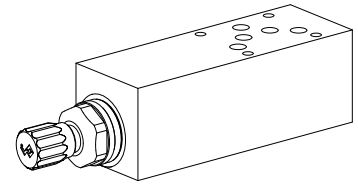


3-way flow control valve
Flange- and sandwich construction

- Q_{max} = 120 l/min
- Q_{Nmax} = 100 l/min
- p_{max} = 350 bar

NG10
ISO 4401-05

DESCRIPTION

Direct operated, pressure compensated flow control valve in flange- and sandwich construction. Flow control screw-in cartridges M33x2 acc. to ISO 7789 are installed. The flange body is painted, the sandwich plates and the outside parts are phosphatised. The solenoid is zinc coated.

FUNCTION

The 3-way flow control valve is designed to keep the oil flow to any actuator constant irrespective of the load.

APPLICATION

3-way flow control valves are used where the supply volume flow has to be kept constant even when the load fluctuates. Depending on the application, a distinction is made between restricting the forward flow or the return flow.

TYPE CODE

				Q	D	<input type="checkbox"/>	<input type="checkbox"/>	A10 -	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Flow control valve													
3-way													
Type of adjustment	Key	<input type="checkbox"/>	S										
	Control knob	<input type="checkbox"/>	D										
	Cover	<input type="checkbox"/>	A										
Flange construction		<input type="checkbox"/>	F										
Sandwich construction		<input type="checkbox"/>	S										
International standard interface ISO, NG10													
Type list/Function	Flange construction A → B	<input type="checkbox"/>	A/B	Sandwich construction in P	<input type="checkbox"/>	P							
Nominal volume flow rate Q_N	50 l/min	<input type="checkbox"/>	50	100 l/min	<input type="checkbox"/>	100							
Design index (subject to change)													

GENERAL SPECIFICATIONS

Description	3-way flow control valve
Nominal size	NG10 acc. to ISO 4401-05
Construction	Flange- and sandwich construction
Mounting	4 holes for socket cap screws M6 or studs screws M6
Connection	Threaded connection plates Multi-flange subplate Longitudinal stacking system
Ambient temperature	-20...50 °C
Mounting position	any
Fastening torque	$M_D = 9,5 \text{ Nm}$ (Qual. 8.8) for fastening screws $M_D = 80 \text{ Nm}$ for screw-in cartridge
Weight	• Flange type $m = 2,40 \text{ kg}$ • Sandwich type $m = 3,75 \text{ kg}$
(without screw-in cartridge)	

HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 18/16/13 (Required filtration grade $\beta_{6...10} \geq 75$) see data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70 °C
Peak pressure	$p_{max} = 350 \text{ bar}$
Min. volume flow	$Q_{min} = 0,2 \text{ l/min}$ (at $v = 30 \text{ mm}^2/\text{s}$)
Max. volume flow	$Q_{max} = 120 \text{ l/min}$
Control accuracy	$\leq 1\%$

SCREW-IN CARTRIDGES INSTALLED

The following screw-in cartridges are used in either the flange body or the sandwich body:

Type	Designation	Data sheet no.
QD.PM33	flow control valve • 3-way	2.5-555


REMARK!

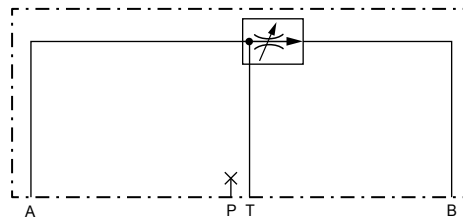
Detailed performance data and additional hydraulic specifications may be drawn from the data sheets of the corresponding installed pressure relief cartridge.


CAUTION!

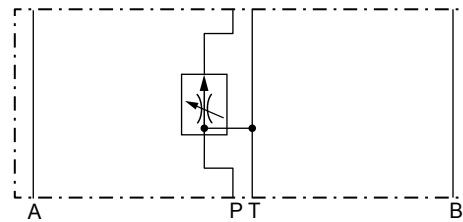
The performance data especially the «**pressure-flow-characteristic**» on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

TYPE CHARTS

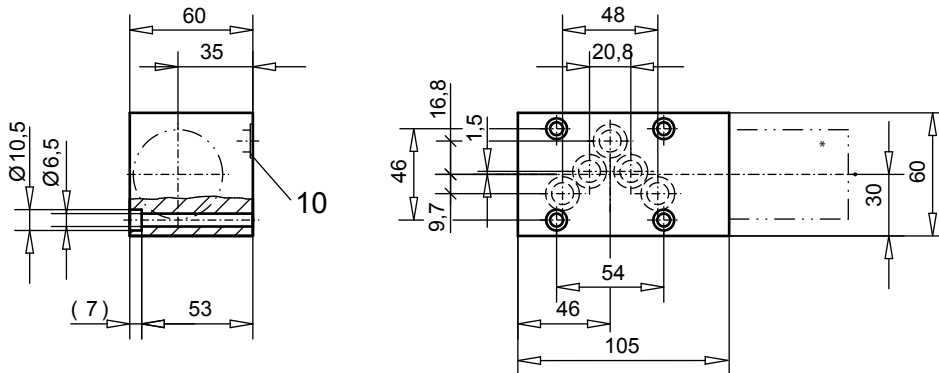
QD.FA10-A/B



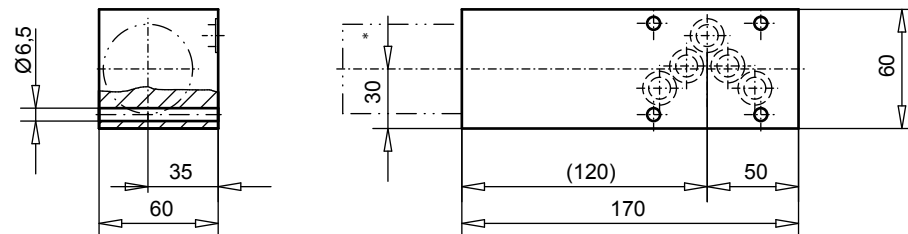
QD.SA10-P


DIMENSIONS

Flange construction QD.FA10-A/B



Sandwich construction QD.SA10-P



* The total lengths depends on the cartridge type, see data sheet 2.5-555

PARTS LIST

Position	Article	Description
10	160.2140	O-ring ID 14,00 x 1,78 (NBR)

Technical explanation see data sheet 1.0-100