# Series PR precision regulators with manual override

Size 1 ports: G1/4 Size 2 ports: G1/4, G3/8





- » High precision adjustment
- » Multi-diaphragm construction to reach the highest stability
- » Adjustment lock
- » Compact dimensions
- » Removable adjustment knob

The Series PR precision pressure regulators are ideal for applications that require a precise and stable air pressure control. The operating principle using multiple diaphragms allows the Series PR to react to even the smallest pressure variations that may occur during use.

## **GENERAL DATA**

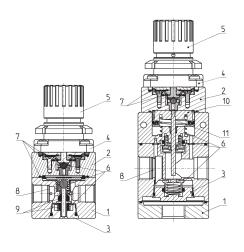
Construction	compact, multi-diaphragm type
Materials	see the following page
Ports	Size 1: G1/4 Size 2: G1/4, G3/8
Mounting	vertical in-line, wall or panel mounting (in any position)
Working temperature	0°C ÷ 50°C
Inlet pressure	0.1 ÷ 12 bar
Outlet pressure	0.05 ÷ 2 bar 0.05 ÷ 4 bar 0.05 ÷ 7 bar 0.05 ÷ 10 bar
Overpressure exhaust	with relieving (standard)
Nominal flow	see FLOW DIAGRAMS on the following pages
Media	filtered and not lubricated compressed air according to DIN ISO 8573-1 Classes 1-3-2
Hysteresis	20mbar
Repeatability	±0.2% FS
Bleed air consumption	≤ 5 l/min



## CODING EXAMPLE

PR	1	04	-	М	07
PR	SERIES				
1	SIZE: 1 = size 1 2 = size 2				
04	PORTS: 04 = G1/4 38 = G3/8 (size 2 only)				
Μ	TYPE OF ADJUSTMENT: M = manual				
07	OPERATING PRESSURE (1 bar = 14, 02 = 0.05 ÷ 2 bar 04 = 0.05 ÷ 4 bar 07 = 0.05 ÷ 7 bar 00 = 0.05 ÷ 10 bar	5 psi):			

Series PR precision regulators - materials



PARTS	MATERIALS	
1 = Body	Anodized aluminium	
2 = Intermediate body	Aluminium	
3 = Valve holder plug	Brass	
4 = Bell	Polyamide	
5 = Regulator knob	Polyamide	
6 = Springs	Stainless steel	
7 = Diaphragms	NBR	
8= Filters	Stainless steel	
9 = Seals	NBR	
10 = Piston	Aluminium	
11 = Rod	Stainless steel	
0-ring	NBR	

## Series PR precision regulators - size 1

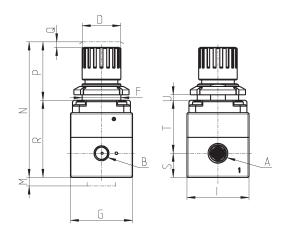


SERIES PR PRECISION REGULATORS

\* to complete the code, add the OPERATING PRESSURE (see the CODING EXAMPLE)

PR02 = Regulator with relieving





DIMENSIONS															
Mod.	А	В	D	F	G	I	М	Ν	Р	Q	R	S	Т	U	Weight (Kg)
PR104-M*	G1/4	G1/8	28	30	45	45	25	96	40	2	56	17.5	38.5	0-6	0.35

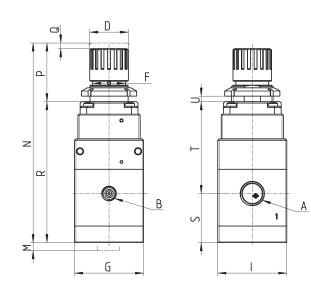
## Series PR precision regulators - size 2



\* to complete the code, add the OPERATING PRESSURE (see the CODING EXAMPLE)

PR02 = Regulator with relieving

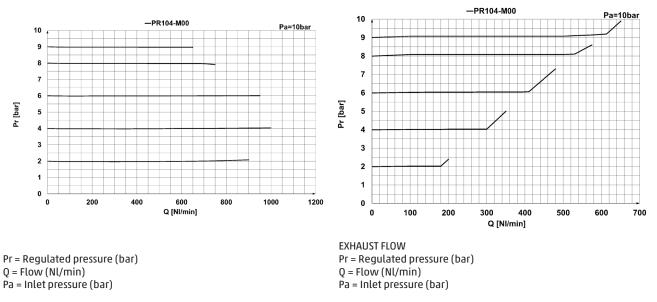




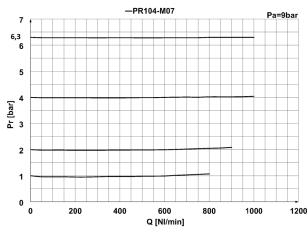
DIMENSIONS															
Mod.	А	В	D	F	G	I	М	Ν	Р	Q	R	S	Т	U	Weight (Kg)
PR204-M*	G1/4	G1/8	28	30	50	50	25	140	40	2	101.8	35.5	66.3	0-6	0.645
PR238-M*	G3/8	G1/8	28	30	50	50	25	140	40	2	101.8	35.5	66.3	0-6	0.645

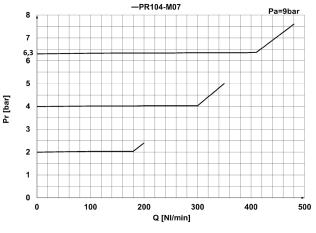
SERIES PR PRECISION REGULATORS

## FLOW DIAGRAMS Mod. PR104-M00



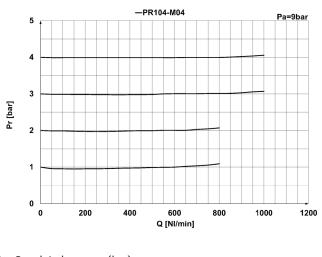
FLOW DIAGRAMS Mod. PR104-M07



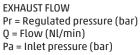


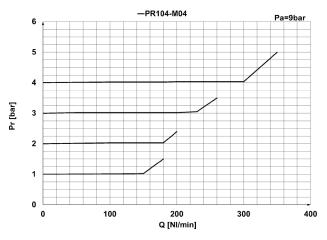
Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)





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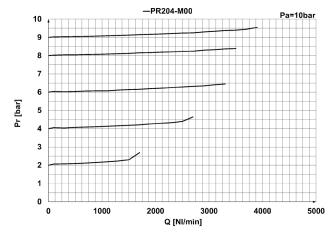


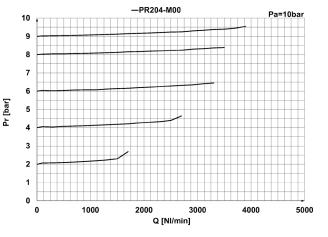


EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar) FLOW DIAGRAMS Mod. PR104-M02

#### -PR104-M02 -PR104-M02 Pa=9bai Pa=9bai 2,5 3,0 2,5 2.0 2,0 1,5 Pr [bar] Pr [bar] 1,5 1,0 1,0 0,5 0.5 0,0 0,0 0 200 400 600 800 1000 0 50 100 150 200 Q [NI/min] Q [NI/min] EXHAUST FLOW Pr = Regulated pressure (bar) Pr = Regulated pressure (bar) Q = Flow (Nl/min) Q = Flow (Nl/min) Pa = Inlet pressure (bar) Pa = Inlet pressure (bar)

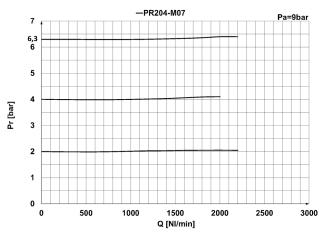
## FLOW DIAGRAMS Mod. PR204-M00





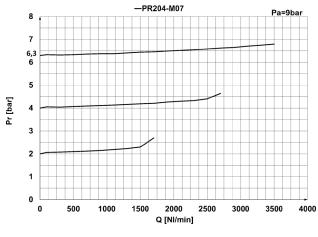
Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

## FLOW DIAGRAMS Mod. PR204-M07



Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

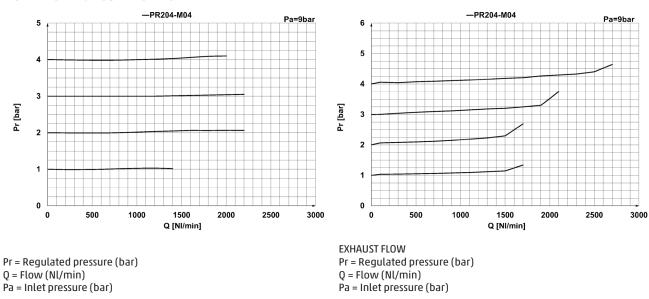
EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)



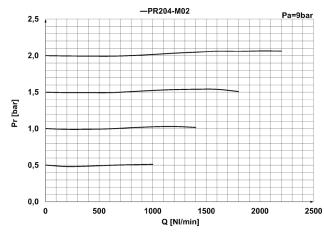
EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

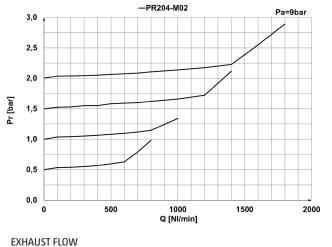
SERIES PR PRECISION REGULATORS

## FLOW DIAGRAMS Mod. PR204-M04



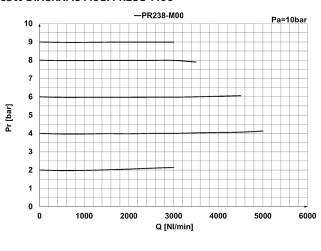
## FLOW DIAGRAMS Mod. PR204-M02



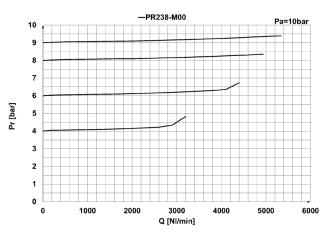


Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

## FLOW DIAGRAMS Mod. PR238-M00



Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

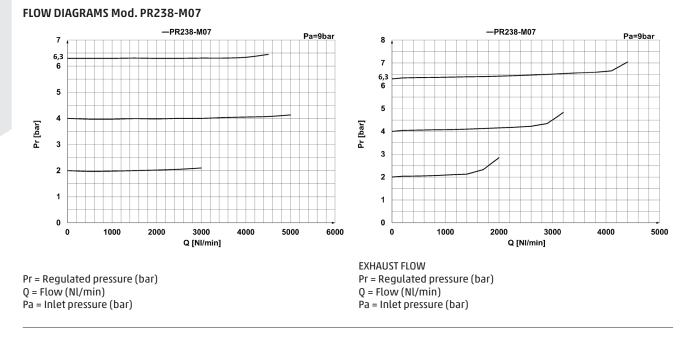


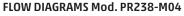
EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

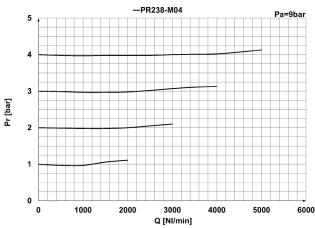
Pr = Regulated pressure (bar)

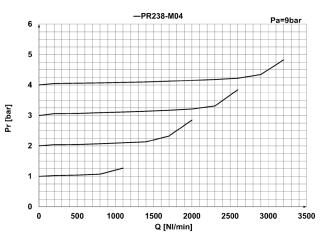
Q = Flow (Nl/min)

Pa = Inlet pressure (bar)



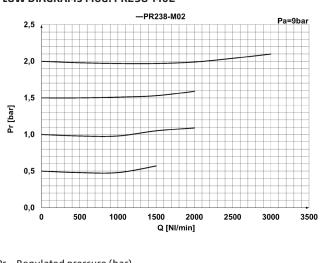






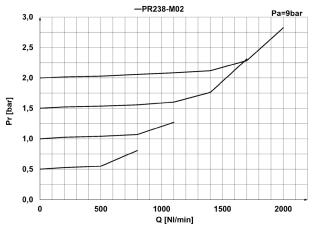
Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

FLOW DIAGRAMS Mod. PR238-M02



Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)



EXHAUST FLOW Pr = Regulated pressure (bar) Q = Flow (Nl/min) Pa = Inlet pressure (bar)

Automation