CPLH0SJ | CPLHESJ – DRUVA®PUR CYLINDER REGULATOR

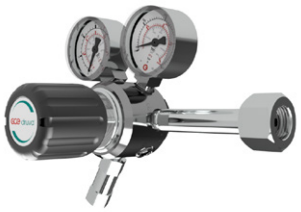
CYLINDER REGULATOR | PURE LINE (BRASS CHROME PLATED) | 20 m³ SERIES | HIGH PRESSURE RANGE SINGLE STAGE | 6-PORT VERSION

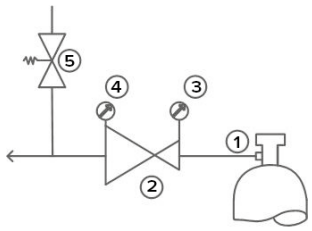
This single-stage cylinder pressure regulator is used in gas supply systems for pure, inert, flammable, oxidising gases and gas mixtures up to gas purity 6.0. It is not usable for corrosive and / or toxic gases and their mixtures.

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:

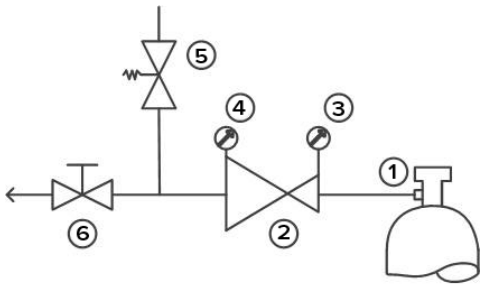
- Hastelloy diaphragm tighting system to atmosphere
- Available with several options (shut-off valve, regulating valve, purge valve, etc.), see drawing
- Available with several international cylinder connections, see drawing
- Compact design
- Excellent pressure adjustment
- Designed and approved regarding ISO 7291 (including O_2 ignition test)
- Relief valve in delivery pressure side available
- Electrostatic chargeability test
  - Fulfills requirements according to 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

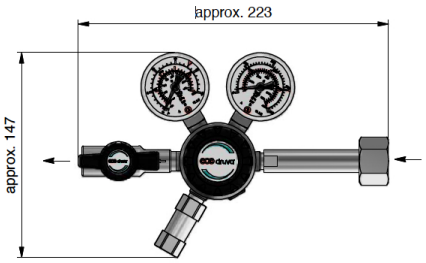
TECHNICAL DATA	
Working temperature:	-20 °C to +60 °C
Inlet port:	Cylinder connection according to national / international directives
Leakage rate seat:	<5x10^{-6} mbar l/s (Helium)
Leakage rate outside:	<1x10^{-9} mbar l/s (Helium)
Filter:	1x for inlet 1x for each outlet
Weight:	2,50 kg
Flow nominal:	20 m³/h (N_2) according to ISO 7291 at 20 bar out
Material gas wetted parts:	
Regulator body:	Brass chrome plated
Regulator diaphragm:	Hastelloy
Regulator seat:	PCTFE (P in > 50 bar) PTFE (P in ≤ 50 bar)
Relief valve seat: CPLH0SJ-Version CPLHESJ-Version	 FKM EPDM
Regulator poppet:	Brass
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)/ 315 (200) 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
	O_2 ignition test regarding 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

OPTIONEN DES FLASCHENDRUCKREGLER CPLH0SJ | CPLHESJ:

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

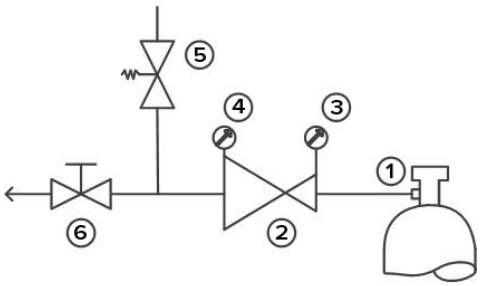
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Outlet shut-off valve

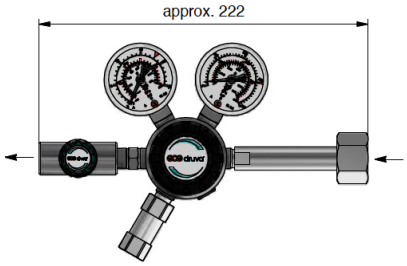




Option-**0R**: with low pressure regulating valve

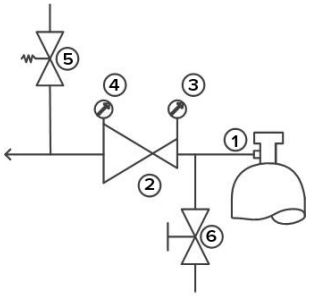
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Outlet regulating valve

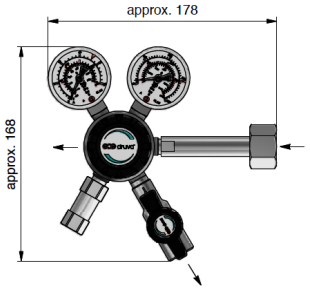




Option-**P0**: with high pressure purge valve

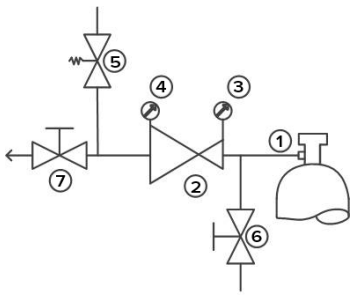
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Purge valve

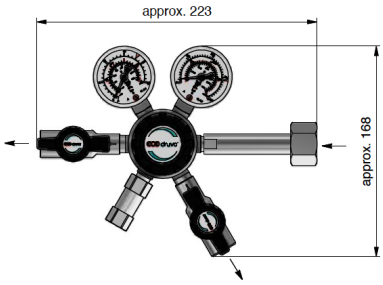




Option-**PS**: with high pressure purge valve & low pressure shut-off valve

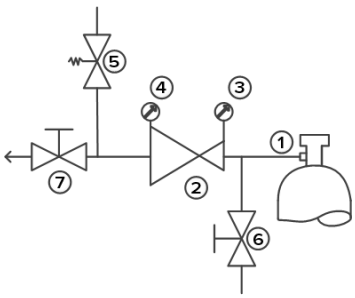
1 – Cylinder connection
2 – Pressure regulator
3 – Inlet pressure gauge
4 – Outlet pressure gauge
5 – Relief valve
6 – Purge valve
7 – Outlet shut-off valve

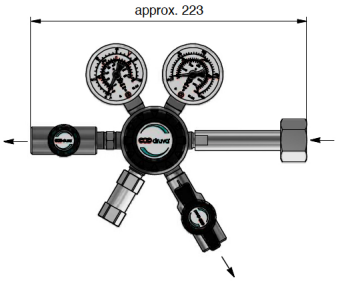




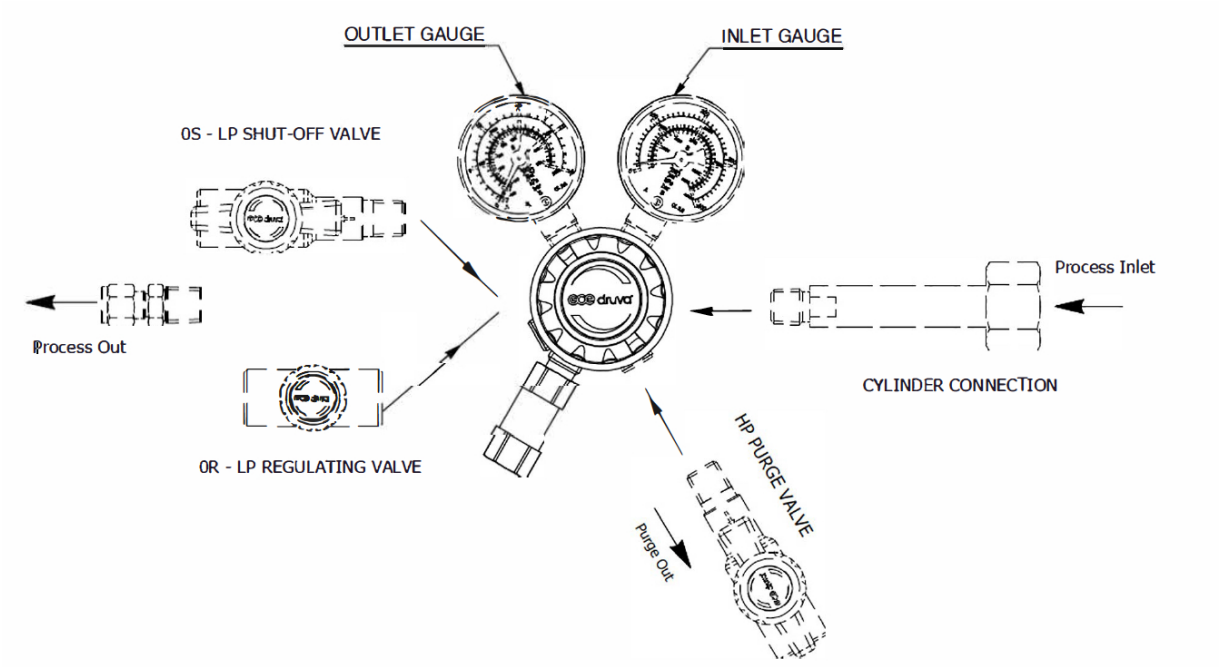
Option-**PR**: with high pressure purge valve & low pressure regulating valve

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

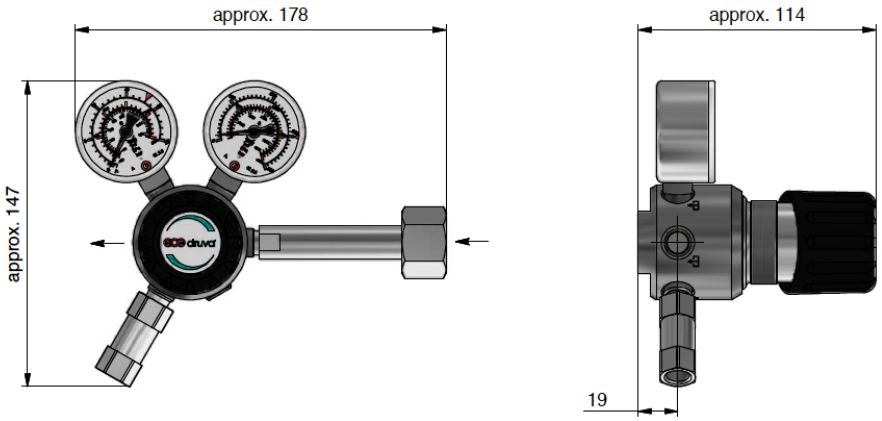




TECHNICAL DRAWING:



STANDARD VERSION



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

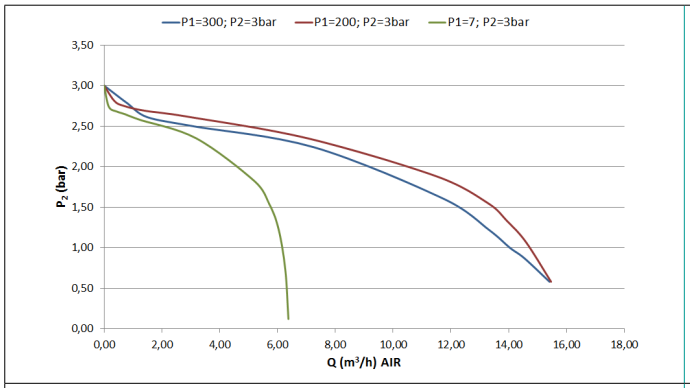
List of possible connections

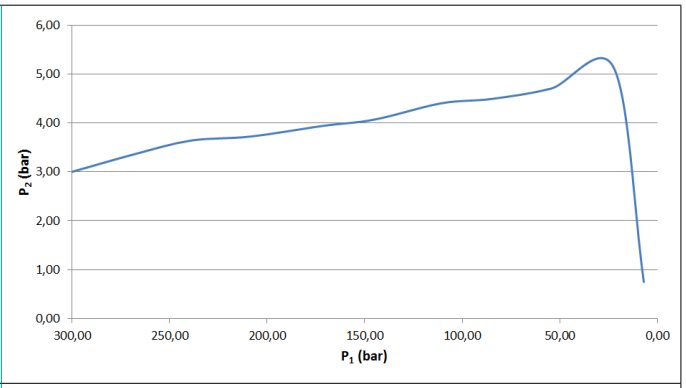
N14F - NPT1/4˝ female
M03B - Compression fitting ø 3 MM Brass
M06B - Compression fitting ø 6 MM Brass
M08B - Compression fitting ø 8 MM Brass
M10B - Compression fitting ø 10 MM Brass
M12B - Compression fitting ø 10 MM Brass
M03S - Compression fitting ø 3 MM SST
M06S - Compression fitting ø 6 MM SST
M08S - Compression fitting ø 8 MM SST
M10S - Compression fitting ø 10 MM SST
M12S - Compression fitting ø 12 MM SST
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
IX2S - Compression fitting ø 1/8“ SST
IX4S - Compression fitting ø 1/4“ SST
IX6S - Compression fitting ø 3/8“ SST
IX8S - Compression fitting ø 1/2“ SST
H04B - Hose nozzle 4,8 mm Brass
H06B - Hose nozzle 6,4 mm Brass
H08B - Hose nozzle 8,0 mm Brass
H04S - Hose nozzle 4,8 mm SST
H06S - Hose nozzle 6,4 mm SST
H08S - Hose nozzle 8,0 mm SST

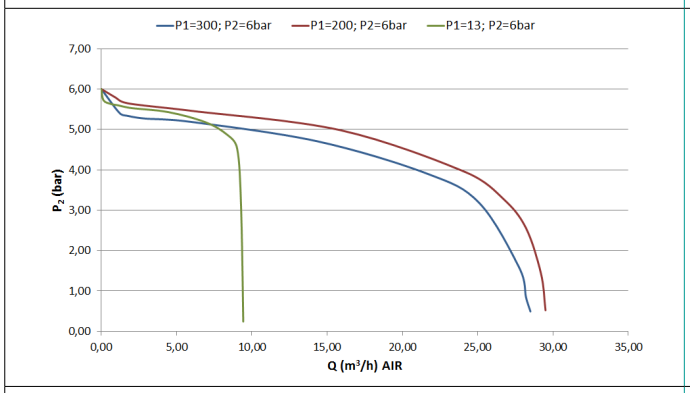
Availability of brass fittings depending on pressure & size.
Pay attention to the maximum approved pressure of your pipework.
Hose nozzle max. 15 bar.

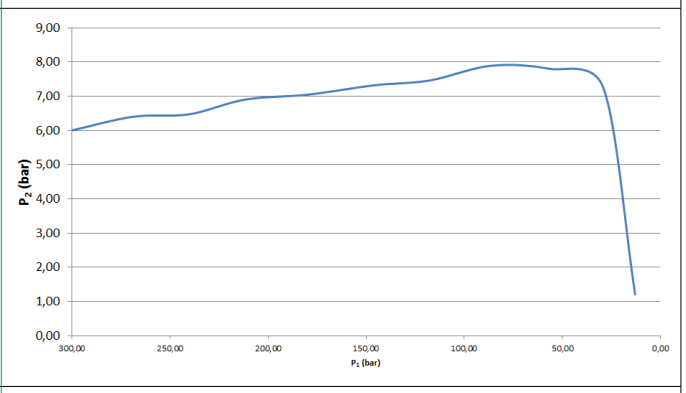
FLOW CURVES:

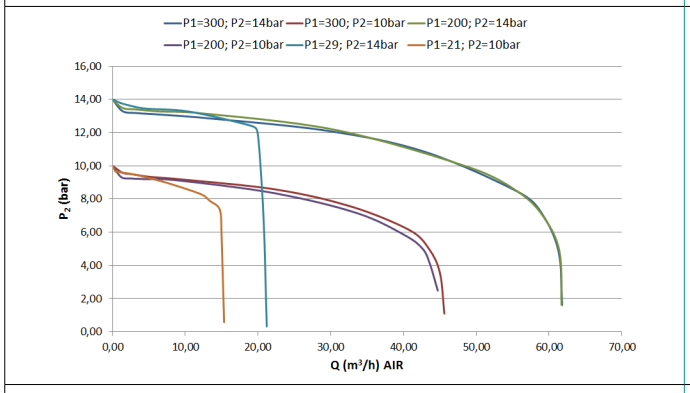
DYNAMIC EXPANSION CURVES:

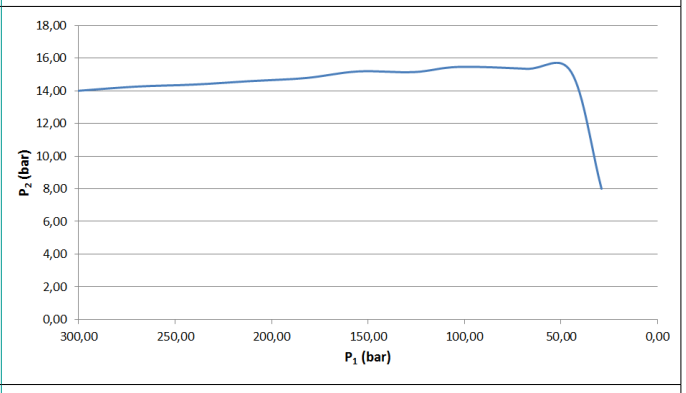


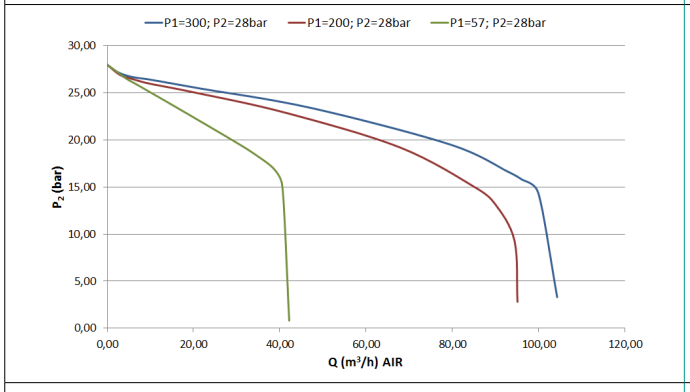


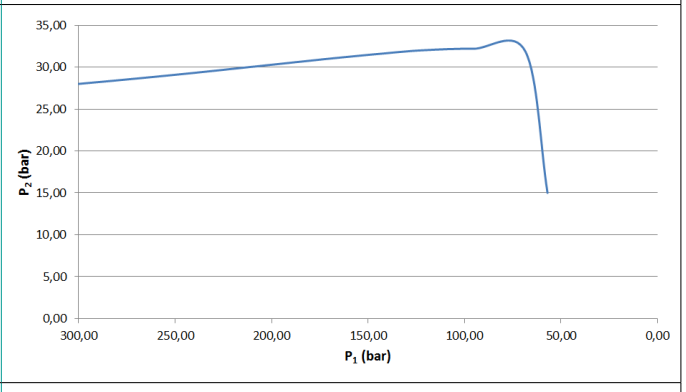


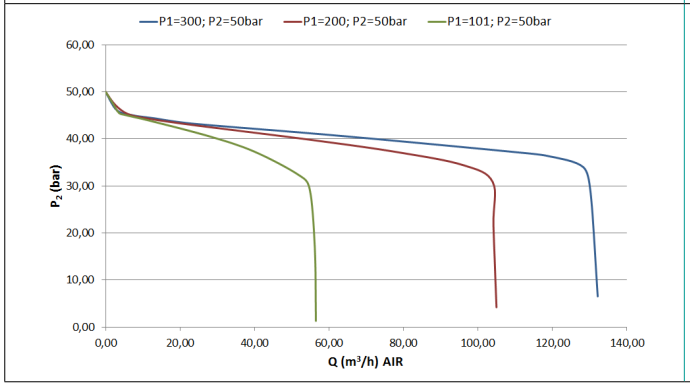


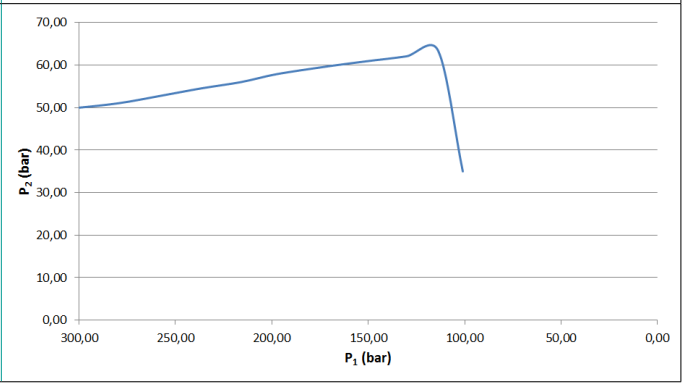




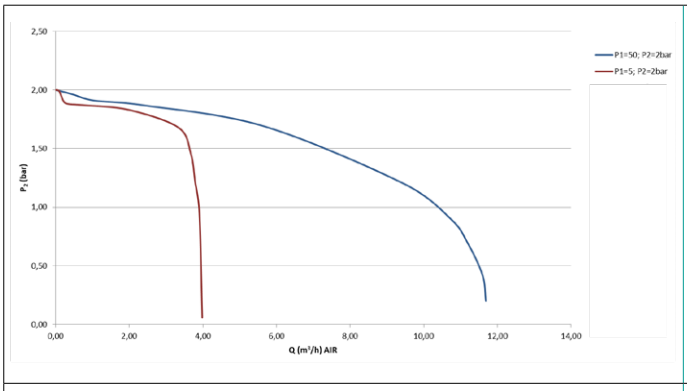


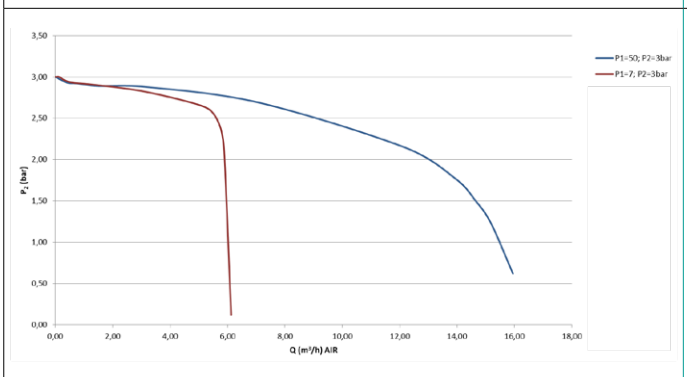


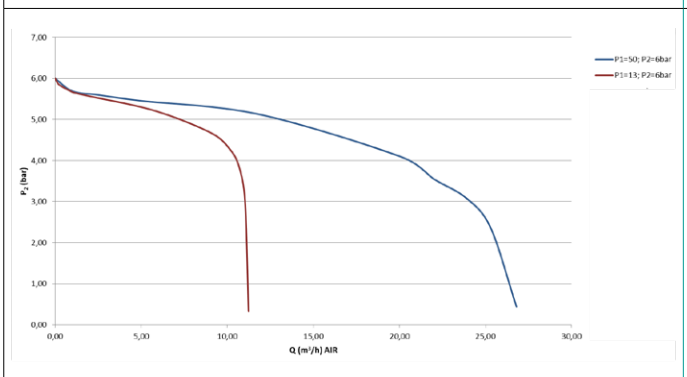


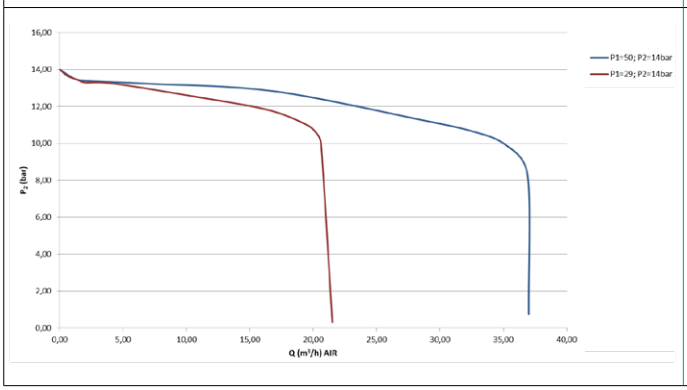


FLOW CURVES:

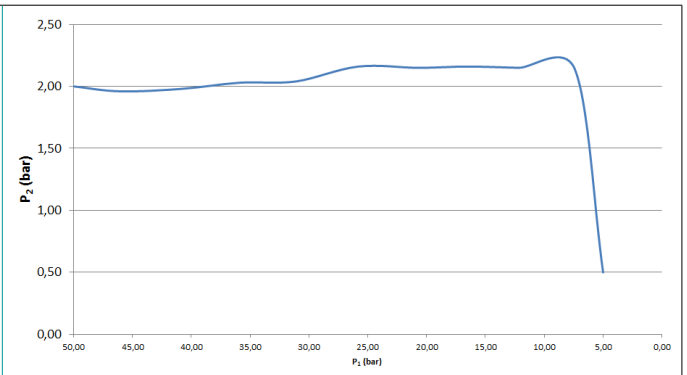


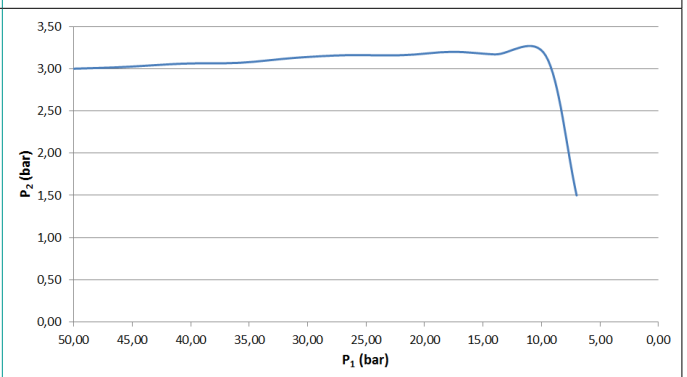


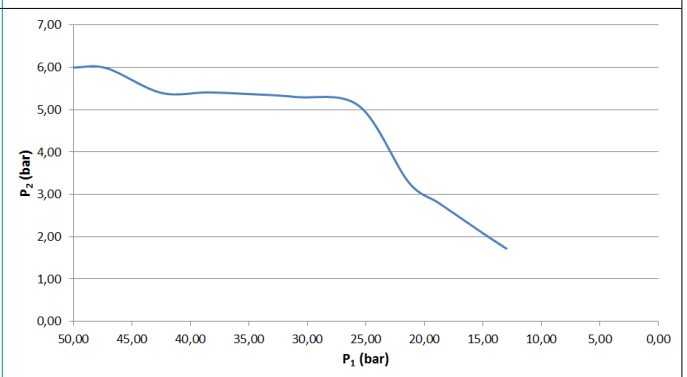


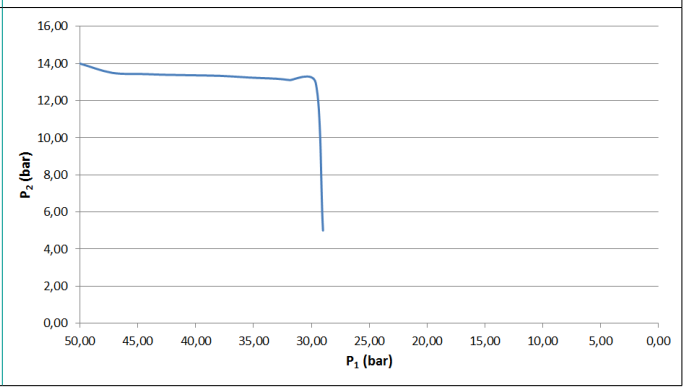


DYNAMIC EXPANSION CURVES:









ORDER CODE:

Example Cylinder Regulator | PUR Linie | Brass Chrome Plated | Low Flow | High Pressure | Single Stage | 6-Port Version | Inlet Right

CPLH0SJ CPLHESJ	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 gauge 1/4" NPT female	00 Without gauge 1/4" NPT female		
		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 gauge	BT Bourdon Tube gauge		
		P0 HP** Purge valve	GX 300 bar	D2 10 bar	I1 Inductiv contact gauge I1	I2 Inductiv contact gauge I2	possible connections	possible connections
		PS HP** Purge- and LP* Shut-off valve		DX 14 bar	R5 Reed contact gauge R5	R2 Reed contact gauge R2	see technical drawing	see technical drawing
		PR HP** Purge- and LP* Regulating valve		EY 28 bar		I1 Inductiv contact gauge I1		
				EX 50 bar				
				F2 100 bar				
				FX 200 bar ****				

Order code (as described above) without special characters or spaces! Complete Order Code CPLH0SJR00EXAXI1BTN14FN14F

* *LP = Low pressure*

** *HP = High pressure*

*** *only for inlet pressure 50 bar*

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

Link to online product configurator

CPLH0SJ | CPLHESJ – DRUVA®PUR FLASCHENDRUCKREGLER

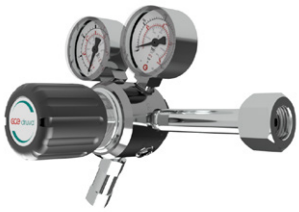
FLASCHENDRUCKREGLER | PURE LINIE (MESSING VERCHROMT) | 20 m³ SERIE | HOCHDRUCKVERSION EINSTUFIG | 6-PORT VERSION

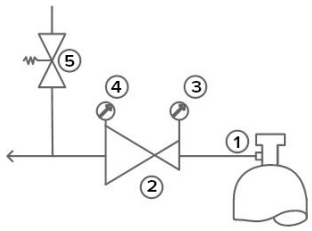
Dieser einstufige Flaschendruckregler kommt zum Einsatz in Gasversorgungssystemen für reine, inerte, entzündbare, brandfördernde Gase und Gasgemische bis Gasereinheit 6.0. Er ist nicht verwendbar für ätzende und / oder giftige Gase und deren Mischungen.

Option-**00**:









1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil

Maße der Standardversion finden Sie in der technischen Zeichnung

TECHNISCHE SPEZIFIKATIONEN:

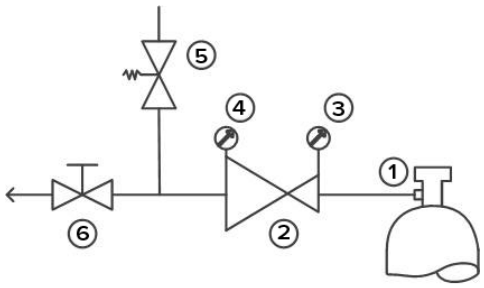
- Abdichtung der Druckregler nach Außen durch Hastelloy Membranen
- Erhältlich mit unterschiedlichen Optionen (Absperr,- Regulier- oder Spülventil (siehe Zeichnung)
- Erhältlich mit unterschiedlichen Anschlüssen gemäß nationaler Standards (siehe Zeichnung)
- Kompaktes Design
- Sehr gute Regelbarkeit
- Entwickelt, hergestellt und geprüft gemäß ISO 7291 (einschließlich Sauerstoffausbrennprüfung)
- Abblaseventil auf der Hinterdruckseite
- Prüfung zur Elektrostatischen Aufladung
  - Erfüllt die Anforderungen gemäß ISO 80079-36, IEC TS 60079-32-1 und der deutschen TRGS 727
  - Einsetzbar in EX-Zone 1 and 2 für Gase mit Explosionsrisiko der Gruppen I, IIA, IIB, IIC

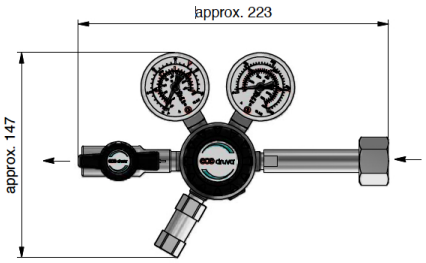
TECHNISCHE DATEN	
Betriebstemperatur:	-20 °C to +60 °C
Eingangs- und Ausgangsanschlüsse:	siehe technische Zeichnung
Leckrate Sitz:	<5x10^{-6} mbar l/s (Helium)
Leckrate nach außen:	<1x10^{-9} mbar l/s (Helium)
Filter:	1x Eingang 1x pro Ausgang
Gewicht:	2,50 kg
Nominaler Durchfluss:	20 m³/h (N_2) gemäß ISO 7291 bei 20 bar Ausgangs- und 41 bar Eingangsdruck
Material gasberührte Teile	
Druckreglerkörper:	Messing verchromt
Druckreglermembran:	Hastelloy
Druckreglersitz:	PCTFE (P in > 50 bar) PTFE (P in ≤ 50 bar)
Abblaseventil Sitz: CPLH0SJ-Version CPLHESJ-Version	 FKM EPDM
Druckreglerschieber:	Messing
Druckbereiche Leitungsdruckregler	
Max. Eingangsdruck:	300 bar
Mögliche Ausgangsdrücke:	2/ 3/ 6/ 10/ 14/ 28/ 50/ 100/ 200 bar
Manometerdruckanzeige (in Klammern – Ausgangsdruckstufe):	2,5 (2)/ 5 (3)/ 10 (6)/ 25 (10, 14)/ 40 (28)/ 65 (50)/ 160 (100)/ 315 (200) bar
Auf Anfrage Kontaktmanometer erhältlich	
Ansprechdruck Abblaseventil (in Klammern – Ausgangsdruckstufe):	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
Produktionstest:	Drucktest mit Helium für jeden Druckregler
	Helium- Lecktest zur Prüfung der Dichtheit über den Druckreglersitz
	Helium- Lecktest für jeden Druckregler zur Prüfung der Dichtheit nach außen
	Funktionstest für jeden Druckregler
Tests während der Entwicklung:	Typtest gemäß ISO 7291
	Sauerstoff Ausbrennprüfung gemäß ISO 7291
	Zusätzlicher Lebensdauertest
	Prüfung zur Elektrostatischen Aufladung • Erfüllt die Anforderungen gemäß ISO 80079-36, IEC TS 60079-32-1 und der deutschen TRGS 727 • Einsetzbar in Ex-Zone 1 und 2 für Gase mit Explosionsrisiko der Gruppen I, IIA, IIB, IIC

OPTIONEN DES FLASCHENDRUCKREGLER CPLH0SJ | CPLHESJ:

Option-**0S**: mit Niederdruck Absperrventil

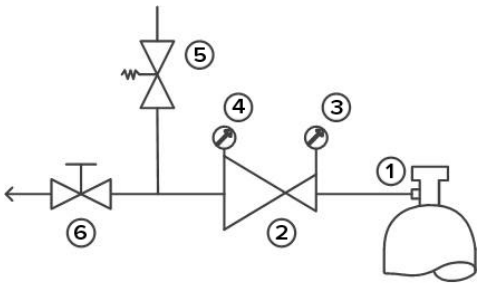
1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil
6 – Ausgangsabsperrventil

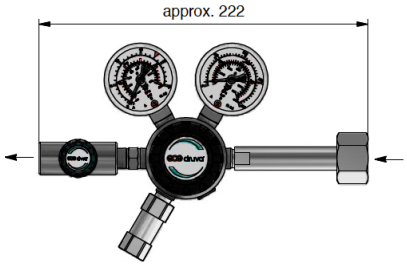




Option-**0R**: mit Niederdruck Regulierventil

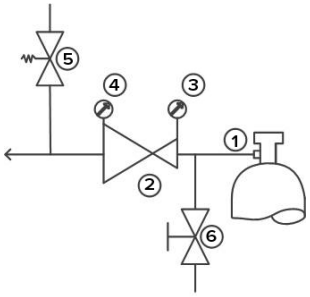
1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil
6 – Ausgangsregulierventil

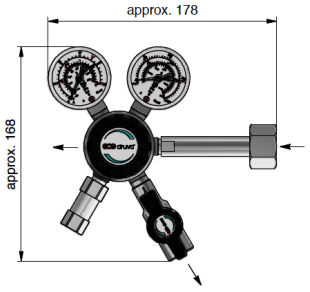




Option-**P0**: mit Hochdruck Spülventil

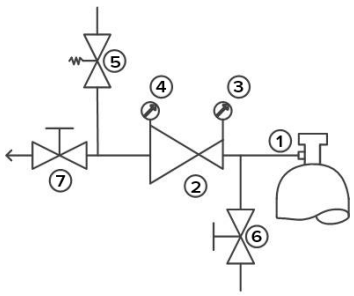
1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil
6 – Spülventil

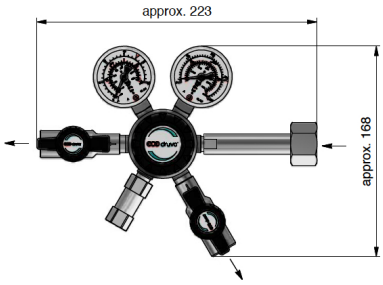




Option-**PS**: mit Hochdruck Spülventil & Niederdruck Absperrventil

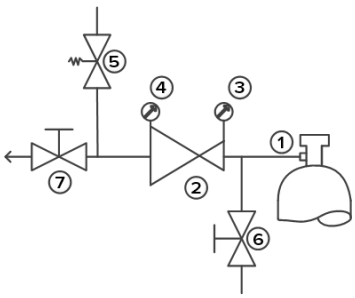
1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil
6 – Spülventil
7 – Ausgangsabsperrventil

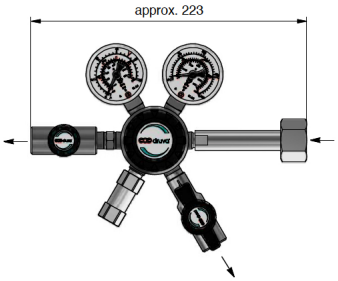




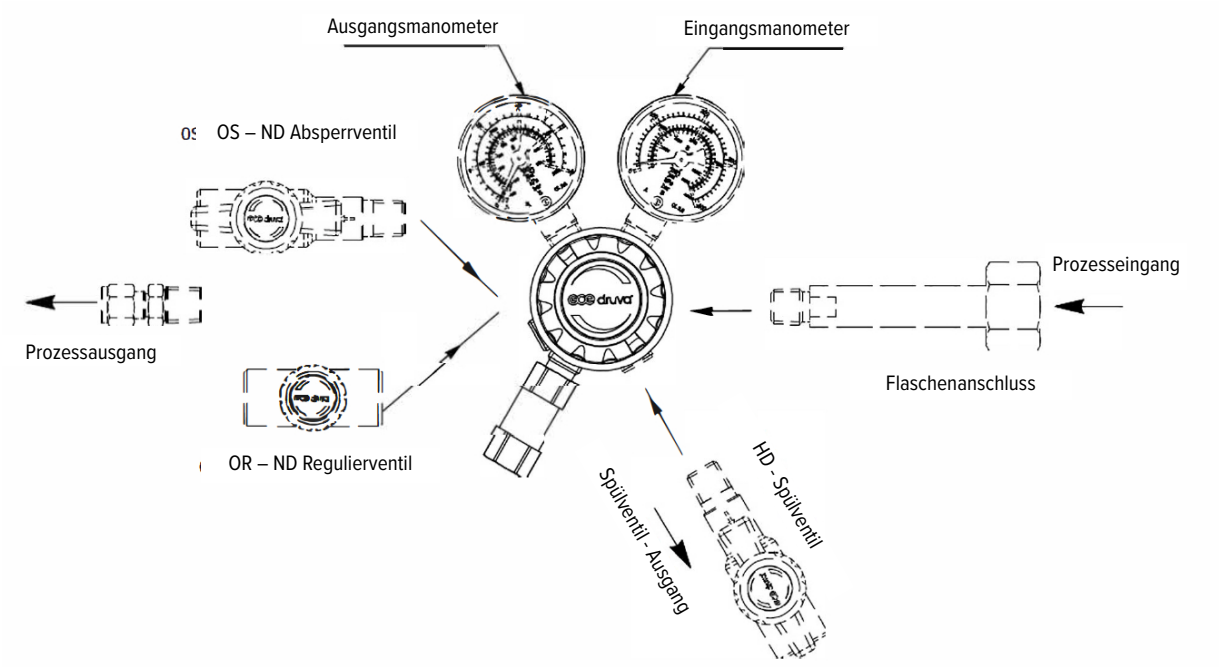
Option-**PR**: mit Hochdruck Spülventil & Niederdruck Regulierventil

1 – Flaschenanschluss
2 – Druckregler
3 – Eingangsmanometer
4 – Ausgangsmanometer
5 – Abblaseventil
6 – Spülventil
7 – Ausgangsregulierventil

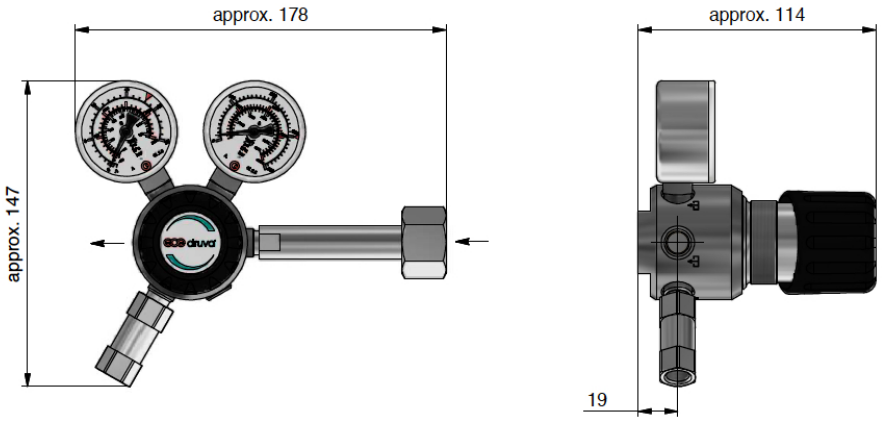




TECHNISCHE ZEICHNUNG:



STANDARD VERSION



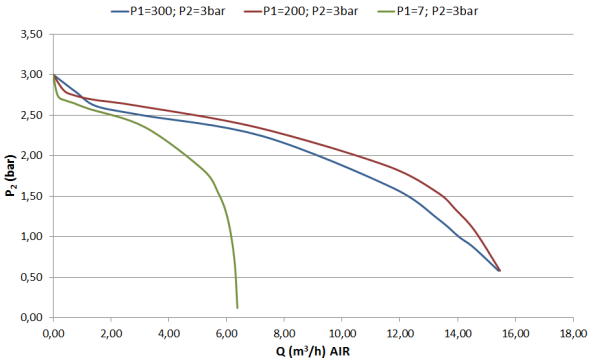
Liste der möglichen Flaschenanschlüsse

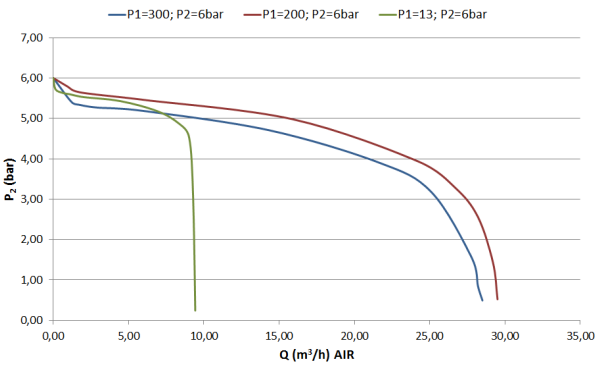
N14F00 - NPT1/4″ female	DI005W - DIN477 No 5 Sechskant	DI054H - DIN477 No 54 Hand
BS003W - BSI341-3 Sechskant	DI006H - DIN477 No 6 Hand	DI054W - DIN477 No 54 Sechskant
BS004W - BSI341-4 Sechskant	DI006W - DIN477 No 6 Sechskant	DI057W - DIN477 No 57 Sechskant
BS008W - BSI341-8 Sechskant	DI007W - DIN477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

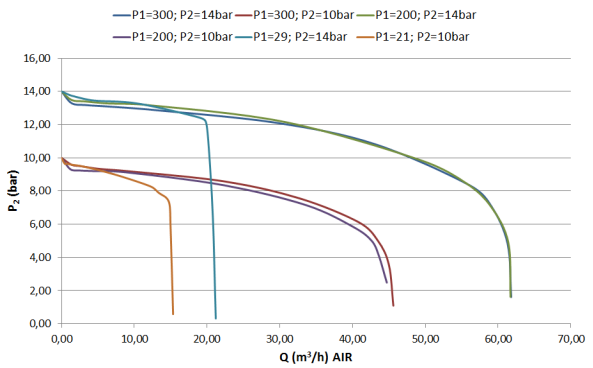
Liste der möglichen Prozessanschlüsse

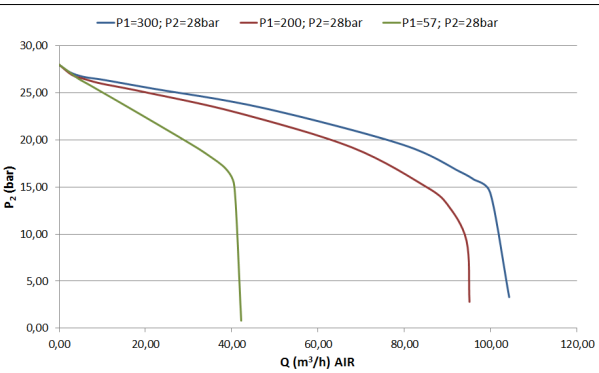
N14F - NPT1/4″ female		
M03B - Klemmring ø 3 MM Messing	IX2B - Klemmring ø 1/8“ Messing	H04B - Schlauchtülle 4,8 mm Messing
M06B - Klemmring ø 6 MM Messing	IX4B - Klemmring ø 1/4“ Messing	H06B - Schlauchtülle 6,4 mm Messing
M08B - Klemmring ø 8 MM Messing	IX6B - Klemmring ø 3/8“ Messing	H08B - Schlauchtülle 8,0 mm Messing
M10B - Klemmring ø 10 MM Messing	IX8B - Klemmring ø 1/2“ Messing	H04S - Schlauchtülle 4,8 mm Edelstahl
M12B - Klemmring ø 10 MM Messing	IX2S - Klemmring ø 1/8“ Edelstahl	H06S - Schlauchtülle 6,4 mm Edelstahl
M03S - Klemmring ø 3 MM Edelstahl	IX4S - Klemmring ø 1/4“ Edelstahl	H08S - Schlauchtülle 8,0 mm Edelstahl
M06S - Klemmring ø 6 MM Edelstahl	IX6S - Klemmring ø 3/8“ Edelstahl	**Die Verfügbarkeit von Messinganschlüssen hängen von Druck und Größe ab.**
M08S - Klemmring ø 8 MM Edelstahl	IX8S - Klemmring ø 1/2“ Edelstahl	**Beachten Sie den maximal möglichen Druck in ihrem Rohrsystem.**
M10S - Klemmring ø 10 MM Edelstahl		**Schlauchtüllen max. 15 bar.**
M12S - Klemmring ø 12 MM Edelstahl		

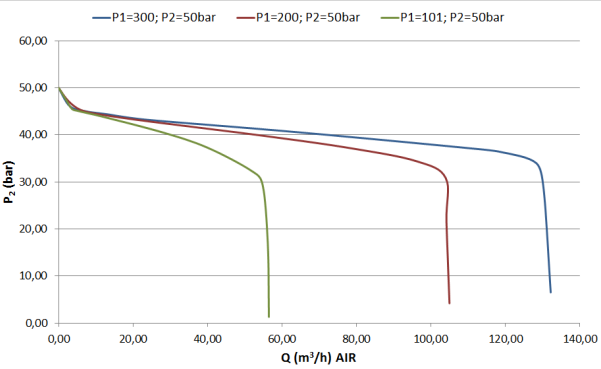
FLIESSKURVEN:



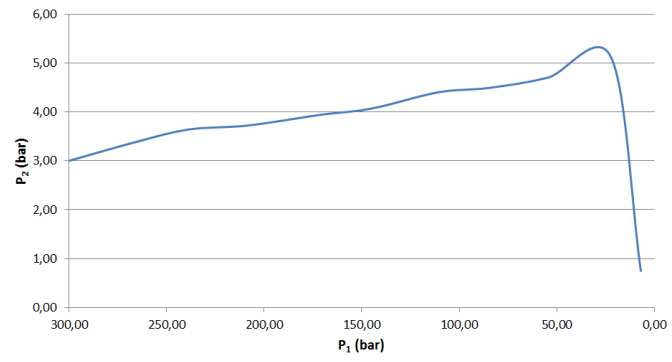


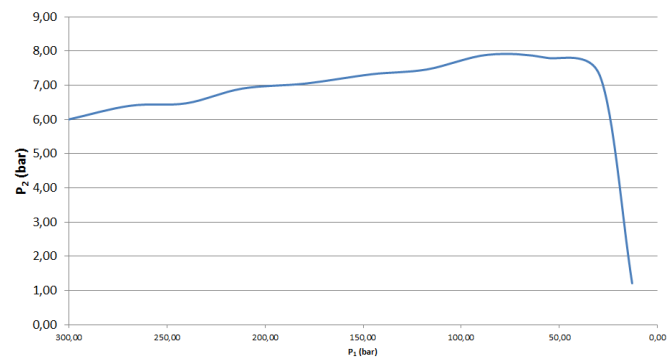


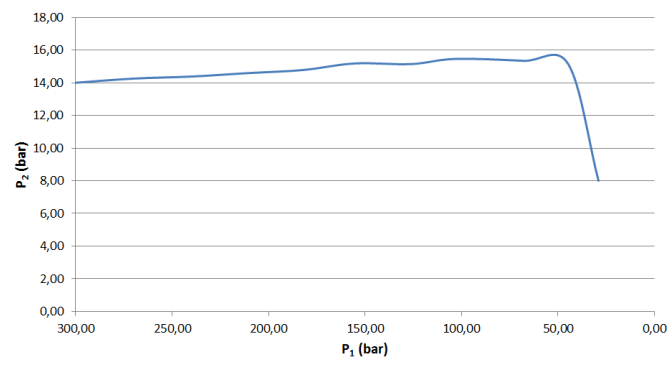


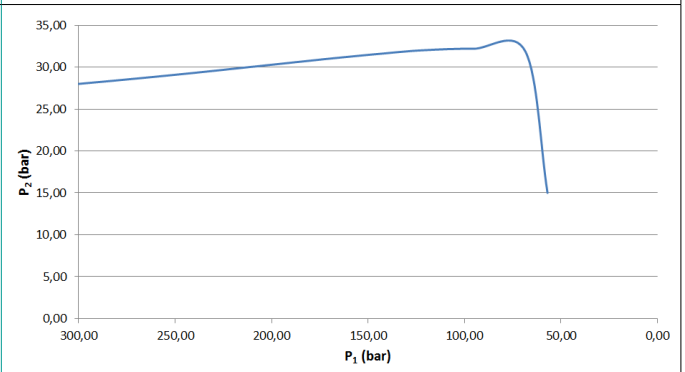


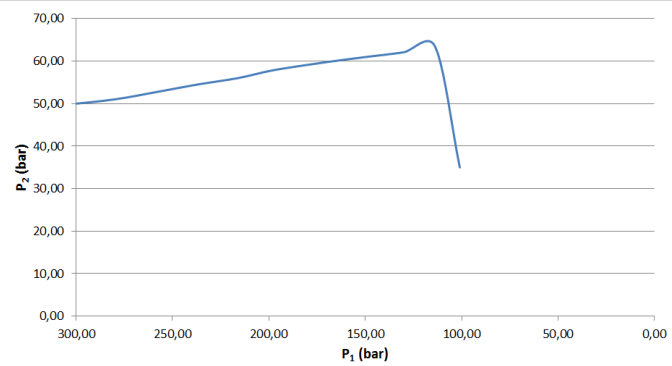
DYNAMISCHE ENTSPANNUNGSKURVEN:



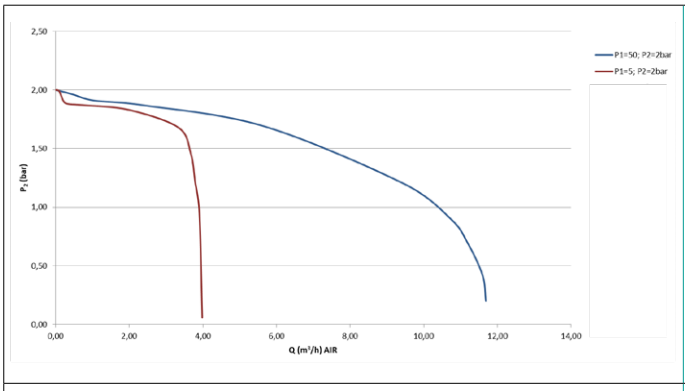


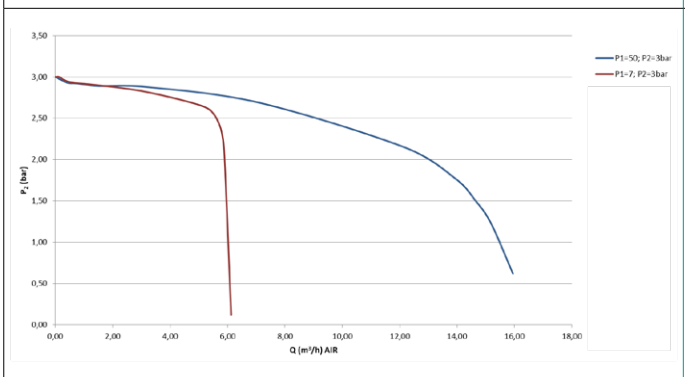


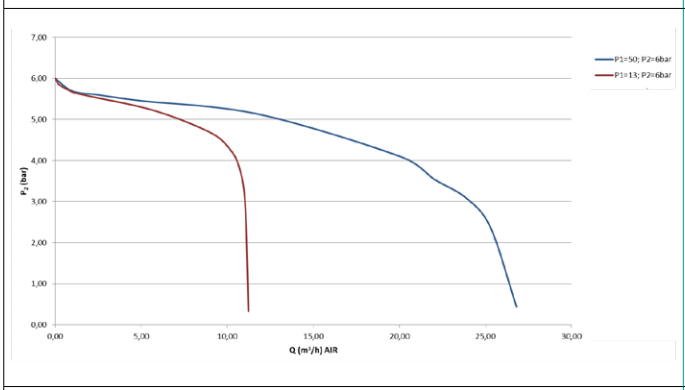


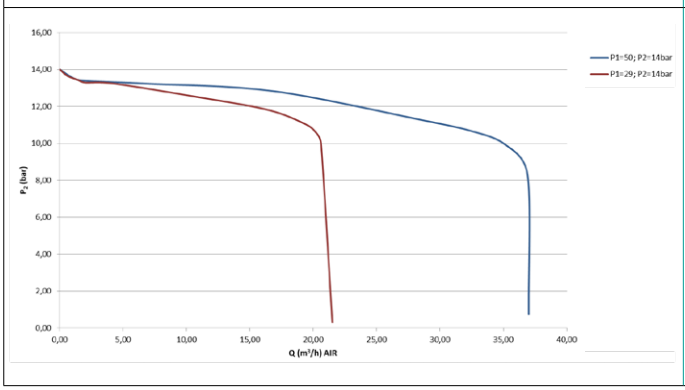


FLIESSKURVEN:

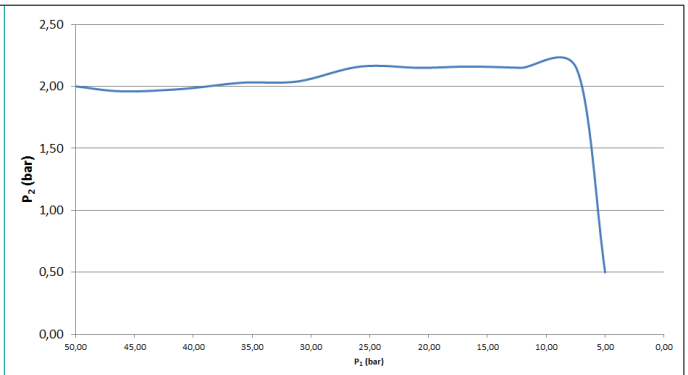


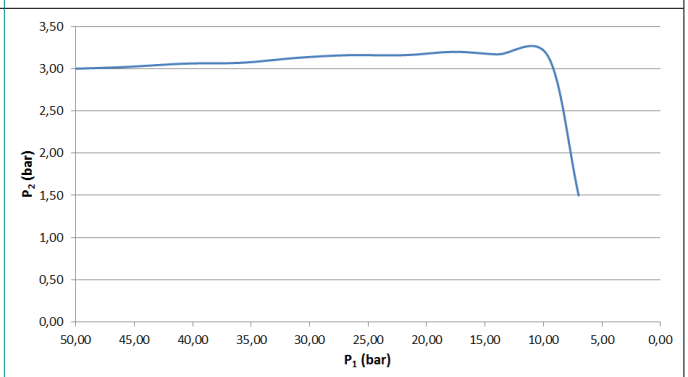


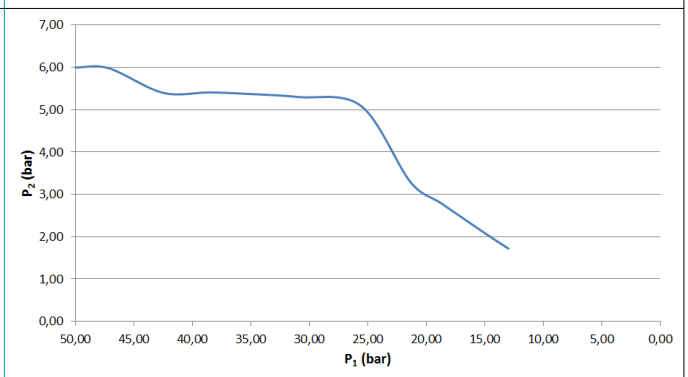


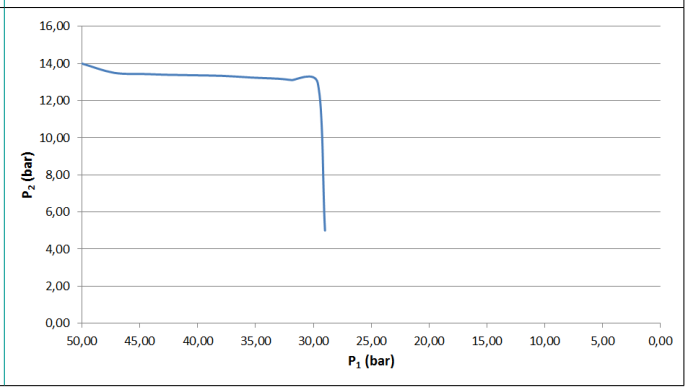


DYNAMISCHE ENTSPANNUNGSKURVEN:









BESTELLINFORMATION:

Beispiel für einen Flaschendruckregler | PUR Linie | Messing Verchromt | Low Flow | Hochdruck | Einstufig | 6-Port Version | Eingang rechts

CPLH0SJ CPLHESJ	R	00	EX	AX	I1	BT	N14F (1/4" NPT female)	N14F (1/4" NPT female)
	Porting	**Optionen**	**Eingangs-druck**	**Ausgangs-druck**	**Eingangs-druck Manometer**	**Ausgangs-druck Manometer**	**Flaschen-anschluss**	**Ausgangs-anschluss**
	R Eingang rechts	00 Ohne Optionen	EX 50 bar	AX 2 bar ***	00 Ohne Manometer 1/4" NPT female	00 Ohne Manometer 1/4" NPT female	**mögliche Anschlüsse** **siehe technische Zeichnung**	**mögliche Anschlüsse** **siehe technische Zeichnung**
		0S ND* Absperrventil	F4 60 bar	BX 3 bar	01 Ohne Manometer Verschluss-Stopfen	01 Ohne Manometer Verschluss-Stopfen		
		0R ND* Regulierventil	FX 200 bar	CX 6 bar	BT Bourdon Tube Manometer	BT Bourdon Tube Manometer		
		P0 HD** Spülventil	GX 300 bar	D2 10 bar	I1 Induktiv Kontakt Manometer I1	I2 Induktiv Kontakt Manometer I2		
		PS HD** Spül- und ND Absperrventil		DX 14 bar	R5 Reed Kontakt Manometer R5	R2 Reed Kontakt Manometer R2		
		PR HD** Spül- und ND* Regulierventil		EY 28 bar		I1 Induktiv Kontakt-manometer I1		
				EX 50 bar				
				F2 100 bar				
				FX 200 bar ****				

Bestellnummern (wie im Beispiel oben) bitte ohne Sonder- oder Leerzeichen verwenden! Komplette Bestellnummer lautet CPLH0SJR00EXAXI1BTN14FN14F

* *ND = Niederdruck*

** *HD = Hochdruck*

*** *nur für Eingangsdruck 50 bar*

**** *Eingangs- und Ausgangsdruck FX=200 bar – kein Ablaseventil (PRV) erhältlich*