

R133

Brass 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.

The external chrome-plated finish and the stainless steel diaphragm make the R133 series suitable for laboratory and gas analysis applications, as well as for normal industrial applications.

Available the ATEX version

Brand  II2GDcIIICX.

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, G 1/4 ports

Diaphragm version regulator weight: ~2,4 kg (~5.29 lb)

Piston version regulator weight: ~2,9 kg (~6.39 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: Kv= 0.05 Nm³/h (Cv = 0.06 US gal/min)

Degree of protection: IP25

MATERIALS

Body and bonnet: brass, chrome-plated outside

Internal parts: OT58 brass

Main valve spring: stainless steel AISI 302

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

Diaphragm (for outlet pressure up to 15 bar):

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

Piston (for greater outlet pressure): brass

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

Main valve gasket: PA 6.6 (EPDM for maximum operating pressure Ps 15 bar)

ACCESSORIES

Panel mounting ring-nut: ODU80101

Wall mounting bracket and ring-nut: M1B102

Not standard inlet and outlet connections

G 1/4 connections to pipe bonnet and overpressure valve, in case of use of dangerous fluid

Overpressure relieving function (for compressed only)

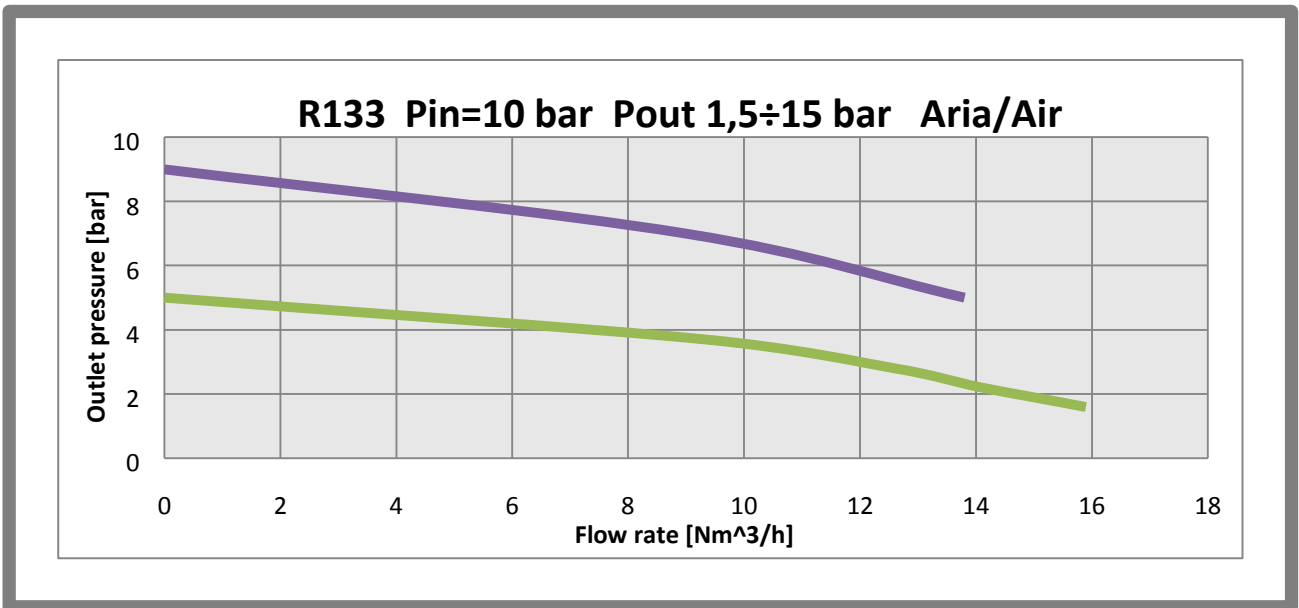
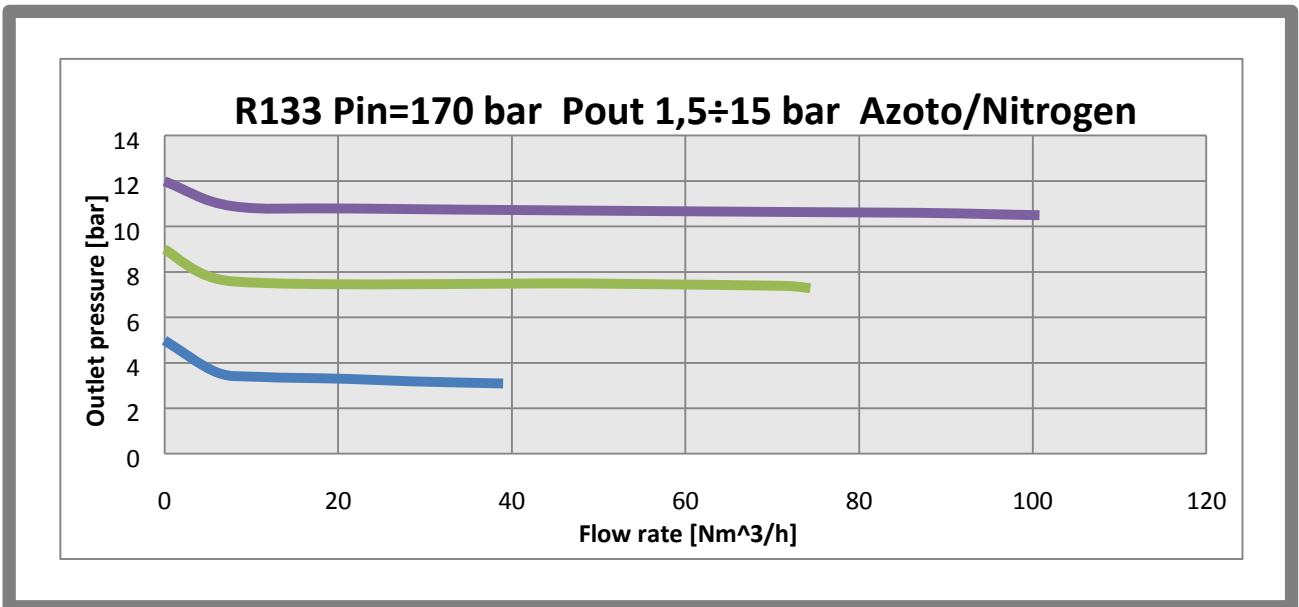
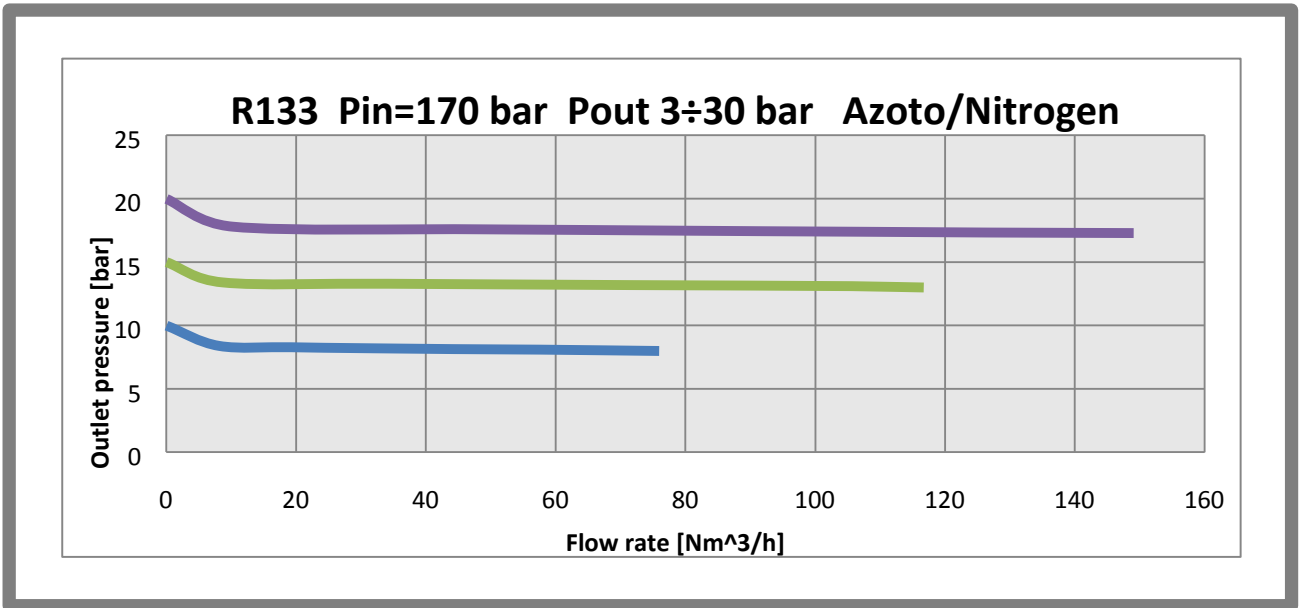
SPARE PARTS

Gauges

Overpressure valve

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

flow charts



available model types

TYPE	Pin Bar	Pout Bar	Connection OUT	MEDIUM
				R133
R133 LA	15	0,2 – 1,5	G 1/4-F	C2H2
R133 MA	80	0,8 – 8	G 1/4-F	CO2 – N2O
R133 MB	80	1,5 – 15	G 1/4-F	CO2 – N2O
R133 MC	80	3 – 30	G 1/4-F	CO2 – N2O
R133 MD	80	5 – 50	G 1/4-F	CO2 – N2O
R133 HA	220	0,8 – 8	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R133 HB	220	1,5 – 15	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R133 HC	220	3 – 30	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R133 HD	220	5 – 50	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R133 HE	220	10 – 100	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He
R133 HF	220	20 – 200	G 1/4-F	O2
				H2 – CH4
				Air – N2 – Ar – He

MEDIUM	Connection IN	UNI
C2H2	Bracket bottle	7S-UNI 11144
	Manifold	1H-UNI 11144
	Bottle connection	7F-UNI 11144
CO2	Bottle_manifold	2-UNI 11144
N2O	Bottle	9-UNI 11144
	Manifold	2-UNI 11144
O2	Bottle_manifold	2-UNI 11144
Air	Bottle	6-UNI 11144
	Manifold	2-UNI 11144
N2	Bottle	5-UNI 11144
	Manifold	2-UNI 11144
Ar – He	Bottle	8-UNI 11144
	Manifold	2-UNI 11144
H2 – CH4	Bottle_manifold	1H-UNI 11144

CONNECTION DIFFERENT FROM STANDARD

Connections different from standard (G 1/4-F in body, external nipples 1/4" NPT-F – 1/4" NPT-M)
 Bottle connection different from italian standard UNI (DIN 477, CGA, NFE 29-650, BS 341 e UNE ITC MIE)

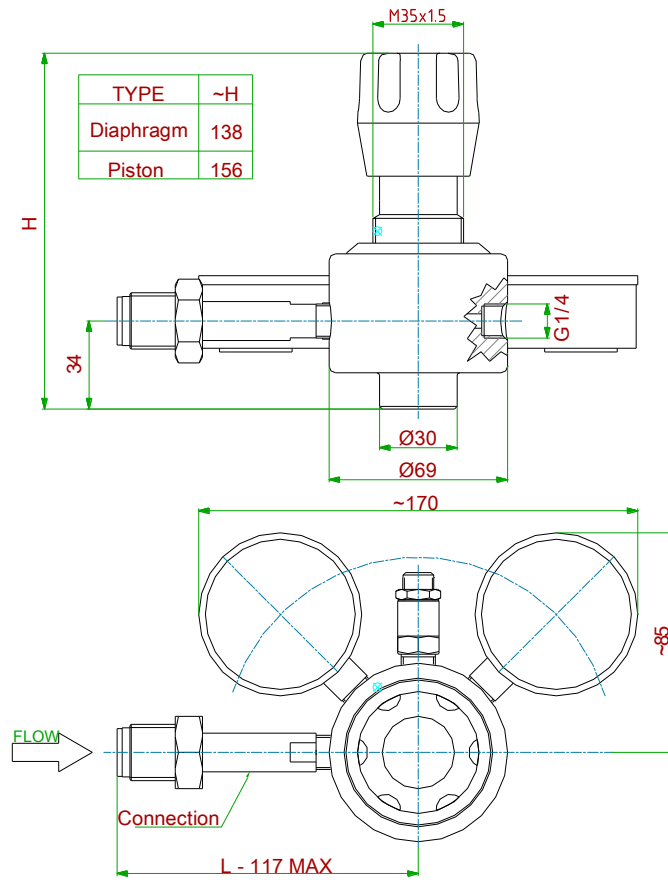
EXECUTIONS DIFFERENT FROM STANDARD

Inlet pressure 250-300 bar	Execution for liquid
Inlet pressure 350-400 bar	Dome loaded version
Pre-set outlet pressure with T screw	Not standard branding
Fixed outlet pressure, screw with cap nut	ATEX version
O-ring in accordance to FDA	Special temperature range
O-ring in FPM	Relieving version
Special O-ring	Degreased for O2
Venting on bonnet and over pressure valve	

ACCESSORIES

Chrome-plated ring nut ODU80101
 Kit bracket and ring nut M1B102
 Ø8 hose-tail composed of : Ø8 hose-tail – P54005011304
 Nut 3/8 – P28021011304
 Connection – P29028011304
 O-ring 107 – 0GABC07021

technical drawings (all dimensions in mm)



Bracket and ring-nut to be ordered separately

