

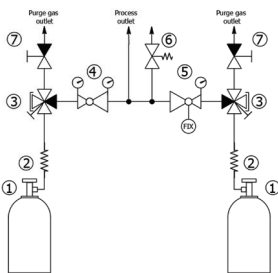
MANIFOLDS FOR INDUSTRIAL GAS SUPPLY SYSTEMS

- LOW FLOW RANGE

- MTLs - TWO SOURCES WITH SEMIAUTOMATICALLY CHANGE OVER SYSTEM



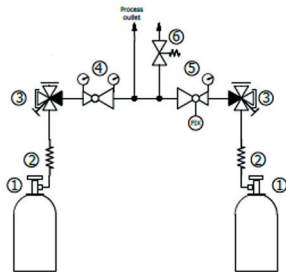
Manifold for two cylinders with semiautomatically change over system and including process gas purging system



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



Manifold for two cylinders with semiautomatically change over system, process gas purging system not included



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

- > Semiautomatically switching between two sources by using pressure difference between two regulators
- > 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 pigtaills are not described in this data sheet

TECHNICAL SPECIFICATION OF PANELS:

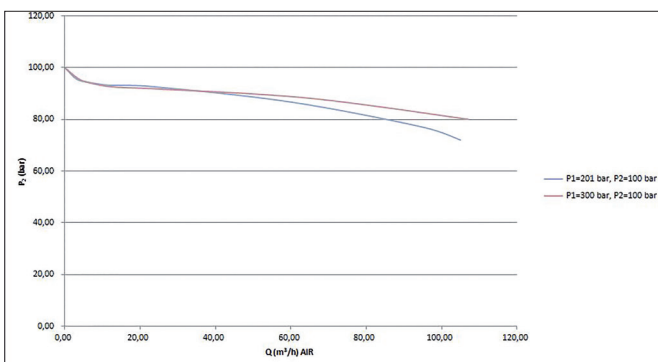
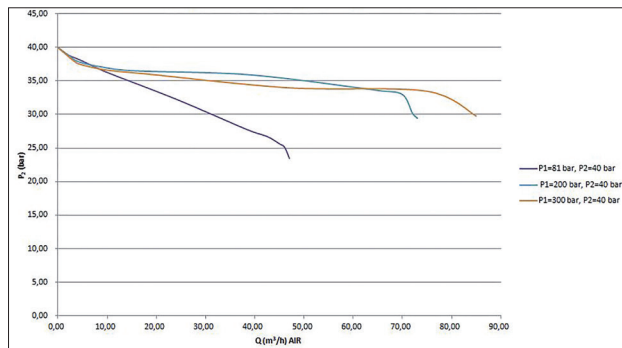
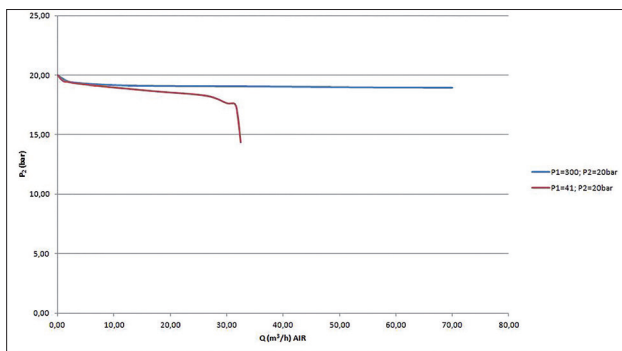
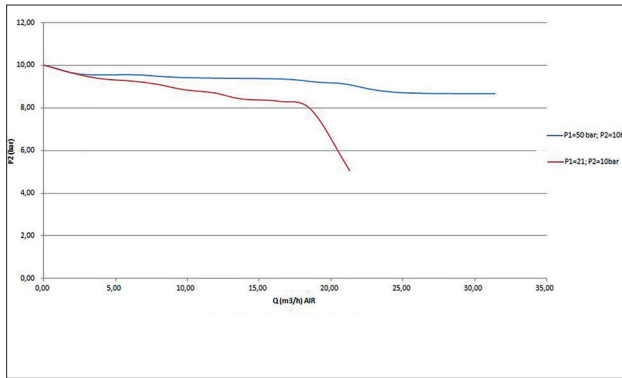
- > Consists of two parts (plates)
- > Easy installation of ground plate (without weight of manifold)
- > Attach front plate and fix by one screw only.
- > Front plate with mounting hole for replacement of gauges

TECHNICAL DATA - REGULATOR	
Working temperatures:	-20°C to + 60 °C
Inlet/outlet ports:	NPT 1/4" 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

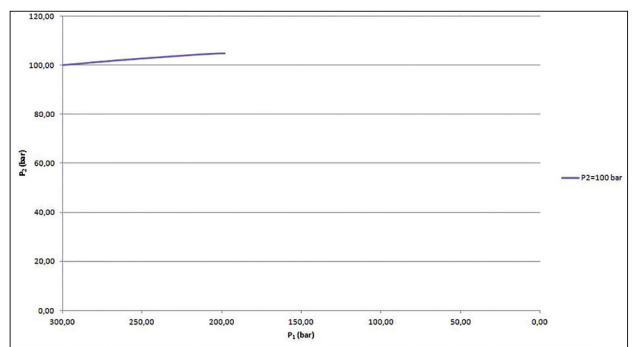
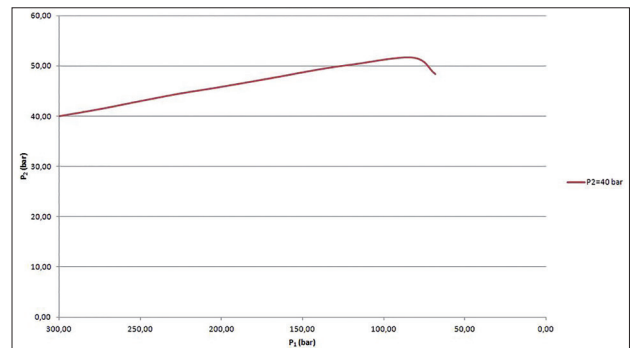
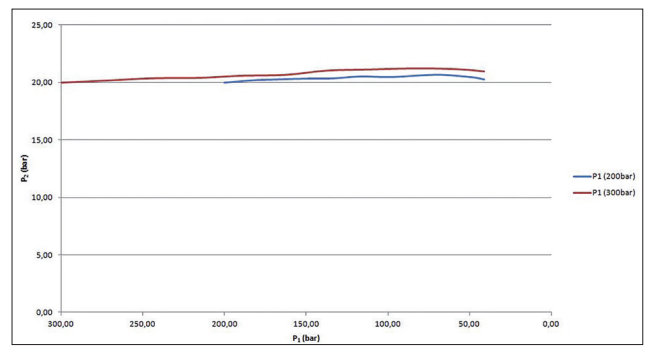
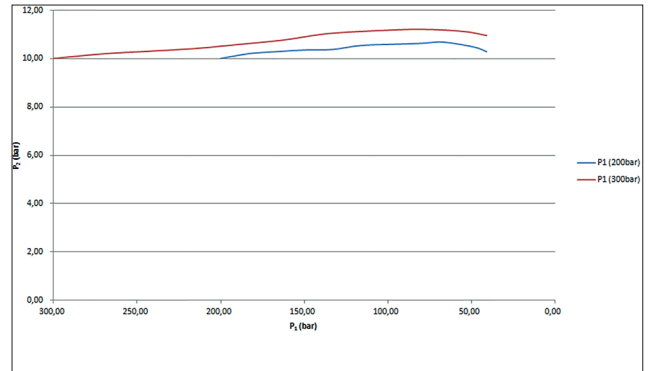
TECHNICAL DATA - VALVES	
Working temperature:	-20°C to + 60°C
Inlet/Outlet ports:	NPT 1/4" female
Max. working pressure:	300 bar
Kv-value:	0,25
Seat diameter:	5 mm
Leakage rate seat:	less than 6 cm ³ /h (20°C; 1,013 bar absolut) Compressed Air
Leakage rate outside:	less than 6 cm ³ /h (20°C; 1,013 bar 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: 2×Elgiloy (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

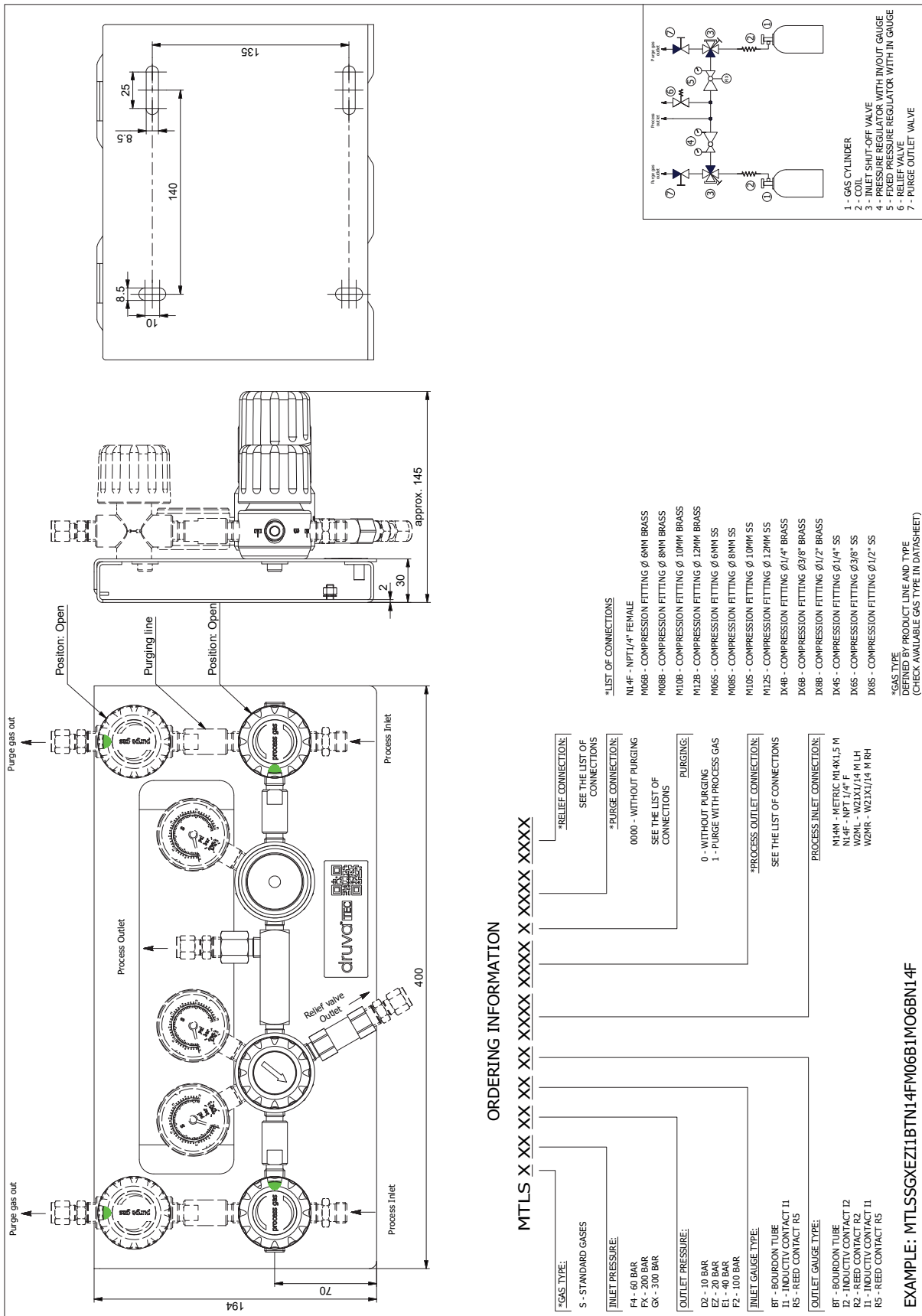


DYNAMIC EXPANSION CURVES



P1 - inlet pressure, P2- outlet pressure

DRAWINGS



Link to product configurator