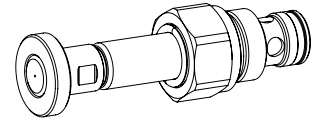


## Solenoid operated poppet valve cartridge

- ◆ solenoid operated
- ◆ pilot operated
- ◆ normally closed
- ◆ 2/2-way
- ◆  $Q_{max} = 40$  l/min
- ◆  $p_{max} = 350$  bar

**M20 x 1,5**



### DESCRIPTION

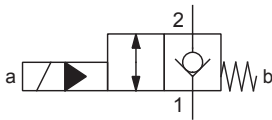
Pilot operated 2/2-way solenoid poppet valve in screw-in cartridge design for cavity according to Wandfluh standard. In case of the BC execution, the valve is closed in the de-energised position.

### APPLICATION

Poppet valves are used where tight closing functions of the valve are essential like leakfree load holding, clamping or gripping. The poppet valve cartridge is mainly used in the mobile and stationary block construction.

### SYMBOL

„Normally closed“ BC



### TYPE CODE

Poppet valve	S	V	E	PM20	-		-	X5	#	
Pilot operated										
Solenoid										
Screw-in cartridge M20 x 1,5										
2/2 way, «normally closed»										BC
Without coil										(The coil has to be ordered separately)
Design index (subject to change)										
1.11-208A										

### GENERAL SPECIFICATIONS

Designation	2/2-way poppet valve
Construction	Pilot operated
Mounting	Screw-in cartridge type
Nominal size	M20 x 1,5
Actuation	Switching solenoid
Ambient temperature	-30...+110 °C
Weight	0,12 kg
MTTFd	150 years

### HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 350$ bar
Maximum volume flow	$Q_{max} = 40$ l/min, see characteristics
Leakage volume flow	Seat tight, max. 5 drops / min at $p_{max}$
Fluid	Mineral oil, other fluid on request
Viscosity range	8 mm <sup>2</sup> /s...420 mm <sup>2</sup> /s
Temperature range fluid	-20...+70 °C
Contamination efficiency	Class 20 / 18 / 14
Filtration	Required filtration grade $\beta_{10...16} \geq 75$ , see data sheet 1.0-50

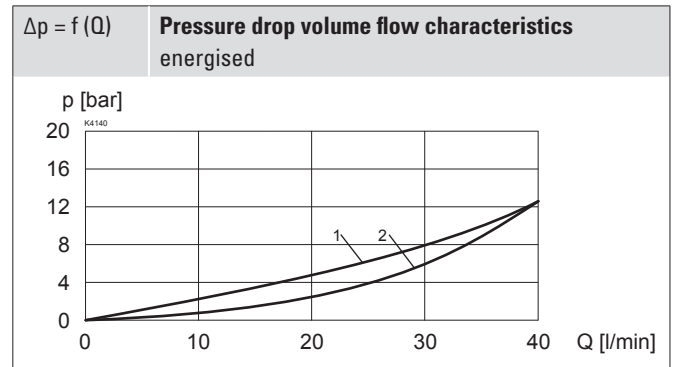
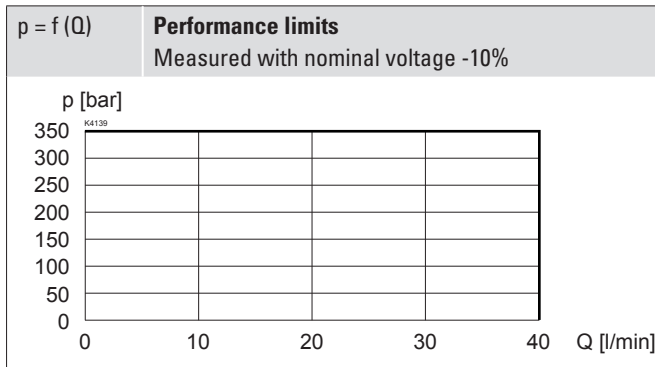
### SURFACE TREATMENT

- ◆ The armature tube and the external parts of the cartridge body are zinc coated

### MANUAL OVERRIDE

None

## PERFORMANCE SPECIFICATIONS

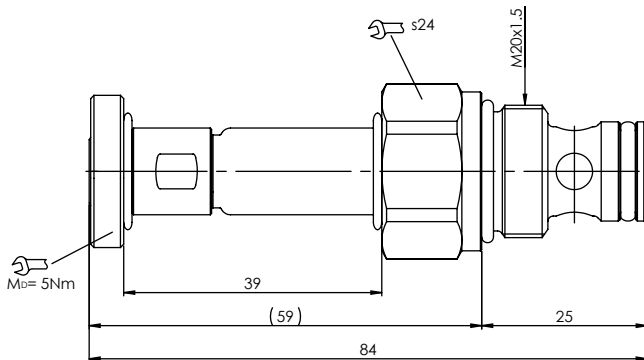
 Oil viscosity  $\nu = 30 \text{ mm}^2/\text{s}$ 


### Switching times

SVEPM20	Type	Switching on	Switching off
	BC	approx. 30 ms	approx. 50 ms

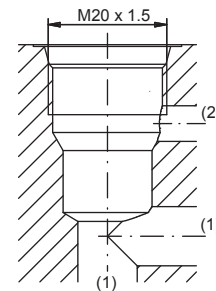
	BC
de-energised 1 → 2	2
de-energised 2 → 1	-
energised 1 → 2	2
energised 2 → 1	1

## DIMENSIONS



## HYDRAULIC CONNECTION

Cavity drawing according to Wandfluh standard



**Note!** For detailed cavity drawing and cavity tools see data sheet 2.13-1042



## ACCESSORIES

Technical explanations	data sheet 1.0-100
Hydraulic fluids	data sheet 1.0-50
Filtration	data sheet 1.0-50
Relative duty factor	data sheet 1.1-430

## ACTUATION

Actuation	Switching solenoid, wet pin pull type, pressure tight
Execution	K.E33 / 13 x 39 (data sheet 1.1-160)
Connection	Connector socket EN 175301 – 803 Connector socket AMP Junior-Timer Connector Deutsch DT04 – 2P

**Note!** The solenoid coil is not included in the delivery!



## INSTALLATION NOTES

Mounting type	Screw-in cartridge M20 x 1
Mounting position	Any, preferably horizontal
Tightening torque	$M_D = 40-45 \text{ Nm}$ for screw-in cartridge

## STANDARDS

Protection class	EN 60 529
Contamination efficiency	ISO 4406

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