4.4

Double throttle/ check valve

Type Z2FS6...L4X

Size 6
Up to 315 bar
Up to 80 L/min

Contents

Features

- Sandwich plate valve
- Porting pattern to DIN 24 340 form A and ISO4401
- For limiting the main or pilot fluid flow of 2 actuator connections
- For meter-in or meter-out control

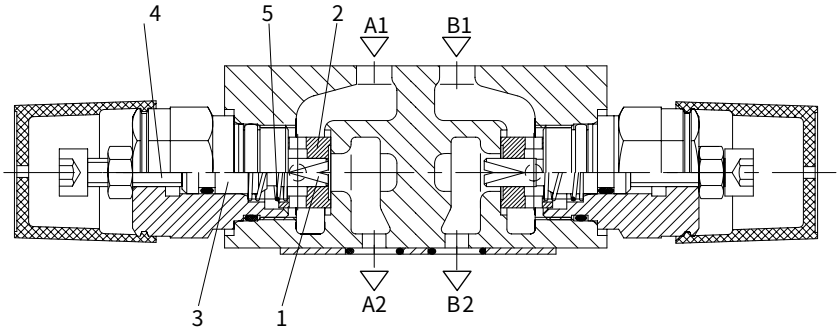
Function and configuration

Valve type Z2FS 6 is a double throttle/check valve with sandwich plate structure.
It is used to control the flow by changing the throttling. In the opposite direction, fluid flows freely through the check valve.
For meter-in control fluid passes from port A1 to port A2 via the throttling point (1), which is made up of the valve seat (2) and the throttling spool (3). The throttling spool (3) is axially adjustable through the adjustment screw (4).
Fluid flows from A2 to A1, valve seat (2) is opened against spring (5) and valve acts as check valve. Depending on the installation position, the throttling effect may be arranged as a meter-in or a meter-out control.

Standard version used for controlling main flow (Z2FS6.../2Q)
In order to change the velocity of an actuator (limiting of main flow),
the double throttle/check valve is installed between the directional valve and the sub-plate.

Fine control version used for controlling pilot flow(Z2FS6.../1Q)
In order to limit the pilot flow, the double throttle/check valve
is installed between the main valve and the pilot valve.

Type: Z2FS6-2-L4X/2Q



This installed position is for meter-in control

Ordering code

Z2FS	6		– L4X /		*

Double throttle/check valve

Nominal size 6 =6

Throttle/check valve ports A and B = -
Throttle/check valve port A = A
Throttle/check valve port B = B

Screw with locknut and protective cap = 2

L4X [1] = Series L40 to L49 (L40 to L49: unchanged installation and connection dimensions)

1Q = With fine control
2Q = Standard version

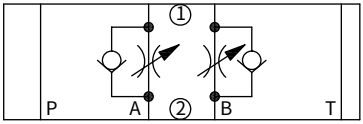
No code = NBR seals
V = FKM seals

Further details in clear text

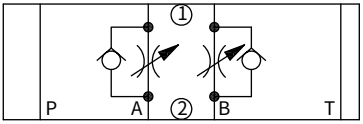
[1] Length of series L4X double throttle/check valve which are made by our company is 6 mm longer than that of Rexroth valve. Please pay attention when you order.

Symbols (① =valve side, ② = sub-plate side)

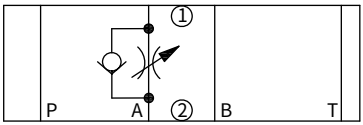
Type:Z2FS6-...-L4X/ (meter-in control)



Type:Z2FS6-...-L4X/ (meter-out control)



Type:Z2FS6A-...-L4X/ (meter-in control)



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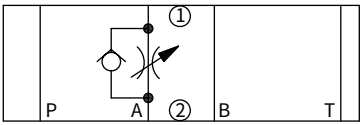

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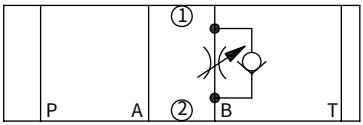

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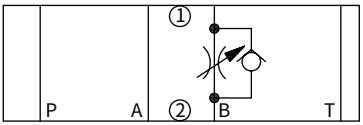
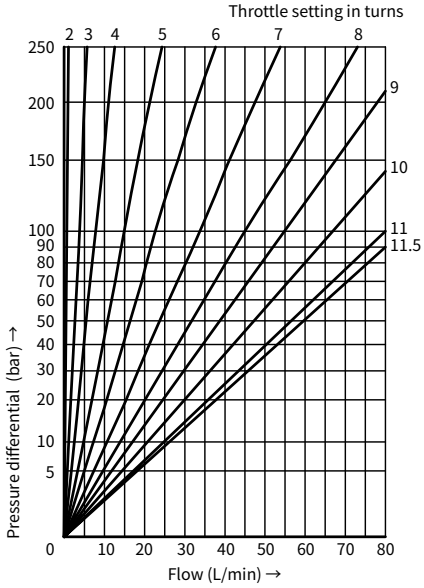


Technical data

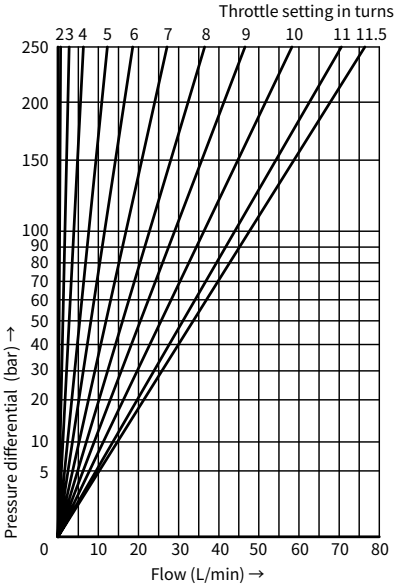
Fluid		Mineral oil suitable for NBR and FKM seal
		Phosphate ester for FKM seal
Fluid temperature range	°C	-30 to +80 (NBR seal)
		-20 to +80 (FKM seal)
Viscosity range	mm^2/s	10 to 800
Degree of contamination		Maximum permissible degree of fluid contamination: Class 9. NAS 1638 or 20/18/15, ISO4406
Max. working pressure	bar	315
Max. flow-rate	L/min	80
Weight	kg	Approx. 1.0

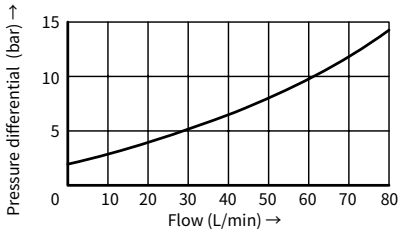
Characteristic curves (Measured at ϑ_{oil}=40°C ±5°C , using HLP46)

ΔP-Q_v curve-Z2FS6-...-L4X/2QV



ΔP-Q_v curve-Z2FS6-...-L4X/1QV



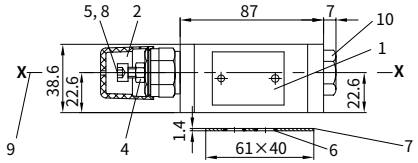


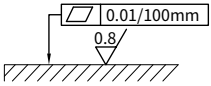
Through check valve (throttle closed)

Unit dimensions

(Dimensions in mm)

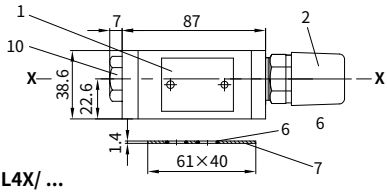
Type:Z2FS6A-...-L4X/ ...



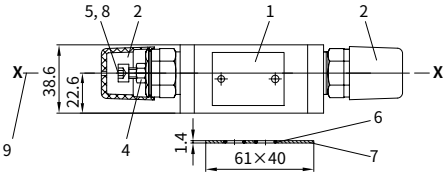


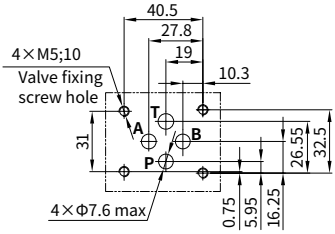
Requirement for mounting surface

Type:Z2FS6B-...-L4X/...

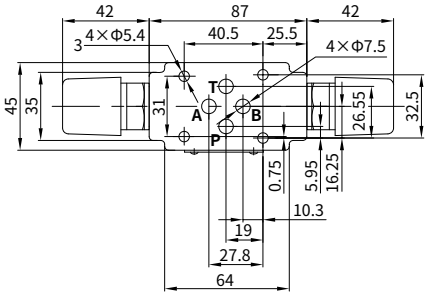


Type:Z2FS6-...-L4X/ ...





Dimensions of mounting surface



Valve fixing screws:
M5 according to GB/T 70.1-10.9, the length according to sandwich, Tightening torque M_A = 8.9Nm, must be ordered separately.

1 Nameplate
2 Adjustment element "2"
3 Valve fixing holes
4 Lockable nut S=10
5 Internal hexagon screw S=5
6 O-rings 9.25×1.78 (Port A, B, P, T)
7 O-ring plate
8 For adjustment elements:
turn anti-clockwise=increases flow
turn clockwise=decreases flow
9 To change from meter-in to meter-out, rotate the unit around the 'X–X' axis
10 End cap S=22