

Two Ways Flow Control Valve

Model: 2FRM5...3XJ



- ◆ Size 5
- ◆ Maximum working pressure 210 bar
- ◆ Maximum working flow 15 L/min

Contents

Function description, sectional drawing	02
Models and specifications	02
Technical parameters	03
Characteristic curve	03
Component size	04

Features

- Optional pressure compensator stroke limiter
- Start-up jump reduction
- Lockable knob
- Flow control in both direction by means of current stacking plate

Any part of this brochure can not be reproduced, edited, copied and disseminated electronically in any way without authorization of Jiayite Hydraulics company. As the product is in constant development and innovation, the information in this brochure is not specific to the special conditions or applicability of a specific industry, thus Jiayite Hydraulics company is not responsible for any incomplete or inaccurate description generated.

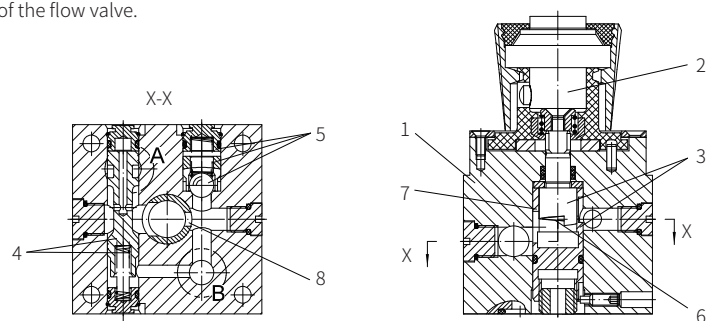


Function description, sectional drawing

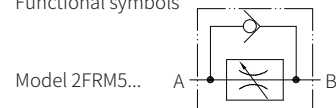
2FRM model flow valve is two ways flow control valve. This valve mainly includes the valve body (1), the adjusting element (2), the throttle body (3), optional pressure compensator (4) with stroke limiter and check valve (5), it is used for the throttling of the flow from A to B at throttle port (6).

The curve bolt (7) can adjust the throttling cross section. The pressure compensator needs to be connected to keep the flow constant at the throttle port (8) and without affection of pressure. The orifice is designed with sharp edges, so the throttling is not easily affected by temperature. The free flow return from B to A via the check valve (5).

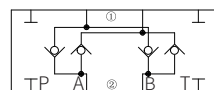
The current stacking plate Z4S5-1XJ/ is installed under the flow valve to control the flow in both directions of the flow valve.



Functional symbols



Model 2FRM5...

 Model Z4S5...
 ①=Valve side
 ②=Subplate side


Models and specifications

Two ways flow control valve

2FRM5 - 3X		J					*	more information in text
3X series (30 to 39 series installation and =3X connection size unchanged)								
rekith		=J						
nonlinearity	nonlinearity							
0.2L/min=0.2Q	10L/min=10Q	flow direction A → B						
0.6L/min=0.6Q	15L/min=15Q							
1.2L/min=1.2Q								
3L/min=3Q								
6L/min=6Q								
		No code = without pressure compensator stroke limiter						
		B= with pressure compensator stroke limiter						

Current stacking plate

Current stacking plate		Z4S5	- 1X	J	/		*	
1X series (10 to 19 series installation and connection size unchanged)				=1X	more information in text			
rekith				=J	sealing material			
					No code = NBR seals			
					V= FKM seals			
					(consult for other seals)			

Technical parameters

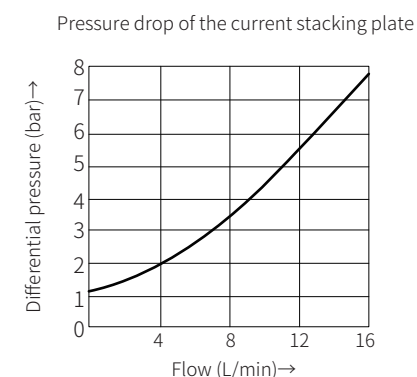
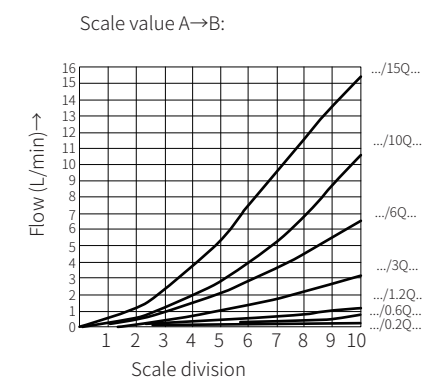
Oil fluid		Current stacking plate	
Mineral hydraulic oil or phosphate ester hydraulic oil		Rated flow L/min	15
Oil temperature range °C		Working pressure bar	to 210
-30 to +80 (NBR seals) -20 to +80 (FKM seals)		Cracking pressure bar	1
Viscosity mm²/s range		Weight kg	0.6
10 to 800			

Two ways flow control valve										
Maximum flow		L/min		0.2	0.6	1.2	3.0	6.0	10.0	15.0
△P with free return flow B → A qv-dependent		bar		0.5	0.5	0.6	0.9	1.8	3.6	6.7
Flow control	Temperature stability		±5%	±3%	±2%					
	Pressure stability (to △P=210)		bar		±2%				±4%	
Working pressure at port A		bar		to 20						
Minimum pressure drop		bar		3 to 5					6 to 8	
Degree of contamination		µm		25(Q<5L/min)			10(Q<0.5L/min)			
Weight		kg		1.6						

For the application of other technical conditions, please consult us.

Characteristic curve

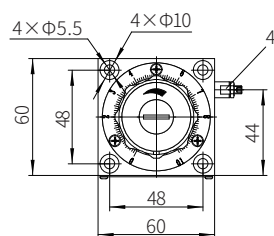
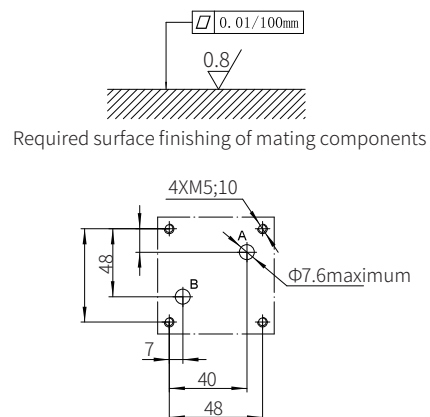
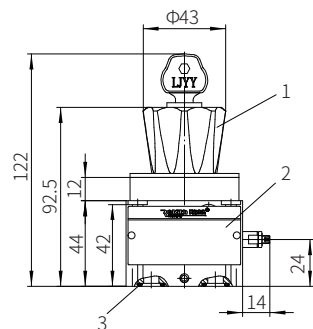
(Measured when using HLP 46, ϑ_{oil} = 40°C ± 5°C)



Component size

Size unit: mm

Model 2FRM5-3XJ/...

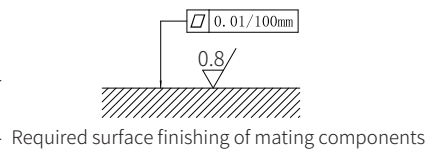
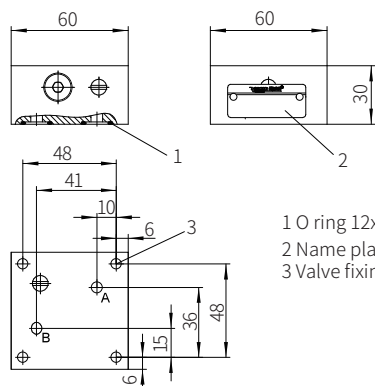


O ring 12x2 (for oil port A, B)
 M5x50-10.9 stage GB/T70.1-2000
 Tightening torque $M_A=7.8\text{Nm}$
 Subplate model:
 G44/01(G1/4"); G44/02(M14x1.5)
 G45/01(G1/2"); G45/02(M22x1.5)

Component size

Size unit: mm

Model Z4S5-1XJ/...



1 O ring 12x2 (for oil port A, B)
 2 Name plate
 3 Valve fixing screw hole

Two Ways Flow Control Valve

Model: 2FRM6...3XJ



- ◆ Size 6
- ◆ Maximum working pressure 315 bar
- ◆ Maximum working flow 32 L/min

Contents

Function description, sectional drawing	02-03
Functional symbols	03-04
Models and specifications	04
Technical parameters	05
Characteristic curve	06
Component size	07-08

Features

- Optional pressure compensator closed externally
- Subplate mounting
- Optional check valve
- Rotary knob with scale
- Optional lock