

LPBPVSF | LPBPESF– DRUVA® PUR LINE REGULATOR
 LINE REGULATOR | PURE LINE (BRASS CHROME PLATED) | 5 m³ SERIES | PRECISION REGULATOR
 SINGLE STAGE | 4-PORT VERSION



This single-stage line pressure regulator is used in gas supply systems for pure, inert, flammable, oxidising gases and gas mixtures up to gas purity 6.0. It is not usable for corrosive and / or toxic gases and their mixtures.

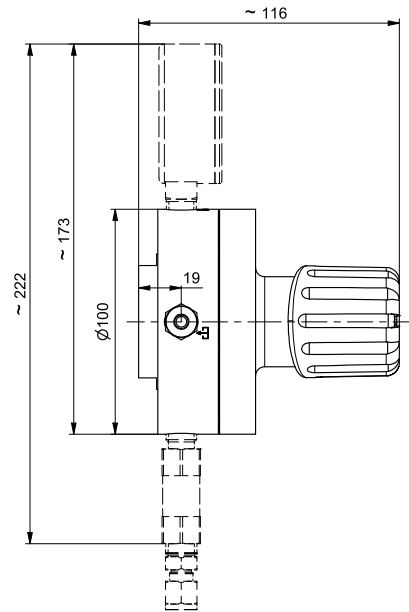
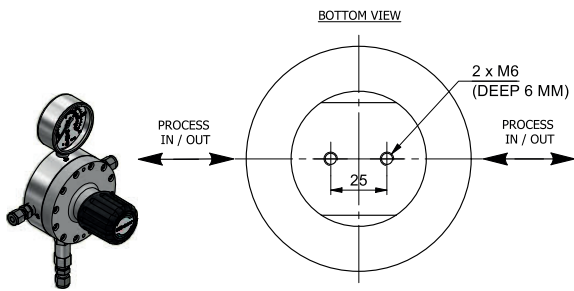
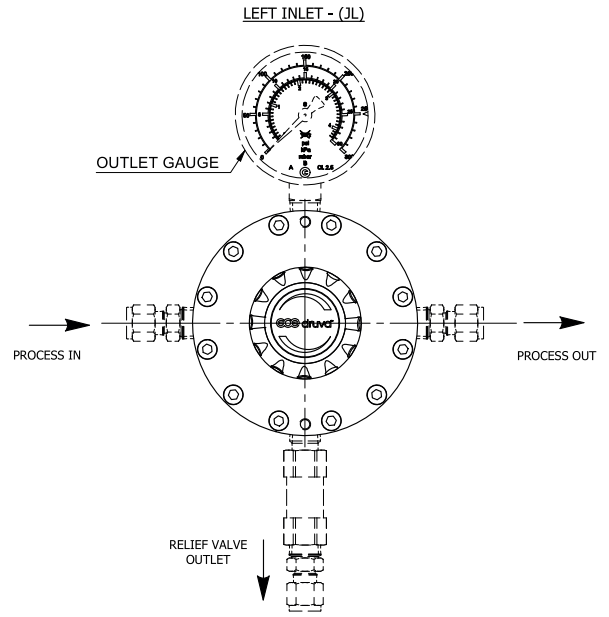
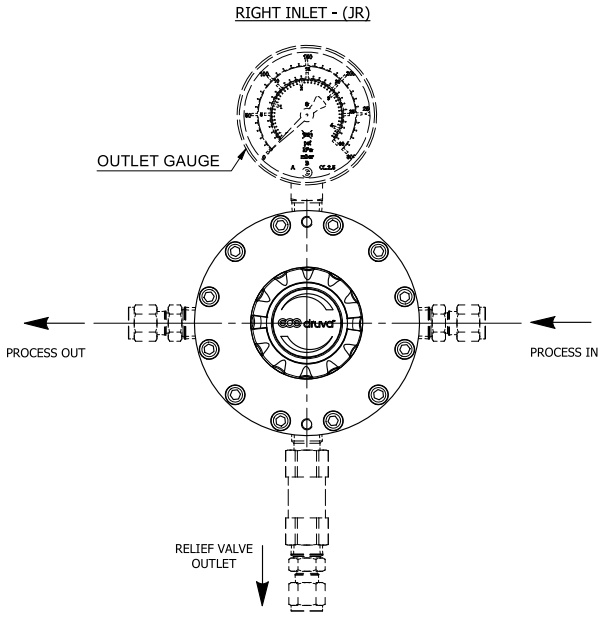


SPECIAL FEATURES:

- > Low outlet pressure
- > Very fine adjustment
- > The large housing diameter of this pressure reducer allows large metal diaphragms and thus very fine adjustment of the back pressure at comparatively high flows down to 250 mbar
- > The line pressure regulator reduces the line pressure with very small hysteresis to very low supply pressures

| TECHNICAL DATA | |
|---|---|
| Working temperature: | -20 °C to +60 °C |
| Inlet / outlet ports: | NPT 1/4" f, optional compression fitting |
| Leakage rate seat: | <5x10 ⁻⁶ mbar l/s (Helium) |
| Leakage rate outside: | <1x10 ⁻⁹ mbar l/s (Helium) |
| Filter: | 1x for inlet 1x for each outlet |
| Weight: | 2,7 kg |
| Flow nominal: | 5 m ³ /h (N ₂) |
| Material gas wetted parts: | |
| Regulator body: | Brass chrome plated |
| Regulator diaphragm: | Hastelloy |
| Regulator seat: | LPBPVSJ-Version: FKM LPBPESJ-Version: EPDM |
| Relief valve seat: | LPBPVSJ-Version: FKM LPBPESJ-Version: EPDM |
| Regulator poppet: | Brass |
| Regulator seal: | PCTFE |
| Pressure rates line regulator: | |
| Inlet pressure | 12 40 bar |
| Outlet pressure | |
| 12 bar Version: | 250 mbar 450 mbar 1300 mbar |
| 40 bar Version: | 250 mbar 450 mbar 1300 mbar 3000 mbar |
| Pressure gauges rates (pressure rates): | 0-300 mbar (250 mbar) 0-600 mbar (450 mbar) 0-1600 mbar (1300 mbar) 0-4000 mbar (3000 mbar) |
| Contact gauges available – please contact us | |
| Cracking pressure relief valves: | 2 bar (1300 mbar) 4,6 bar (3000 mbar) |
| | Pressure test with Helium of each item |
| Test in production: | Seat leakage test with Helium of each item |
| | Helium leak test of each regulator against atmosphere |
| | Test of functionality of each item |
| | Type test in accordance with 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 DRAWING:

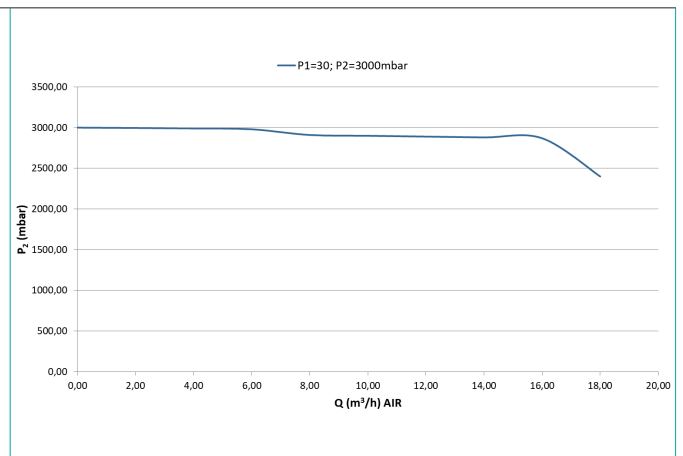
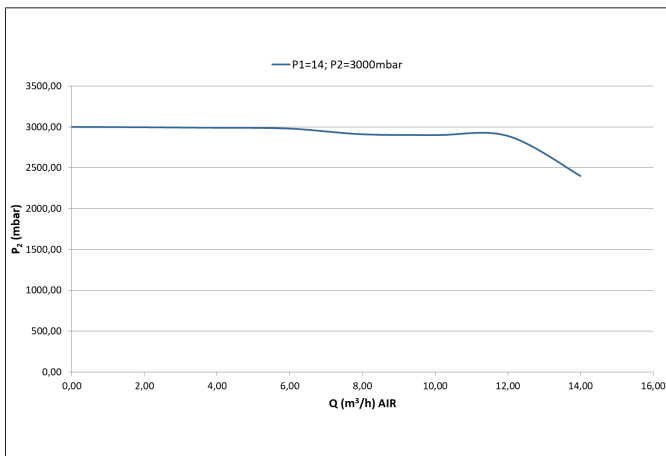
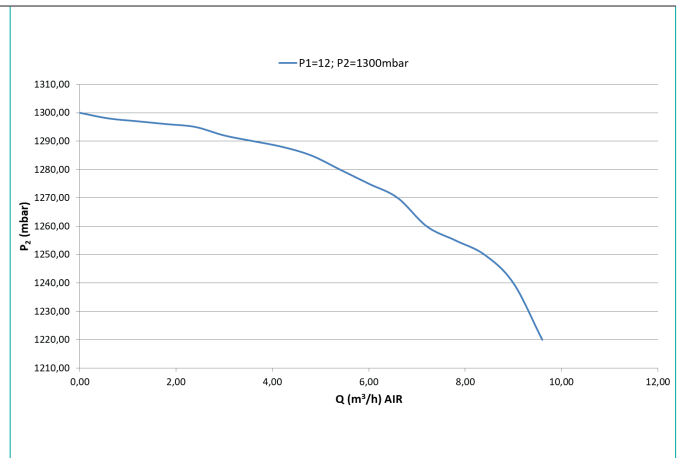
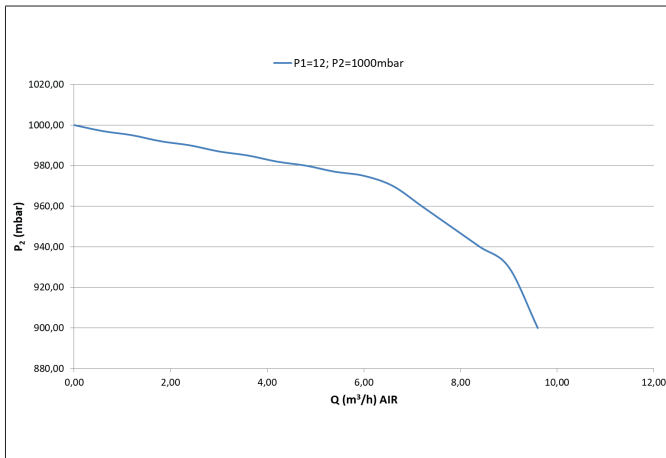
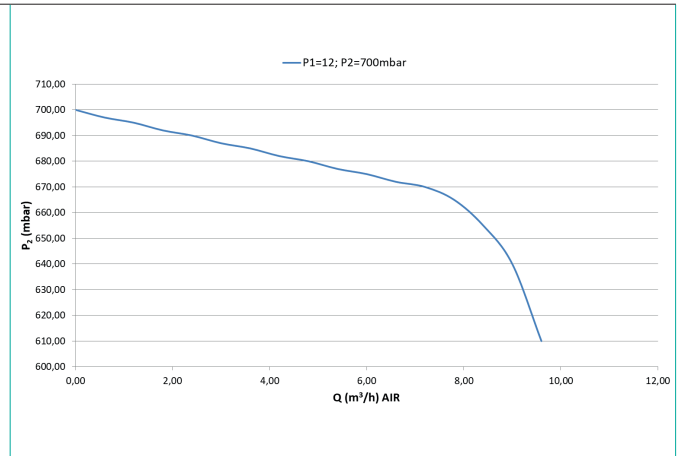
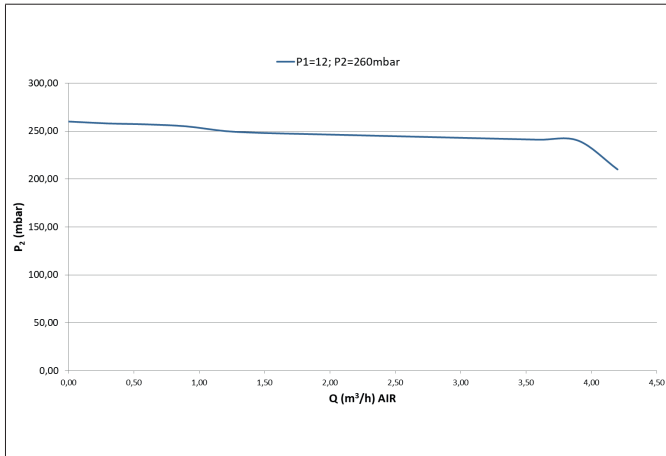


Connections

- | | |
|--|---|
| N14F - NPT1/4" female | IX2S - Compression fitting \varnothing 1/8" Stainless steel |
| M03B - Compression fitting \varnothing 3 MM Brass | IX4S - Compression fitting \varnothing 1/4" Stainless steel |
| M06B - Compression fitting \varnothing 6 MM Brass | IX6S - Compression fitting \varnothing 3/8" Stainless steel |
| M08B - Compression fitting \varnothing 8 MM Brass | IX8S - Compression fitting \varnothing 1/2" Stainless steel |
| M10B - Compression fitting \varnothing 10 MM Brass | H04B - Hose nozzle 4,8 mm Brass |
| M12B - Compression fitting \varnothing 12 MM Brass | H06B - Hose nozzle 6,4 mm Brass |
| M03S - Compression fitting \varnothing 3 MM Stainless steel | H08B - Hose nozzle 8,0 mm Brass |
| M06S - Compression fitting \varnothing 6 MM Stainless steel | H04S - Hose nozzle 4,8 mm Stainless steel |
| M08S - Compression fitting \varnothing 8 MM Stainless steel | H06S - Hose nozzle 6,4 mm Stainless steel |
| M10S - Compression fitting \varnothing 10 MM Stainless steel | H08S - Hose nozzle 8,0 mm Stainless steel |
| M12S - Compression fitting \varnothing 12 MM Stainless steel | |
| IX2B - Compression fitting \varnothing 1/8" Brass | |
| IX4B - Compression fitting \varnothing 1/4" Brass | |
| IX6B - Compression fitting \varnothing 3/8" Brass | |
| IX8B - Compression fitting \varnothing 1/2" Brass | |

Availability of brass fittings depending on pressure & size. Pay attention to the maximum approved pressure of your pipework.
Hose nozzles max. 15 bar

FLOW CURVES:



ORDER CODE:

Example Line Regulator | PUR Line | Brass chrome plated | 5 m³ Series | Precision | Single Stage | 4-Port Version

| LPBPVSF LPBPESF | R | D1 | A2 | BT | BT | N14F | N14F | RV | N14F |
|--|----------------|-----------------|----------------------------|----------------------------|-----------------------|-----------------------|----------------------------|--|-------------------|
| | | | | | | (1/4" NPT female) | (1/4" NPT female) | | (1/4" NPT female) |
| Porting | Inlet pressure | Outlet pressure | Inlet gauge | Outlet gauge | Inlet connection | Outlet connection | Safety device | Relief valve connection | |
| R Inlet right | D1 12 bar | A4 250 mbar | 00 Without 1/4" NPT female | 00 Without 1/4" NPT female | possible connections | possible connections | 00 Without 1/4" NPT female | 0001 – if no safety device is chosen possible connection if safety device RV is chosen see technical drawing | |
| L Inlet left | E1 40 bar | A3 450 mbar | 01 Without (plugged) | 01 Without (plugged) | | | 01 Without (plugged) | | |
| | | A2 1,3 bar | BT Bourdon Tube gauge | BT Bourdon Tube gauge | see technical drawing | see technical drawing | RV Relief valve ** | | |
| | | BX 3,0 bar * | | | | | | | |
| *only for inlet pressure 40 bar ** only for outlet pressure 1,3 bar and 3 bar | | | | | | | | | |

Order code (as described above) without special characters or spaces! Complete Order Code **LPBPVSFRD1A2BTBN14FN14FRVN14F**

