

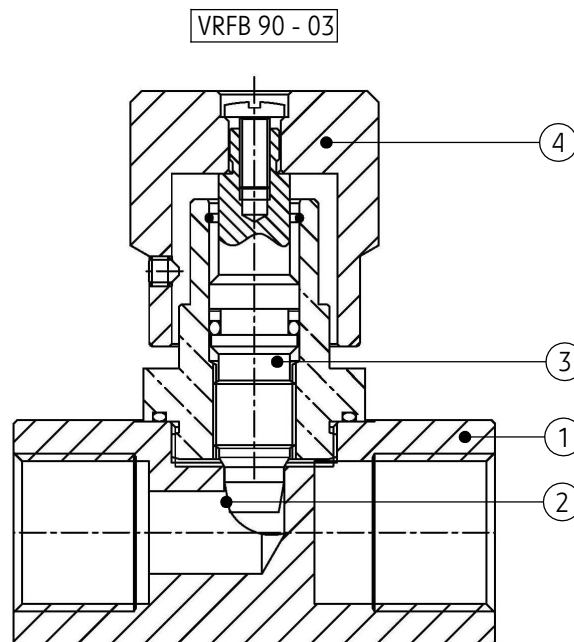
APPLICATION

Throttle valve type VRFB... is used for fluid flow choking which depends from the difference of pressure at the choke-point and also from fluid viscosity. It can be applied in hydraulic systems, where a constant working resistance occurs or the change of speed at the varying workload is less important.

The valve is installed in hydraulic systems in any position with connection pipes.



DESCRIPTION OF OPERATION



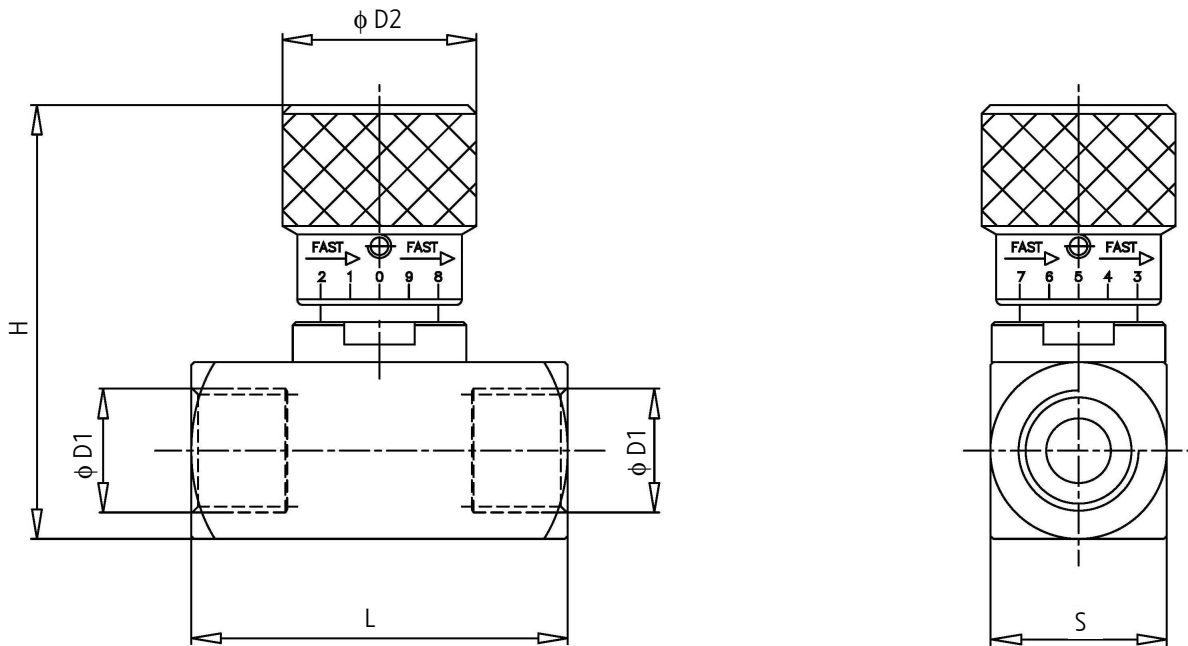
Hydraulic fluid jet flows through the connection port of the body (1) to the choke opening (2) between the body (1) and the adjustable choke (3). With the choke

rotation (3) by the calibrated knob (4) one can variably change the circular section of the choke opening (2). Choking is performed for both direction of the fluid flow.

TECHNICAL DATA

Hydraulic fluid	mineral oil			
Required fluid cleanliness class	ISO 4406 class 20/18/15			
Nominal fluid viscosity	37 mm ² /s at the temperature 55 °C			
Viscosity range	2,8 up to 380 mm ² /s			
Fluid temperature range (in a tank)	recommended	40°C up to 55°C		
	max	-20°C up to +70°C		
Ambient temperature range	-20°C up to +70°C			
Maximum operating pressure	version			
	VRFB 90 - 01	VRFB 90 - 02	VRFB 90 - 03	VRFB 90 - 04
	40 MPa	40 MPa	40 MPa	35 MPa
Maximum flow	15 dm ³ /min	30 dm ³ /min	50 dm ³ /min	80 dm ³ /min

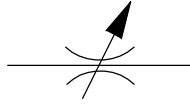
OVERALL AND CONNECTION DIMENSIONS



Nominal size (NS)	Max. working pressure	Labelling	$\phi D1$	$\phi D2$	L	H	S	Weight
6	40 MPa	VRFB 90 - 01	G1/4	30	54	68	25	0,29 kg
8	40 MPa	VRFB 90 - 02	G3/8	30	54	68	25	0,27 kg
10	40 MPa	VRFB 90 - 03	G1/2	33	64	72	30	0,45 kg
15	35 MPa	VRFB 90 - 04	G3/4	42	81	94	40	1,02 kg

SCHEMES

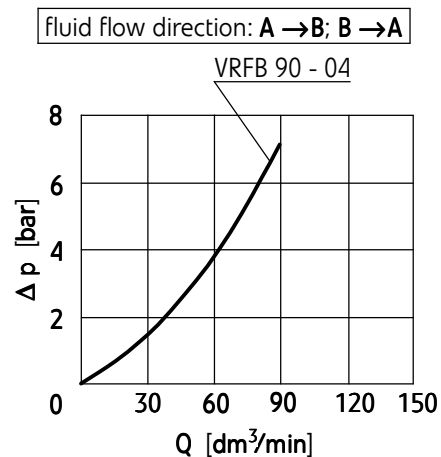
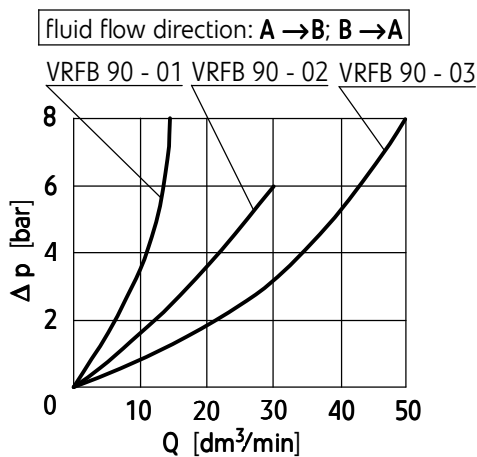
Graphic symbol of the VRFB... valve



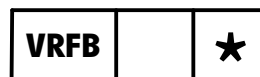
CHARACTERISTICS

measured at viscosity $\nu = 41 \text{ mm}^2/\text{s}$ and temperature $t = 50^\circ\text{C}$

$\Delta p(Q)$ values for different nominal sizes of the valve



HOW TO ORDER



Fluid flow range (A → B; B → A)

up to **15 dm³/min** (threaded connection G1/4) = 90 - 01
 up to **30 dm³/min** (threaded connection G3/8) = 90 - 02
 up to **50 dm³/min** (threaded connection G1/2) = 90 - 03
 up to **80 dm³/min** threaded connection G3/4) = 90 - 04

Optionally, full description of any additional requirements
 (discussed with the manufacturer)

NOTICE:

When placing an order, please use the symbols listed above, for example: VRFB 90 - 03

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