# MAXIMATOR® Maximum Pressure.

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All technical and dimensional information are subject to changes. All general terms and conditions of sales including limitations of our liability are applicable to all products and service sold.

- Air Driven Liquid Pumps
- Air Driven Gas Boosters
- Air Driven Air Amplifiers
- High Pressure Valves, Fittings And Tubing
- Liquid And Gas Test Bay Systems
- Ultra High Pressure Hoses
- Heavy Duty Pressure Gauges

MAXIMATOR is one of the world's leading manufacturers of air driven liquid pumps, gas boosters, amplifiers, high pressure valves, fittings and tubing, heavy duty pressure gauges, high pressure hoses & fittings and accessories like valves, air pilot switches that are used in high pressure technology.

The products comply with the accident preventive directive of the European Union, the pressure equipment directive, machinery directive and explosion directive and on request, we can supply according to NACE specifications. With more than 30 years of experience in high pressure technology, MAXIMATOR today designs and manufactures a full line of high pressure equipment. Our production plant in Nordhausen together with sales offices around the world give us the force to support our customers in the best possible manner. As a first-class quality manufacturer (DIN EN ISO 9001:2000 certified), our principles are always:

- Customer-oriented
- Problem-solving
- Reliability
- Flexibility
- Availability

MAXIMATOR products are used by major national and international operating companies. Please ask for our extended reference list. Maximator is a member of the NACE association (No.198024-01).



Typical applications for MAXIMATOR pumps and pump systems:

- Valve actuation
- Valve testing
- Hydraulic drive
- Flushing drill pipes
- Metering / Dosing
- Bolt tensioning / Nut torquing

- Lubrication
- Flush out
- Tank testing
- Fire protection
- Leak testing

- Hydraulic power source
- · Hydrostatic pressure testing
- Wellhead shutdown systems
- Pressure testing of hoses
- Line flushing

MAXIMATOR air driven liquid pumps are ideal for a wide range types of oil, water and chemical applications. The pumps are air driven at air drive pressures of 1 to 10bar (14.5 to 145psi). These are high quality products with outstanding lifetime. Portable designs with few moving parts. Easy installation and operation. Explosion proof as no electrical power is required. The pumps are an economical source for hydraulic power and the pressures held without energy consumption and without media heating. Pump standard ratios available for pressures up to 7,000bar (101,000psi) and it requires no lubrication.



**MAXIMATOR®** 









ТҮРЕ	PRESSURE RATIO	MAX. OUTLET PRESSURE(BAR)	*FLOWRATE (L/MIN)	ТҮРЕ	PRESSURE RATION	MAX. OUTLET PRESSURE(BAR)	*FLOWRATE (L/MIN)
MHU72	1:86	860	0.72	MHU150	1:151	1450	1.36
MHU111	1:130	1300	0.48	MHU300	1:314	3140	0.65
MHU111-2	1:261	2500	0.35	MHU189	1:220	2200	0.28
MHU60	1:63	630	3.21	MHU350	1:350	3000	0.49
MHU100	1:113	1050	1.81	MHU189-2	1:440	4000	0.21

<sup>\*</sup> Approximate flow at air drive of 6bar / 87psi and outlet pressure of 0 bar/psi.
In co-operation with our partners, we are in a position to serve you with reliable solutions at a competitive pricing.
More options are available, please consult our sales offices.

Please ask for our brochure 'Air Driven Liquid Pumps' or download from www.maximator.de.

MAXIMATOR air driven gas boosters are suitable for oil-free compression of gases and air. Industrial gases like Argon, Helium, Hydrogen and Nitrogen can be compressed to operating pressures of 2,400bar (36,000psi), Oxygen to 350bar (5,000psi). The boosters are an efficient alternative instead of electrically driven products and can be used in explosion-proof areas. All gas boosters are contaminant-free with full separation between drive section and gas section.



Typical applications for MAXIMATOR gas boosters and booster systems:

- Diving
- Fire fighting
- Gas transfer
- Diesel engine starter

- Gas testing
- Survival craft
- Oxygen charging systems
- Transportation
- Gas transfer circuit breaker
- · Helium leak detection











#### MAXIMATOR Gas Booster Unit Series MGU

ТҮРЕ	PRESSURE RATIO	MAX. OUTLET PRESSURE (BAR)	ТҮРЕ	PRESSURE RATIO	MAX. OUTLET PRESSURE (BAR)
MGU2-1	1:2	20	MGU2-2	1:4	40
MGU5-1	1:5	50	MGU5-2	1:10	100
MGU15-1	1:15	150	MGU15-2	1:30	300
MGU30-1	1:30	300	MGU30-2	1:60	600
MGU75-1	1:75	750	MGU75-2	1:150	1500
MGU2	1:2	40	MGU2-5	1:2/1:5	70
MGU5	1:5	100	MGU5-15	1:5/1:15	198
MGU15	1:15	300	MGU5-30	1:5/1:30	330
MGU30	1:30	600	MGU15-30	1:15/1:30	450
MGU75	1:75	1500	MGU15-75	1:15/1:75	875
			MGU30-75	1:30/1:75	1050

Several other options can be made available, please consult our sales offices.



MAXIMATOR air driven amplifiers are suitable for compression of pressurised air or nitrogen. The units are capable of increasing normal pressure up to the desired final pressure. Selected pressure boosting up stream of individual consumers by using different model of air amplifiers. Zero-energy consumption after final pressure is attained and no electrical installations are required. We can offer you a choice between a standard air amplifier station or a customized solution.

#### Typical applications for MAXIMATOR air amplifiers and amplifier systems:

- Burner cleaning
- Tyre inflation of heavy duty vehicles
- Cleaning of varnishing systems (pigging)

ТҮРЕ	MPLV 4	GPLV 2	GPLV 5
PRESSURE RATIO			
SYSTEM CONFIGURATION			
	TECHNICAL DAT	A	
PRESSURE RATIO	1:4	1:2	1:5
AIR DRIVEN PRESSURE IN BAR	2 - 10	1 - 10	1 - 10
MAX. DISCHARGE PRESSURE IN BAR	40 (16*)	20 (16*)	60 (40*)

MAXIMATOR offers a complete line of high pressure valves, fittings, tubing, check valves, line filters, anti-vibration fittings and safety head assemblies with features:

VFT For Sour Gas is **Available!** 

- Rising stem design
- 316 L (1.4404) wetted parts for excellent corrosion resistance
- Metal-to-metal seating achieves bubble-tight shut-off, longer stem and seat life, greater durability for repeated open and close cycles
- · PTFE and carbon packing with metal back-up rings offers reliable stem to body sealing
- Non-rotating stem prevents stem to seat galling
- Stem sleeve and packing gland materials have been selected to achieve optimum thread cycle life and reduced handle torque. All stem sleeve threads are rolled, assuring smooth operation
- Safety weep holes for all pressure connections and packing area
- Six different valve body patterns, with choice of vee or regulating type stem tip

PRESSURE RANGE:		
1,050 bar (15,200 psi)	1,550 bar (22,500 psi)	2,500 bar (36,000 psi)
4,500 bar (65,000 psi)	7,000 bar (101,000 psi)	10,500 bar (152,000psi)



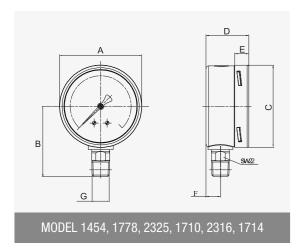
Please ask for our brochure 'Air Driven Amplifiers' or download from www.maximator.de.

<sup>\*</sup> Limited by pressure vessel rating.



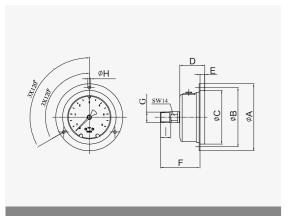
MAXIMATOR supply pressure gauges of size diameter 63mm, diameter 100mm and diameter 160mm (panel mount or bottom connection). A wide range of pressure rating from 16bar up to 4,000bar. Please consult our sales offices.

Pressure gauges are liquid-filled, made of stainless steel casing and complies with IP65 to EN60 529 / IEC529



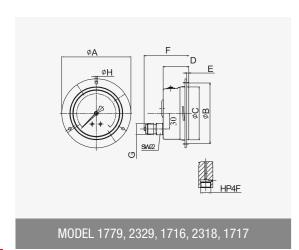
GAUGES B	GAUGES BOTTOM CONNECTION (DIMENSION in mm)							
Model No	Α	В	С	D	Е	F	G	
1454 ND 63	68	54	62	32	5	13	1/4" NPT	
1778 ND 100	101	87	100	54	16.7	17.7	1/2" NPT	
2325 ND 100	101	87	100	54	17.5	17.7	1/2" NPT /G1/2"	
1710 ND 100	101	87	100	54	17.5	17.7	G1/2" /HP4F*	
2316 ND 160	161	118	159	67	17.5	15.5	G1/2"	
1714 ND 160	161	118	159	49.5	17.5	15.4	G1/2" /HP4F*	

\* UP TO 2000 BAR-G1/2"; 2500 / 4000 BAR-HP4F



GAUGES CENTER BACK (DIMENSION in mm)								
Model No	Α	В	С	D	Е	F	G	Н
1453 ND 63	85	75	68	32	5	50	1/4" NPT	3.6

### MODEL 1453



GAUGES L	GAUGES LOWER BACK CONNECTION (DIMENSION in mm)							
Model No	Α	В	С	D	Е	F	G	Н
1779 ND 100	132	116	101	54	6	85.5	1/2" NPT	4.8
2329 ND 100	132	116	101	54	6	85.5	1/2" NPT /G1/2"	4.8
1716 ND 100	132	116	101	54	6	87	G1/2" /HP4F**	4.8
2318 ND 160	196	178	161	67	5	100	G1/2"	5.8
1717 ND 160	196	178	161	54	5	90	G1/2" /HP4F**	5.8

<sup>\*\* 1600</sup> BAR-G1/2"; 2000 / 4000 BAR-HP4F







MODEL	1454	1453
Diameter	63mm	63mm
Pressure Connection	1/4" NPT	1/4" NPT
Pressure Range	Up to 1000 Bar	Up to 1000 Bar
Accuracy Class	1.6	1.6
Wetted Parts	Cu Zn alloy	Cu Zn alloy
Temperatures Process Medium Ambient	-20°C to 80°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C
Process Medium	0.21 kg	0.26 kg













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MODEL	1778	1779	2325	2329	1710	1716
Diameter	100mm	100mm	100mm	100mm	100mm	100mm
Pressure Connection	1/2" NPT	1/2" NPT	1/2" NPT / G 1/2"	1/2" NPT / G 1/2"	G 1/2" / HP4F	G 1/2" / HP4F
Pressure Range	Up to 1000 Bar	Up to 1000 Bar	Up to 1000 Bar	Up to 1000 Bar	1600-4000 Bar	1600-4000 Bar
Accuracy Class	1.0	1.0	1.0	1.0	1.0	1.0
Wetted Parts	Cu Zn alloy	Cu Zn alloy	Stainless Steel	Stainless Steel	Stainless Steel / Ni Span	Stainless Steel / Ni Span
Temperatures Process Medium Ambient	-20°C to 80°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C	-20°C to 100°C -25°C to 60°C	-20°C to 100°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C
Process Medium	0.90 kg	0.90 kg	1.00 kg	1.00 kg	0.70 kg	0.70 kg











MODEL	2316	2318	1714	1717
Diameter	160mm	160mm	160mm	160mm
Pressure Connection	G 1/2"	G 1/2"	G 1/2" / HP4F	G 1/2" / HP4F
Pressure Range	Up to 1600 Bar	Up to 1600 Bar	1600-4000 Bar	1600-4000 Bar
Accuracy Class	1.0	1.0	1.0	1.0
Wetted Parts	Stainless Steel	Stainless Steel	Stainless Steel /Ni Span	Stainless Steel /Ni Span
Temperatures Process Medium Ambient	-20°C to 100°C -25°C to 60°C	-20°C to 100°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C	-20°C to 80°C -25°C to 60°C
Process Medium	2.10 kg	2.10 kg	1.10 kg	1.10 kg

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#### **SPECIFICATIONS**

- Portable rectangular recorder 277 x 277mm with handle and feet
- Case St. Steel 316, weatherproof, corrosion resistant
- Recording with disposable felt pen on circular recorder charts diameter 223mm, writing width 80mm
- Mechanical spring wound clock, revolution time 24hrs (clockwise)
- Viewing window laminated safety glass
- Accuracy Class 1.0 (+/- 1% of full scale)
- Connection back, 1/4" NPT female or 1/4" HP female

Pressure Range: 0 - 10,000 psi 0 - 15,000 psi

0 - 30,000 psi

0 - 20,000 psi

Minimum Temperature Span: 60°C Minimum Temperature: -170°C Maximum Temperature: +600°C



8" Portable Pressure Chart Recorder Maximator MX 4888SST

#### **OPTIONS**

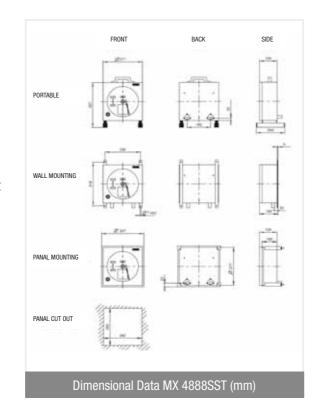
- Wall or Panel Mounting
- Mechanical spring wound clock, single revolution time 1hr, 4hrs, 8hrs, 12hrs or 7 days (clockwise, optional: anti-clockwise)
- Switchable clockworks 1hr/15min, 1hr/4hrs, 2hrs/8hrs, 24hrs/7 days (clockwise)
- Multiprogrammable battery-operated chart drive (anti-clockwise)
- Dual pen execution
- Other ranges and process connections are available upon request

#### **ORDERING INFORMATION:**

- Model Number
- Mounting: wall mount / panel mount / portable
- Range
- Clockwork revolution time
- Options, if any

#### NOTE:

- All our recorders are supplied with 50 recorder charts and 1 spare felt pen
- Calibration certificate is optional at additional cost

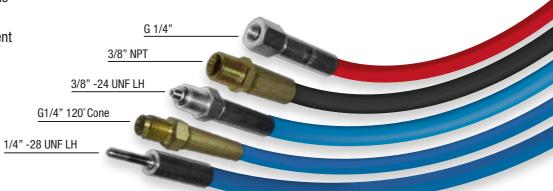


MAXIMATOR supply ultra high pressure hoses from 1,000bar, 1,800bar, 2,500bar and coupled with a wide range of hose fittings.

#### Typical applications for MAXIMATOR hoses:

- Bolt Tensioning & Torque Tools
- Hydraulic Jacks
- Controls for Service Equipment
- Pressure Testing for Valves
- **Tooling and Control Panels**
- Water Blasting





HOSE TYPE	MX 1000	MX 1800	MX 2500
WORKING PRESSURE	1000 Bar	1800 Bar	2500 Bar
BURST PRESSURE	2500 Bar	4500 Bar	6250 Bar
IDø	6.3mm	5.0mm	4.8mm
OD Ø	11.5mm	11.2mm	13.2mm
MIN.BEND RADIUS	110mm	150mm	200mm
PRESSURE SUPPORT	2 Layers	4 Layers	6 Layers
COLOUR	Black	Blue	Red
TEMPERATURE RANGE	-30°c to -60°c	-30°c to -60°c	-30°c to -60°c
WEIGHT	175g/m	260g/m	450g/m

HOSE FITTING	MX 1000	MX 1800	MX 2500
Swivel Nut 1/4" JIC	•		
Male Fitting 1/4" NPT	•		
Male Fitting 3/8" NPT	•		
G1/4" Male for Usit Ring	•		
G1/4" Male with 120° Cone		•	•
G1/4" Female Swivel			•
MX14x1.5 Female Swivel		•	
9/16"-18 UNF Female Swivel			•
1/4"x28 UNF LH AISI 316Ti		•	•
1/4" Collar & Gland			•
3/8"x24 UNF LH AISI 316Ti		•	•
3/8" Collar & Gland			•
9/16"x18 UNF LH AISI 316Ti		•	•
9/16" Collar & Gland		•	•

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Note: If gaseous media is used, a safety factor 1 to 6 between working pressure and burst pressure will have to be maintained. In this case, test pressure is 25% of the burst pressure.







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PULSE TEST STAND



















Your success is our first priority. Our engineering and service team is available for you at all times for professional maintenance, inspection, refitting and repair of your systems and test machines.

Overview of MAXIMATOR services:

- Setup and initial start-up
- Inspection service
- Training service
- Maintenance contracts
- Installing and laying pipes
- Overhauling and upgrading hydrostatic systems
- Customizing of pressure solutions
- Commissioning

Please ask for our brochure 'Gas and Water Assisted Systems' and 'Test Benches' or download from www.maximator.de.

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