

310R3

Stainless steel AISI 316L precision pressure regulator



FEATURES

Precision pressure regulator for inlet pressure up to 7 bar (101 psi).

Connections 3/4"-F and 1"-F by flanges screwed to the body . Other connections available on request.

Outlet pressure is controlled by a rubber diaphragm.

The regulator's main valve is balanced.

Available the ATEX version

Brand  II2GDcllCX.

For use in potentially explosive atmospheres zones: 1, 21, 2, 22 (not applicable in mines and zone 0).

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

SPECIFICATIONS

Weight model A/B/C: ~15,1 kg (~33,3 lb)

model D/E: ~16,5 kg (~36,2 lb)

Operating temperature: -20°C ÷ +80°C (-4°F ÷ 176°F) for standard version

Main valve leakage classification: VI (bubble tight)

Flow coefficient: $K_v = 15 \text{ Nm}^3/\text{h}$ - $C_v = 17,5 \text{ US gal/min}$ (Models A/B/C)

$K_v = 36 \text{ Nm}^3/\text{h}$ - $C_v = 42 \text{ US gal/min}$ (Model D)

$K_v = 23 \text{ Nm}^3/\text{h}$ - $C_v = 27 \text{ US gal/min}$ (Model E)

Degree of protection: IP25

G 1/4 or 1/4" NPT ports for outlet pressure gauge

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Main valve spring: stainless steel AISI 302

Adjusting spring: C85 nickel plated NiP/Fe 15 μm , not in contact with the fluid

Diaphragm: NBR and PTFE coupled diaphragms (PTFE diaphragm in contact with the fluid)

Gaskets: FPM (EPDM for NH_3 , CO_2 and N_2O)

ACCESSORIES

Gauge kit: accuracy class 1,6

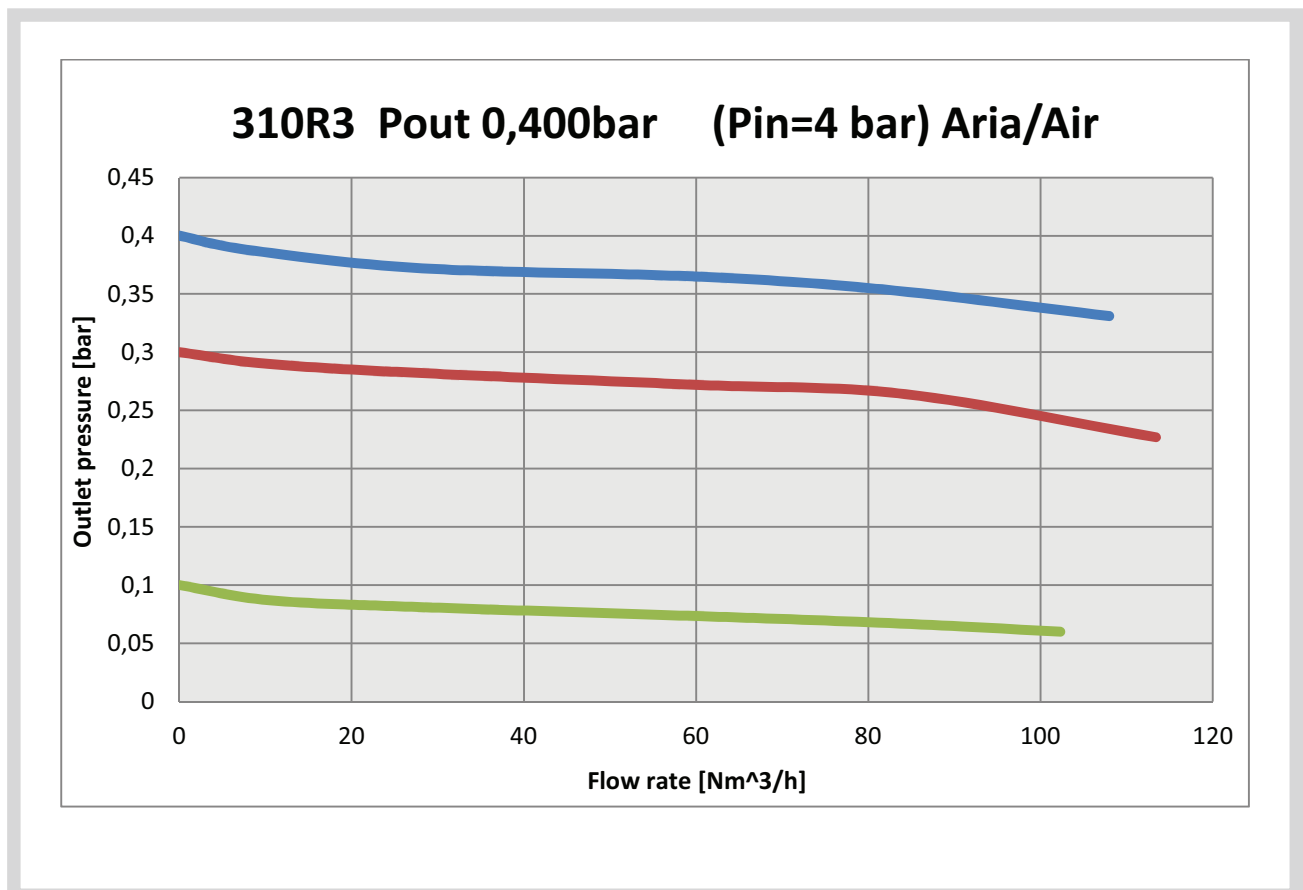
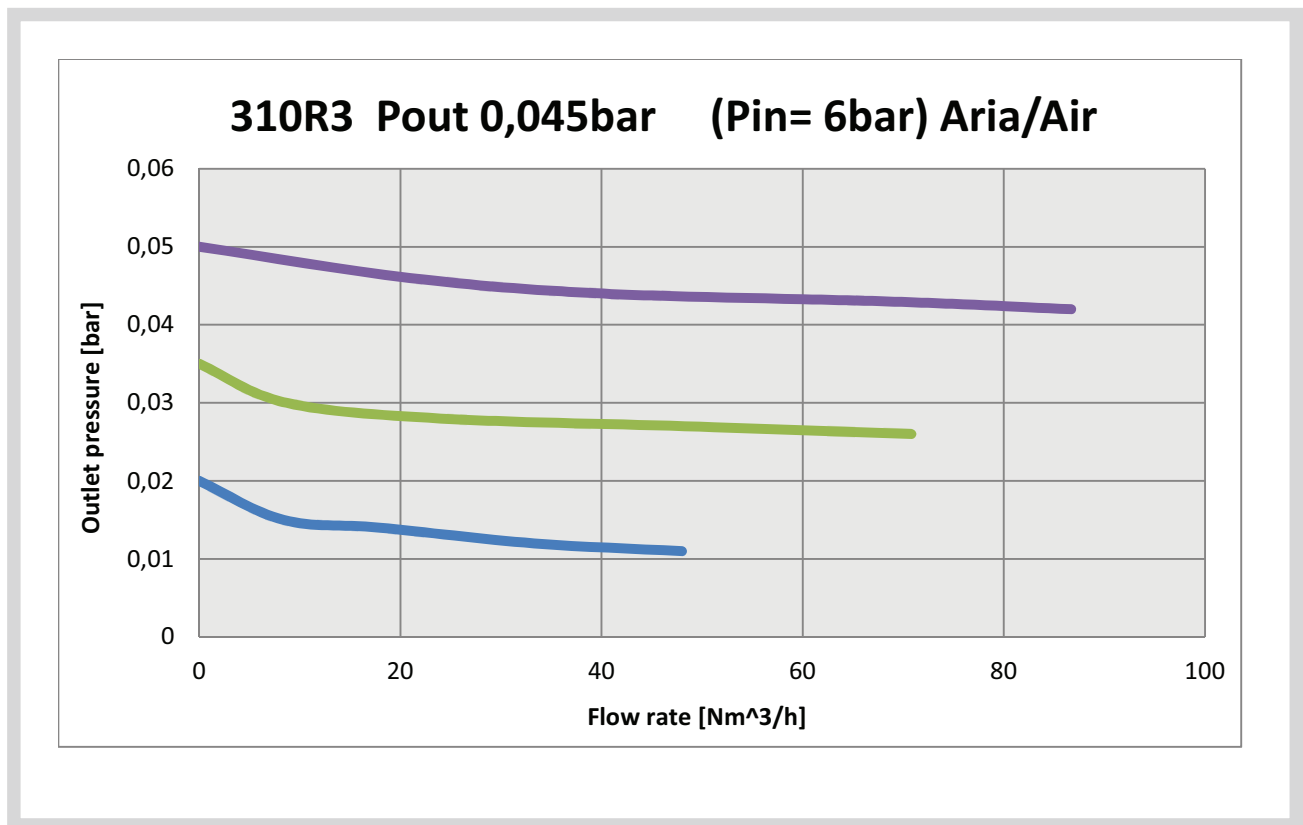
Gasket material different from standard

SPARE PARTS

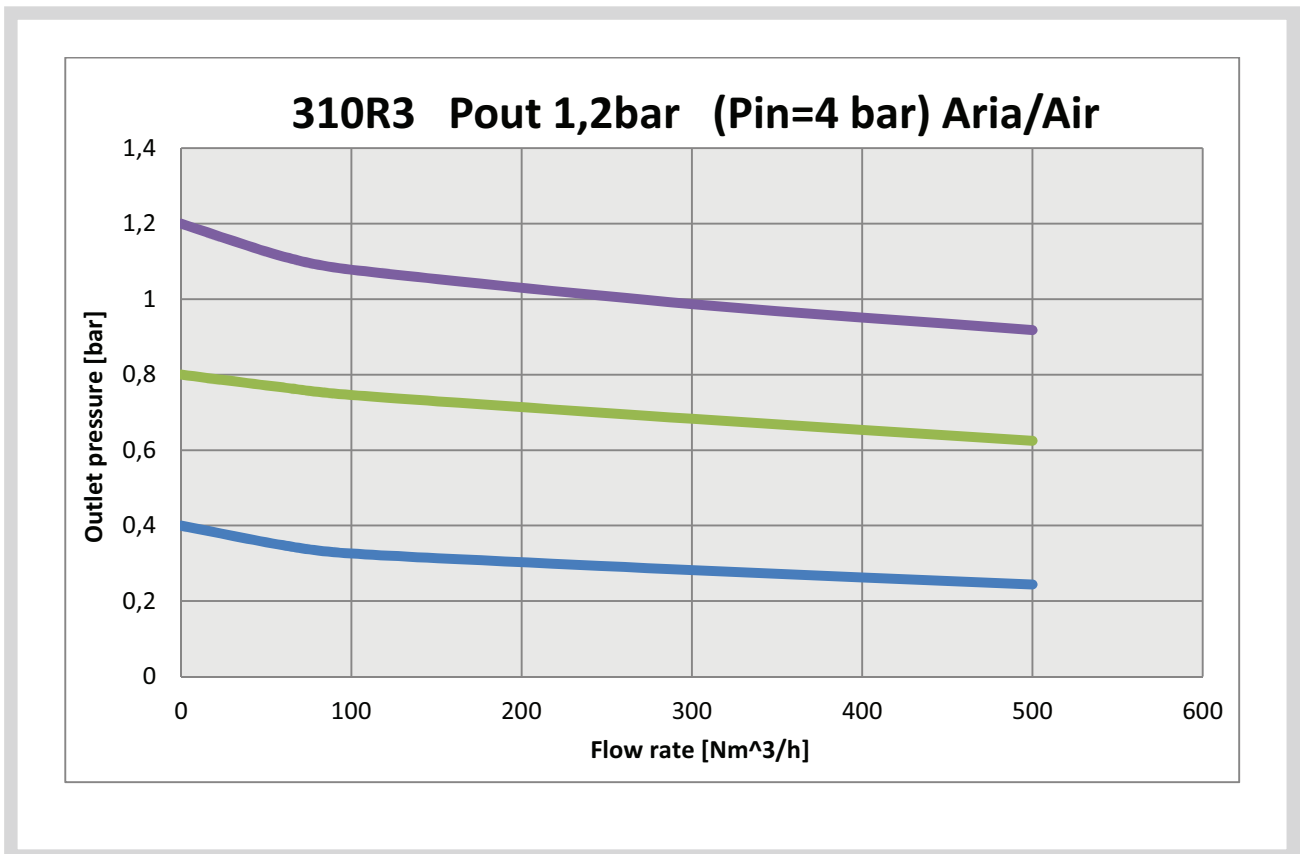
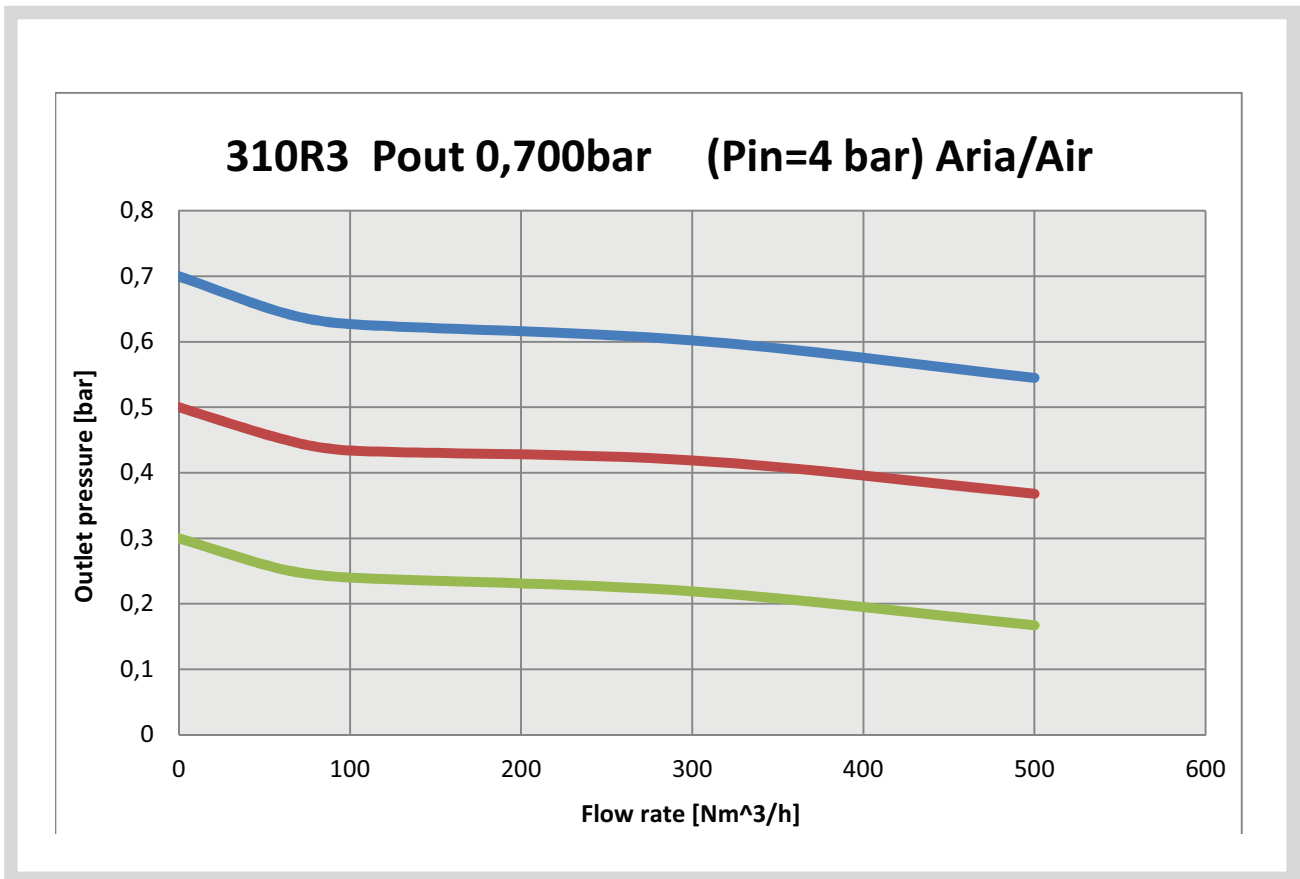
Gauges

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

flow chart



flow chart



available model types

Regolatori di pressione ad alta sensibilità High sensibility pressure regulators

Campana in acciaio inox 316L / Bonnet of stainless steel 316L

Corpo in acciaio inox 316L / Body of stainless steel 316L

Particolari interni in acciaio inox 316L / Internal parts of stainless steel 316L

TYPE	PS bar	P.Out mbar	CONNECTION IN	CONNECTION OUT	GAUGE CONNECTION	CODE	MEDIUM
							310R3
310R3 A	7	5÷45	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1/4-F G 1/4-F 1/4"NPT-F 1/4"NPT-F	310R3#	O2 * **
310R3 B	7	10÷120	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1/4-F G 1/4-F 1/4"NPT-F 1/4"NPT-F	310R3#	O2 * **
310R3 C	7	10÷400	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1/4-F G 1/4-F 1/4"NPT-F 1/4"NPT-F	310R3#	O2 * **
310R3 D	7	15÷700	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1/4-F G 1/4-F 1/4"NPT-F 1/4"NPT-F	310R3#	O2 * **
310R3 E	7	200÷1200	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1-F G 3/4 -F 1" NPT-F 3/4 " NPT-F	G 1/4-F G 1/4-F 1/4"NPT-F 1/4"NPT-F	310R3#	O2 * **

* Aria - N2 - He - Ar - H2 - C3H8 - CH4

** NH3 - CO2 - N2O

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / EXECUTIONS DIFFERENT FROM STANDARD

Pressione uscita prearata, sopra 0,1 bar / Pre-set outlet pressure for outlet pressure more than 0,1 bar

Pressione uscita tarata fissa, sopra 0,1 bar / Fixed outlet pressure for outlet pressure more than 0,1 bar

O-ring secondo FDA / O-ring according to FDA

O-ring diversi da standard / O-ring different from standard

Convogliamento su campana / Connection for bonnet piping

Stampigliatura su specifica del cliente / Not standard branding

Versione ATEX / ATEX version

Temperatura diversa da standard / Temperature different from standard

Sgrassato uso O2 / Degreased for O2

ACCESSORI / ACCESSORIES

Kit manometro ø 63 e raccordo inox

Stainless steel Gauge ø 63 back connection with fitting

310R3 A	M63301	0+60 mbar 0+600 mmH2O
310R3 B	M63302	0+300 mbar 0+3000 mmH2O
310R3 C	M63303	0+1bar
310R3 D	M63303	0+1bar
310R3 E	M63307	0+2,5 bar

generating the product code

Regolatore 3° stadio 310R3 AISI 316L			
AA BB CC DD EE FF			
AA	Attacchi / Connections	Q0	G 3/4-F
		R0	G 1-F
		X0	3/4"NPT-F
		Y0	1"NPT-F
BB	Pressione ingresso / Inlet pressure	I0	PS 7bar
CC	Intervallo uscita - Outlet range	N0	Mod. A Pout 5÷45 mbar
		J0	Mod. B Pout 10÷120 mbar
		K0	Mod. C Pout 10÷400 mbar
		T1	Mod. D Pout 15÷700 mbar
		AA	Mod. E Pout 0,2÷1,2 bar
DD	Tipologia di fluido / Fluid type	15	O2
		98	EPDM
		99	FPM
EE	Marchiato / Marked	I0	ID
FF	Accessori/ Accessories	0	Nessun accessorio

CODE COMPOSITION EXAMPLE

310R3# R0 I0 N0 99 I0 0

310R3#: AISI 316 L precision regulator 310R3

R0: connection G 1-F

I0: maximum inlet pressure 7 bar

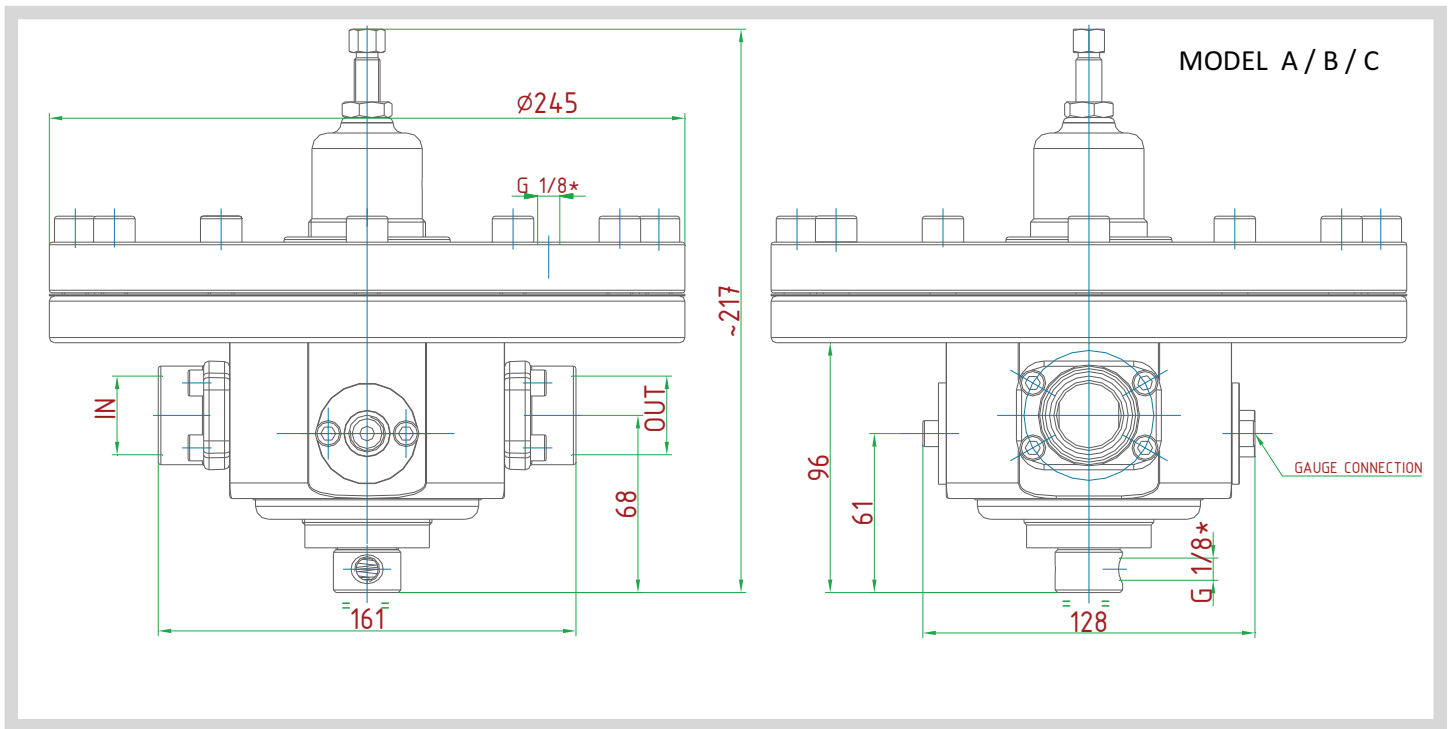
N0: Outlet pressure range 5÷45 mbar

99: FPM gaskets

I0

00: No accessories

technical drawings (dimensions in mm)



TYPE	IN/OUT	GAUGE CONNECTION
310R3 3/4" GF	G 3/4 -F	G 1/4
310R3 1" GF	G 1 -F	G 1/4
310R3 3/4"NPTF	3/4" NPT-F	1/4" NPT-F
310R3 1"-NPTF	1" NPT-F	1/4" NPT-F

*For pipe connection when required; Random orientation

