

4.4

Fine throttle valve

Type F

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



Contents

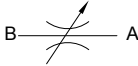
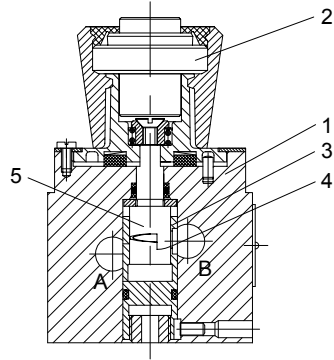
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Features

- 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.



Flow direction:A→B

Specification



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

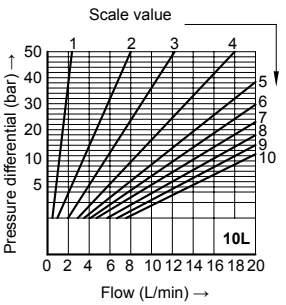
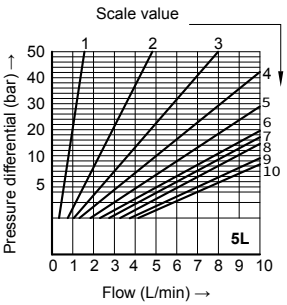
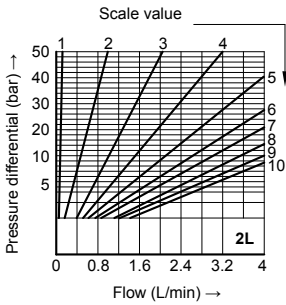
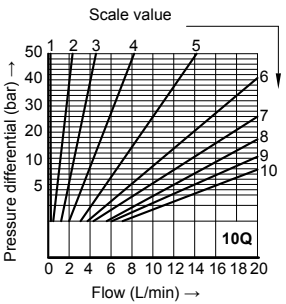
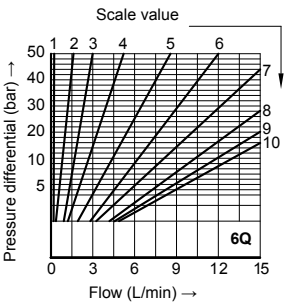
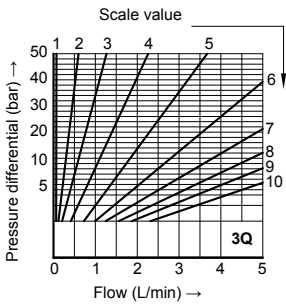
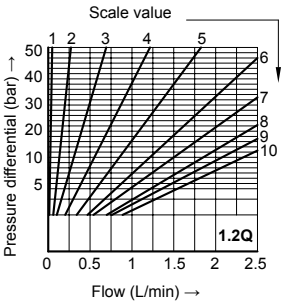
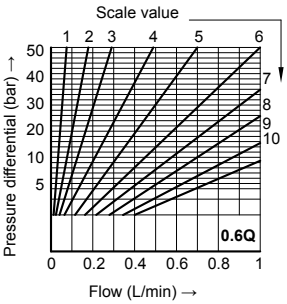
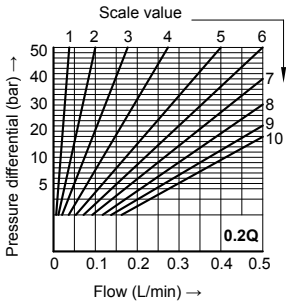
Threaded connection
 No code= Inch
 2 = Metric

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

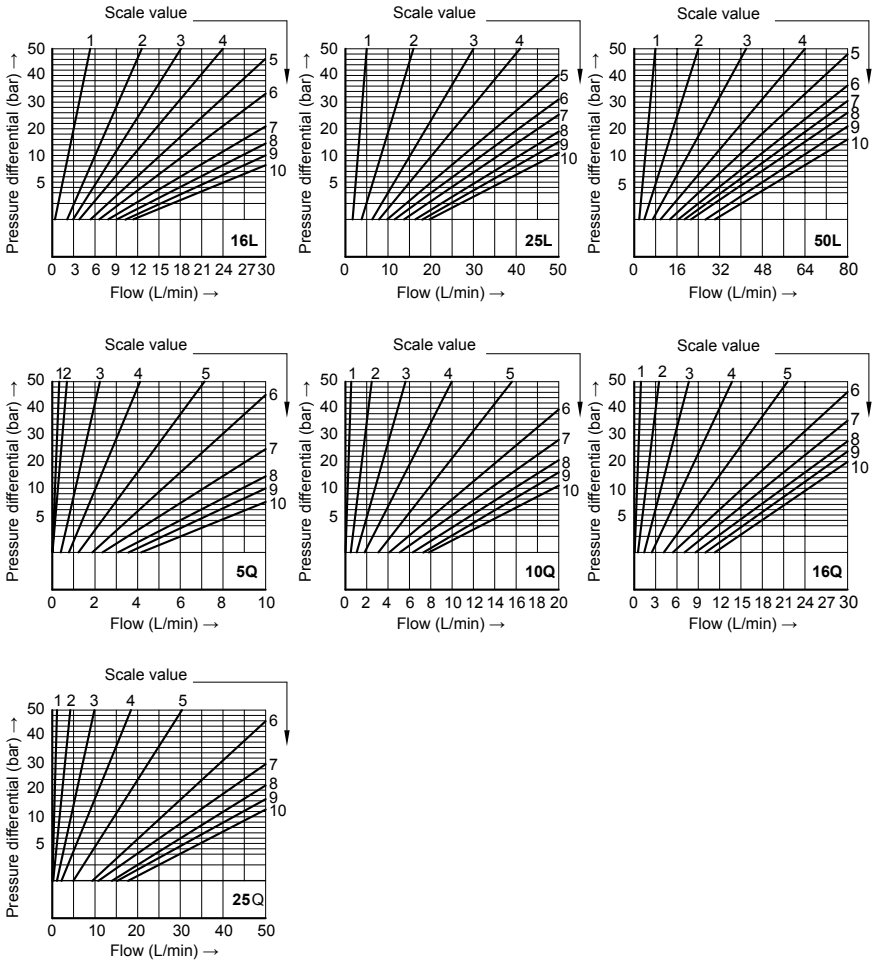
Technical data

Installation position			Optional
Weight	- Manifold mounting	kg	1
	- Threaded 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		mm ² /s	2.8 to 380
Max. operating pressure		bar	210
Max. flow-rate		L/min	80
Adjustment angle		°	300
Operating torque	- at 100bar	Nm	1.1
	- at 200bar	Nm	1.8

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



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



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