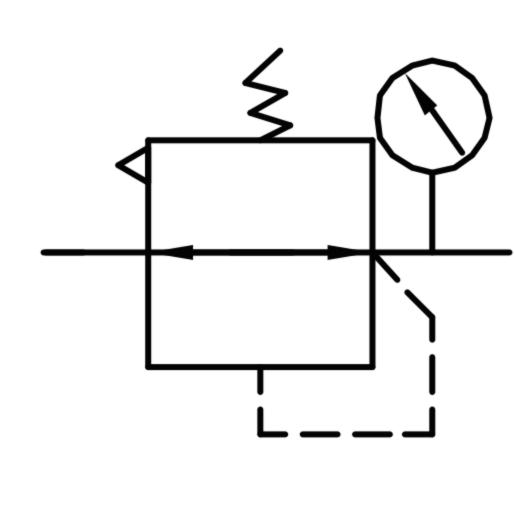
EIR-K Series Regulator with Backflow Function



Regulator with backflow function







O How to Order?

	e body ize Type	code –	– Port	size	Pressure		Bracket	code	Scale unit	— Thre	ad type
EIR:Regulator with square gauge	K: Backf	low type			: With Press Without Press	sure Gauge essure Gauge	е		1: Mpa 2: Bar 3: Psi	F	 nk: G P: PT F: NPT
3000:30	00 Series		01: 1/8 " 02: 1/4 "		04: 1/2 " ①			bracket out bracket			
	00 Series 00 Series		02: 1/4 " 03: 3/8 "	•	06: 3/4 " 10: 1 "						

Order Example: Regulator with square gauge, 2000 series body, backflow type, 1/4" port size, with gauge, with bracket, MPa, G thread, ERP code is: EIR2000K–021

Note: 1. Backflow type regulator must work separately; the regulator knob must be upward, the air should be left port in and right port out.

- 2. 2000 series must work in case of knob upward and left port in & right port out Right port in & left port out is not available currently.
- 3. Standard 3000,4000,5000 series with backflow function must conform to above 1st point. If right port in & left port out was requested, EMC can customize it.

Note: ① 3/8" and 3/4" port are not available for 4000 series.

Specifications

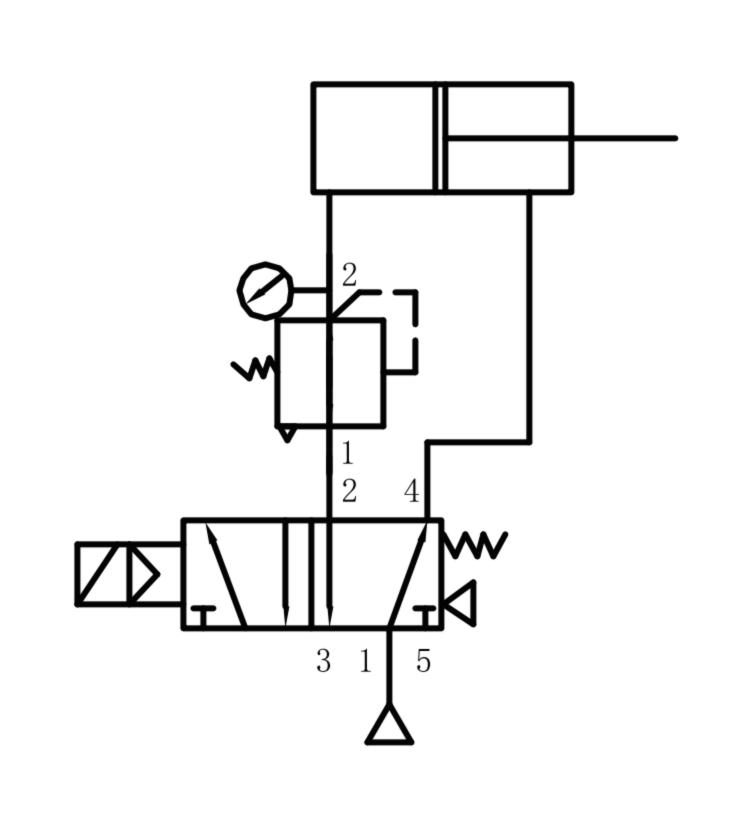
Model	EIR2000K	EIR3000K	EIR4000K	EIR5000K						
Working Medium		Clean air(After 40 μ m filtration)								
Proof pressure(MPa)		1.5								
Max. Working pressure(MPa)		1.0								
Pressure adjusting range(MPa)		0.05~0.9								
Working temperature (${}^{\circ}$ C)		-5~60 (No freezing)								
Overpressure Exhaust Mechanism		With overflow								

Model	Rated flow(L/min) *	Port size *
EIR2000K-01	1178	1/8"
EIR2000K-02	1200	1/4"
EIR3000K-02	2112	1/4"
EIR3000K-03	2212	3/8"
EIR4000K-04	5312	1/2"
EIR5000K-06	6400	3/4"
EIR5000K-10	6600	1"

^{*} Supply pressure 8.0Bar, Set pressure 6.3Bar, and pressure difference 1 Bar, testing result shows that standard type and backflow type have same flow rate.

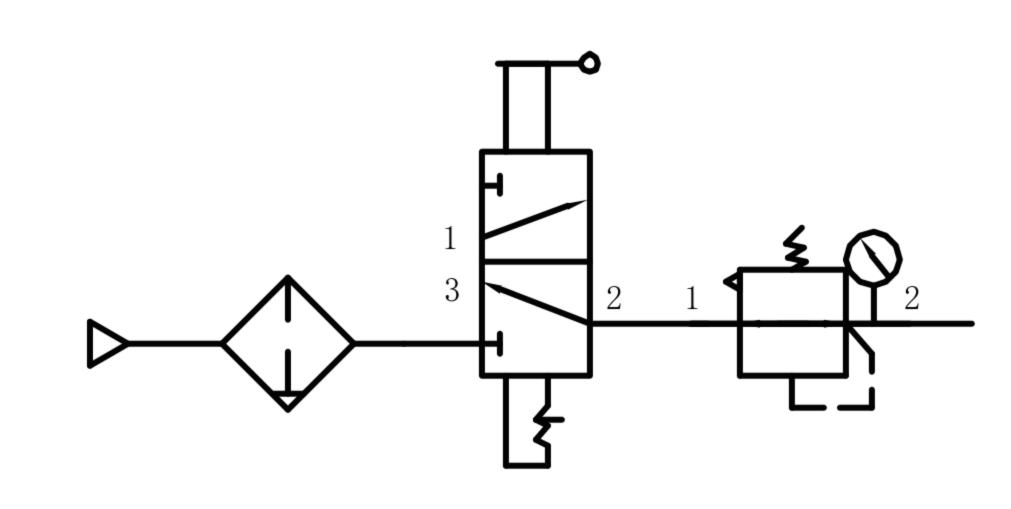
Suitable Applications

1. The pressure is different between piston rod side and the opposite side.



2. Exhaust through the inlet port when air supply stopped. It is a safety precaution.

The residual compress air on the outlet side of pressure reducing valve can be discharged



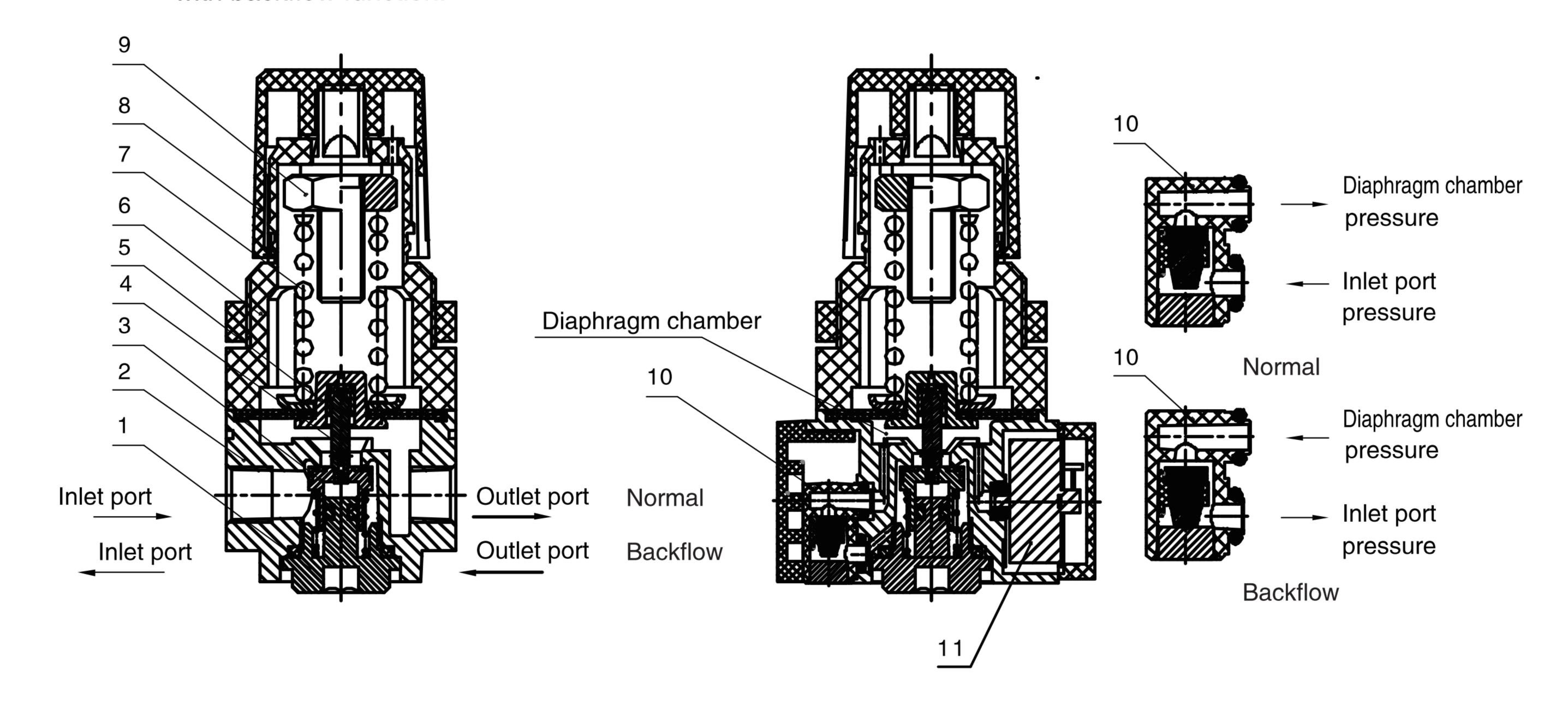
^{*} G, PT, NPT is optional.

EIR-K Series Regulator with Backflow Function

Construction and working principle

Working principle:

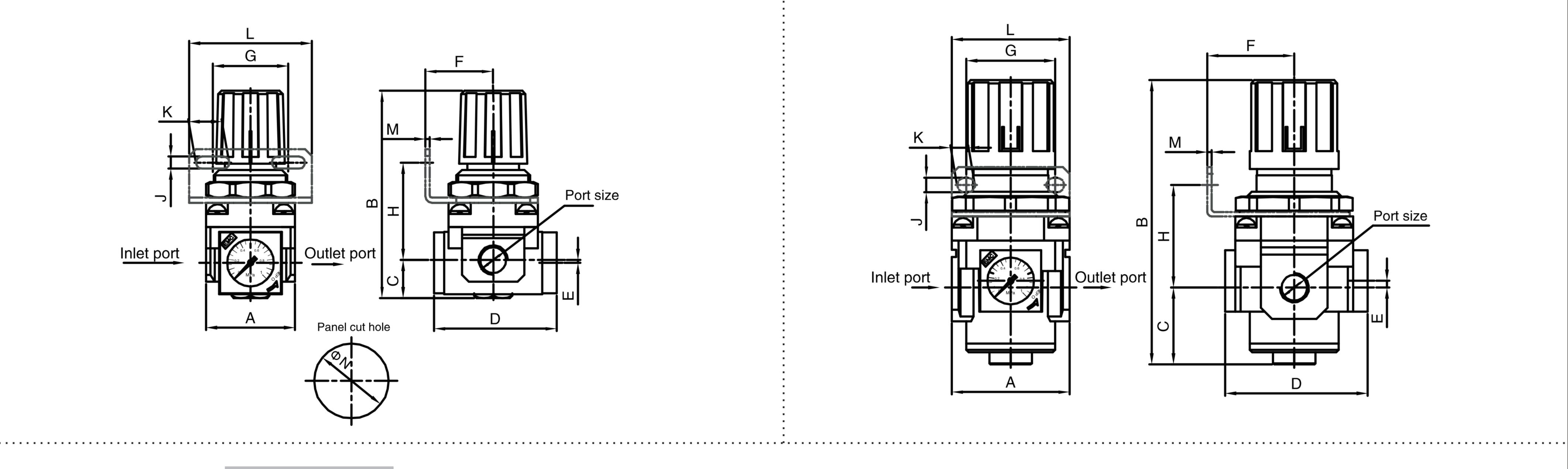
- 1. When inlet pressure is higher than set pressure, one-way valve 10 closes, it works as a normal regulator.
- 2. When the inlet pressure blocked, the one-way valve 10 opens, pressure in diaphragm chamber exhausts from the inlet side. When diaphragm chamber pressure goes down, diaphragm is pushed down by the spring force, The valve core will be open by valve rod, pressure at the outlet side exhaust through the inlet side, it works as a regulator with backflow function.



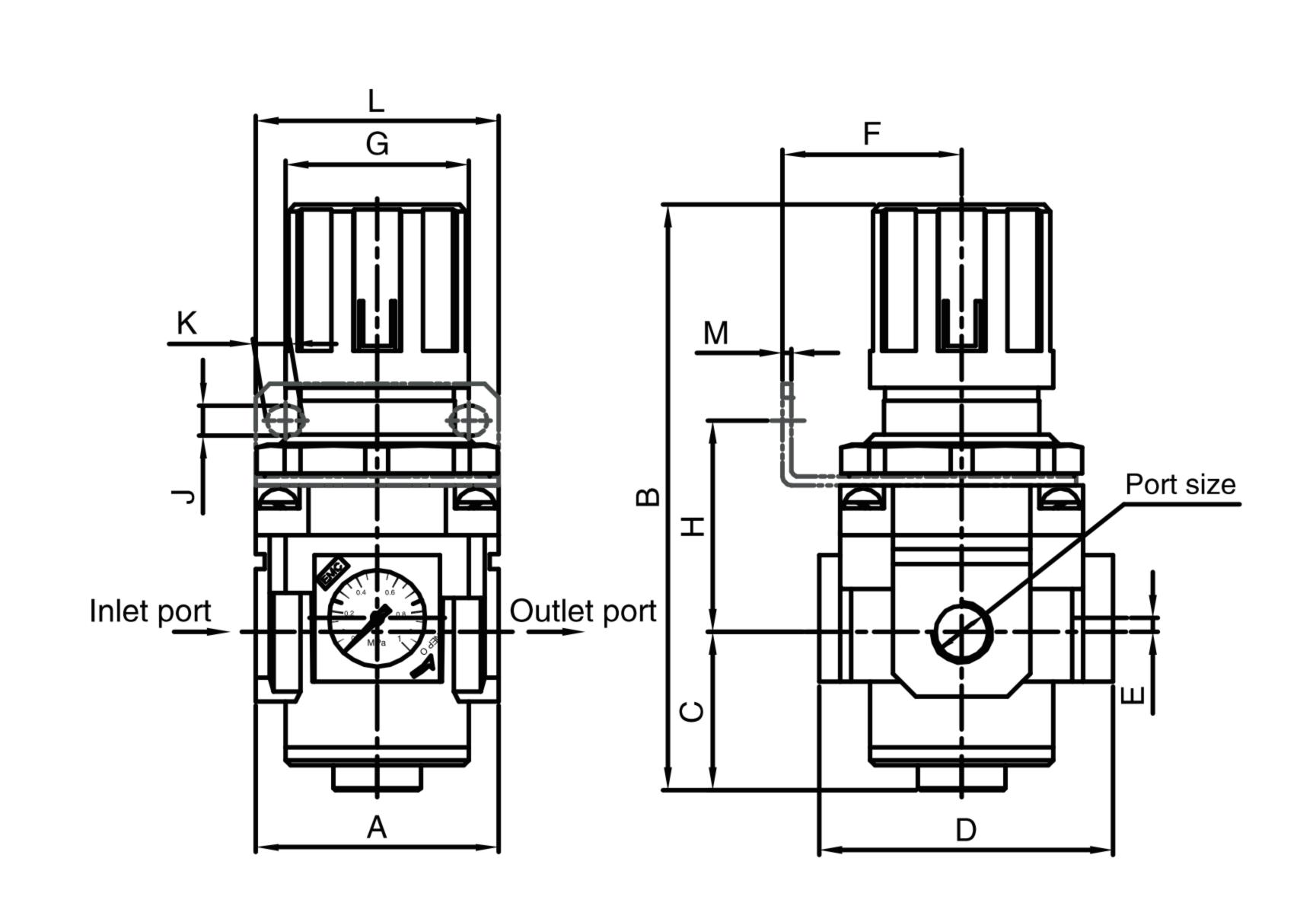
No.	Name	Material				
1	Regulator seat	Aluminium				
2	Regulator body	Aluminium				
3	Valve core	NBR/Metal				
4	Spool	Brass				
5	Diaphram components	NBR/Metal				
6	Valve cover	Reinforce nylon (2000/3000)				
	vaive cover	Aluminium(4000/5000)				
7	Spring	SWC				
8	Knob	Reinforce nylon				
9	Adjustment bolt components	Free-cutting steel				
10	One-way valve components	NBR/Plastic				
11	Pressure gauge	Brass/Plastic				

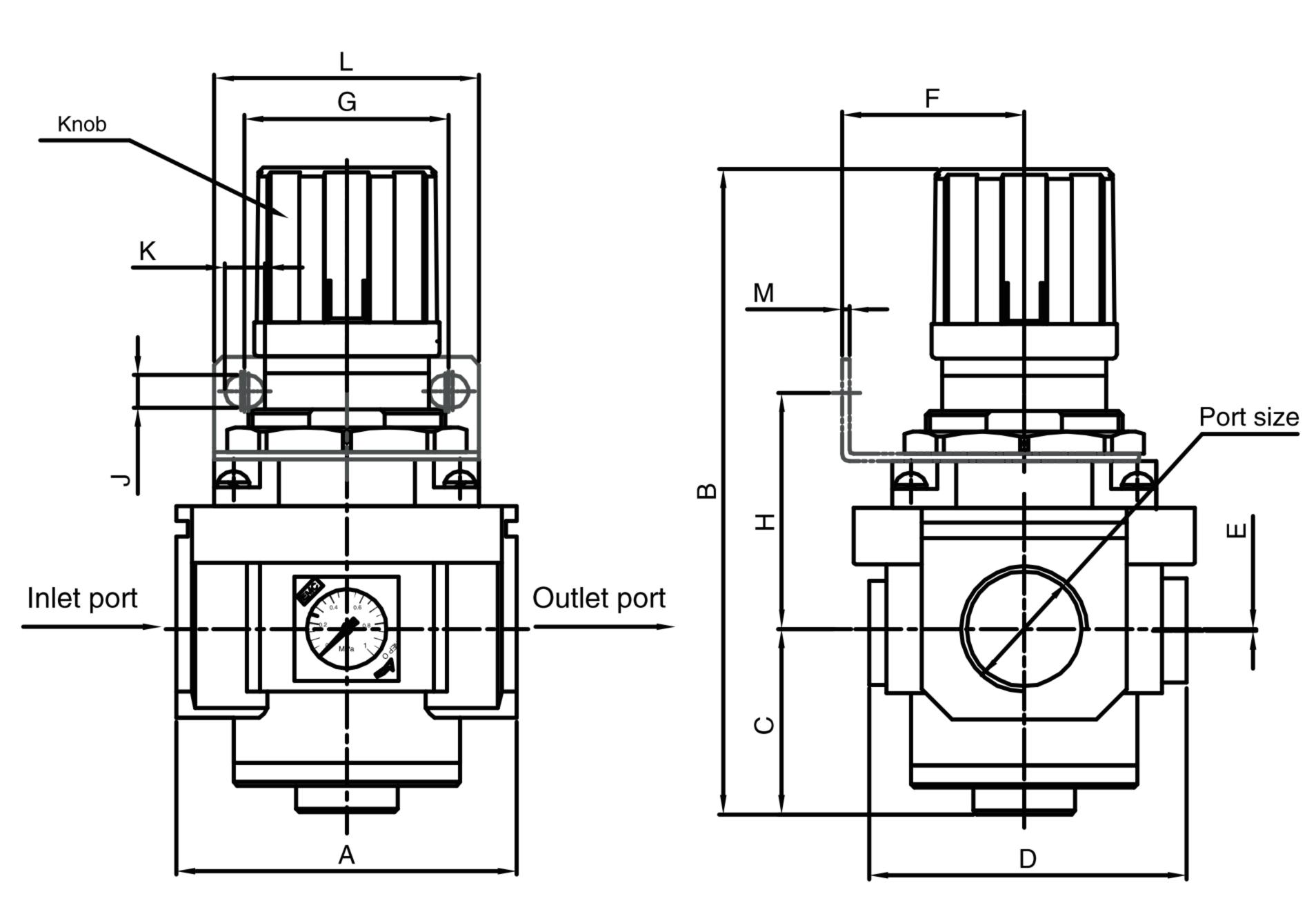
Main Dimension





EIR3000K-EIR4000K





Note:

- 1. Backflow type regulator knob should be upward, left port inlet and right port outlet.
- 2 . Standard regulator knob should be downward, left port inlet and right port outlet. (Refer to EI series of standard type)
- 3. The installation size and dimensions of standard and backflow type are same.

Model	Port size	Α	В	С	D	E	F	G	Н	J	K	L	М	N
EIR2000K	1/8" –1/4"	40	95	17	55	1.3	30.5	33.5	44	5.4	15	55	2	33
EIR3000K	1/4" –3/8"	53	127.5	34.5	64	3	39	40	46	6.5	8	53	2	42
EIR4000K	1/2"	70	149.5	37.5	81	4	48	53.5	54.5	8.5	10.5	70	2	52
EIR5000K	3/4" –1"	90	168	49	90	0.5	48	53.5	62	8.5	10.5	70	2	52