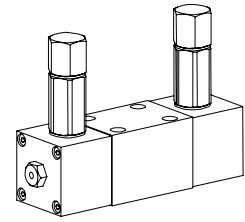


Spool valve with integral pressure reversal

- 4/2-way
- $Q_{max} = 30 \text{ l/min}$
- $p_{max} = 315 \text{ bar}$

NG6
ISO 4401-03


DESCRIPTION

Spool valve with integral pressure reversal subplate mounted, interface NG6 according to ISO 4401-03. Direct operated spool valve in 5 chamber design. Main spool with coaxial pilot spool. End cover with relief valve to set the shifting pressure and integrated manual override. Precise spool fit for low leak and long service life. The spools are made from hardened steel and the valve body from high grade hydraulic cast iron. The valve body is painted and the cover zinc coated.

FUNCTION

This 4/2-way valve shifts into the opposite spool position if the pressure setting is reached. in the outlet part A or B. Shifting takes place when cylinder reaches its end position or if due to load pressure setting is reached. By exchanging the main spool shifting can be dampened.

APPLICATION

Valves with integral pressure reversal are intended to operate oscillating movements of a cylinder. Fields of application are press controls, assembly robots, feeding systems for wood heating or other systems with pressure dependent resetting.

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TYPE CODE

	A	Q	4	Z	6	0	<input type="checkbox"/>	#	<input type="checkbox"/>
International mounting interface ISO									
Integral pressure reversal									
Number of control ports									
2 spool positions									
Nominal size 6									
Spool type									
Option for damped shifting	<input type="checkbox"/> W								
Design-Index (Subject to change)									

GENERAL SPECIFICATIONS

Designation	4/2-way spool valve
Nominal size	NG6 according to ISO 4401-03
Construction	Direct operated spool valve
Operations	Integral pressure reversal
Mounting	Flange construction
Connection	4 holes for socket cap screws M5x45
	Threaded connection plates
	Multi-flange subplate
	Longitudinal stacking system
Ambient temperature	-20...+50°C
Mounting position	any, preferably horizontal
Fastening torque	$M_t = 5,5 \text{ Nm}$ (screw quality 8.8)
Weight	$m = 2,7 \text{ kg}$

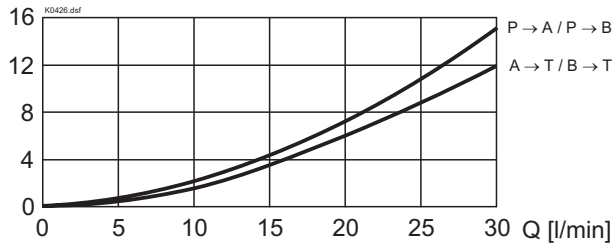
HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 20/18/14 (Required filtration grade $\beta_{10...16} \geq 75$) see data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70°C
Working pressure on port A and B	$p_{max} = 315 \text{ bar}$
System pressure	$p = 25...315 \text{ bar}$
Reversal pressure	max 90% of the system pressure
Tank pressure in port T	$p_{max} = 160 \text{ bar}$
Max. volume flow	$Q_{max} = 30 \text{ l/min}$, see characteristic
Min. volume flow	$Q_{min} = 2 \text{ l/min}$

CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$

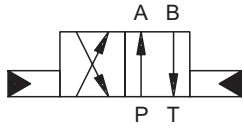
$\Delta p = f(Q)$ Pressure drop volume flow characteristics

Δp [bar]

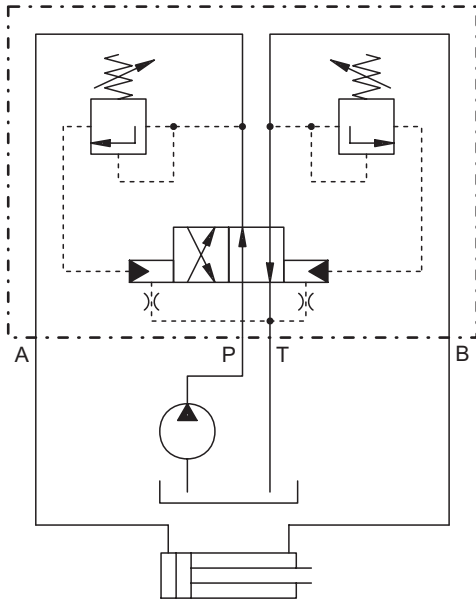


SYMBOLS

simplified

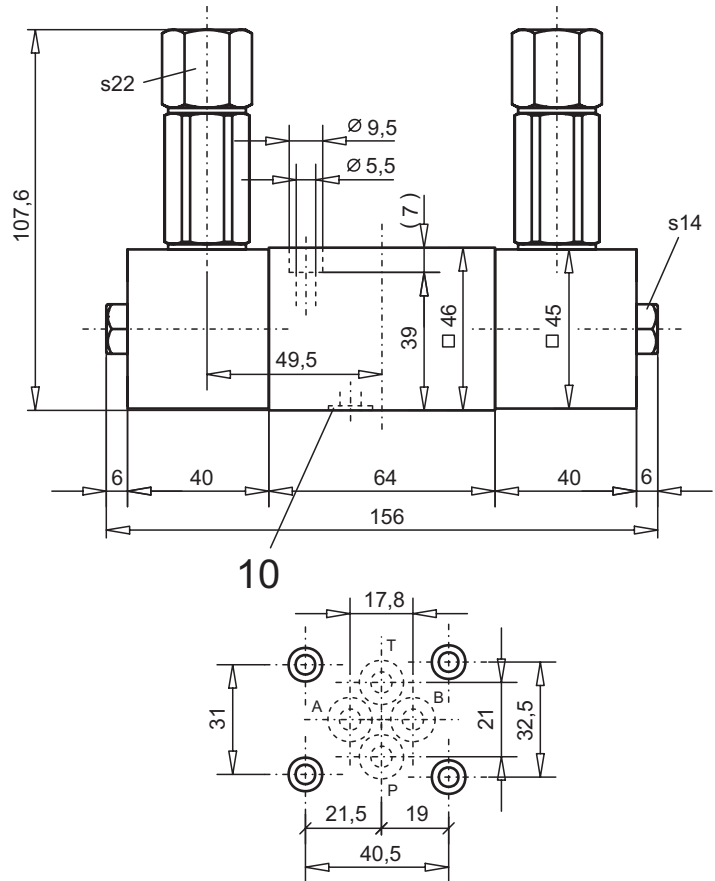


detailed



DIMENSIONS

4/2-way spool valve



PARTS LIST

Position	Article	Description
10	160.2093	O-ring ID 9,25x1,78

ACCESSORIES

Threaded connection plates, Multi-flange plates and longitudinal stacking system register 2.9

Technical explanation see data sheet 1.0-100E