

# DRUVA® TEC MANIFOLD – MTMHOMSP | MTMHMSP | MTMHSMSP

MANIFOLD | TEC LINE (BRASS) | 100 m³ SERIES | HIGH PRESSURE VERSION | 2 INLETS | MANUAL CHANGEOVER | SINGLE STAGE | PROCESS GAS PURGING



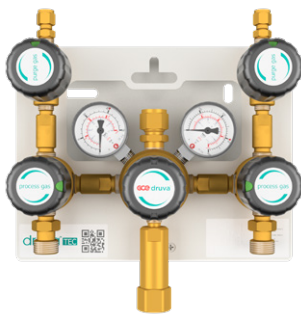
**HO** VERSION – HIGH PRESSURE REGULATOR WITH FKM-SEAL

**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 inert, flammable, oxidizing gases and gas mixtures up to gas purity 5.0.

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



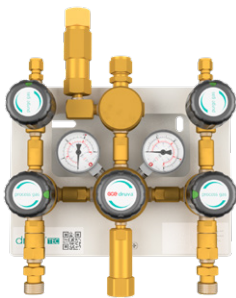
**Type:** MTMHxMSP00

**Option P0**

- Process gas purging at inlet

**Special 0**

- no special



**Type:** MTMHxMSP0U

**Option P0**

- Process gas purging 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

<b>Working temperature:</b>	-40 °C to +60 °C
<b>Inlet pressure range:</b>	60   200   300 bar
<b>Outlet pressure range:</b>	10   20   40   100 bar (adjustable)
<b>Nominal flow:</b>	100 m³/h (N₂) according to ISO 7291 at 20 bar outlet pressure and 41 bar inlet pressure
<b>Gewicht</b>	8,36 (Weight refers to the basic version of the manifold)
<b>Inlet - &amp; outlet connection:</b>	see ordering information
<b>Leakage rate seat:</b>	max. 5 x 10 <sup>-6</sup> mbar l/s (Helium)
<b>Leakage rate outside:</b>	max. 5 x 10 <sup>-6</sup> mbar l/s (Helium)
<b>Pressure gauges rates (in brackets- pressure rates):</b>	18 (10)   40 (20)   65 (40)   80 (60)   160 (100)   315 (200) 400 (300) bar
<b>Cracking pressure relief valves (in brackets – Outlet pressure rates):</b>	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

### TECHNICAL DATA – MOUNTING PLATES MANIFOLD

<b>Ground plate:</b>	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
<b>Dimensions ground plate:</b> (Height x Width x Length)	194 x 30 x 230 mm
<b>Front plate:</b>	Stainless Steel (polished) Cut outs for replacement of gauges Free space for additional installer label (e.g. remark for next maintenance)
<b>Dimensions front plate:</b> (Height x Width x Length)	194 x 30 x 325 mm
<b>Marking on panel:</b>	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 VALVE

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

**TECHNICAL DATA – BALL VALVE UP TO 20 BAR**

**Max. working pressure:** 20 bar

**Material gas wetted parts:**

<b>Body</b>	Brass nickel plated
<b>Ball</b>	Brass hard chrome plated
<b>Ball seal</b>	PTFE
<b>Gearshift seal</b>	FKM / EPDM

**Nominal width (free passage):** 13 mm

**TECHNICAL DATA – BALL VALVE UP TO 40 BAR – NOT SUITABLE FOR OXYGEN**

**Max. working pressure:** 40 bar

**Material gas wetted parts:**

<b>Body</b>	Stainless Steel
<b>Ball</b>	Stainless Steel
<b>Ball seal</b>	PTFE
<b>Gearshift seal</b>	PTFE

**Nominal width (free passage):** 15 mm

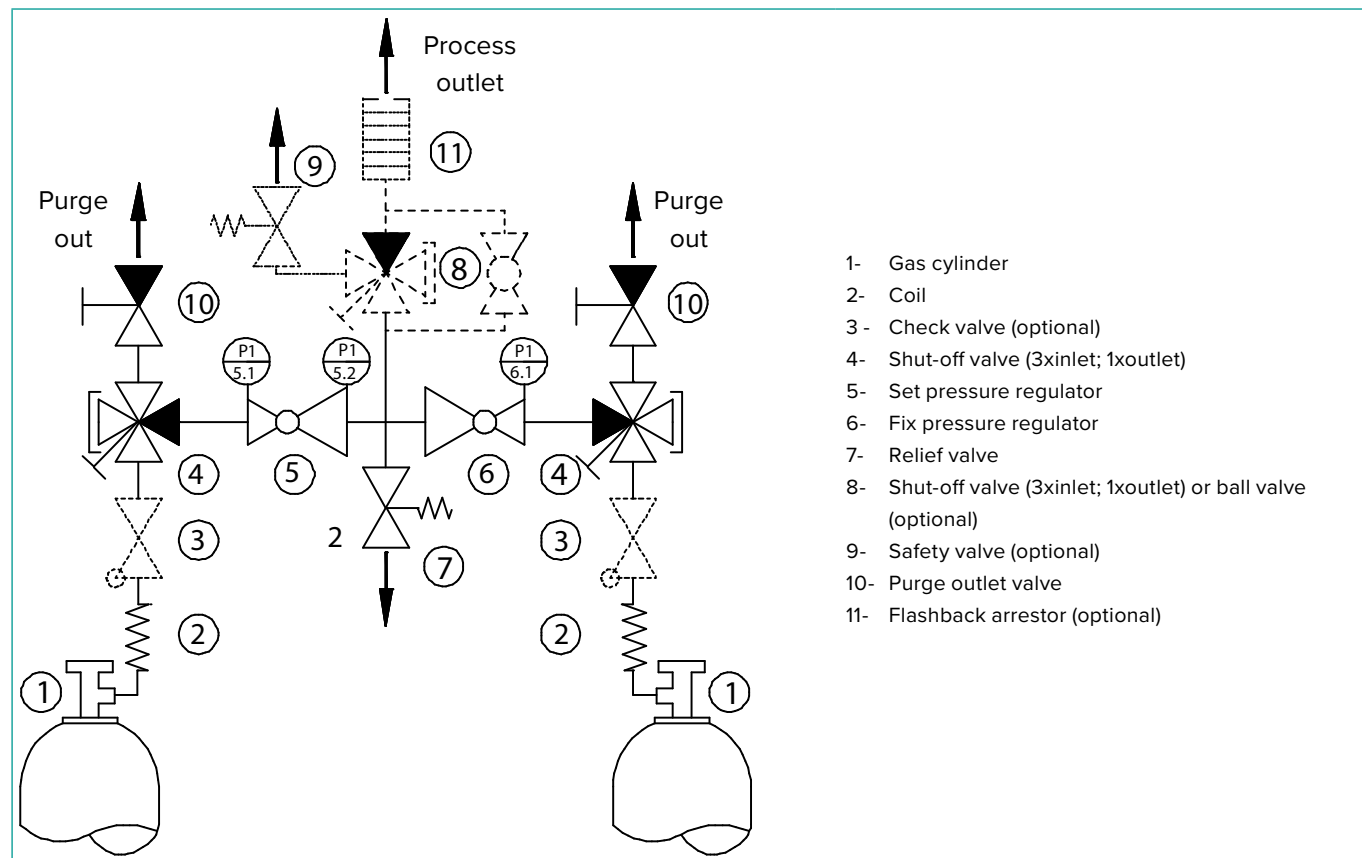
**TECHNICAL DATA – CHECK VALVE**

**Max. Working pressure:** 300 bar

**Pressure loss at inlet pressure 41 bar  
and flow rate 100m³/h:** 3,8 bar

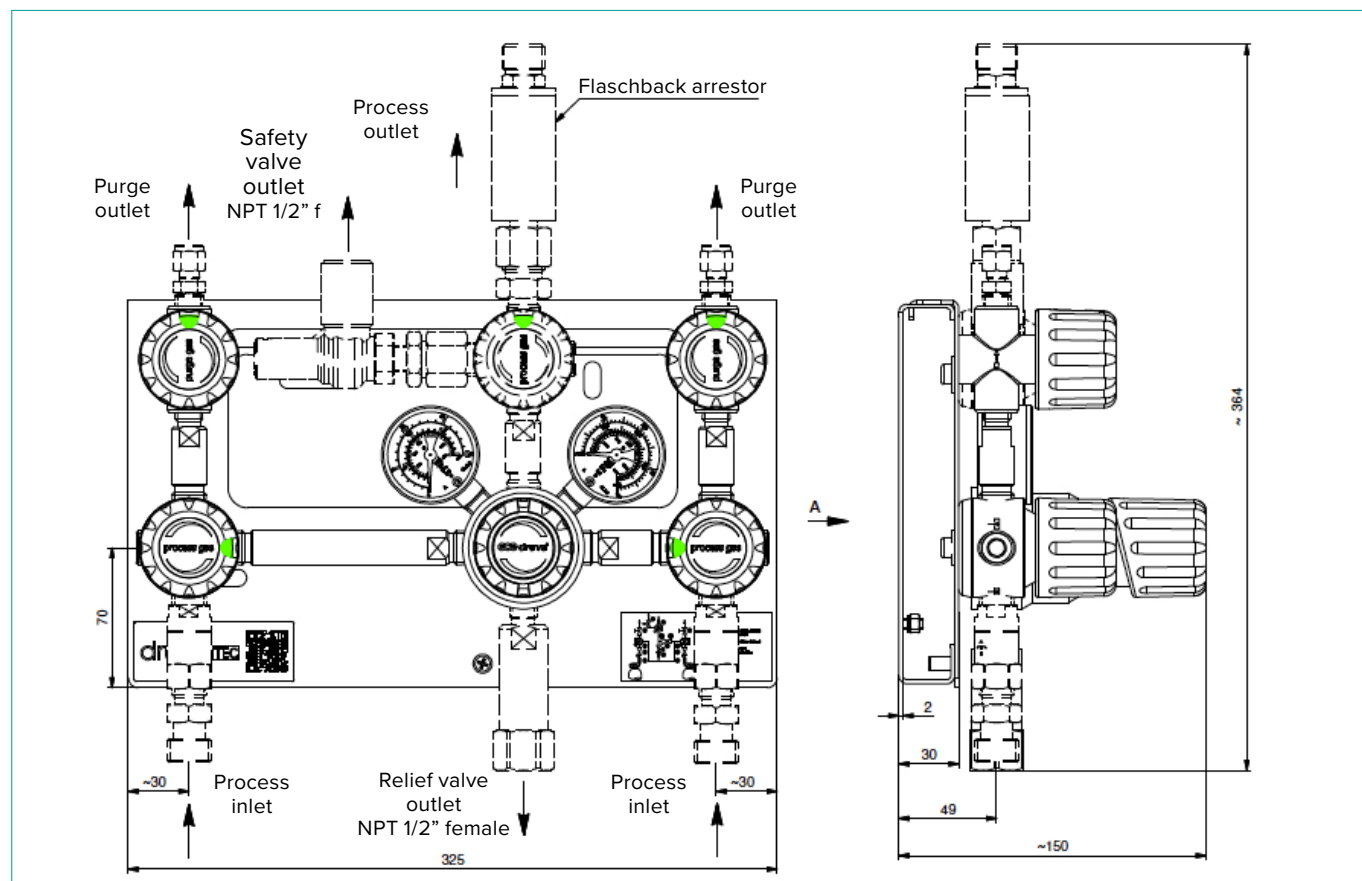
**Material gas wetted parts:**

<b>Valve body</b>	Brass
<b>Filter</b>	Sinter bronze SIKA-B
<b>Valve seat</b>	Silicon nitride ceramic (Si3N4)
<b>Spring</b>	Stainless Steel 316 L

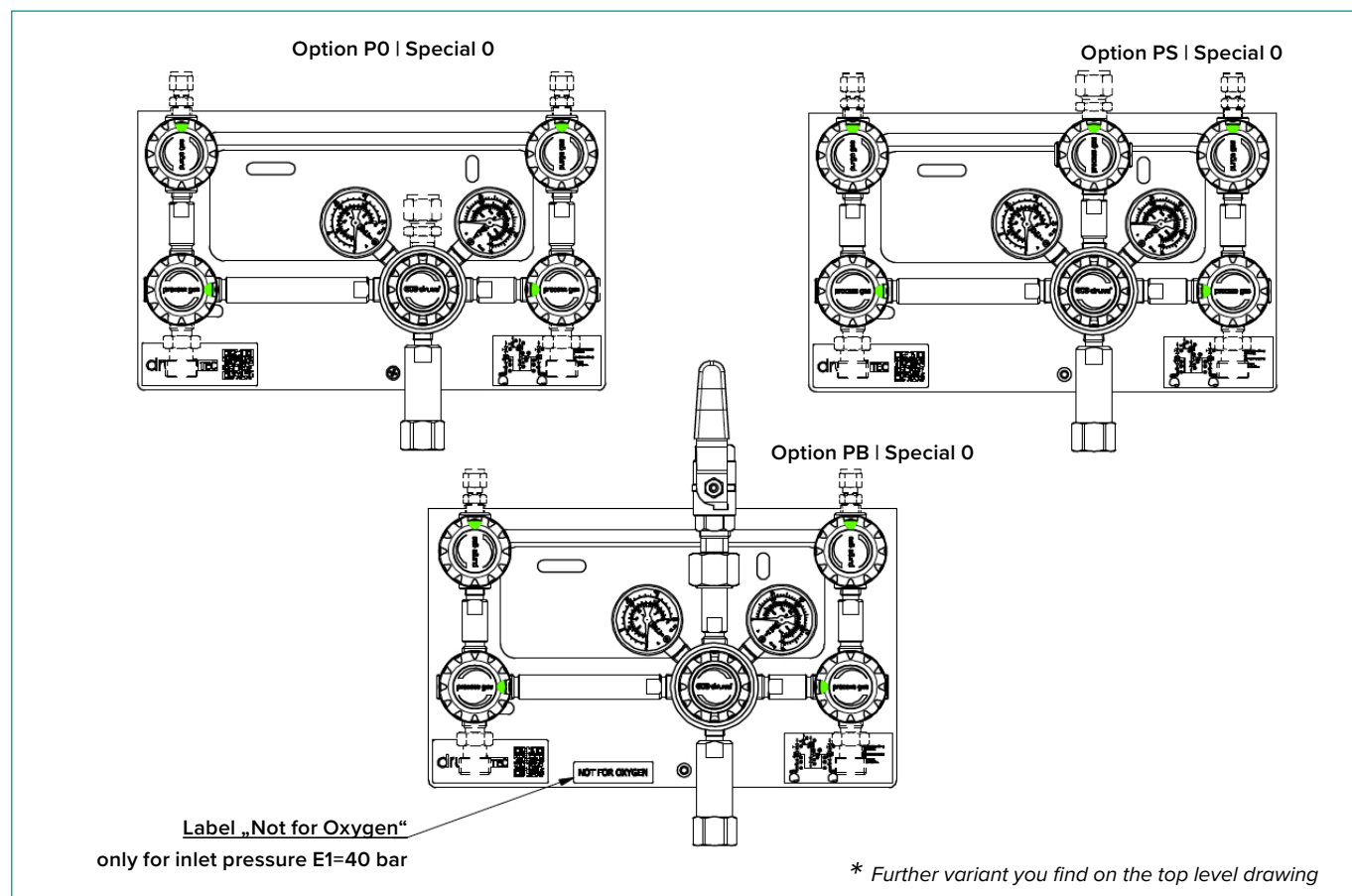
**TECHNICAL DRAWING – FLOW SCHEMATIC**

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

## TECHNICAL DRAWING – DIMENSIONS



## TECHNICAL DRAWING– STANDARD VARIANTS \*



## ORDERING INFORMATION – MTMHOMSP | MTMHEMSP | MTMHSMSP

Example for a manifold | TEC Line | Brass | Mid Flow (100m³) | Manual changeover | Single stage | Process gas purging at inlet

MTMHOM MTMHEM MTMHSM	S	PB	C	FX	EZ	BT	BT	N14F	N38F (3/8" NPT female)	N14F (1/4" NPT 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	P0 HP purge valve no LP valve	0 without	F4 60	D2 10	BT Bourdon Tube Gauge	BT Bourdon Tube Gauge	N14F 1/4" NPT female	<b>Further connections can be found in the table below</b>	
		PS HP purge valve LP relief valve	C Check valve	FX 200	EZ 20	I1 Inductive contact gauge I1	I2 Inductive contact gauge I2	N38F 3/8" NPT female		
		PB HP purge 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		
			G Check Valve & Safety Device Flammables		F2** 100		I1 Inductive contact gauge I1	W2ML Whitworth 21.8x1/4" male left		
			H Check Valve & Safety Valve & Safety Device Flammables				R5 Reed contact gauge R5	W2MR Whitworth 21.8x1/4" 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 ball valve at outlet for Oxygen | \*\* Not available in combination with option ball valve at outlet

Order code (as described above) without special characters or spaces! Complete Order Code: [MTMHOMSPBCFXEZBTBTN14FN38FN14F](#)**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

**Purge connection**

N14F - NPT 1/4 inch female

M06B - Compression fitting 6 mm Brass

M08B - Compression fitting 8 mm Brass

M10B - Compression fitting 10 mm Brass

M12B - Compression fitting 12 mm Brass

M06S - Compression fitting 6 mm Stainless Steel

M08S - Compression fitting 8 mm Stainless Steel

M10S - Compression fitting 10 mm Stainless Steel

M12S - Compression fitting 12 mm Stainless Steel

IX4B - Compression fitting 1/4 inch Brass

IX6B - Compression fitting 3/8 inch Brass

IX8B - Compression fitting 1/2 inch Brass

IX4S - Compression fitting 1/4 inch Stainless Steel

IX6S - Compression fitting 3/8 inch Stainless Steel

IX8S - Compression fitting 1/2 inch Stainless Steel

Availability of brass fittings depending on pressure and size.

Pay attention to the maximum approved pressure of your pipework.

