

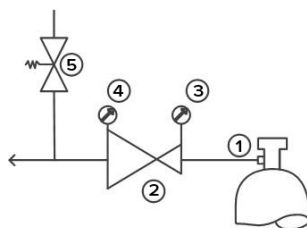
# CSLAVSJ | CSLAESJ – DRUVA®PUR CYLINDER REGULATOR

## CYLINDER REGULATOR | PURE LINE (STAINLESS STEEL) | 20 m³ SERIES | ABSOLUTE 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:

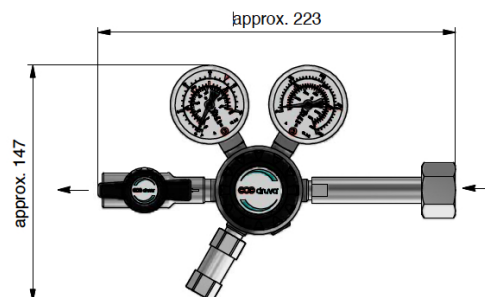
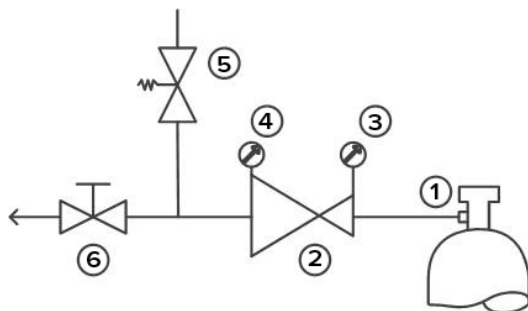
- > Hastelloy diaphragm tightening system to atmosphere
- > Available with several options (shut-off valve, regulating valve, purge valve, etc.), see drawing
- > Available with several international cylinder connections, see drawing
- > Compact design
- > Excellent pressure adjustment
- > Designed and 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	
<b>Working temperature:</b>	-20 °C to +60 °C
<b>Inlet port:</b>	Cylinder connection according to national / international directives
<b>Leakage rate seat:</b>	<5x10 <sup>-6</sup> mbar l/s (Helium)
<b>Leakage rate outside:</b>	<1x10 <sup>-9</sup> mbar l/s (Helium)
<b>Filter:</b>	1x for inlet 1x for each outlet
<b>Weight:</b>	4,05 kg
<b>Flow nominal:</b>	3 m³/h (N₂)
<b>Material gas wetted parts:</b>	
<b>Regulator body</b>	Stainless Steel
<b>Regulator diaphragm</b>	Hastelloy
<b>Regulator seat:</b>	
CSLAVSJ-Version	FKM
CSLAESJ-Version	EPDM
<b>Relief valve seat:</b>	
CSLAVSJ-Version	FKM
CSLAESJ-Version	EPDM
<b>Regulator poppet:</b>	Stainless Steel
<b>Pressure rates cylinder regulator</b>	
<b>Max. inlet pressure:</b>	12 bar
<b>Delivery pressure:</b>	2/ 3 bar abs
<b>Pressure gauges rates (pressure rates):</b>	-1 bar till 1,5 bar (2 bar abs) / -1 till 5 bar (3 bar abs)
<b>Contact gauges available – please contact us</b>	
<b>Cracking pressure relief valves:</b>	1,5 bar (2 bar abs) / 3,1 Bar (3 bar abs)
<b>Test in production:</b>	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
<b>Approvals during development:</b>	Type test in accordance with ISO 7291
	Additional life cycle test
	Electrostatic chargeability test
	<ul style="list-style-type: none"> <li>• Fulfills requirements according to ISO 80070-36; 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; IIB; IIC</li> </ul>

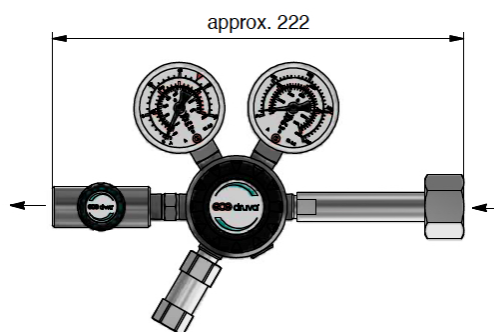
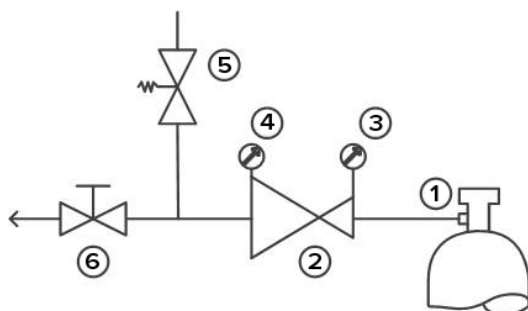
## OPTIONS OF CYLINDER PRESSURE REGULATOR CSLAVSJ | CSLAESJ:

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

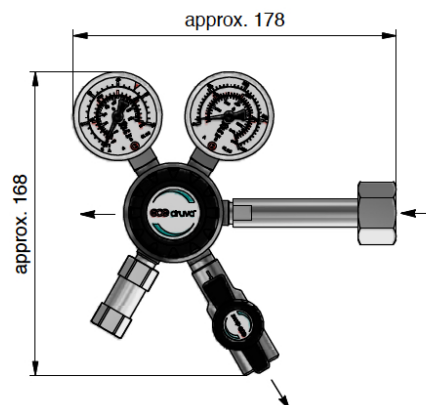
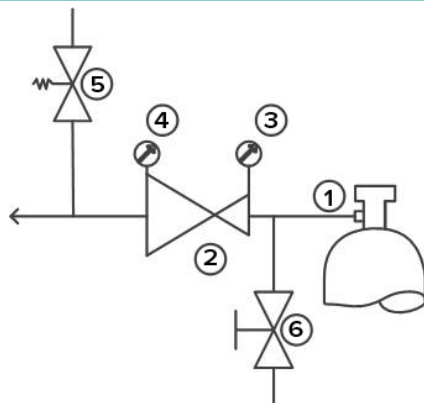
- 1 – Cylinder connection
- 2 – Pressure regulator
- 3 – Inlet pressure gauge
- 4 – Outlet pressure gauge
- 5 – Relief valve
- 6 – Outlet shut-off valve

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

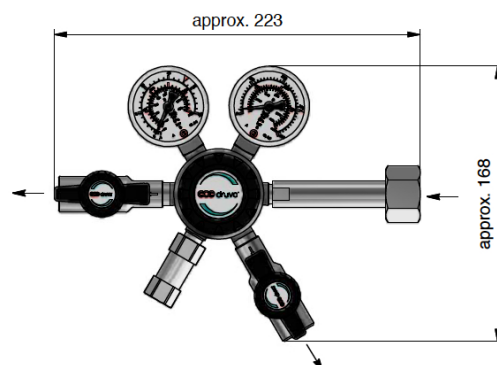
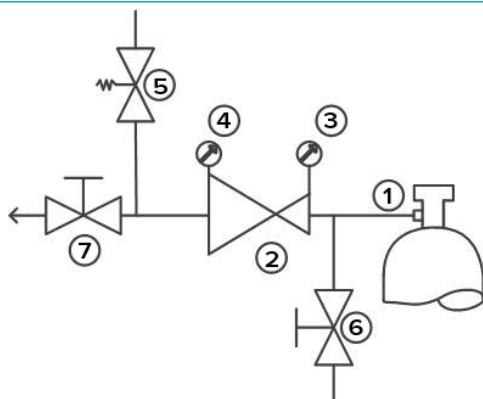
- 1 – Cylinder connection
- 2 – Pressure regulator
- 3 – Inlet pressure gauge
- 4 – Outlet pressure gauge
- 5 – Relief valve
- 6 – Purge valve



## OPTIONS OF CYLINDER PRESSURE REGULATOR CSLAVSJ | CSLAESJ:

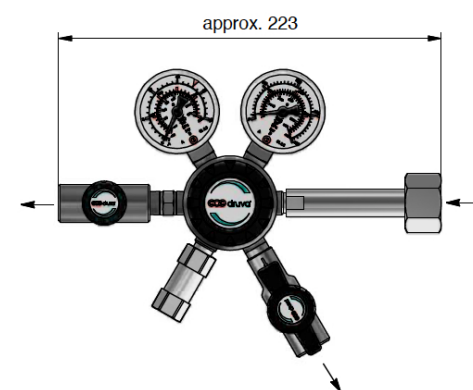
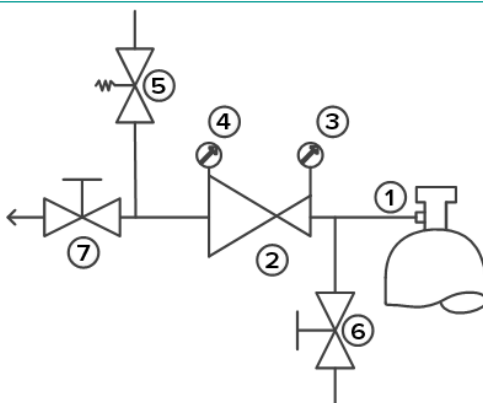
### Option-PS: with high pressure purge valve & low pressure shut-off valve

- 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



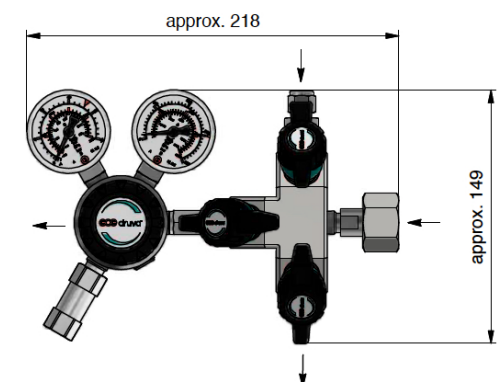
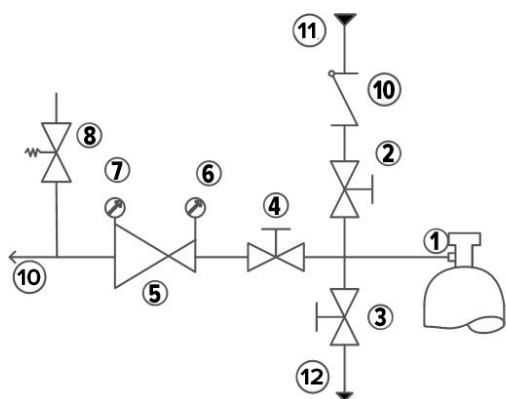
### Option-PR: with high pressure purge valve & low pressure regulating valve

- 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

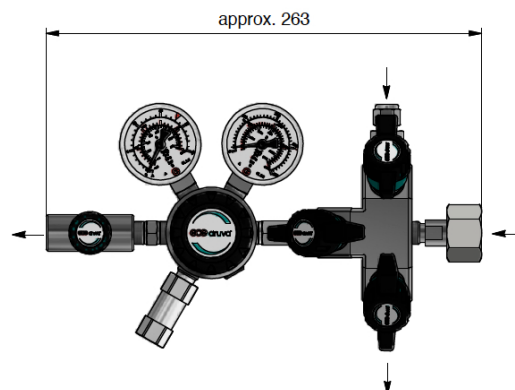
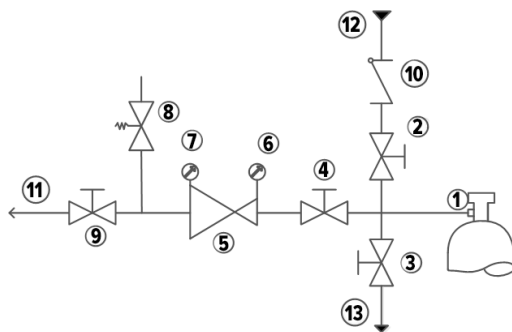
- 1 – Cylinder connection
- 2 – Purge inlet valve
- 3 – Purge outlet valve
- 4 – Inlet shut-off valve
- 5 – Pressure regulator
- 6 – Inlet pressure gauge
- 7 – Outlet pressure gauge
- 8 – Relief valve
- 9 – Check valve
- 10 – Process gas outlet
- 11 – Purge inlet
- 12 – Purge outlet



## OPTIONS OF CYLINDER PRESSURE REGULATOR CSLAVSJ | CSLAESJ:

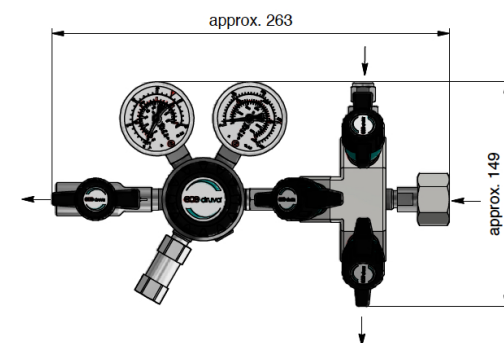
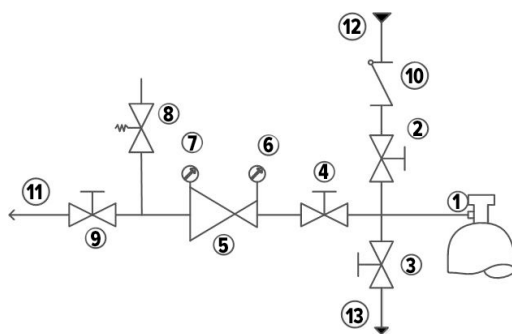
## Option-3R: with high pressure triple purge block &amp; low pressure regulating valve

- 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

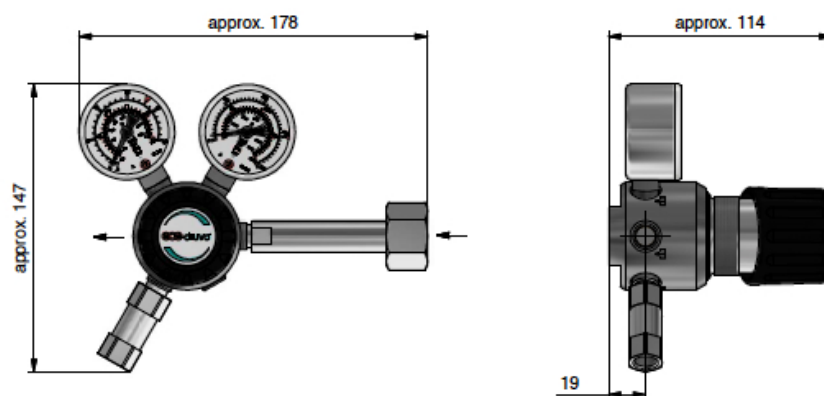
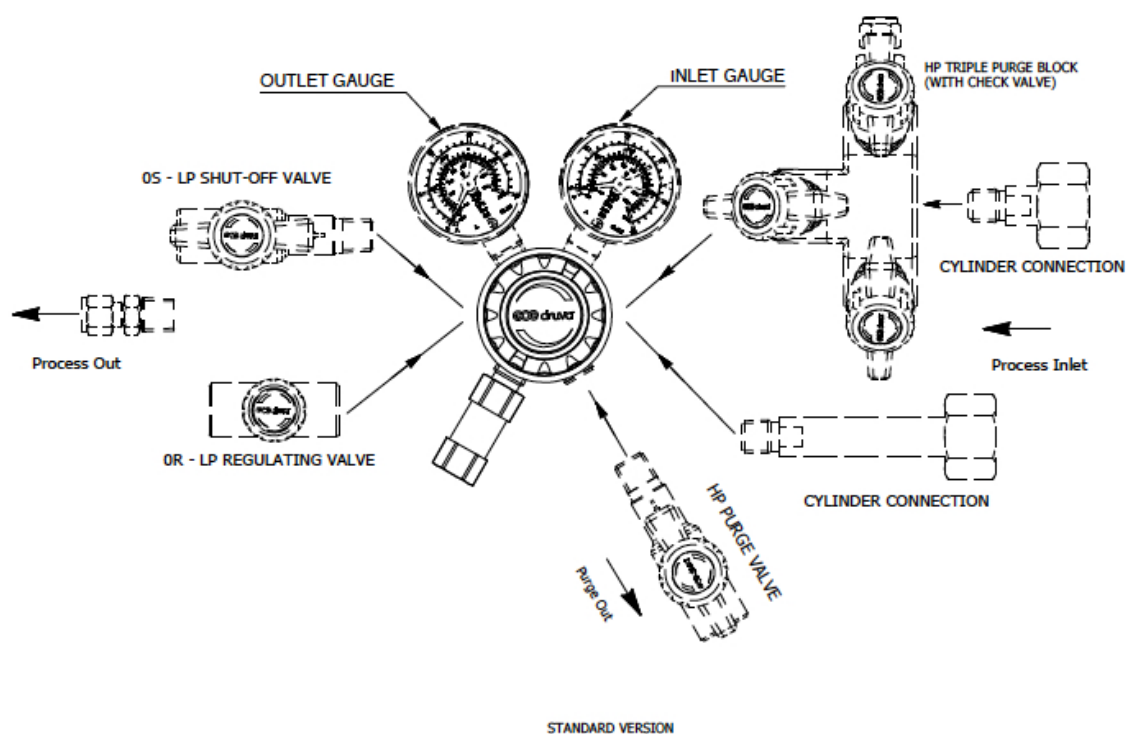


## Option-3S: with high pressure triple purge block &amp; low pressure shut-off valve

- 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

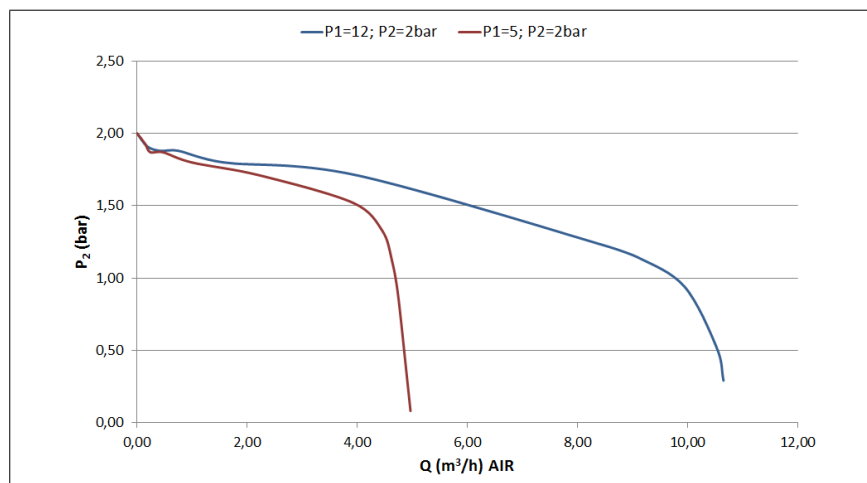
DI054H - DIN477 No 54 Hand  
 DI054W - DIN477 No 54 Wrench  
 DI057W - DIN477 No 57 Wrench  
 DI059W - DIN477 No 59 Wrench  
 NELU1W - NEN LU1 Wrench  
 NELU4W - NEN LU4 Wrench  
 NER12W - NEN RI2 Wrench  
 NERU1W - NEN RU1 Wrench  
 NERU3W - NEN RU3 Wrench  
 NF00CW - AFNOR Type C Wrench  
 NF00FW - AFNOR Type F Wrench  
 other connections on request

## List of possible connections

N14F - NPT1/4" female  
 M03S - Compression fitting  $\varnothing$  3 MM Stainless Steel  
 M06S - Compression fitting  $\varnothing$  6 MM Stainless Steel  
 M08S - Compression fitting  $\varnothing$  8 MM Stainless Steel  
 M10S - Compression fitting  $\varnothing$  10 MM Stainless Steel  
 M12S - Compression fitting  $\varnothing$  12 MM Stainless Steel

IX2S - Compression fitting  $\varnothing$  1/8" Stainless Steel  
 IX4S - Compression fitting  $\varnothing$  1/4" Stainless Steel  
 IX6S - Compression fitting  $\varnothing$  3/8" Stainless Steel  
 IX8S - Compression fitting  $\varnothing$  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 CURVE:



## ORDER CODE:

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

CSLAVSJ	R	00	D1	AX	I1	BT	N14F	N14F
CSLAESJ							(1/4" NPT female)	(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	D1 12 bar	AX 2 bar (abs)	00 Without 1/4" NPT female	00 Without 1/4" NPT female	possible connections see technical drawing	possible connections see technical drawing
		0S LP* Shut-off valve		BX 3 bar (abs)	01 Without (plugged)	01 Without (plugged)		
		0R LP* Regulating valve			BT Bourdon Tube gauge	BT Bourdon Tube gauge		
		P0 HP** Purge valve			I1 Inductiv contact gauge I1			
		PS HP** Purge- and LP* Shut-off valve			R5 Reed contact gauge R5			
		PR HP** Purge- and LP* Regulating valve						
		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 **CSLAVSJ R00D1AXI1BTN14FN14F**

\* LP = Low pressure

\*\* HP = High pressure

