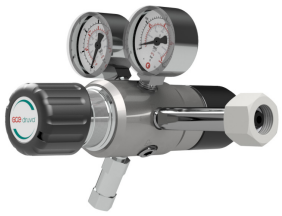
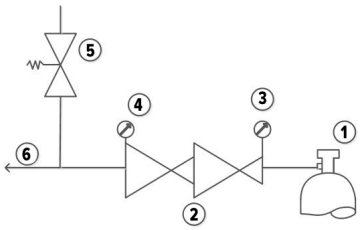
CSLH0DJ | CSLHEDJ – DRUVA®PUR CYLINDER REGULATOR

CYLINDER REGULATOR | PURE LINE (STAINLESS STEEL) | 20 m³ SERIES | HIGH PRESSURE RANGE DUAL STAGE | 6-PORT VERSION | INLET RIGHT

This dual-stage cylinder 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.

Option-**00**:





1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Process gas outlet

Dimension for standard version see technical drawing

SPECIAL FEATURES:

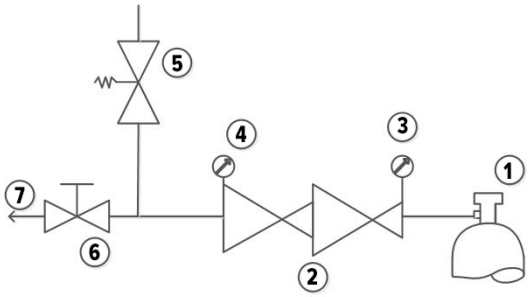
- Hastelloy diaphragm tighting system to atmosphere
- Available with several options (shut-off valve, regulating valve, purge valve, etc.), see drawing
- Available with several international cylinder connections, see drawing
- Compact design
- Excellent pressure adjustment
- Designed and approved regarding ISO 7291
- Relief valve in delivery pressure side available
- Electrostatic chargeability test
  - Fulfills requirements according to ISO 80070-36; 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

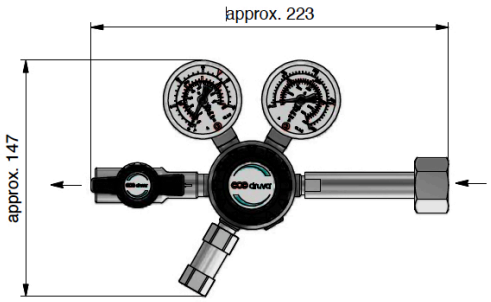
TECHNICAL DATA	
Working temperature:	-20 °C to +60 °C
Inlet port:	Cylinder connection according to national / international directives
Leakage rate seat:	<5x10^{-6} mbar l/s (Helium)
Leakage rate outside:	<1x10^{-9} mbar l/s (Helium)
Filter:	1x for inlet 1x for each outlet
Weight:	4,04 kg
Flow nominal:	20 m³/h (N_2) according to ISO 7291 at 20 bar out
Material gas wettet parts	
Regulator body:	Stainless Steel
Regulator diaphragm:	Hastelloy
Regulator seat: First pressure stage Second pressure stage	 PCTFE PTFE
Relief valve seat: CSLH0DJ-Version CSLHEDJ-Version	 FKM EPDM
Regulator poppet:	Stainless Steel
Pressure rates cylinder regulator	
Max. inlet pressure:	300 bar
Delivery pressure:	2/ 3/ 6/ 10/ 14/ 28/ 50/ 100/ 200 bar
Pressure gauges rates (pressure rates):	2,5 (2)/ 5 (3)/ 10 (6)/ 25 (10, 14)/ 40 (28)/ 65 (50)/ 160 (100)/ 200 (315) bar
Contact gauges available – please contact us	
Cracking pressure relief valves:	3,1 (2)/ 4,6 (3)/ 9,2 (6)/ 15,4 (10)/ 21,6 (14)/ 15,4 (10)/ 21,6 (14)/ 43,1 (28)/ 77 (50)/ 154 (100) bar
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 • Fulfills requirements according to ISO 80070-36; 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

OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0DJ | CSLHEDJ:

Option-**0S**: with low pressure shut-off valve

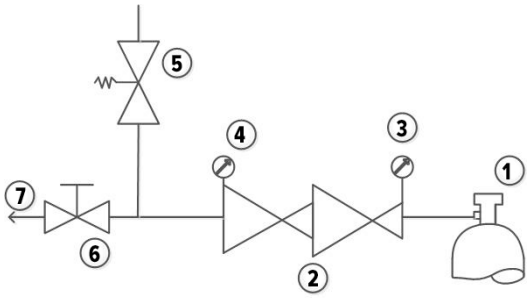
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Outlet shut-off valve
7 – Process gas outlet

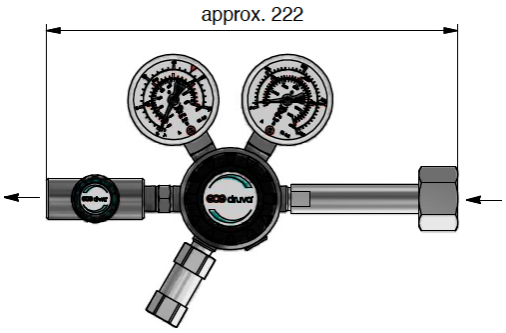




Option-**0R**: with low pressure regulating valve

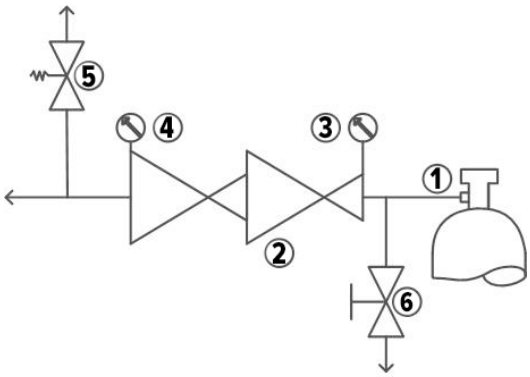
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Outlet regulating valve
7 – Process gas outlet

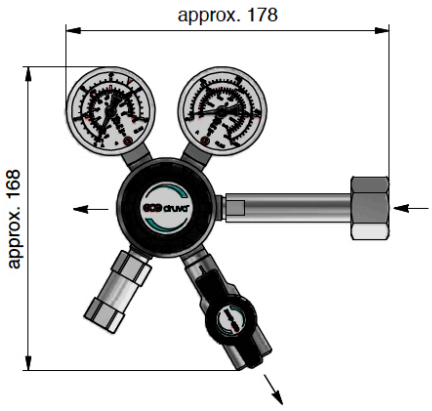




Option-**P0**: with high pressure purge valve

1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Purge valve

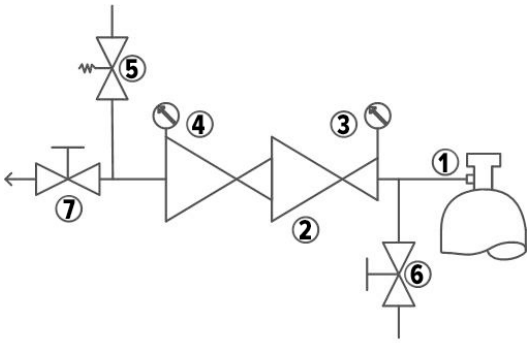


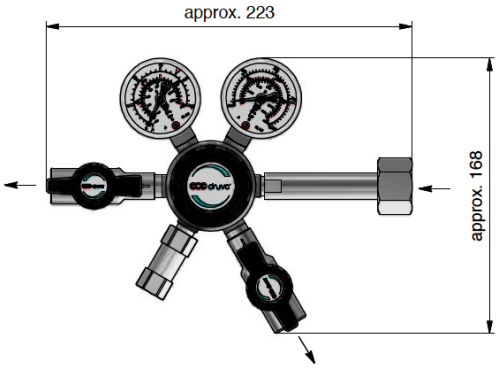


OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0DJ | CSLHEDJ:

Option-**PS**: with high pressure purge valve & low pressure shut-off valve

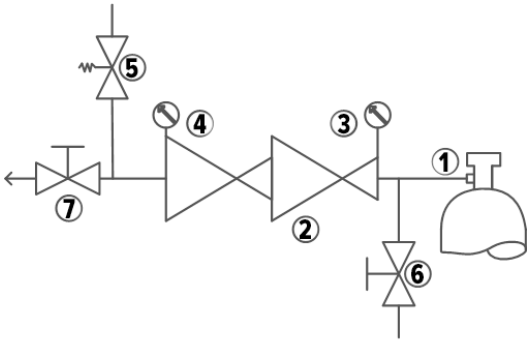
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Purge valve
7 – Outlet shut-off valve

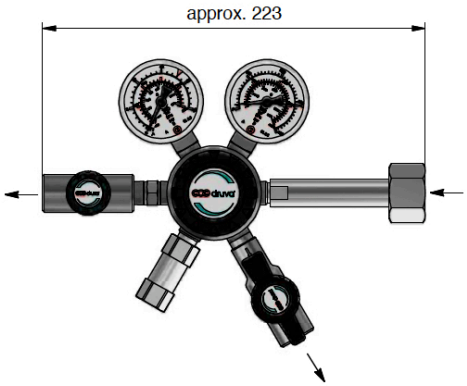




Option-**PR**: with high pressure purge valve & low pressure regulating valve

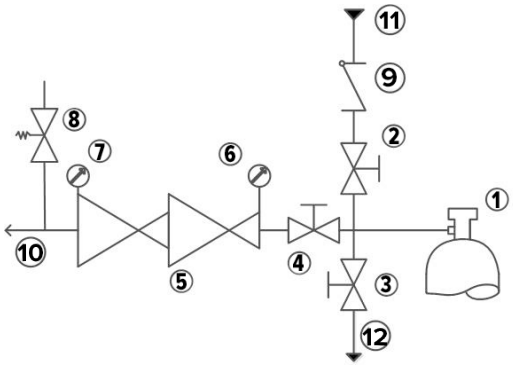
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Purge valve
7 – Outlet regulating valve

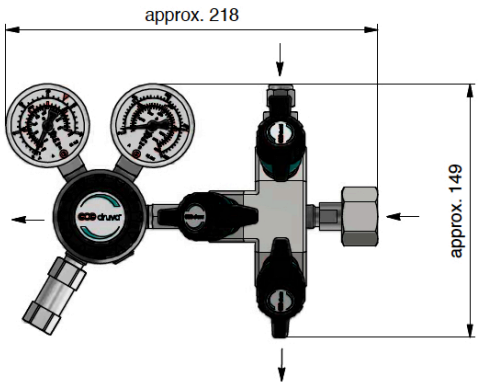




Option-**30**: with high pressure triple purge block

1 – Cylinder connection
2 – Purge inlet valve
3 – Purge outlet valve
4 – Inlet shut-off valve
5 – Pressure regulator
6 – Inlet pressure gauge
7 – Outlet pressure gauge
8 – Relief valve
9 – Check valve
10 – Process gas outlet
11 – Purge inlet
12 – Purge outlet

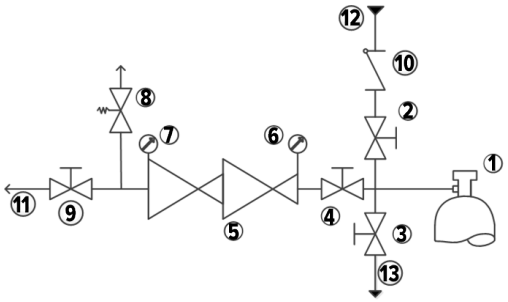


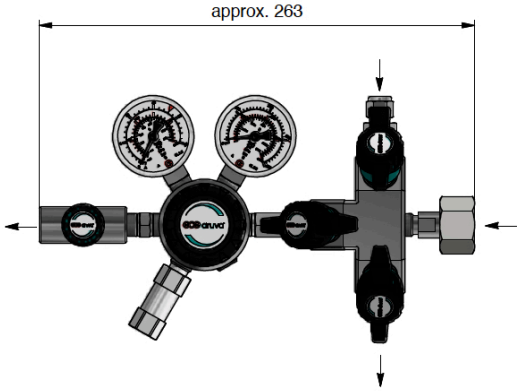


OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0DJ | CSLHEDJ:

Option-**3R**: with high pressure triple purge block & low pressure regulating valve

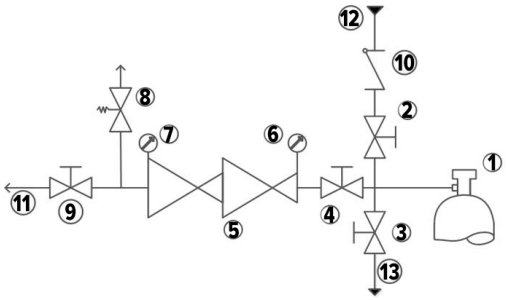
1 – Cylinder connection
2 – Purge inlet valve
3 – Purge outlet valve
4 – Inlet shut-off valve
5 – Pressure regulator
6 – Inlet pressure gauge
7 – Outlet pressure gauge
8 – Relief valve
9 – Outlet regulating valve
10 – Check valve
11 – Process gas outlet
12 – Purge inlet
13 – Purge outlet

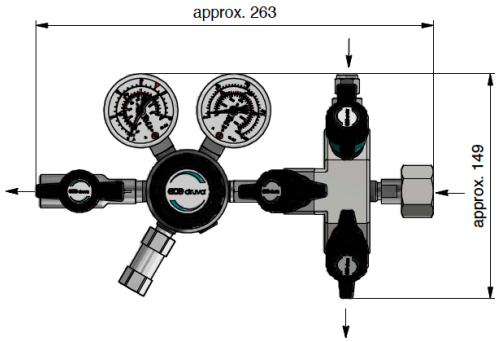




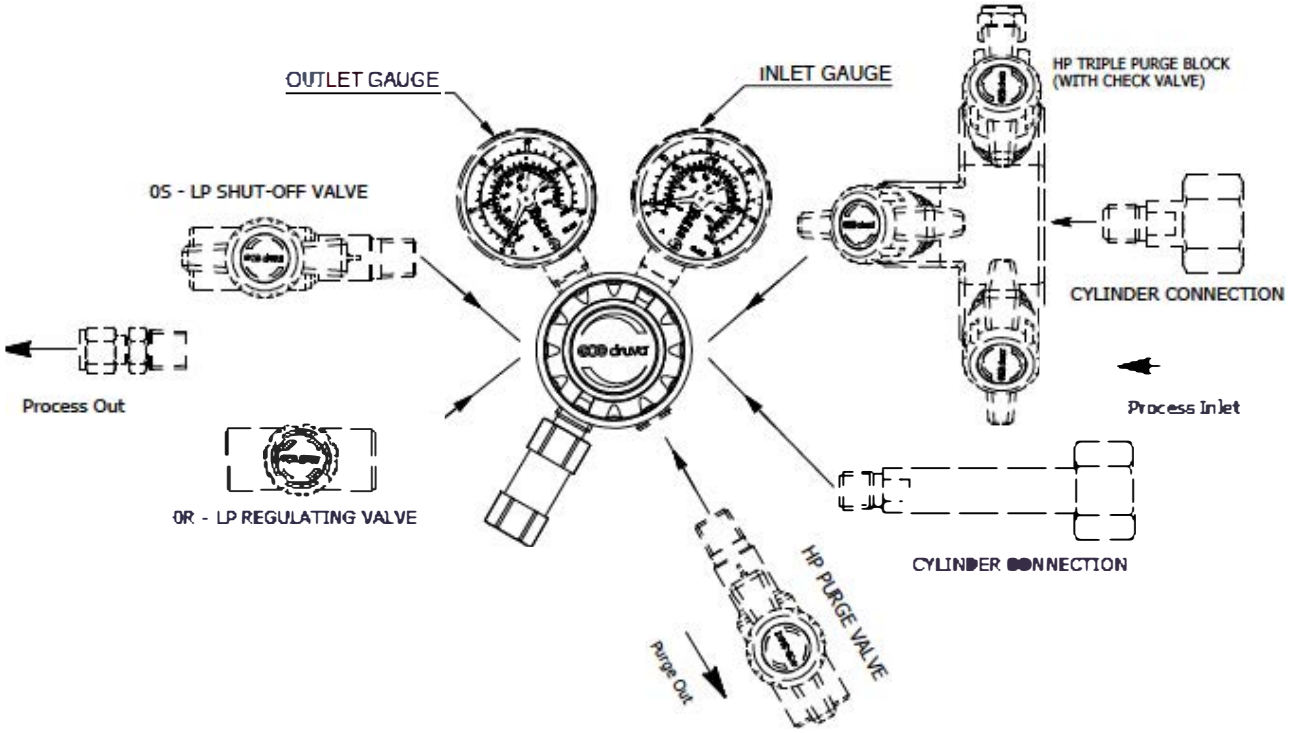
Option-**3S**: with high pressure triple purge block & low pressure shut-off valve

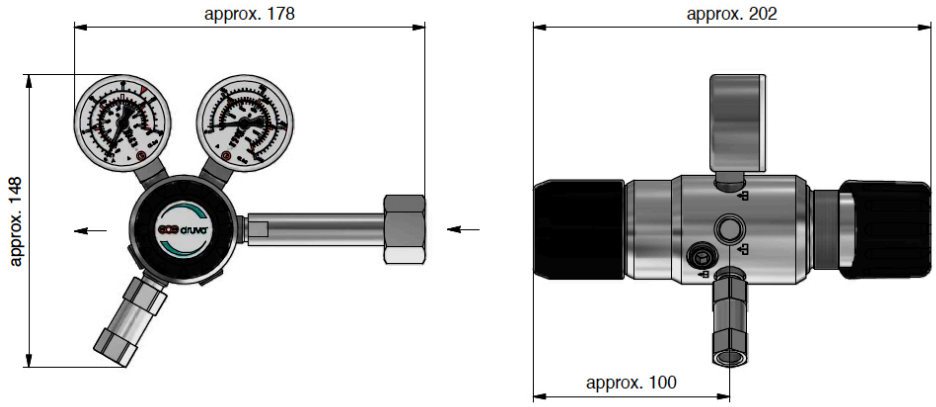
1 – Cylinder connection
2 – Purge inlet valve
3 – Purge outlet valve
4 – Inlet shut-off valve
5 – Pressure regulator
6 – Inlet pressure gauge
7 – Outlet pressure gauge
8 – Relief valve
9 – Outlet shut-off valve
10 – Check valve
11 – Process gas outlet
12 – Purge inlet
13 – Purge outlet





TECHNICAL DRAWING:





List of possible cylinder connections

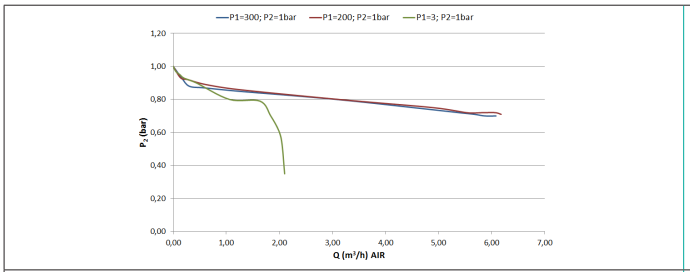
N14F00 - NPT1/4″ female
BS003W - BSI341-3 Wrench
BS004W - BSI341-4 Wrench
BS008W - BSI341-8 Wrench
BS010W - BSI341-10 Wrench
BS014W - BSI341-14 Wrench
CG170W - CGA No 170 Wrench
CG330W - CGA No 330 Wrench
CG580W - CGA No 580 Wrench
CG590W - CGA No 590 Wrench
DI001H - DIN477 No 1 Hand
DI001W - DIN477 No 1 Wrench
DI005W - DIN477 No 5 Wrench
DI006H - DIN477 No 6 Hand
DI006W - DIN477 No 6 Wrench
DI007W - DIN477 No 7 Wrench
DI008W - DIN477 No 8 Wrench
DI009W - DIN477 No 9 Wrench
DI010H - DIN477 No 10 Hand
DI010W - DIN477 No 10 Wrench
DI011W - DIN477 No 11 Wrench
DI013W - DIN477 No 13 Wrench
DI014H - DIN477 No 14 Hand
DI014W - DIN477 No 14 Wrench
DI054H - DIN477 No 54 Hand
DI054W - DIN477 No 54 Wrench
DI057W - DIN477 No 57 Wrench
DI059W - DIN477 No 59 Wrench
NELU1W - NEN LU1 Wrench
NELU4W - NEN LU4 Wrench
NERI2W - NEN RI2 Wrench
NERU1W - NEN RU1 Wrench
NERU3W - NEN RU3 Wrench
NF00CW - AFNOR Type C Wrench
NF00FW - AFNOR Type F Wrench
other connections on request

List of possible connections

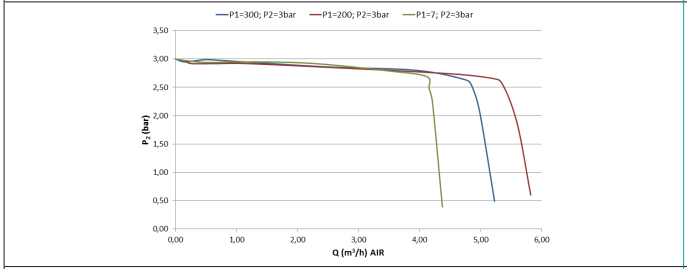
N14F - NPT1/4″ female
M03S - Compression fitting ø 3 MM Stainless Steel
M06S - Compression fitting ø 6 MM Stainless Steel
M08S - Compression fitting ø 8 MM Stainless Steel
M10S - Compression fitting ø 10 MM Stainless Steel
M12S - Compression fitting ø 12 MM Stainless Steel
IX2S - Compression fitting ø 1/8“ Stainless Steel
IX4S - Compression fitting ø 1/4“ Stainless Steel
IX6S - Compression fitting ø 3/8“ Stainless Steel
IX8S - Compression fitting ø 1/2“ Stainless Steel
H04S - Hose nozzle 4,8 mm Stainless Steel
H06S - Hose nozzle 6,4 mm Stainless Steel
H08S - Hose nozzle 8,0 mm Stainless Steel
Hose nozzle max. 15 bar.

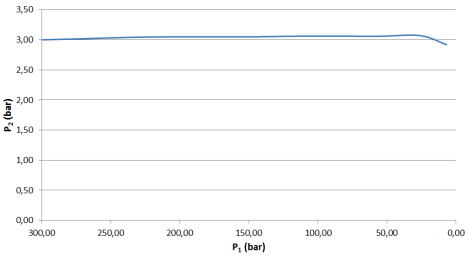
FLOW CURVES:

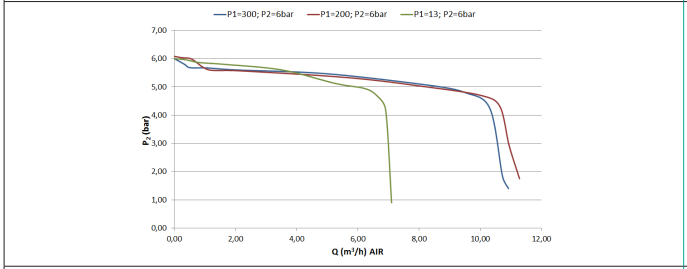
DYNAMIC EXPANSION CURVES:

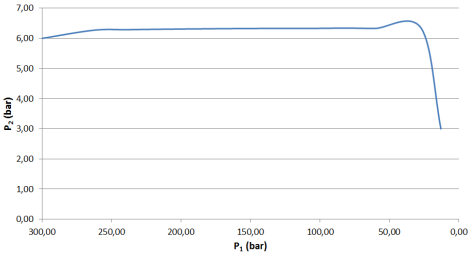


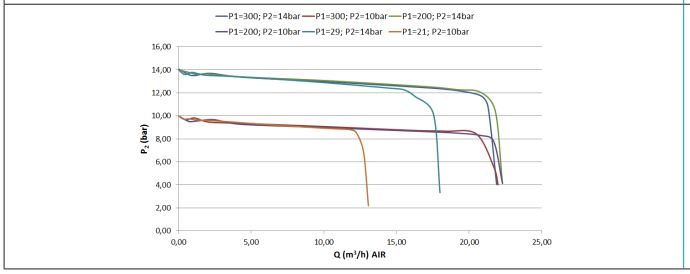
Dynamic expansion curve not measurable for P2=1bar

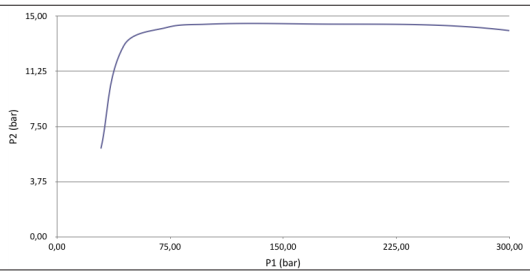












ORDER CODE:

Example Cylinder Regulator | PUR Linie | Stainless Steel | Low Flow | High Pressure | Dual Stage | 6-Port Version | Inlet Right

CSLH0DJ CSLHEDJ	R	00	FX	DX	I1	BT	N14F (1/4" NPT female)	N14F (1/4" NPT female)
	Porting	**Options**	**Inlet pressure**	**Outlet pressure**	**Inlet gauge**	**Outlet gauge**	**Cylinder connection**	**Process outlet connection**
	R Inlet right	00 No option	F4 60 bar	AY 1 bar	00 Without 1/4" NPT female	00 Without 1/4" NPT female		
		0S LP* Shut-off valve	FX 200 bar	BX 3 bar	01 Without (plugged)	01 Without (plugged)		
		0R LP* Regulating valve	GX 300 bar	CX 6 bar	BT Bourdon Tube gauge	BT Bourdon Tube gauge		
		P0 HP** Purge valve		D2 10 bar	I1 Inductiv contact gauge I1	I2 Inductiv contact gauge I2		
		PS HP** Purge- and LP* Shut-off valve		DX 14 bar	R5 Reed contact gauge R5	I1 Inductiv contact gauge I1	possible connections	possible connections
		PR HP** Purge- and LP* Regulating valve					see technical drawing	see technical drawing
		30 HP** Triple purge block						
		3S HP** Triple purge block & LP shut-off valve						
		3R HP** Triple purge block & LP* regulating valve						

Order code (as described above) without special characters or spaces! Complete Order Code CPLH0DJR00FXDXI1BTN14FN14F

** LP = Low pressure*

*** HP = High pressure*

Link to online product configurator