MSLHOSSE | MSLHESSE – DRUVA® PUR MANIFOLD MANIFOLD | PURE LINE (STAINLESS STEEL) | 20 m³ SERIES HIGH PRESSURE RANGE | SEMI-AUTOMATIC CHANGE OVER | SINGLE STAGE | EXTERNAL GAS PURGING

DRULY 6.0 PUR

This manifold is used in gas supply systems for pure, inert, flammable, oxidising, corrosive and / or toxic gases and their mixtures up to gas purity 6.0.

TECHNICAL SPECIFICATION:

- $\,>\,$ Switching between two sources by semi-automatic change over system
- > Regulator and Valves Hastelloy/Elgiloy diaphragm tighting system to atmosphere
- > Compact design
- > Excellent pressure adjustment
- > Valves designed and approved in accordance with relevant sections of ISO 10297:2015
- > Regulator designed and approved regarding ISO7291
- > Relief valve in delivery pressure side
- > Manifold with external gas purge system
- > Available with shut-off valve at outlet, safety valve at outlet, check valve at inlet
- > Electrostatic chargeability test
 - Fulfills requirements according to ISO 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
- > Seperated 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

| TECHNICAL DATA - MANIFOLD | | | | | |
|--|--|--|--|--|--|
| Working temperature: | -20 °C to +60 °C | | | | |
| Inlet/ outlet ports: | see technical drawing | | | | |
| Leakage rate seat: | <5x10 ⁻⁶ mbar I/s (Helium) | | | | |
| Leakage rate outside: | <1x10 ⁻⁹ mbar l/s (Helium) | | | | |
| Weight: | max 10,91 kg | | | | |
| Flow nominal: | $20m^3/h$ (N_2) acc. to ISO 7291 at 20 bar outlet pressure and 41 bar inlet pressure | | | | |
| Pressure rates manifold: | | | | | |
| Max. inlet pressure: | 300 bar | | | | |
| Delivery pressure: | 10/ 14/ 28/ 50 bar | | | | |
| | | | | | |
| TECHNICAL DATA - REGULATOR | | | | | |
| Filter: | 1x for inlet 1x for each outlet | | | | |
| Material gas wetted parts: | | | | | |
| Regulator body: | Stainless Steel | | | | |
| Regulator diaphragm: | Hastelloy | | | | |
| Regulator seat: | PCTFE | | | | |
| Regulator poppet: | Stainless Steel | | | | |
| Relief valve seat: H0 Version HE Version | FKM EPDM | | | | |
| Pressure gauges rates (pressure rates): | 18 (10)/ 25 (14)/ 40 (28)/ 80 (50) bar | | | | |
| Contact gauges available – please con | tact us | | | | |
| Cracking pressure relief valves: | 15,4 (10)/ 21,6 (14)/ 43,1 (28)/ 65 (50) bar | | | | |
| | Pressure test with Helium of each item | | | | |
| Test in production. | Seat leakage test with Helium of each item | | | | |
| Test in production: | Helium leak test of each regulator against atmosphere | | | | |
| | Test of functionality of each item | | | | |
| | | | | | |



Type MSLHOSS**E00** E0 HP Ext. Gas Purge 0 Without Specials



Type MSLH0SSESS

ES HP Ext. Gas Purge

LP Shut-off valve S Specials

Safety Valve

| 61 0 | |
|------|--|

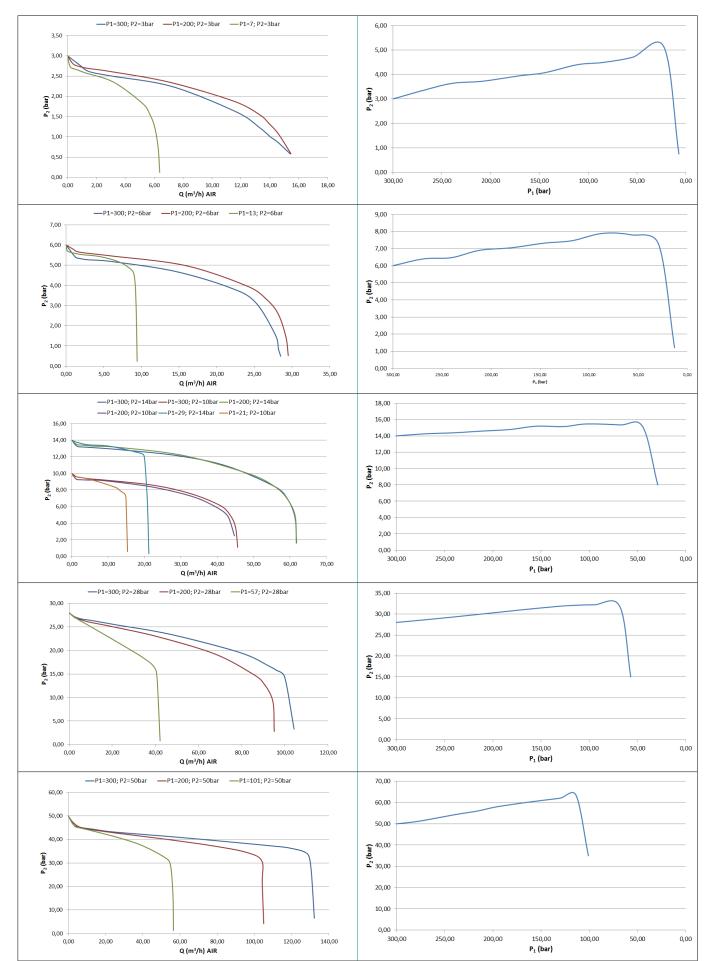
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- 1 Gas cylinder
- 2 Coil/Hose
- 3 Shut-off valve (3xin, 1xout)
- 4 Purge outlet valve
- 5 Fix pressure regulator
- 6 Set pressure regulator
- 7 Relief valve
- 8 Shut-off valve (1xin, 3xout)
- 9 Safety valve
- 10 Check valve
- 11 Purge Inlet valve (1xin, 3xout)

Options are shown as dotted line

| | Turse test in accordance with ENISO 7001 | | | | | | |
|--|---|--|--|--|--|--|--|
| | Type test in accordance with EN ISO 7291 Additional life cycle test | | | | | | |
| Approvals during development: | Electrostatic chargeability test Fulfill requirements according ISO 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 | | | | | | | |
| Max. working pressure: | 300 bar | | | | | | |
| Kv-value: | 0,25 | | | | | | |
| Seat diameter: | 5 mm | | | | | | |
| Leakage rate seat: | <5x10 ⁻⁶ mbar l/s (Helium) | | | | | | |
| Leakage rate outside: | <1x10 ⁻⁹ mbar I/s (Helium) | | | | | | |
| Filter: | 1x for each inlet 1x for each outlet | | | | | | |
| Material gas wetted parts: | | | | | | | |
| Valve body: | Stainless Steel | | | | | | |
| Valve diaphragm: | 4-Port: 1x Hastelloy, 1x Elgiloy 2-Port: 2x Elgiloy | | | | | | |
| Valve seat: | PCTFE | | | | | | |
| Valve poppet: | Stainless Steel | | | | | | |
| | Pressure test with Helium of each item | | | | | | |
| Test in production: | Seat leakage test with Helium of each item | | | | | | |
| | Helium leak test of each valve against atmosphere | | | | | | |
| | Test of functionality of each item | | | | | | |
| Approvals during development: | Type test in accordance with relevant sections of ISO 10297:2015 Electrostatic chargeability test • Fulfill requirements according ISO 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 | | | | | | | |
| 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 250 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 560 mm | | | | | | |
| Marking on panel: | 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) | | | | | | |
| Opening pressure: | 15/ 21/ 42 bar | | | | | | |
| Leakage rate: | < 5 x 10 ⁻⁶ mbar l/s (valve seat) at nominal pressure of receiver | | | | | | |
| Material: | Housing and metal parts made of Stainless Steel, pressure spring made of stainless steel | | | | | | |
| Seat and seal: | FKM | | | | | | |
| Outlet connection: | NPT 1/2" female | | | | | | |
| | | | | | | | |

3 | Central Gas Systems / Druva PUR



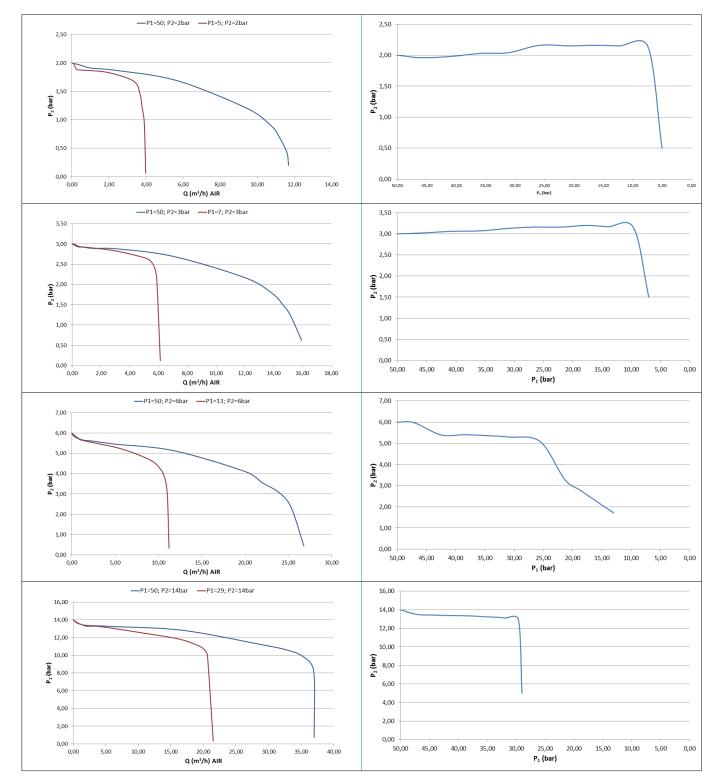
DYNAMIC EXPANSION CURVES:

GCE CENTRAL GAS SYSTEMS

FLOW CURVES:

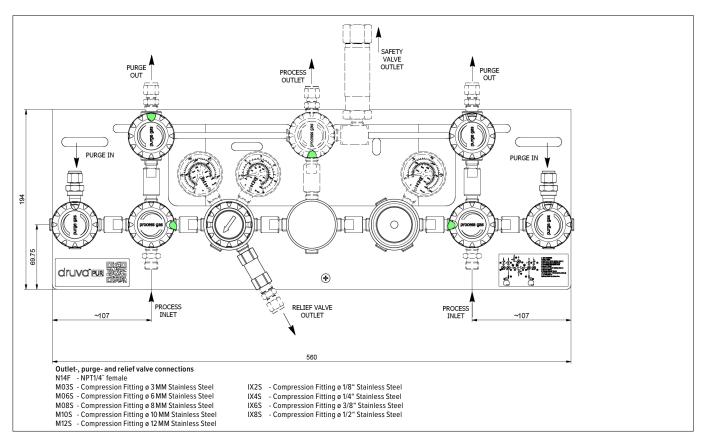
GCE CENTRAL GAS SYSTEMS

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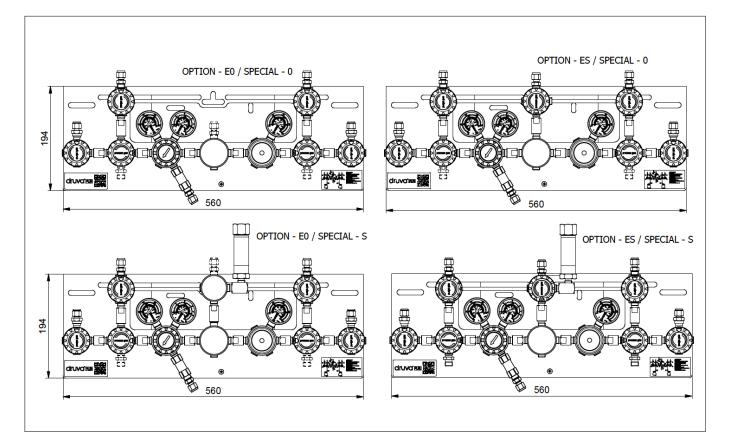


DYNAMIC EXPANSION CURVES:

TECHNICAL DRAWING:



TECHNICAL DRAWING - VARIANTS:



ORDER CODE:

Example Manifold | PUR Linie | Stainless Steel | Low Flow | Semiautomatic Change Over | Single Stage | External Gas Purging

| MSLH0S | S | ES | S | FX | DX | 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 |
| | S Single stage | E0 HP ext. gas purge | 0 without | F4 60 | D2 10 | BT Bourdon Tube gauge | BT Bourdon Tube gauge | N14F 1/4" NPT female | | |
| | | ES HP ext. gas purge LP Shut-off valve | S Safety valve | FX 200 | DX 14 | I1 Inductiv contact gauge I1 | I2 Inductiv contact gauge I2 | M14M Metric 14x1.5 male | possible connections | possible connections |
| | | | | GX 300 | EY 28 | R5 Reed contact gauge R5 | I1 Inductiv contact gauge I1 | | see technical drawing | see technical drawing |
| | | | | | EX 50 | | | | | |

Order code (as described above) without special characters or spaces! Complete Order Code MSLH0SSESSFXDXBTBTN14FN14FN14F