DRUVA®TEC MANIFOLD - MTMH0TSP | MTMHETSP | MTMHSTSP

MANIFOLD | TEC LINE (BRASS) | 100 m³ SERIES | HIGH PRESSURE VERSION | 3 INLETS | MANUAL CHANGEOVER | SINGLE STAGE | DIAPHRAGM SHUT-OFF VALVE AT INLET



HO VERSION - HIGH PRESSURE REGULATOR WITH FKM-SEAL

HE VERSION - HIGH PRESSURE REGULATOR WITH EPDM-SEAL

HS VERSION - HIGH PRESSURE REGULATOR WITH SST VALVE AND EPDM-SEAL (ONLY FOR MISON)

Manifolds for use in supply systems for industrial, inert, flammable, oxidizing gases and gas mixtures.

Not suitable for Acetylene, corrosive and/or toxic gases and their mixtures.



Type: MTMHxTSS0U

Option SO

Diaphragm shut-off valve at inlet

Special U

- Check valve at inlet
- Safety valve at outlet



Type: MTMHxTSSBU

Option SB

- Diaphragm shut-off valve at inlet
- Ball valve at outlet

Special U

- Check valve at inlet
- Safety valve at outlet

SPECIAL FEATURES

- Metallic sealing of the shut-off valves and pressure regulator against atmosphere by Elgiloy/Hastelloy diaphragms
- > No increase in outlet pressure with decreasing inlet pressure due to the use of a pressure reducer with inlet pressure compensation
- > Very compact design
- > Easy installation due to splitted plates for the manifold

TECHNICAL DATA - MANIFOLD					
Working temperature:	-40 °C to +60 °C				
Inlet pressure range:	60 200 300 bar				
Outlet pressure range:	10 20 40 100 bar (adjustable)				
Nominal flow:	100 m^3/h (N ₂) according to ISO 7291 at 20 bar outlet pressure and 41 bar inlet pressure				
Weight:	10.18 kg (Weight refers to the basic version of the manifold)				
Inlet - & outlet connection:	see ordering information				
Leakage rate seat:	max. 5 x 10 ⁻⁶ mbar I/s (Helium)				
Leakage rate outside:	max. 5 x 10 ⁻⁶ mbar l/s (Helium)				
Pressure gauges rates (in brackets- pressure rates):	18 (10) 40 (20) 65 (40) 80 (60) 160 (100) 315 (200) 400 (300) bar				
Cracking pressure relief valves (in brackets – Outlet pressure rates):	15 (10) 30 (20) 60 (40) 140 (100) bar				

TECHNICAL DATA – REGULATOR LTMHOSJ | LTMHESJ see separate data sheet

TECHNICAL DATA – SHUT- OFF VALVES VTMDSMIR – 4 PORT (3X INLET – 1X OUTLET) VTMDSMFR –4 PORT (1X NLET – 3X OUTLET) see separate data sheets

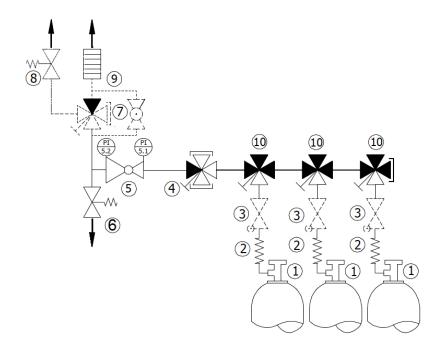
TECHNICAL DATA - MOUNTING PLATES MANIFOLD

TECHNICAL DATA MODITING FEATES MAIN DED				
Ground plate:	Stainless Steel (polished) Option to secure arrestor cable of hoses with hook on ground plate. Grounding bolt Cut outs on top and bottom allows installation			
Dimensions ground plate: (Height x Width x Length)	194 x 30 x 230 mm			
Front plate:	Stainless Steel (polished) Cut outs for replacement of gauges Free space for additional installer label (e.g. remark for next maintenance)			
Dimensions front plate: (Height x Width x Length)	194 x 25 x 500 mm			
Marking on panel:	Product range label QR-Code — Link to the product overview on the website and from there the operating instructions (IFU) can be accessed			

TECHNICAL DATA - SAFETY VAL	VE
	Spring loaded according P.E.D. 2014/68/EU and AD2000 (A2)
Opening pressure:	15 30 60 bar
Material:	Housing and metallic parts made of brass, pressure spring made of alloy steel
Seat and seal:	FKM / EPDM

TECHNICAL DATA - BALL VALVE UP 1	TO 20 BAR					
Max. working pressure:	20 bar					
Material gas wetted parts:						
Body	Brass nickel plated					
Ball	Brass hard chrome plated					
Ball seal	PTFE					
Gearshift seal	FKM / EPDM					
Nominal width (free passage):	13 mm					
TECHNICAL DATA - BALL VALVE UP 1	TO 40 BAR - NOT SUITABLE FOR OXYGEN					
Max. working pressure:	40 bar					
Material gas wetted parts:						
Body	Stainless Steel					
Ball	Stainless Steel					
Ball seal	PTFE					
Gearshift seal	PTFE					
Nominal width (free passage):	15 mm					
TECHNICAL DATA - CHECK VALVE						
Max. Working pressure:	300 bar					
Pressure loss at inlet pressure 41 bar and flow rate 100m ³ /h:	3,8 bar					
Material gas wetted parts:						
Valve body	Brass					
Filter	Sinter bronze SIKA-B					
Valve seat	Silicon nitride ceramic (Si3N4)					
Spring	Stainless Steel 316 L					

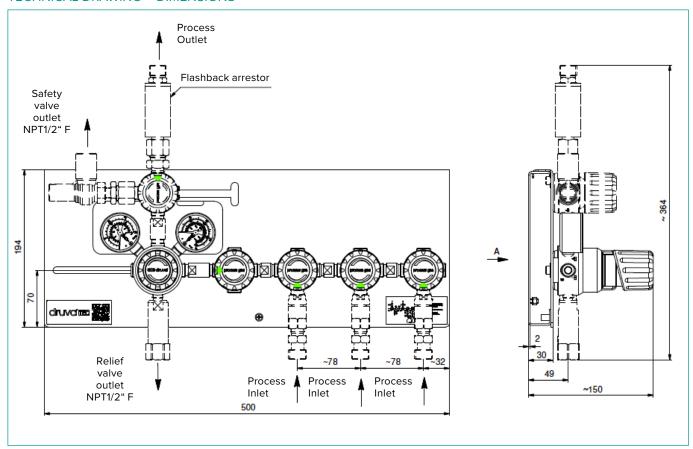
TECHNICAL DRAWING - FLOW SCHEMATIC



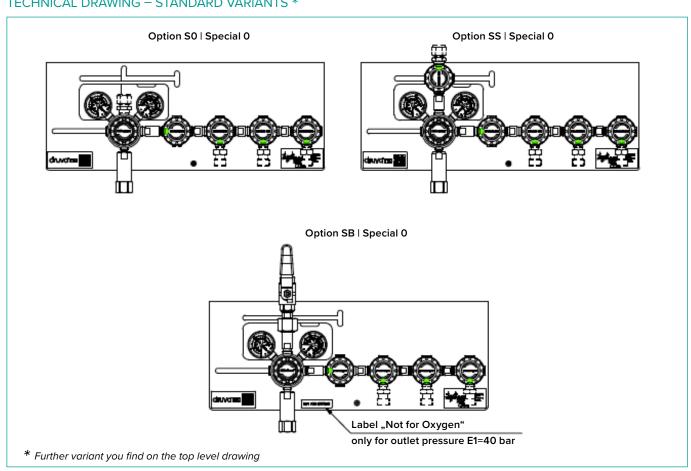
- 1- Gas cylinder
- 2 Coil
- 3 Check valve (optional)
- 4 Shut-off valve (3xinlet; 1xoutlet)
- 5 Pressure regulator with in/out gauge
- 6 Relief valve
- 7 Shut-off valve (3xinlet; 1xoutlet) or ball valve (optional)
- 8 Safety valve (optional)
- 9 Flashback arrestor (optional)
- 10 Shut-off valve (1xinlet; 3xoutlet)

FOR FLOW CURVES PLEASE REFER TO - Data-FlowCurves-EN

TECHNICAL DRAWING - DIMENSIONS



TECHNICAL DRAWING - STANDARD VARIANTS *



ORDERING INFORMATION - MTMHOTSS | MTMHETSS | MTMHSTSS

Example for a manifold | TEC Line | Brass | Mid Flow (100m³) | 3 Inlets | Manual changeover | Single stage | Shut-off valve at inlet

мтмнот ΕZ N38F 0001 3/8" NPT МТМНЕТ MTMHST female

Stages	Options	Specials	Inlet pressure (bar)	Outlet pressure (bar)	Inlet pressure gauge	Outlet pressure gauge	Process inlet connection	Process outlet connection	Purge connection
S single stage	SO HP shut-off valve no valve at LP	0 without	F4 60	D2 10	BT Bourdon Tube Gauge	BT Bourdon Tube Gauge	N14F 1/4" NPT female	pun	0001 without (plugged)
	SS HP shut-off valve LP shut-off valve	C Check valve	FX 200	EZ 20	I1 Inductive contact gauge I1	l2 Inductive contact gauge I2	N38F 3/8" NPT female	Further connections can be found in the table below	
	SB HP shut-off valve LP Ball valve	F Safety Device Flammables	GX 300	E1* 40	R5 Reed contact gauge R5	R2 Reed contact gauge R2	E2MR G3/8" male EN560 right	connections can b	
		G Check Valve & Safety Device Flammables		F2** 100		I1 Inductive contact gauge	W2ML Whitworth 21.8x1/14" male left	Further c	
		H Check Valve & Safety Valve & Safety Device Flammables				R5 Reed contact gauge R5	W2MR Whitworth 21.8x1/14" male right		
		N Safety Device Oxy/Air					W3ML Whitworth 30x2 male left		
		P Check Valve & Safety Device Oxy/Air					W3MR Whitworth 30x2 male right		
		Q Check Valve & Safety Valve & Safety Device Oxy/Air							
		S Safety valve							
		U Check valve & safety valve							
		Y Safety Device Flammables & Safety Valve							
		Z Safety Device Oxy/Air & Safety Valve							

HP= High pressure | LP= Low pressure

* Not available in combination with option bal valve at outlet for Oxygen | ** Not available in combination with option bal valve at outlet Order code (as described above) without special characters or spaces! Complete Order Code: MTMH0TSSBCFXEZBTBTN14FN38F0001

Process outlet connection

N38F - NPT 3/8 inch female G12F - G 1/2 inch female E3MR - G1/2" male EN560 right
E3ML - G1/2" male EN560 left
E5MR - G3/4" male EN560 right
M12B - Compression fitting 12 mm Brass
M15B - Compression fitting 15 mm Brass

M18B - Compression fitting 18 mm Brass

M12S - Compression fitting 12 mm Stainless Steel M15S - Compression fitting 15 mm Stainless Steel M18S - Compression fitting 18 mm Stainless Steel M25S -Compression fitting 25 mm Stainless Steel

IX8B - Compression fitting 1/2 inch Brass I10B - Compression fitting 5/8 inch Brass

I12B - Compression fitting 3/4 inch Brass I14B - Compression fitting 7/8 inch Brass IX8S - Compression fitting 1/2 inch Stainless Steel

I12S - Compression fitting 3/4 inch Stainless Steel I16S - Compression fitting 1 inch Stainless Steel

DM21 - Tube 21,3 mm

Availability of brass fittings depending on pressure and size.

Pay attention to the maximum approved pressure of your pipework.