# DRUVA®TEC MANIFOLD - MTMH0XSS | MTMHEXSS | MTMHSXSS

MANIFOLD | TEC LINE (BRASS) | 100 m<sup>3</sup> SERIES | HIGH PRESSURE VERSION | 1 INLET | 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: MTMHxXSS00

#### Option S0

• Diaphragm shut-off valve at inlet

#### Special 0

· no special



**Type:** MTMHxXSS0U

#### Option S0

• Diaphragm shut-off valve at inlet

#### 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
Gewicht	6,14 (Weight refers to the basic version of the manifold)
Inlet - & outlet connection:	see ordering information
Leakage rate seat:	max. 5 x 10 <sup>-6</sup> mbar I/s (Helium)
Leakage rate outside:	max. 5 x 10 <sup>-6</sup> mbar I/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 LTMH0SJ | LTMHESJ see separate data sheet

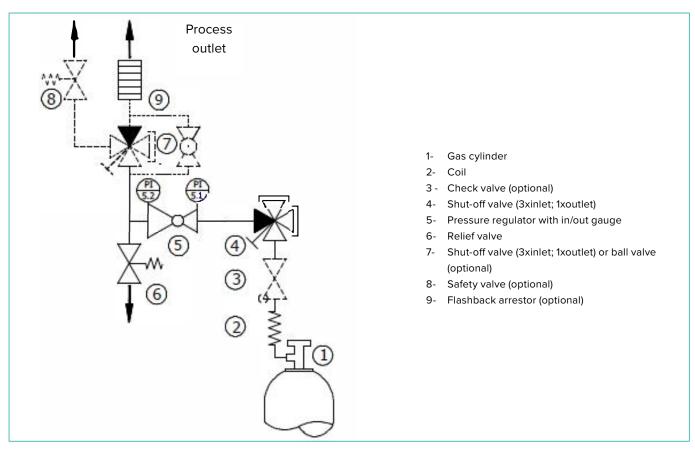
TECHNICAL DATA – SHUT- OFF VALVES VTMDSMIR – 4 PORT (3X INLET – 1X OUTLET) VTMDSMFR –4 PORT (1X NLET – 3X OUTLET) see separate data sheets

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TECHNICAL DATA - MOUNTING PLATES MANIFOLD								
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 30 x 230 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 VALV	/E							
	Spring loaded according P.E.D. 2014/68/EU and AD2000 (A2)							

TECHNICAL DATA - SAFETY VALVE	
	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

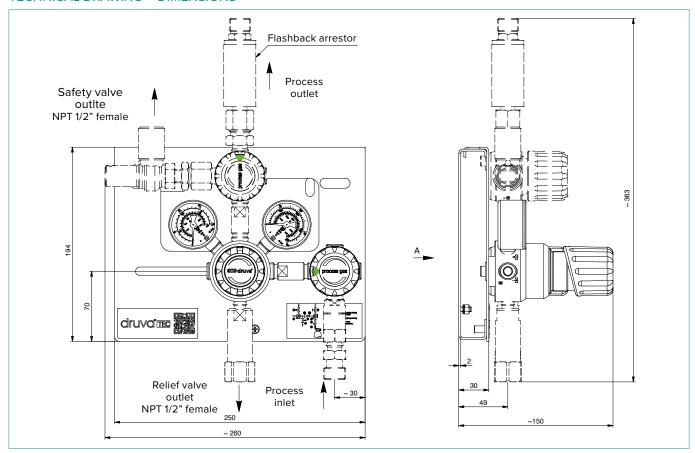
TECHNICAL DATA - BALL VALVE UP T	O 20 BAR
Max. working pressure:	20 bar
Material gas wetted parts:	
Body	Brass nickel plated
Ball	Brass hard chrome plated
Ball seal	PTFE
Gearshift seal	FKM / EPDM
Nominal width (free passage):	13 mm
TECHNICAL DATA – BALL VALVE UP T	O 40 BAR - NOT SUITABLE FOR OXYGEN
Max. 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 100m³/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

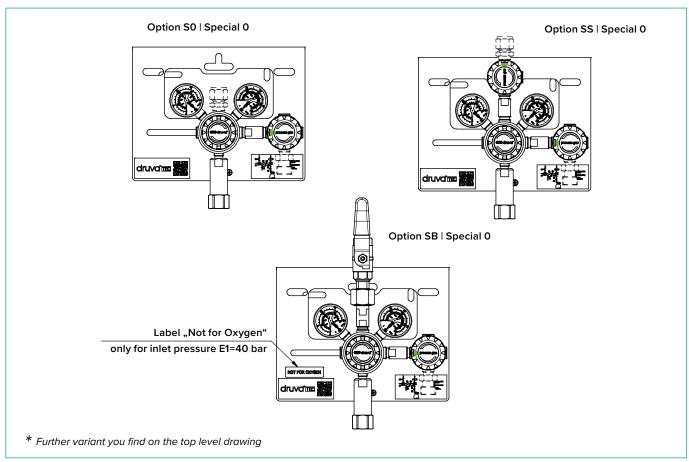


FOR FLOW CURVES PLEASE REFER TO - Data-FlowCurves-EN

## **TECHNICAL DRAWING - DIMENSIONS**



## TECHNICAL DRAWING-STANDARD VARIANTS \*



### ORDERING INFORMATION - MTMH0XSS | MTMHEXSS | MTMHSXSS

Example for a manifold | TEC Line | Brass | Mid Flow (100m3) | Single Stage | Diaphragm shut-off valve at inlet

MTMH0X ΕZ N14F N38F 0001 MTMHEX 3/8" NPT MTMHSX female

Stages		Options	Specials	Inlet pressure (bar)		Outlet pressure (bar)		Inlet pressure gauge		Outlet pressure gauge		Process inlet connection		Proces outle connect	i i	Purge connection	
S single stage	S0	HP shut-off valve	0	without	F4	60	D2	10	вт	Bourdon Tube Gauge	вт	Bourdon Tube Gauge	N14F	1/4" NPT female	Þ		0001 withou (plugg
	SS	HP shut-off valve LP shut-off valve	С	Check valve	FX	200	EZ	20	11	Inductive contact gauge I1	12	Inductive contact gauge I2	N38F	3/8" NPT female	s can be four		
	SB	HP no 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	Further connections can be found in the table below		
			G	Check Valve & Safety Device Flammables			F2**	100			11	Inductive contact gauge I1	W2ML	Whitworth 21.8x1/14" male left		•	
			Н	Check Valve & Safety Valve & Safety Device Flammables							R5	Reed contact gauge R5	W2MR	Whitworth 21.8x1/14" male right	Œ.	ቯ	
			N	Safety Device Oxy/Air									W3ML	Whitworth 30x2 male left			
			P Check Valve & Safety Device Oxy/Air  C Check Valve & Safety Valve & Safety Device Oxy/Air					W3MR	Whitworth 30x2 male right								
				Safety valve Check valve &													
				safety valve													
		Υ	Safety Device Flammables & Safety Valve														
			Z	Safety Device Oxy/Air & Safety Valve													

HP= High pressure | LP= Low pressure

# 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 114B - Compression fitting 7/8 inch Brass IX8S - Compression fitting 1/2 inch Stainless Steel

112S - Compression fitting 3/4 inch Stainless Steel 116S - 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.

<sup>\*</sup> 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: MTMH0XSSOCFXEZBTBTN14FN38F0001