HELYON

5 Chemin du Jubin 69570 DARDILLY
Tél. +33 (0)4 72 52 16 70 - Fax +33 (0)4 72 52 16 71
www.helyon.com / E-mail : contact@helyon.com

R1100

**Brass high pressure regulator,
for compressed air, gas and liquids**

FEATURES

High pressure regulator for cylinder or manifold; standard version inlet pressure up to 220 bar (3190 psi), higher pressure for special versions.

Ideal for industrial applications and welding equipment.

Cylinder connections according to UNI standard, other connections available on request.

Outlet pressure up to 15 bar (218 psi) is controlled by a diaphragm; greater outlet pressures are controlled by a piston.

Available the ATEX version
Brand CE Ex II2GDcIICX.
For use in potentially explosive zones:
1, 21, 2, 22 (not for mines and zone 0).

The product complies with the directive 97/23/CE (PED)

SPECIFICATIONS

Gauges: accuracy class 1,6

Regulator weight: ~4 Kg (~8,8 lb)

Regulator weight HF version: ~4.6 Kg (~10,1 lb)

Standard version operating temperature -20°C ÷ +60°C (-4°F ÷ 140°F)

Main valve leakage classification: VI (bubble tight)

Flow coefficient: Kv= 0.15 Nm^3/h (Cv = 0,18 US gal/min)

Degree of protection: IP25

MATERIALS

Body and bonnet: brass

Internal parts: brass

Adjusting spring: C85 (not in contact with the fluid)

Main valve spring: stainless steel AISI 302

Diaphragm (for outlet pressure up to 15 bar): two coupled diaphragms NBR+PTFE, PTFE in contact with the fluid

Piston (for greater outlet pressure): brass

O-rings: EPDM or FPM depending on the fluid (other compounds available on request)

Main valve gasket: PA 6.6 (EPDM for PS 15 bar)

ACCESSORIES

Ring-nut 0DU80301

Kit bracket and ring-nut M1B101

SPARE PARTS

Gauges

Relief valve

Complete kit: gaskets, assembled diaphragm, filter, main valve, O-rings

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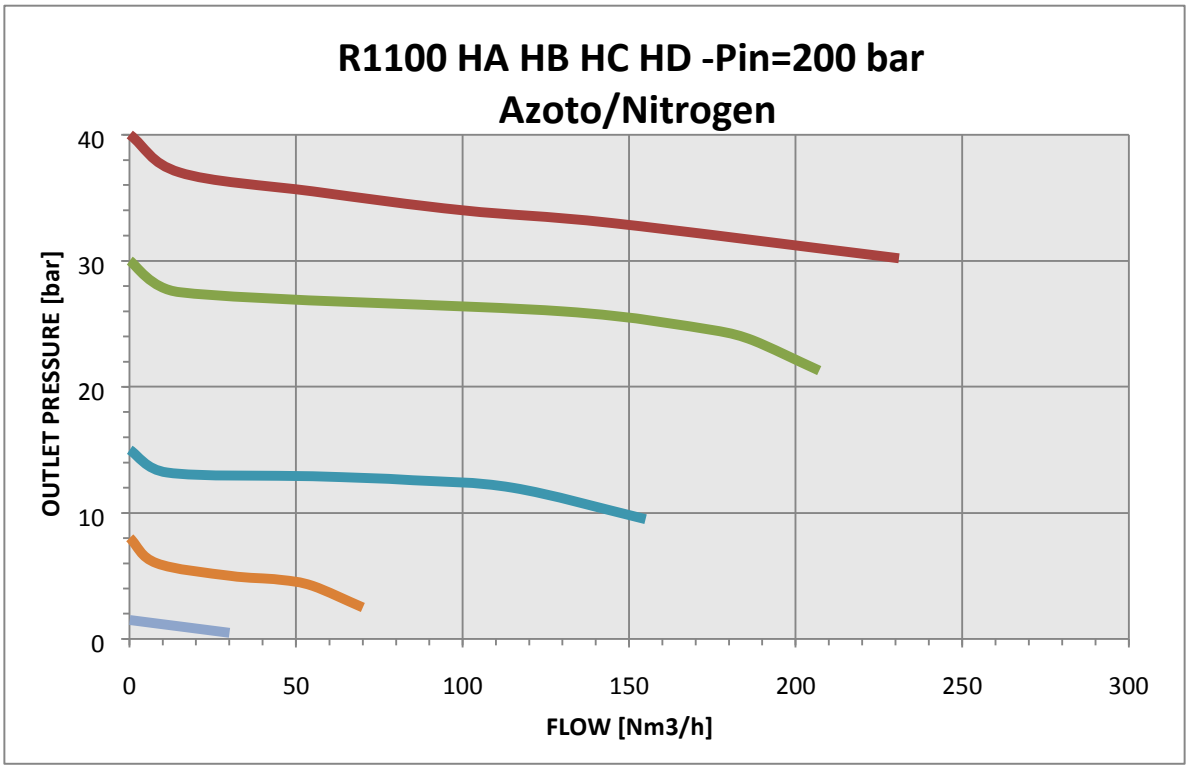
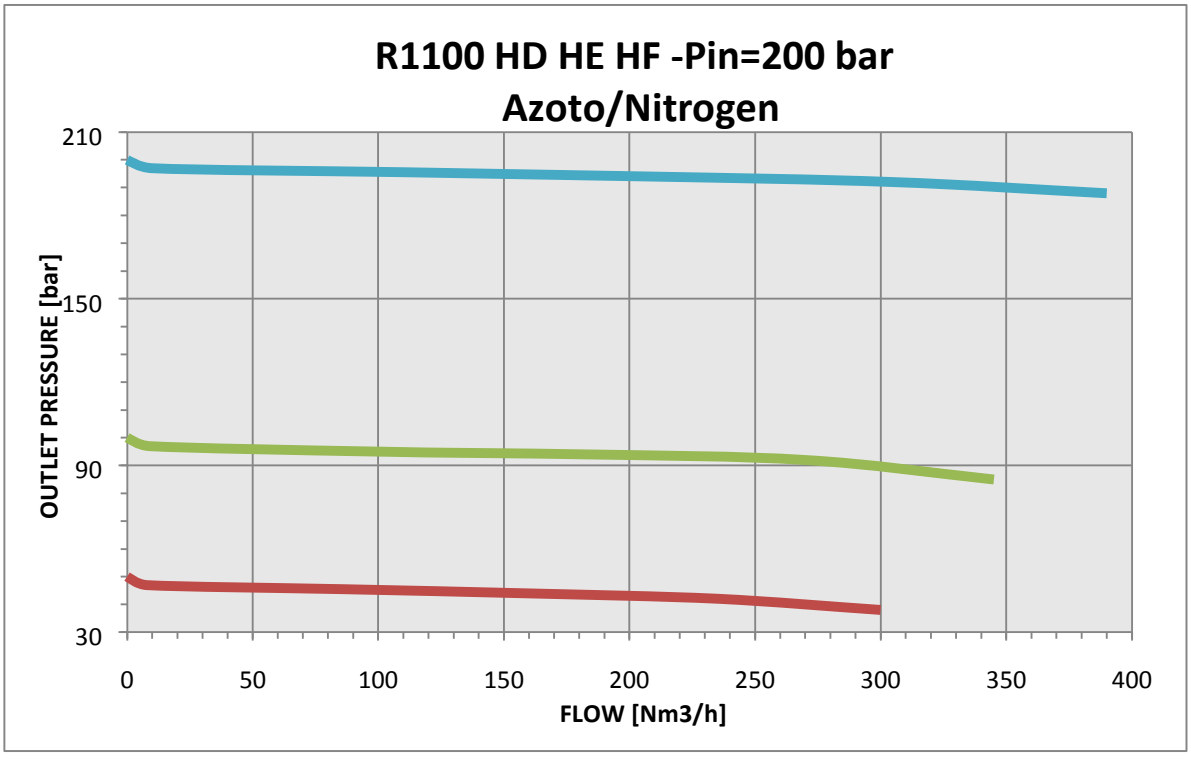
flow charts





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available model types

Body by machning round bar, inlet connection to bottle according to standard UNI

TYPE	PIn Bar	Pout Bar	Connection OUT	MEDIUM
				R1100
R1100 LA	15	0,2 – 1,5	G 1/2-M	C2H2
R1100 MA	80	0,8 – 8	G 1/2-M	CO2 – N2O
R1100 MB	80	1,5 – 15	G 1/2-M	CO2 – N2O
R1100 MC	80	3 – 30	G 3/8-F	CO2 – N2O
R1100 MD	80	5 – 50	G 3/8-F	CO2 – N2O
R1100 HA	220	0,8 – 8	G 1/2-M	O2
				H2 – CH4
				Air – N2 – Ar – He
R1100 HB	220	1,5 – 15	G 1/2-M	O2
				H2 – CH4
				Air – N2 – Ar – He
R1100 HC	220	3 – 30	G 3/8-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R1100 HD	220	5 – 50	G 3/8-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R1100 HE	220	10 – 100	G 3/8-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R1100 HF	220	20 – 200	G 3/8-F	O2
				H2 – CH4
				Air – N2 – Ar – He

MEDIUM	Connection IN	UNI
C2H2	Bracket bottle	7S-UNI 11144
	Manifold	1H-UNI 11144
	Bottle connection	7F-UNI 11144
CO2	Bottle_manifold	2-UNI 11144
N2O	Bottle	9-UNI 11144
	Manifold	2-UNI 11144
O2	Bottle_manifold	2-UNI 11144
Air	Bottle	6-UNI 11144
	Manifold	2-UNI 11144
N2	Bottle	5-UNI 11144
	Manifold	2-UNI 11144
Ar – He	Bottle	8-UNI 11144
	Manifold	2-UNI 11144
H2 – CH4	Bottle_manifold	1H-UNI 11144

CONNECTION DIFFERENT FROM STANDARD

Connections different from standard (G 3/8-F in body, external nipples G1/2-F – G1/2-M - 1/2'' NPT-F)
Bottle connection different from italian standard UNI (DIN 477, CGA, NFE 29-650, BS 341 e UNE ITC MIE)
Inlet connection for manifold, not for CO2, O2, H2, CH4

EXECUTIONS DIFFERENT FROM STANDARD

Inlet pressure 250-300 bar
Inlet pressure 350-400 bar
Pre-set outlet pressure
Fixed outlet pressure
O-ring in accordance to FDA
O-ring in FPM
Special O-ring
Venting on bonnet and over pressure valve
Execution for liquid
Dome loaded version
Chrome-Nickel plating
Not standard branding
ATEX version
Special temperature range
Relieving version
Degreased for O2

ACCESSORIES

Ring nut 0DU80301
Kit bracket and ring nut M1B101

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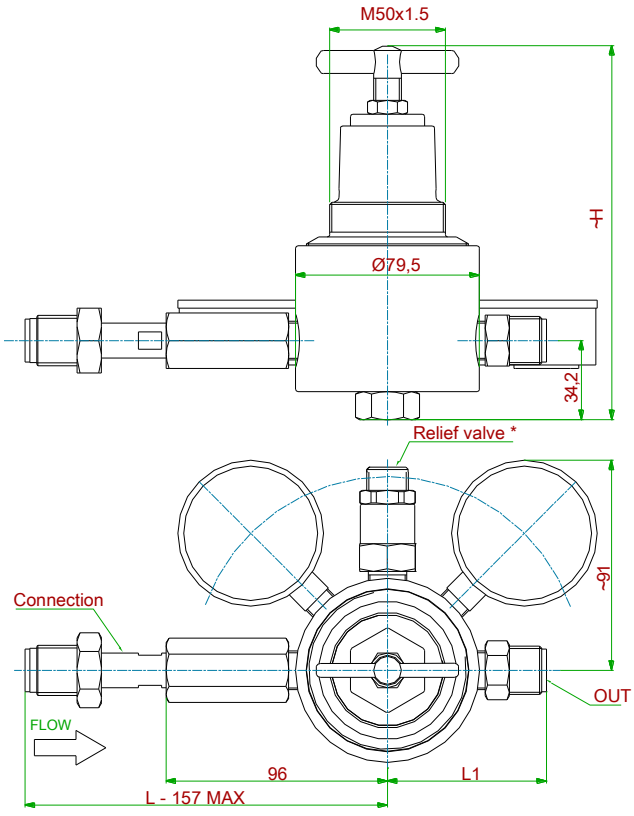
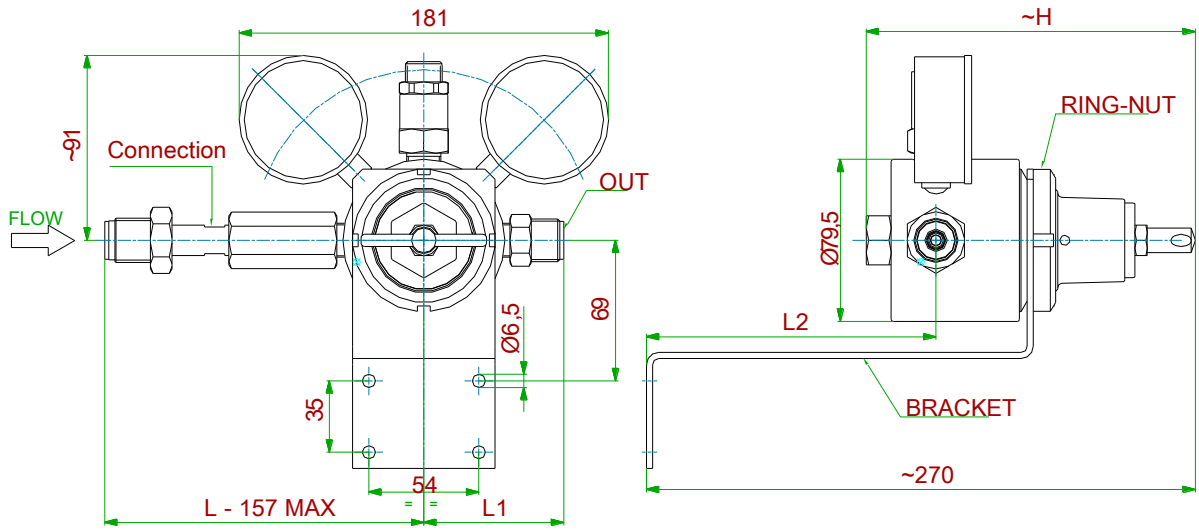
technical drawings (all dimensions in mm)



* No Relief valve for type piston 200 bar

TYPE	OUT	~H	L1
Diaphragm	G 1/2-M	162	69
Piston 30/50 bar	G 3/8-F	164	Thread in the body without connection
Piston 200 bar	G 3/8-F	182	Thread in the body without connection

Bracket and ring-nut to be ordered separately



TYPE	OUT	~H	L1	L2
Diaphragm	G 1/2-M	162	69	142
Piston 30/50 bar	G 3/8-F	164	Thread in the body without connection	140
Piston 200 bar	G 3/8-F	182	Thread in the body without connection	122

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