

Directional spool valves, direct operated, with solenoid actuation

Type WE



- ▶ Size 10
- ▶ Component series 5X
- ▶ Maximum operating pressure 350 bar
- ▶ Maximum flow: 160 l/min – DC
120 l/min – AC



Features

- ▶ 4/3-, 4/2- or 3/2-way version
- ▶ Porting pattern according to ISO 4401-05-04-0-05
- ▶ High-power solenoid, optionally rotatable by 90°
- ▶ Electrical connection as individual or central connection
- ▶ Cartridge optionally equipped with PWM connector (fast switching amplifier, energy reduction)
- ▶ Manual override, optional
- ▶ CE conformity according to the Low-Voltage Directive 2014/35/EU for electrical voltages > 50 VAC or > 75 VDC
- ▶ Solenoid coil as approved component with UR marking, optional
- ▶ Approval according to CSA C22.2 No. 139-13, optional

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Ordering code

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
	WE	10		5X	/		E				/					*

01	3 main ports	3
	4 main ports	4
02	Directional valve	WE
03	Size 10	10
04	Symbols; possible version see page 8 and 9	
05	Component series 50 ... 59 (50 ... 59: unchanged installation and connection dimensions)	5X
06	With spring return	no code
	With reinforced compression spring (for quick switching off)	D
	Without spring return	O
	Without spring return with detent	OF ¹⁾
07	High-power wet-pin solenoid with detachable coil	E

Electrical voltages

08	For ordering code see page 4 ... 7	e.g. G24
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Manual override ²⁾ (see page 25)

09	Without manual override	no code
	With lockable manual override "mushroom button" (large)	N5 ^{1; 3)}
	With manual override "mushroom button" (large), not lockable	N6 ¹⁾
	With concealed manual override and protective cap	N8 ^{1; 4)}
	With concealed manual override (standard)	N9

Corrosion resistance (outside) (for the availability, refer to the table on page 3)

10	None (valve housing primed)	no code
	Improved corrosion protection (240 h salt spray test according to EN ISO 9227)	J3

Electrical connection

11	Individual connection or central connection	
	For ordering code see page 4 ... 7	e.g. K4

Switching time increase

12	Without switching time increase						no code
	With switching time increase (only with symbol ".73"; not for version "D" with reinforced compression spring; more information upon request)						A12
13	Without throttle insert (standard)						no code
	With throttle insert (when the admissible valve performance limit is exceeded, refer to page 17 and 22) ⁵⁾						
	Port						
		0.8	1.0	1.2	2.0	3.0	4.0
	P	= B08	= B10	= B12	= B20	= B30	= B40
	A	= H08	= H10	= H12	= H20	= H30	= H40
	B	= R08	= R10	= R12	= R20	= R30	= R40
	A and B	= N08	= N10	= N12	= N20	= N30	= N40
T ⁶⁾	= X08	= X10	= X12	= X20	= X30	= X40	

Ordering code

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
	WE	10		5X	/		E				/					*

Control spool play

14	Standard (recommended)	no code
	Minimum (selection for reduced leakage values; higher oil cleanliness required)	T06
	Increased (selection with high temperature difference hydraulic fluid/environment; leads to higher internal leakage values)	T12

Seal material (observe compatibility of seals with hydraulic fluid used, see page 12)

15	NBR seals	M
	FKM seals	V
	Recommended for operation with HFC hydraulic fluids	MH
	Low-temperature version (only with version "Without manual override")	MT
16	Standard	no code
	Approval according to CSA C22.2 No. 139-13	CSA
	Porting pattern according to ANSI B93.9	AN ⁷⁾
17	Further details in the plain text	*

- 1) Only direct voltage "G..."
- 2) Operation of the manual override only possible up to 50 bar tank pressure. Avoid damage to the bore of the manual override. (Special tool for the operation, separate order, material no. **R900024943**). If the manual override is blocked, operation of the opposite solenoid is to be excluded. The manual override cannot be allocated a safety function.
- 3) With tank pressures higher than 50 bar, it is not guaranteed that the valve remains in the position into which it was switched by the lockable manual override ("N5").
- 4) Protective cap must be removed prior to actuation.
- 5) Not with low-temperature version "MT".
- 6) When throttle inserts are used in channel T, the pressure in the working ports and in case of connection to the tank chambers must not exceed 210 bar.
- 7) With power supply to
 - solenoid "a", channel P is connected to A
 - solenoid "b", channel P is connected to B



Notice:

For directional spool valves NG10 with spool position monitoring, see data sheet 23352.

Available corrosion resistance

	Electrical connection						Manual override	
	"DL", "DJL"						Without	"N8"
	"G12"	"G24"	"G96"	"G110"	"G205"	"G220"	"W200R"	
"J3"	✓	✓	✓	✓	✓	✓	✓	✓