

Maximator technology

High-pressure pumps – the Maximator concept

Maximator high-pressure pumps can be used for many technical applications in engineering and industry – even in explosion-proof areas. They generate pressure using oil, water or special fluids in a reliable, cost-effective way. The pumps are based on the design principle of an oscillating pressure intensifier, so that pumping continues when the pressure drops. The pumps are driven with compressed air at 1 to 10 bar.

Easy handling

1. Initial operation

The pump is prepared for operation manually:

- Connect supply lines (compressed air, suction and pressure lines)
- Set air drive pressure
- Open compressed air supply slowly so that the high-pressure pump starts up

2. Build up pressure

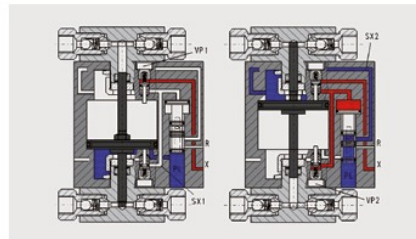
The pump technology executes all the steps for pressure build-up automatically:

- Automatic cycling of 4/2-way valve (spool cycling valve) by means of air pulses from the pilot valve (2/2-way valve)
- Suction of medium
- Optimum cycling conditions thanks to large cross-sections

3. Achieve and hold pressure

The pump controls the processes of reaching and holding pressure.

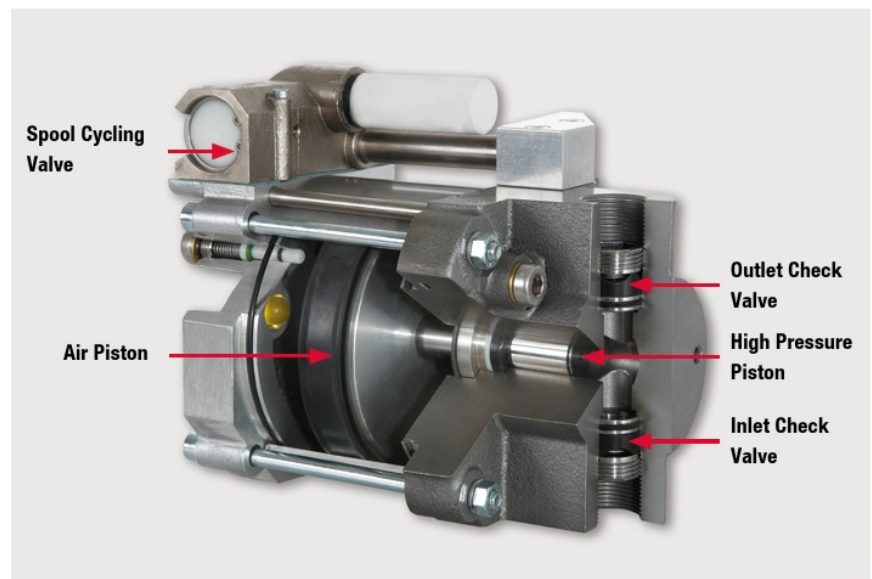
- Pump automatically stops operating when the operating pressure is reached due to equilibrium of forces
- Pressure is held
- Pressure holding phase with no energy consumption or heat generation
- Pump restarted automatically if operating pressure drops



The Maximator pumps in detail

The advantages of Maximator pumps:

- Pressure regulation via manual pressure regulator or pneumatically actuated valve
- Operation with compressed air allows use in explosion-proof areas
- Pump automatically stops operating upon reaching pre-selected final pressure
- Suitable for most liquids and liquified gases
- No power consumption during long pressure holding periods
- No heat generation during pressure holding period
- Easy installation and trouble-free handling of pumps
- Low maintenance thanks to reliable, easy-to-install devices



General information

The series and its functions

Maximator pumps offer the right solution for every application. They are suitable for different or stepped flow rates as well as for different maximum allowable operating pressures. The models are available in six different sizes: M, S, G, GX, GPD and DPD. The pressure ratio of the pump (surface ratio between the air drive piston and the high-pressure piston) can be seen from the type designation of the pump in question. The G35, for example, has a pressure ratio (i) of 1:40 and achieves a maximum operating pressure (pB) of 240 bar at an air drive pressure (pL) of 6 bar. The following model variants are available depending on the series:



One air drive section



Two air drive sections



Three air drive sections



Single-acting



Double-acting

Maximator pumps with two or three air drive sections reach the same final pressure as a Maximator pump with one air drive section with $\frac{1}{2}$ or $\frac{1}{3}$ of the air drive. Double-acting pumps increase the pump capacity by around 50% in comparison to single-acting pumps and reduce the pulsation equally.

Selecting the right pump

1. Data for pump design

The following parameters are required for designing and selecting pumps:

- Required operating pressure
- Desired pump capacity at operating pressure
- Available air drive pressure
- Medium
- Temperature of the medium
- Ambient Temperature

Depending on the application, you may require additional data. Feel free to contact us – we are happy to assist in the designing process.

2. Required operating pressure and pump capacity

Specifications of pump operating pressures are essentially based on an air drive pressure of $P_L = 10$ bar (145 psi). The operating pressure (P_B) can be determined by multiplying the pressure ratio of the pump (i) by the available air drive pressure (P_L) $P_B = i \times P_L$.

Specifications of pump capacity at the respective outlet pressure can be found in the pump capacity tables following the information about our pump series featured in this catalogue (page 26-33).

3. Medium

The pump model should be selected to match the medium to be pumped, as it is the properties of this medium which determine the requirements for the sealing materials and the wetted parts. Maximator pumps are suitable for a large variety of media. Standard designs are available for oil and water and for many special media.

Medium		
Oil	Oil / Water	Special Media
MO-Series	M-Series	MSF-Series
S-Series	S...SS-Series	GSF-Series
	G-Series	GX-Series
	GPD-Series	
	DPD-Series	

If your medium is not included in the overview (page 32/33), we will check suitable combinations for you.

4. Dimensions and weight

Some applications require special pump dimensions and weights. Please refer to the tables and option lists for our pump series for more information about this as well as on the availability of the „side inlet“ option.

Fields of application of hydraulic pumps

Pumps for oil up to 1,000 bar (14,500 psi)

- **Lifting and clamping:** Hydraulic systems for lifting and shifting loads, lifting tables, aircraft jacking
- **Hydraulic applications:** Clamping devices, punching and pin presses, chucks, actuation of cylinders
- **Presses:** cold isostatic presses, filter presses, hydraulic presses, pressure generation for presses and press overload protection
- **Tooling and Tightening:** actuating cropping, crimping, cable shears and pipe bending tools, roller tensioning and torque wrenches
- **Testing:** tensile test machines and pressure testing
- **Lubrication systems**

» M0 and S Series

Their compact, light construction as well as their numerous pressure ratios make the M0 and S series predestined for a large number of applications in oil hydraulics. The pumps are available in both single-acting and double-acting design.



Type M0



Type S

Pumps for water and oil up to 7,000 bar (101,000 psi)

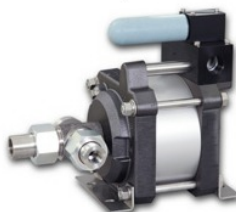
- **Hydrostatic tests:** Valves, tanks, pressure vessels, pressure switches, hoses, pipes and tubing, pressure gauges, cylinders, transducers, well casings, BOPs, gas cylinders and components from aerospace technology
- **Burst and Cycle fatigue testing** for parts mentioned above
- **Calibration:** Pressure gauges and transducers
- **Water jet cutting and cleaning**
- **Leak testing**
- **Emergency shutdown systems** for oil and gas wells
- **Pressurization** of accumulators for testing numerous components
- **Operation and Control** of well service and well head equipment

» M, S...SS and G Series

Thanks to their stainless-steel wetted parts, M, S...SS and G pumps are optimally suited for use in water hydraulics. They are available as single-acting and double-acting pumps as well as in one-, two- (M and G) or three-stage (M only) design.



Type M



Type G



Type S...SS

Pumps for the chemical and offshore industries up to 3,000 bar (43,500 psi)

- **Injection of inhibitors** such as methanol and glycol in wells
- **Injection of coolants**
- **Aviation and Automotive Testing:**
brake fluid, skydrol, transmission fluid and power steering fluid
- **Pipeline testing**
- **Charging hydraulic accumulators**
- **Actuation of subsea valves**

» MSF, GSF, GX and GPD Series

With their configuration of distance piece, leakage borehole and PTFE seal, the MSF and GSF pump models meet the specific requirements of the chemical industry.

The GX and GPD pumps are distinguished by high pump capacities and have proved very effective for the rough operational conditions of the offshore industry. With their robust construction, their stainless steel wetted parts, and their high corrosion resistance, they can withstand extreme stress.

Pumps for special applications

- **Water jet cutting** (for intermittent operation)
- **Pressure generation for Mandrel Extraction Machines**

» DPD Series

DPD pumps are large, double-acting pumps with high pump capacities working at high operating pressures of up to 2,100 bar (30,450 psi).



Type MSF



Type GX



Type GSF



Type GPD



Type DPD

Oil operation – M0 series up to 1,000 bar

Maximator pumps of the M0 series are available in single- or double-acting design with one air drive piston. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

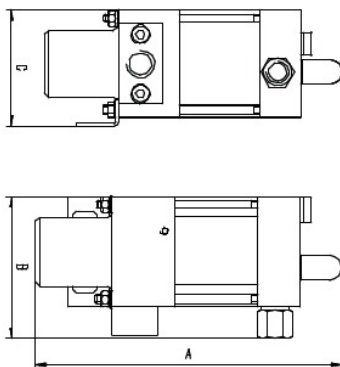
M0-Pumps

- » Single-acting
- » With one air drive piston
- » Operating pressures of up to 1,000 bar (14,500 psi)



The light and robust M0 pumps are available with a very large variety of pressure ratios. They are ideal for use as portable pump units.

- Material: Pump heads made of cast iron, pistons made of tool steel and seal made of polyurethane
- Standard design with bottom inlet
- For air drive pressures of 1 to 10 bar (14.5 bis 145 psi)



Options for M0 and M0-D pumps

- Side inlet for single-acting, single air drive section pumps
Order code: M037 – S
- Direct pilot valve air modification for single-acting, one-stage pumps (for switching on/off via an external solenoid valve) -
Order code: M022(D) to M0189(D): M037(D) – DIR

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M04	1:4	30.5	1.86	40	580	14.81	3/8 BSPP	3/4 BSPP	1/2 BSPP	190	102	80	2.5
M08	1:9	14.7	0.90	90	1305	7.07	3/8 BSPP	3/4 BSPP	1/2 BSPP	190	102	80	2.5
M012	1:14	9.4	0.57	140	2030	4.55	3/8 BSPP	3/4 BSPP	1/2 BSPP	190	102	80	2.5
M022	1:29	4.6	0.28	290	4205	2.22	3/8 BSPP	3/8 BSPP	1/4 BSPP	228	102	80	3.0
M037	1:47	2.8	0.17	470	6815	1.36	3/8 BSPP	3/8 BSPP	1/4 BSPP	228	102	80	3.0
M072	1:88	1.5	0.09	880	12760	0.72	3/8 BSPP	3/8 BSPP	1/4 BSPP	228	102	80	3.0
M0111	1:133	1.0	0.06	1000	14500	0.48	3/8 BSPP	3/8 BSPP	1/4 BSPP	228	102	80	3.0
M0189	1:225	0.6	0.04	1000	14500	0.28	3/8 BSPP	3/8 BSPP	1/4 BSPP	228	102	80	3.0

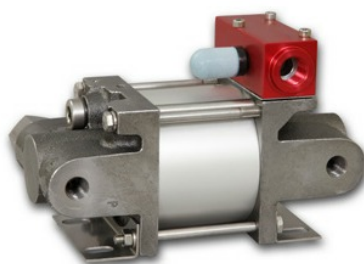
* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

(14,500 psi)



MO...D-Pumps

- » Double-acting
- » With one air drive piston
- » Operating pressures of up to 1,000 bar (14,500 psi)

The MO...D pumps run with lower pulsation than the single-acting MO pumps and achieve an approx. 50% higher pump capacity.

- Standard pumps with side inlet only

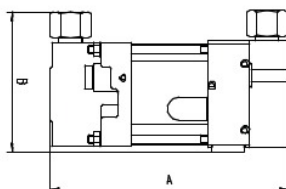
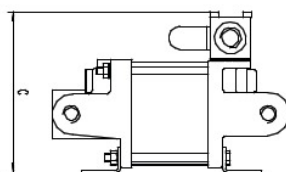
- Special connections, e.g. with NPT thread

Order code: M037(D) – NPT

- Air control unit for MO(D) pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve

Order code: M037(D) with C1

Other options available on request.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M022D	1:28	9.2	0.56	280	4060	3.91	3/8 BSPP	3/8 BSPP	1/4 BSPP	186	108	118	4.5
M037D	1:46	5.6	0.34	460	6670	2.35	3/8 BSPP	3/8 BSPP	1/4 BSPP	186	108	118	4.5
M072D	1:86	3.0	0.18	860	12470	1.24	3/8 BSPP	3/8 BSPP	1/4 BSPP	186	108	118	4.5
M0111D	1:130	2.0	0.12	1000	14500	0.82	3/8 BSPP	3/8 BSPP	1/4 BSPP	186	108	118	4.5
M0189D	1:220	1.2	0.07	1000	14500	0.49	3/8 BSPP	3/8 BSPP	1/4 BSPP	186	108	118	4.5

Oil operation – S series up to 1,000 bar

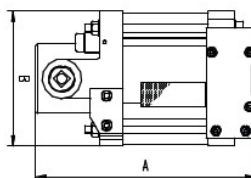
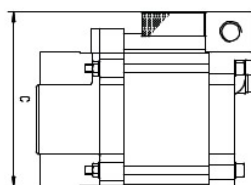
Maximator pumps of the S series are available in single- or double-acting design with one air drive piston. They are suitable for use in zone 1, category 2G/2D IIB TX explosion-proof areas (temperature class depending on medium temperature).

S-Pumps

- » Single-acting
- » With one air drive piston
- » Operating pressures of up to 1,000 bar (14,500 psi)

The light and compact S pumps can be used with units for steady operation and in mobile applications. They already start at an air drive pressure of 1 bar (14.5 psi) and can be used for precision work.

- Material: Pump heads made of cast iron, pistons made of tool steel and seal made of polyurethane
- Only available with side inlet
- Maximum air drive pressure: 10 bar (145 psi)



Options for S pumps

- Special connections, e.g. with NPT thread

Order code: S35(D) - NPT

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
S15	1:17	28.3	1.73	170	2465	9.38	1/2 BSPP	3/4 BSPP	3/4 BSPP	221	135	175.5	9.1
S25	1:25	19.6	1.20	250	3625	6.72	1/2 BSPP	3/4 BSPP	3/4 BSPP	221	135	175.5	9.1
S35	1:39	12.6	0.77	390	5655	4.31	1/2 BSPP	3/4 BSPP	3/4 BSPP	221	135	175.5	9.1
S60	1:61	8.0	0.49	610	8845	2.75	1/2 BSPP	1/2 BSPP	3/8 BSPP	221	135	175.5	9.1
S100	1:108	4.5	0.27	1000	14500	1.55	1/2 BSPP	1/2 BSPP	3/8 BSPP	221	135	175.5	9.1
S150	1:156	3.1	0.19	1000	14500	1.08	1/2 BSPP	1/2 BSPP	3/8 BSPP	221	135	175.5	9.1

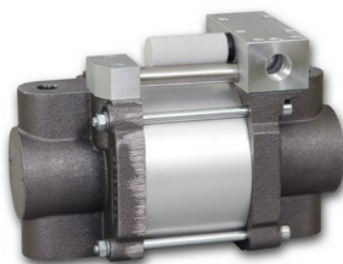
* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

(14,500 psi)



S...D-Pumps

- » Double-acting
- » With one air drive piston
- » Operating pressures of up to 1,000 bar (14,500 psi)

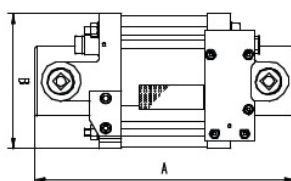
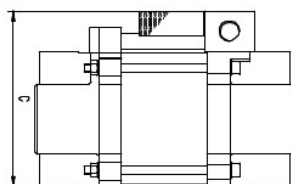
The S...D pumps run with lower pulsation than the single-acting S pumps and achieve an approx. 50% higher pump capacity.

- Connection for direct pilot valve air for switching the pump on and off via solenoid valves with small nominal size

- Air control unit for S pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve

Order code: S35(D) with C1.5

Other options available on request.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
S15D	1:16	57.0	3.48	160	2320	17.56	1/2 BSPP	3/4 BSPP	3/4 BSPP	260	135	175.5	14.5
S25D	1:24	39.0	2.39	240	3480	12.00	1/2 BSPP	3/4 BSPP	3/4 BSPP	260	135	175.5	14.5
S35D	1:38	25.2	1.54	380	5510	7.58	1/2 BSPP	3/4 BSPP	3/4 BSPP	260	135	175.5	14.5
S60D	1:60	16.0	0.98	600	8700	4.80	1/2 BSPP	1/2 BSPP	3/8 BSPP	260	135	175.5	14.5
S100D	1:107	9.0	0.55	1000	14500	2.68	1/2 BSPP	1/2 BSPP	3/8 BSPP	260	135	175.5	14.5
S150D	1:155	6.2	0.38	1000	14500	1.85	1/2 BSPP	1/2 BSPP	3/8 BSPP	260	135	175.5	14.5

Water or oil operation – M series up to 4,000 bar

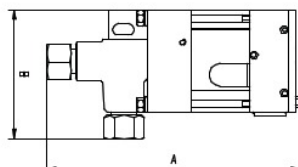
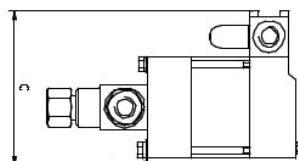
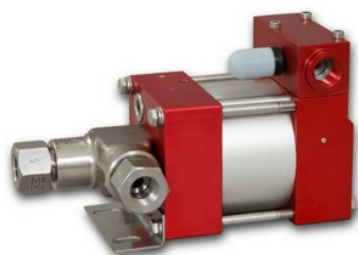
Maximator pumps of the M series are available in single- or double-acting design with one, two or three air drive pistons. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

M-Pumps

- » Single-acting
- » With one air drive piston
- » For operating pressures up to 2,200 bar (31,900 psi)

M pumps in single-acting design are distinguished by their light, compact construction.

- Material: M4, M8 and M12: Pump heads made of aluminium, pistons made of stainless steel; M22 to M189: stainless steel pump heads and pistons
- With UHMWPE seal and FKM O-ring
- Standard models with bottom inlet, side inlet optionally available



Options for M pumps

- Seal version for optimised water operation: (not available for M ...-2 /M...-3 and M...-01HL versions) up to 2,000 bar (29,000 psi)
Order code: M37 - (L)VE / M37D - VE
- Seal version for oil operation (standard)
Order code: M37 - (L)
- Seal versions for special media - **Order code: See media compatibility guide**
- Side inlet for single-acting M pumps - **Order code: M37(L) - S/M37(L)VE - S**
- Direct pilot valve air modification for single-acting, single air drive section types pumps M4 to M189: (for switching pump on/off via an external solenoid valve with small nominal size)
Order code: M37 - DIR

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M4	1:4	30.5	1.86	40	580	14.81	3/8 BSPP	1 BSPP	1/2 BSPP	216	120	112	3.0
M8	1:9	14.7	0.90	90	1305	7.07	3/8 BSPP	3/4 BSPP	1/2 BSPP	209	120	112	3.0
M12	1:14	9.4	0.57	140	2030	4.55	3/8 BSPP	3/4 BSPP	1/2 BSPP	209	120	112	3.0
M22	1:28	4.6	0.28	280	4060	2.22	3/8 BSPP	3/8 BSPP	3/8 BSPP	195	104	112	2.8
M37	1:46	2.8	0.17	460	6670	1.36	3/8 BSPP	3/8 BSPP	3/8 BSPP	195	104	112	2.8
M72	1:86	1.5	0.09	860	12470	0.72	3/8 BSPP	3/8 BSPP	3/8 BSPP	195	104	112	2.8
M111	1:130	1.0	0.06	1300	18850	0.48	3/8 BSPP	3/8 BSPP	3/8 BSPP ①	195	104	112	2.8
M189	1:220	0.6	0.04	2200	31900	0.28	3/8 BSPP	3/8 BSPP	3/8 BSPP ①	195	104	112	2.8

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

① High pressure pumps with outlet connections type BSPP or NPT are suitable for outlet pressures of up to 1,050 bar (15,000 psi). For higher outlet pressures, the pumps must be ordered with high pressure connections according to the required pressure range.

(58,000 psi)

- Spring return and hand lever attachment modification only available for M22 to M189 single acting, single air drive head types)

Order code: M37 - 01HL

- Special connections, e.g. with NPT thread

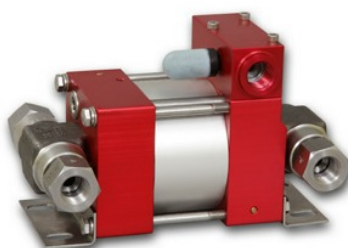
Order code: M37 - NPT

- Air control unit for M(D) pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve

Order code: M37(D) with C1

- Air control unit as above with additional safety valve in the drive air line for limiting the operating pressure on the high-pressure side **Order code: M37(D) with C1/SVAir (Please indicate the operating pressure to be set.)**

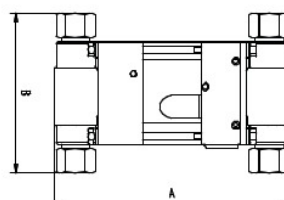
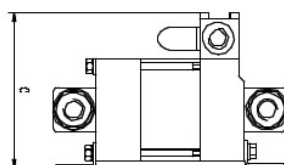
Other options available on request.



M...D-Pumps

- » Double-acting
- » With one air drive piston
- » Operating pressures of up to 2,200 bar (31,900 psi)

M...D pumps provide approx. 50% more pump capacity than M pumps with lower pulsation.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M4D	1:3	61	3.7	30	440	25	3/8 BSPP	1 BSPP	1/2 BSPP	314	119	112	4,7
M8D	1:8	29.4	1.8	80	1160	12	3/8 BSPP	3/4 BSPP	1/2 BSPP	300	119	112	3,7
M12D	1:13	18.3	1.15	130	1890	7.8	3/8 BSPP	3/4 BSPP	1/2 BSPP	300	119	112	3,7
M22D	1:28	9.2	0.56	280	4060	3.91	3/8 BSPP	3/8 BSPP	3/8 BSPP	184	124	112	3.7
M37D	1:46	5.6	0.34	460	6670	2.35	3/8 BSPP	3/8 BSPP	3/8 BSPP	184	124	112	3.7
M72D	1:86	3.0	0.18	860	12470	1.24	3/8 BSPP	3/8 BSPP	3/8 BSPP	184	124	112	3.7
M111D	1:130	2.0	0.12	1300	18850	0.82	3/8 BSPP	3/8 BSPP	3/8 BSPP ①	184	124	112	3.7
M189D	1:220	1.2	0.07	2200	31900	0.49	3/8 BSPP	3/8 BSPP	3/8 BSPP ①	184	124	112	3.7

Water or oil operation – M series up to 4,000 bar

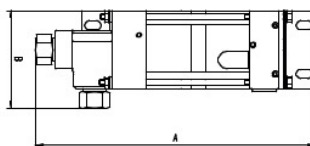
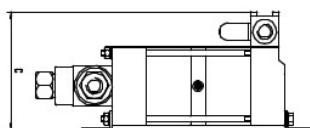
Maximator pumps of the M series are available in single- or double-acting design with one, two or three air drive pistons. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

M...-2-Pumps

- » Single-acting
- » With two air drive pistons
- » Operating pressures of up to 4,000 bar (58,000 psi)

M...-2 pumps in single-acting design with two air drive pistons achieve twice the operating pressure of single-acting, single air drive section M pumps with the same drive pressure.

- Standard models with polyurethane seal
- Standard models with bottom inlet, side inlet optionally available



Options for M-Pumps

- Seal version for oil operation (standard)
Order code: M189-(2)(3)(L)
- Seal versions for special media
Order code: See media compatibility guide
- Side inlet for single-acting M pumps
Order code: M189-(2)(3)(L) - S
- Special connections, e.g. with BSPP or NPT thread
- Air control unit for M pumps, consisting of a filter/pressure regulator

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M111-2	1:261	1.0	0.06	2500	36250	0.35	3/8 BSPP	1/4 BSPP	9/16-18 UNF	255	100	112	3.9
M189-2	1:440	0.6	0.04	4000	58000	0.21	3/8 BSPP	1/4 BSPP	9/16-18 UNF	255	100	112	3.9

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

(58,000 psi)



M...-3-Pumps

- » Single-acting
- » With three air drive pistons
- » Operating pressures of up to 4,000 bar (58,000 psi)

M...-3 pumps in single-acting design with three air drive pistons achieve three times the operating pressure of single-acting, single air drive section M pumps with the same drive pressure.

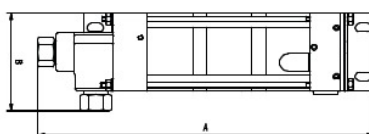
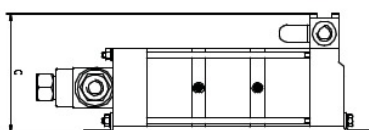
- Standard models with polyurethane seal
- Standard models with bottom inlet, side inlet optionally available

combination, control pressure gauge and shut-off valve - **Order code:**

M189-(2)(3) with C1

- Air control unit as above with additional safety valve in the drive air line for limiting the operating pressure on the high-pressure side - **Order code:** **M189-(2)(3) with C1/SVAir** (Please indicate the operating pressure to be set.)

Other options available on request.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
M111-3	1:391	1.0	0.06	2500	36250	0.24	3/8 BSPP	1/4 BSPP	9/16-18 UNF	316	100	112	4.6
M189-3	1:660	0.6	0.04	4000	58000	0.14	3/8 BSPP	1/4 BSPP	9/16-18 UNF	316	100	112	4.6

Water or oil operation – S...SS and G series up to

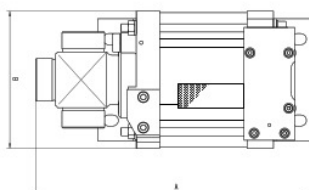
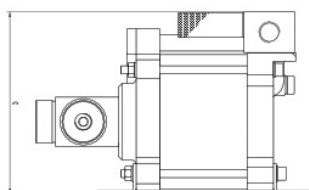
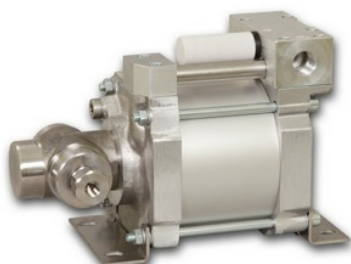
Maximator pumps of the S...-SS series are available in single-acting design with one air drive piston. They are suitable for use in zone 1, category 2G/2D IIB TX explosion-proof areas (temperature class depending on medium temperature).

S...-SS-Pumps

- » Single-acting
- » With one air drive piston
- » Operating pressures of up to 3,700 bar (53,660 psi)

The light, compact S...-SS pumps are ideally suited both for units for steady operation and for mobile applications. They already start at an air drive pressure of only 1 bar (14.5 psi) and are ideal for applications which require fast reaction times.

- Components in contact with medium made of stainless steel
- Stainless steel pump heads and pistons and UHMWPE seal
- Only available with side inlet
- Maximum air drive pressure: 10 bar (145 psi)



Options for S...-SS-Pumps

- Special connections, e.g. with NPT thread
Order code: S160SS - NPT
- Air control unit for M pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve - **Order code: S160SS with C1.5**

Other options available on request.

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
S40-SS	1:39	12.0	0.76	390	5650	4.0	1/2 BSPP	3/8 BSPP	3/8 BSPP	272	135	179	7
S80-SS	1:80	6.0	0.37	800	11600	2.0	1/2 BSPP	3/8 BSPP	3/8 BSPP	272	135	179	7
S160-SS	1:160	3.0	0.18	1630	23635	1.1	1/2 BSPP	1/4 BSPP	9/16-18 UNF (4H)	272	135	179	7
S200-SS	1:200	2.4	0.15	1930	28000	0.9	1/2 BSPP	1/4 BSPP	9/16-18 UNF (4H)	258	135	179	7
S250-SS	1:244	2.0	0.12	2400	34800	0.6	1/2 BSPP	1/4 BSPP	9/16-18 UNF (4H)	258	135	179	7
S350-SS	1:370	1.0	0.08	3700	53660	0.45	1/2 BSPP	1/4 BSPP	9/16-18 UNF (4H)	258	135	179	7

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

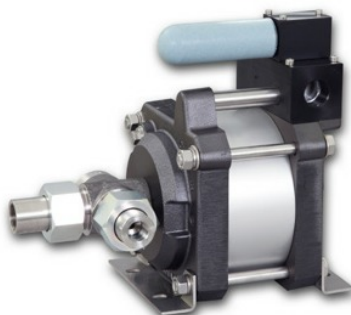
*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

ⓘ High pressure pumps with outlet connections type BSPP or NPT are suitable for outlet pressures of up to 1,050 bar (15,000 psi). For higher outlet pressures, the pumps must be ordered with high pressure connections according to the required pressure range.

7,000 bar (101,000 psi)

Maximator pumps of the G series are available in single- or double-acting design with one or two air drive pistons. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

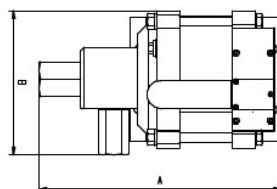
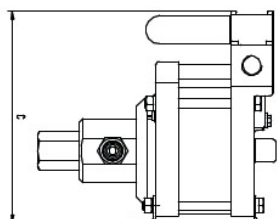


G-Pumps

- » **Single-acting**
- » **With one air drive piston**
- » **Operating pressures of up to 4,500 bar (65,250 psi)**
- Material: Stainless-steel pump heads and pistons
- Polyurethane seal; recommended for water operation: UHMWPE seal
- Standard models with bottom inlet, side inlet available on request
- G500(S) is only available with side inlet
- Maximum air drive pressure 10 bar (145 psi)
- Connection for direct pilot valve air for switching the pump on and off via solenoid valves with small nominal size

Options for G-Pumps

Note: Please refer to the information on models G...D and G...-2 on the following pages for the different options for G pumps.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
G10	1:11	90.0	5.49	110	1595	18.53	3/4 BSPP	1 BSPP	3/4 BSPP	311	190.5	272	16.0
G15	1:16	62.0	3.78	160	2320	12.86	3/4 BSPP	1 BSPP	3/4 BSPP	311	190.5	272	16.0
G25	1:28	35.3	2.15	280	4260	7.24	3/4 BSPP	3/4 BSPP	3/4 BSPP	296	181	272	14.5
G35	1:40	24.5	1.49	400	6800	5.02	3/4 BSPP	3/4 BSPP	3/4 BSPP	296	181	272	14.5
G60	1:63	15.4	0.94	630	9135	3.21	3/4 BSPP	3/4 BSPP	1/2 BSPP	321	184.5	272	13.5
G100	1:113	8.8	0.54	1050	15225	1.81	3/4 BSPP	3/4 BSPP	1/2 BSPP	321	184.5	272	13.5
G150	1:151	6.6	0.40	1450	21025	1.36	3/4 BSPP	3/4 BSPP	1/2 BSPP ^①	321	184.5	272	13.5
G250	1:265	3.8	0.23	2650	38425	0.77	3/4 BSPP	1/2 BSPP	9/16-18 UNF	300	193.5	272	13.5
G300	1:314	3.2	0.20	3140	45530	0.65	3/4 BSPP	1/2 BSPP	9/16-18 UNF	300	193.5	272	13.5
G400	1:398	2.5	0.15	3980	58000	0.51	3/4 BSPP	1/2 BSPP	9/16-18 UNF	300	193.5	272	13.5
G500S	1:519	1.9	0.12	4500	65250	0.39	3/4 BSPP	1/4 BSPP	9/16-18 UNF	362	181	272	13.5

Water or oil operation – G series up to 7,000 bar

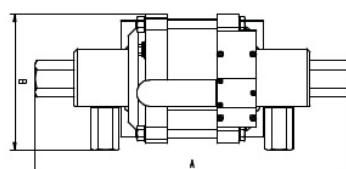
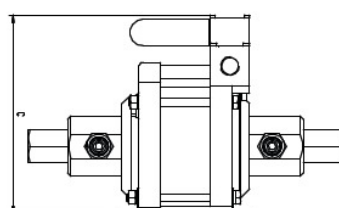
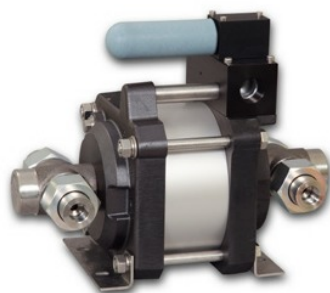
Maximator pumps of the G series are available in single- or double-acting design with one or two air drive pistons. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

G...D-Pumps

- » Double-acting
- » With one air drive piston
- » Operating pressures of up to 4,500 bar (65,250 psi)

G...D pumps in double-acting design with one air drive piston provide approx. 50% more pump capacity than single-acting G pumps with lower pulsation.

- Standard models with UHMWPE seal with FKM O-ring
- Standard models with bottom inlet, side inlet available on request
- G60D(S) - G150D(S) with side inlet only
- Maximum air drive pressure 10 bar (145 psi)
- Connection for direct pilot valve air for switching the pump on and off via solenoid valves with small nominal size



Options for G pumps

- Seal version for optimised water operation up to 4,000 bar (58,000 psi):
Order code: G35 - (L)VE / G35D - VE
(not available for G500S and G500-2S)
- Seal version for oil operation
Order code: G35 - (L)
- Seal versions for special media
Order code: See media compatibility guide
- Side inlet (G500(S), G500-2(S) and G60D(S) to G150(D)S available with side inlet only) - **Order code: G35(L) - S / G35(L)VE - S**
Other options available on request.

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
G10D	1:10	180.0	10.98	100	1450	28.85	3/4 BSPP	1 BSPP	3/4 BSPP	442	190.5	272	22.0
G15D	1:15	124.0	7.56	150	2175	19.84	3/4 BSPP	1 BSPP	3/4 BSPP	442	190.5	272	22.0
G25D	1:27	70.6	4.31	270	3915	11.34	3/4 BSPP	3/4 BSPP	3/4 BSPP	412	181	272	19.0
G35D	1:40	49.0	2.99	400	6800	7.74	3/4 BSPP	3/4 BSPP	3/4 BSPP	412	181	272	19.0
G60DS	1:63	31.4	1.92	630	9135	5.04	3/4 BSPP	3/4 BSPP	1/2 BSPP	344	184.5	272	17.0
G100DS	1:113	17.6	1.07	1050	15225	2.78	3/4 BSPP	3/4 BSPP	1/2 BSPP	344	184.5	272	17.0
G150DS	1:151	13.2	0.81	1450	21025	2.10	3/4 BSPP	3/4 BSPP ①	1/2 BSPP	344	184.5	272	17.0

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

① High pressure pumps with outlet connections type BSPP or NPT are suitable for outlet pressures of up to 1,050 bar (15,000 psi). For higher outlet pressures, the pumps must be ordered with high pressure connections according to the required pressure range.

(101,000 psi)



G...-2-Pumps

- » **Single-acting**
- » **With two air drive pistons**
- » **Operating pressures up to 7,000 bar (101,000 psi)**

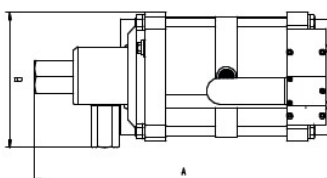
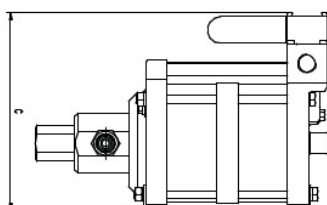
G...-2 pumps in single-acting design with two air drive pistons provide twice the operating pressure of single-acting G pumps with the same air drive pressure.

- Standard models with UHMWPE seal with FKM O-ring
- Standard models with bottom inlet, side inlet available on request
- G500-2(S) available with side inlet only
- Maximum air drive pressure 10 bar (145 psi)

- Special connections, e.g. with NPT thread
Order code: G35(L) - NPT

- Air control unit for G pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve - **Order code: G35(L) with C2**

- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: G35(L) with C2/SVAir (Please indicate the operating pressure to be set.)**
Also applies to the G models shown on the preceding page



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
G10-2	1:22	90.0	5.49	220	3190	15.89	3/4 BSPP	1 BSPP	3/4 BSPP	411	211	272	20.5
G15-2	1:32	62.0	3.78	320	4640	11.02	3/4 BSPP	1 BSPP	3/4 BSPP	411	211	272	20.5
G25-2	1:56	35.3	2.15	560	8120	6.19	3/4 BSPP	3/4 BSPP	3/4 BSPP	396	211	272	19.0
G35-2	1:80	24.5	1.49	800	11600	4.30	3/4 BSPP	3/4 BSPP	3/4 BSPP	396	211	272	19.0
G60-2	1:126	15.4	0.94	1260	18270	2.76	3/4 BSPP	3/4 BSPP	1/2 BSPP ①	421	211	272	18.0
G100-2	1:226	8.8	0.54	2100	30450	1.55	3/4 BSPP	1/2 BSPP	9/16-18 UNF	400	211	272	18.0
G150-2	1:300	6.6	0.40	2900	42050	1.16	3/4 BSPP	1/2 BSPP	9/16-18 UNF	400	211	272	18.0
G250-2	1:530	3.8	0.23	4500	65250	0.66	3/4 BSPP	1/4 BSPP	9/16-18 UNF	483	211	272	22.0
G300-2	1:628	3.2	0.20	4500	65250	0.56	3/4 BSPP	1/4 BSPP	9/16-18 UNF	483	211	272	22.0
G400-2	1:796	2.5	0.15	5500	79750	0.44	3/4 BSPP	1/4 BSPP	9/16-18 UNF	483	211	272	22.0
G500-2	1:1038	1.4	0.09	7000	101500	0.34	3/4 BSPP	1/4 BSPP	5/8-18 UNF	462	211	272	22.0

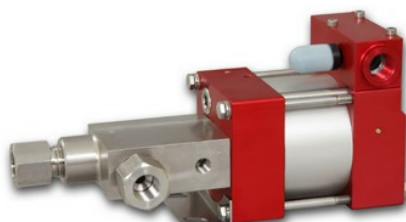
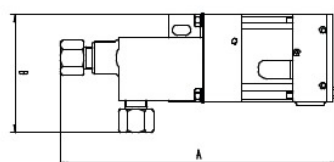
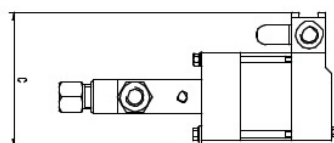
Chemical and offshore industries – MSF and GSF

MSF-Pumps

- » **Single-acting**
- » **With one air drive piston**

Thanks to their robust construction, MSF pumps are especially suited for applications in the chemical industry.

- Distance piece and leakage borehole
- Operating pressures of up to 1,000 bar (14,500 psi)
- MSF pump heads and pistons made of stainless steel
- PTFE seal material
- Standard design with bottom inlet
- Maximum air drive pressure: 10 bar (145 psi).



All high-pressure pumps from the MSF series are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

Options for MSF pumps

- Seal versions for special media
Order code: See media compatibility guide
- Side inlet:
Order code: MSF37-S
- Special connections, e.g. with NPT thread
Order code: MSF37 - NPT
- Air control unit for MSF pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve
Order code: MSF37 with C1
- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: MSF37 with C1/SVAir (Please indicate the operating pressure to be set.)**

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
MSF4	1:4	30.5	1,86	40	580	14.81	3/8 BSPP	1 BSPP	1/2 BSPP	248	112	120	6.7
MSF8	1:9	14.7	0,90	90	1305	7.07	3/8 BSPP	3/4 BSPP	1/2 BSPP	241	112	120	6.7
MSF12	1:14	9.4	0,57	140	2030	4.55	3/8 BSPP	3/4 BSPP	1/2 BSPP	241	112	120	6.7
MSF22	1:28	4.6	0,28	280	4060	2.22	3/8 BSPP	3/8 BSPP	3/8 BSPP	247	112	108	3.5
MSF37	1:46	2.8	0,17	460	6670	1.36	3/8 BSPP	3/8 BSPP	3/8 BSPP	247	112	108	3.5
MSF72	1:86	1.5	0,09	860	12470	0.48	3/8 BSPP	3/8 BSPP	3/8 BSPP	247	112	108	3.5
MSF111	1:130	1.0	0,06	1000	14500	0.28	3/8 BSPP	3/8 BSPP	3/8 BSPP	247	112	108	3.5

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

ⓘ High pressure pumps with outlet connections type BSPP or NPT are suitable for outlet pressures of up to 1,050 bar (15,000 psi). For higher outlet pressures, the pumps must be ordered with high pressure connections according to the required pressure range.

series up to 1,450 bar (21,000 psi)

All high-pressure pumps from the GSF series are suitable for use in zone 1, category 2G/2D IIB TX explosion-proof areas (temperature class depending on medium temperature).



Options for GSF pumps

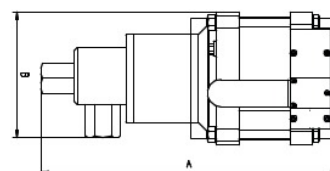
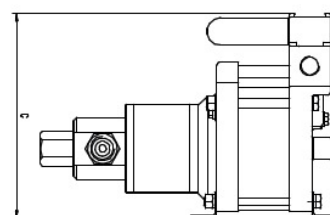
- Seal versions for special media
Order code: See media compatibility guide
- Side inlet:
Order code: GSF35-S
- Special connections, e.g. with NPT thread
Order code: G35(L) - NPT
- Air control unit for GSF pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve
Order code: GSF35 with C2
- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: GSF35 with C2/SVAir (Please indicate the operating pressure to be set.)**

GSF-Pumps

- » Single-acting
- » With one air drive piston
- » Operating pressures of up to 1,450 bar (21,000 psi)

Due to their robust construction, GSF ideally satisfy the requirements for applications in the chemical industry.

- Material: GSF pump heads and pistons made of stainless steel
- Standard design with bottom inlet
- Maximum air drive pressure: 10 bar (145 psi)
- Distance piece and leakage borehole
- PTFE seal material



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
GSF10	1:11	90.0	5.49	110	1595	18.53	3/4 BSPP	1 BSPP	3/4 BSPP	411	190,5	272	20.0
GSF15	1:16	62.0	3.78	160	2320	12.86	3/4 BSPP	1 BSPP	3/4 BSPP	411	190,5	272	20.0
GSF25	1:28	35.3	2.15	280	4260	7.24	3/4 BSPP	3/4 BSPP	3/4 BSPP	400	181	272	19.0
GSF35	1:40	24.5	1.49	400	5800	5.02	3/4 BSPP	3/4 BSPP	3/4 BSPP	400	181	272	19.0
GSF60	1:63	15.7	0.96	630	9135	3.21	3/4 BSPP	3/4 BSPP	1/2 BSPP	412	181	272	18.0
GSF100	1:113	8.8	0.54	1050	15225	1.81	3/4 BSPP	3/4 BSPP	1/2 BSPP	412	181	272	18.0
GSF150	1:151	6.6	0.40	1450	21025	1.36	3/4 BSPP	3/4 BSPP	1/2 BSPP ①	412	181	272	18.0

Chemical and offshore industries – GPD series

Maximator pumps of the GPD series are available in double-acting design with one or two air drive pistons. They are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

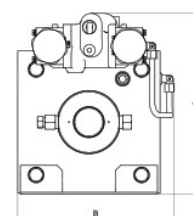
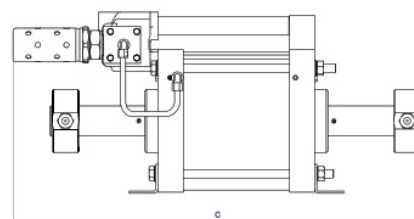
GPD-Pumps

- » Double-acting
- » With one air drive piston
- » Operating pressures of up to 2,770 bar (40,200 psi)

GPD pumps are distinguished by their high pump capacity with oil, water or different chemicals. They are optimally suited for testing pipelines, charging hydraulic accumulators or actuating subsea valves. Due to their high-quality materials, they are corrosion-resistant and can be used in a large number of applications in the oil and gas industry, the petrochemical industry and in general mechanical engineering.

- Pump capacity: up to 48 l/min
- Standard models with UHMWPE seal and FKM O-rings
- Only available with side inlet
- Maximum air drive pressure 10 bar (145 psi)

Thanks to their smart design, the GPD pumps allow fast, easy maintenance. Their safe operation is ensured through the separation of the drive section from the high-pressure section by the distance piece, preventing potential contamination of the environment.



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
GPD30	1:30	508	31.0	300	4350	48.0	3/4 BSPP	3/4 BSPP	3/4 BSPP	343	300	777	58
GPD60	1:60	257	15.7	600	8700	22.0	3/4 BSPP	3/4 BSPP	3/4 BSPP	343	300	777	58
GPD120	1:129	121	7.4	1200	17400	11.2	3/4 BSPP	3/4 BSPP	13/16-16 UNF (9M)	343	300	777	58
GPD180	1:192	69	4.2	1920	27840	7.5	3/4 BSPP	1/4 BSPP	3/4-16 UNF (6H)	343	300	777	58
GPD260	1:277	48	2.9	2770	40165	4.8	3/4 BSPP	1/4 BSPP	3/4-16 UNF (6H)	343	300	777	58

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

ⓘ High pressure pumps with outlet connections type BSPP or NPT are suitable for outlet pressures of up to 1,050 bar (15,000 psi). For higher outlet pressures, the pumps must be ordered with high pressure connections according to the required pressure range.

up to 3,000 bar (43,500 psi)



GPD-2-Pumps

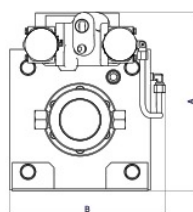
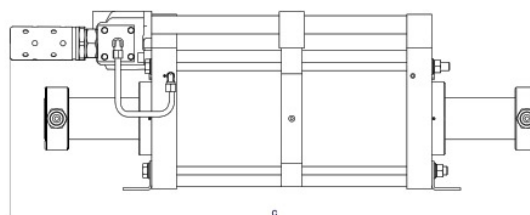
- » Double-acting
- » With two air drive pistons
- » Operating pressures of up to 3,000 bar (43,500 psi)

Options for GPD pumps

- Air control unit for GPD pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve

Order code: GPD30 with C3

- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: GPD30 with C3/SVAir (Please indicate the operating pressure to be set.)**



Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
GPD30-2	1:60	508	31.0	600	8700	25.5	3/4 BSPP	3/4 BSPP	3/4 BSPP	343	300	1016	78
GPD60-2	1:120	257	15.7	1200	17400	13.0	3/4 BSPP	3/4 BSPP	3/4 BSPP ⓘ	343	300	1016	78
GPD120-2	1:258	121	7.4	2580	37400	7.0	3/4 BSPP	3/4 BSPP	13/16-16 UNF (9M) ⓘ	343	300	1016	78
GDP180-2	1:384	69	4.2	3000	43500	4.4	3/4 BSPP	1/4 BSPP	3/4-16 UNF (6H)	343	300	1016	78
GPD260-2	1:554	48	2.9	3000	43500	2.85	3/4 BSPP	1/4 BSPP	3/4-16 UNF (6H)	343	300	1016	78

Chemical and offshore industries – GX series up to 1,000 bar (14,500 psi)

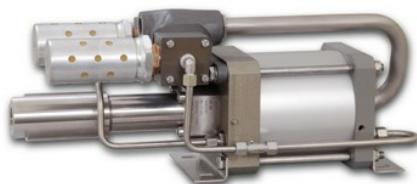
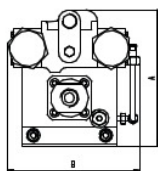
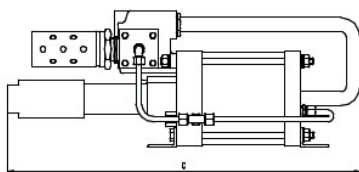
All high-pressure pumps from the GX series are suitable for use in zone 1, category 2G/2D IIC TX explosion-proof areas (temperature class depending on medium temperature).

GX-Pumps

» Operating pressures of up to 1,000 bar
(14,500 psi)

The GX pumps are distinguished by their high pump capacity. Their robust construction, stainless-steel wetted parts and high resistance to corrosion air drive section make them ideal for the rough operating conditions in the offshore industry.

- Material: Stainless-steel pump heads and pistons
- Standard models with UHMWPE seals and FKM O-ring



Options for GX pumps

- UHMWPE seals and optionally available with (depending on medium used):
 - FKM O-Ring **Order code: GX35 - FKM**
 - NBR O-Ring **Order code: GX35 - NBR**
 - EPDM O-Ring **Order code: GX35 - EPDM****See media compatibility guide**
- Air control unit for GX pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve
Order code: GX35 with C3
- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: GX with C3/SVAir (Please indicate the operating pressure to be set.)**

Other options available on request.

Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
GX35	1:36	110	6.71	360	5220	24.50	3/4 BSPP	1 FNPT	3/8 FNPT	237	244	632	24.0
GX60	1:66	65	3.97	600	8700	23.00	3/4 BSPP	1 FNPT	3/8 FNPT	237	244	632	24.0
GX100	1:117	36	2.20	1000	14500	9.00	3/4 BSPP	1 FNPT	3/8 FNPT	237	244	632	24.0
GX170	1:177	36	2.20	1000	14500	5.50	3/4 BSPP	1 FNPT	3/8 FNPT	274	249	622	30.0

* Ratio – driving surface air drive piston / driven surface high pressure piston (calculated)

** Displacement volume per double stroke (calculated).

*** Static outlet pressure (calculated and maximum allowed)

**** Approximate flow at an air drive of 6 bar / 87 psi and an outlet pressure of 0 bar/psi.

Special pumps

DPD series up to 2,100 bar (30,500 psi)



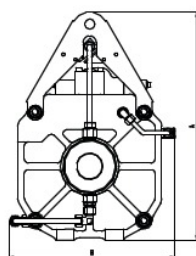
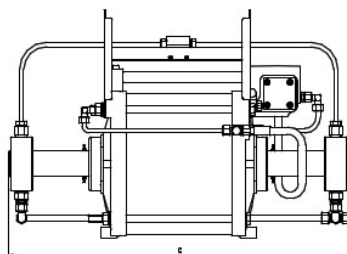
DPD-Pumps

» Operating pressures of up to 2,100 bar (30,500 psi)

DPD pumps are large pumps with high pump capacities working at high operating pressures of up to 2,100 bar (30,450 psi). The pumps are double-acting and available in two different pressure ratios.

Options for DPD pumps

- Air control unit for DPD pumps, consisting of a filter/pressure regulator combination, control pressure gauge and shut-off valve
Order code: DPD150 with C3
- Air control unit as above with additional safety valve in the air drive line for limiting the operating pressure on the high-pressure side - **Order code: DPD with C2/SVAir (Please indicate the operating pressure to be set.)**



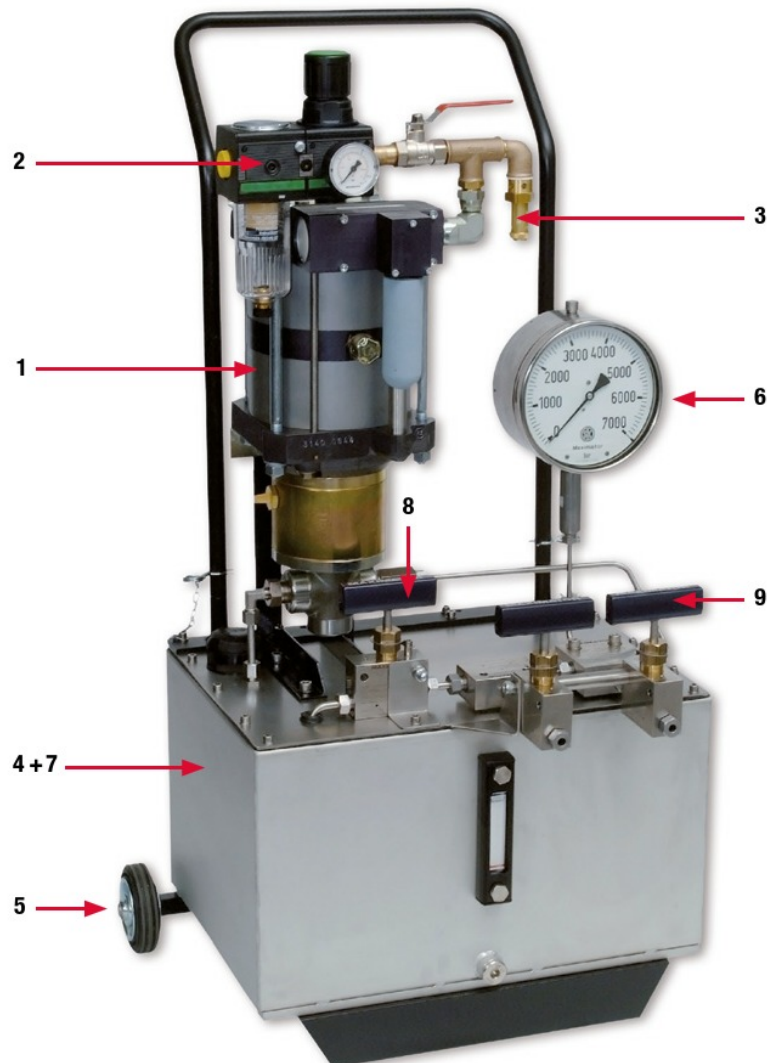
Type	Pressure ratio*	Displ. Volume **		Outlet pressure ***		Flow capacity l/min ****	Connections			Dimensions in mm			Weight kg
		cm ³	cu.inch	bar	psi		Air Drive L	Inlet A	Outlet B	A	B	C	
DPD150	1:185	72	4.4	1500	21750	8.00	3/4 BSPP	3/8 BSPP	1 1/18-12 UNF	460	346	762	54.0
DPD200	1:268	72	4.4	2100	30450	2.11	3/4 BSPP	3/8 BSPP	1 1/18-12 UNF	460	346	762	54.0

Accessories

Accessories for air-driven hydraulic pumps

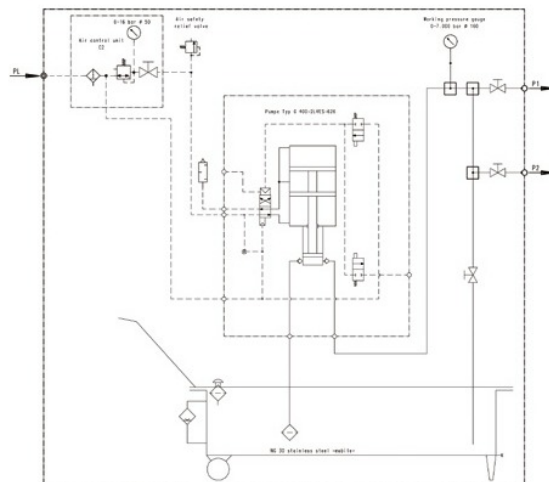
We also have an extensive range of accessories for the installation of your MAXIMATOR pump. This way, you can either select a pump unit which is ready for connection or individual components for manufacturing hydraulic systems at your site.

Please contact MAXIMATOR or ask for our „MAXIMATOR Hydraulic Units“ catalogue.



Easy operation for heavy-duty conditions

Because the devices are air-driven, all control processes are unsurpassed in their simplicity. This makes the entire device especially sturdy, reliable and insensitive to even the most extreme operating conditions.





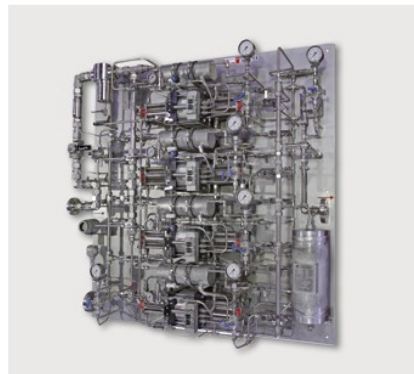
Gas boosters

- Oil-free compression of industrial gases and compressed air up to 2,400 bar
- Air-driven piston boosters which operating according to the principle of a pressure intensifier
- Air-driven operation makes them particularly suitable for use in explosion-protected areas
- No power consumption during long pressure holding periods



Valves, fittings and pipes

- Engineering and manufacturing exclusively in Germany
- Extensive product range (high-pressure valves, fittings, tubings, check valves, filters, adaptors and more)
- Short delivery times thanks to highly flexible manufacturing
- Certificates available for all products (manufacturer's declaration, ATEX and more)



Hydraulic systems and gas booster stations

- Compact hydraulic units for clamping and testing applications
- Injection units and sampling systems
- Flushing stations for extreme environmental conditions
- Hydraulic systems for on- and offshore applications (Wellhead control panels, testing and supply systems for subsea control modules)
- Booster stations for increasing sealing pressure with gas-sealed mechanical seals
- Gas booster stations for testing and filling tasks
- Hydraulic units and booster stations in stainless-steel design
- Feed systems for mechanical seals