

# 210R3

## Aluminium high precision pressure regulator



### FEATURES

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

#### Connections

3/4"-F;

1" -F;

1" 1/4-F;

1" 1/2-F

GAS or NPT, by flanges screwed to the body. Connections with EN or ASME flanges available on request.

Outlet pressure is controlled by a rubber diaphragm.

The regulator's main valve is balanced.

Available the ATEX 2014/34/EU version

Brand  $\text{CE} \text{Ex} \text{II}2\text{GcIICTX}$

$\text{CE} \text{Ex} \text{II}2\text{DcIICTX}$ .

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

The product complies with the directive 2014/68/EU PED.

## SPECIFICATIONS

Weight model A/B/C: ~6,6kg (~14,5 lb)  
model D/E: ~7,45 kg (~16,6 lb)

Operating temperature: -20°C ÷ +60°C (-4°F ÷ 140°F) for standard version

Main valve leakage classification: VI (bubble tight)

Flow coefficient Kv= 15 Nm<sup>3</sup>/h (CV = 17,5 US gal/min) models A/B/C

Kv= 36 Nm<sup>3</sup>/h (CV = 42 US gal/min) model D

Kv= 23 Nm<sup>3</sup>/h (CV = 27 US gal/min) model E

Degree of protection: IP25

Gauge connection by flange screwed to the body , the flange can be installed at both sides of the regulator.

- GAS connection versions have G1/4 port for outlet pressure gauge;
- NPT connection versions have 1/4"NPT port for outlet pressure gauge.

## MATERIALS

Body and bonnet: aluminum

Internal parts: AISI 316L/Aluminum

Main valve spring: stainless steel AISI 302

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

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

O-Rings: FPM (other compound available on request)

## ACCESSORIES

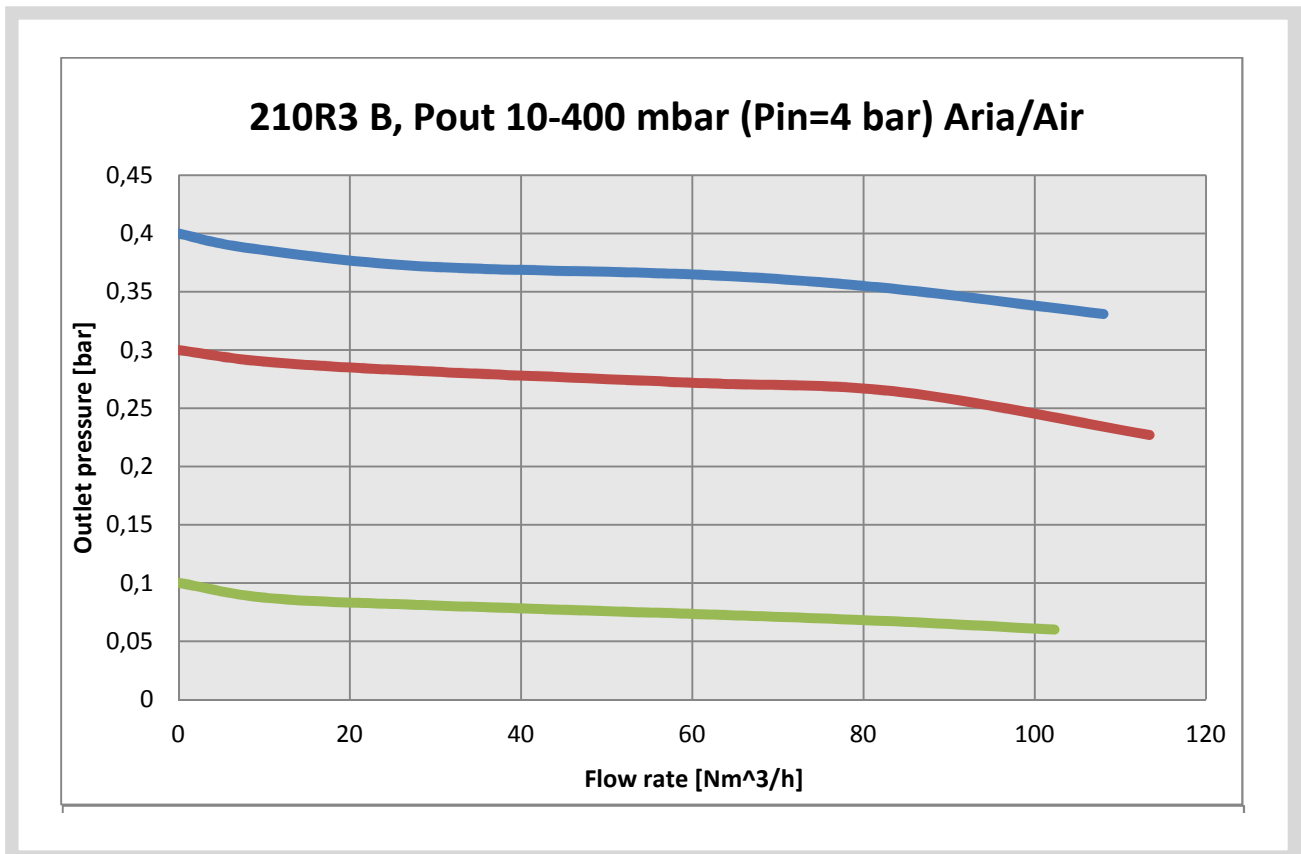
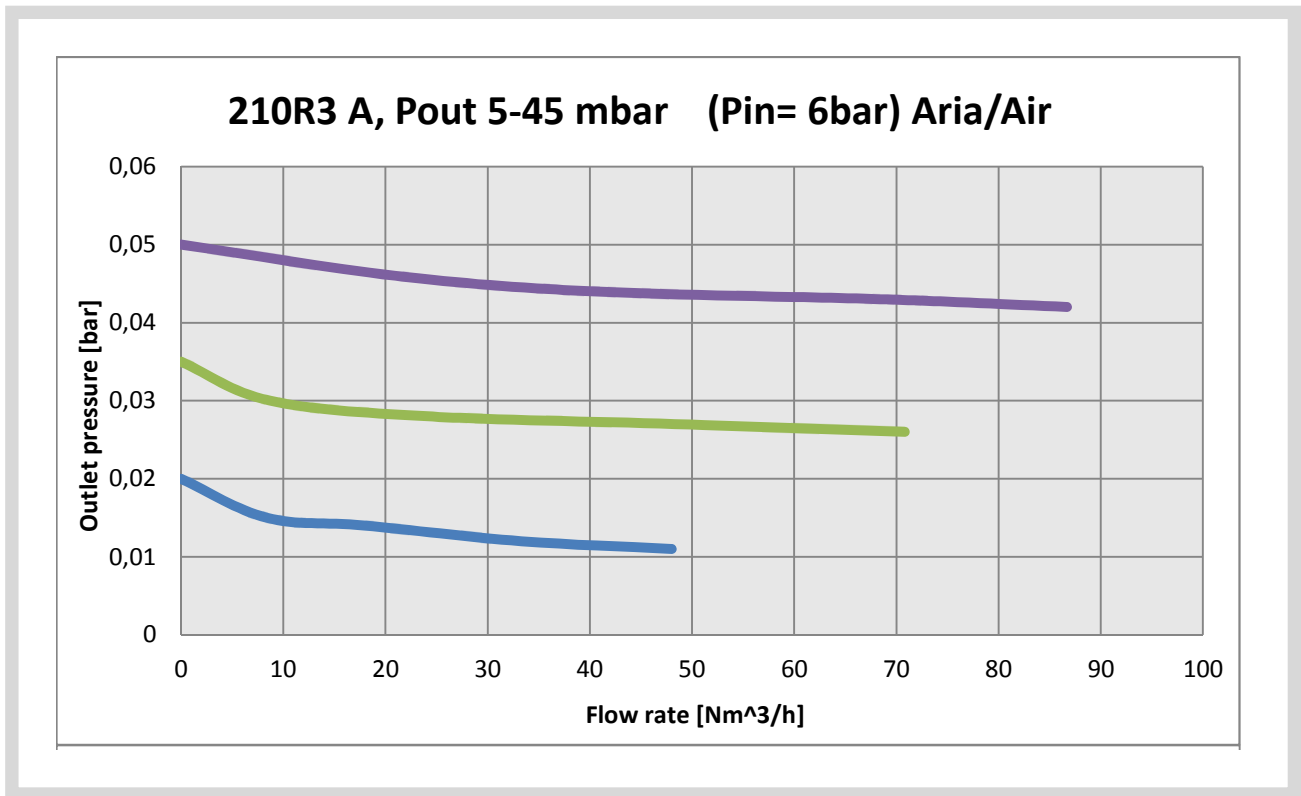
Gauges kit: accuracy class 1,6

## SPARE PARTS

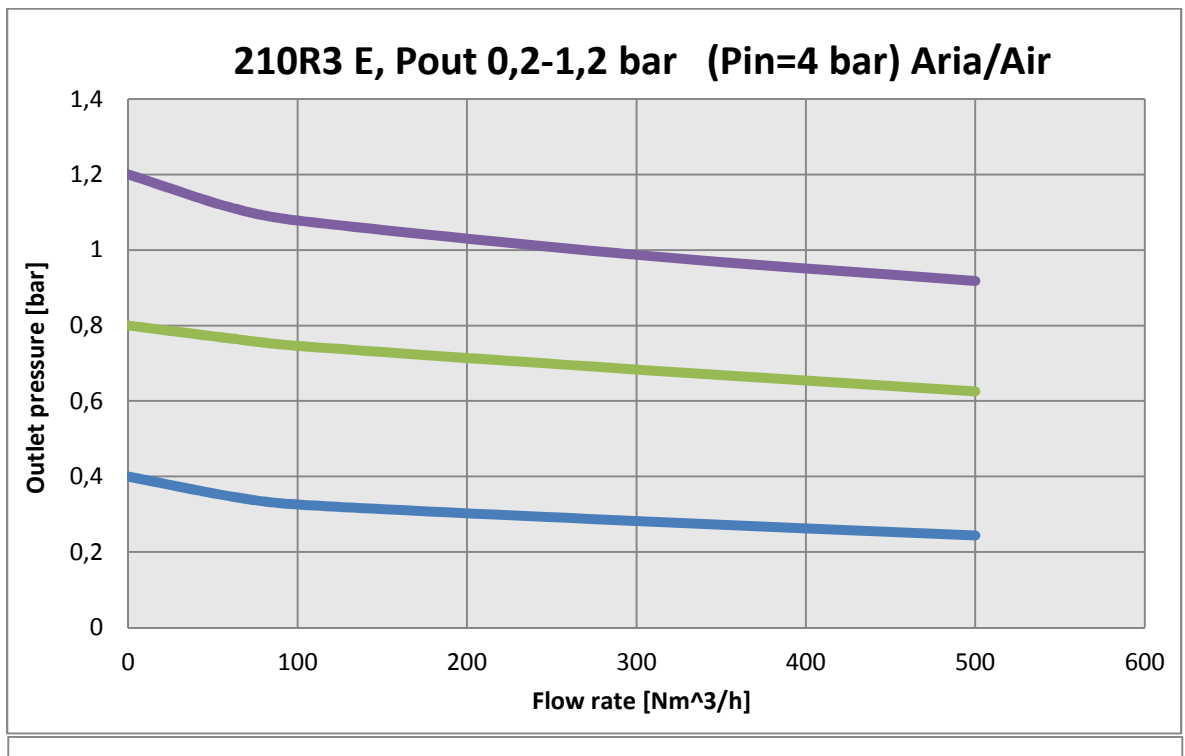
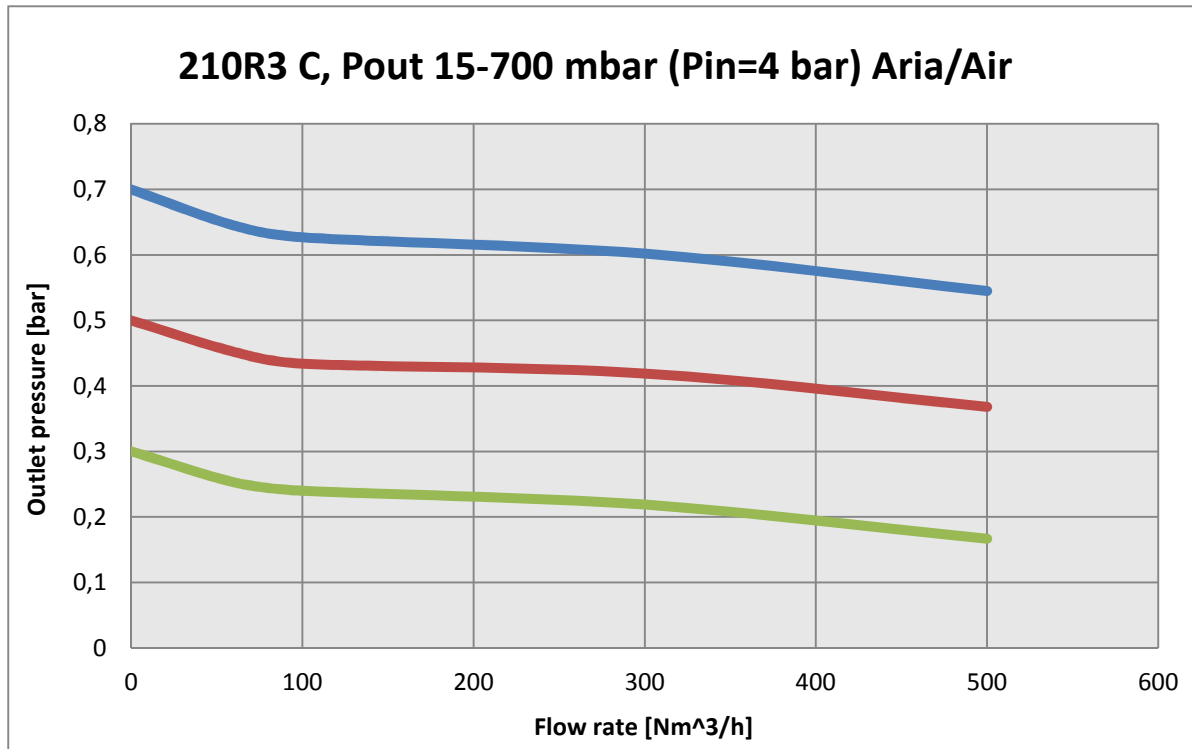
Gauges

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

## Flow charts



## Flow charts



## Generating the product code

Regolatore alta sensibilità in alluminio/ Aluminum high precision pressure			
AA BB CC DD EE FF			
AA	Attacchi / Connections	Q0	G 3/4-F
		R0	G1-F
		J0	G1 1/4-F
		S0	G1 1/2-F
BB	Pressione d'ingresso / Inlet pressure	I0	PS 7bar
CC	Intervallo uscita / Outlet range	N0	Pout 5÷45 mbar (mod. A)
		K0	Pout 10÷400 mbar (mod. C)
		T1	Pout 15÷700 mbar (mod. D)
		J0	Pout 10÷120 mbar (mod. B)
		AA	Pout 0,2÷1,2 bar (mod. E)
DD	Tipologia di fluido / Fluid type	97	NBR
		98	EPDM
		99	FPM
EE	Marchiato / Marked	I0	Insert Deal
		Z0	Dir ATEX 2014/34/EU
FF	Accessori / Accessories	00	Nessun accessorio / No accessories

### CODE COMPOSITION EXAMPLE

**210R3#R0 I0 N0 99 I0 00**

**R0:** Connection G 1-F

**I0:** Maximum inlet pressure 7bar

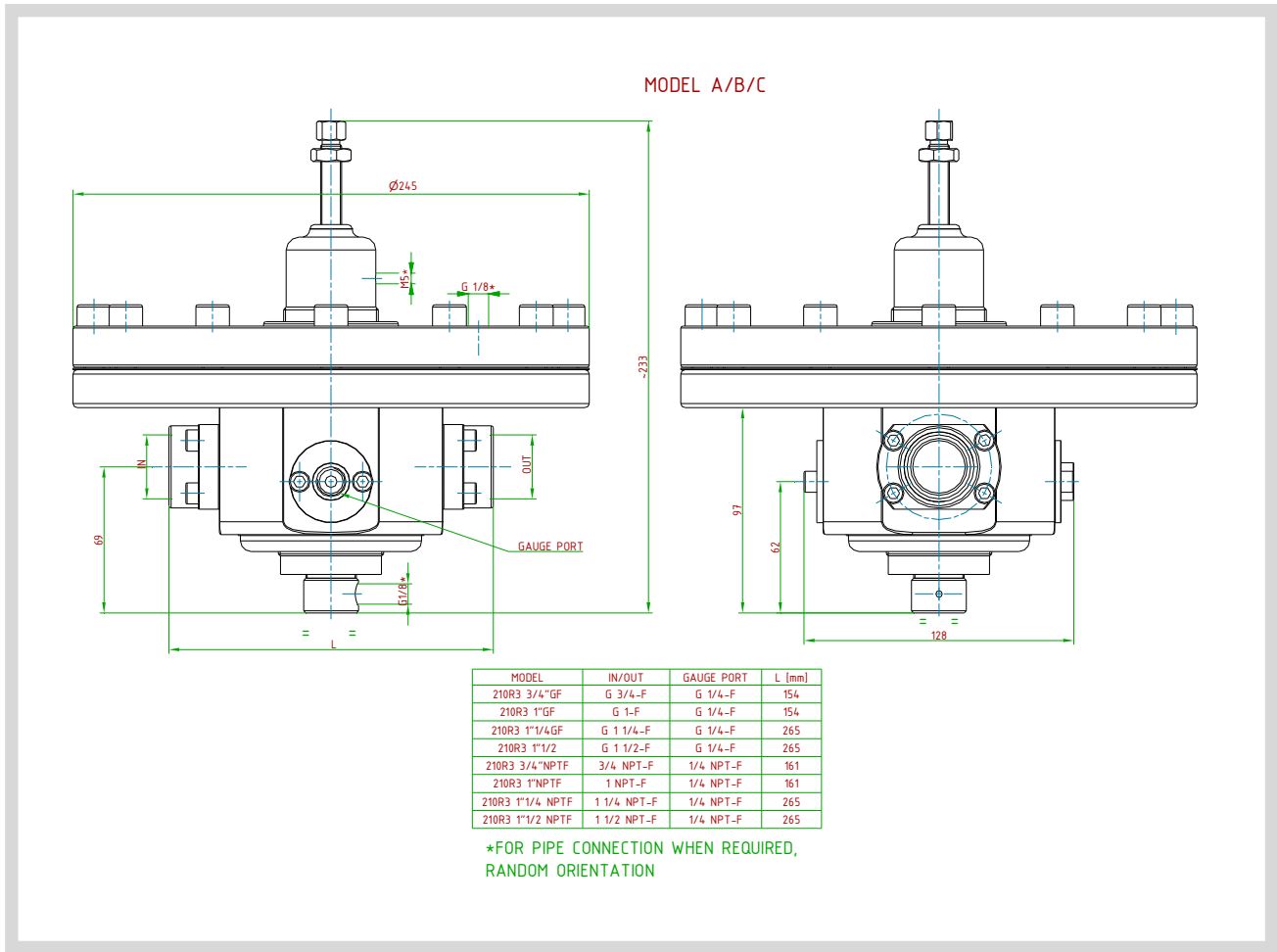
**N0:** Outlet pressure range 5÷45 mbar (mod. A)

**99:** FPM

**I0:** Insert Deal

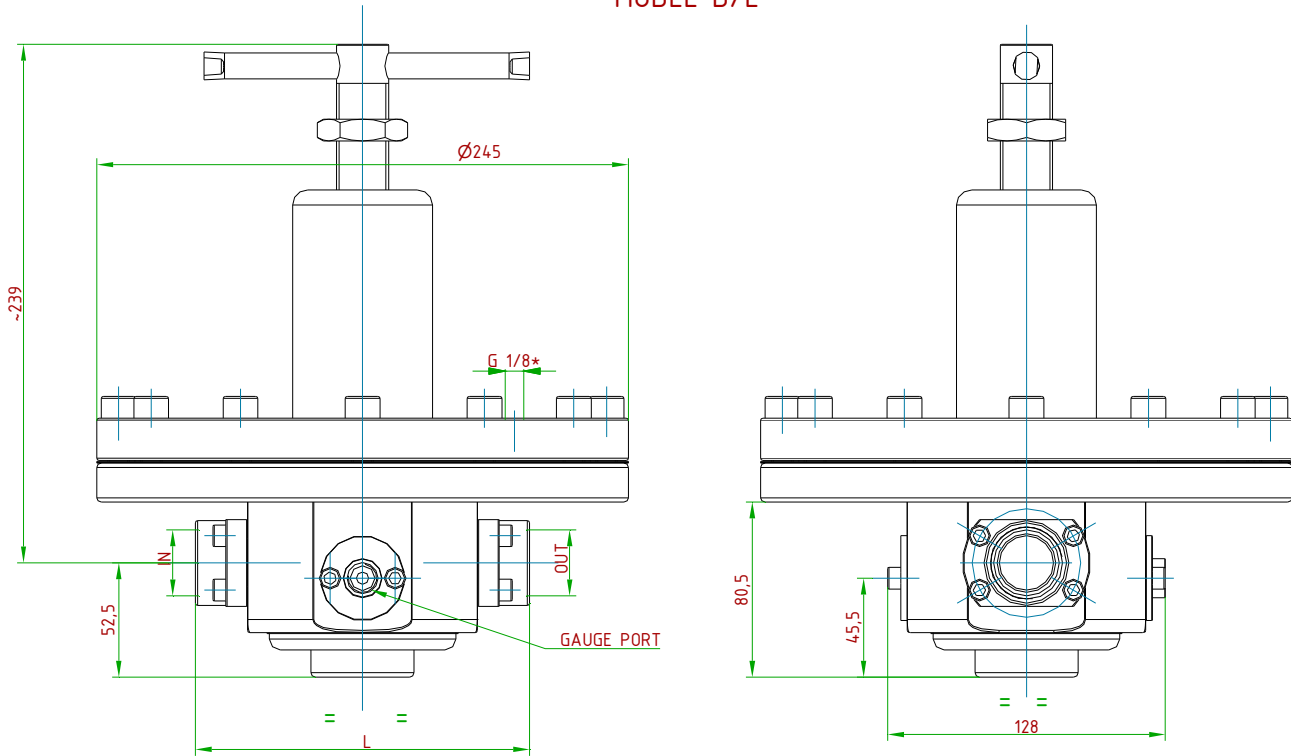
**00:** No accessories

# Technical drawings (dimensions in mm)



# Technical drawings (dimensions in mm)

MODEL D/E



MODEL	IN/OUT	GAUGE PORT	L [mm]
210R3 3/4"GF	G 3/4-F	G 1/4-F	154
210R3 1"GF	G 1-F	G 1/4-F	154
210R3 1"1/4GF	G 1 1/4-F	G 1/4-F	265
210R3 1"1/2	G 1 1/2-F	G 1/4-F	265
210R3 3/4"NPTF	3/4 NPT-F	1/4 NPT-F	161
210R3 1"NPTF	1 NPT-F	1/4 NPT-F	161
210R3 1"1/4 NPTF	1 1/4 NPT-F	1/4 NPT-F	265
210R3 1"1/2 NPTF	1 1/2 NPT-F	1/4 NPT-F	265

\*FOR PIPE CONNECTION WHEN REQUIRED

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**PRESSURE REGULATOR\_210R3\_EN\_01**



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**certificato N° 50 100 9191**  
Company with certificated quality management system.  
**certificate N° 50 100 9191**