



Catalogue
Series PR
precision regulators
with manual override





Series PR precision regulators with manual override

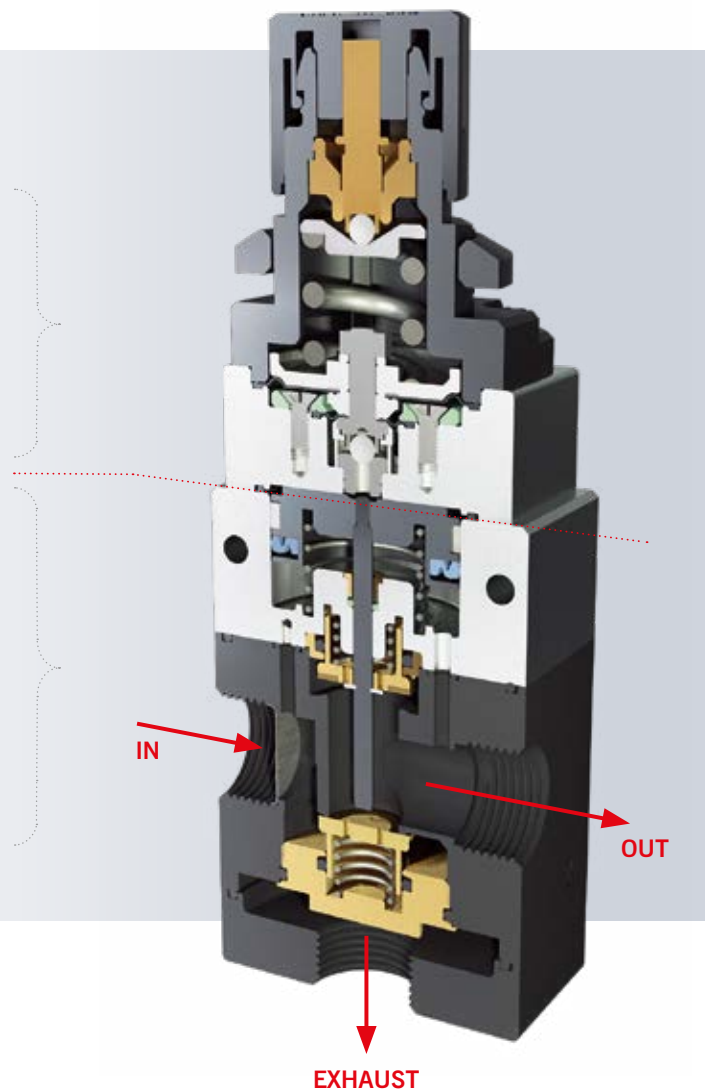
The **Series PR** precision pressure regulators are ideal for applications that require a precise and stable air pressure control. The operating principle with multiple diaphragms allows to react even to the smallest pressure variations that may occur during use.

- HIGH PRECISION ADJUSTMENT
- MULTI-DIAPHRAGM CONSTRUCTION TO REACH THE HIGHEST STABILITY
- ADJUSTMENT LOCK
- COMPACT DIMENSIONS
- REMOVABLE ADJUSTMENT KNOB

OPERATION PRINCIPLE

By rotating the adjustment knob, a screw with a very fine pitch is driven to adjust the air pressure in a very precise way. The stable and accurate maintenance of the pressure is guaranteed by the balance of forces acting on multiple diaphragms, optimizing the performance obtainable by a regulator with single diaphragm.

To reach higher flows, in size 2 poppets have been added that allow to open or close large flow passage sections. The exhaust, similar in size to the other connections, is threaded and positioned on the lower side. Any silencers do not interfere with the mounting position of the regulator. Fixing can be done with brackets on the adjustment knob or by means of through holes on the body.



General data

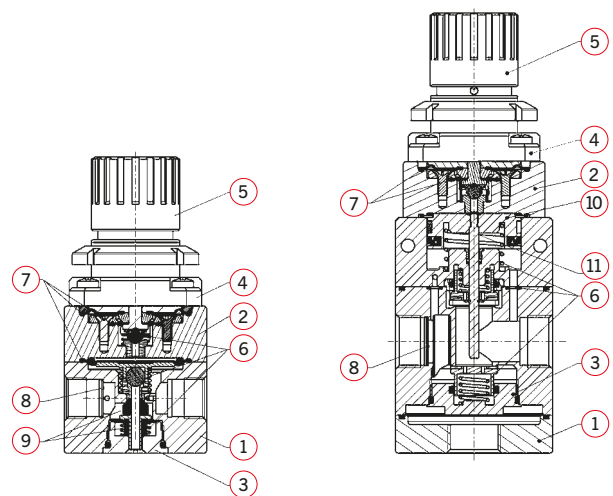
Construction	compact, multi-diaphragm type
Ports	size 1: G1/4 size 2: G1/4, G3/8
Mounting	vertical in-line, wall or panel mounting (in any position)
Working temperature	0°C ÷ 50°C
Inlet pressure	0.1 ÷ 12 bar
Outlet pressure	0.05 ÷ 2 bar 0.05 ÷ 4 bar 0.05 ÷ 7 bar 0.05 ÷ 10 bar
Overpressure exhaust	with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

Coding example

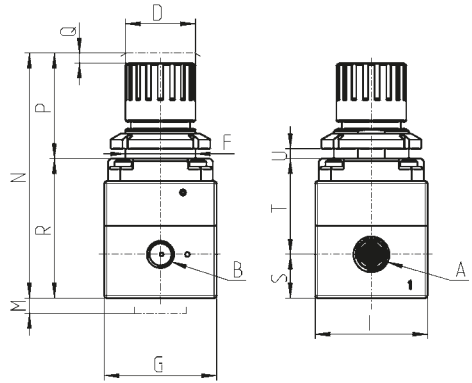
PR	1	04	-	M	07
PR	SERIES				
1	SIZE: 1 = size 1 2 = size 2				
04	PORTS: 04 = G1/4 38 = G3/8 (size 2 only)				
M	TYPE OF ADJUSTMENT: M = manual				
07	OPERATING PRESSURE (1 bar = 14,5 psi): 02 = 0.05 ÷ 2 bar 04 = 0.05 ÷ 4 bar 07 = 0.05 ÷ 7 bar 00 = 0.05 ÷ 10 bar				

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 Stem	Stainless steel
O-ring	NBR



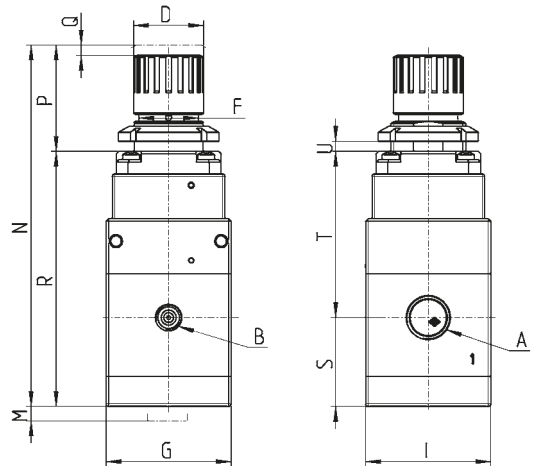
Regulator
Size 1



Mod.	A	B	D	F	G	I	M	N	P	Q	R	S	T	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

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

Regulator
Size 2

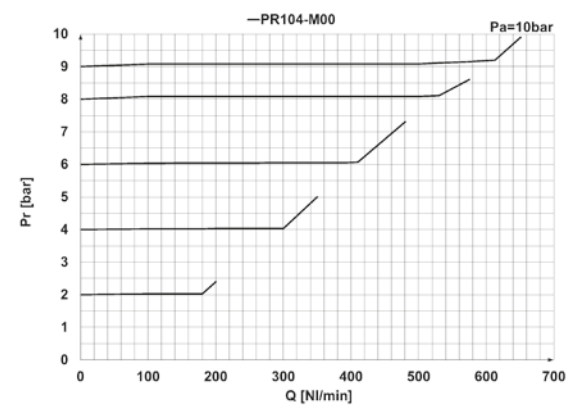
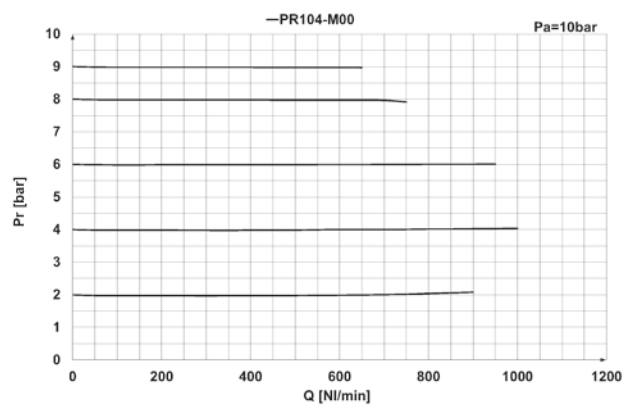
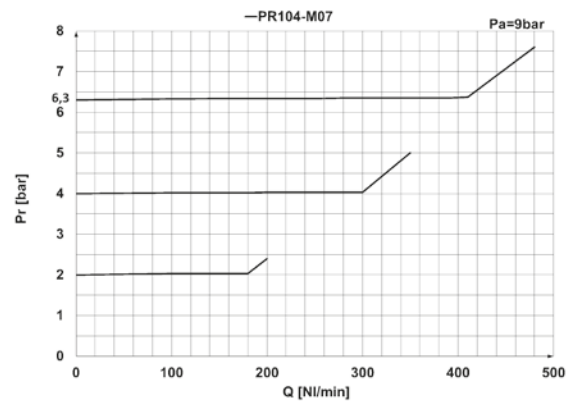
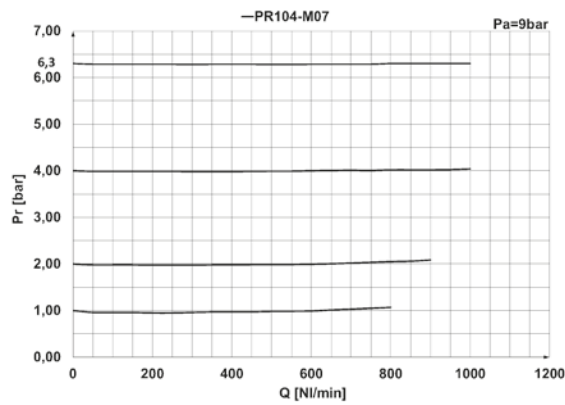
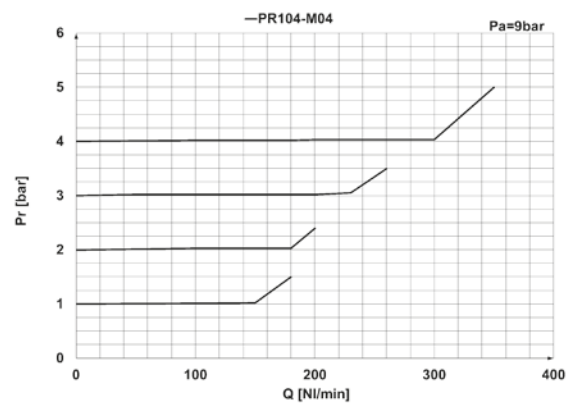
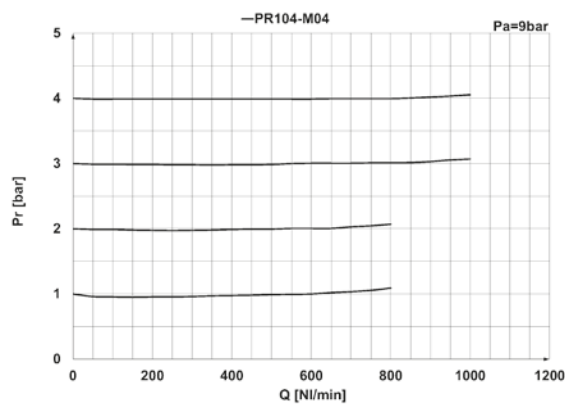
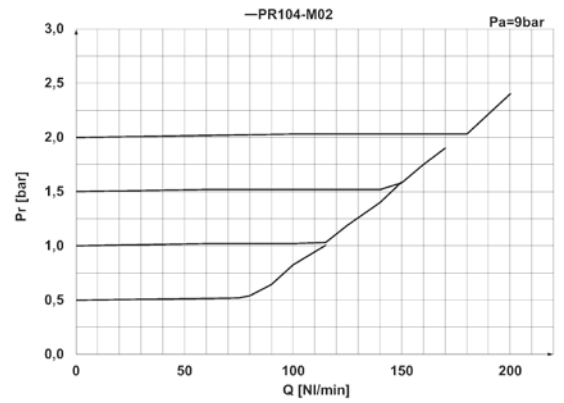
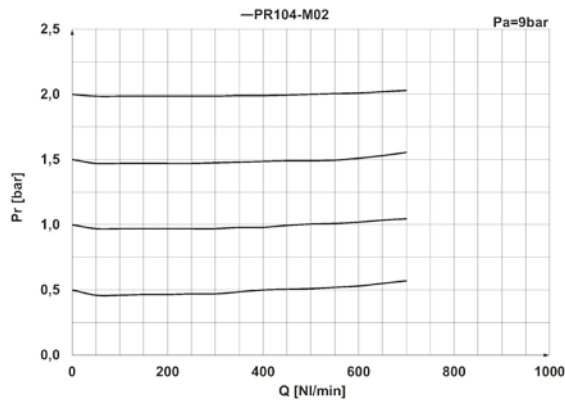


Mod.	A	B	D	F	G	I	M	N	P	Q	R	S	T	U	Weight (kg)
PR204-M*	G1/4	G1/8	28	30	50	50	25	140	40	2	101.8	35.5	66.3	0-6	0.645
PR238-M*	G3/8	G1/8	28	30	50	50	25	140	40	2	101.8	35.5	66.3	0-6	0.645

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

FLOW DIAGRAMS

EXHAUST FLOW DIAGRAMS



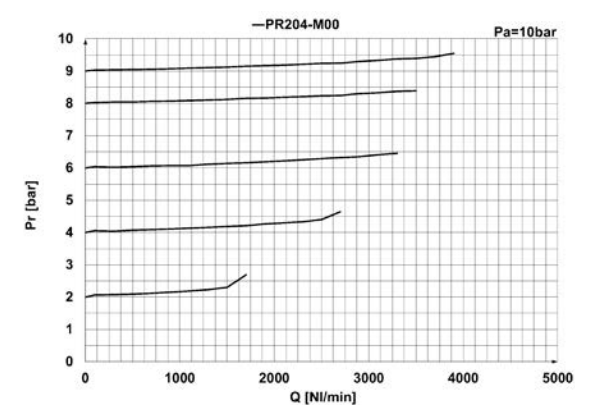
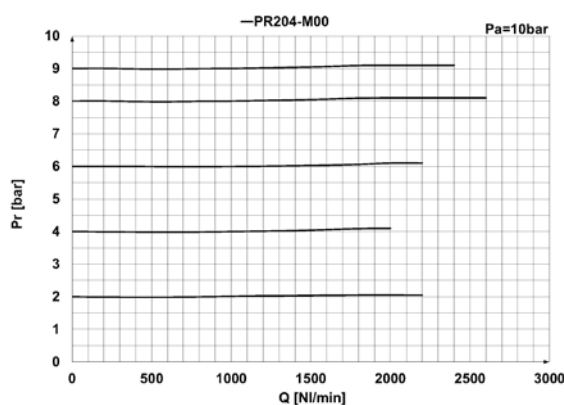
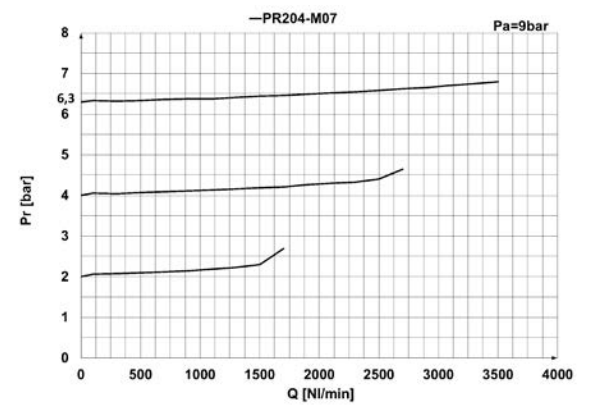
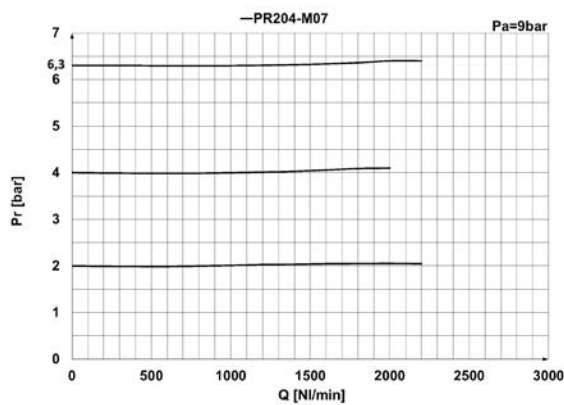
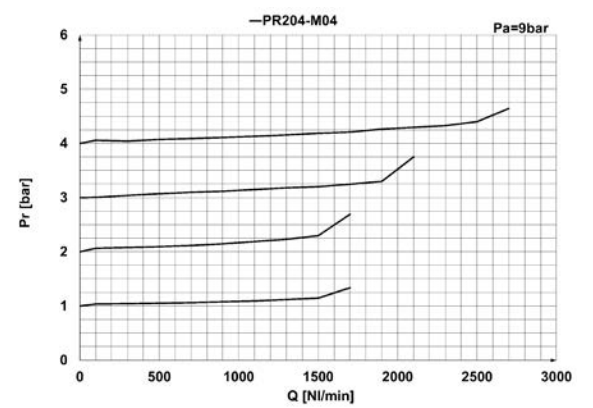
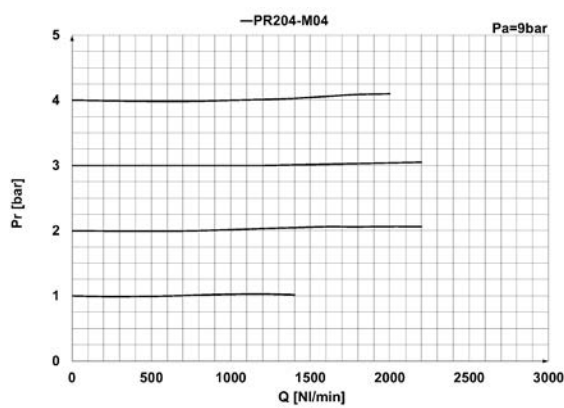
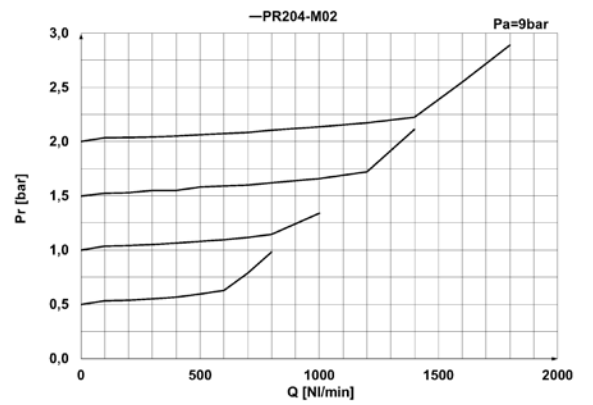
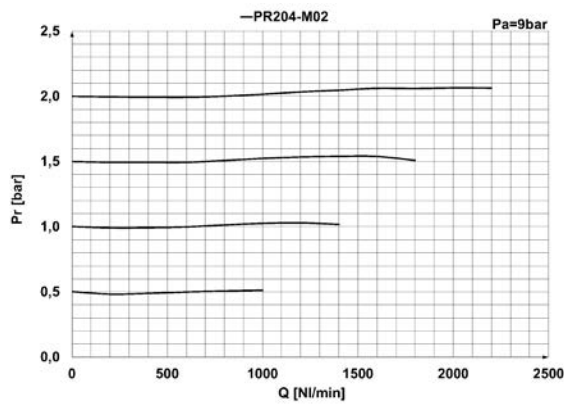
Pr = Regulated pressure (bar)

Q = Flow (NI/min)

Pa = Inlet pressure (bar)

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EXHAUST FLOW DIAGRAMS



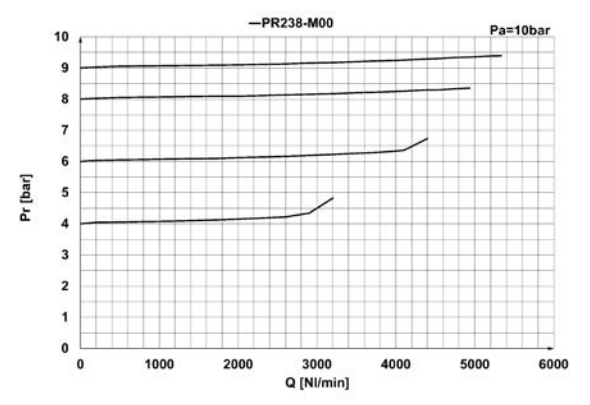
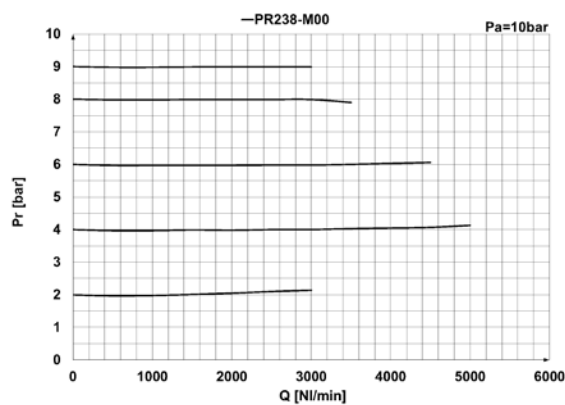
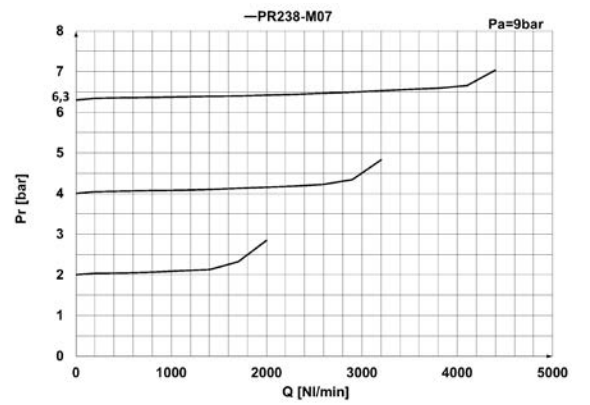
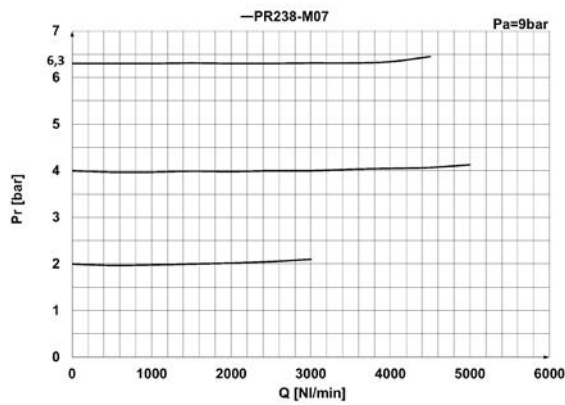
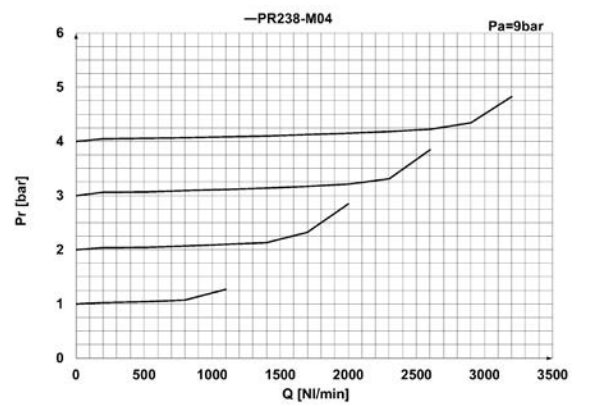
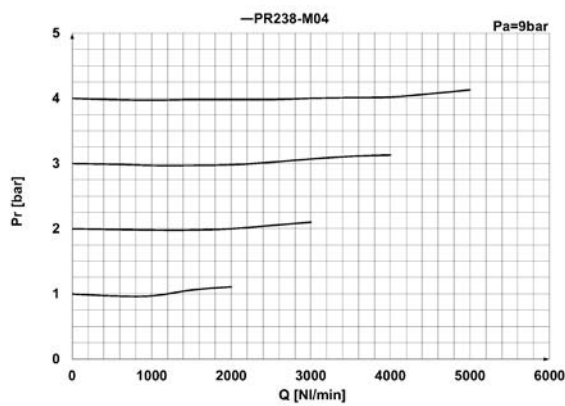
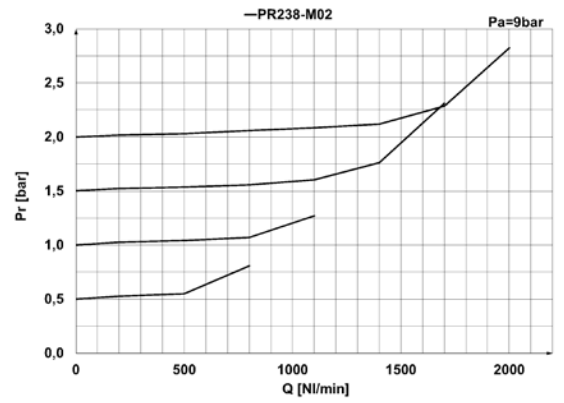
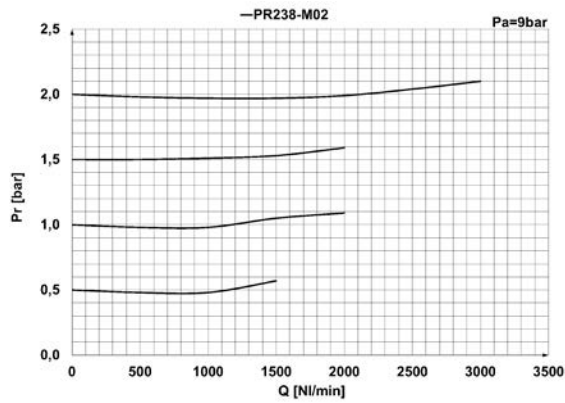
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Contacts

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