

R190

Aluminium precision pressure regulator



FEATURES

Precision pressure regulator for inlet pressure up to 6 bar (87 psi).

Standard version connections G2-F by flanges screwed to the body. NPT and 1 ½" connections available on request.

Outlet pressure is controlled by a rubber diaphragm. The main valve is balanced.

Available the ATEX version

Brand **CE**  II 2GDc IICX.

For use in potentially 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: ~15 kg (~33 lb)

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

Main valve leakage classification: VI

Flow coefficient: $K_v = 5.7 \text{ Nm}^3/\text{h}$ ($C_v = 6,6 \text{ US gal/min}$)

Degree of protection: IP25

G $\frac{1}{4}$ ports for outlet pressure gauge

Adjusting screw to set outlet pressure

MATERIALS

Body and bonnet: aluminium

Internal parts: brass/AISI 316L

Main valve spring: stainless steel AISI 302

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

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

O-Rings: NBR/EPDM (depending on the fluid)

Main valve gasket: NBR/EPDM (depending on the fluid)

ACCESSORIES

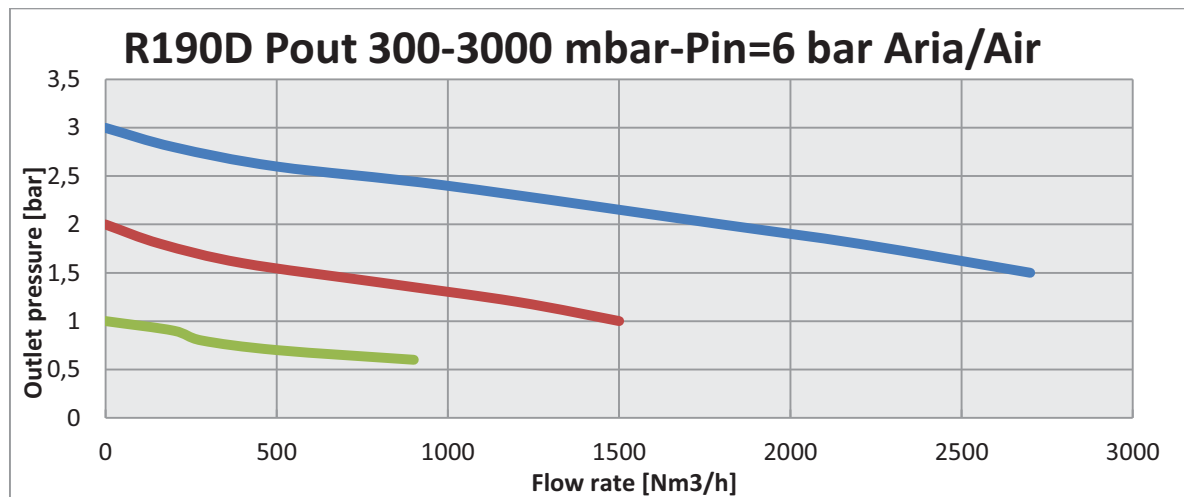
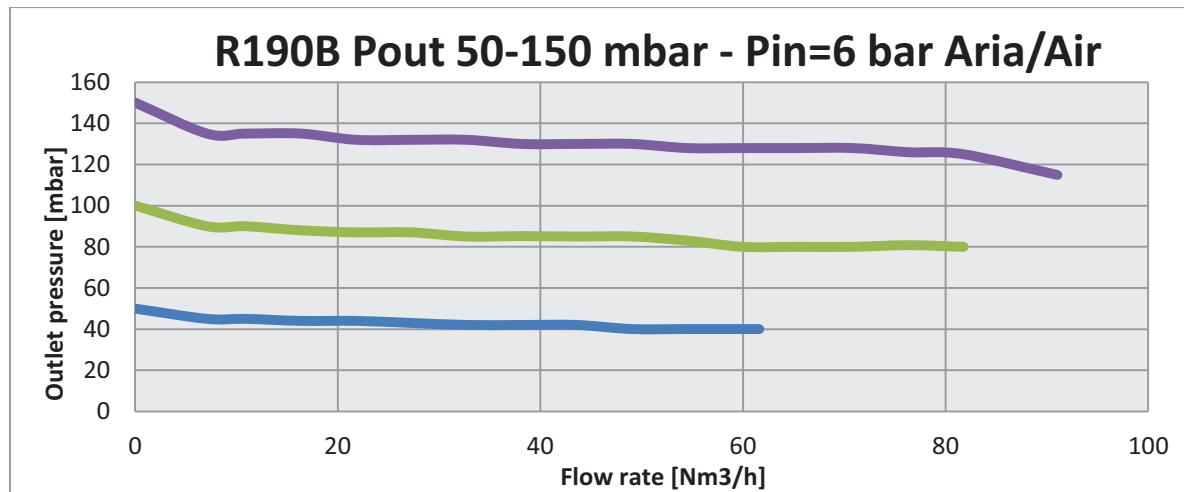
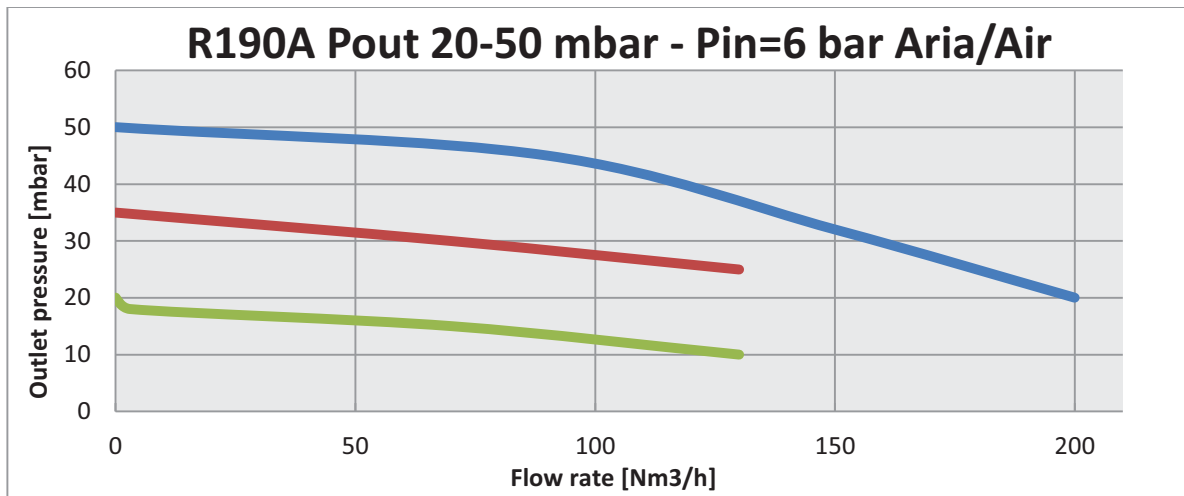
Gauges kit: accuracy class 1.6

SPARE PARTS

Gauges

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

flow charts



available model types

Regolatori di pressione ad alta sensibilità High sensibility pressure regulators

Campana in alluminio / Bonnet of aluminium

Corpo alluminio / Body of aluminium

Particolari interni in ottone / Internal parts of brass

TYPE	PS bar	P.Out mbar	CONNECTION IN	CONNECTION OUT	CODE	MEDIUM
						R190
R 190 A	6	20-50	G 2-F	G 2-F	190#TO	*
						**
R 190 B	6	50-150	G 2-F	G 2-F	190#TO	*
						**
R 190 C	6	150-300	G 2-F	G 2-F	190#TO	*
						**
R 190 D	6	300-3000	G 2-F	G 2-F	190#TO	*
						**

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

** CO2 - N2O

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi in/out diversi da standard (2" NPT-F - G 1 1/2-F - 1"1/2 NPT-F) / Connections different from standard (2" NPT-F - G
Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / EXECUTIONS DIFFERENT FROM STANDARD

Pressione entrata 7 bar / Inlet pressure 7 bar

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 - FPM / O-ring different from standard - FPM

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

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 / Degreased

ACCESSORI / ACCESSORIES

Kit manometro ø 63 e raccordo

Gauge ø 63 back connection with fitting

R 190 A	M62204	0+100 mbar 0+1000 mmH2O
R 190 B	M62202	0+300 mbar 0+3000 mmH2O
R 190 C	M62203	0+1bar
R 190 D	M62206	0+6 bar

generating the product code

R 190 LL			
AA BB CC DD E FF			
AA	Attacchi / Connections	T0	G 2-F
BB	Pressione ingresso / Inlet pressure	A0	PS 6 bar
CC	Intervallo uscita / Outlet range	B0	MOD D Pout 0,3 - 3 bar
		L0	MOD C Pout 150 - 300 mbar
		R0	MOD A Pout 20 - 50 mbar
		U0	MOD B Pout 50 - 150 mbar
DD	Tipologia di fluido / Fluid type	97	NBR
		98	EPDM
E	Marchiato / Marked	I	ID
		Z	Dir ATEX 94/9 CE
FF	Accessori / Accessories	00	Nessun accessorio

CODE COMPOSITION EXAMPLE

190#T0 A0 R0 97 I 00

190#: Regulator R190 in LL

T0: Connection G2-F

A0: Maximum inlet pressure 6 bar

R0: Outlet pressure range 20 - 50 mbar

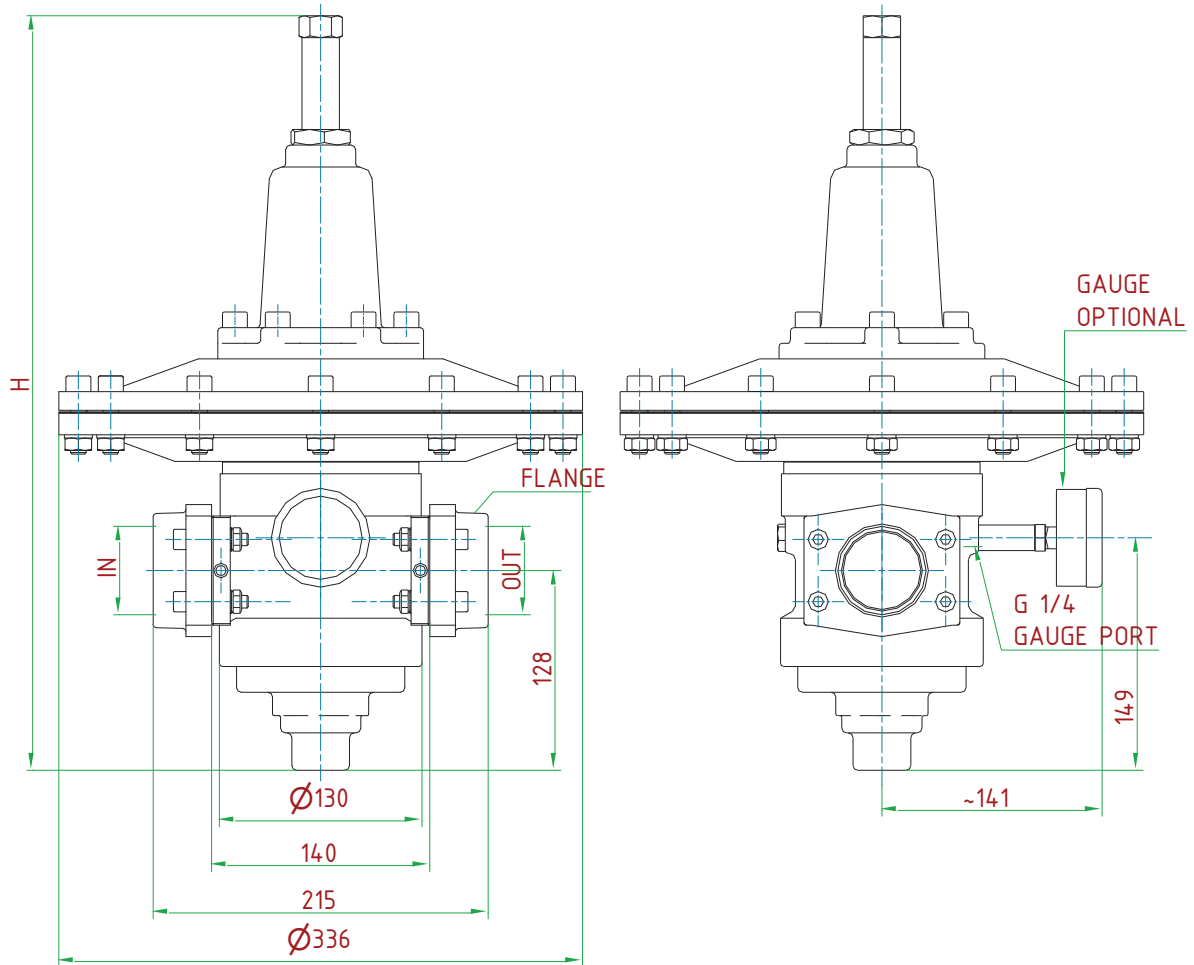
97: NBR Gaskets

I

00: No accessories

technical drawings (all dimensions in mm)

MODEL	H	Pout	GAUGE KIT	GAUGE
R190 A	~ 484	20 ÷ 50 mbar	M62204	0 ÷ 100 mbar
R190 B	~ 484	50 ÷ 150 mbar	M62202	0 ÷ 300 mbar
R190 C	~ 467	150 ÷ 300 mbar	M62203	0 ÷ 1 bar
R190 D	~ 450	0.3 ÷ 3 bar	M62206	0 ÷ 6 bar



TYPE	IN/OUT	FLANGE	KIT
1" 1/2 GF	G1 1/2-F	P37012	M27208
2"GF	G2-F	P37013	M27209
1" 1/2 NPTF	1" 1/2 NPT-F	P37026	-
2"NPTF	2"NPT-F	P37029	-