



4.3

Fine throttle valve

Type F

Sizes 5 and 10
Up to 210 bar
Up to 80 L/min



Contents

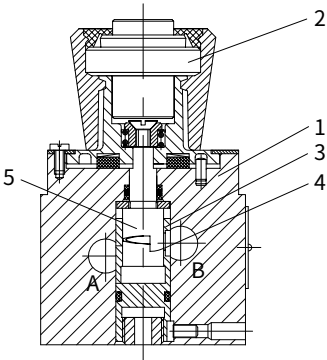
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Features

- Sub-plate mounting
- Threaded connections
- Manifold mounting
- Lockable rotary knob

Function and configuration

Flow control valves, type F are fine throttle valves with orifice . They are basically comprised of housing (1), adjustment element (2) and thin-blade orifice (3). Throttling flow is almost independent of temperature variations. Throttling flow from A to B is carried out at orifice aperture (4). The throttle opening is adjusted by rotating cylindrical spool (5). The low dependence on temperature is due to an thin-blade orifice.



Ordering code

F

3

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Fine throttle valve

Nominal size 5 = 5

Nominal size 10 = 10

For manifold mounting = K

For threaded connection = G

For sub-plate mounting = P

L20 to L29 Series (version K) =L2X

(L20 to L29: unchanged installation and connection dimensions)

L30 to L39 Series (versions G and P) =L3X

(L30 to L39: unchanged installation and connection dimensions)

Further details in clear text

No code = NBR seals

V = FKM seals

Threaded connection

No code= Inch

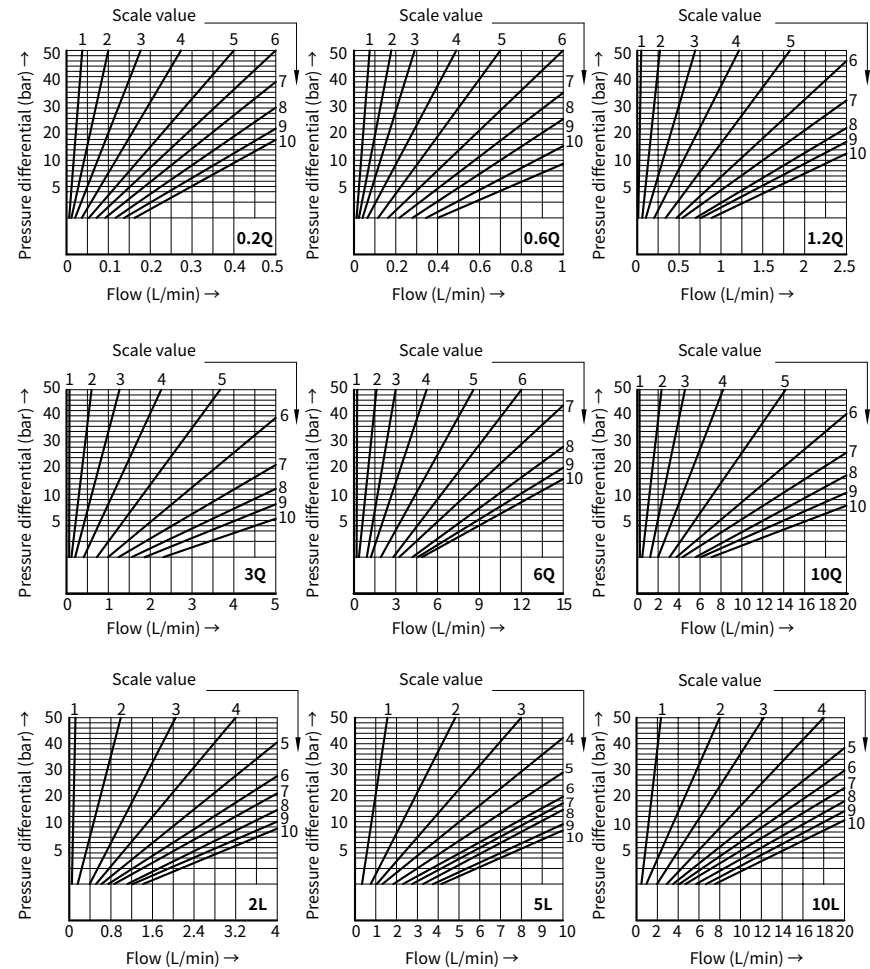
2 = Metric

Size 5	Size 10	
Non-linear	Non-linear	Linear
Orifice 0.2=0.2Q	Orifice 5=5Q	Orifice 2=2L
Orifice 0.6=0.6Q	Orifice 10=10Q	Orifice 5=5L
Orifice 1.2=1.2Q	Orifice 16=16Q	Orifice 10=10L
Orifice 3=3Q	Orifice 25=25Q	Orifice 16=16L
Orifice 6=6Q		Orifice 25=25L
Orifice 10=10Q		Orifice 50=50L

Technical data

Installation position			Optional
Weight	- Manifold mounting	kg	1
	- Thaded connection	kg	1.6
	- Sub-plate mounting	kg	1.8
Fluid			Mineral oil suitable for NBR and FKM seal
			Phosphate ester for FKM seal
Degree of contamination			Maximum permissible degree of fluid contamination: Class 9. NAS 1638 or 20/18/15, ISO4406
Fluid temperature range	°C		-30 to +80 (NBR seal)
			-20 to +80 (FKM seal)
Viscosity range	mm²/s		2.8 to 380
Max.operating pressure	bar		210
Max. flow-rate	L/min		80
Adjustment angle	°		300
Operating torque	- at 100 bar	Nm	1.1
	- at 200 bar	Nm	1.8

Characteristic curves (Measured at $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)



Characteristic curves

(Measured at $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)

