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

R31000

Stainless steel AISI 316L high pressure regulator, suitable for compressed air, gas and liquid

FEATURES

High pressure regulator, standard version inlet pressure up to 220 bar (3190 psi), higher pressure for special versions

Suitable for industrial applications that require high flow rates.

Inlet and outlet connections 1” - M.
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.

Balanced main valve, for outlet pressure up to 50 bar, to provide constant outlet pressure regardless of inlet pressure variations.

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

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

SPECIFICATIONS

Inlet and outlet pressure gauges: accuracy class 1.6

Diaphragm regulator weight: ~14,5 kg (~32 lb)

Piston regulator weight: ~16,5 kg (~36 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: Kv= 2.5 Nm^3/h (Cv= 2.93 US gal/min)

Degree of protection: IP25

Gauges ports: G 1/4 – F

Big dimension upstream filter

MATERIALIS

Body and bonnet: stainless steel AISI 316 L

Internal parts: stainless steel AISI 316 L

Main valve spring: C85 nickel-plated NiP/Fe 15 µm (not in contact with the fluid)

Adjusting spring: AISI 302 or C85 nichel-plated NiP/Fe 15 µm (not in contact with the fluid)

Diaphragm (for inlet pressure up to 15 bar): stainless steel AISI 316 L

Piston (for greater outlet pressure): stainless steel AISI 316 L

O-ring: EPDM or FPM according to the fluid (other compounds available on request)

Main valve gasket: PTFE + carbon

ACCESSORIES

Wall mounting bracket (mod. HA, HB, HC, HD): M1B304

Wall mounting bracket (mod. HF): M1B305

Dome loaded version: outlet pressure to be controlled by a pilot pressure

SPARE PARTS

Gauges

Overpressure valve

Complete kit: filter cartridge, complete main valve, o-rings, assembled diaphragm

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available model types

Pressure regulators for high pressure,
made of stainless steel 316L, for compressed air, technical gases and liquids
Body by machining barn inlet connection G 1-M (for line service)

TYPE	PIn Bar	Pout Bar	Connection IN	Connection OUT	MEDIUM
					R31000
R31000 MA	80	0,8 – 8	G1-M	G1-M	CO2
R31000 MB	80	1,5 – 15	G1-M	G1-M	CO2
R31000 MC	80	3 – 30	G1-M	G1-M	CO2
R31000 HA	220	0,8 – 8	G1-M	G1-M	H2 – CH4
					Air – N2 – Ar – He
R31000 HB	220	1,5 – 15	G1-M	G1-M	H2 – CH4
					Air – N2 – Ar – He
R31000 HC	220	3 – 30	G1-M	G1-M	H2 – CH4
					Air – N2 – Ar – He
R31000 HD	220	5 – 50	G1-M	G1-M	H2 – CH4
					Air – N2 – Ar – He
R31000 HF	220	20 – 200	G1-M	G1-M	H2 – CH4
					Air – N2 – Ar – He

CONNECTION DIFFERENT FROM STANDARD

Connections different from standard (external nipples 1'' NPT-M ; 1'' NPT-F)
Connections with flanges

EXECUTIONS DIFFERENT FROM STANDARD

Inlet pressure 250 bar
Inlet pressure 300 bar
Pre-set outlet pressure
Fixed outlet pressure, screw with cap nut
O-ring in accordance to FDA
O-ring FPM
Special O-ring
Venting on bonnet and over pressure valve
Execution for liquid
Dome loaded version
Not standard branding
ATEX version
Special temperature range
Degreased for O2

ACCESSORIES

Bracket with screws (mod. HA, HB, HC, HD) M1B304
Bracket with screws (mod. HF) M1B305

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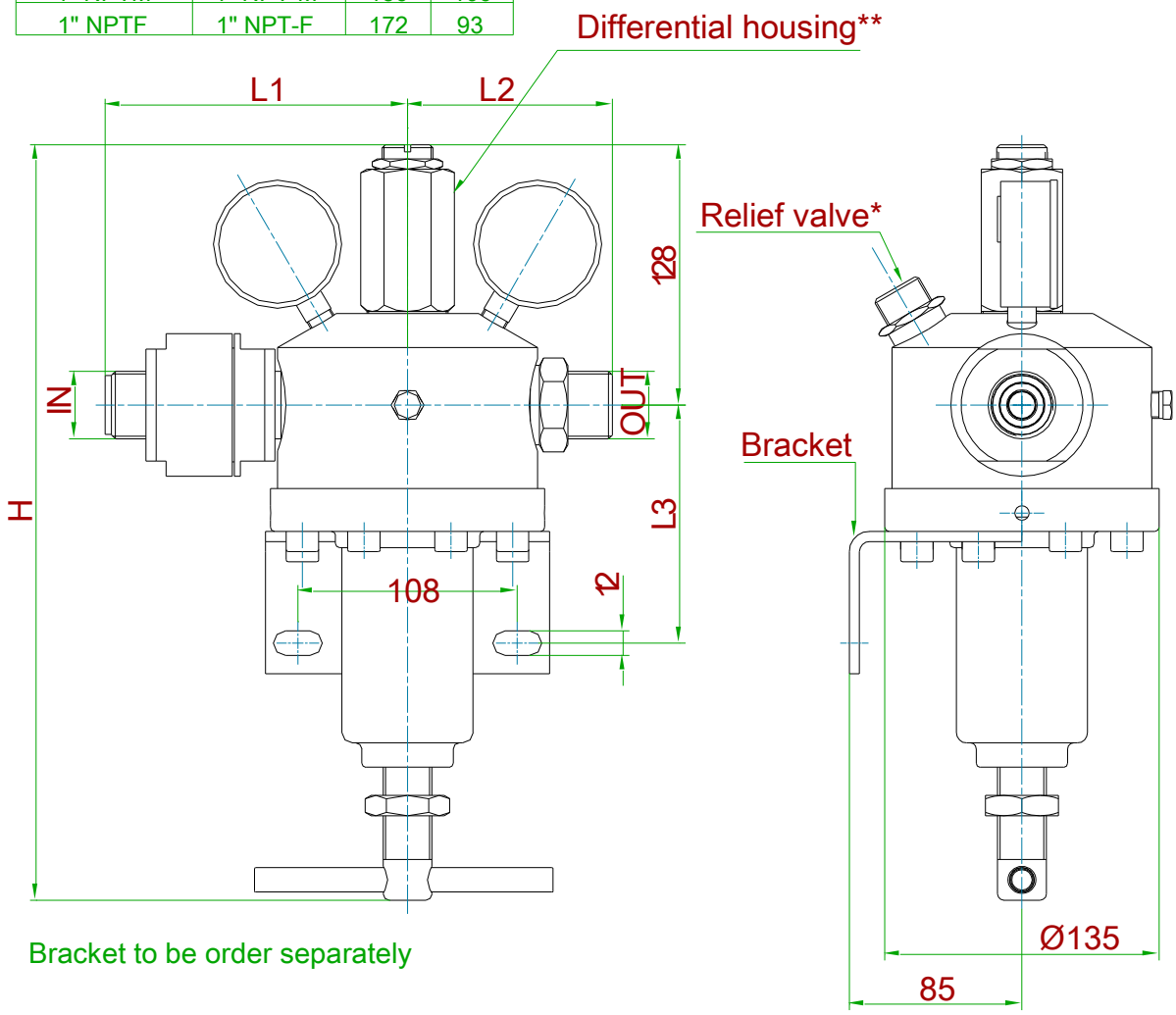
technical drawings (all dimensions in mm)

* No Relief valve for type piston 200 bar
** No differential housing for type piston 200 bar

CONNECTION	IN / OUT	L1	L2
1" GM	G1-M	149	101
1" NPTM	1" NPT-M	156	106
1" NPTF	1" NPT-F	172	93



Bracket to be order separately

TYPE	OUTLET PRESSURE	OUTLET GAUGE CODE	OUTLET GAUGE RANGE	H	L3	BRACKET, KIT ORDER NUMBER
A	0,8÷8	0AANEC07	0÷16	~371	117	M1B304
B	1,5÷15	0AANEC08	0÷25	~371	117	M1B304
C	3÷30	0AANEC09	0÷63	~410	158	M1B304
D	5÷50	0AANEC10	0÷100	~410	158	M1B304
F	20÷200	0AANEC12	0÷315	~390	158	M1B305

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