

CSLH0SJ | CSLHESJ – DRUVA®PUR CYLINDER REGULATOR

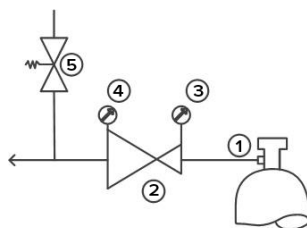
CYLINDER REGULATOR | PURE LINE (STAINLESS STEEL) | 20 m³ SERIES | HIGH PRESSURE RANGE

SINGLE STAGE | 6-PORT VERSION



This single-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

Dimension for standard version
see technical drawing

SPECIAL FEATURES:

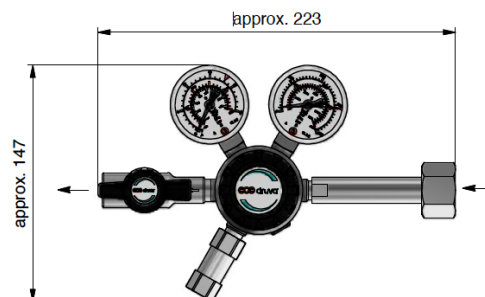
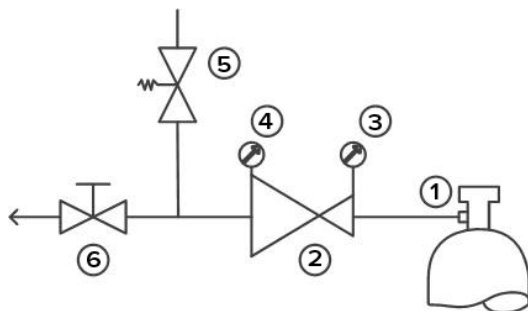
- > Hastelloy diaphragm tightening system to atmosphere
- > Available with several options (shut-off valve, regulating valve, purge valve, etc.), see drawing
- > Available with several international cylinder connections, see drawing
- > Compact design
- > Excellent pressure adjustment
- > Designed and 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 (N₂) according to ISO 7291 at 20 bar out
Material gas wetted parts	
Regulator body:	Stainless Steel
Regulator diaphragm:	Hastelloy
Regulator seat:	PCTFE (P in > 50 bar) PTFE (P in ≤ 50 bar)
Relief valve seat:	CSLH0SJ-Version: FKM CSLHESJ-Version: 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

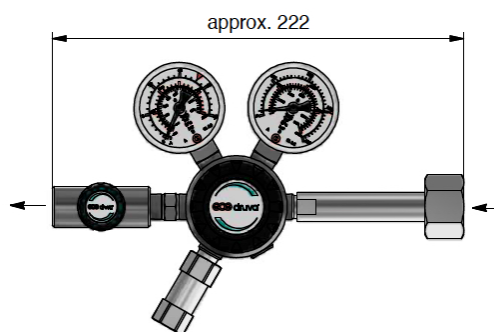
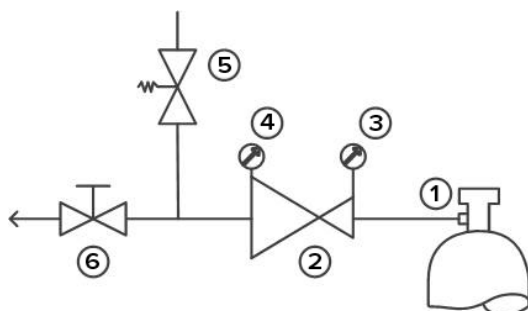
OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0SJ | CSLHESJ:

Option-**OS**: with low pressure shut-off valve

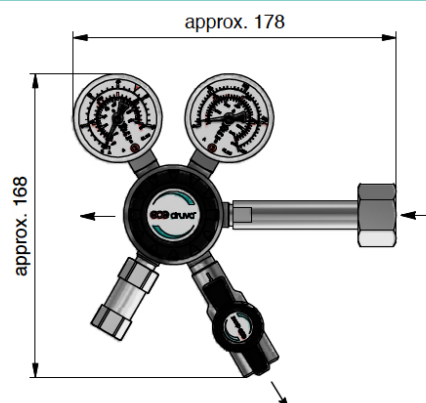
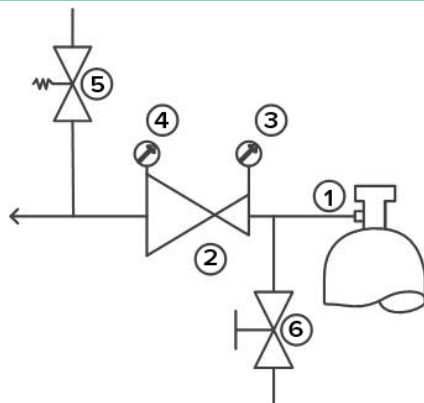
- 1 – Cylinder connection
- 2 – Pressure regulator
- 3 – Inlet pressure gauge
- 4 – Outlet pressure gauge
- 5 – Relief valve
- 6 – Outlet shut-off valve

Option-**OR**: 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

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

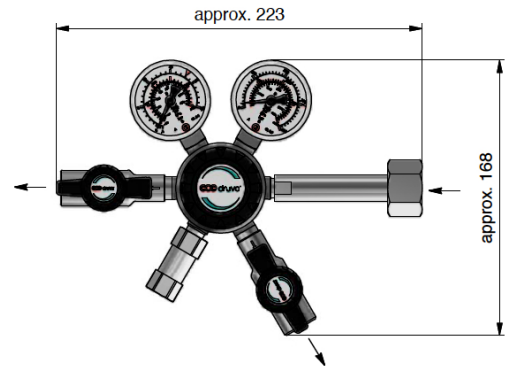
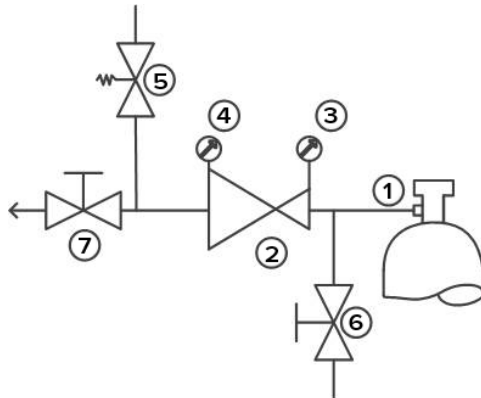
- 1 – Cylinder connection
- 2 – Pressure regulator
- 3 – Inlet pressure gauge
- 4 – Outlet pressure gauge
- 5 – Relief valve
- 6 – Purge valve



OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0SJ | CSLHESJ:

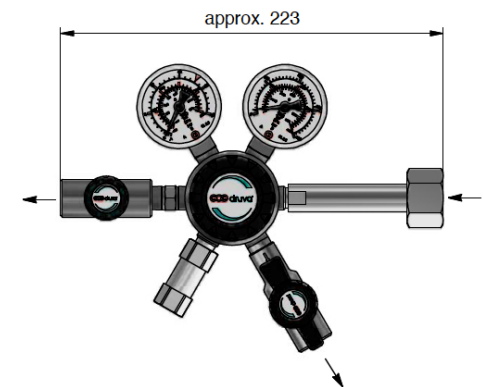
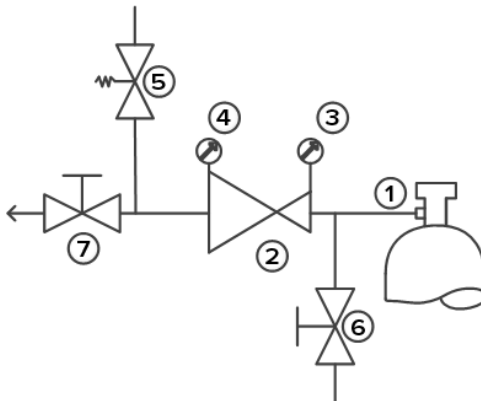
Option-**PS**: with high pressure purge valve & low pressure shut-off valve

- 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



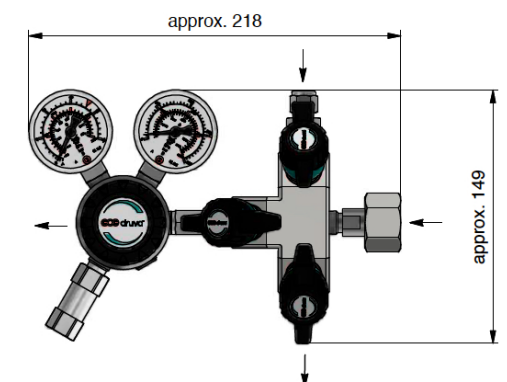
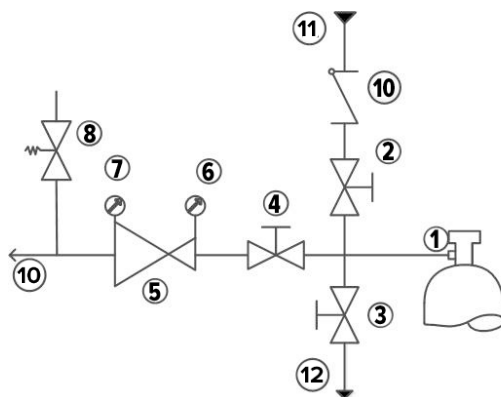
Option-**PR**: with high pressure purge valve & low pressure regulating valve

- 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

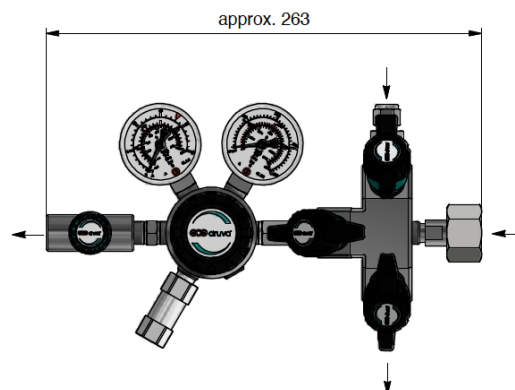
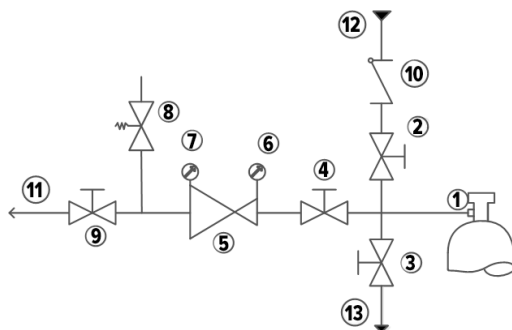
- 1 – Cylinder connection
- 2 – Purge inlet valve
- 3 – Purge outlet valve
- 4 – Inlet shut-off valve
- 5 – Pressure regulator
- 6 – Inlet pressure gauge
- 7 – Outlet pressure gauge
- 8 – Relief valve
- 9 – Check valve
- 10 – Process gas outlet
- 11 – Purge inlet
- 12 – Purge outlet



OPTIONS OF CYLINDER PRESSURE REGULATOR CSLH0SJ | CSLHESJ:

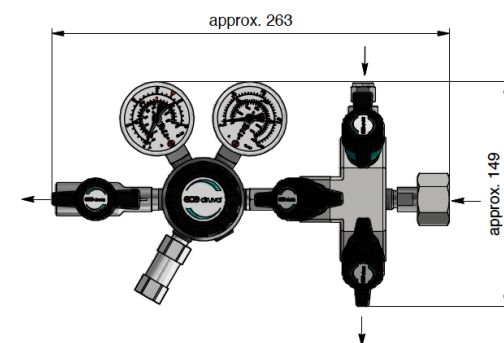
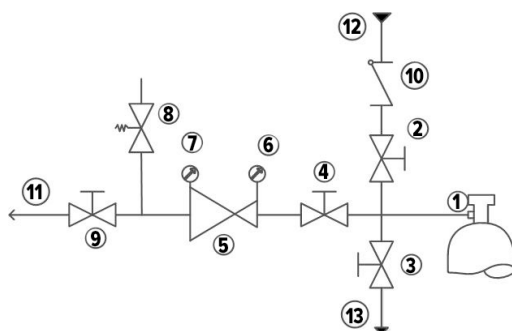
Option-3R: with high pressure triple purge block & low pressure regulating valve

- 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

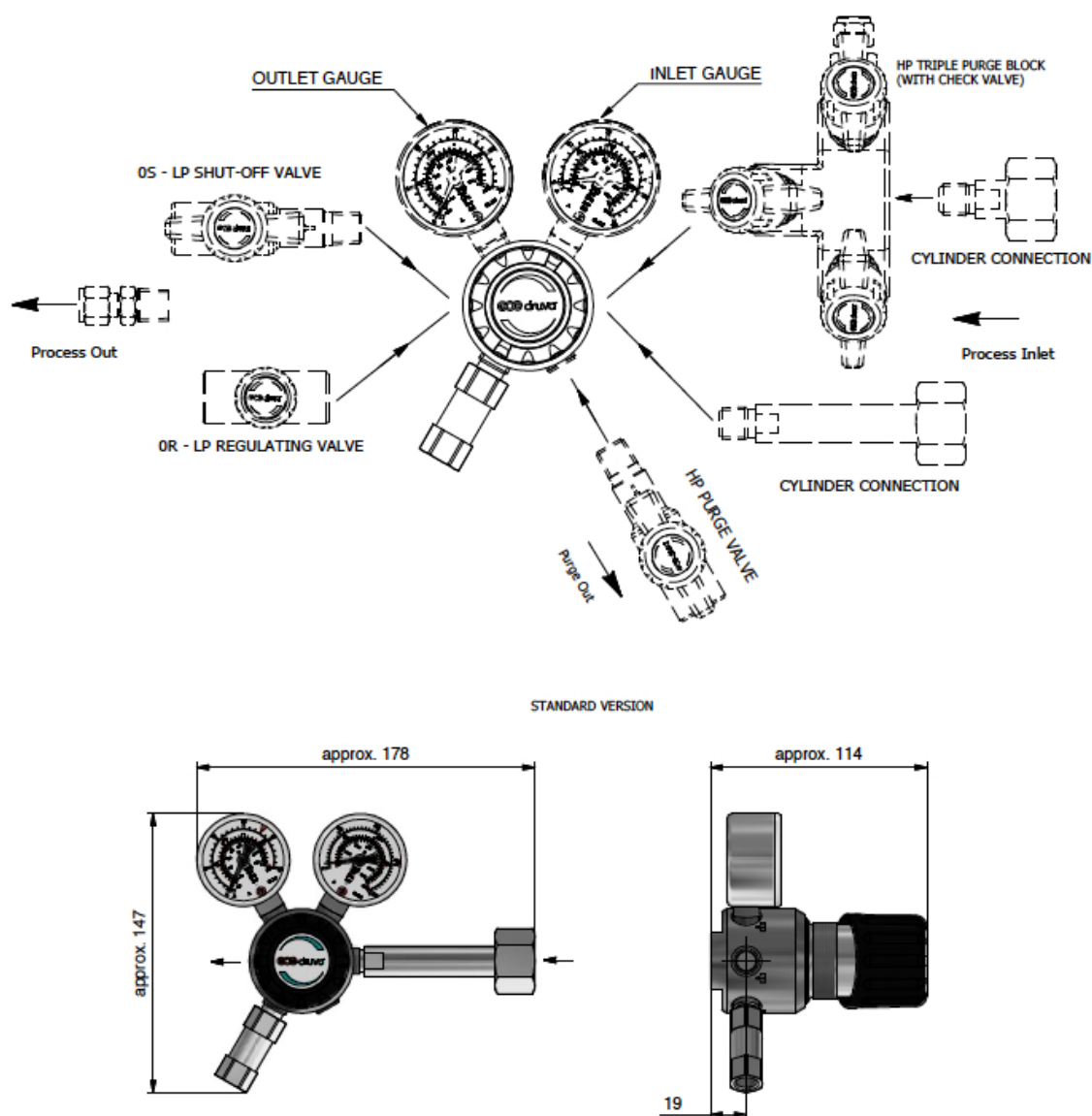


Option-3S: with high pressure triple purge block & low pressure shut-off valve

- 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

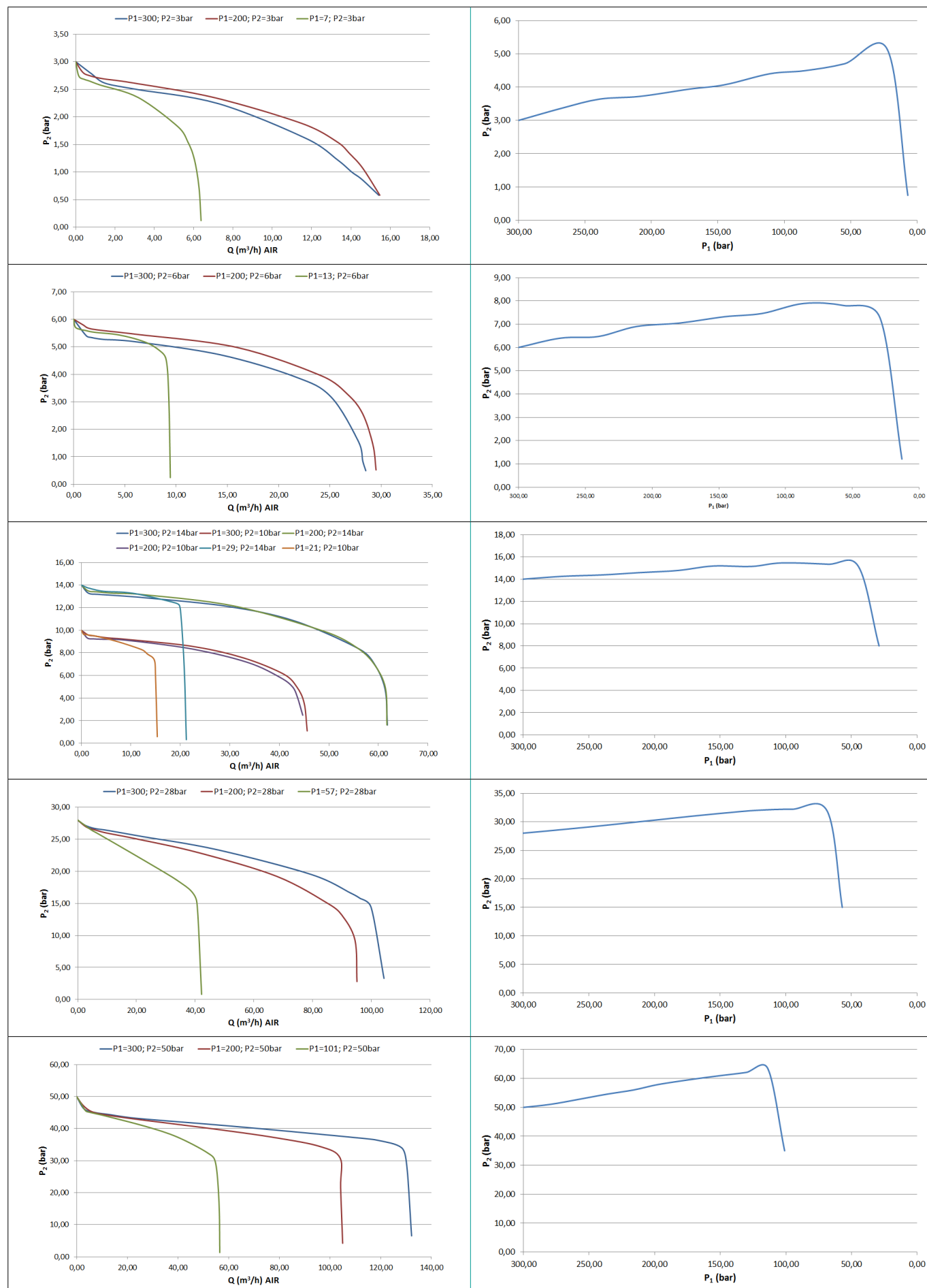
N14F00	- NPT1/4" female	DI005W	- DIN477 No 5 Wrench	DI054H	- DIN477 No 54 Hand
BS003W	- BSI341-3 Wrench	DI006H	- DIN477 No 6 Hand	DI054W	- DIN477 No 54 Wrench
BS004W	- BSI341-4 Wrench	DI006W	- DIN477 No 6 Wrench	DI057W	- DIN477 No 57 Wrench
BS008W	- BSI341-8 Wrench	DI007W	- DIN477 No 7 Wrench	DI059W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

List of possible connections

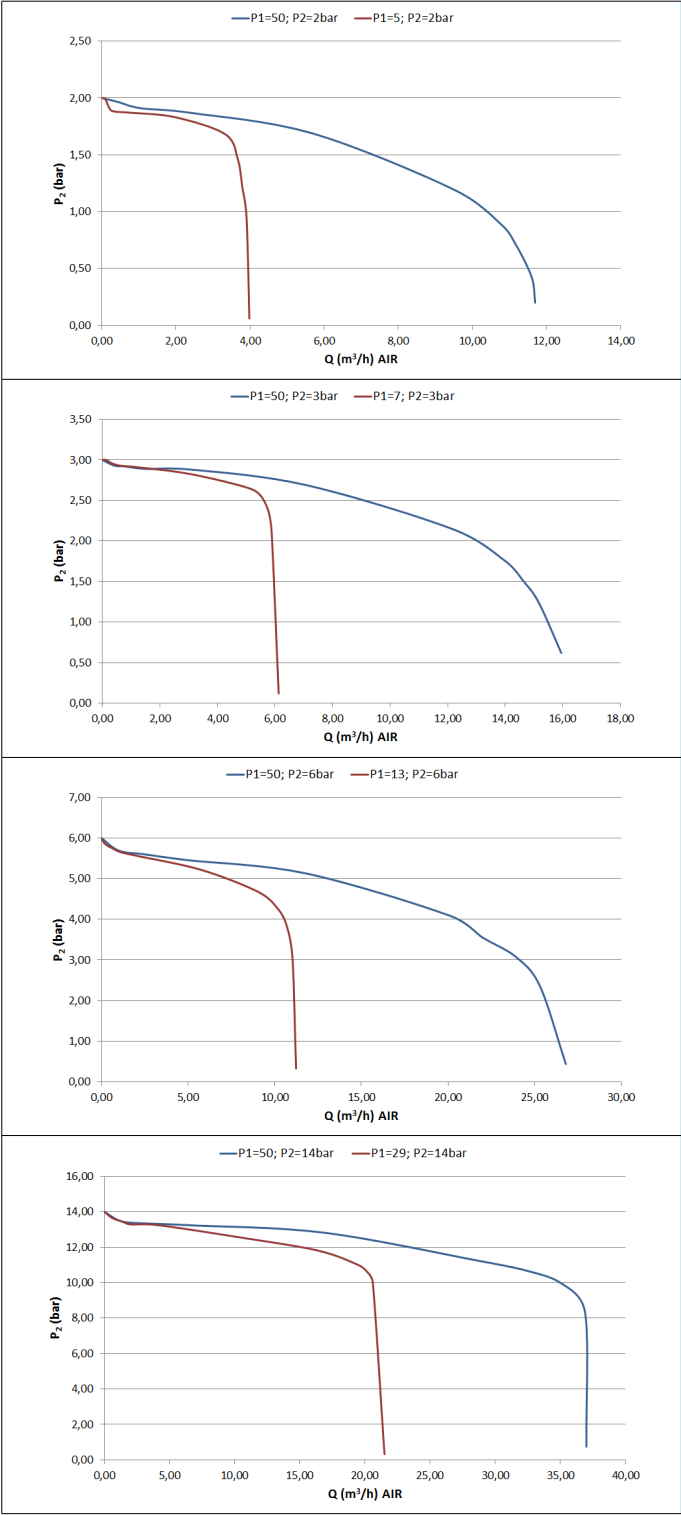
N14F	- NPT1/4" female	IX2S	- Compression fitting \varnothing 1/8" Stainless Steel
M03S	- Compression fitting \varnothing 3 MM Stainless Steel	IX4S	- Compression fitting \varnothing 1/4" Stainless Steel
M06S	- Compression fitting \varnothing 6 MM Stainless Steel	IX6S	- Compression fitting \varnothing 3/8" Stainless Steel
M08S	- Compression fitting \varnothing 8 MM Stainless Steel	IX8S	- Compression fitting \varnothing 1/2" Stainless Steel
M10S	- Compression fitting \varnothing 10 MM Stainless Steel	H04S	- Hose nozzle 4,8 mm Stainless Steel
M12S	- Compression fitting \varnothing 12 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:

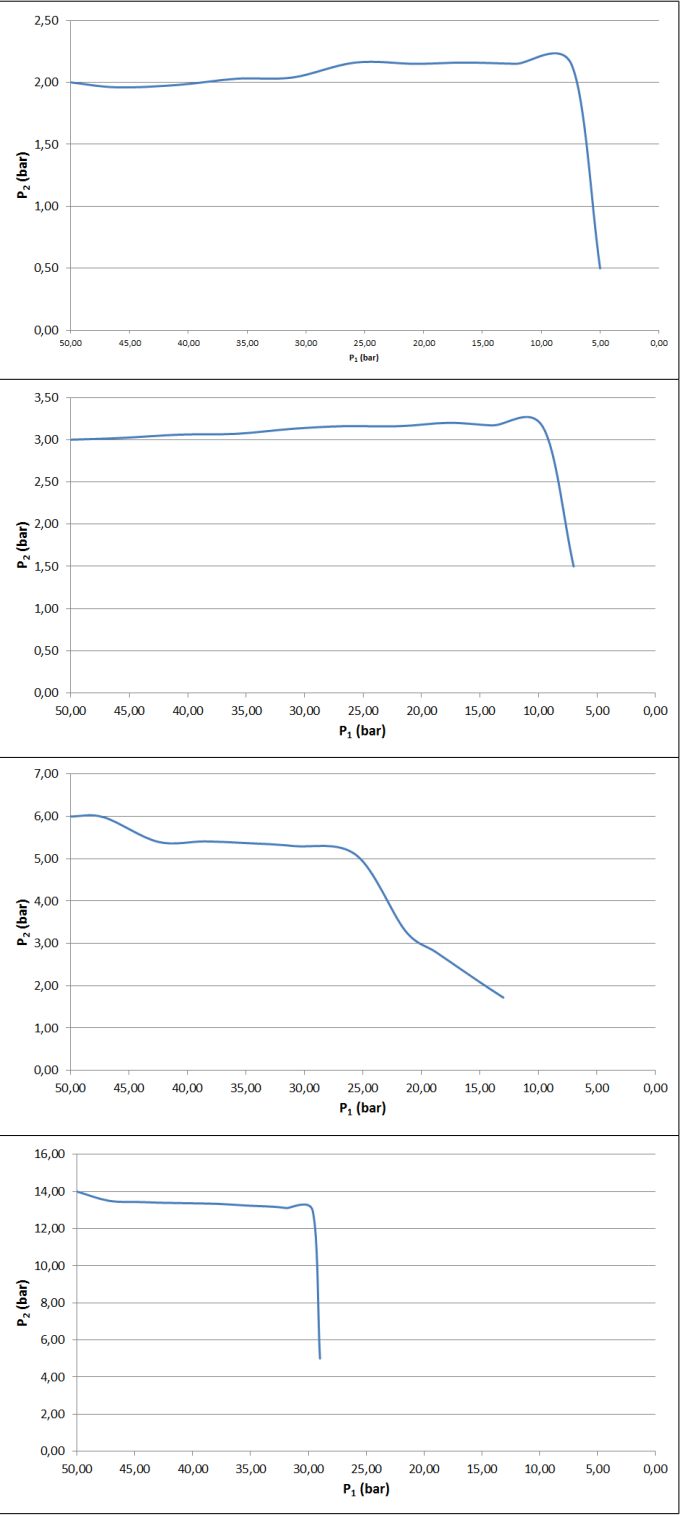
DYNAMIC EXPANSION CURVES:



FLOW CURVES:



DYNAMIC EXPANSION CURVES:



ORDER CODE:

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

CSLH0SJ CSLHESJ	R	00	EX	AX	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	EX 50 bar	AX 2 bar ***	00 Without 1/4" NPT female	00 Without gauge 1/4" NPT female	possible connections see technical drawing	possible connections see technical drawing
		0S LP* Shut-off valve	F4 60 bar	BX 3 bar	01 Without (plugged)	01 Without (plugged)		
		0R LP* Regulating valve	FX 200 bar ****	CX 6 bar	BT Bourdon Tube	BT Bourdon Tube		
		P0 HP** Purge valve	GX 300 bar	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		
		PR HP** Purge- and LP* Regulating valve		EY 28 bar				
		30 HP** Triple purge block		EX 50 bar				
		3S HP** Triple purge block & LP shut-off valve		F2 100 bar				
		3R HP** Triple purge block & LP* regulating valve		FX 200 bar ****				

Order code (as described above) without special characters or spaces! Complete Order Code **CSLH0SJR00EXAXI1BTN14FN14F**

* LP = Low pressure

** HP = High pressure

*** only for inlet pressure 50 bar

**** in & out pressure FX=200 bar – no pressure relief valve (PRV) available

