

R31100

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 versions.

Ideal for industrial application and for welding equipment.

Cylinder inlet connections according to UNI standard, other connections available on request.

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

Available the ATEX version.

Brand $\text{CE} \text{ II 2GDcllCX}$.

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

Available the EAC-EX TP TC 012/2011 versions for the Russian market.

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

SPECIFICATIONS

Gauges: accuracy class 1,6

Regulator weight: ~4.7 Kg (~10,4 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: $K_v = 0.15 \text{ Nm}^3/\text{h}$ ($C_v = 0,18 \text{ USgal}/\text{min}$)

Degree of protection: IP25

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Adjusting spring: stainless steel AISI 302 (not in contact with the fluid)

Main valve spring: stainless steel AISI 302

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 (EPDM for PS 15 bar)

ACCESSORIES

Ring-nut P35018030304

Kit bracket and ring-nut M1B306

Rubber diaphragm for liquids

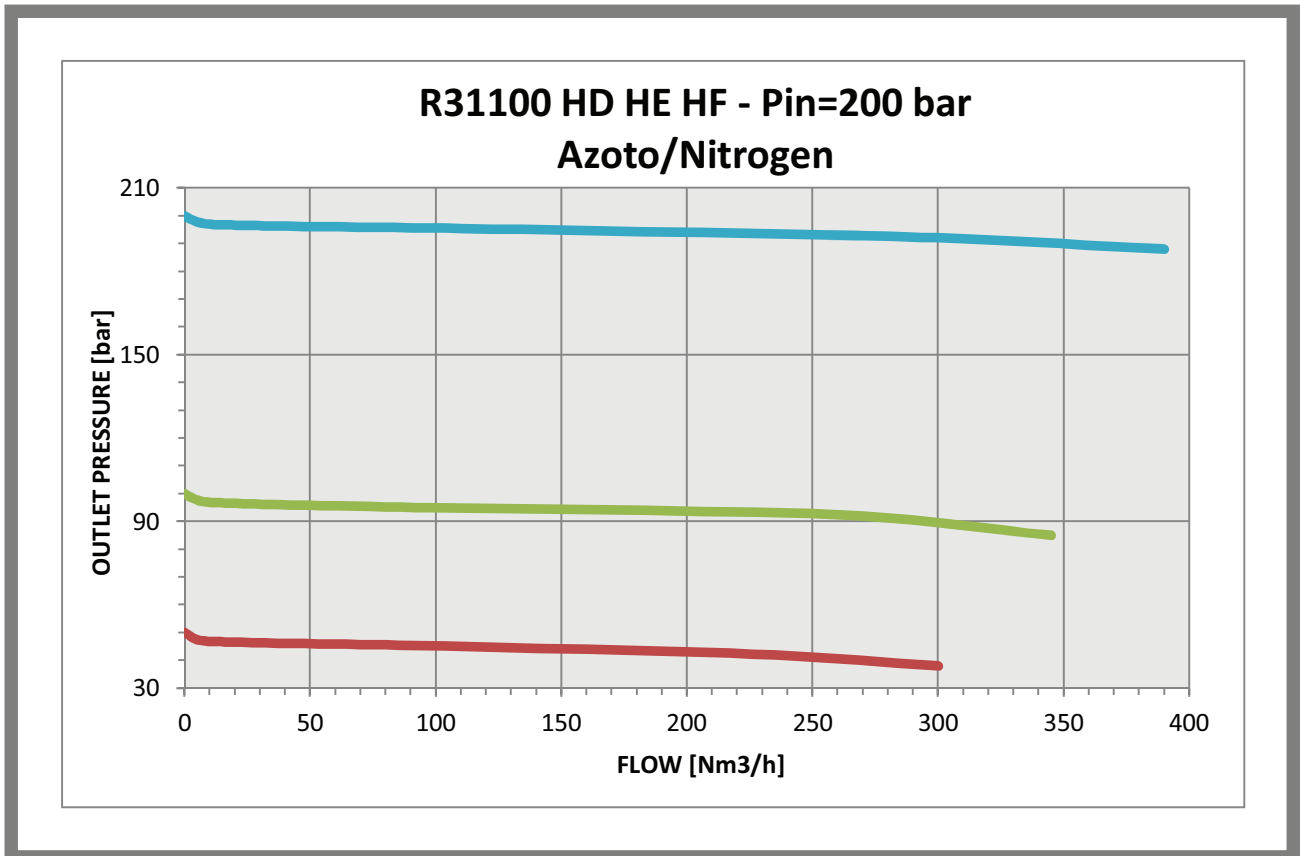
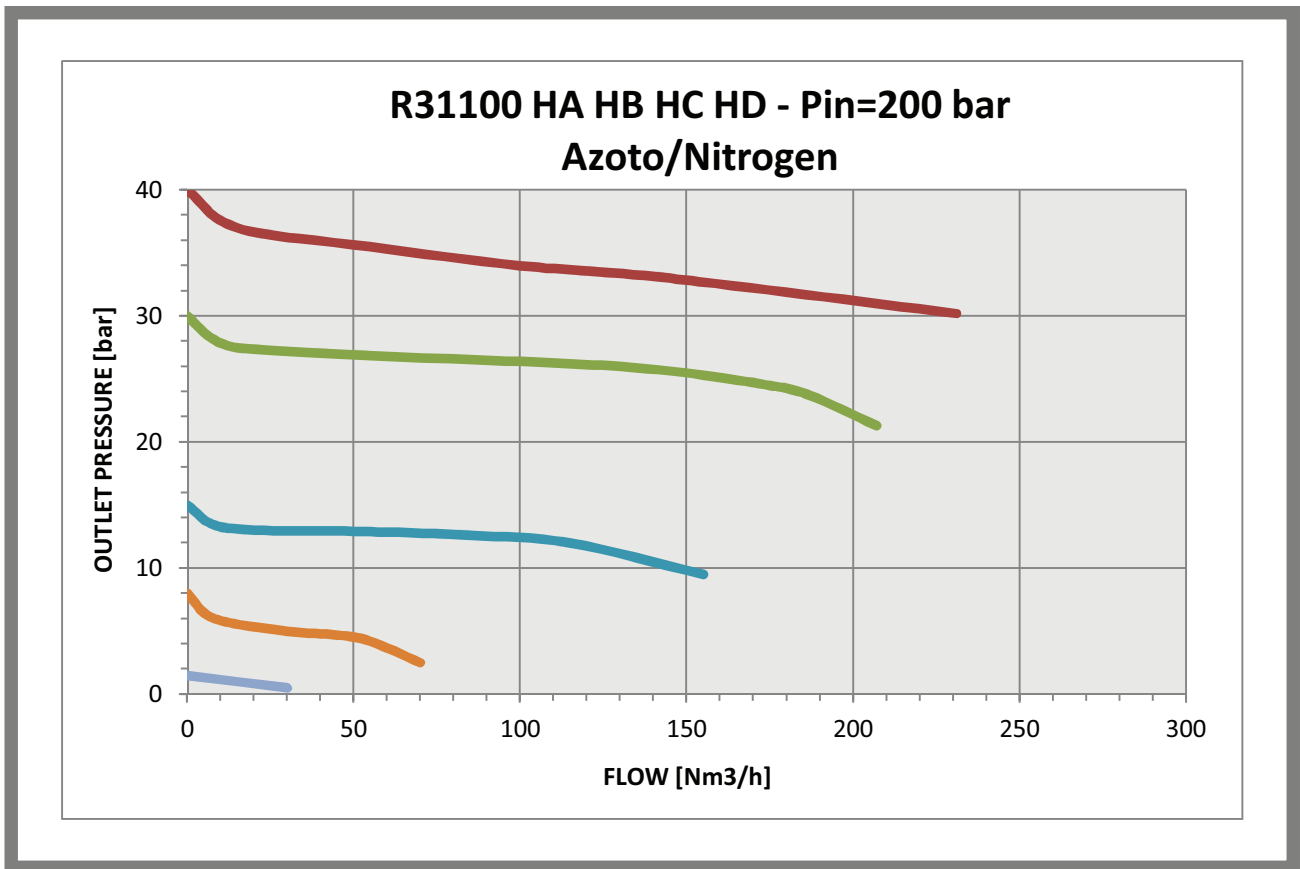
SPARE PARTS

Gauges

Relief valve

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

flow charts



available model types

**Regolatori di pressione per alta pressione
in acciaio inox 316L, idonei per aria compressa, gas tecnici e liquidi**
**Pressure regulators for high pressure,
made of stainless steel 316L, for compressed air technical gases and liquids**

Corpo da lavorazione di barra tonda, attacco entrata per bombola a norme UNI
Body by machining round bar, inlet connection to bottle according to standard UNI

TYPE	PS bar	P.Out bar	CONNECTION OUT	CODE	MEDIUM
					R31100
R31100 LA	15	0,2-1,5	G 3/8-F	31100#	C2H2 - NH3
R31100 MA	80	0,8-8	G 3/8-F	31100#	CO2 - N2O
R31100 MB	80	1,5-15	G 3/8-F	31100#	CO2 - N2O
R31100 MC	80	3-30	G 3/8-F	31100#	CO2 - N2O
R31100 MD	80	5-50	G 3/8-F	31100#	CO2 - N2O
R31100 HA	220	0,8-8	G 3/8-F	31100#	H2 - CH4
R31100 HB	220	1,5-15	G 3/8-F	31100#	Aria - N2 - Ar - He H2 - CH4
R31100 HC	220	3-30	G 3/8-F	31100#	Aria - N2 - Ar - He H2 - CH4
R31100 HD	220	5-50	G 3/8-F	31100#	Aria - N2 - Ar - He H2 - CH4
R31100 HE	220	10-100	G 3/8-F	31100#	Aria - N2 - Ar - He H2 - CH4
R31100 HF	220	20-200	G 3/8-F	31100#	Aria - N2 - Ar - He H2 - CH4

MEDIUM	CONNECTION IN	UNI
C2H2	Rampa / Manifold	1H-UNI 11144
	Codolo bombola / Bottle connection	7F-UNI 11144
NH3	Bombola_Rampa / Bottle_Manifold	3-UNI 11144
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 (G 3/8-F nel corpo, nipples esterni G 1/2-F - 1/2"NPT-F) / Connections different from standard (G 3/8-F in body, external nipples G 1/2-F - 1/2"NPT-F)

Attacchi bombola diversi da standard UNI / Bottle connection different from Italian standard UNI (DIN 477, CGA, NFE 29-650, BS 341 e UNE ITC MIE)

Attacco entrata rampa, esclusi CO2, H2, CH4, NH3 / inlet connection for manifold, not for CO2, H2, CH4, NH3

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 EAC-EX TP TC 012/2011 / EAC-EX TP TC 012/2011 version

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

REGOLATORE R31100 AISI316					
AA BB CC DD E FF					
AA	Attacchi / Connections	00	Vedi tipo fluido, tabella DD		
BB	Pressione ingresso / Inlet pressure	B0	PS 15 bar L		
		J0	PS 220 bar H		
		L0	PS 80 bar M		
CC	Intervallo uscita / Outlet range	A0	AQ - Pout 0,2 - 1,5 bar		
		D0	AQ - Pout 0,8 - 8 bar		
		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	U1	1H - UNI 11144 PED CLASSE III
U2	2 - UNI 11144				
U3	3 - UNI 11144				
U5	5 - UNI 11144				
U6	6 - UNI 11144				
U8	8 - UNI 11144				
E	Marchiato / Marked			I	ID
				Z	Dir ATEX 94/9 CE
FF	Accessori / Accessories	00	Nessun accessorio		
		11	Scarico convogliato		

CODE COMPOSITION EXAMPLE

31100# 00 J0 E0 U1 I 00

31100#: Regulator R31100 AISI316

00: Connection depending on the fluid according to the table DD

J0: Inlet pressure 220 bar

E0: Outlet pressure 1,5-15 bar

U1: Cylinder inlet connection according to standard UNI 1H-UNI 11144

I

00: No accessories

technical drawings (all dimensions in mm)

