

# 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" G - 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 2014/34/EU version

Brand  $\text{CE} \text{ II2GcIICTX}$

$\text{CE} \text{ II2DcIIICTX}$ .

For use in potentially explosive atmospheres zones:

1, 21, 2, 22 (not for mines and zone 0).

Available the EAC-EX TP TC 012/2011 versions for the Russian market.

The product complies with the directive 2014/68/EU (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:  $K_v = 2.5 \text{ Nm}^3/\text{h}$  ( $C_v = 2.93 \text{ US gal/min}$ )

Degree of protection: IP25

Gauges ports: G 1/4 – F

Big dimension upstream filter

## **MATERIALS**

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 nickel-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

Wall mounting bracket

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

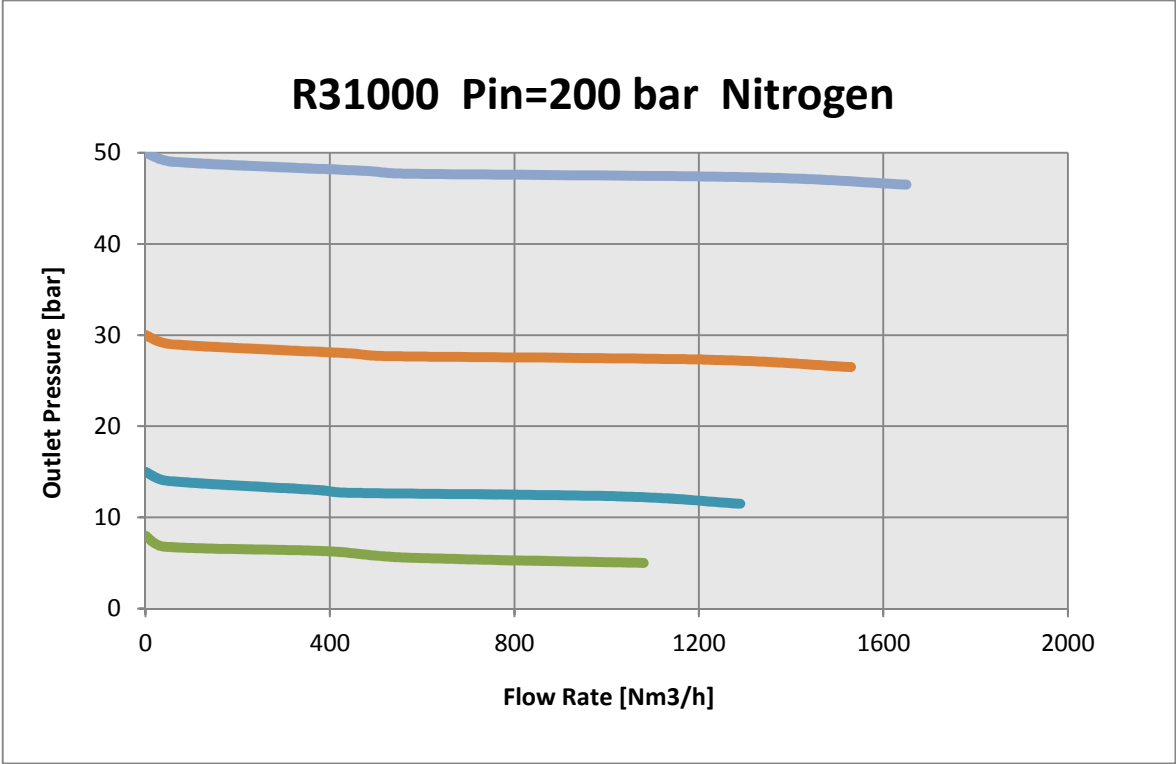
## **SPARE PARTS**

Gauges

Overpressure valve

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

flow charts



## generating the product code

R31000 AISI 316			
AA BB CC DD E F GG			
AA	Attacchi / Connections	R0	G 1-M
BB	Pressione d'ingresso / Inlet pressure	J0	220 bar
		L0	80 bar
CC	Intervallo d'uscita/ Outlet range	D0	Pout 0,8 - 8 bar <sup>(B)</sup>
		E0	Pout 1,5 - 15 bar <sup>(B)</sup>
		FO	Pout 3-30 bar <sup>(B)</sup>
		G0	Pout 5-50 bar <sup>(B)</sup>
		V0	Pout 20-200 bar
		X0	Pout 10-100 bar
DD	Tipologia di fluido / Fluid type	94	FPM PED Classe III
		98	EPDM
E	Pilotato/ Pilot operated	N	Non Pilotato
		P	Pilotato
F	Marchiato / Marked	I	ID
		Z	Dir ATEX 2014/34/EU
GG	Accessori / Accessories	00	Nessun accessorio / No accessories

(B): Regolatore bilanciato/ Balanced regulator

## CODE COMPOSITION EXAMPLE

**31000# 01 J0 E0 98 N I 00**

**31000#:** R31000 stainless steel AISI 316 L regulator

**01:** connections 1" NPT - F

**J0:** Inlet pressure 220 bar

**E0:** Outlet pressure 1,5-15 bar

**98:** EPDM gaskets

**N:** Not dome loaded

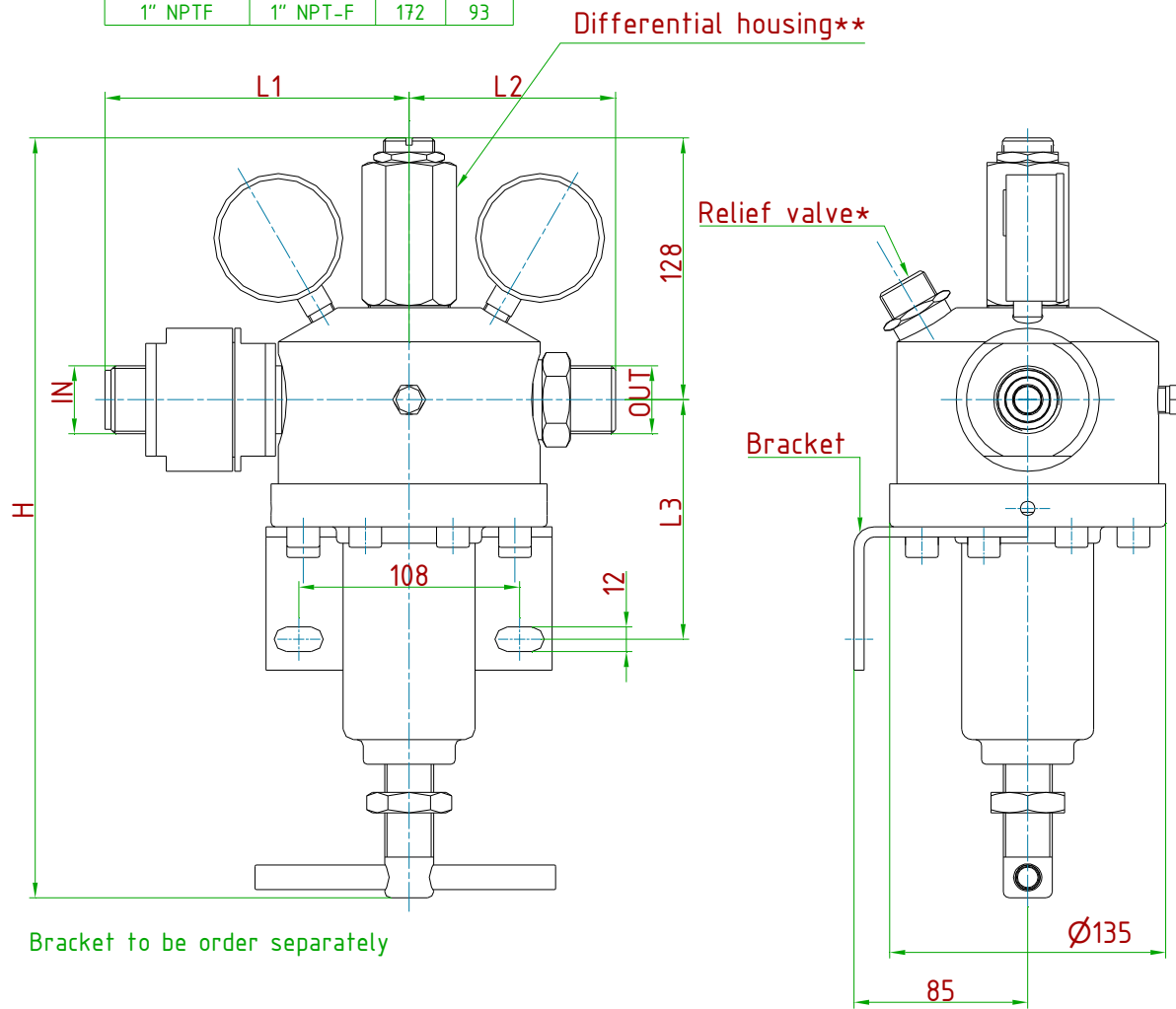
**I:** Insert Deal

**00:** No accessories

# 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



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

## **ID Insert Deal Srl**

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**PRESSURE REGULATOR\_R31000\_EN\_04**



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