

R31200

Stainless steel AISI 316L high pressure regulator,
for compressed air, gas and liquids



FEATURES

High pressure regulator for cylinder or manifold; standard version inlet pressure up to 220 bar (3190 psi), higher pressure for special version.

Ideal for industrial application and for welding equipment.

Inlet connection by nipple and hexagon nut G $\frac{3}{4}$ -F. Other connections available on request.

Balanced main valve for a constant outlet pressure when varying the upstream pressure.

Outlet pressure up to 15 bar (218 psi) is controlled by a diaphragm; greater outlet pressure is controlled by a piston.

Available the ATEX version.

Brand  II 2GDcllCX.

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

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

SPECIFICATIONS

Gauges: accuracy class 1,6

Regulator weight: ~4.3 Kg (~9,5 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: $K_v = 0.25 \text{ Nm}^3/\text{h}$ ($C_v = 0,29 \text{ US gal/min}$)

Degree of protection: IP25

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Adjusting spring: stainless steel AISI 302/C85 nickel plated NiP/Fe 10 µm, not in contact with the fluid

Main valve spring: stainless steel AISI 302/C85 nickel plated NiP/Fe 10 µm, not in contact with the fluid

Diaphragm (for outlet pressure up to 15 bar): stainless steel AISI 316L

Piston (for greater outlet pressure): stainless steel AISI 316L

O-rings: EPDM or FPM depending on the fluid (other compounds available on request)

Main valve gasket: PTFE + carbon

ACCESSORIES

Ring-nut P35018030304

Kit bracket and ring-nut M1B306

Pilot operated version, pressure setpoint to be controlled by a pilot regulator.

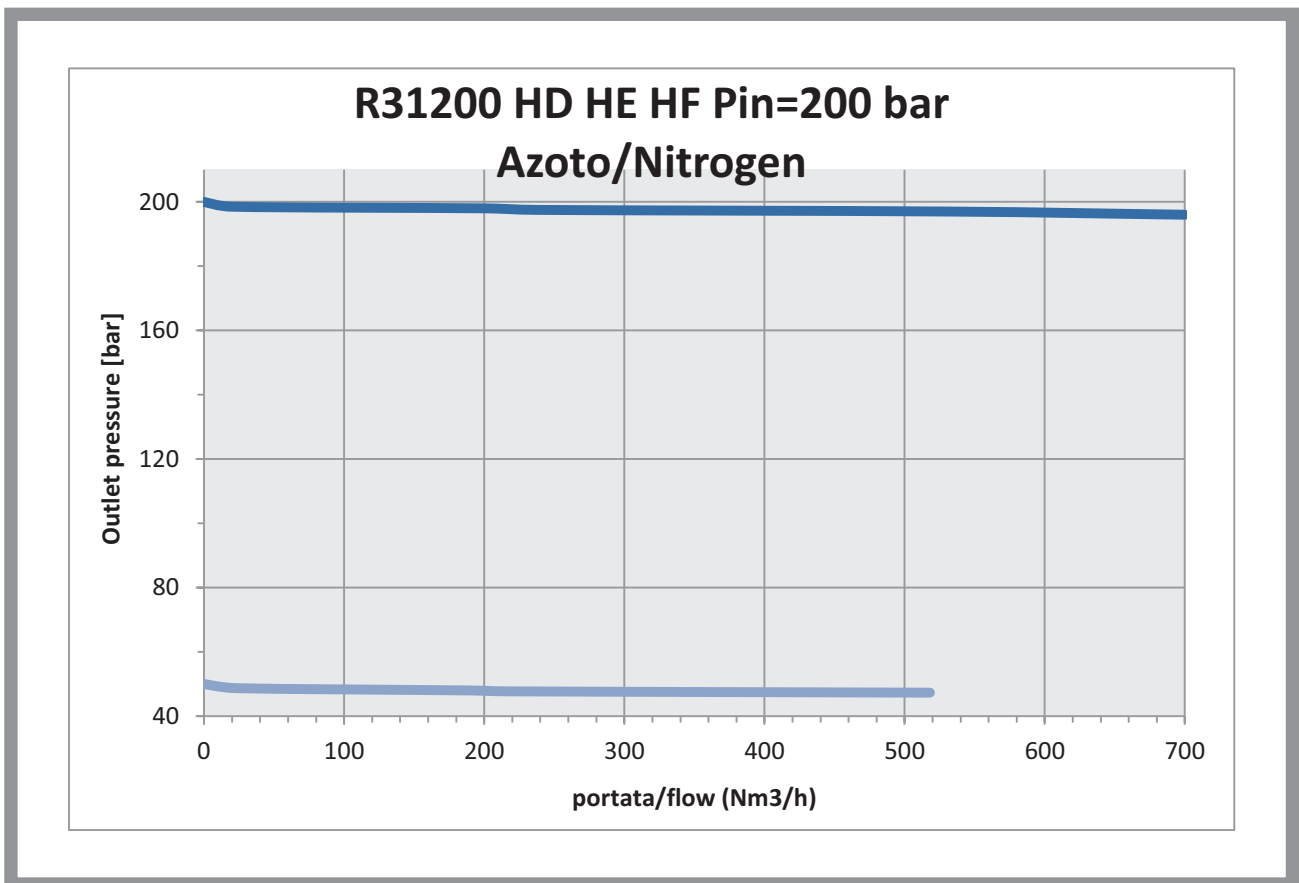
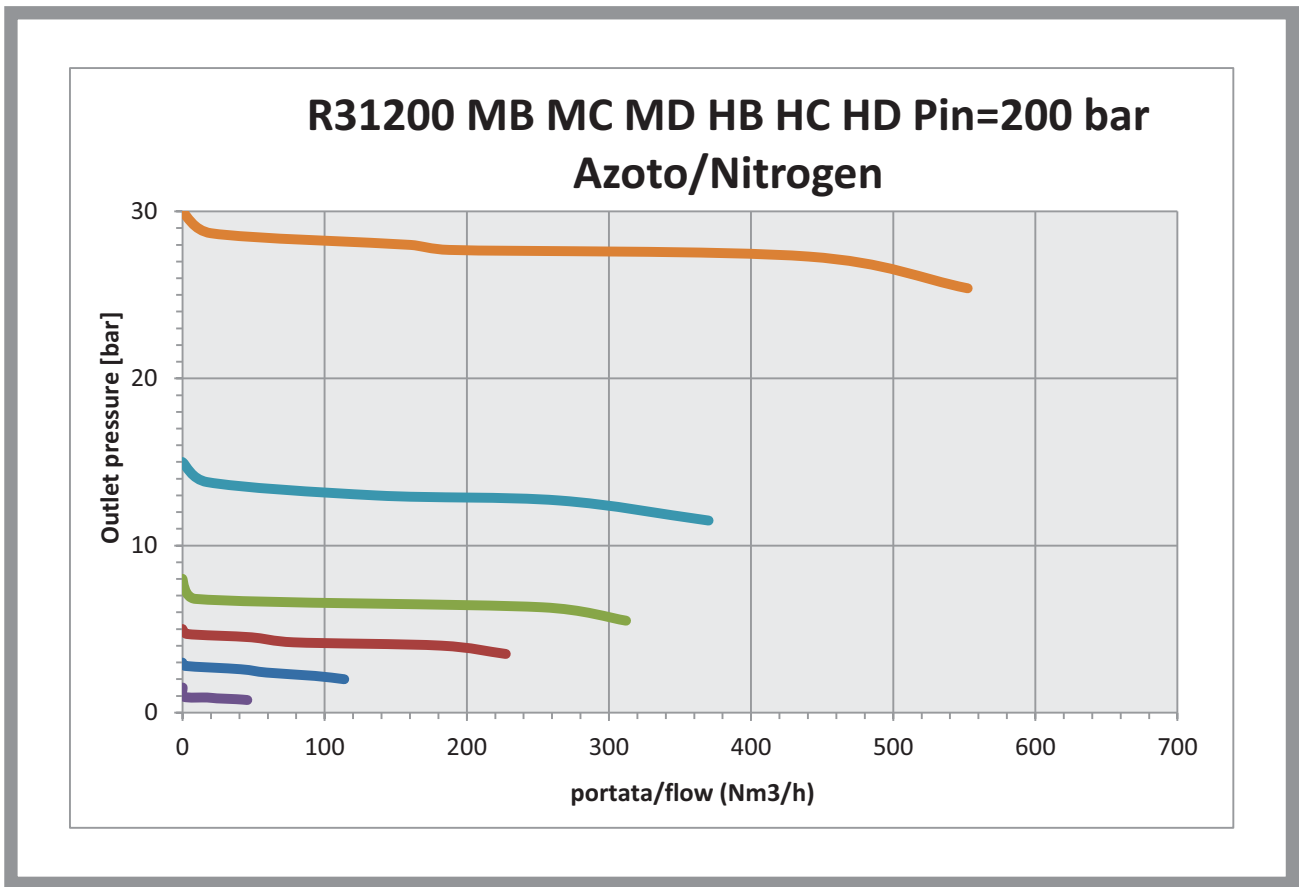
SPARE PARTS

Gauges

Relief valve

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

flow charts



available model types

Corpo da lavorazione di barra tonda, attacco entrata con codolo e dado girevole G 3/4-F
Body by machining round bar, inlet connection with hemispheric end and rotating G 3/4-F nut

TYPE	PS bar	P.Out bar	CONNECTION IN	CONNECTION OUT	CODE	MEDIUM
						R31200
R31200 MB	80	1,5-15	G 3/4-F	G 3/8-F	31200#	CO2 - N2O
R31200 MC	80	3-30	G 3/4-F	G 3/8-F	31200#	CO2 - N2O
R31200 MD	80	5-50	G 3/4-F	G 3/8-F	31200#	CO2 - N2O
R31200 HB	220	1,5-15	G 3/4-F	G 3/8-F	31200#	H2 - CH4
R31200 HC	220	3-30	G 3/4-F	G 3/8-F	31200#	Aria - N2 - Ar - He
						H2 - CH4
R31200 HD	220	5-50	G 3/4-F	G 3/8-F	31200#	Aria - N2 - Ar - He
						H2 - CH4
R31200 HE	220	10-100	G 3/4-F	G 3/8-F	31200#	Aria - N2 - Ar - He
						H2 - CH4
R31200 HF	220	20-200	G 3/4-F	G 3/8-F	31200#	Aria - N2 - Ar - He
						H2 - CH4

MEDIUM	POSSIBILITA' ATTACCHI BOMBOLA UNI/POSSIBILITY BOTTLE UNI CONNECTION
CO2	Bombola_Rampa / Bottle_Manifold 2-UNI 11144
N2O	Bombola / Bottle 9-UNI 11144
	Rampa / Manifold 2-UNI 11144
Aria	Bombola / Bottle 6-UNI 11144
	Rampa / Manifold 2-UNI 11144
N2	Bombola / Bottle 5-UNI 11144
	Rampa / Manifold 2-UNI 11144
Ar - He	Bombola / Bottle 8-UNI 11144
	Rampa / Manifold 2-UNI 11144
H2 - CH4	Bombola_Rampa / Bottle_Manifold 1H-UNI 11144

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi in/out diversi da standard (nipples esterni G 3/8-F - G 1/2-F - 1/2"NPT-F) / Connections different from standard (external nipples in G 3/8-F - G 1/2-F - 1/2"NPT-F)

Attacchi in/out diversi da standard (nipples esterni 3/4"NPT-F - 1"NPT-F) / Connections different from standard (external nipples 3/4"NPT-F - 1"NPT-F)

Attacchi bombola da standard UNI / Bottle connection from standard UNI

Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / EXECUTIONS DIFFERENT FROM STANDARD

Pressione ingresso 250 bar / Inlet pressure 250 bar

Pressione ingresso 300-400 bar / Inlet pressure 300-400 bar

Pressione uscita pretarata / Pre-set outlet pressure

Pressione uscita tarata fissa, vite con dado cieco / Fixed outlet pressure, screw with cap nut

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

O-ring FPM / O-ring FPM

O-ring speciali / Special O-ring

Convogliamento su campana e Valvola di sovrappressione / Venting on bonnet and over pressure Valve

Versione idonea per liquidi / Execution for liquid

Versione regolatore pilotato / Dome loaded version

Stampigliatura su specifica del cliente / Not standard branding

Versione ATEX / ATEX version

Temperature diverse da standard / Special temperature range

Versione Relieving / Relieving version

Sgrassato uso O2 / Degreased for O2

ACCESSORI / ACCESSORIES

Ghiera P35018030304 / Ring nut P35018030304

Kit staffa + ghiera M1B306 / Kit bracket and Ring nut M1B306

generating the product code

SERIE R31200 AISI 316			
AA BB CC DD E FF			
AA	Attacchi / Connections	00	Vedi tipo fluido, tabella DD
		02	G 3/4-F Girevole
BB	Pressione ingresso / Inlet pressure	J0	PS 220 bar H
		L0	PS 80 bar M
CC	Intervallo uscita / Outlet range	E0	BQ - Pout 1,5 - 15 bar
		F0	CQ - Pout 3 - 30 bar
		G0	DQ - Pout 5 - 50 bar
		V0	FQ - Pout 20 - 200 bar
		X0	EQ - Pout 10 - 100 bar
DD	Tipologia di fluido / Fluid type	98	EPDM
		99	FPM
		U5	5 - UNI 11144
E	Marchiato / Marked	I	ID
		Z	Dir ATEX 94/9 CE
FF	Accessori / Accessories	00	Nessun accessorio
		06	Pretarato
		11	Scarico convogliato

CODE COMPOSITION EXAMPLE

31200# 02 J0 E0 98 I 00

31200#: Regulator R31200 AISI 316L

02: Nipple and G3/4-F nut

J0: Inlet pressure 220 bar

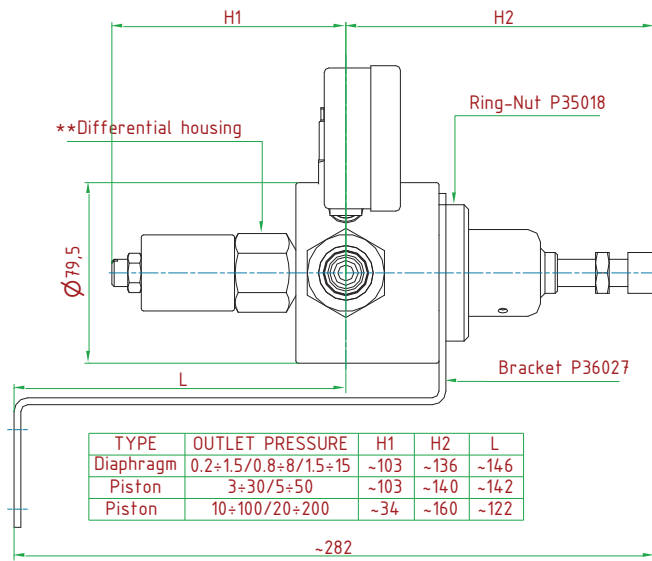
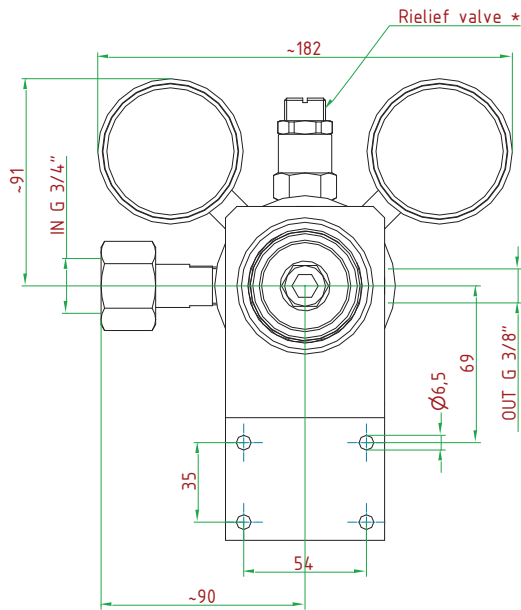
E0: Outlet pressure range 1,5-15 bar

98: EPDM gaskets

I

00: No accessories

technical drawings (all dimensions in mm)



TYPE	OUTLET PRESSURE	H1	H2	L
Diaphragm	0.2+1.5/0.8+8/15+15	~103	~136	~146
Piston	3+30/5+50	~103	~140	~142
Piston	10+100/20+200	~34	~160	~122

Bracket to be ordered separately, Kit order number: M1B306
 * No Relief valve for type piston 100/200 bar
 ** No differential housing for type piston 100/200 bar

MODEL	IN	OUT
R31200 3/4"GF	G3/4-F	G3/8-F
R31200 3/4"GF SX	G3/4-F SX	G3/8-F

Other connections available on request