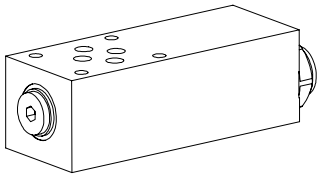
Pressure compensating valve
Sandwich construction
- **2- and 3-way operation**
- **Q_{max}= 25 l/min**
- **p_{max} = 350 bar**

NG6
ISO 4401-03



DESCRIPTION
Pressure compensator valve with fixed setting in sandwich design with interface NG6 acc. to ISO 4401-03 with 4 ports. Available with 2-way and 3-way operation. The steel body of the sandwich valve is phosphatized and the cartridge body is zinc coated for corrosion protection. The load is sensed in line A or B with an incorporated shuttle valve.

FUNCTION
The pressure compensator valve maintains a constant differential pressure across an orifice (e.g. metering edge of a directional valve). The 2-way pressure compensator restricts the volume flow in the meter-in mode. The 3-way pressure compensator diverts the surplus volume flow to the tank line. As a result, with both compensator types the amount of flow through an orifice (directional valve) remains constant even if the load pressure changes.

APPLICATION
Pressure compensator sandwich valves are usually stacked underneath proportional directional valves. They are used in open loop circuits. 2-way pressure compensators may be installed in parallel pressure lines with a common power source to operate actuators individually. For each actuator the full pump pressure is available. Only one 3-way pressure compensator can be installed in a system.

CONTENT

TYPE CODE

U☐ F S A06 # ☐

Pressure compensator, 2-way operation Z
Pressure compensator, 3-way operation D

Types of adjustment: fixed setting

Sandwich construction

Mounting interface NG6

Design-Index (Subject to change)

GENERAL SPECIFICATION

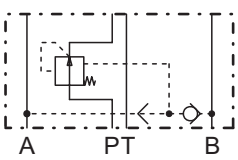
Designation	2- and 3-way pressure compensating valve
Size	NG6 acc. to ISO 4401-03
Construction	Sandwich construction
Mounting	3 mounting holes for M5 socket head screws or M5 locking screws
Type of connection	Thread connection plates Rows of flange plates and horizontal stacking system
Ambient temperature	-20 ... +50°C
Installation position	any
Fastening torque	M_D = 5,5 Nm (Qual. 8.8) for fixing screws M_D = 50 Nm for screw cartridge
Weight	m = 1,8 kg

HYDRAULIC SPECIFICATIONS

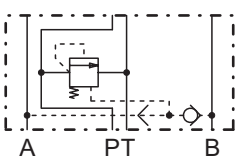
Hydraulic fluid	Mineral oils, other media on request
Max. permissible contamination level	ISO 4406:1999, class 18/16/13 (Recommended filter gauge ß6...10≥75) see data sheet 1.0-50/2
Viscosity range	12 mm²/s ... 320 mm²/s
Hydraulic fluid temperature	-20 ...+70°C
Peak pressure	p_{max} = 350 bar
Differential pressure	$p_{Diff.}$ = 10 bar other differential pressures on request
Maximum volume flow	Q_{max} = 25 l/min
Leaking volume flow	see characteristics

SWITCHING DIAGRAMS

2-way operation



3-way operation

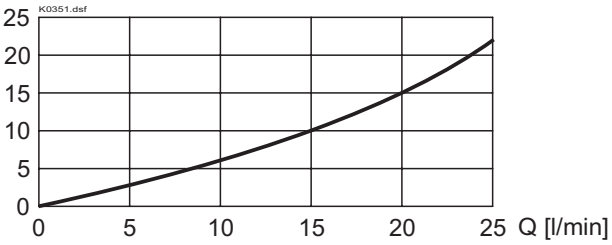


MECHANICAL ACTUATION
Fixed setting design. Other differential pressures available on request.

CHARACTERISTICS Oil viscosity υ = 30 mm²/s

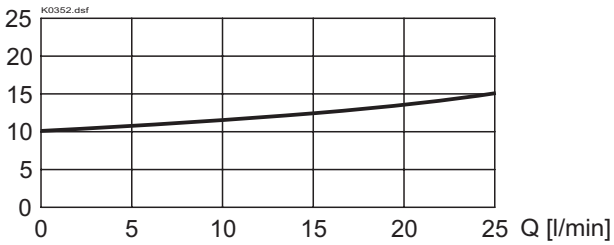
2-way operation

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

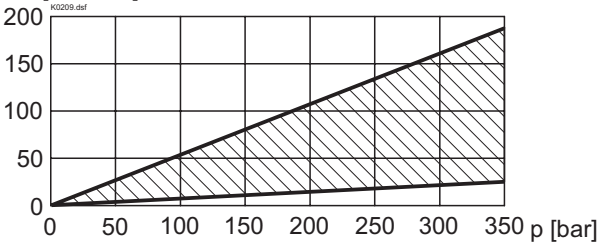


3-way operation

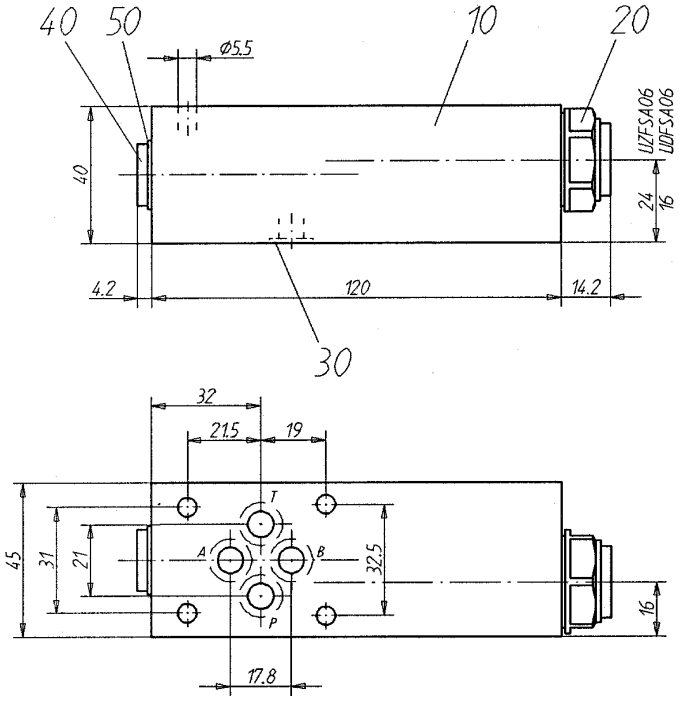
$\Delta p = f(Q)$ Pressure drop-volume flow curve



$Q_L = f(p)$ Leakage volume flow cruve



DIMENSIONS



PARTS LIST

Position	Article	Description
10	134.4603	Sandwich plate for 2-way operation
	134.4602	Sandwich plate for 3-way operation
20	597.3000	Cartridge UZFPM22 (data sheet 2.5-630)
	597.3001	Cartridge UDFPM22 (data sheet 2.5-630)
30	160.2093	O-ring ID 9,25x1,78
40	238.2204	Locking screw DIN 908 G1/4"
50	49.2132	Bonded seal ID 13,7x20x1,5

ACCESSORIES

Thread connection plates and rows of flange plates register 2.9

Technical explanation see data sheet 1.0-100E