

#### Pressure relief valve

#### Flange- or Sandwich construction

- ◆ pilot or direct operated
- ightharpoonup p<sub>max</sub> = 400 bar
- ◆ p<sub>N max</sub> = 350 bar
- ◆ 0<sub>max</sub> = 80 l/min

## NG<sub>6</sub> ISO 4401-03



### **DESCRIPTION**

Pilot or direct operated pressure relief valve in flange or sandwich construction. When the adjusted operating pressure is reached, the main spool opens and connects the protected line with the drain to the tank. For flange or sandwich executions with pressure relief in port P, there is a manometer connection.

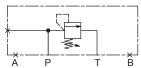
### **APPLICATION**

For the limitation of the operating pressure in hydraulic systems by reliefing the oil from the secured oil line P (1), A (2), B (3) to output / tank line T (4).

#### **SYMBOL**

Flange execution

B..FA06-P

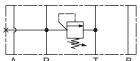


Note!

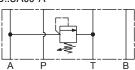
- ◆ Direct operated execution drawn
- ◆ All variants are also available pilot operated

Sandwich execution

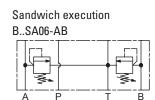
B..SA06-P



Sandwich execution B..SA06-A



Sandwich execution B..SA06-B



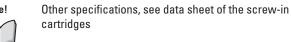
#### **GENERAL SPECIFICATIONS**

Designation	Pressure relief valve
Construction	Direct or pilot operated
Mounting	Flange- or Sandwich construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Manually
Ambient temperature	-25+70 °C
Weight	1,65 kg (Flange construction) 1,40 kg (Sandwich construction P, A, B) 1,95 kg (Sandwich construction AB)

#### **ACTUATION**

Actuation S = lockable key adjustment D = lockable knob adjustment

Note!





I	Y	P	E	C	0	D	E

Pressure relief valve			B 🗌 🗎 🗀	A06	] - [	 # <u></u>
Direct operated, conical spo Direct operated, control spor Pilot operated		A K V				
	Key Control knob Cover	S D A				
Flange construction Sandwich construction		F S				
Mounting interface acc. to IS	SO, NG6					
	Flange constructio in P	on Sandwich construction P in P P in A A in B B in A and B AB				
Nominal pressure range (p <sub>N</sub> )	) of the built-in scre	ew-in cartridge				
3	NBR [ FKM (Viton)	D1				
Design index (subject to cha	ange)					

### **HYDRAULIC SPECIFICATIONS**

$\begin{array}{c} \text{Nominal pressure range} & \begin{array}{c} P_{\text{N max}} \\ \text{A: 63, 210, 315 or 350 bar} \\ \text{K: 32 bar} \\ \text{V: 63, 160 or 350 bar} \end{array}$ $\begin{array}{c} O_{\text{max}} \\ \text{K and V: 80 l/min} \\ \text{A: 25 l/min} \end{array}$ $\begin{array}{c} \text{Fluid} \\ \text{Viscosity range} \end{array} \qquad \begin{array}{c} 12 \text{ mm}^2/\text{s320 mm}^2/\text{s} \\ -25+70 \text{ °C (NBR)} \\ -20+70 \text{ °C (FKM)} \end{array}$ $\begin{array}{c} \text{Contamination efficiency} \end{array} \qquad \begin{array}{c} \text{Class 18 / 16 / 13} \\ \text{Required filtration grade § 610} \geq 75, \\ \text{see data sheet 1.0-50} \end{array}$	Working pressure	p <sub>max</sub> A and V: 400 bar K: 100 bar
K and V: 80 l/min A: 25 l/min  Fluid  Mineral oil, other fluid on request  Viscosity range 12 mm²/s320 mm²/s  Temperature range fluid -25+70 °C (NBR) -20+70 °C (FKM)  Contamination efficiency  Class 18 / 16 / 13  Filtration  Required filtration grade $\&$ 610 $\geq$ 75,	Nominal pressure range	A: 63, 210, 315 or 350 bar K: 32 bar
Viscosity range $12 \text{ mm}^2/\text{s}320 \text{ mm}^2/\text{s}$ Temperature range fluid $-25+70 \text{ °C (NBR)}$ $-20+70 \text{ °C (FKM)}$ Contamination efficiencyClass $18 / 16 / 13$ FiltrationRequired filtration grade $\& 610 \ge 75$ ,	Maximum volume flow	K and V: 80 I/min
Temperature range fluid $-25+70$ °C (NBR) $-20+70$ °C (FKM)  Contamination efficiency Class $18/16/13$ Filtration Required filtration grade $610 \ge 75$ ,	Fluid	Mineral oil, other fluid on request
$ -20+70 \ ^{\circ}\text{C (FKM)} $ Contamination efficiency	Viscosity range	12 mm <sup>2</sup> /s320 mm <sup>2</sup> /s
Filtration Required filtration grade ß 610 ≥ 75,	Temperature range fluid	
	Contamination efficiency	Class 18 / 16 / 13
	Filtration	



Other specifications, see data sheet of the screw-in cartridges

### PERFORMANCE SPECIFICATIONS

Note!

Detailed performance limites and additional hydraulic specifications may by drawn from the data sheets of the corresponding installed pressure relief cartridge.

Attention!



The performance data especially the "pressure-flowcharacteristic," on the data sheets of the screw-in catridges refere to the screw-in cartridges only. The additional pressure drop of the flange body respectivly sandwich body must be taken into consideration.

# **ACCESSORIES**

Verstellarten für Schraubpatronen	Data sheet 2.0-50
Threaded subplates	Data sheet 2.9-30
Multi-station subplates	Data sheet 2.9-60
Horizontal mounting blocks	Data sheet 2.9-100
Technical explanations	Data sheet 1.0-100
Filtration	Data sheet 1.0-50

## **SEALING MATERIAL**

NBR or FKM (Viton) as standard, choice in the type code

#### **SURFACE TREATMENT**

◆ The sandwich bodies are zinc-nickel coated



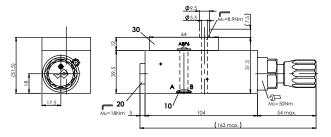
### **VALVES INSTALLED**

The following screw-in cartridges are used in either the flange body or the sandwich body.

Article	Description	Data sheet no.
BV.PM22	Pressure relief cartridge pilot operated	2.1-530
BA.PM22	Pressure relief cartridge direct operated	2.1-540
BK.PM22	Pressure relief cartridge direct operated	2.1-542

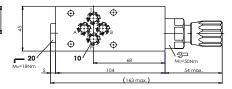
# **DIMENSIONS**

Flange execution B.DFA06-P

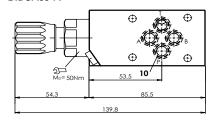


Sandwich execution B.DSA06-P

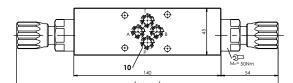




Sandwich execution B.DSA06-A



Sandwich execution B.DSA06-AB



Type of adjustment B.S.A06



Type of adjustment B.A.A06



### **PARTS LIST**

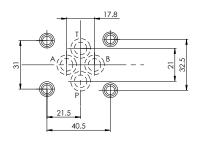
Position	Article	Description
20	238.2406	Screw plug VSTI G1/4"-ED
30	173.3150	Blanking plate NG6 ABP6 (only for flange)
	251.2408	Seal kit BA06, GA06
	251.2413	Seal kit BA06, GA06-D1

Seal kit consisting of:

10 O-ring ID 9,25 x 1,78

Seal kit 251.5906 Seal kit B..PM22

# **HYDRAULIC CONNECTION**



# **STANDARDS**

Mounting interface	ISO 4401-03
Contamination efficiency	ISO 4406

# **INSTALLATION NOTES**

Mounting type	Flange or sandwich mounting 4 fixing holes for socket head screws or stud M5
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_D = 5.5$ Nm (quality 8.8, zinc coated Knurled nut $M_D = 60$ Nm

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