

Throttle valve

RE 27482/08.07

1/4

Type Z1FG

Size 6

Component series 4X

Maximum operating pressure 315 bar [4568 psi]

Maximum flow 70 l/min [18.5 US gpm]



TB0198

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Features

- Sandwich plate valve
- Porting pattern to ISO 4401-03-02-0-05, NFPA T3.5.1 R2 and ANSI B93-7 D03 (**with** locating bore)
- For limiting a flow
- Adjustment element:
Spindle with hexagon socket

Ordering code

	Z	1	FG	6	P	8	4X	/	*
Sandwich plate valve	= Z								Further details in clear text
1 function		= 1							
Throttle valve			= FG						
Size 6				= 6					
Throttling in channel P					= P				
Adjustment element									
Spindle with hexagon socket						= 8			
						4X =		Component series 40 to 49 (40 to 49: unchanged installation and connection dimensions)	

Seal material

NBR seals

FKM seals

(other seals on request)

⚠ Attention!

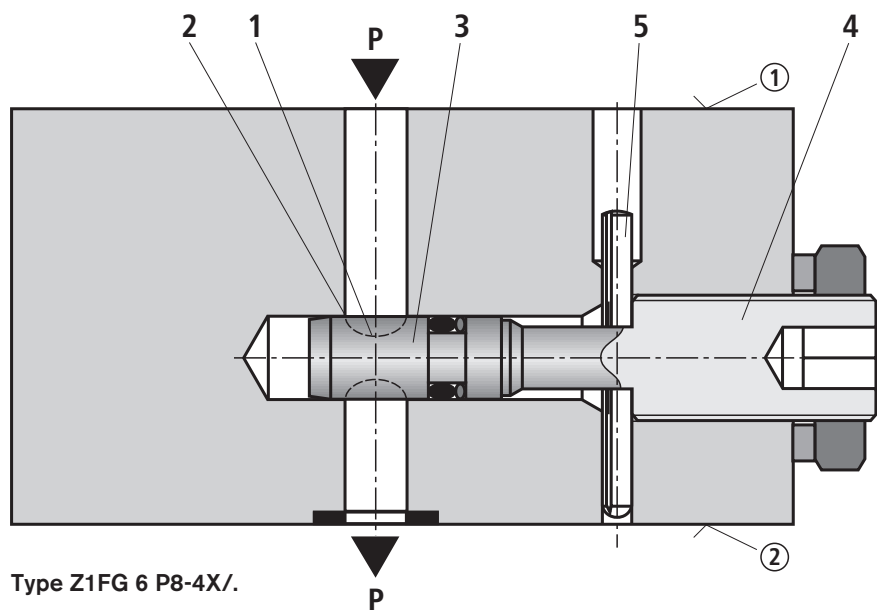
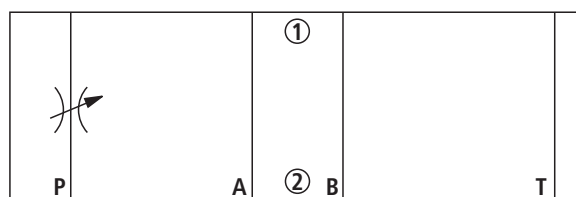
Observe compatibility of seals with hydraulic fluid used!

Function, section, symbol (① = component side, ② = plate side)

Valves of type Z1FG are throttle valves of sandwich plate design. They are used to limit the flow in channel P.

When throttled, the hydraulic fluid flows through channel P1 across throttling point (1), which is formed by control land (2) and throttling spool (3), to port P2. Throttling spool (3) can be axially adjusted by means of spindle (4) axial and thus allows the flow across throttling point (1) to be adjusted. The adjustment stroke is limited on both sides by pin (5). The flow depends on the pressure differential and viscosity.

Symbol



Technical data (for applications outside these parameters, please consult us!)**General**

Weight	kg [lbs]	ca. 0.91 [2.01]
Installation position		Optional
Ambient temperature range	°C [°F]	-30 to +80 [-22 to +176] (NBR seals) -20 to +80 [-4 to +176] (FKM seals)

Hydraulic

Maximum operating pressure	bar [psi]	315 [4568]
Maximum flow	l/min [US gpm]	70 [18.5]
Hydraulic fluid		Mineral oil (HL, HLP) to DIN 51524 ¹⁾ ; fast bio-degradable hydraulic fluids to VDMA 24568 (see also RE 90221); HETG (rape seed oil) ¹⁾ ; HEPG (polyglycols) ²⁾ ; HEES (synthetic esters) ²⁾ ; other hydraulic fluids on request
Hydraulic fluid temperature range	°C [°F]	-30 to +80 [-22 to +176] (NBR seals) -20 to +80 [-4 to +176] (FKM seals)
Viscosity range	mm ² /s [SUS]	10 to 800 [46 to 3700]
Permissible max. degree of contamination of the hydraulic fluid - cleanliness class to ISO 4406 (c)		Class 20/18/15 ³⁾

¹⁾ Suitable for NBR and FKM seals

²⁾ Suitable only for FKM seals

³⁾ The cleanliness classes specified for components must be adhered to in hydraulic systems. Effective filtration prevents malfunction and, at the same time, prolongs the service life of components.

For the selection of filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086, RE 50087 and RE 50088.

Characteristic curves (measured with HLP46, $\vartheta_{\text{oil}} (\nu = 190 \text{ SUS}) = 40 \text{ °C} \pm 5 \text{ °C} [104 \text{ °F} \pm 9 \text{ °F}]$)

Δp - q_v characteristics with constant throttle position

