

# R314 MC – R318 MC

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




## FEATURES

Minimum size pressure regulator for inlet pressure up to 20 bar (290 psi) in the plastic bonnet version; inlet pressure up to 30 bar (435 psi) in the stainless steel bonnet version.

Inlet and outlet connections 1/4"-F or 1/8"-F ports.

Outlet pressure is controlled by a rubber diaphragm.  
The main valve is balanced.

Available the ATEX version.  
Brand  II 2GDc IICX.  
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**

Regulator weight version PS 20 bar: ~260 g (~0,57 lb)

Regulator weight version PS 30 bar: ~350 g (~0,77 lb)

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

Main valve leakage classification: VI (bubble tight)

Flow coefficient: Kv= 0.2 Nm<sup>3</sup>/h Cv = 0,23 US gal/min

Degree of protection: IP25

G1/8 gauge port for outlet pressure on both sides.

## **MATERIALS**

Body: stainless steel AISI 316L

Bonnet version PS 20 bar: POM/PA 6.6

Bonnet version PS 30 bar: stainless steel AISI 316L

Internal parts: stainless steel AISI 316L

Main valve spring: stainless steel AISI 302

Adjusting spring: stainless steel AISI 302

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

O-Rings: FPM or EPDM depending on the fluid (other compounds available on request)

Main valve gasket: FPM or EPDM depending on the fluid (other compounds available on request)

## **ACCESSORIES**

Panel mounting ring-nut: P35021030304

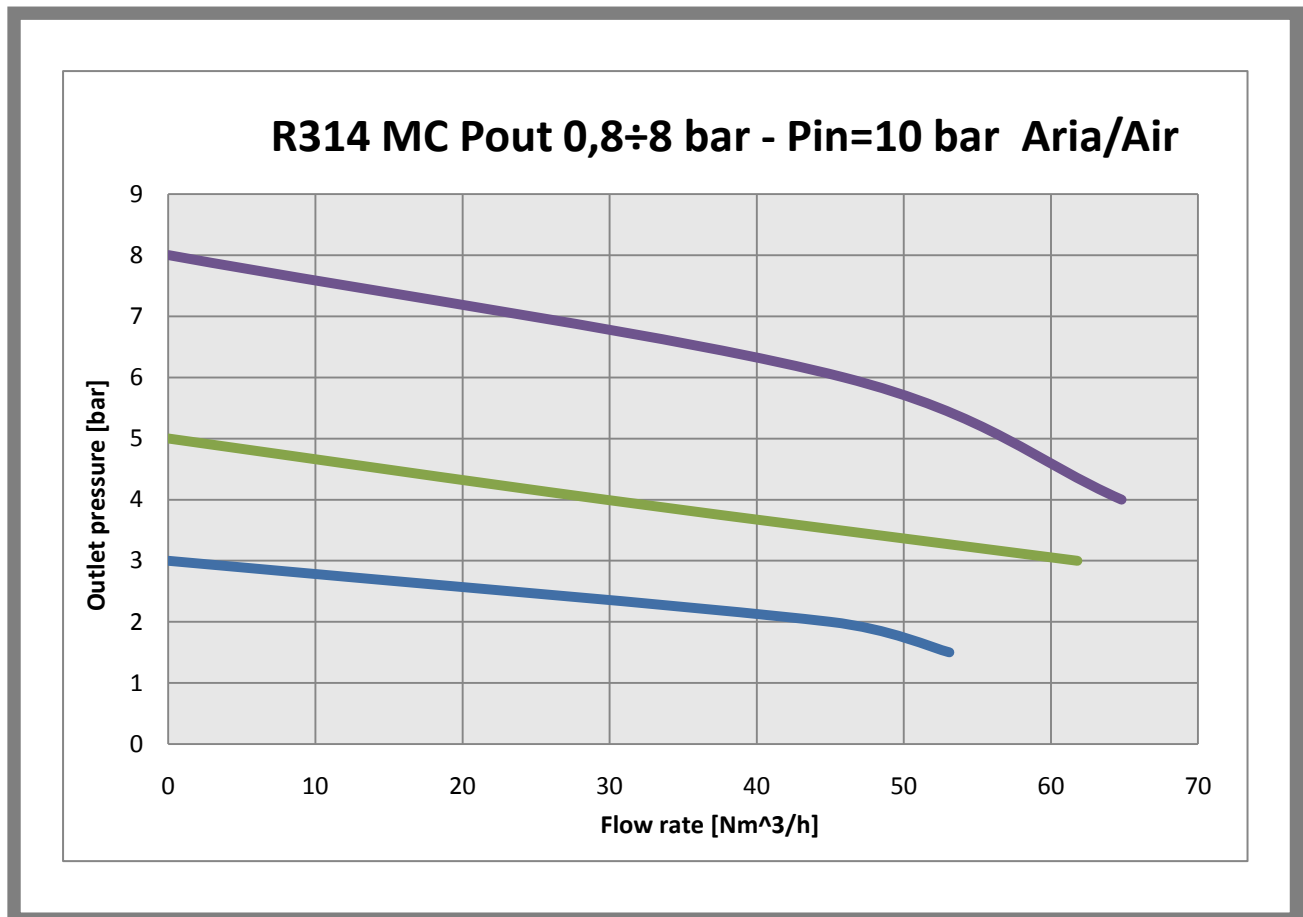
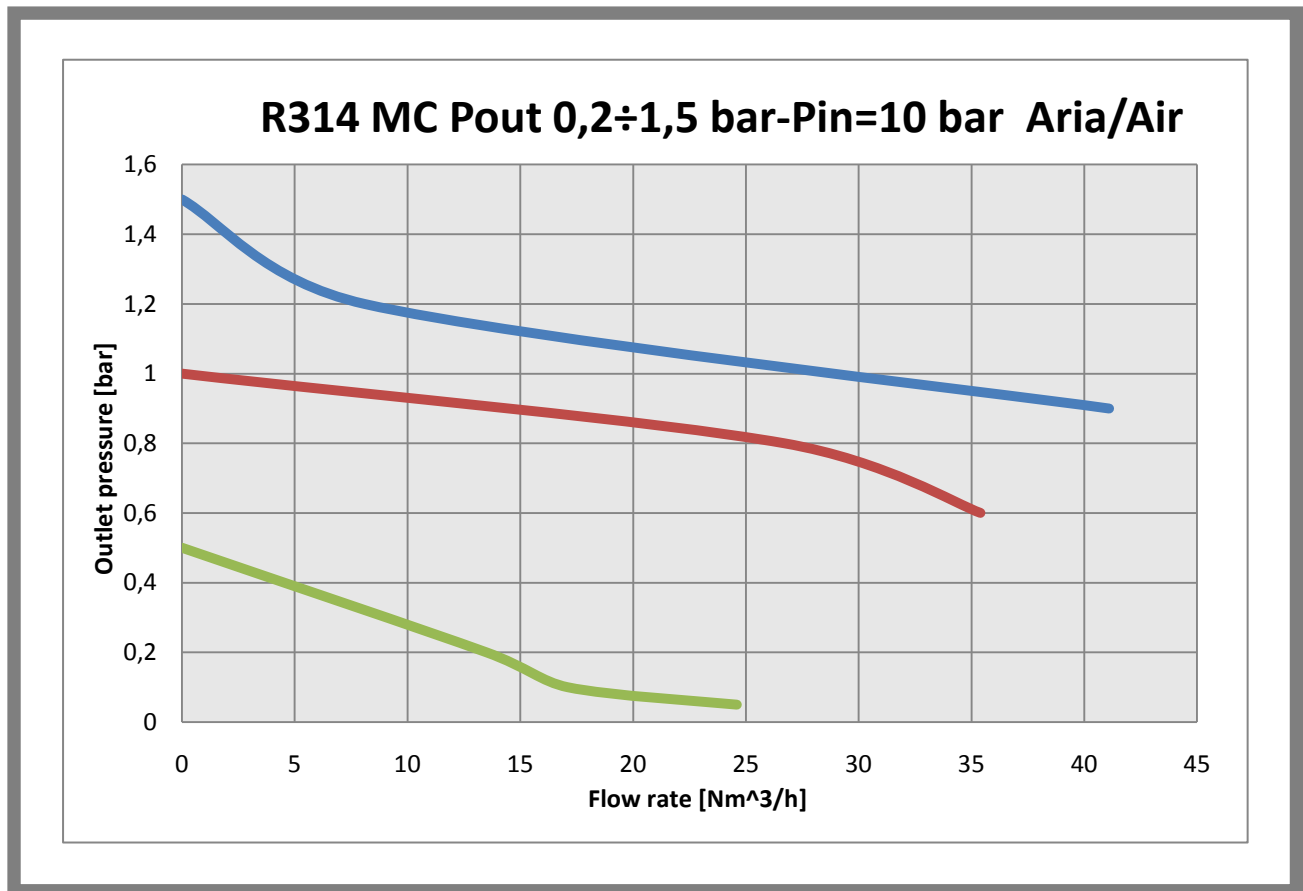
Wall mounting bracket + ring-nut: M14301

Overpressure relieving function, only for compressed air version

## **SPARE PARTS**

Complete kit: assembled diaphragm, main valve, O-rings

# 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
Campana in plastica / Bonnet made of plastic						<b>R314 MC</b>
R314 MC	20	0,2-1,5	G 1/4-F	G 1/4-F	543#N	Air
						Liquid
R314 MC	20	0,3-3	G 1/4-F	G 1/4-F	543#N	Air
						Liquid
R314 MC	20	0,8-8	G 1/4-F	G 1/4-F	543#N	Air
						Liquid
R314 MC	20	1,5-15	G 1/4-F	G 1/4-F	543#N	Air
						Liquid
Campana in acciaio / Bonnet made of stainless						
R314 MC	30	0,2-1,5	G 1/4-F	G 1/4-F	543#N	O2
						Liquid
						*
R314 MC	30	0,3-3	G 1/4-F	G 1/4-F	543#N	O2
						Liquid
						*
R314 MC	30	0,8-8	G 1/4-F	G 1/4-F	543#N	O2
						Liquid
						*
R314 MC	30	1,5-15	G 1/4-F	G 1/4-F	543#N	O2
						Liquid
						*
Campana in plastica / Bonnet made of plastic						<b>R318 MC</b>
R318 MC	20	0,2-1,5	G 1/8-F	G 1/8-F	543#M	Air
						Liquid
R318 MC	20	0,3-3	G 1/8-F	G 1/8-F	543#M	Air
						Liquid
R318 MC	20	0,8-8	G 1/8-F	G 1/8-F	543#M	Air
						Liquid
R318 MC	20	1,5-15	G 1/8-F	G 1/8-F	543#M	Air
						Liquid
Campana in acciaio / Bonnet made of stainless						
R318 MC	30	0,2-1,5	G 1/8-F	G 1/8-F	543#M	O2
						Liquid
						*
R318 MC	30	0,3-3	G 1/8-F	G 1/8-F	543#M	O2
						Liquid
						*
R318 MC	30	0,8-8	G 1/8-F	G 1/8-F	543#M	O2
						Liquid
						*
R318 MC	30	1,5-15	G 1/8-F	G 1/8-F	543#M	O2
						Liquid
						*

\* Air - N2 - He - Ar - H2 - C3H8 - CH4 - CO2 - N2O

#### **ATTACCHI DIVERSI DA STANDARD / CONNECTION DIFFERENT FROM STANDARD**

Attacchi entrata/uscita NPT / Inlet/outlet connections NPT

#### **ESECUZIONI DIVERSE DA STANDARD / EXECUTIONS DIFFERENT FROM STANDARD**

O-ring diversi da standard - EPDM / O-ring different from standard - EPDM

O-ring secondo FDA / O-ring in accordante to FDA

Convogliamento su campana / Venting on bonnet

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 P35021030304 / Ring nut P35021030304

Kit staffa + ghiera M14301 / Kit bracket + Ring nut M14301

## generating the product code

Reg. Micro MC Inox			
AA BB CC DD E F GG			
AA	Attacchi / Connections	M0	R318MC G 1/8-F
		N0	R314MC G 1/4-F
BB	Pressione ingresso / Inlet pressure	C0	20 bar - campana plastica
		D0	30 bar
CC	Intervallo uscita / Outlet range	A0	0,2 - 1,5 bar
		B0	0,3 - 3 bar
		D0	0,8 - 8 bar
		E0	1,5-15 bar
DD	Tipologia di fluido / Fluid type	15	O2
		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

**543#N0 C0 D0 98 N I 00**

**543#:** Regulator Micro MC stainless steel

**N0:** Connection G 1/4-F

**C0:** Maximum inlet pressure 20 bar

**D0:** Outlet pressure range 0,8-8 bar

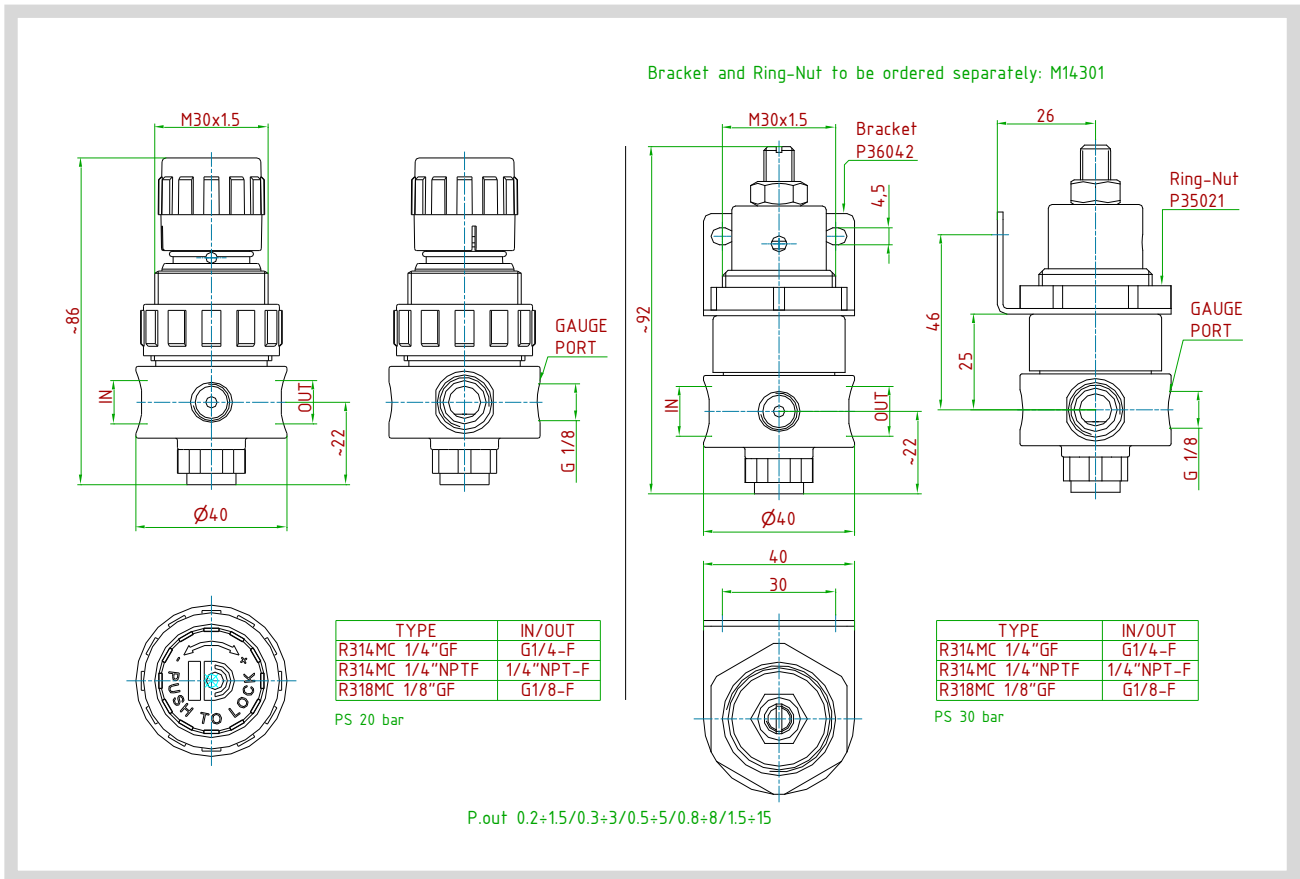
**98:** O-rings in EPDM

**N:** Not pilot operated

**I**

**00:** No accessories

# technical drawings (all dimensions in mm)



## **ID Insert Deal Srl**

Strada dei Boschi, 40  
20852 Villasanta (MB) Italia  
tel. +39 039 302035  
[info@idinsertdeal.com](mailto:info@idinsertdeal.com)  
[www.idinsertdeal.com](http://www.idinsertdeal.com)

ID Insert Deal si riserva il diritto di cambiare le specifiche del prodotto senza preavviso.  
ID Insert Deal reserves the right to change and/or modify product specifications without prior notice.

Insert Deal non si assume alcuna responsabilità per la scelta, uso e manutenzione di qualsiasi prodotto. La responsabilità per l'ideale scelta, uso e manutenzione di qualsiasi prodotto ID rimane interamente a carico dell'acquirente.  
Insert Deal does not assume responsibility for selection, use and maintenance of any products. Responsibility for proper selection, use and maintenance of any ID products remains entirely to the purchaser.

Riproduzione vietata. Tutti i diritti riservati; nessuna parte del presente documento può essere riprodotta senza autorizzazione di ID Insert Deal Srl.  
Reproduction forbidden. All rights reserved; the hereby document can't be reproduced, also partially, without the authorization of ID Insert Deal Srl.

2^S-543 - R314MC-R318MC\_EN\_00



Azienda con sistema di gestione qualità certificato.  
certificato N° 50 100 9191  
Company with certificated quality management system.  
certificate N° 50 100 9191