

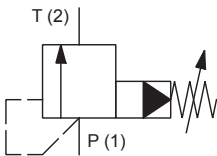
Pressure relief cartridge stainless

- ◆ pilot operated
- ◆ $p_{max} = 400$ bar
- ◆ $p_{Nmax} = 350$ bar
- ◆ $Q_{max} = 100$ l/min

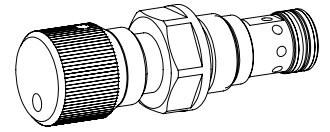
DESCRIPTION

Pilot operated pressure relief valve in screw-in cartridge construction for cavity according to ISO 7789. High flow capacity, very sensitively adjustable. If the pressure in P (1) exceeds the adjusted value of the valve, the excessive pressure is drained to T (2). Rapid switching with low hysteresis and excellent stability over the whole flow range. The small clearance of the hardened spool ensures a low leakage volume flow. The stainless execution is especially suitable for the use in wet and salty environment.

SYMBOL



M22 x 1,5
ISO 7789



APPLICATION

These valves are used for limiting the operating pressure in the hydraulic system or for protection against pressure peaks. Can be used in double pressure relief switches. For machining the cartridge cavity in steel and aluminum blocks, cavity tools are available (hire or purchase). Please refer to the data sheets in register 2.13.

Attention! As of design index #2, applications with periodically changing flow direction are admitted.



ACTUATION

Actuation	Adjustment spindle M8 x 1
Execution	S = blockable key adjustment D = blockable knob adjustment Optionally: G = star handle adjustment
Actuation angle	$\alpha_b = 1800^\circ$ (5 rotations)
Actuation stroke	$S_b = 5$ mm

TYPE CODE

Pressure relief valve					B	V	<input type="checkbox"/>	PM22	-	<input type="checkbox"/>	-	<input type="checkbox"/>	K9	#	2
Pilot operated															
Type of adjustment	Key	<input type="checkbox"/>	S												
	Control knob	<input type="checkbox"/>	D												
	Cover	<input type="checkbox"/>	A												
Screw-in cartridge M22 x 1,5															
Nominal pressure range p_N	63 bar	<input type="checkbox"/>	63												
	160 bar	<input type="checkbox"/>	160												
	350 bar	<input type="checkbox"/>	350												
Sealing material	NBR	<input type="checkbox"/>													
	FKM (Viton)	<input type="checkbox"/>	D1												
	NBR 872	<input type="checkbox"/>	y-Z604												
Stainless															
Design index (subject to change)															

2.1-530S

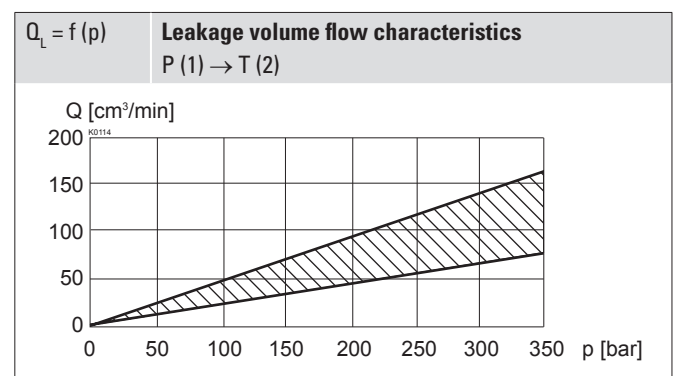
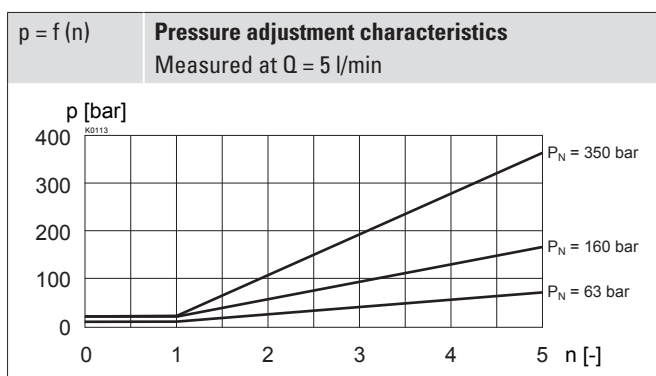
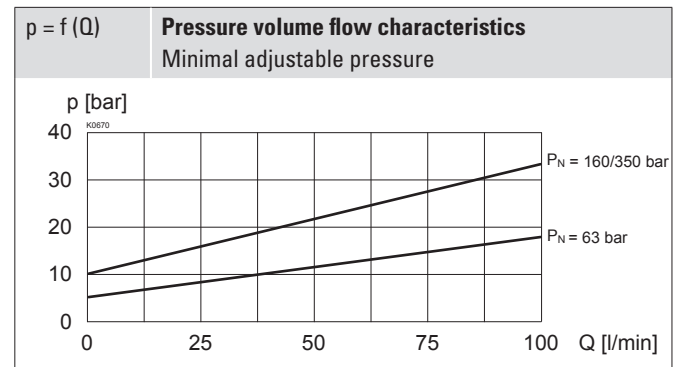
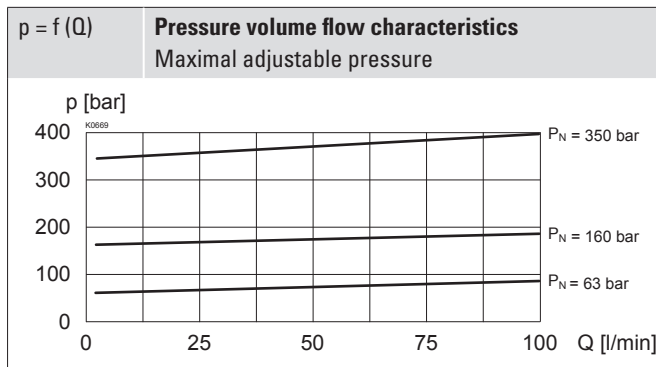
GENERAL SPECIFICATIONS

Designation	Pressure relief valve
Construction	Pilot operated
Mounting	Screw-in cartridge construction
Nominal size	M22 x 1,5 according to ISO 7789
Actuation	Manually
Ambient temperature	-25...+90 °C
Weight	0,17 kg key adjustment 0,26 kg control knob adjustment 0,21 kg cover
MTTFd	150 years

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 400$ bar
Tank pressure	$p_{Tmax} = 350$ bar
Nominal pressure range	$p_N = 63; 160; 350$ bar
Minimum pressure	See characteristics
Volume flow range	$Q = 0,2 \dots 100$ l/min
Leakage oil	See characteristics
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm ² /s...320 mm ² /s
Temperature range fluid	-25...+90 °C (NBR) -20...+90 °C (FKM)
Contamination efficiency	Class 18 / 16 / 13
Filtration	Required filtration grade $\beta_{6 \dots 10} \geq 75$, see data sheet 1.0-50

PERFORMANCE SPECIFICATIONS

 Oil viscosity $\nu = 30$ mm²/s

SEALING MATERIAL

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

SURFACE TREATMENT

- ◆ The cartridge body and the control knob are made of stainless steel

STANDARDS
INSTALLATION NOTES

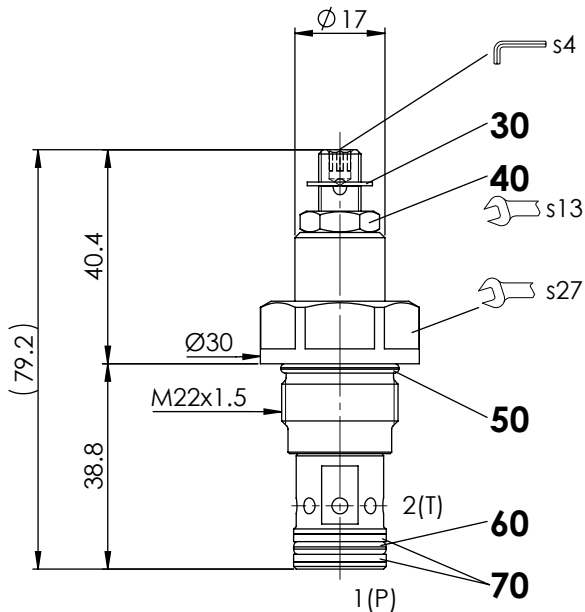
Cartridge cavity	ISO 7789
Mounting type	Screw-in cartridge M22 x 1,5
Mounting position	Any, preferably horizontal
Tightening torque	$M_D = 80$ Nm screw-in cartridge

INSTALLATION NOTES

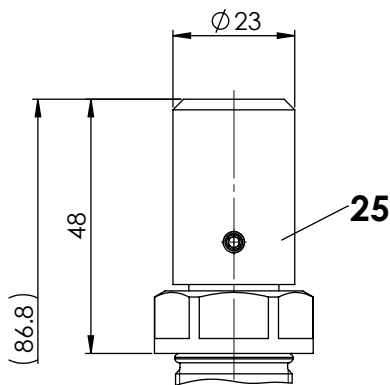
Mounting type	Screw-in cartridge M22 x 1,5
Mounting position	Any, preferably horizontal
Tightening torque	$M_D = 80$ Nm screw-in cartridge

DIMENSIONS

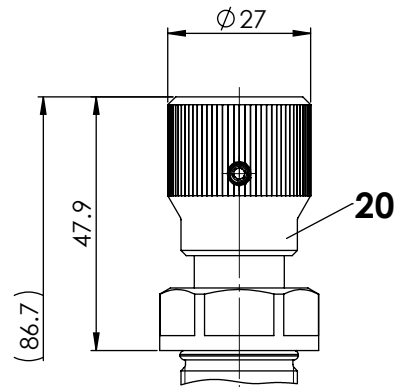
Key adjustment «S»



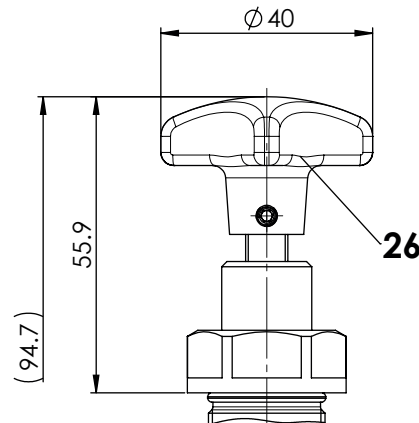
Cover «A»



Control knob adjustment «D»



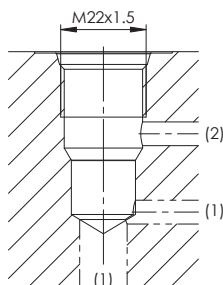
Star handle «G»


ACCESSORIES

Types of adjustment for screw-in cartridges	Data sheet 2.0-50
Technical explanations	Data sheet 1.0-100
Filtration	Data sheet 1.0-50

HYDRAULIC CONNECTION

Cavity drawing according to ISO 7789-22-02-0-98


Note!


For detailed cavity drawing and cavity tools see data sheet 2.13-1003

PARTS LIST

Position	Article	Description
20	114.2228	Control knob K9
25	032.0616	Cover rd 23 / 3 x 35 K9
26	082.2004	Star handle rd 40 x 26
30	193.1062	Retainer rd 6 DIN 6799
40	154.7407	Hexagon nut M8 x 1 x 4
	251.5906	Seal kit BVSPM22
	251.5907	Seal kit BVSPM22-D1
	251.5913	Seal kit BVSPM22-D2
	251.2419	Seal kit BVSPM22 Z604

Seal kit consisting of:

50	O-ring	ID 18,77 x 1,78
60	O-ring	ID 14,00 x 1,78
70	Back. ring	PTFE rd 14,6 x 17,5 x 1,4

Wandfluh AG Postfach CH-3714 Frutigen
 Tel. +41 33 672 72 72 Fax +41 33 672 72 12 sales@wandfluh.com