

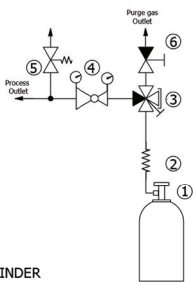
MANIFOLDS FOR INDUSTRIAL GAS SUPPLIER SYSTEMS

- LOW FLOW RANGE

- MTLX - ONE SOURCE



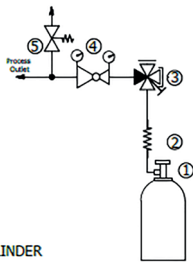
Manifold for one cylinder with process gas purging system



- 1 - GAS CYLINDER
- 2 - COIL
- 3 - INLET SHUT-OFF VALVE
- 4 - PRESSURE REGULATOR WITH IN/OUT GAUGE
- 5 - RELIEF VALVE
- 6 - PURGE OUTLET VALVE



Manifold for one cylinder without process gas purging system



- 1 - GAS CYLINDER
- 2 - COIL
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- 4 - PRESSURE REGULATOR WITH IN/OUT GAUGE
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Manifold used in supply systems for industrial, inert, flammable, oxidizing gases and gas mixtures. Not usable for corrosive or toxic gases and gas mixtures.

SPECIAL FEATURES:

- > Metal diaphragm for valves and regulators
- > Compact design
- > Valves - designed and approved in accordance with relevant sections of EN ISO 10297:2015 (including O₂ - ignition test for main shut off valve)
- > Regulator - designed and approved regarding ISO7291 (including O₂- ignition test)
- > Electrostatic chargeability test
 - fulfill requirements according DIN EN ISO 80070-36; IEC TS 60079-32-1 and German TRGS 727
 - usable in EX- areas zones 1 and 2 for gases with explosion risk group I; IIA; IIB; IIC
- > Connection hoses or connection pigtailes are not described in this data sheet

TECHNICAL SPECIFICATION OF PANELS:

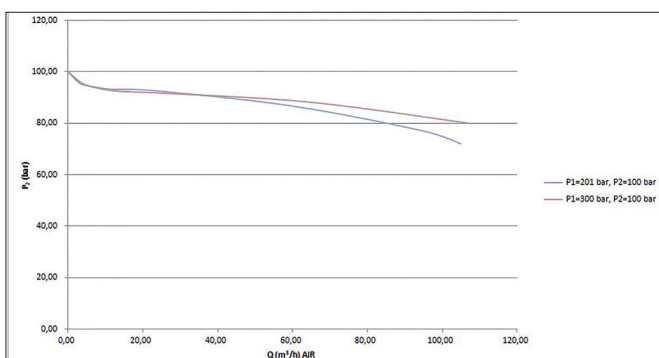
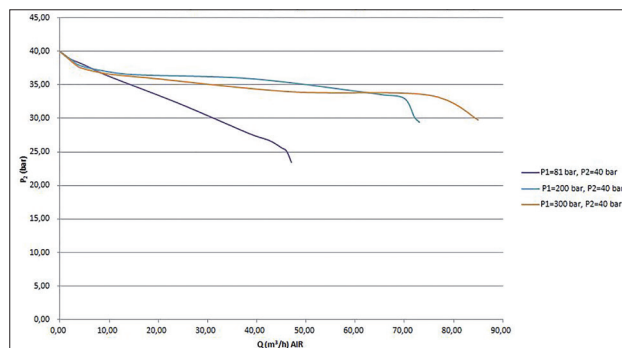
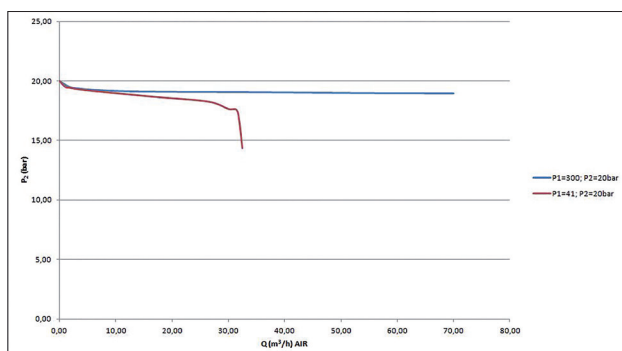
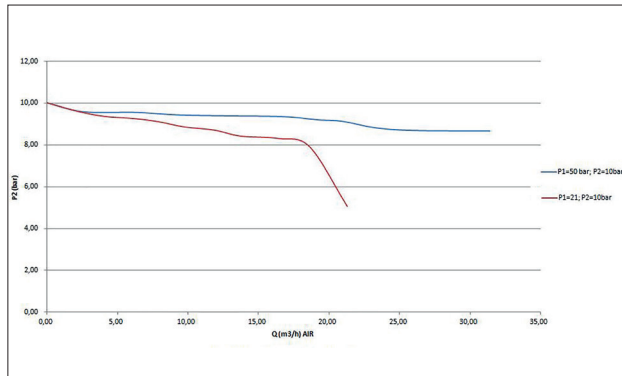
- > Consists of two parts (plates)
- > Easy installation of ground plate (without weight of manifold)
- > Attach front plate and fix by one screw only.
- > Front plate with mounting hole for replacement of gauges

TECHNICAL DATA - REGULATOR	
Working temperatures:	-20°C to + 60 °C
Inlet/outlet ports:	NPT ¼" female
Leakage rate seat:	less than 50 cm ³ /h (23°C; 1,013 bar absolut) Compressed Air
Leakage rate outside:	less than 10 cm ³ /h (23°C; 1,013 bar absolut) Compressed Air
Filter inlet:	10 µm mesh
Filter outlet ports:	100 µm mesh
Mounting holes:	2xM6
Materials gas wetted parts:	
Regulator body:	BRASS (2.0401.26)
Regulator diaphragm:	Hastelloy (2.4819)
Regulator seat:	PCTFE
Regulator popet:	BRASS (2.0371)
Contact gauges available - please contact us	
Max. inlet pressure:	300 bar
Delivery pressures:	10 bar, 20 bar, 40 bar, 100 bar
Pressure gauge rates (pressure rates):	25 bar (10 bar); 40 bar (20 bar); 65 bar (40 bar); 160 bar (100 bar); 200 (315 bar); 400 bar (300 bar);
Cracking pressure relief valves:	15,4 bar (10 bar); 30,8 bar (20 bar); 61,6 bar (40 bar); 154 bar (100 bar)
Tests in production:	Pressure test with dry air (ISO 8573 [1:2:2]) of each item regarding ISO 7291 5.2.7.2
	Seat leakage test with dry air (ISO 8573 [1:2:2]) of each item regarding ISO 7291 5.2.7.3
	Test of functionality of each item
Approvals during development:	Type test regarding ISO 7291
	O ₂ ignition test regarding ISO 7291
	Approval for all none metallic O ₂ - wetted parts which were not part of O ₂ ignition test
	Electrostatic chargeability test

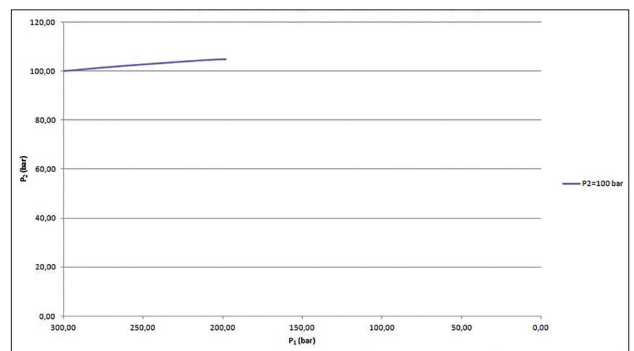
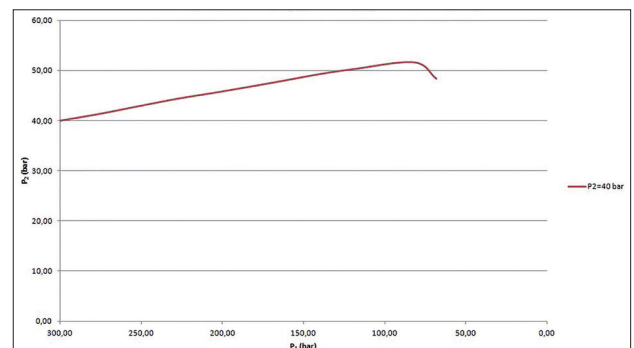
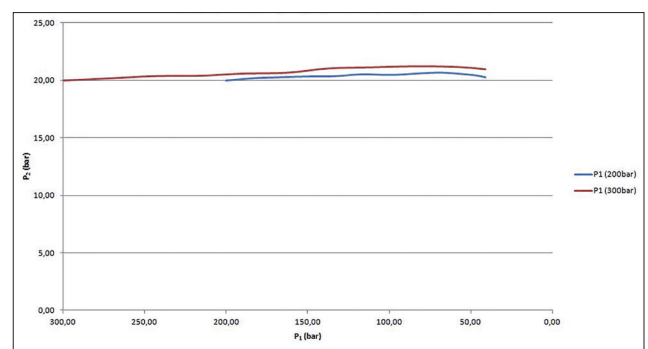
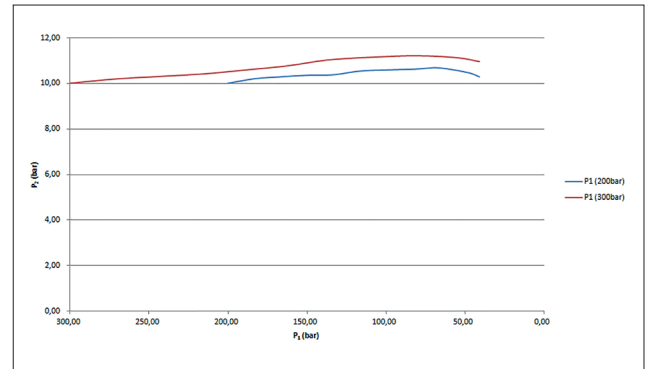
TECHNICAL DATA - VALVES	
Working temperature:	-20°C to + 60°C
Inlet/Outlet ports:	NPT 1/4" female
Max. working pressure:	300 bar
Kv-value:	0,25
Seat diameter:	5 mm
Leakage rate seat:	less than 6 cm ³ /h (20°C; 1,013 bar absolut) Compressed Air
Leakage rate outside:	less than 6 cm ³ /h (20°C; 1,013 bar absolut) Compressed Air
Filter inlet:	10 µm mesh
Filter outlet ports:	100 µm mesh
Mounting holes:	M6
Material gas wetted parts:	
Valve body:	BRASS (2.0401.26)
Valve diaphragm:	4- port version: 1 x Hastelloy (2.4819), 1 x Elgiloy (2.4711) 2- port version: 2xElgiloy (2.4711)
Valve seat:	PCTFE
Valve popet:	BRASS (2.0401.26)
Tests in production:	Pressure test with dry air (ISO 8573 [1:2:2]) Seat leakage test with dry air (ISO 8573 [1:2:2]) of each item Test of functionality of each item
Approvals during development:	Type test accordance with relevant sections of EN ISO 10297:2015 (including O2 ignition test for main shut off valve) Electrostatic chargeability test

TECHNICAL DATA - PLATES	
Ground plate:	Material 1.4301 (polished) Option for attaching safety wire of hoses with special trap against loosening Grounding bolt Openings on top and in bottom of ground plate allows installations "behind" manifold
Front plate:	Material 1.4301 (polished) Mounting hole for possible replacement of gauges Free space for additional installer label (for instance remark for next maintenance)
Marking on panel:	Sign of our range (druvaTEC) QR - code Label with link to our home page to find IFU, data sheet and other technical documents

FLOW CURVES



DYNAMIC EXPANSION CURVES



P_1 - inlet pressure, P_2 - outlet pressure

DRAWINGS

ORDERING INFORMATION

MTLX X XX XX XX XX XXXX XXXX X XXXX XXXX

***GAS TYPE:**
S - STANDARD GASES

***INLET PRESSURE:**
F4 - 60 BAR
F6 - 100 BAR
G6 - 300 BAR

***OUTLET PRESSURE:**
D2 - 10 BAR
D3 - 20 BAR
E1 - 40 BAR
F2 - 100 BAR

***INLET GAUGE TYPE:**
BT - BOURDON TUBE
I1 - INDUCTIV CONTACT I1
R5 - REED CONTACT R5

***OUTLET GAUGE TYPE:**
BT - BOURDON TUBE
I1 - INDUCTIV CONTACT I1
R2 - REED CONTACT R2
I1 - INDUCTIV CONTACT I1
R5 - REED CONTACT R5

***RELIEF CONNECTION:**
SEE THE LIST OF CONNECTIONS

***PURGE CONNECTION:**
0000 - WITHOUT PURGING
SEE THE LIST OF CONNECTIONS

***PURGING:**
0 - WITHOUT PURGING
1 - PURGE WITH PROCESS GAS

***PROCESS OUTLET CONNECTION:**
SEE THE LIST OF CONNECTIONS

***PROCESS INLET CONNECTION:**
M14H - METRIC M-HX1.5 H
M14N - METRIC M-HX1.5 N
W2M - W21X1/4 M LH
W2NR - W21X1/4 N RH

***LIST OF CONNECTIONS**

N14F - NPT1/4" FEMALE
M06B - COMPRESSION FITTING Ø 6MM BRASS
M08B - COMPRESSION FITTING Ø 8MM BRASS
M10B - COMPRESSION FITTING Ø 10MM BRASS
M12B - COMPRESSION FITTING Ø 12MM BRASS
M06S - COMPRESSION FITTING Ø 6MM SS
M08S - COMPRESSION FITTING Ø 8MM SS
M10S - COMPRESSION FITTING Ø 10MM SS
M12S - COMPRESSION FITTING Ø 12MM SS
I46B - COMPRESSION FITTING Ø3/8" BRASS
I48B - COMPRESSION FITTING Ø1/2" BRASS
I45S - COMPRESSION FITTING Ø1/4" SS
I46S - COMPRESSION FITTING Ø3/8" SS
I48S - COMPRESSION FITTING Ø1/2" SS

***GAS TYPE DEFINED BY PRODUCT LINE AND TYPE (CHECK AVAILABLE GAS TYPE IN DATASHEET)**

EXAMPLE: MTLXSGXE111BTN14FM06B1M06BN14F

1 - GAS CYLINDER
2 - COIL
3 - INLET SHUT-OFF VALVE
4 - PRESSURE REGULATOR WITH IN/OUT GAUGE
5 - RELIEF VALVE
6 - PURGE OUTLET VALVE



Link to product configurator