

R114-R138-R112-R121

Brass pressure regulator,
for compressed air, gas and liquid



FEATURES


Pressure regulator for inlet pressure up to 50 bar (725 psi).

Connection ports:

R114	1/4" - F
R138	3/8" - F
R112	1/2" - F (1/4" size)
R121	1/2" - F (1/2" size)

Outlet pressure is controlled by a rubber diaphragm. Balanced main valve.

Available the ATEX version.

Brand  II2GDcIICX.

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

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

Gauge for outlet pressure (accuracy class 1.6)

SPECIFICATIONS

Weight R114/R138/R112: diaphragm model ~1.3 kg (~2.8 lb), piston model ~1.8 kg (~4 lb)

Weight R121: diaphragm model ~2 kg (~4.4 lb), piston model ~2.2 kg (~4.8 lb)

Operating temperature: -20°C ÷ +60°C (-4 °F ÷ +140 °F) for standard version

Main valve leakage: VI (bubble tight)

Flow coefficient R114/R138/R112: Kv= 0.35 Nm³/h (Cv = 0.41 US gal/min)

Flow coefficient R121: Kv= 1 Nm³/h (Cv = 1.17 US gal/min)

Degree of protection: IP25

G $\frac{1}{4}$ gauge ports on both sides

MATERIALS

Body and bonnet: brass

Internal parts: brass

Main valve spring: stainless steel AISI 304 (for R114/R138/R112), AISI 302 (for R121)

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

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

Piston: brass

O-Ring: NBR/FPM/EPDM depending on the fluid (different compounds available on request)

Main valve gasket: NBR/FPM/EPDM depending on the fluid (different compounds available on request), PUR for inlet pressure greater than 30 bar

ACCESSORIES

Pilot-controlled version, outlet pressure controlled by a pilot regulator

Panel mounting ring-nut: 0DU80101 (R114-R138-R112), 0DU80301 (R121)

Wall mounting bracket + ring-nut: M12102 (R114-R138-R112), M12101 (R121)

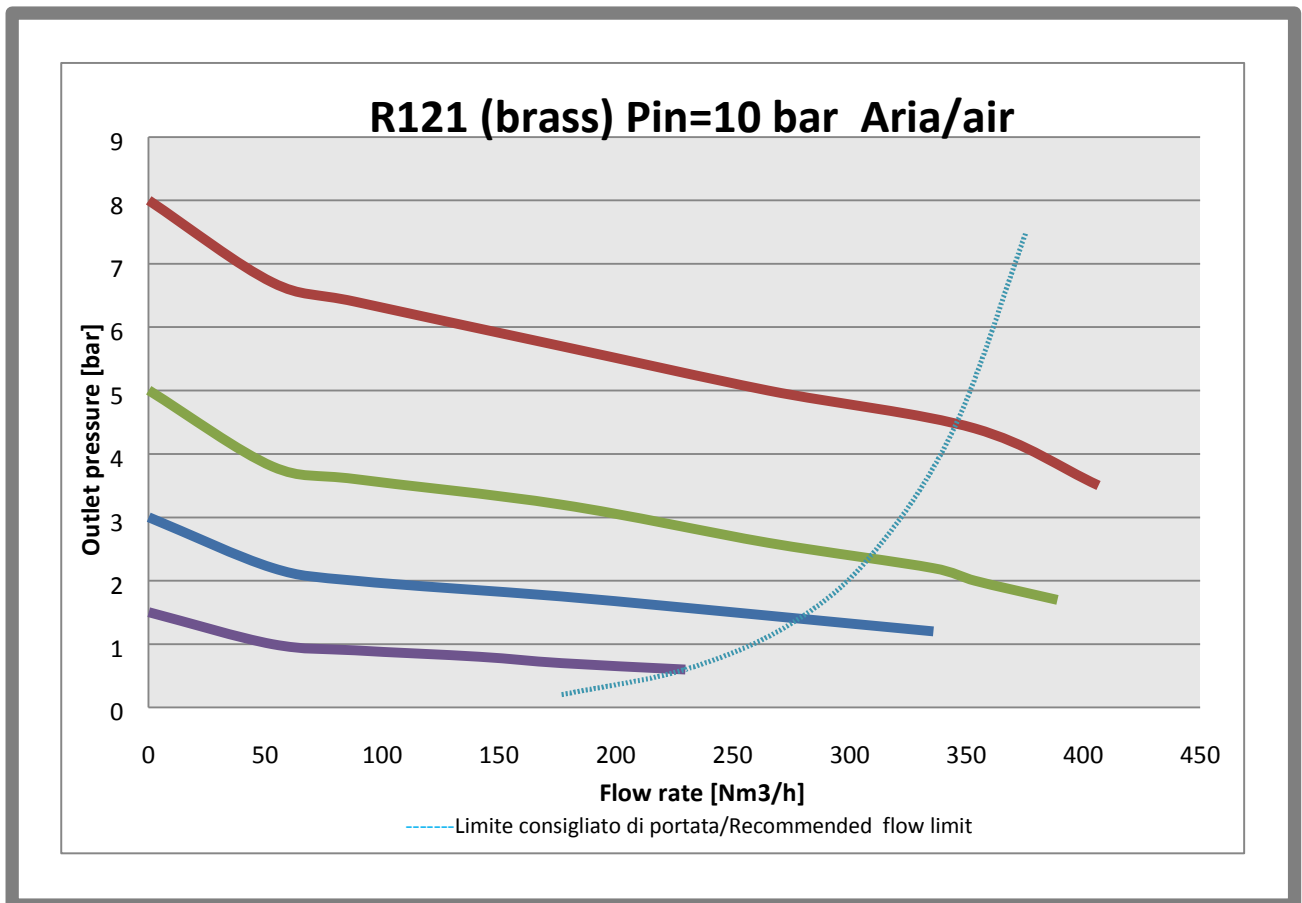
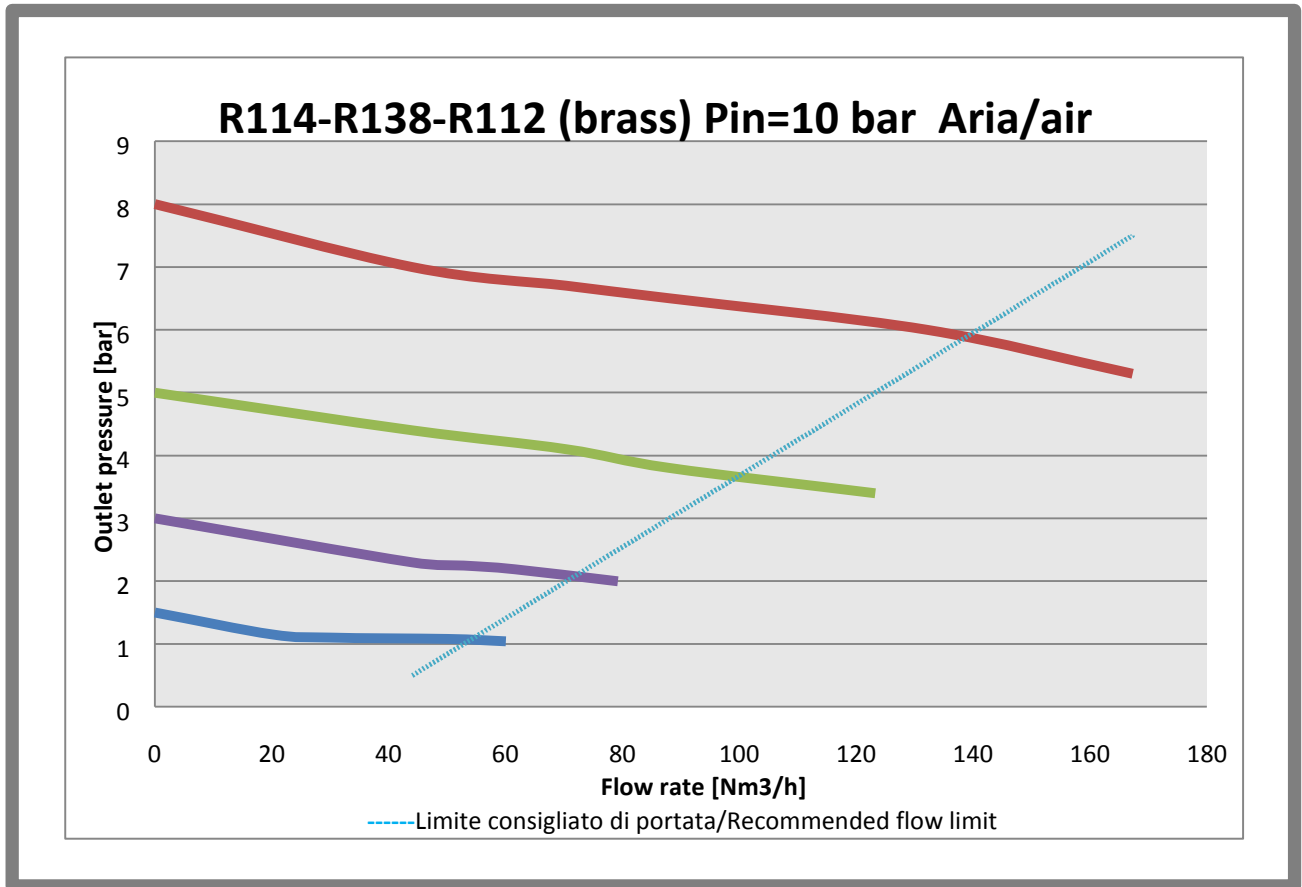
Relieving overpressure function (only for compressed air version)

SPARE PARTS

Gauge

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

flow charts



available model types

**Pressure regulators for medium pressure, made of brass,
for compressed air and technical, non corrosive gases and liquid**
Forged body and bonnet

TYPE	PIn Bar	Pout Bar	Connection IN	Connection OUT	MEDIUM
					R114
R114 A1	30	0,2 – 1,5	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 B1	30	0,3 – 3	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 C1	30	0,8 – 8	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 E1	30	1,5 – 15	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 F1	50	1,5 – 15	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 G1	50	3 – 30	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
R114 L1	50	5 – 50	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
RP114 E1 **	30	1,5 – 15	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
RP114 F1 **	50	1,5 – 15	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving
RP114 L1 **	50	5 – 50	G ¼-F	G ¼-F	O2
					Liquid *
					Air – relieving

* Air – N2 – He – Ar – H2 – C3H8 – CH4 – CO2 – N2O

** Dome loaded execution

CONNECTION DIFFERENT FROM STANDARD

Inlet outlet connections NPT

Connections with flanges

EXECUTIONS DIFFERENT FROM STANDARD

Inlet pressure max 60 bar

Chrome-Nickel plating

Pre-set outlet pressure

Not standard branding

Fixed outlet pressure

ATEX version

O-ring different from standard – FPM

Special temperature range

O-ring different from standard - EPDM

Degreased for O2

Venting on bonnet

"T" setting screw

ACCESSORIES

Ring nut ODU80101

Kit bracket + ring nut M12102

available model types

Pressure regulators for medium pressure, made of brass, for compressed air and technical, non corrosive gases and liquid *Forged body and bonnet*

TYPE	Pln Bar	Pout Bar	Connection IN	Connection OUT	MEDIUM
					R138
R138 A1	30	0,2 – 1,5	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 B1	30	0,3 – 3	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 C1	30	0,8 – 8	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 E1	30	1,5 – 15	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 F1	50	1,5 – 15	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 G1	50	3 – 30	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
R138 L1	50	5 – 50	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
RP138 E1 **	30	1,5 – 15	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
RP138 F1 **	50	1,5 – 15	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving
RP138 L1 **	50	5 – 50	G 3/8-F	G 3/8-F	O2
					Liquid
					*
					Air – relieving

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Pressure regulators for medium pressure, made of brass, for compressed air and technical, non corrosive gases and liquid *Forged body and bonnet*

TYPE	Pin Bar	Pout Bar	Connection IN	Connection OUT	MEDIUM
					R112
R112 A1	30	0,2 – 1,5	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 B1	30	0,3 – 3	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 C1	30	0,8 – 8	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 E1	30	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 F1	50	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 G1	50	3 – 30	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R112 L1	50	5 – 50	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP112 E1 **	30	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP112 F1 **	50	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP112 L1 **	50	5 – 50	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving

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TYPE	PIn Bar	Pout Bar	Connection IN	Connection OUT	MEDIUM
					R121
R121 A1	30	0,2 – 1,5	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 B1	30	0,3 – 3	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 C1	30	0,8 – 8	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 E1	30	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 F1	50	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 G1	50	3 – 30	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
R121 L1	50	5 – 50	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP121 E1 **	30	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP121 F1 **	50	1,5 – 15	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving
RP121 L1 **	50	5 – 50	G 1/2-F	G 1/2-F	O2
					Liquid
					*
					Air – relieving

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technical drawings (all dimensions in mm)

