

R3133

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



FEATURES

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

Inlet cylinder connections according to UNI standard, other connections available on request.

Outlet pressure up to 15 bar (218 psi) is controlled by a stainless steel diaphragm (AISI 316); greater outlet pressures are controlled by a piston.

Body machined from the bar.
Entirely made of stainless steel is suitable for laboratory and gas analysis applications, as well as for normal industrial applications.

Available the ATEX version

Brand $\text{CE} \text{Ex} \text{II}2\text{GDcIICX}$.

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

Inlet and outlet pressure gauges: accuracy class 1.6

Regulator weight: ~2,7 kg (~5.95 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: $K_v = 0.05 \text{ Nm}^3/\text{h}$ ($C_v = 0.06 \text{ US gal/min}$)

Degree of protection: IP25

Gauges ports: G 1/4 – F

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Main valve spring: stainless steel AISI 302

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

Diaphragm (for outlet pressure up to 15 bar):

- standard: stainless steel AISI 316L
- for liquid and air relieving: two coupled diaphragms NBR+PTFE (PTFE in contact with the fluid)

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

O-ring: EPDM or FPM according to the fluid (other compounds available on request)

Main valve gasket: PTFE + carbon (EPDM for 15 bar maximum operating pressure)

ACCESSORIES

Panel mounting ring-nut: P35017030304

Wall mounting bracket and ring-nut: M1B301

Overpressure relieving function (for compressed air only)

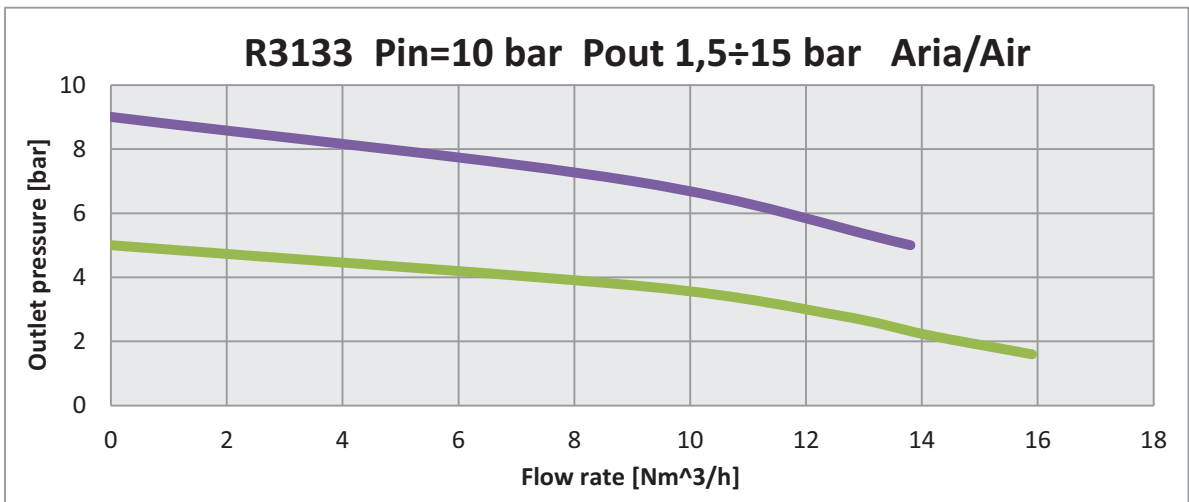
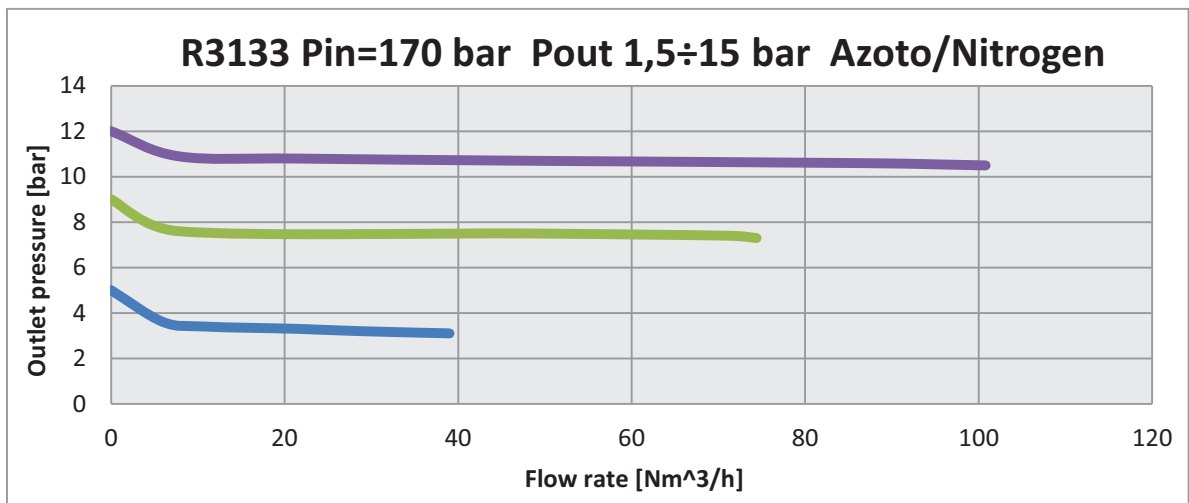
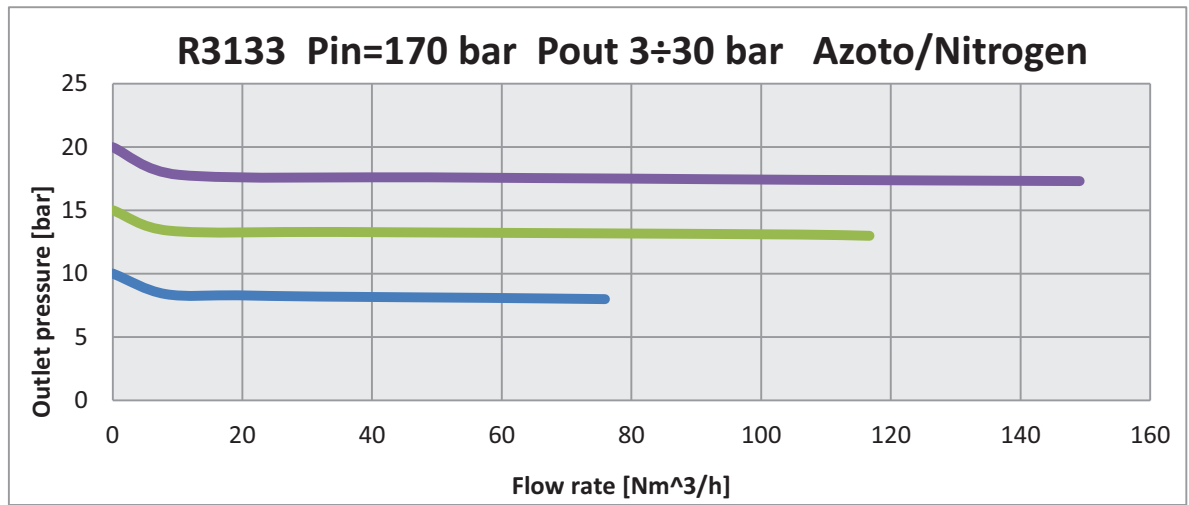
RICAMBI

Gauges

Overpressure valve

Complete kit: filter, complete main valve, o-rings, assembled diaphragm

flow charts



available model types

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 |
|----------|--------|-----------|----------------|-------|---------------------|
| | | | | | R3133 |
| R3133 LA | 15 | 0,2-1,5 | G 1/4-F | 3133# | C2H2 - NH3 |
| R3133 LB | 15 | 0,3-3 | G 1/4-F | 3133# | NH3 |
| R3133 MA | 80 | 0,8-8 | G 1/4-F | 3133# | CO2 - N2O |
| R3133 MB | 80 | 1,5-15 | G 1/4-F | 3133# | CO2 - N2O |
| R3133 MC | 80 | 3-30 | G 1/4-F | 3133# | CO2 - N2O |
| R3133 MD | 80 | 5-50 | G 1/4-F | 3133# | CO2 - N2O |
| R3133 HA | 220 | 0,8-8 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |
| R3133 HB | 220 | 1,5-15 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |
| R3133 HC | 220 | 3-30 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |
| R3133 HD | 220 | 5-50 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |
| R3133 HE | 220 | 10-100 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |
| R3133 HF | 220 | 20-200 | G 1/4-F | 3133# | H2 - CH4 |
| | | | | | Aria - N2 - Ar - He |

| 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 (nipples esterni G 1/4-F - 1/4"NPT-F - 1/4"NPT-M) / Connections different from standard (external nipples G 1/4-F - 1/4"NPT-F - 1/4"NPT-M)

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

Convogliamento valvola di sovrappressione / Venting on 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 P35017030304 / Ring nut P35017030304

Kit staffa + ghiera M1B301 / Kit bracket and Ring nut M1B301

generating the product code

| R 3133 IN AISI 316 | | | |
|---------------------------|-------------------------------------|----|-------------------------------|
| 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 | 02 | NH3 3-UNI 11144 |
| | | 98 | EPDM |
| | | 99 | FPM |
| | | U1 | 1H - UNI 11144 PED CLASSE III |
| | | U2 | 2 - UNI 11144 |
| | | U3 | NH3 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 |

CODE COMPOSITION EXAMPLE

3133#00 J0 A0 U5 I 00

3133#: R3133 stainless steel AISI 316 L regulator

00: Connection according to the fluid see table DD

J0: Inlet pressure 220 bar

A0: Outlet pressure 1,5 - 15 bar

U5: Inlet connection UNI 5-UNI11144

I: Insert Deal

00: No accessories

technical drawings (all dimensions in mm)

