

## 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 version

Brand II2GDcIICX.

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: ~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

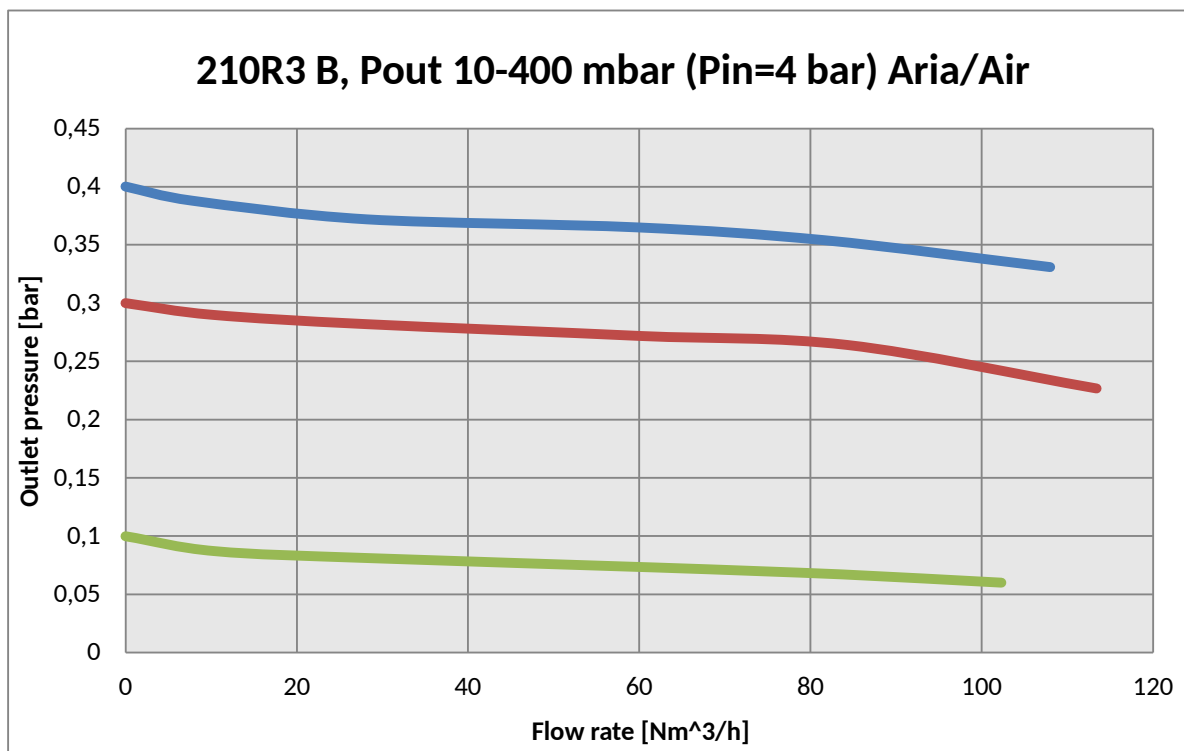
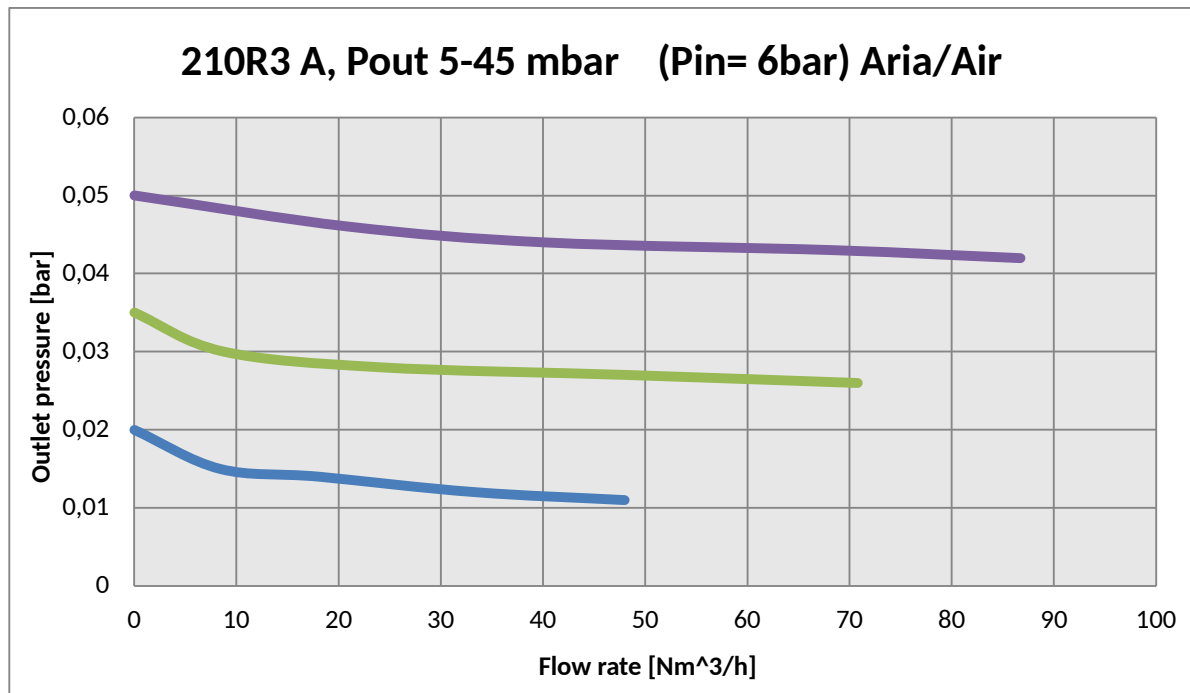
Gauges kit: accuracy class 1,6

## SPARE PARTS

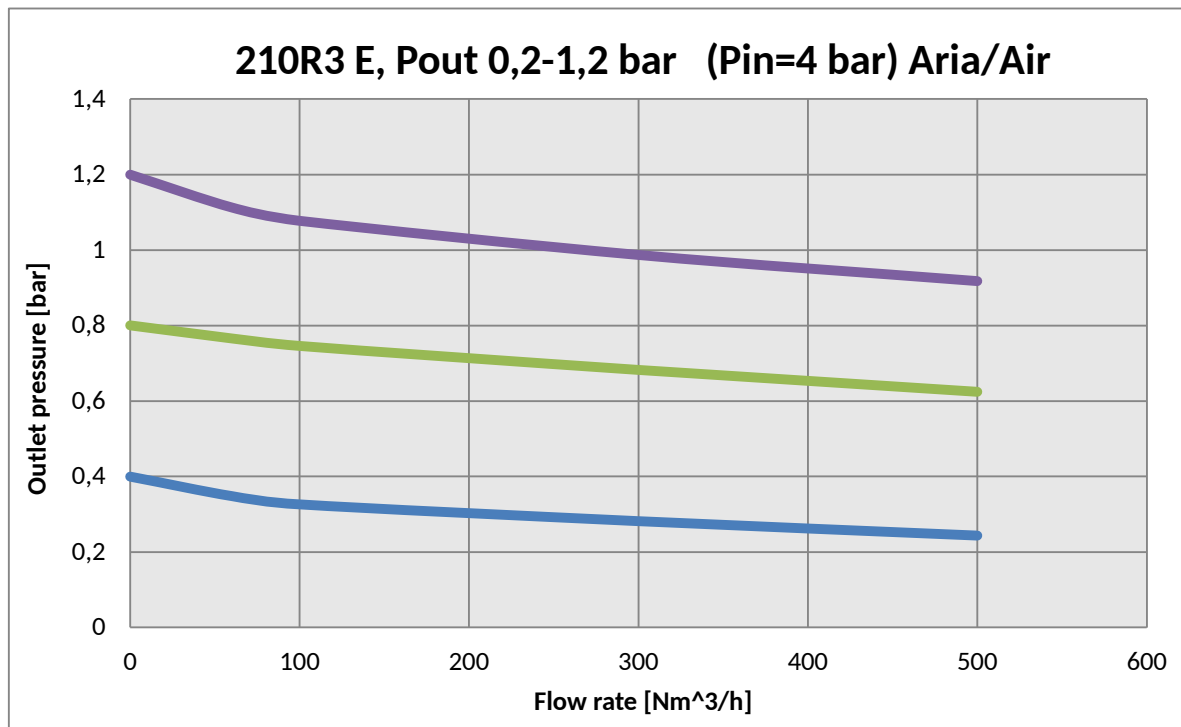
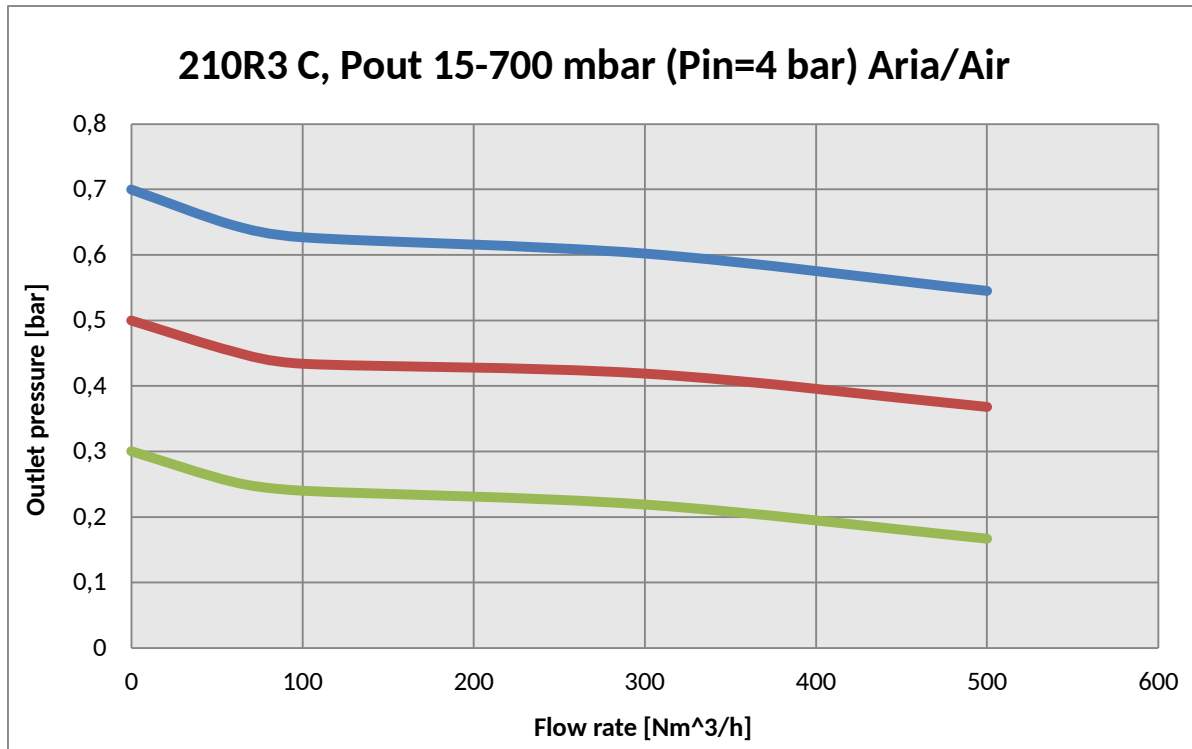
Gauges

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                           |
|  |                                       | X0 | 3/4"NPT-F                          |
|  |                                       | Y0 | 1"NPT-F                            |
|  |                                       | B0 | 1 1/4"NPT-F                        |
|  |                                       | Z0 | 1 1/2"NPT-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. B)          |
|  |                                       | T1 | Pout 15÷700 mbar (mod. C)          |
|  |                                       | J0 | Pout 10÷120 mbar (mod. D)          |
|  |                                       | 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                        |
| FF   | Accessori / Accessories               | 00 | Nessun accessorio / No accessories |

### CODE COMPOSITION EXAMPLE

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

**R0 :** G1-F

**I0 :** PS 7bar

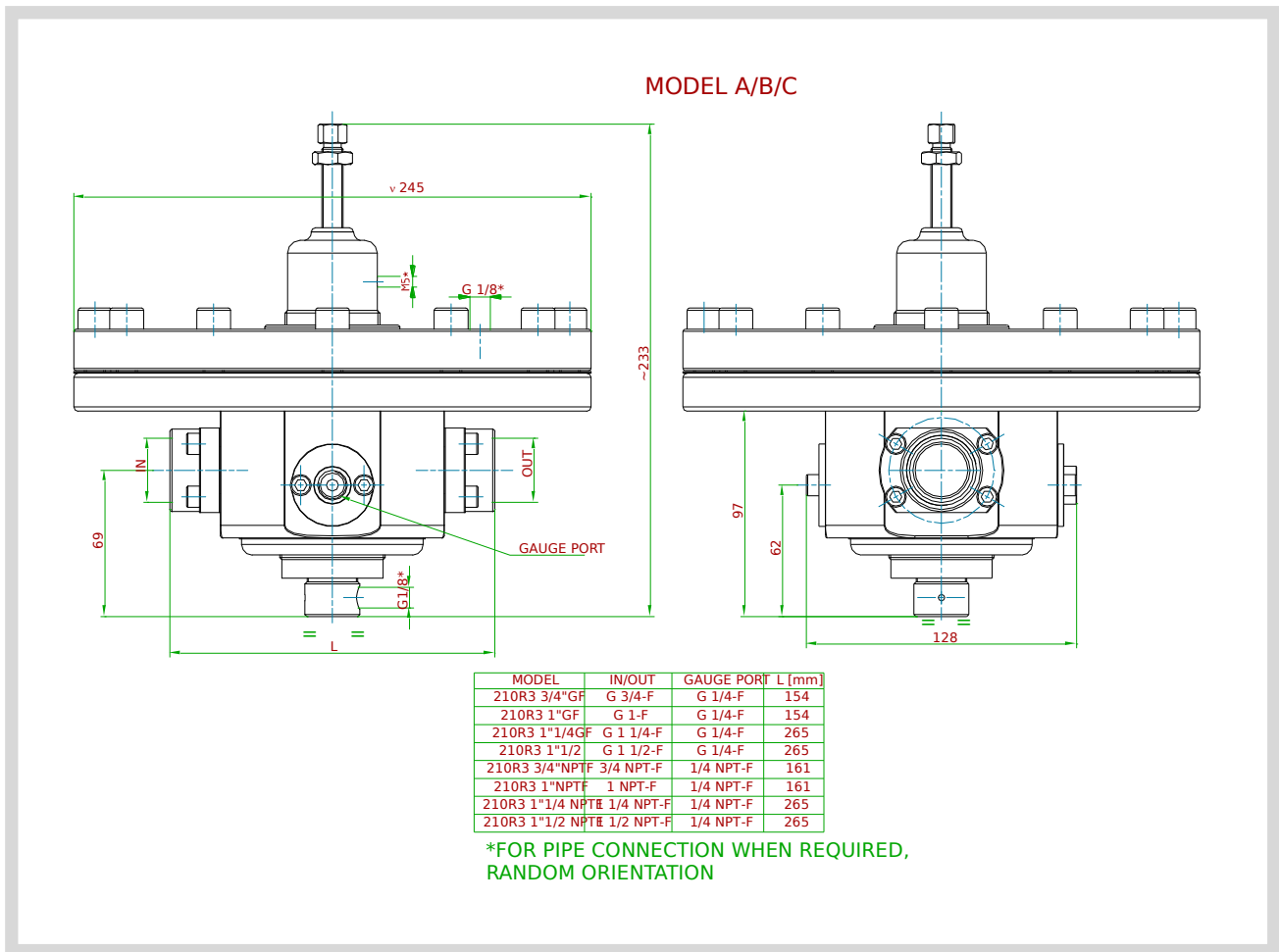
**N0 :** Pout 5÷45 mbar (mod. A)

**99 :** FPM

**I0 :** Insert Deal

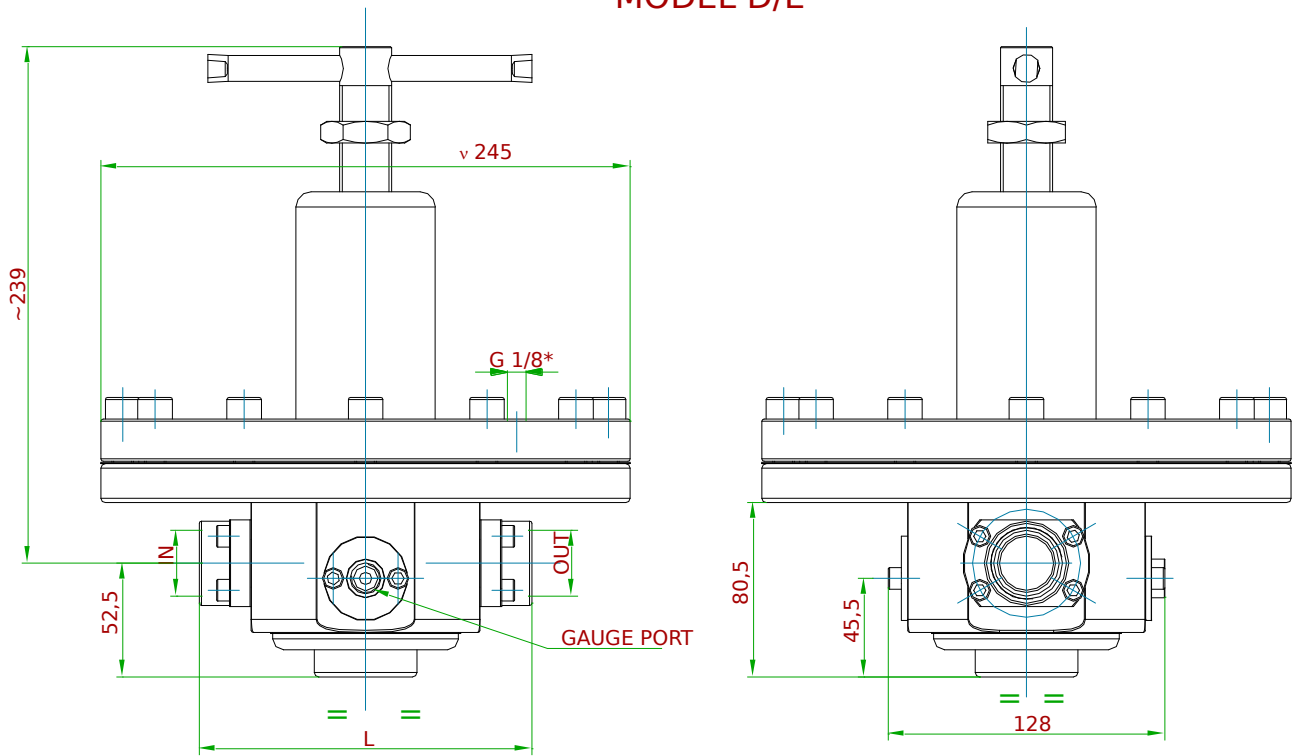
**00 :** Nessun accessorio / No accessories

## 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 | 1/4 NPT-F | 1/4 NPT-F  | 265    |
| 210R3 1"1/2 NPTF | 1/2 NPT-F | 1/4 NPT-F  | 265    |

**\*FOR PIPE CONNECTION WHEN REQUIRED**