

R3114-R3138-R3121

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



FEATURES

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

Connection ports:

R3114 1/4"-F

R3138 3/8"-F

R3121 1/2"-F

Different connections available on request:
3/4" or welded flanges.

Outlet pressure, up to 15 bar (217 psi), is controlled by stainless steel diaphragm; greater outlet pressure are controlled by a piston.

Balanced main valve

Available the ATEX version.

Brand  II 2GDc IICX.

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 97/23/CE PED directive.

Gauge for outlet pressure
(accuracy class 1.6)

The product is registered at the Canadian authority ABSA, CRN 0C11053.2, and can be sold and used in Canada.

SPECIFICATIONS

Weight (R3114/R3138): diaphragm model ~1.6 kg (~3.5 lb), piston model ~1.9 kg (~ 4.2 lb)

Weight (R3121): diaphragm model ~2.2 kg (~4.8 lb), piston model ~2.3 kg (~5 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient R3114/R3138: $K_v = 0.5 \text{ Nm}^3/\text{h}$ $C_v = 0.59 \text{ US gal/min}$

Flow coefficient R3121: $K_v = 1.8 \text{ Nm}^3/\text{h}$ $C_v = 2.11 \text{ US gal/min}$

Degree of protection: IP25

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

MATERIALS

Body and bonnet: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Main valve spring: stainless steel AISI 304 (for R3114 and R3138), AISI 316 (for R3121)

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

Diaphragm: stainless steel AISI 316L

Piston: stainless steel AISI 316L

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

Main valve gasket: NBR/FPM/EPDM depending on the fluid

PUR for inlet pressure greater than 30 bar

Other compounds available on request

ACCESSORIES

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

Panel mounting ring-nut: P35017030304 (R3114-R3138), P35018030304 (R3121)

Wall mounting bracket + ring-nut: M13302 (R3114-R3138), M13304 (R3121)

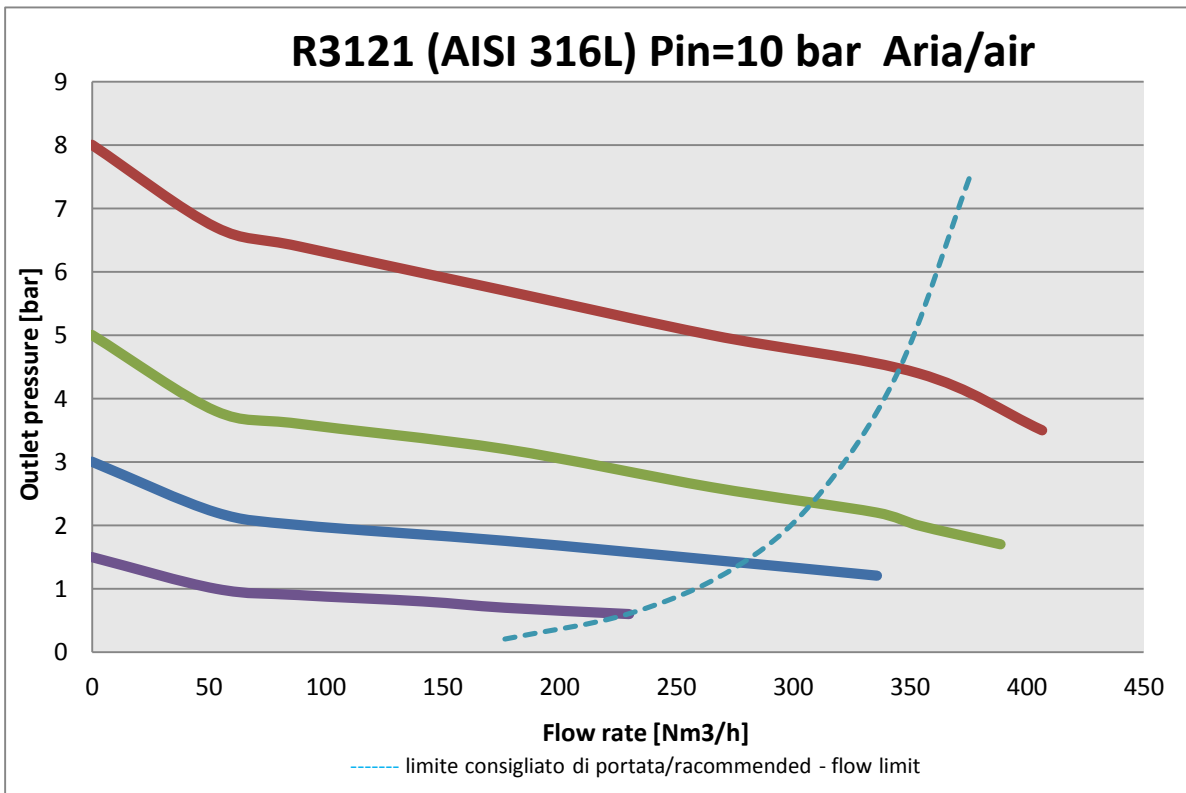
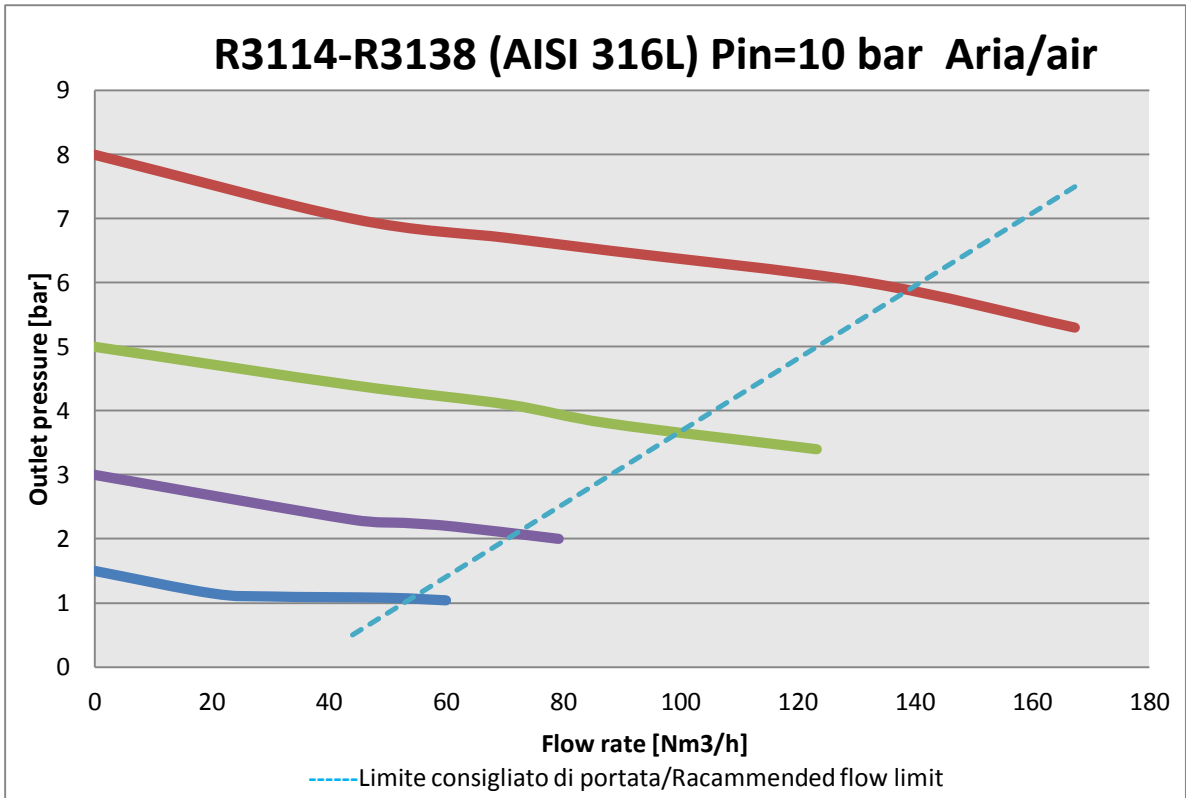
Overpressure relieving function (only for compressed air versions)

SPARE PARTS

Gauges

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

flow charts



available model types

**Regolatori di pressione per media pressione in acciaio inox,
ideali per aria compressa e gas tecnici non corrosivi e liquidi**

**Pressure regulators for medium pressure, made of stainless steel,
for compressed air and technical, non corrosive gases and liquid**

Corpo e campana da lavorazione di barra-NO manometro / Body by machining bar-Without gauge

TYPE	PS bar	P.Out bar	CONNECTION IN	CONNECTION OUT	CODE	MEDIUM
						R3114
R3114 A	15	0,2-1,5	G 1/4-F	G 1/4-F	533#N	NH3
	30	0,2-1,5	G 1/4-F	G 1/4-F	533#N	O2
						Liquid
						*
R3114 B	15	0,3-3	G 1/4-F	G 1/4-F	533#N	Air - Relieving
	30	0,3-3	G 1/4-F	G 1/4-F	533#N	NH3
						O2
						Liquid
R3114 C	30	0,8-8	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
R3114 E	30	1,5-15	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
R3114 F	50	1,5-15	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
R3114 G	50	3-30	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
R3114 L	50	5-50	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
RP3114 E**	30	1,5-15	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
RP3114 F**	50	1,5-15	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid
RP3114 L**	50	5-50	G 1/4-F	G 1/4-F	533#N	*
						Air - Relieving
						O2
						Liquid

* Aria - N2 - He - Ar - H2 - C3H8 - CH4 - CO2 - N2O

** Versione pilotata / Dome loaded execution

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi entrata/uscita NPT / Inlet/outlet connections NPT

Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / FEATURES DIFFERENT FROM STANDARD

Pressione ingresso max 60 bar / Inlet pressure max 60 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 diversi da standard - EPDM / O-rings different from standard - EPDM

O-ring secondo FDA / O-ring according to FDA

Convogliamento su campana / Connection for bonnet piping

Versione IP55 / IP55 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

Sgrassato uso O2 / Degreased for O2

Manometro per pressione di uscita / Gauge for outlet pressure

ACCESSORI / ACCESSORIES

Ghiera P35017030304 / Ring nut P35017030304

Kit staffa + ghiera M13302 / Kit bracket + Ring nut M13302

available model types

TYPE	PS bar	P.Out bar	CONNECTION IN	CONNECTION OUT	CODE	MEDIUM
						R3138
R3138 A	15	0,2-1,5	G 3/8-F	G 3/8-F	533#L	NH3
	30	0,2-1,5	G 3/8-F	G 3/8-F	533#L	O2
						Liquid
						*
R3138 B	15	0,3-3	G 3/8-F	G 3/8-F	533#L	Air - Relieving
	30	0,3-3	G 3/8-F	G 3/8-F	533#L	NH3
						O2
						Liquid
R3138 C	30	0,8-8	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
R3138 E	30	1,5-15	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
R3138 F	50	1,5-15	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
R3138 G	50	3-30	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
R3138 L	50	5-50	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
RP3138 E**	30	1,5-15	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
RP3138 F**	50	1,5-15	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid
RP3138 L**	50	5-50	G 3/8-F	G 3/8-F	533#L	*
						Air - Relieving
						O2
						Liquid

* Aria - N2 - He - Ar - H2 - C3H8 - CH4 - CO2 - N2O

** Versione pilotata / Dome loaded execution

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi entrata/uscita NPT / Inlet/outlet connections NPT

Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / FEATURES DIFFERENT FROM STANDARD

Pressione ingresso max 60 bar / Inlet pressure max 60 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 diversi da standard - EPDM / O-rings different from standard - EPDM

O-ring secondo FDA / O-ring according to FDA

Convogliamento su campana / Connection for bonnet piping

Versione IP55 / IP55 Version

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

Stampigliatura su specifica del cliente / Not standard branding

Versione ATEX / ATEX version

Temperature diverse da standard / Special temperature range

Sgrassato uso O2 / Degreased for O2

Manometro per pressione di uscita / Gauge for outlet pressure

ACCESSORI / ACCESSORIES

Ghiera P35017030304 / Ring nut P35017030304

Kit staffa + ghiera M13302 / Kit bracket + Ring nut M13302

available model types

TYPE	PS bar	P.Out bar	CONNECTION IN	CONNECTION OUT	CODE	MEDIUM
						R3121
R3121 A	15	0,2-1,5	G 1/2-F	G 1/2-F	533#P	NH3
	30	0,2-1,5	G 1/2-F	G 1/2-F	533#P	O2
						Liquid
						*
R3121 B	15	0,3-3	G 1/2-F	G 1/2-F	533#P	Air - Relieving
	30	0,3-3	G 1/2-F	G 1/2-F	533#P	NH3
						O2
						Liquid
R3121 C	30	0,8-8	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
R3121 E	30	1,5-15	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
R3121 F	50	1,5-15	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
R3121 G	50	3-30	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
R3121 L	50	5-50	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
RP3121 E**	30	1,5-15	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
RP3121 F**	50	1,5-15	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid
RP3121 L**	50	5-50	G 1/2-F	G 1/2-F	533#P	*
						Air - Relieving
						O2
						Liquid

* Aria - N2 - He - Ar - H2 - C3H8 - CH4 - CO2 - N2O

** Versione pilotata / Dome loaded execution

ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD

Attacchi entrata/uscita NPT / Inlet/outlet connections NPT

Attacchi in/out diversi da standard (G 3/4-F nel corpo) / Connections different from standard (G 3/4-F in body)

Attacchi flangiati / Connections with flanges

ESECUZIONI DIVERSE DA STANDARD / FEATURES DIFFERENT FROM STANDARD

Pressione ingresso max 60 bar / Inlet pressure max 60 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 diversi da standard - EPDM / O-rings different from standard - EPDM

O-ring secondo FDA / O-ring according to FDA

Membrana diversa da standard / Diaphragm different from standard

Convogliamento su campana / Connection for bonnet piping

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

Sgrassato uso O2 / Degreased for O2

Manometro per pressione di uscita / Gauge for outlet pressure

ACCESSORI / ACCESSORIES

Ghiera P35018030304 / Ring nut P35018030304

Kit staffa + ghiera M13304 / Kit bracket + Ring nut M13304

generating the product code

Reg. R3121+R3114+R3138			
AA BB CC DD E F GG			
AA	Attacchi / Connections	L0	R3138 G 3/8-F
		N0	R3114 G 1/4-F
		P0	R3121 G 1/2-F
BB	Pressione ingresso / Inlet pressure	D0	30 bar
		E0	50 bar
		H0	15 bar
CC	Intervallo 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
		02	NH3 3-UNI 11144
		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 94/9 CE
GG	Accessori / Accessories	00	Nessun accessorio

CODE COMPOSITION EXAMPLE

533#N0 D0 D0 99 N I 00

521#: standard AISI 316L pressure regulator

N0: connection G ¼-F

D0: maximum inlet pressure 30 bar

D0: outlet pressure range 0,8-8 bar

97: NBR gaskets

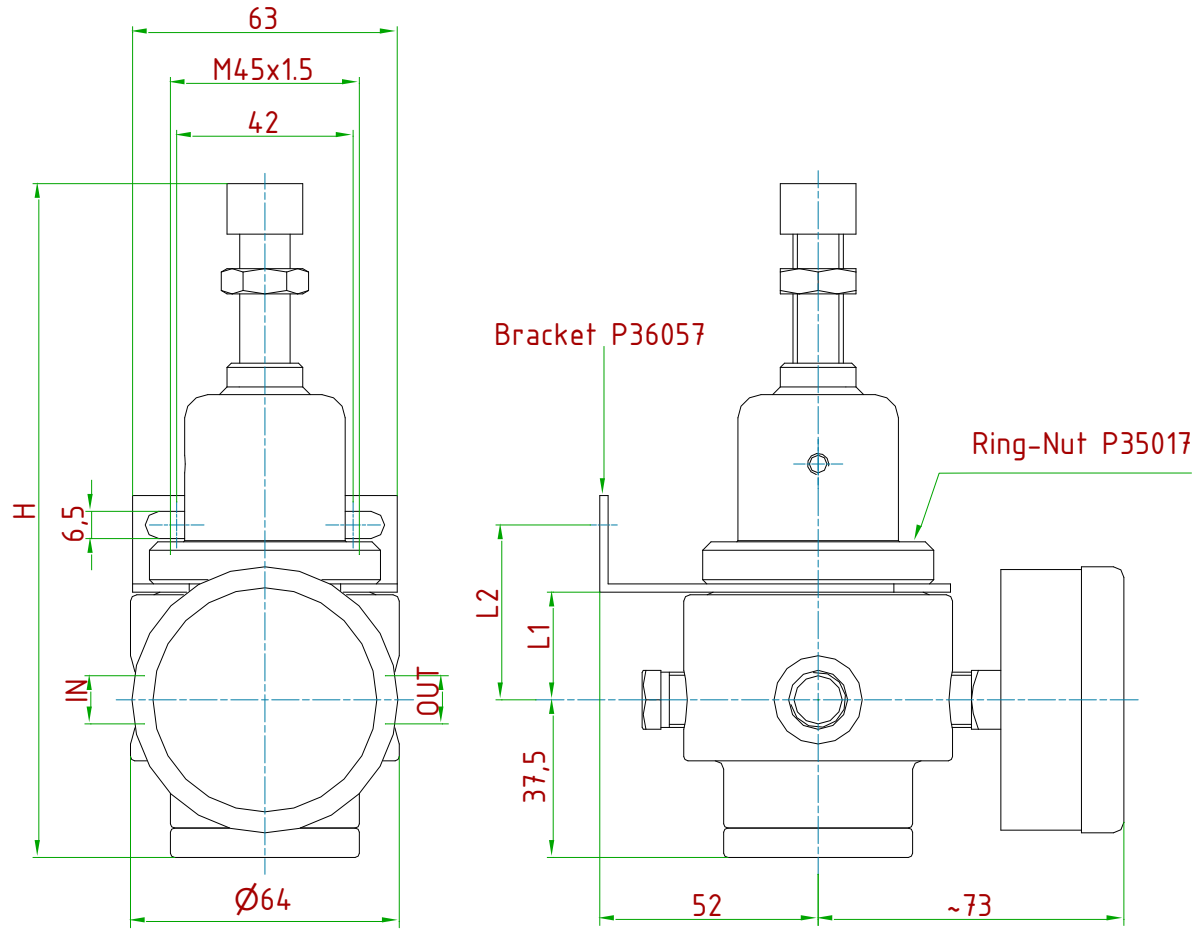
N: not pilot-controlled

I

00: no accessories

technical drawings (all dimensions in mm)

Bracket and Ring-Nut to be ordered separately
Kit order number: M13302



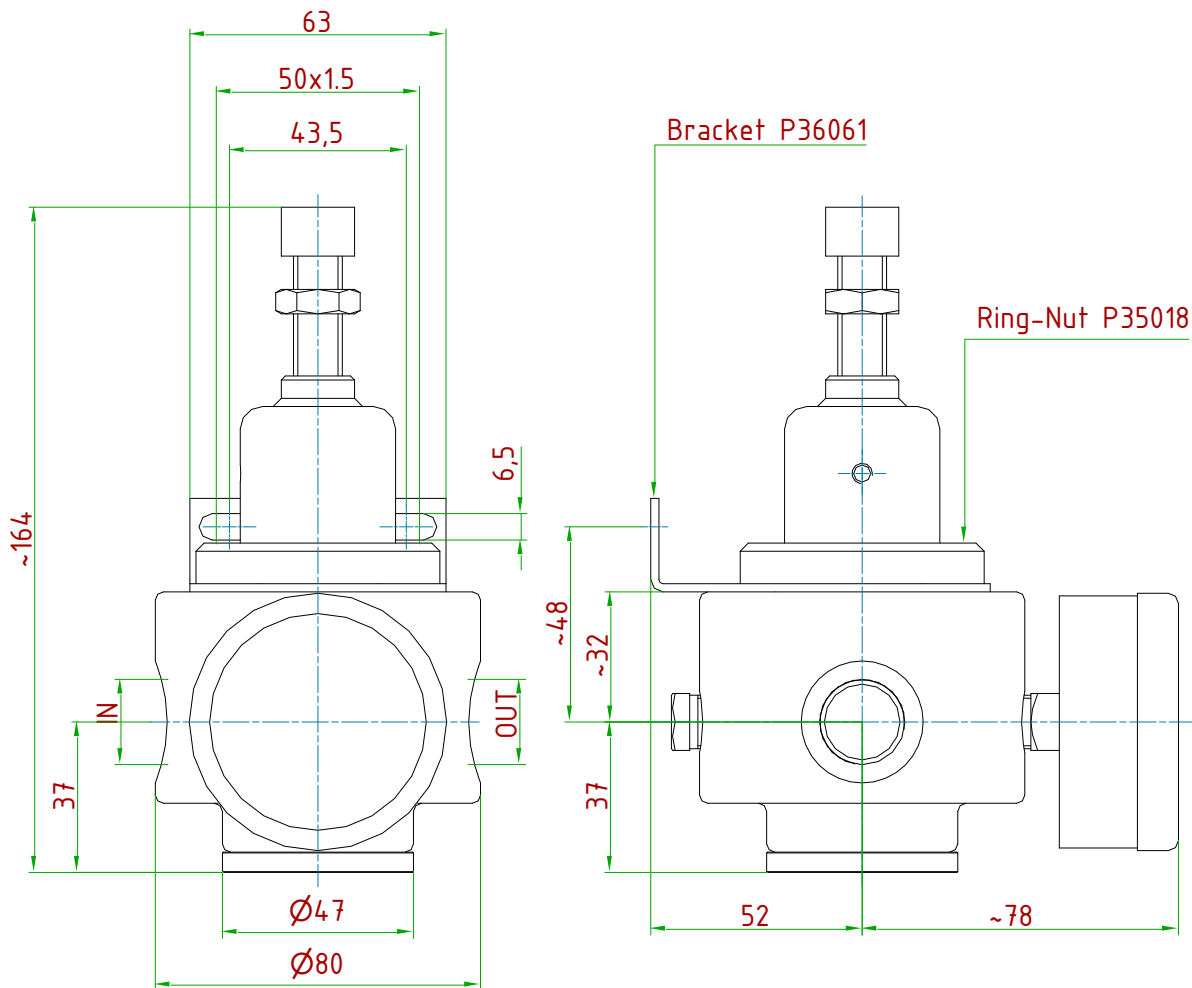
TYPE	IN/OUT
R3114 1/4"GF	G 1/4"-F
R3138 3/8" GF	G 3/8"-F
R3114 1/4"NPTF	1/4" NPT-F
R3138 3/8" NPTF	3/8" NPT-F

TYPE	H	L1	L2	OUTLET PRESSURE
Diaphragm	~161	26	42	UP TO 15 bar
Piston	~175	42.5	58.5	MORE THAN 15 bar

technical drawings (all dimensions in mm)

Bracket to be ordered separately, Kit order number: M13304

TYPE	IN/OUT
R3121 1/2"GF	G 1/2-F
R3121 1/2"NPTF	1/2"NPT-F



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PRESSURE REGULATOR_533(R3114-R3138-R3121)_EN_02



Azienda con sistema di gestione qualità certificato.

certificato N° 50 100 9191

Company with certificated quality management system.

certificate N° 50 100 9191