

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.

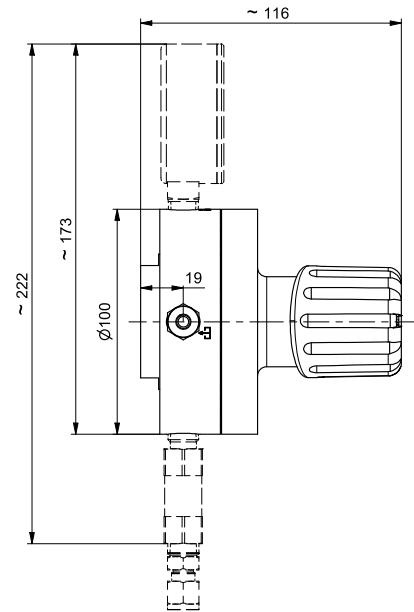
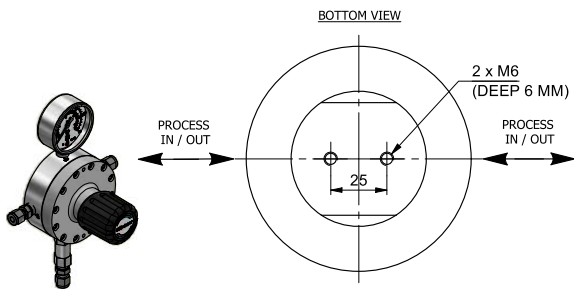
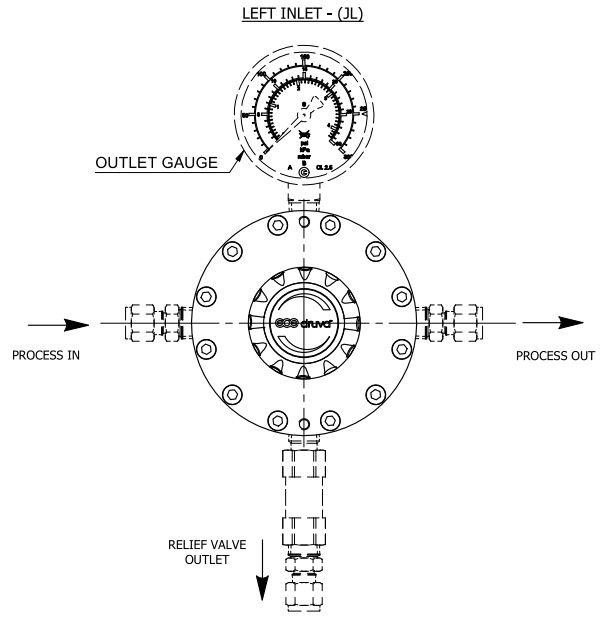
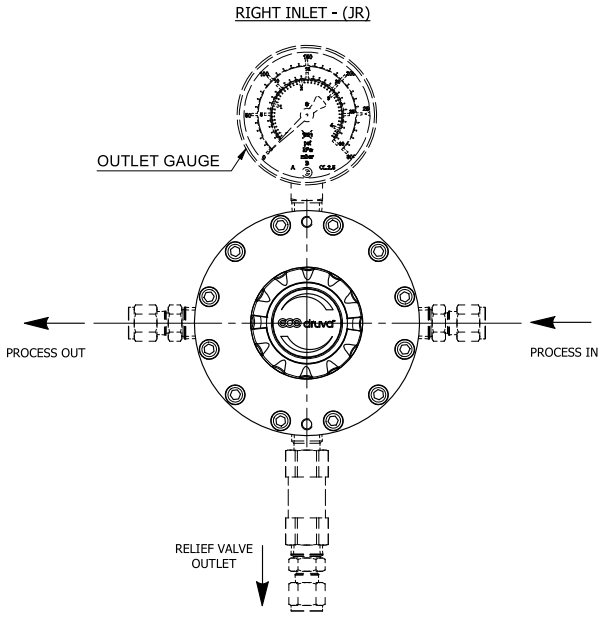


SPECIAL FEATURES:

- > 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)
Test in production:	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
Approvals during development:	Type test in accordance with ISO 7291
	Additional life cycle test
	Electrostatic chargeability test
	<ul style="list-style-type: none"> • 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:



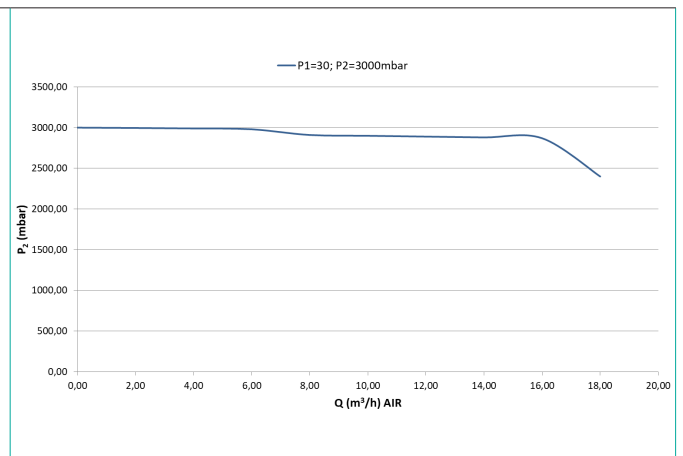
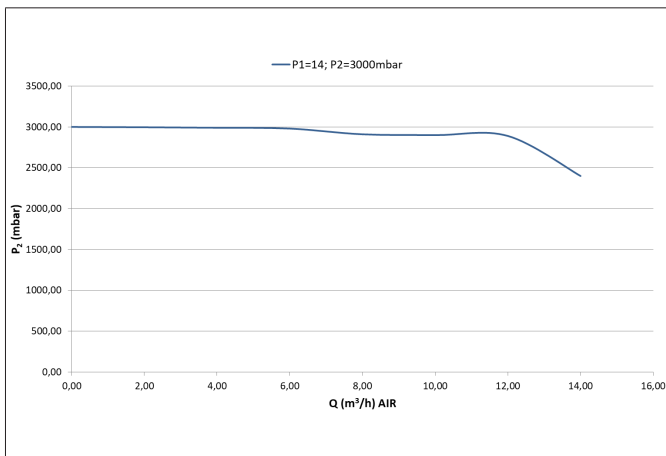
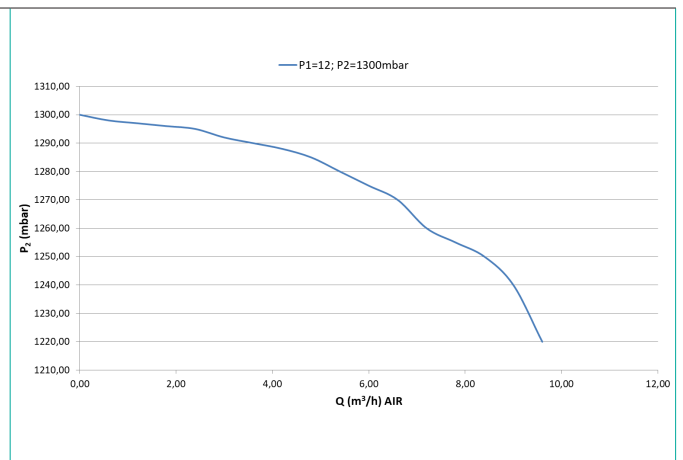
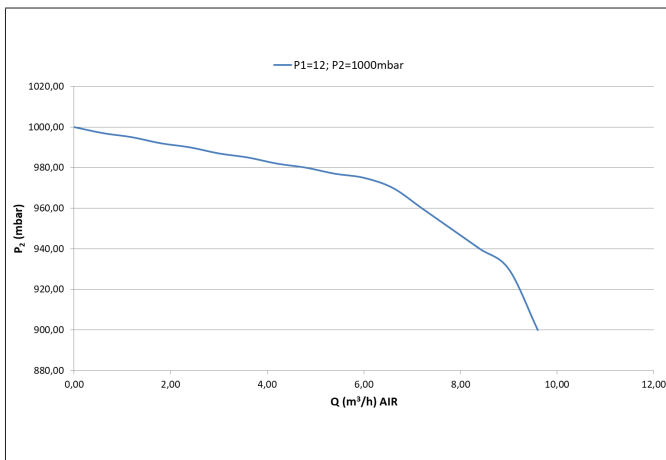
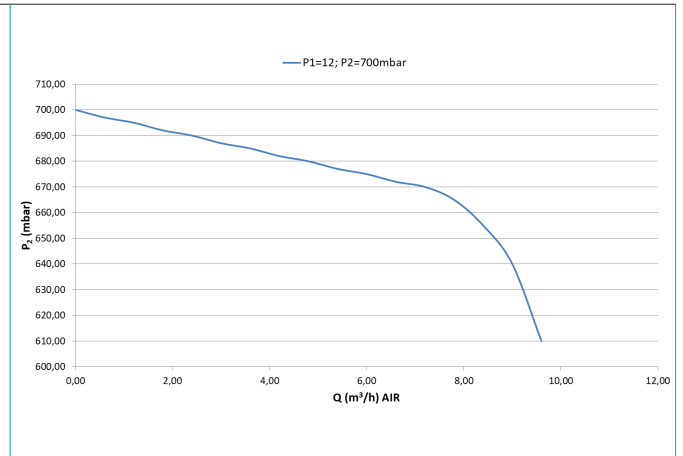
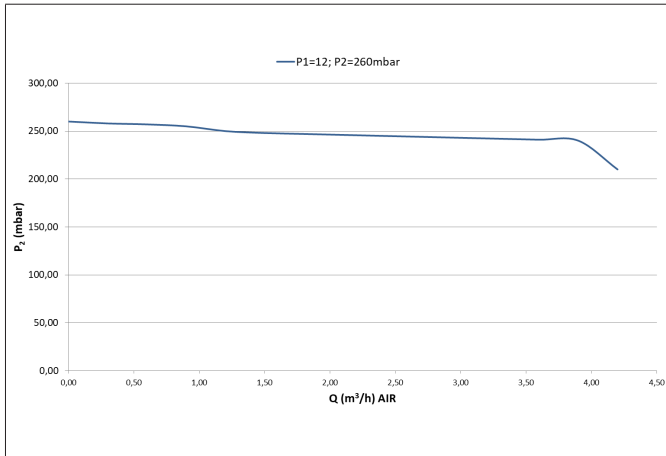
Connections

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

