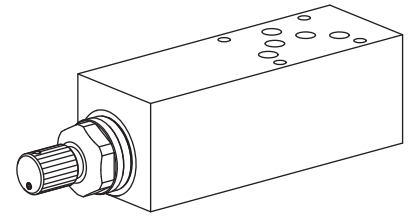


**3-way flow control valve**  
**Flange- and sandwich construction**

- $Q_{max}$  = 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**

Flow control valve	Q	D	<input type="checkbox"/>	<input type="checkbox"/>	A10	-	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
3-way-construction											
Setting versions:	Screw	Turning knob	Lock	Cover							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
Flange construction					<input type="checkbox"/>						
Sandwich construction					<input type="checkbox"/>						
International mounting interface ISO, NG10											
Type list/Function:											
Flange, flow control from A to B					<input type="checkbox"/>						
Sandwich, meter-in flow control in P					<input type="checkbox"/>						
Nominal volume flow rates $Q_N$ :	50 l/min	100 l/min			<input type="checkbox"/>	<input type="checkbox"/>					
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 <sup>2</sup> /s...320 mm <sup>2</sup> /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	$\leq 1\%$

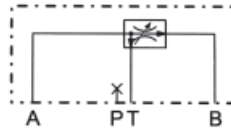
**SCREW-IN CARTRIDGES INSTALLED**

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

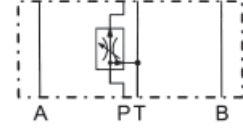
Type	Designation	Data sheet no.
QD.PM33	flow control valve • 3-way	2.5-540

**TYPE CHARTS**

QD.FA10-A/B



QD.SA10-P


**REMARK!**

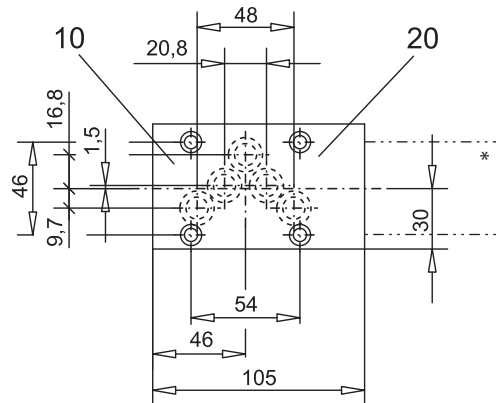
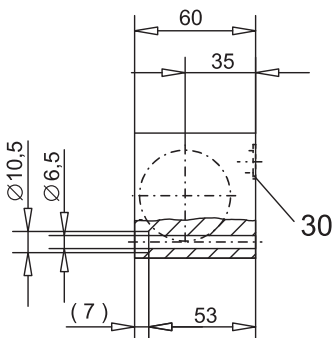
Detailed performance data and additional hydraulic specifications may be drawn from the data sheets of the corresponding installed pressure relief cartridge.


**CAUTION!**

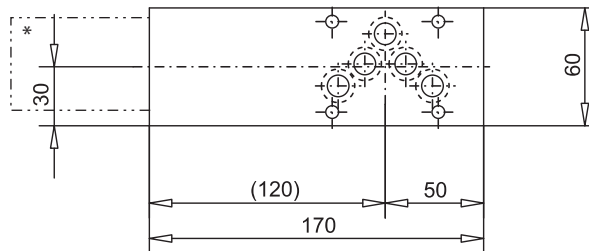
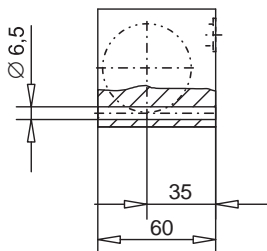
The performance data especially the «**pressure-flow-characteristic**» on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

**DIMENSIONS**

Flange construction QD.FA10-A/B



Sandwich construction QD.SA10-P



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

**PARTS LIST**

Position	Article	Description
10	136.6204	Flange body
	136.6639	Sandwich plate P
20	633.8...	Flow control cartridge M33x2 see data sheet 2.5-555
30	160.2140	O-ring ID 14,00x1,78

Technical explanation see data sheet 1.0-100E