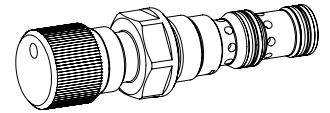


Pressure reducing cartridge stainless

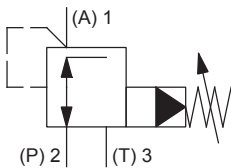
- ◆ pilot operated
- ◆ $p_{max} = 400 \text{ bar}$
- ◆ $p_{N \text{ red max}} = 350 \text{ bar}$
- ◆ $Q_{max} = 80 \text{ l/min}$

M22 x 1,5
ISO 7789

DESCRIPTION

Pilot operated pressure reducing valve in screw-in cartridge construction for cavity according to ISO 7789. The valve reduces the input pressure to an adjustable output pressure. Through the integrated pressure relief function, exceeding the reduced pressure as a result of external forces is avoided. The pressure reducing valve controls the pressure in port A (1). Through increasing the spring tension, the pressure in port A(1) rises. The valve operates practically independently of the pressure in port P (2). Pressure increase in port A (1) to above the adjusted value, e.g. through an active consumer, is avoided by discharging excess oil to the tank (3). The stainless execution is especially suitable for the use in wet and salty environment.

APPLICATION

The integrated pressure relief makes an additional pressure relief valve in the consumer line superfluous. In the case of several consumers, the pressure of the specific consumers can be individually adjusted by the pressure reducing valve. Pressure reducing valves are used to maintain the pressure in a consumer constant independent of pressure fluctuations on the supply side. The screw-in cartridge is perfectly suitable for installation in control blocks. 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.

SYMBOL

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	$S_b = 5 \text{ mm}$

TYPE CODE

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

2.2-530S

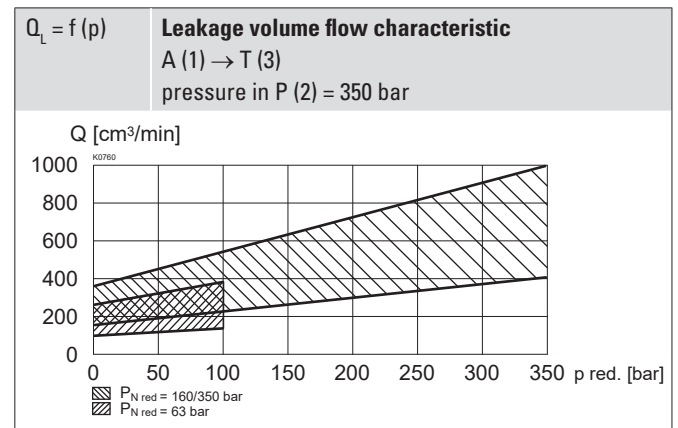
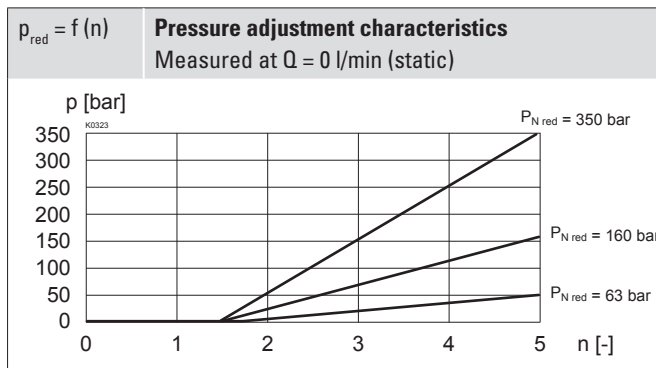
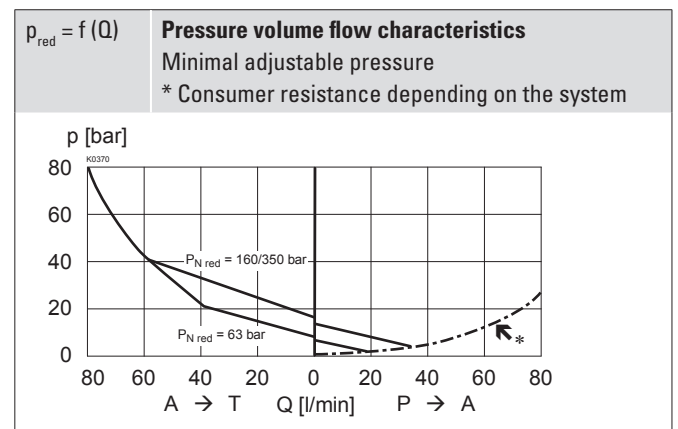
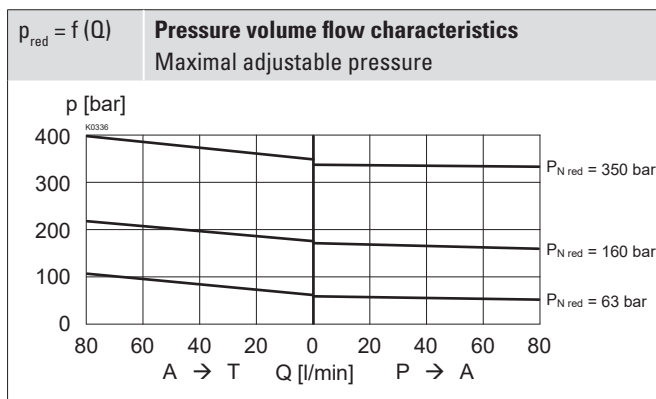
GENERAL SPECIFICATIONS

Designation	Pressure reducing 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	0,18 kg key adjustment 0,27 kg control knob adjustment 0,22 kg cover
MTTFd	150 years

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 400$ bar
Nominal pressure range	$P_{N\ red} = 63$ bar, 160 bar, 350 bar
Volume flow range	$Q = 0 \dots 80$ 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 $\beta_{10 \dots 16} \geq 75$, 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

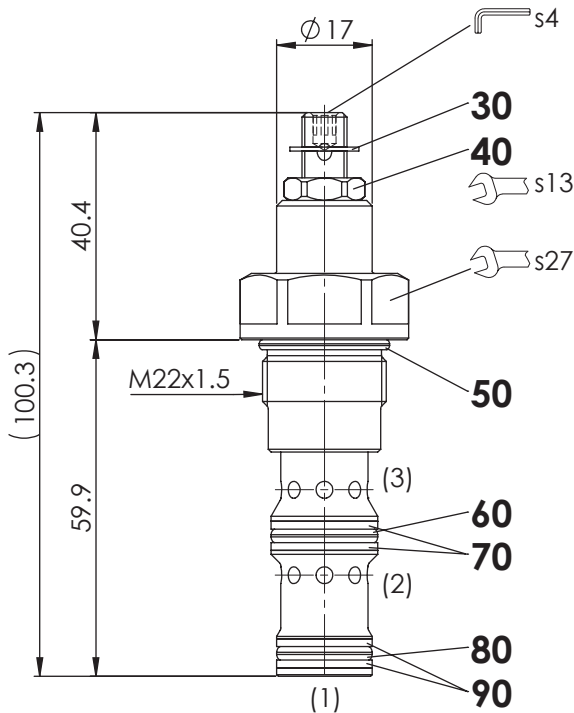
Cartridge cavity	ISO 7789
Contamination efficiency	ISO 4406

INSTALLATION NOTES

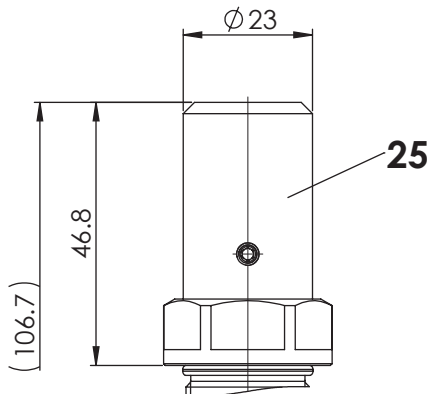
Mounting type	Screw-in cartridge M22 x 1,5
Mounting position	Any, preferably horizontal
Tightening torque	$M_D = 60$ Nm Screw-in cartridge

DIMENSIONS

Key adjustment „S”

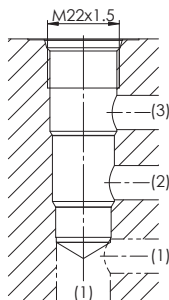


Cover „A”



HYDRAULIC CONNECTION

Cavity drawing according to ISO 7789-22-04-0-98

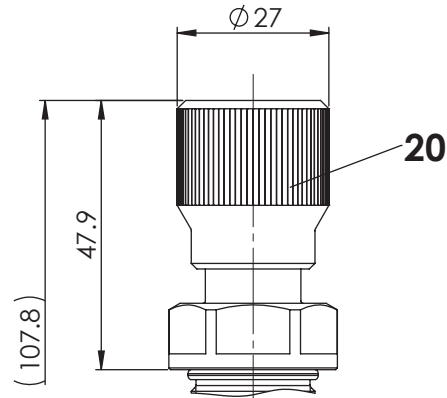


Note!

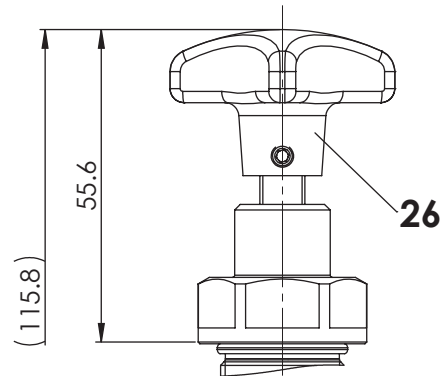


For detailed cavity drawing and cavity tools see data sheet 2.13-1004

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

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
	251.2411	Seal kit MVSPM22
	251.2417	Seal kit MVSPM22 D1

Seal kit consisting of:

50	O-ring	ID 18,77 x 1,78
60	O-ring	ID 15,60 x 1,78
70	Back. ring	PTFE rd 16,1 x 19 x 1,4
80	O-ring	ID 14,00 x 1,78
90	Back. ring	PTFE rd 14,1 x 17 x 1,4

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