

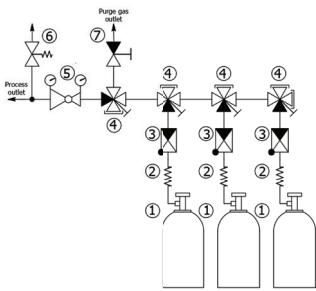
MANIFOLDS FOR INDUSTRIAL GAS SUPPLY SYSTEMS

- LOW FLOW RANGE

- MTLT - THREE SOURCES WITH MANUAL CHANGE OVER SYSTEM



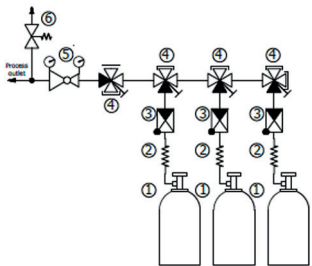
Manifold for three cylinders with manual change over system and including process gas purging system



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



Manifold for three cylinders with manual change over system process gas purging system not included



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

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:

- > Switching between three sources by manual valve actuation
- > 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 pigtailed are not described in this data sheet

TECHNICAL SPECIFICATION OF PANELS:

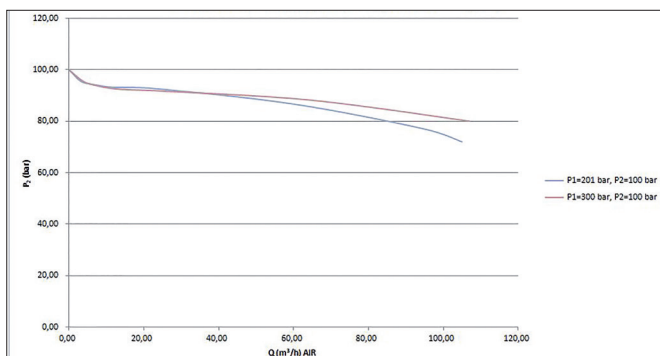
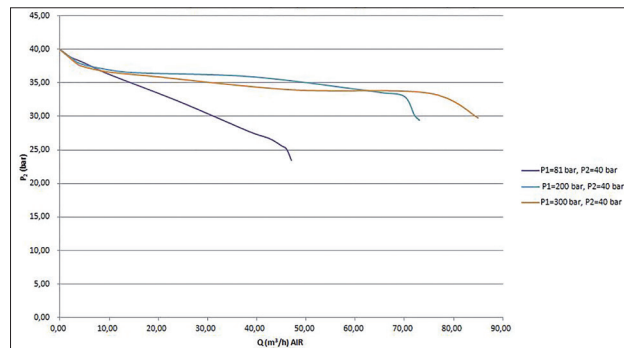
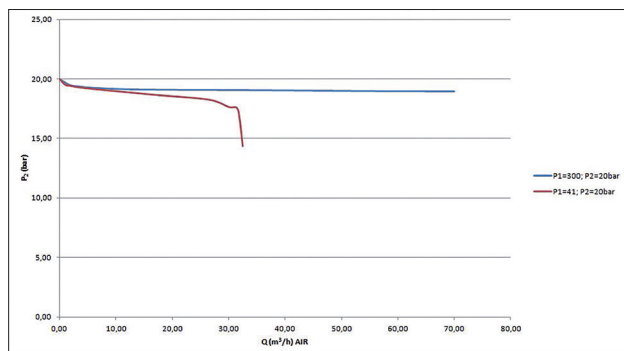
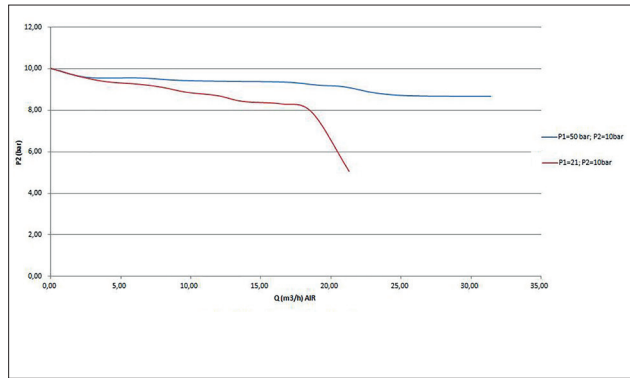
- > Consists of two parts (plates)
- > Easy installation of ground plate (without weight of manifold)
- > Attach front plate and fix by one screw only
- > Front plate with mounting hole for replacement of gauges

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
	O2 ignition test regarding ISO 7291
	Approval for all none metallic O2 - wetted parts which were not part of O2 ignition test
	Electrostatic chargeability test

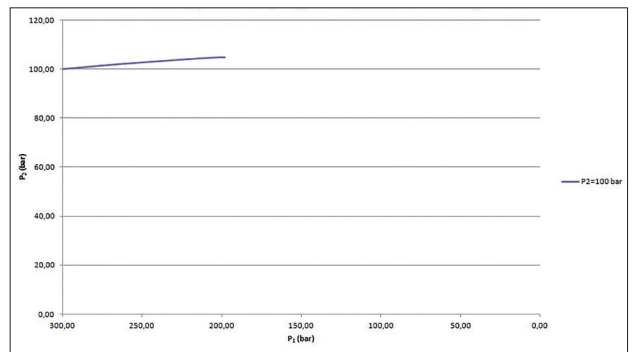
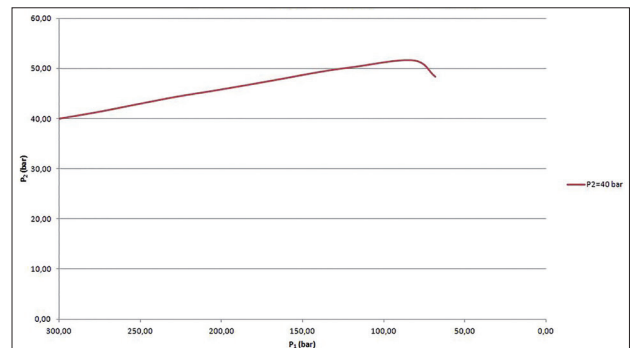
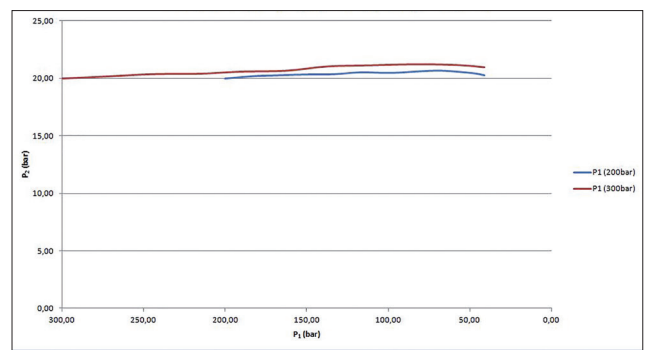
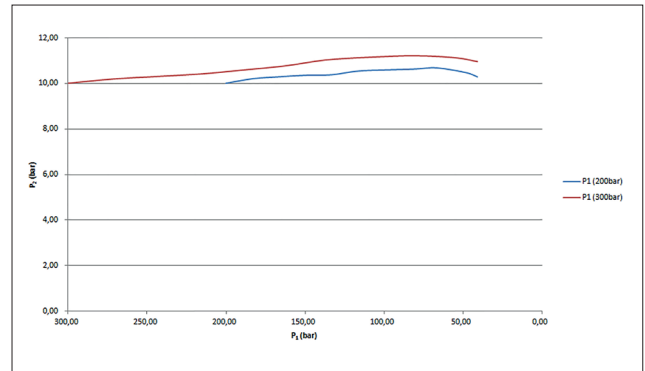
TECHNICAL DATA - VALVES	
Working temperature:	-20°C to + 60°C
Inlet/Outlet ports:	NPT 1/4" female
Max. working pressure:	300 bar
Kv-value:	0,25
Seat diameter:	5 mm
Leakage rate seat:	less than 6 cm ³ /h (20°C; 1,013 bar absolut) Compressed Air
Leakage rate outside:	less than 6 cm ³ /h (20°C; 1,013 bar 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 (2.0401.126)
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



P1 - inlet pressure, P2- outlet pressure

DRAWINGS

Top View Dimensions:
 Total width: 135
 Distance from left edge to first valve: 8.5
 Valve diameter: 10
 Distance between valves: 25
 Distance from last valve to right edge: 140

Side View Dimensions:
 Total height: approx. 142
 Mounting hole offset: 2
 Mounting hole diameter: 30

Assembly View Dimensions:
 Total width: 194
 Gauge diameter: 70
 Total height: 400

Labels in Assembly View:
 Purge gas out, Position: Open, Purging line, Process Outlet, Relief Valve, Process Inlet, Process gas, druvatec

Legend:
 1 - GAS CYLINDER
 2 - COIL
 3 - CHECK VALVE
 4 - INLET SHUT-OFF VALVE (1XIN; 3XOUT)
 5 - SHUT-OFF VALVE (3XIN; 1XOUT)
 6 - PRESSURE REGULATOR WITH IN/OUT GAUGE
 7 - RELIEF VALVE
 8 - PURGE OUTLET VALVE

***LIST OF CONNECTIONS**
 N1/4F - 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
 IX4B - COMPRESSION FITTING Ø1/4" BRASS
 IX8B - COMPRESSION FITTING Ø3/8" BRASS
 IX1S - COMPRESSION FITTING Ø1/2" BRASS
 IX4S - COMPRESSION FITTING Ø1/4" SS
 IX6S - COMPRESSION FITTING Ø3/8" SS
 IX8S - COMPRESSION FITTING Ø1/2" SS

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

ORDERING INFORMATION
 MTLT X XX XX XX XX XXXX XXXX X XXXX XXXX

***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:
 M14M - METRIC M14X1,5 M
 N1/4F - NPT 1/4" F
 N1/4M - NPT 1/4" M
 W2RH - W2.3X1/4" M RH

GAS TYPE:
 S - STANDARD GASES

TINLET PRESSURE:
 F4 - 60 BAR
 FX - 200 BAR
 GX - 300 BAR

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

TINLET GAUGE TYPE:
 BT - BOURDON TUBE
 I1 - INDUCTIV CONTACT I1
 RS - REED CONTACT RS

OUTLET GAUGE TYPE:
 BT - BOURDON TUBE
 I2 - INDUCTIV CONTACT I2
 R2 - REED CONTACT R2
 I1 - INDUCTIV CONTACT I1
 RS - REED CONTACT RS

EXAMPLE: MTLTSGXEZ11BTN14FM06B1MO6BN14F



Link to product configurator