

**Needle Valve, Adjustable**  
Type GRO-...-B



The needle valve regulates air flow, for example, to control piston speed of a cylinder. Air flow is approximately equal in both directions and can be finely adjusted.

Accessories:  
Protective cap, Type GRK-...  
to prevent unauthorized setting



For GRO-M 5-B:  
Order No. 6436 GRK-M 5

For GRO-1/8-B:  
Order No. 2105 GRK-1/8

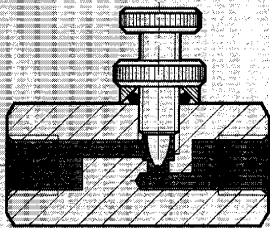
Hex Nut, Type GRM-...  
for front panel mounting



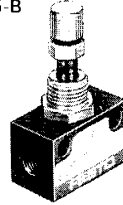
For GRO-M 5-B:  
Order No. 6444 GRM-M 5

For GRO-1/8-B:  
Order No. 2107 GRM-1/8

Example: Type GRO-1/4



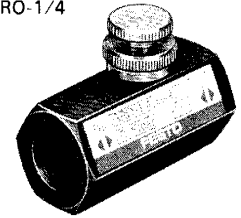
Type GRO-M 5-B



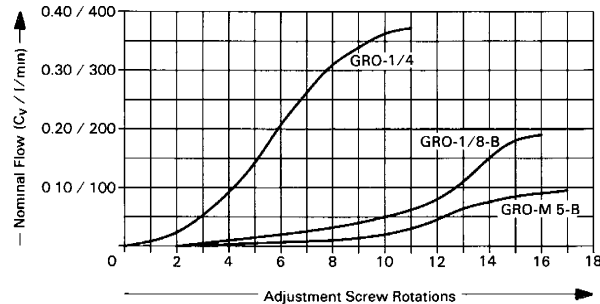
Type GRO-1/8-B



Type GRO-1/4



Flow versus Adjustment Screw Rotations



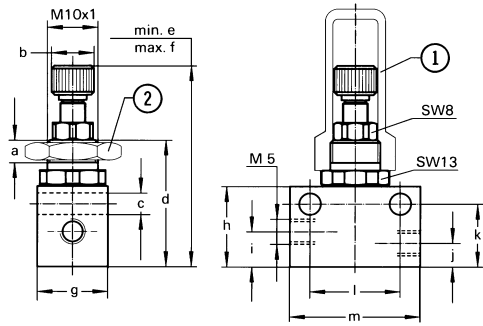
Order Number	Part No. / Type	151214 GRO-M 5-B	151216 GRO-1/8-B	2109 GRO-1/4
Medium		Compressed air (filtered, lubricated or unlubricated)		
Mounting		Two holes through housing or front panel mounting		In-line
Connection		M 5	G 1/8 ISO	G 1/4 ISO
Orifice Size		0.08 in / 2 mm	0.12 in / 3 mm	0.18 in / 4.5 mm
Standard Nominal Flow Rate		0 to 0.086 C <sub>v</sub> / 0 to 86 l/min	0 to 0.190 C <sub>v</sub> / 0 to 190 l/min	0 to 0.350 C <sub>v</sub> / 0 to 350 l/min
Pressure Range*		0 to 150 psi / 0 to 10 bar		
Design		Throttle valve		
Material		Housing: Al, brass. Seals: Buna N.		Housing: Al. Steel. Seals: Buna N.
Weight		0.044 lb / 0.020 kg	0.066 lb / 0.030 kg	0.176 lb / 0.080 kg

\* 14 to 140°F / -10 to +60°C

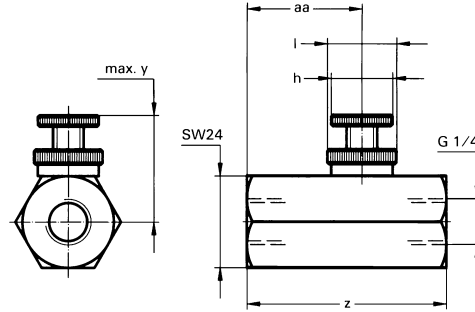
# In-line Flow Controls

## Dimensions

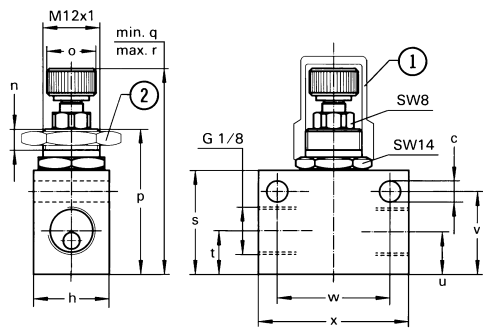
Type GRO-M5-B



Type GRO-1/4



Type GRO-1/8-B



SW = wrench size (mm)

- ① Protective cap
- ② Hex nut

### Dimensions

a	0.18 in / 4.5 mm	o	0.41 in / 10.4 mm
b	0.33 in / 8.4 mm	p	1.21 in / 30.8 mm
c	0.17 in / 4.3 mm	q	1.61 in / 41 mm
d	0.99 in / 25.2 mm	r	1.77 in / 45 mm
e	1.42 in / 36 mm	s	0.87 in / 22 mm
f	1.57 in / 40 mm	t	0.36 in / 9.2 mm
g	0.55 in / 55 mm	u	0.35 in / 9 mm
h	0.63 in / 16 mm	v	0.69 in / 17.5 mm
i	0.28 in / 7 mm	w	0.94 in / 24 mm
j	0.19 in / 4.5 mm	x	1.26 in / 32 mm
k	0.49 in / 12.5 mm	y	1.10 in / 28 mm
l	0.71 in / 18 mm	z	2.05 in / 52 mm
m	0.16 in / 4.1 mm	aa	1.18 in / 30 mm

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**Email:** customer.service@us.festo.com

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