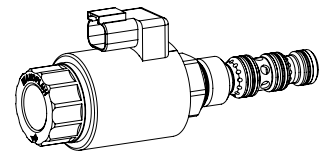


Solenoid operated spool valve cartridge

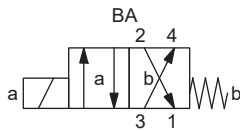
Screw-in cartridge construction

- ◆ 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

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

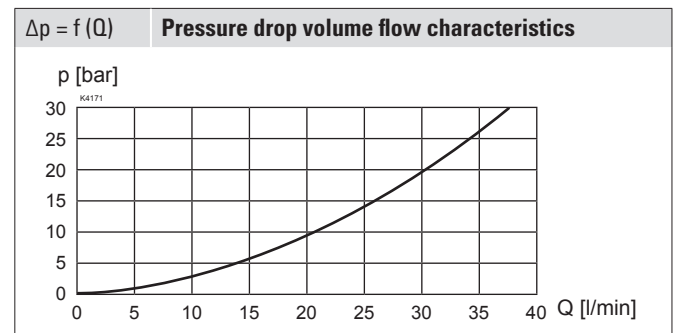
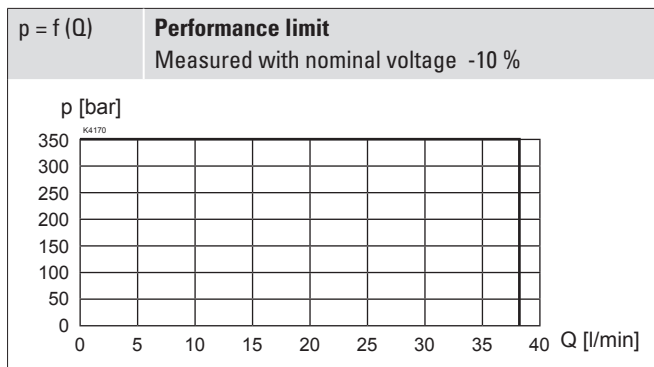


HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 350 \text{ bar}$
Maximum volume flow	$Q_{max} = 38 \text{ l/min}$
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm ² /s...320 mm ² /s
Temperature range fluid	-25...+70 °C (NBR) -20...+70 °C (FKM)
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 $\nu = 30 \text{ mm}^2/\text{s}$



ACCESSORIES

Electric plug B (black)	Article no. 219.2002
Technical explanations	Data sheet 1.0-100
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	$M_D = 60 \text{ Nm}$ Screw-in cartridge $M_D = 5 \text{ Nm}$ knurled nut

SURFACE TREATMENT

- ◆ All parts are zinc-nickel coated

MANUAL OVERRIDE

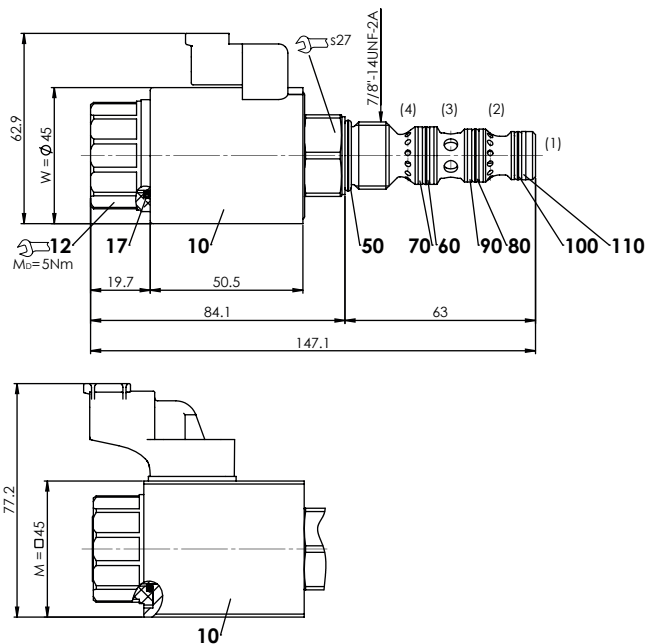
None

SEALING MATERIAL

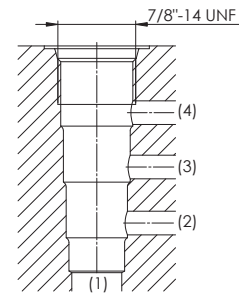
NBR or FKM (Viton) as standard, choice in the type code

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