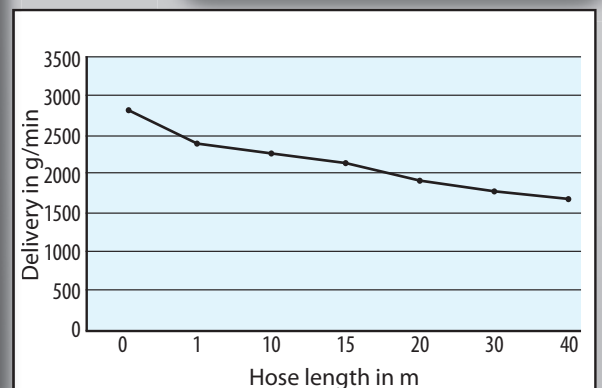
The a. m. performance values are based upon the following test conditions:
lithium grease NLGI 0 at 22°C -- Compressed air pressure 8 bar -- free flow outlet 1/2".

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

100:1 Compression ratio



Art. no.	4019	4021	4061	4081
Compressed air supply	Pressure min 2 bar, max 8 bar			
Compression ratio	100:1	100:1	100:1	100:1
Outlet pressure	800 bar	800 bar	800 bar	800 bar
Delivery	2700 g/min	2700 g/min	2700 g/min	2700 g/min
Connection compressed air	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)
Connection lubricant outlet	1/4" BSP (M)	1/4" BSP (M)	1/4" BSP (M)	1/4" BSP (M)
Max air consumption with 8 bar pressure	110 l/min	110 l/min	110 l/min	110 l/min
Length suction tube	335 mm	450 mm	750 mm	950 mm
Diameter suction tube	28 mm	28 mm	28 mm	28 mm
Dimensions LxWxH (mm)	95x95x690	95x95x780	95x95x1005	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".

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.

25:1 Compression ratio

7:1 Compression ratio

45:1 Compression ratio

25:1

Max outlet pressure **200 bar** Max delivery **7 kg/min**



For **18/25 kg** – pails

Art. no. **4022**

25:1

Max outlet pressure **200 bar** Max delivery **7 kg/min**



For **50 kg** – drums

Art. no. **4062**

25:1

Max outlet pressure **200 bar** Max delivery **7 kg/min**




For **180 kg** – drums

Art. no. **4082**

7:1

Max outlet pressure **56 bar** Max delivery **9,8 kg/min**




For **180 kg** – drums

Art. no. **4043**

45:1

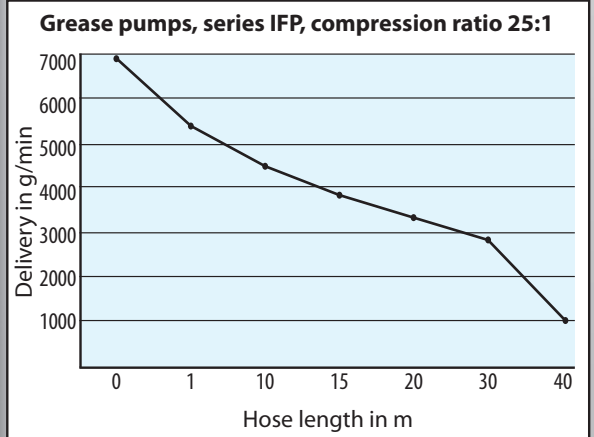
Max outlet pressure **360 bar** Max delivery **6,9 kg/min**



For **180 kg** – drums

Art. no. **4083**

Art. no.	4043	4022	4062	4082	4083
Compressed air supply	Pressure min 2 bar, max 8 bar				
Compression ratio	7:1	25:1	25:1	25:1	45:1
Outlet pressure	56 bar	200 bar	200 bar	200 bar	360 bar
Delivery	9800 g/min	7000 g/min	7000 g/min	7000 g/min	6900 g/min
Connection compressed air	3/8" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)	1/4" BSP (F)
Connection lubricant outlet	3/4" 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	165 l/min	78 l/min	78 l/min	78 l/min	78 l/min
Length suction tube	950 mm	450 mm	750 mm	950 mm	950 mm
Diameter suction tube	33 mm	28 mm	28 mm	28 mm	28 mm
Dimensions LxWxH (mm)	95x95x1250	95x95x690	95x95x780	95x95x1005	95x95x1250
Suitable for pails / drums of	180 kg	18 - 25 kg	50 kg	180 kg	180 kg
Weight	6 kg	4,2 kg	5 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".

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.

100:1 Compression ratio



Max outlet pressure **800 bar**

For **16 kg** – pails

Art. no. **4019TWDE**



Max outlet pressure **800 bar**

For **18/25 kg** – pails


Art. no. **4021TWDE**



Max outlet pressure **800 bar**

For **50 kg** – drums

Art. no. **4061TWDE**

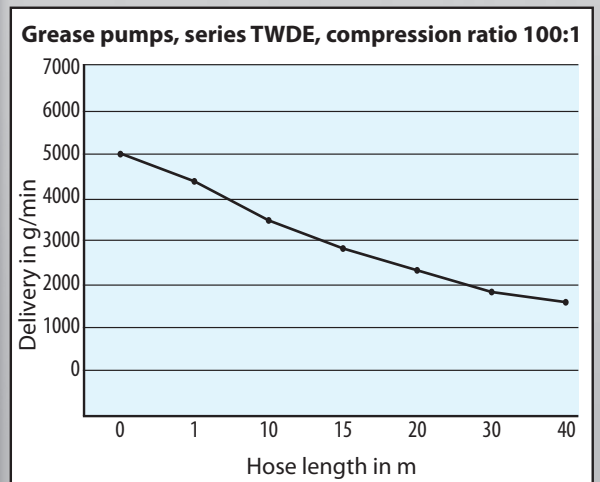


Max outlet pressure **800 bar**

For **180 kg** – drums

Art. no. **4081TWDE**

Art. no.	4019 TWDE	4021TWDE	4061TWDE	4081TWDE
Compressed air supply	Pressure min 2 bar, max 8 bar			
Compression ratio	100:1	100:1	100:1	100:1
Outlet pressure	800 bar	800 bar	800 bar	800 bar
Delivery	5000 g/min	5000 g/min	5000 g/min	5000 g/min
Connection compressed air	3/8" BSP (F)	3/8" BSP (F)	3/8" BSP (F)	3/8" BSP (F)
Connection lubricant outlet	1/2" BSP (M)	1/2" BSP (M)	1/2" BSP (M)	1/2" BSP (M)
Max air consumption with 8 bar pressure	165 l/min	165 l/min	165 l/min	165 l/min
Length suction tube	335 mm	450 mm	750 mm	950 mm
Diameter suction tube	28 mm	28 mm	28 mm	28 mm
Dimensions LxWxH (mm)	95x95x690	95x95x780	95x95x1005	95x95x1250
Suitable for pails / drums of	16 kg	18 - 25 kg	50 kg	180 kg
Weight	3,9 kg	4,3 kg	5,1 kg	5,7 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".



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	18,00	18,00	104 bar
5	18,00	16,00	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	8,00	6,20	3,80	165 bar
20	8,60	5,20	4,10	3,10	140 bar
30	6,50	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	5,30	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	4,30	2,60	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	4047	4048	4049	4050
Hose length	1	19,00	22,00	15,00	13,00	7,00	
	5	18,00	21,50	14,60	12,50	6,80	
	10	17,50	20,00	10,50	11,60	6,40	
	20	13,80	18,60	8,60	10,00	5,90	
	30			6,50	8,60	4,80	
	40			5,30	6,00	4,50	
	50			4,20	5,40	4,30	
70			3,00	4,00	4,00		

Grease type NLGI 2

		Art. no. Pump					
		m	4046	4047	4048	4049	4050
Hose length	1	18,00	21,00	11,60	8,60	5,70	
	5	13,20	16,90	8,50	7,90	5,20	
	10	12,60	15,00	6,20	6,70	4,70	
	20	7,60	10,20	4,10	4,80	3,50	
	30			3,80	3,10	2,90	
	40			3,40	2,50	2,50	
	50			6,00	2,20	2,20	
70			2,00	1,90	2,10		

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
Hose length	1	18,00	21,00	12,70	9,60	6,30	
	5	16,00	20,00	10,30	9,00	5,80	
	10	14,90	18,40	8,00	8,20	5,30	
	20	11,10	17,00	5,20	6,40	4,30	
	30			4,40	4,70	3,30	
	40			4,10	3,20	2,90	
	50			3,80	2,80	2,60	
70			1,80	2,50	2,20		

Grease type NLGI 3

		Art. no. Pump					
		m	4046	4047	4048	4049	4050
Hose length	1	18,00	21,00	9,30	7,80	5,10	
	5	11,00	14,20	5,30	5,60	4,10	
	10	9,10	12,10	3,80	4,00	3,50	
	20	6,90	7,40	3,10	2,30	2,10	
	30			2,20	2,10	1,90	
	40			1,70	1,70	1,70	
	50			0,80	1,40	1,60	
70			0,30	0,90	1,30		

The a. m. performance values are based upon the following test conditions:
Compressed air pressure 8 bar - temperature 24°C - rubber outlet hose ø 1" for the art. nos. 4048 - 4049 - 4050 and rubber outlet hose ø 1 1/2" for the art. nos. 4046 and 4047.

Delivery **19 kg/min**

Max outlet pressure **100 bar**



Art. no. **4046**

Delivery **22 kg/min**

Max outlet pressure **56 bar**



Art. no. **4047**

Delivery **15 kg/min**

Max outlet pressure **240 bar**



Art. no. **4048**

Delivery **12 kg/min**

Max outlet pressure **400 bar**



Art. no. **4049**

Delivery **6 kg/min**

Max outlet pressure **720 bar**



Art. no. **4050**

Art. no.	4046	4047	4048	4049	4050
Compressed air supply	Pressure min 2 bar, max 8 bar				
Compression ratio	13 : 1	7 : 1	30 : 1	50 : 1	90 : 1
Max outlet pressure	104 bar	56 bar	240 bar	400 bar	720 bar
Delivery	19000 g/min	22000 g/min	15000 g/min	12000 g/min	6000 g/min
Max frequency strokes/min	60	120	150	120	60
Connection compressed air	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)	1/2" BSP (F)
Connection lubricant outlet	1" BSP (M)	1" BSP (M)	1" BSP (M)	1" BSP (M)	1" BSP (M)
Max air consumption with 8 bar pressure	1,80 m ³ /min	1,92 m ³ /min	1,86 m ³ /min	1,92 m ³ /min	1,80 m ³ /min
Diameter pneumatic piston	160 mm	125 mm	100 mm	125 mm	160 mm
Diameter suction tube	70x50 mm	70x50 mm	50x22 mm	50x22 mm	50x22 mm
Suitable for pails / drums of	180 kg	180 kg	180 kg	180 kg	180 kg
Weight	26 kg	22 kg	18 kg	22 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!

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.

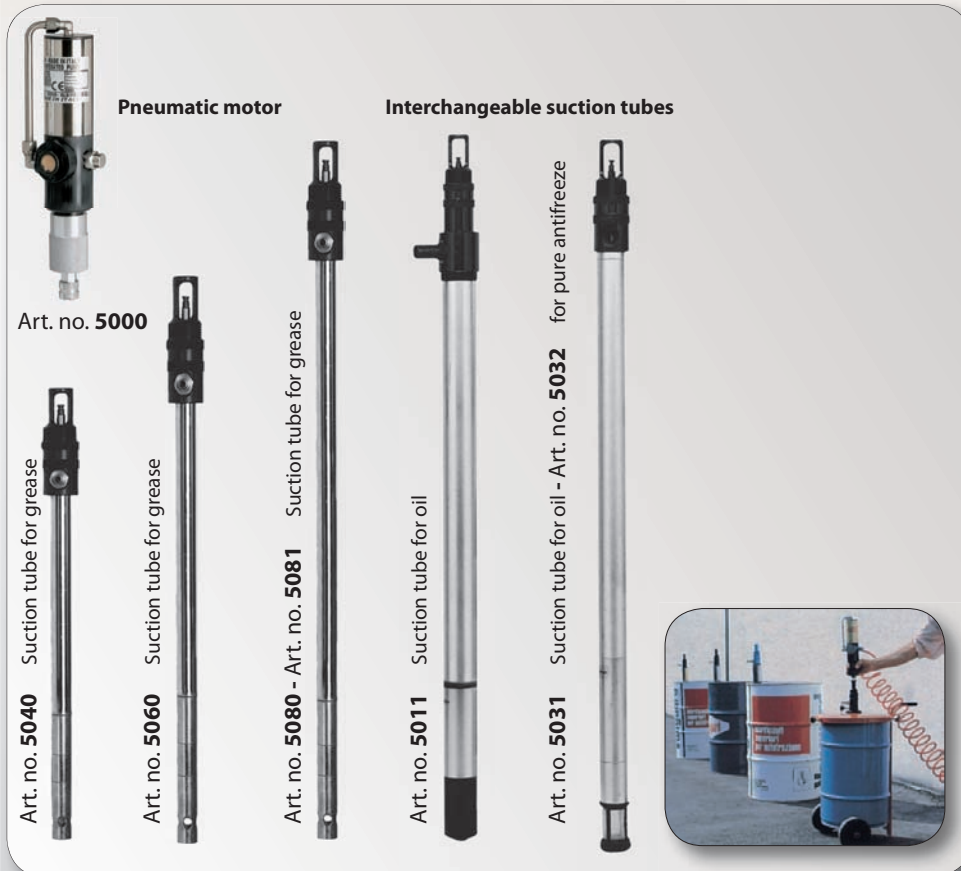
This solution offers a significant practical and economical advantage for whom must pump greases, oils, antifreeze or diesel, since it allows the user to leave the various suction tubes installed in the drums and to use the same pneumatic motor for pumping the required lubricant.

Art. no. 4025

High pressure pneumatic pump for grease and oil. The pump has been particularly developed for checking eventually existing leakages in hydraulic circuits or in test benches.

Technical data:

- Compressed air supply: min 2 bar - max 5 bar
- Air connection: 3/8" BSP (F)
- Pressure max 1100 bar
- Delivery: 800 g/min
- Connection lubricant outlet: 1/4" BSP (M)
- Length suction tube: 450 mm



250:1 Compression ratio



Art. no.	5000	5040	5060	5081	5080	5011	5031	5032
Compressed air supply	Pressure min 2 bar, max 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	950 mm	950 mm	950 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.