

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 2014/34/EU version.

Brand  II2GcIICTX
 II2DcIICTX.

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

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

The product complies with the 2014/68/EU 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= 2 Nm³/h (Cv = 2,33 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

Wall mounting bracket + ring-nut

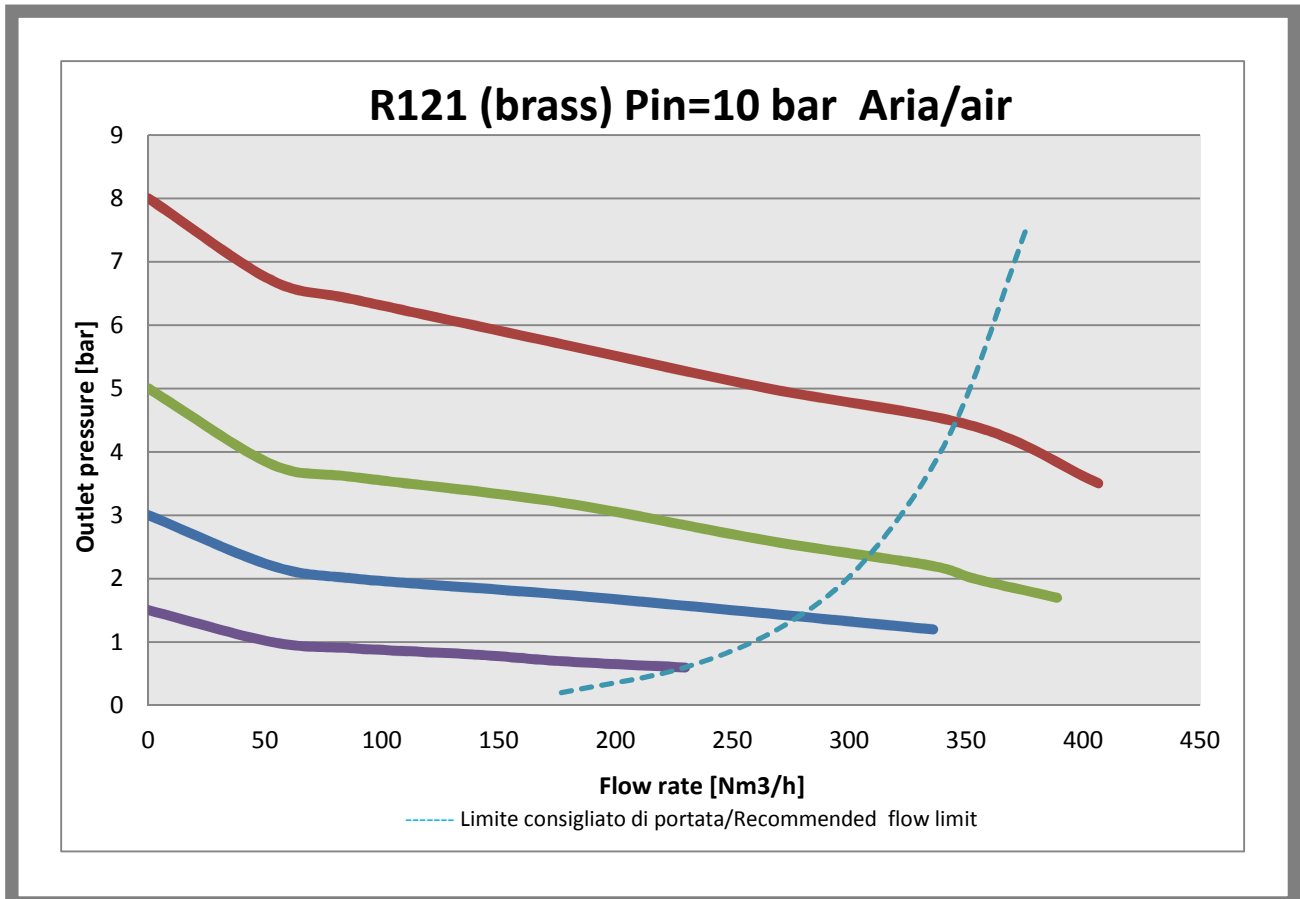
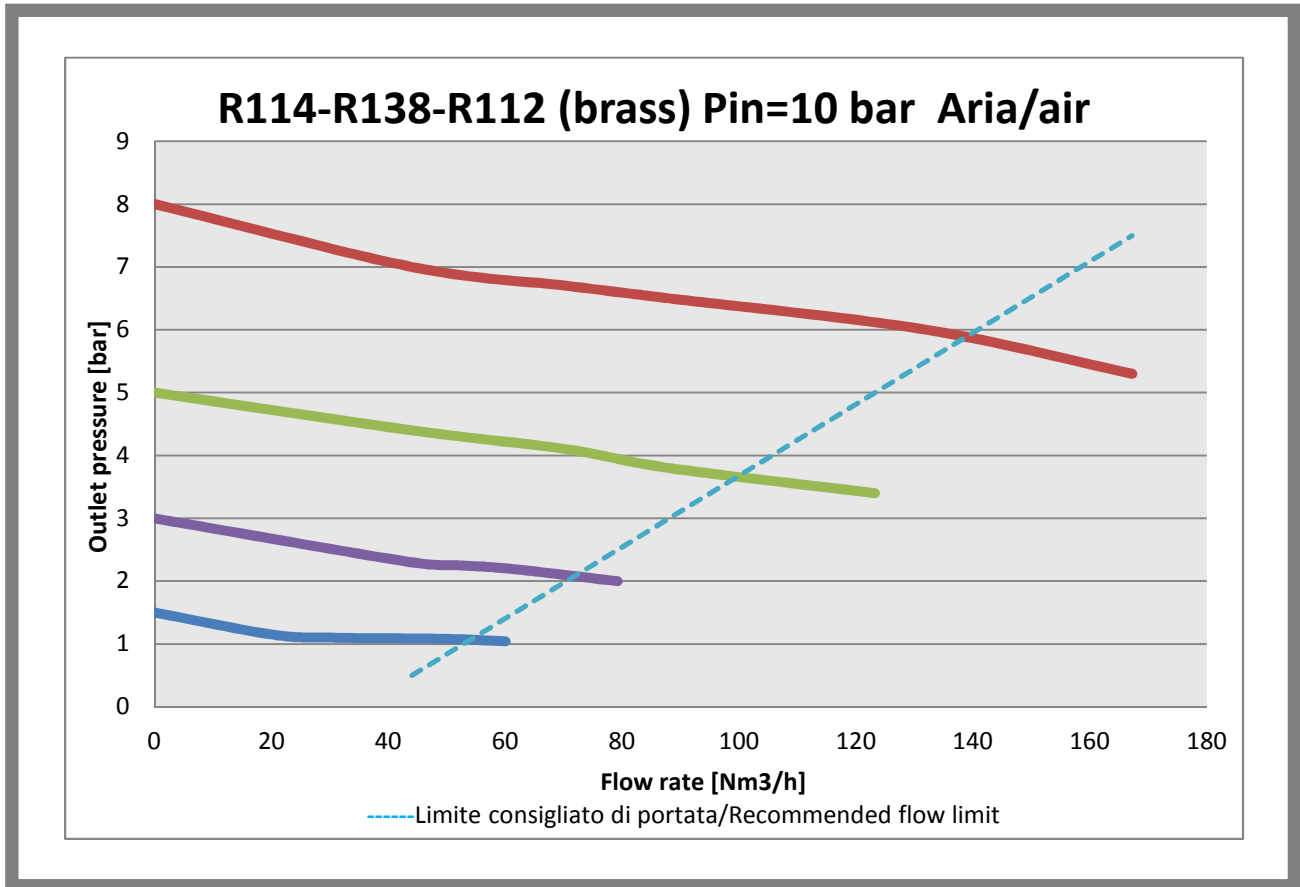
Relieving overpressure function (only for compressed air version)

SPARE PARTS

Gauge

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

flow charts



generating the product code

Reg. R121+R114+R138 Ottone			
AA BB CC DD E F GG			
AA	Attacchi / Connections	01	R112 IN/OUT G1/2-F
		L0	R138 G3/8-F
		N0	R114 G1/4-F
		P0	R121 G1/2-F
BB	Pressione d'ingresso / Inlet pressure	D0	30bar
		E0	50bar
CC	Intervallo d'uscita/ Outlet range	A0	Pout 0,2 - 1,5 bar
		B0	Pout 0,3 - 3 bar
		D0	Pout 0,8 - 8 bar
		E0	Pout 1,5 - 15 bar
		F0	Pout 3-30 bar
		G0	Pout 5-50 bar
DD	Tipologia di fluido / Fluid type	01	Relieving
		15	O2
		97	NBR
		98	EPDM
		99	FPM
E	Pilotato / Pilot operated	n	Non Pilotato
		p	Pilotato
F	Marchiato / Marked	I	ID
		Z	Dir ATEX 2014/34/EU
GG	Accessori/Accessories	00	Nessun accessorio

CODE COMPOSITION EXAMPLE

521#N0 D0 D0 97 N I 00

521#: die-cast standard brass pressure regulator

N0: connection G¼-F

D0: maximum inlet pressure 30 bar

D0: outlet pressure range 0,8-8 bar

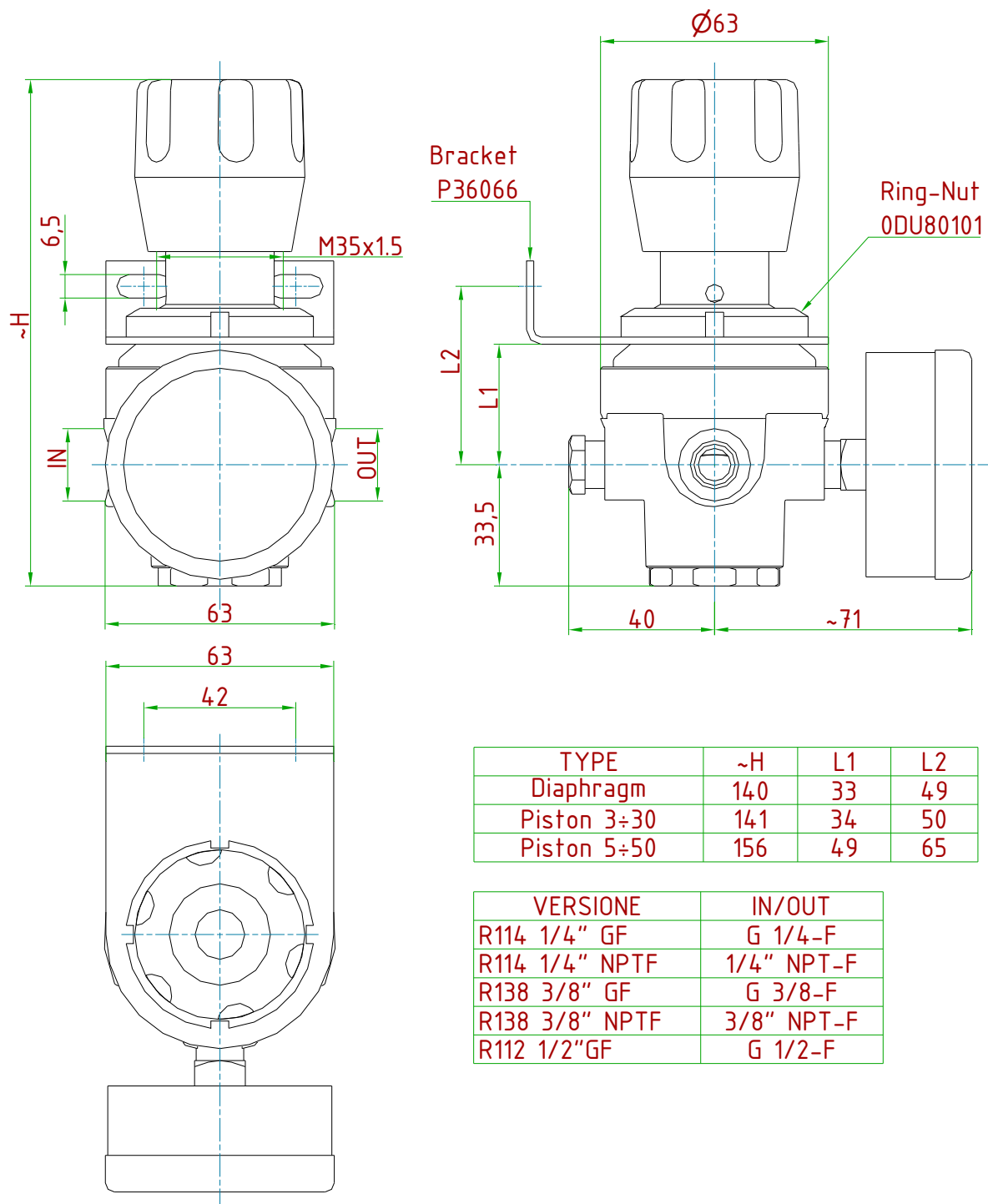
97: NBR gaskets

N: not pilot-controlled

I: ID

00: no accessories

technical drawings (all dimensions in mm)

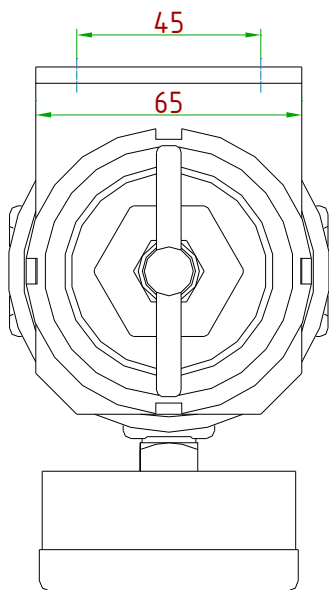
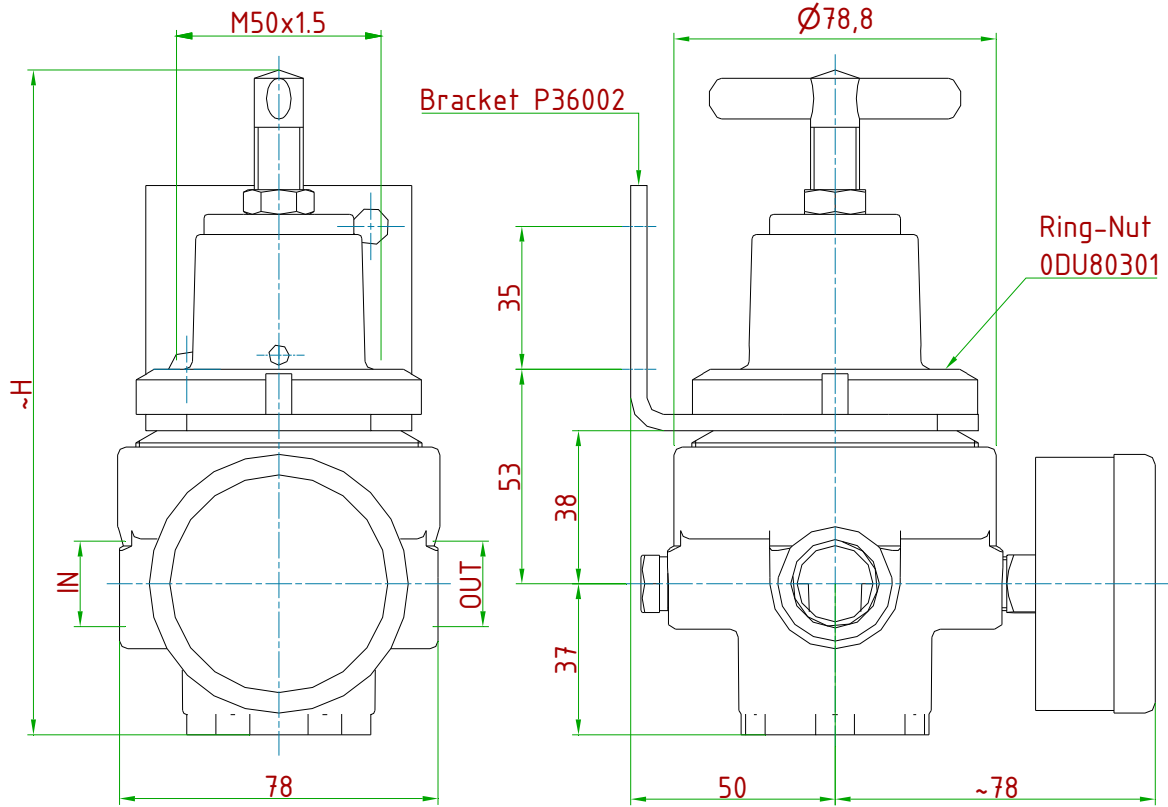


TYPE	~H	L1	L2
Diaphragm	140	33	49
Piston 3÷30	141	34	50
Piston 5÷50	156	49	65

VERSIONE	IN/OUT
R114 1/4" GF	G 1/4-F
R114 1/4" NPTF	1/4" NPT-F
R138 3/8" GF	G 3/8-F
R138 3/8" NPTF	3/8" NPT-F
R112 1/2"GF	G 1/2-F

technical drawings (all dimensions in mm)

Bracket and Ring-Nut to be ordered separately
 Kit order number: M12101



TYPE	~H	OUTLET PRESSURE
Diaphragm	163	Up to 15 bar
Piston	159	More than 15 bar

TYPE	IN/OUT
R121 1/2" GF	G 1/2-F
R121 1/2" NPTF	1/2 NPT-F