# LSBPVSF | LSBPESF- DRUVA®PUR LINE REGULATOR LINE REGULATOR | PURE LINE (STAINLESS STEEL) | 5 m<sup>3</sup> 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, corrosive and / or toxic gases and their mixtures up to gas purity 6.0.

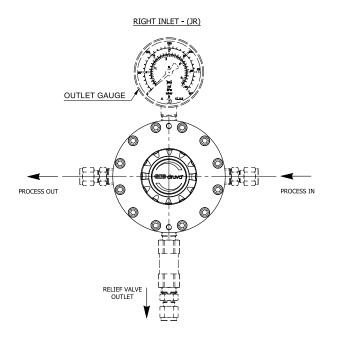


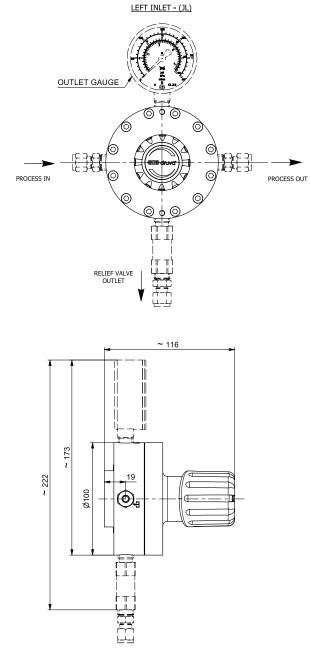
#### SPECIAL FEATURES:

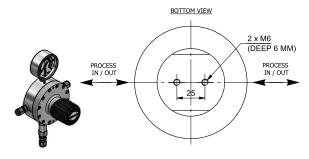
- > Low outlet pressure
- > Very fine adjustment
- > The large housing diameter of this pressure reducer allows large metal diaphragms and thus very fine adjustment of the back pressure at comparatively high flows down to 250 mbar
- > The line pressure regulator reduces the line pressure with very small 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 <sup>-6</sup> mbar l/s (Helium)				
Leakage rate outside:	<1x10 <sup>-9</sup> mbar l/s (Helium)				
Filter:	1x for inlet 1x for each outlet				
Weight:	2,57 kg				
Flow nominal:	5 m³/h (N₂)				
Material gas wetted parts:					
Regulator body:	Stainless Steel				
Regulator diaphragm:	Hastelloy				
Regulator seat: LSBPVSF-Version LSBPESF-Version	FKM EPDM				
Relief valve seat: LSBPVSF-Version LSBPESF-Version	FKM EPDM				
Regulator poppet:	Stainless Steel				
Regulator seal:	PCTFE				
Regulator poppet:	Stainless Steel				
Pressure rates line regulator:					
Inlet pressure	12   40 bar				
Outlet pressure 12 bar Version: 40 bar Version:	250 mbar   450 mbar   1300 mbar 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 conta	act 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				
lest in production.	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:	<ul> <li>Electrostatic chargeability test</li> <li>Fulfill requirements according ISO 80079-36; IEC TS 60079-32-1 and German TRGS 727</li> <li>Usable in EX-areas zones 1 and 2 for gases with explosion risk group I; IIA; USABLE INC.</li> </ul>				
	IIB; IIC				

### **TECHNICAL DRAWING:**







#### Connections

- MIAF NPT1/4" female M03S Compression fitting ø 3 MM Stainless Steel M06S Compression fitting ø 6 MM Stainless Steel
- M08S Compression fitting ø 8 MM Stainless Steel
- M10S Compression fitting ø 10 MM Stainless Steel
- M125
   - Compression fitting ø 12 MM Stainless Steel

   IX25
   - Compression fitting ø 1/8" Stainless Steel

   IX45
   - Compression fitting ø 1/4" Stainless Steel
- IX6S - Compression fitting ø 3/8" Stainless Steel
- IX8S - Compression fitting ø 1/2" Stainless Steel
- HO4S
   - Hose nozzle 4,8mm Stainless Steel

   H06S
   - Hose nozzle 6,4mm Stainless Steel
- H08S Hose nozzle 8,0 mm Stainless Steel

Hose nozzles max. 15 bar

## FLOW CURVES:

0,00

2,00

4,00

6,00

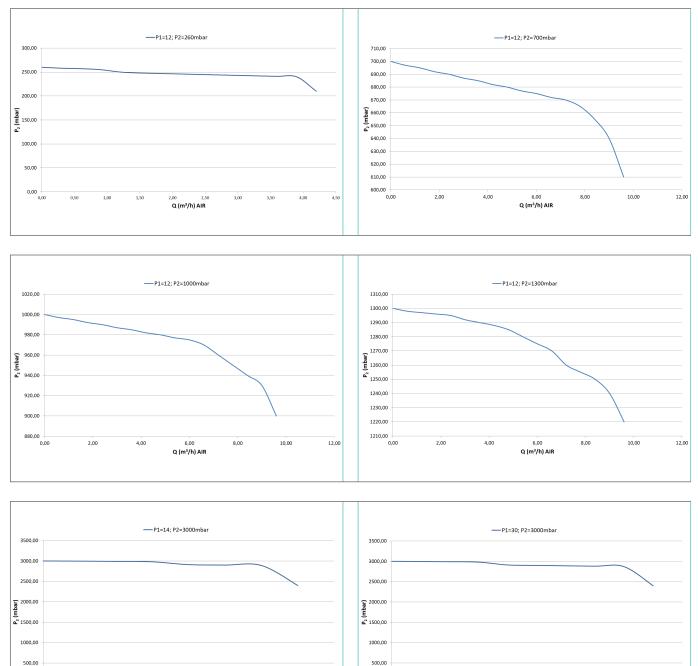
8,00 Q (m³/h) AIR

10,00

12,00

14,00

16,00



0,00

2,00

4,00

6,00

8,00

10,00 **Q (m³/h) AIR** 

12,00

14,00

16,00

18,00

20,00

### ORDER CODE:

Example Line Regulator | PUR Line | Stainless Steel | 5 m<sup>3</sup> Series | Precision | Single Stage | 4-Port Version

LSBPVSF LSBPESF	R	D1	A2	BT	BT	N14F	N14F	RV	N14F
							(1/4" NPT female) (1/4" NPT female)		
	Porting	Inlet pressure	Outlet pressure	Inlet gauge	Outlet gauge	Inlet connection	Oulet 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			00 Without 1/4" NPT female	0001 – if no safety
	L Inlet left	E1 40 bar	A3 450 mbar	01 Without (plugged)	01 Without (plugged)	possible		01 Without (plugged)	device is choosen
			A2 1,3 bar	BT Bourdon Tube gauge	BT Bourdon Tube gauge	connections connections	RV Relief valve **	possible connection if safety	
			<b>BX</b> 3,0 bar *			see technical drawing	see technical drawing		device RV is choosen
		t pressure 40 b tet pressure 1,3							see technical drawing

Order code (as described above) without special characters or spaces! Complete Order Code LSBPVSFRD1A2BTBTN14FN14FRVN14F