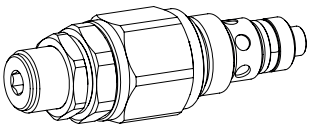
Pressure relief cartridge

- direct operated
- p_{max} = 350 bar
- $p_{N\,max}$ = 350 bar
- Q_{max} = 30 l/min

¾"-16 UNF
Wandfluh standard



DESCRIPTION

Direct operated poppet type pressure relief valve in screw-in cartridge construction for cavity according to Wandfluh standard. The valve is closed in the neutral position. If the pressure in P (1) exceeds the adjusted value of the valve, the excessive pressure is drained to T (2). The back pressure at T (2) is added to the adjusted value. T (2) can be charged up to the maximum. Hardened precision parts ensure virtually leakage-free closing. Rapid switching with low hysteresis and excellent stability over the whole flow range.

APPLICATION

These valves are used for limiting the operating pressure in the hydraulic system. 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.

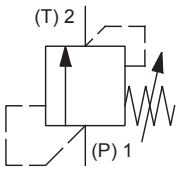
TYPE CODE

B E S PU08 - [ ] # [ ]

Pressure relief valve		
Direct operated, leakage-free		
Type of adjustment	key	
Screw-in cartridge 3/4"-16 UNF		
Nominal pressure range p_N	60 bar	60
	135 bar	135
	220 bar	220
	350 bar	350
Design index (subject to change)		

2.1-523

SYMBOL



GENERAL SPECIFICATIONS

Designation	Pressure relief valve
Construction	Direct operated seat tight
Mounting	Screw-in cartridge type
Nominal size	¾"-16 UNF according to Wandfluh standard
Actuation	Manually
Ambient temperature	-30…+110 °C
Weight	0,145 kg key adjustment
MTTFd	150 years

HYDRAULIC SPECIFICATIONS

Working pressure	p_{max} = 350 bar
Tank pressure	$p_{T\,max}$ = 350 bar
Nominal pressure range	p_N = 60 bar, 135 bar, 220 bar, 350 bar
Minimum pressure	P_N 60 bar = 15 bar P_N 135 bar = 25 bar P_N 220 bar = 50 bar P_N 350 bar = 120 bar
Volume flow range	Q = 0,1…30 l/min
Leakage volume flow	Leakage free 0,25 cc / min
Fluid	Mineral oil, other fluid on request
Viscosity range	7,4 mm²/s…420 mm²/s
Temperature range fluid	-20…+70 °C
Contamination efficiency	Class 18 / 16 / 13
Filtration	Required filtration grade ß 10…16 ≥ 75, see data sheet 1.0-50

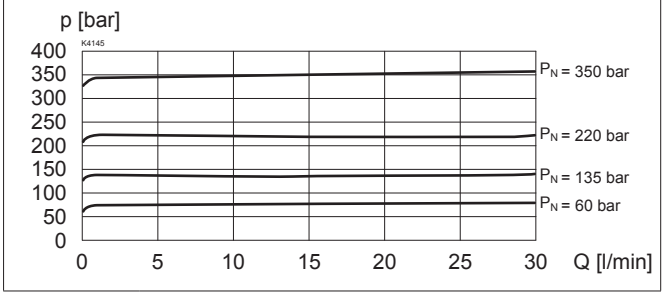
ACTUATION

Actuation	S = lockable key adjustment
Actuation angle	2520 ° (7 rotations)
Actuation stroke	7 mm

PERFORMANCE SPECIFICATIONS

Oil viscosity υ = 30 mm²/s

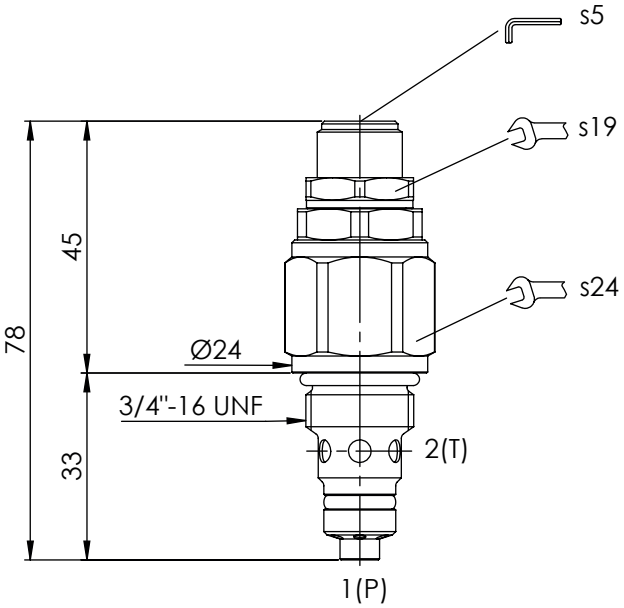
p = f (Q)	**Pressure volume flow characteristics** at nominal pressure



SURFACE TREATMENT

◆ The external parts of the cartridge body are zinc coated

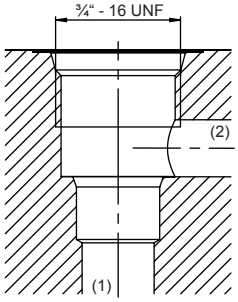
DIMENSIONS



HYDRAULIC CONNECTION

Cavity drawing according to Wandfluh standard

Note! For detailed cavity drawing and cavity tools see data sheet 2.13-1043



Attention! The nose of the cartridge protrudes 4 mm

INSTALLATION NOTES

Mounting type	Screw-in cartridge ¾"-16 UNF
Mounting position	Any, preferably horizontal
Tightening torque	M_D = 40 - 45 Nm Screw-in cartridge

SEALING MATERIAL

NBR as standard

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