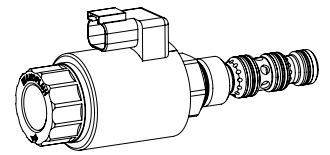


## Solenoid operated spool valve cartridge

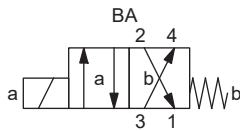
### Screw-in cartridge construction

- ◆ 4/2-way with spring reset
- ◆  $Q_{max} = 38 \text{ l/min}$
- ◆  $p_{max} = 350 \text{ bar}$

**7/8"-14 UNF**  
**Wandfluh standard**



## SYMBOL



## TYPE CODE

Spool valve, direct operated		W		D		E		PU10		-	-	/	-	-	#	-			
Slip-on coil Economy																			
Screw-in cartridge 7/8"-14 UNF																			
Designation of symbols acc. to table																			
Nominal voltage $U_N$	12 VDC	G12		115 VAC	R115														
	24 VDC	G24		230 VAC	R230														
	without coil	X5																	
Slip-on coil	Metal housing round			W															
	Metal housing square			M															
Connection execution	Connector socket EN 175301-803 / ISO 4400	D																	
	Connector socket AMP Junior-Timer	J		(only for $U_N \leq 75 \text{ VDC}$ )															
	Connector Deutsch DT04 - 2P	G		(only for $U_N \leq 75 \text{ VDC}$ )															
Sealing material	NBR																		
	FKM (Viton)	D1																	

Design index (subject to change)

1.2-210

## GENERAL SPECIFICATIONS

Designation	4/2-spool valve
Construction	Direct operated
Mounting	Screw-in cartridge construction
Nominal size	7/8"-14 UNF according to Wandfluh standard
Actuation	Switching solenoid
Ambient temperature	-25...+70 °C (NBR)
	-20...+70 °C (FKM)
Weight	0,68 kg
MTTFd	150 years

## ACTUATION

Actuation	Switching solenoid, wet pin push type, pressure tight
Execution	W.E45 / 23 x 50 (Data sheet 1.1-182)
	M.S45 / 23 x 50 (Data sheet 1.1-181)
Connection	Connector socket EN 175301 – 803
	Connector socket AMP Junior-Timer
	Connector Deutsch DT04 – 2P

## ELECTRICAL SPECIFICATIONS

Protection class	Connection execution D: IP65 Connection execution J: IP66 Connection execution G: IP67 and IP69K
Relative duty factor	100 % DF
Switching frequency	15'000 / h
Service life time	10 <sup>7</sup> (number of switching cycles, theoretically)
Voltage tolerance	± 10 % with regard to nominal voltage
Standard nominal voltage	12 VDC, 24VDC, 115 VAC, 230 VAC AC = 50 to 60 Hz, rectifier integrated in the connector socket

**Note!** Other electrical specifications see data sheet 1.1-182 (slip-on coil W) and 1.1-181 (slip-on coil M)

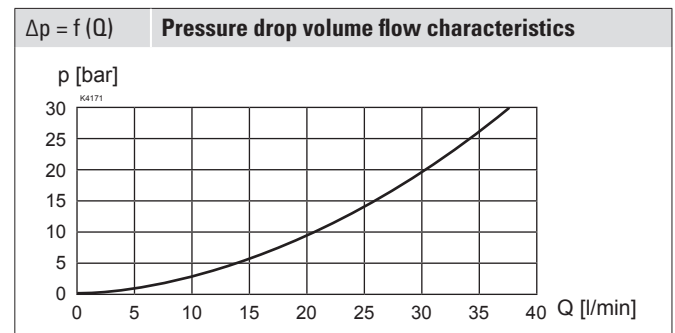
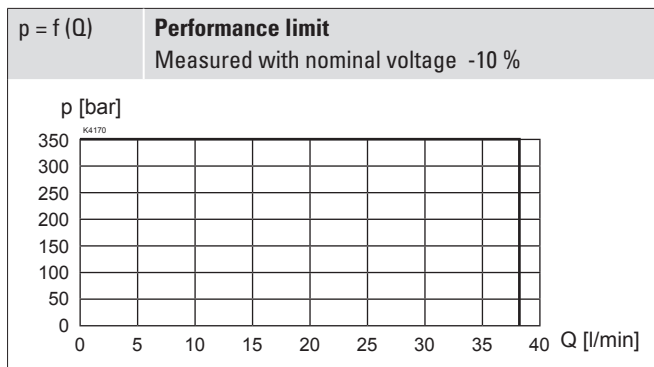


## HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 350$ bar
Maximum volume flow	$Q_{max} = 38$ l/min
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm <sup>2</sup> /s...320 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

## PERFORMANCE SPECIFICATIONS

Oil viscosity  $\nu = 30$  mm<sup>2</sup>/s



## ACCESSORIES

Electric plug B (black)	Article no. 219.2002
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

## INSTALLATION NOTES

Mounting type	Screw-in cartridge 1/4"-14 UNF
Mounting position	Any, preferably horizontal
Tightening torque	$M_D = 60$ Nm Screw-in cartridge $M_D = 5$ Nm knurled nut

## SURFACE TREATMENT

- ◆ All parts are zinc-nickel coated

## MANUAL OVERRIDE

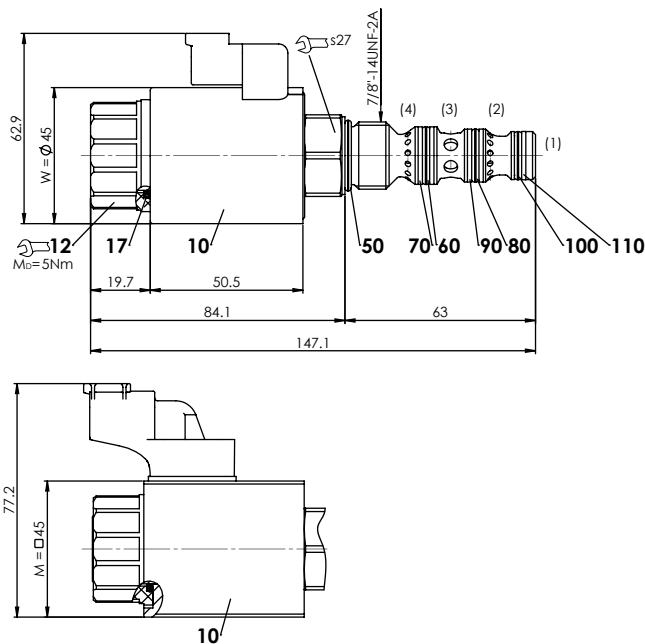
None

## SEALING MATERIAL

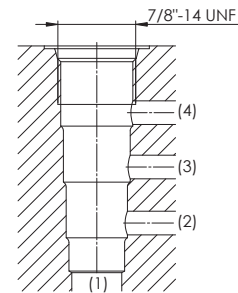
NBR or FKM (Viton) as standard, choice in the type code

**DIMENSIONS**

4/2-way spool valve (spring reset)


**HYDRAULIC CONNECTION**

Cavity drawing according to Wandfluh standard


**Attention!** For detailed cavity drawing and cavity tools see data sheet 2.13-1057

**PARTS LIST**

Position	Article	Description
10	206.1...	W.E45 / 23 x 50
	206.7...	M.S45 / 23 x 50
12	154.2701	Knurled nut M23 x 1,5 x 19,7
17	160.2222	O-ring ID 22,22 x 2,62 (NBR)
50	160.2187	O-ring ID 18,72 x 2,62 (NBR)
60	160.2156	O-ring ID 15,60 x 1,78 (NBR)
70	049.8196	Backup ring PTSM rd 14,5 x 17,4 x 1,4
80	160.2140	O-ring ID 14,00 x 1,78 (NBR)
90	049.8177	Back-up ring PTSM rd 12,4 x 15,3 x 1,4
100	160.2120	O-ring ID 12,42 x 1,78 (NBR)
110	049.8166	Backup ring PTSM rd 10,8 x 13,7 x 1,4