

# MSLHOXDS MSLHEDS – DRUVA®PUR MANIFOLD

MANIFOLD | PURE LINE (STAINLESS STEEL) | 20 m³ SERIES | HIGH PRESSURE RANGE  
DUAL STAGE | HIGH PRESSURE SHUT-OFF VALVE



This manifold is used in gas supply systems for pure, inert, flammable, oxidising, corrosive and / or toxic gases and their mixtures.



Type MSLHOXDS00  
S0 HP Shut-off Valve  
0 Without Specials

## TECHNICAL SPECIFICATION:

- > Manifold for one gas cylinder or bundle
- > Regulator and Valves – Hastelloy/Elgiloy diaphragm tightening system to atmosphere
- > Compact design
- > Excellent pressure adjustment
- > Valves - designed and approved in accordance with relevant sections of DIN 10297:2015
- > Regulator - designed and approved regarding ISO 7291
- > Relief valve in delivery pressure side
- > Manifold with process inlet shut-off valve
- > Available with shut-off valve at outlet, safety valve at outlet, check valve at inlet
- > Electrostatic chargeability test
  - Fulfills requirements according to DIN 80079-36, 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

## SPECIAL FEATURES OF MANIFOLD:

- > Splitted plates of manifold
  - Separated mounting of ground plate
  - Easy mounting of manifold to ground plate and fix with one screw only
- > Front plate cutout for in-field gauge replacement

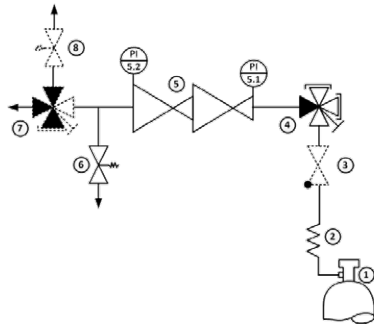


Type MSLHOXDS0U  
S0 HP Shut-off Valve  
U Specials  
Check Valve & Safety Valve



Type MSLHOXDSSU  
SS HP Shut-off Valve  
& LP Shut-off Valve  
U Specials  
Check Valve & Safety Valve

TECHNICAL DATA – MANIFOLD	
<b>Working temperature:</b>	-20 °C to +60 °C
<b>Inlet/ outlet ports:</b>	see technical drawing
<b>Leakage rate seat:</b>	<5x10 <sup>-6</sup> mbar l/s (Helium)
<b>Leakage rate outside:</b>	<1x10 <sup>-9</sup> mbar l/s (Helium)
<b>Weight:</b>	max 5,79 kg
<b>Flow nominal:</b>	20 m³/h (N₂) acc. to ISO 7291 at 20 bar outlet pressure and 41 bar inlet pressure
<b>Pressure rates manifold:</b>	
<b>Max. inlet pressure:</b>	300 bar
<b>Delivery pressure:</b>	1/ 3/ 6/ 10/ 14 bar
TECHNICAL DATA – REGULATOR	
<b>Filter:</b>	1x for inlet 1x for each outlet
<b>Material gas wetted parts:</b>	
<b>Regulator body:</b>	Stainless Steel
<b>Regulator diaphragm:</b>	Hastelloy
<b>Regulator seat:</b>	PCTFE (1 <sup>st</sup> stage) PTFE (2 <sup>nd</sup> stage)
<b>Relief valve seat:</b>	MSLHOXDS Version: FKM MSLHEDS Version: EPDM
<b>Regulator poppet:</b>	Stainless Steel
<b>Pressure gauges rates (pressure rates):</b>	1,5 (1)/ 5 (3)/ 10 (6)/ 18 (10) / 25 (14) bar
<b>Contact gauges available – please contact us</b>	
<b>Cracking pressure relief valves:</b>	1,5 (1)/ 4,6 (3)/ 9,2 (6)/ 15,4 (10)/ 21,6 (14) bar
<b>Test in production:</b>	Pressure test with Helium of each item
	Seat leakage test with Helium of each item
	Helium leak test of each regulator against atmosphere
	Test of functionality of each item



- 1 – Gas cylinder
- 2 – Coil/Hose
- 3 – Check valve
- 4 – Shut-off valve (3xin, 1xout)
- 5 – Pressure regulator
- 6 – Relief valve
- 7 – Shut-off valve (1xin, 3xout)
- 8 – Safety valve

Options & specials are shown as dotted line

#### Approvals during development:

Type test in accordance with DIN 7291

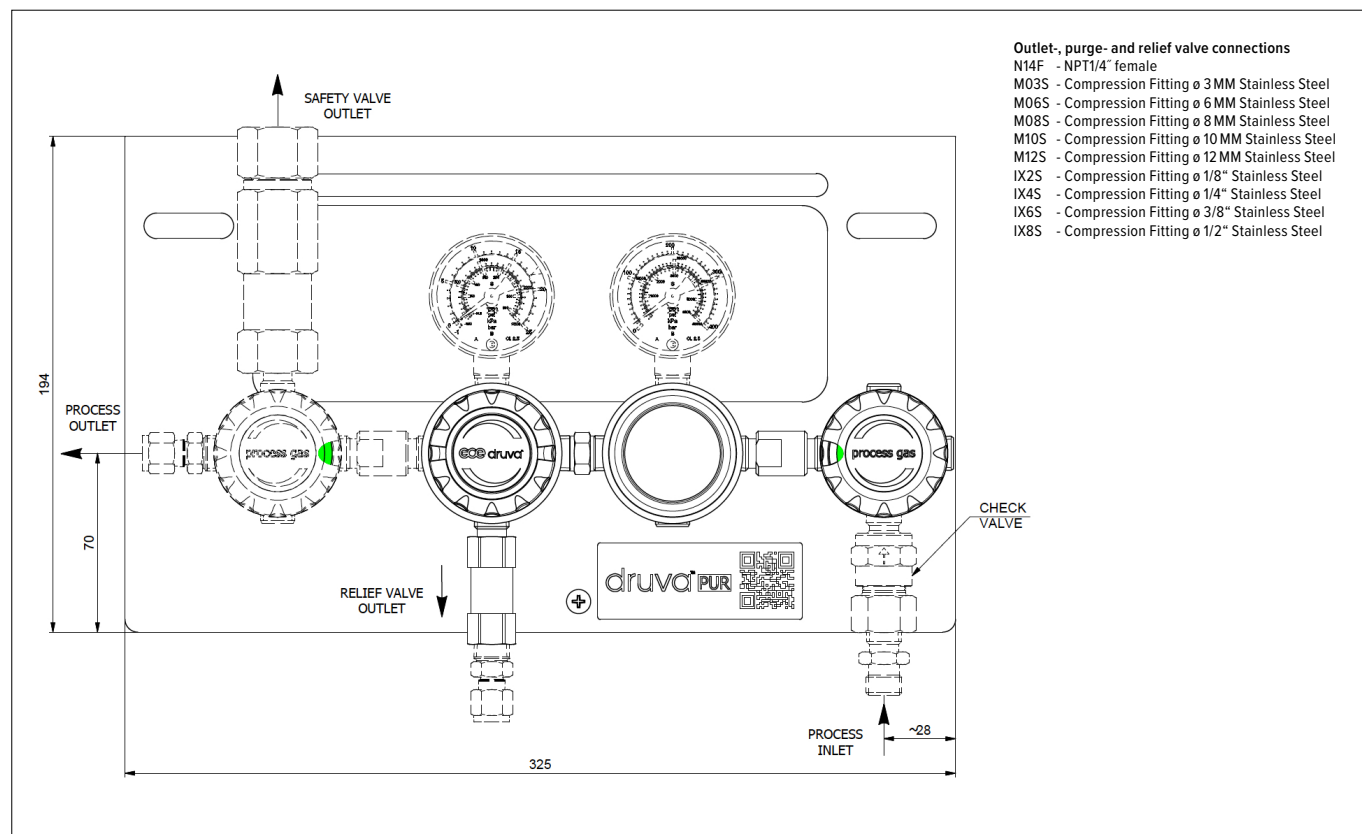
Additional life cycle test

Electrostatic chargeability test

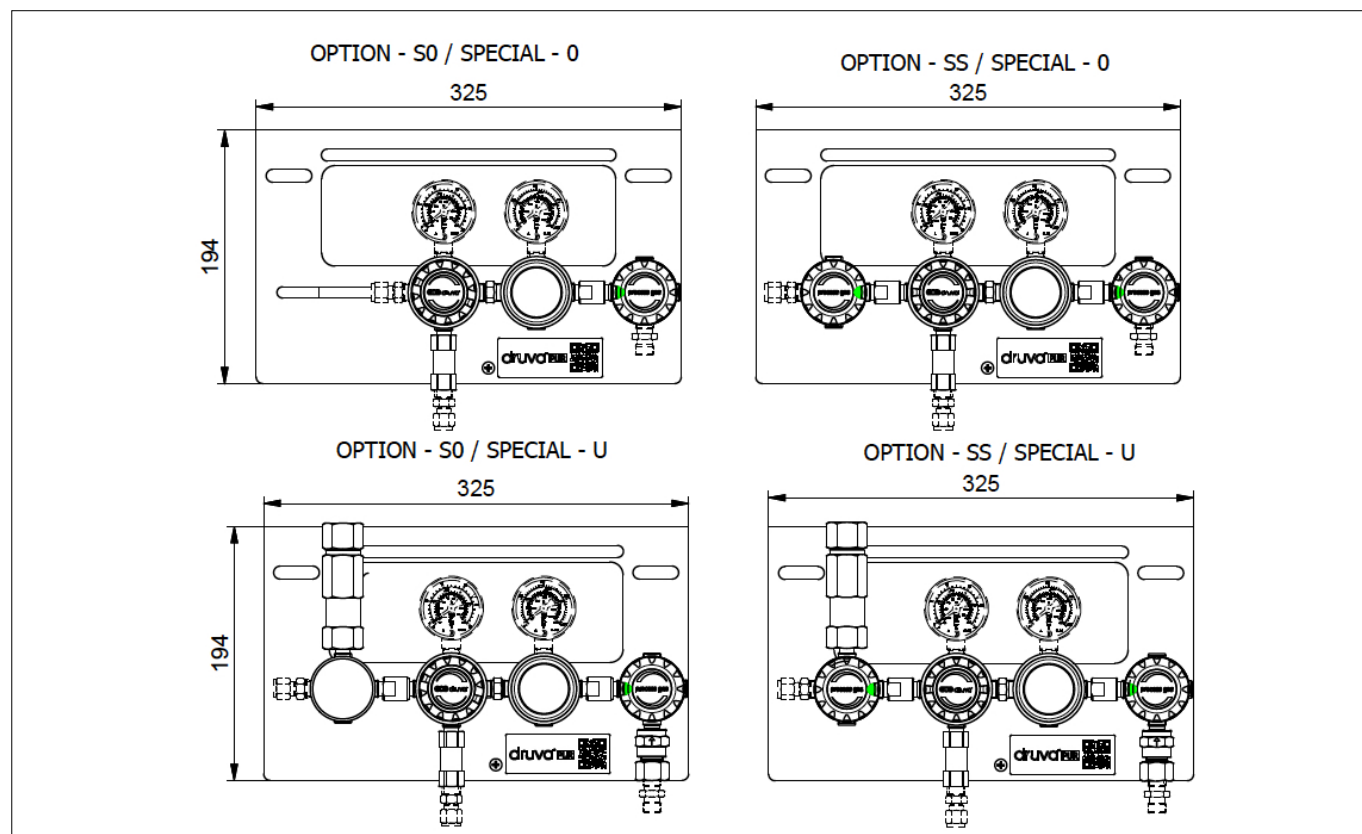
- Fulfill requirements according DIN 80079-36, IEC TS 60079-32-1 and German TRGS 727
- Usable in EX-areas zones 1 and 2 for gases with explosion risk group I, IIA, IIB, IIC

TECHNICAL DATA – VALVES	
<b>Max. working pressure:</b>	300 bar
<b>Kv-value:</b>	0,25
<b>Seat diameter:</b>	5 mm
<b>Leakage rate seat:</b>	<5x10 <sup>-6</sup> mbar l/s (Helium)
<b>Leakage rate outside:</b>	<1x10 <sup>-9</sup> mbar l/s (Helium)
<b>Filter:</b>	1x for each inlet 1x for each outlet
<b>Material gas wetted parts:</b>	
<b>Valve body:</b>	Stainless Steel
<b>Valve diaphragm:</b>	4-Port: 1x Hastelloy, 1x Elgiloy 2-Port: 2x Elgiloy
<b>Valve seat:</b>	PCTFE
<b>Valve poppet:</b>	Stainless Steel
<b>Test in production:</b>	Pressure test with Helium of each item
	Seat leakage test with Helium of each item
	Helium leak test of each valve against atmosphere
	Test of functionality of each item
<b>Approvals during development:</b>	Type test in accordance with relevant sections of DIN 10297:2015
	Electrostatic chargeability test
	• Fulfill requirements according DIN 80079-36, 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
TECHNICAL DATA – PLATES	
<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 250 mm
<b>Front plate:</b>	Stainless Steel (polished) Cut outs for easy 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 online product configurator
TECHNICAL DATA – SAFETY VALVES (S)	
	Spring loaded according P.E.D. 2014/68/EU and AD2000 (A2)
<b>Opening pressure:</b>	1,5/ 4,5/ 9/ 15/ 21 bar
<b>Leakage rate:</b>	< 5 x 10 <sup>-6</sup> mbar l/s (valve seat) at nominal pressure of receiver
<b>Material:</b>	Housing and metal parts made of stainless steel, pressure spring made of stainless steel
<b>Seat and seal:</b>	FKM
<b>Outlet connection:</b>	NPT ½" female

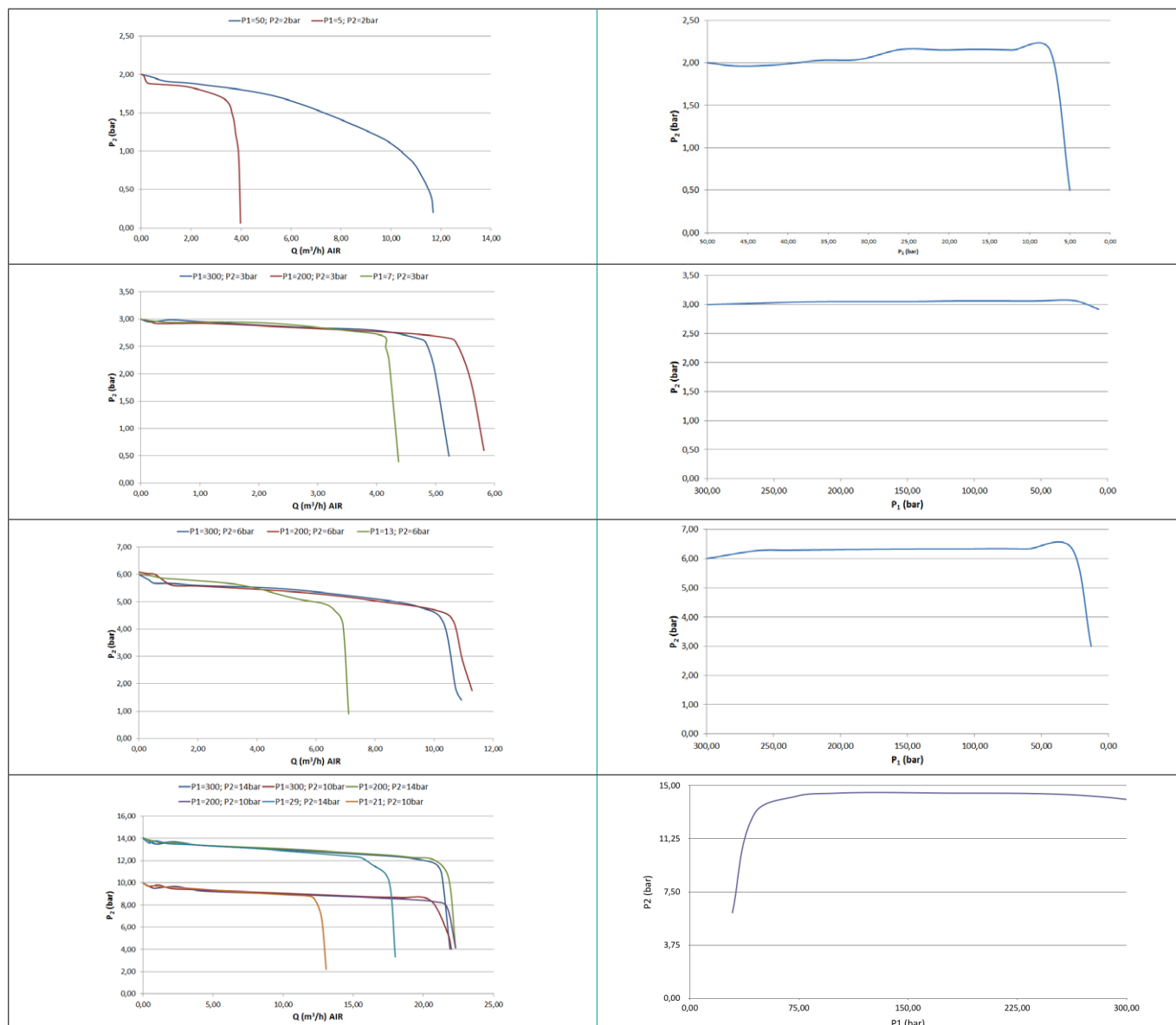
## TECHNICAL DRAWING:



## TECHNICAL DRAWING – VARIANTS:



## FLOW CURVES:



## ORDER CODE:

Example Manifold | PUR Linie | Stainless Steel | Low Flow | High Pressure Range | Dual Stage | High Pressure Shut-off Valve

MSLH0X MSLHEX	D	SS	C	FX	CX	BT	BT	N14F	N14F (1/4" 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 & relief connection
	D Dual stage	S0 HP shut-off valve	0 without	F4 60	AX 2	BT Bourdon Tube gauge	BT Bourdon Tube gauge	N14F 1/4" NPT female	possible connections  see technical drawing	possible connections  see technical drawing
		SS HP shut-off valve LP Shut-off valve	C Check valve	FX 200	BX 3	I1 Inductiv contact gauge I1	I2 Inductiv contact gauge I2	M14M Metric 14x1.5 male		
			S Safety valve	GX 300	CX 6	R5 Reed contact gauge R5	R2 Reed contact gauge R2			
			U Check valve + safety valve		D2 10	I1 Inductiv contact gauge I1				
					DX 14					

Order code (as described above) without special characters or spaces! Complete Order Code **MSLH0XDSSCFXCXBTBTN14FN14FN14F**

Link to online product configurator