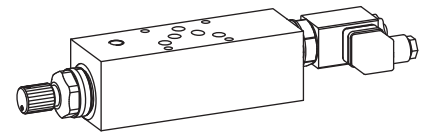


Fine feed-/fast approach valve
Sandwich construction

- Q_{max} = 80 l/min (Fine feed)
- Q_{max} = 120 l/min (Fast approach)
- $Q_{N max}$ = 70 l/min
- p_{max} = 350 bar

NG10
ISO 4401-05


DESCRIPTION

Fine feed-/fast approach valve in sandwich construction. 2-way flow control cartridges (see data sheet 2.5-550) and 2/2-way solenoid poppet valve cartridges 1.11-2075 are installed. 2 standard nominal volume flow ranges are available. The sandwich body made of steel is phosphatized, the solenoid housing zinc coated and the turning knob anodized colourless.

FUNCTION

The fine feed-/fast approach valve serves for the electrically controlled two-stage speed control. Fine feed and fast approach. At the fine feed the volume flow is controlled by the flow control valve, to the manually adjusted value independent on the load. In doing so, the poppet valve is closed. At the fast approach the volume flow, dependent of the load and of the system pressure, flows through the poppet valve.

APPLICATION

The fine feed-/fast approach valves are utilised in hydraulic systems, which require an electrically controlled fine feed-/fast approach changeover, such as positioning controls on machine tools or elevation controls of elevating platforms, etc. Due to the sandwich construction, these fine feed-/fast approach valves can be integrated into stacked systems as an intermediate flange.

TYPE CODE

Fine feed-/fast approach valve		V	Q	<input type="checkbox"/>	S	A10	-	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	/	M	<input type="checkbox"/>	35	#	<input type="checkbox"/>		
Flow control function																					
Setting versions	Key	<input type="checkbox"/> S																			
	Control knob	<input type="checkbox"/> D																			
	Lock	<input type="checkbox"/> K																			
Sandwich construction																					
International standard connection ISO, NG10																					
Function	Flow control in:	Meter-out flow control in:		Meter-in flow control in:																	
	P	<input type="checkbox"/> P	A	<input type="checkbox"/> A	A																<input type="checkbox"/> AV
	T	<input type="checkbox"/> T	B	<input type="checkbox"/> B	B																<input type="checkbox"/> BV
Poppet valve	normally closed	<input type="checkbox"/> C																			
	normally open	<input type="checkbox"/> O																			
Standard nominal volume flow rates Q_N	32 l/min	<input type="checkbox"/> 32																			
Fine feed	70 l/min	<input type="checkbox"/> 70																			
Standard nominal voltage U_N	12VDC	<input type="checkbox"/> G12		115VAC	<input type="checkbox"/> R115																
	24VDC	<input type="checkbox"/> G24		230VAC	<input type="checkbox"/> R230																
Slip-on coil with steel housing																					
Connector socket	EN175301-803/ISO 4400	<input type="checkbox"/> D																			
	AMP Junior-Timer	<input type="checkbox"/> J																			
Coil types																					
Design-Index (Subject to change)																					

GENERAL SPECIFICATIONS

Description	Fine feed-/fast approach valve
Nominal size	NG10 acc. to ISO 4401-05
Construction	Sandwich construction
Mounting	4 holes for socket cap screws M6 or studs M6
Connection	Threaded connection plates, multi-flange subplate, stacking system
Ambient temperature	-20 ... +50 °C
Mounting	any
Fastening torque	$M_D = 9,5$ Nm (Qual. 8.8) for fixing screws cartridges: see valve data sheets
Weight	$m = 4,5$ kg

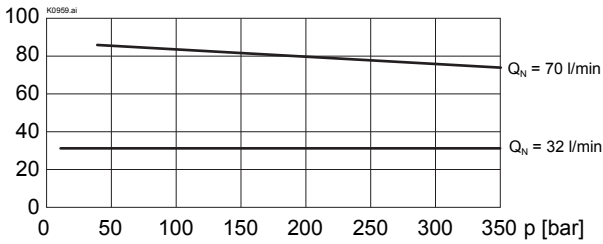
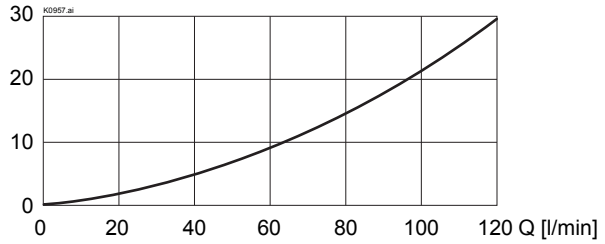
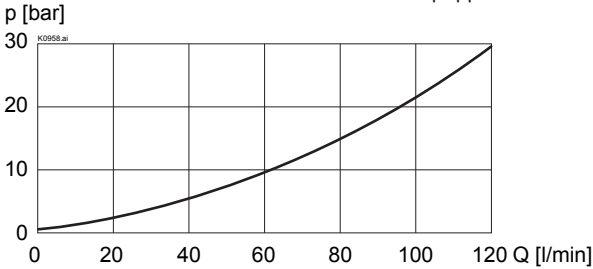
HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 18/16/13 (Recommended filtration grade $\beta_{6...10} \geq 75$) refer to data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70 °C
Peak pressure	$p_{max} = 350$ bar
Nominal volume flow rates	$Q_N = 32$ l/min, 70 l/min
Min. volume flow	$Q_{min} = 0,2$ l/min
Max. volume flow	$Q_{max} = 120$ l/min

For further hydraulic specifications, refer to flow control valve data sheet 2.5-550.

ELECTRICAL ACTUATION

Solenoid construction: see data sheet poppet valve (1.11-2075)

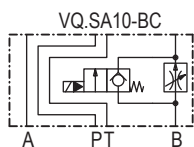
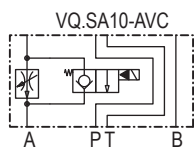
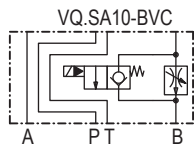
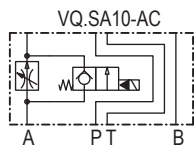
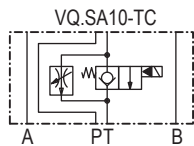
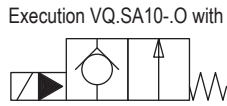
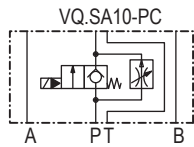
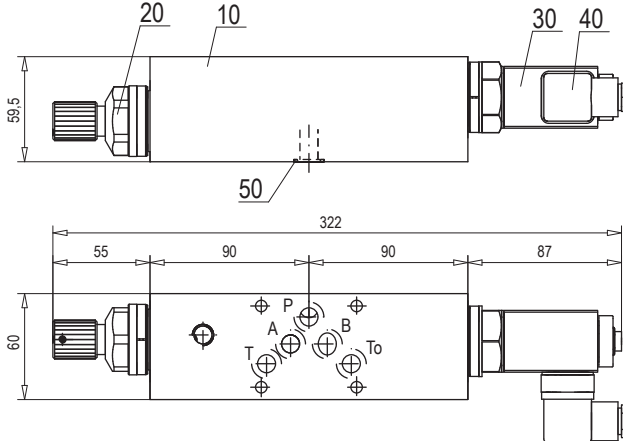
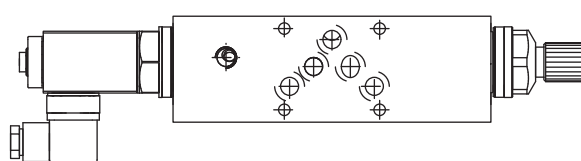
CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$
 $Q = f(p)$ Volume flow pressure characteristics (Fine feed)
 Q [l/min]

 $\Delta p = f(Q)$ Pressure drops volume flow characteristic
 p [bar] (Fast approach)

 $\Delta p = f(Q)$ Pressure drop volume flow characteristic
 over non-return valve function of poppet valve

PARTS LIST

Position	Article	Description
10	136.6640	Sandwich plate P
	136.6643	Sandwich plate T
	136.6641	Sandwich plate A, AV
	136.6642	Sandwich plate B, BV
20	633.8 . . .	Flow control valve QZ.PM33 acc. to data sheet 2.5-550
30	500.4 . . .	Solenoid poppet valve SVSPM33 acc. to data sheet 1.11-2075
40	219.2001	Plug A (grey)
	219.2002	Plug B (black)
50	160.2140	O-ring ID 14,00 x 1,78

ACCESSORIES

Threaded connection plates and multi-flange subplates Register 2.9

Technical explanation see data sheet 1.0-100

TYPES / DIMENSIONS

Control P, T, A, B

Control AV, B


Dimensions of the other setting versions see data sheet 2.5-550