

# Pressure compensating valve Sandwich construction

2- and 3-way operation

• Q<sub>max</sub> = 25 l/min

• p<sub>max</sub> = 350 bar

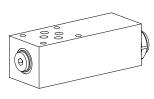
## DESCRIPTION

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.

NG6

ISO 4401-03



#### 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.

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#### TYPE CODE

		- 3	
Pressure compensator, 2-way Pressure compensator, 3-way	Z D		
Type of adjustment fixed setting			
Sandwich construction			
International standard interface ISO, NG6			
Design-Index (Subject to change)			

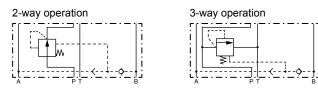
#### **GENERAL SPECIFICATION**

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	$M_{p} = 5,5 \text{ Nm}$ (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	ISO 4406:1999, class 18/16/13
contamination level	(Recommended filter gauge ß610≥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 <sub>max</sub> = 350 bar
Differential pressure	p <sub>Diff</sub> = 10 bar
	other differential pressures on request
Maximum volume flow	Q <sub>max</sub> = 25 l/min
Leaking volume flow	see characteristics

#### SWITCHING DIAGRAMS



#### **MECHANICAL ACTUATION**

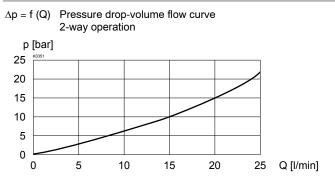
Fixed setting design. Other differential pressures available on request.

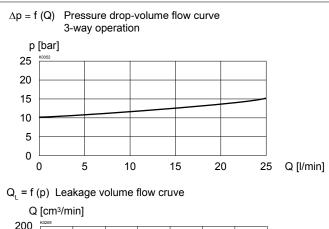
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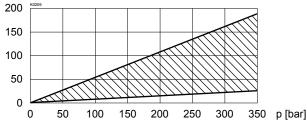
*E-mail:* sales@wandfluh.com Internet: www.wandfluh.com Illustrations not obligatory Data subject to change



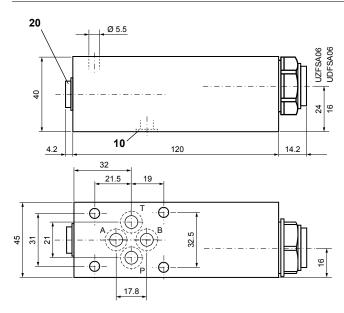
# **CHARACTERISTICS** Oil viscosity $v = 30 \text{ mm}^2/\text{s}$







## DIMENSIONS



# SCREW-IN CARTRIDGES INSTALLED The following screw-in cartridges are used in the sandwich body:

Type Designation		Data sheet no.	
UZFPM22	2-way operation	2.5-630	
UDFPM22	3-way operation	2.5-630	

## PARTS LIST

Position	Article	Description
10	160.2093	O-ring ID 9,25 x 1,78
20	238.2406	Locking screw VSTI G1/4"-ED

#### ACCESSORIES

Thread connection plates and rows of flange plates

register 2.9

Technical explanation see data sheet 1.0-100

Wandfluh AG Postfach CH-3714 Frutigen