Miniature Regulator ARJ1020F Series

- Compact and lightweight (16 g)
- Low cracking pressure 0.02 MPa Standard model equipped with backflow function



ARJ1020F-M5-04

ARJ1020F-M5-06

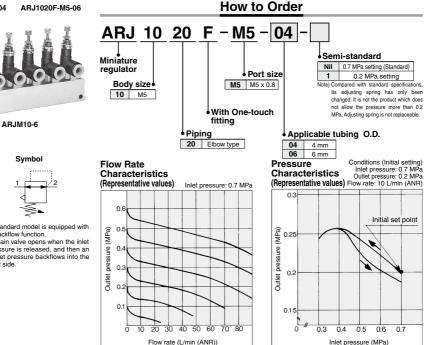
Standard Specifications

Model		ARJ1020F		
Port	IN side	M5 (Male thread)		
size	OUT side (Applicable tubing O.D.)	ø4	ø6	
Fluid		Air		
Proof pre	essure	1.2 MPa		
Maximun	n operating pressure	0.8 MPa		
Developi		Standard: 0.1 to 0.7 MPa		
Regulatil	ng pressure range	0.2 MPa setting 0.05 to 0.2 MPa		
Ambient	and fluid temperature	-5 to 60°C (No freezing)		
Construc	tion	Relieving type		
Weight (I	kg)	0.015	0.016	
Cracking	pressure (Valve)	0.02 MPa		
Max. effe	ctive area (OUT → IN)	1.8 mm ²		
Applicab	le tubing material Note)	Nylon, Soft nylon, Polyurethane		

Note) Be sure to note the maximum operating pressure for soft nylon and polyurethane. (Refer to the Web Catalog.)

Accessory (Option)/Part No.

Description	Part no.
Manifold base	ARJM10-4, -6, -10

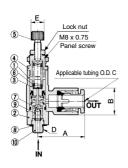


≥SMC

Note) A standard model is equipped with a backflow function. A main valve opens when the inlet pressure is released, and then an outlet pressure backflows into the inlet side.

Miniature Regulator **ARJ1020F** Series

Construction/Dimensions





F

Component Parts

Dimensions

No.	Description	Material	Note
1	Body	PBT	
2	Valve guide	Brass	Electroless nickel plated
3	Piston	Polyacetal	
4	Bonnet	Brass	Electroless nickel plated
5	Knob	Brass	Electroless nickel plated
6	Adjusting spring	Steel wire	Zinc chromated
7	Valve	Brass	Rubber lining
10	Nipple	Brass	Electroless nickel plated

Replacement Parts

No.	Description	Material	Part no.
7	Valve	Brass, HNBR	13434-30#1
8	Gasket	Stainless steel NBR	M-5G2
9	Spring	Stainless steel	134313

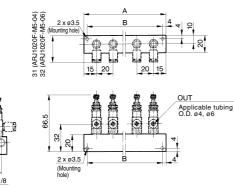
Panel mounting hole

Max. 2.5t

 When replacing valves and springs, remove nipple first. Note that adhesive is applied to the nipple portion.

Dimensions										
Model	Α	В	С	D	E	F	G	н	J	K
ARJ1020F-M5-04	21	10.4	4	M5 x 0.8	6	10.6 (Width across	3.5	15.5	50	17.0
ARJ1020F-M5-06	22	12.8	6	0.0 X CIVI	0	flats: 10)	3.5	15.5	50	17.2

Manifold Base (Option)/Dimensions



Manifold base part no.	Stations	A dimension	B dimension
ARJM10-4	4	90	82
ARJM10-6	6	130	122
ARJM10-10	10	210	202

A Precautions

Be sure to read this before handling the products. Refer to page 9 for safety instructions and pages 13 to 17 for precautions on every series.

Piping

∆Warning

 To connect the IN side, hold the valve guide at its wrench flats (opposite side 10) and tighten it at the recommended torque of 1.0 to 1.5 N·m. (The recommended torque when using a tightening tool to tighten an additional 1/6 to 1/4 turn after tightening by hand)

Excessive torque or holding it at an area other than the specified portion may result in a malfunction.

 While piping to products or operating the knob, ensure that an excess bending moment should not be applied to a product, because it may result in damage.

Mounting/Adjustment

∆Warning

 Set up the regulator while verifying the pressure that is indicated on the inlet and the outlet pressure gauges. Turning the knob excessively could damage the internal parts.

 Release the lock to adjust the pressure. After the adjustment, engage the lock. Failure to observe this procedure could damage the knob or cause the outlet pressure to fluctuate.

<Lock operating method>

Loosen the lock nut to unlock it, and tighten it to lock it.

 This product can be used as a check regulator by installing it between solenoid valve and actuator.

Selection

∆Caution

1.When operating at an inlet pressure lower than the inlet pressure used in the flow rate characteristics graph, the pressure drop on the outlet side may be greater. Therefore, be sure to conduct testing using the actual equipment.

For pressure control equipment selection, refer to the "Product Selection Guide."

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13	
2 x 1/8	
IN	

(Common)