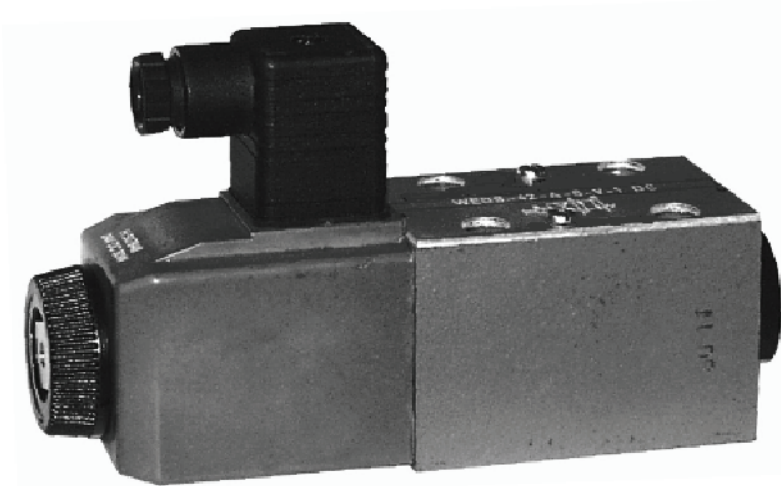


Solenoid Operated Spool Valve, 6 mm Direct Acting Series WEDO ...



- 350 bar, 80 l/min
- T-port can be pressurised to 160 bar (dynamic) – AC models
210 bar (dynamic) – DC models
- Solenoid features slip-on coil, which enables straight-forward coil changes without opening the hydraulic envelope
- With ISO 4401 / CETOP R35H size 3, NFPA D03, DIN 24 340 A6 interface

1. Description

Series WEDO ...-6 units are solenoid operated, direct acting spool type directional valves. They are used to start, stop and control the direction of flows of fluid in hydraulic systems. The spool is actuated by electro-magnetic solenoids which are available in two styles, one for AC (alternating current) service and the other for DC (direct current). The solenoid coils can be rotated and secured at 90° intervals around the core tube. Model WEDO-42-C-6 is provided with mechanical spool detents.

2. Symbols

4/2 FUNCTIONS	4/2 FUNCTIONS WITH 4/3 SPOOLS	4/2 FUNCTIONS WITH 4/3 SPOOLS	4/3 FUNCTIONS
WEDO-42-A-6 1	WEDO-42-AD-6 7	WEDO-42-BD-6 13	WEDO-43-D-6 19
WEDO-42-AN-6 2	WEDO-42-AG-6 8	WEDO-42-BG-6 14	WEDO-43-G-6 20
WEDO-42-B-6 3	WEDO-42-AH-6 9	WEDO-42-BH-6 15	WEDO-43-H-6 21
WEDO-42-BN-6 4	WEDO-42-AF-6 10	WEDO-42-BF-6 16	WEDO-43-F-6 22
WEDO-42-C-6 5	WEDO-42-AJ-6 11	WEDO-42-BJ-6 17	WEDO-43-J-6 23
crossover transients 6			

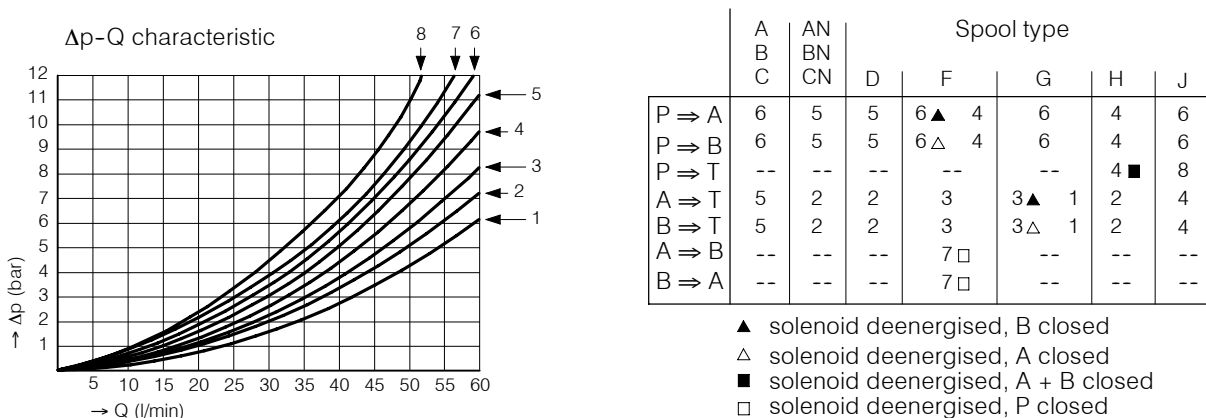
3. Main characteristics

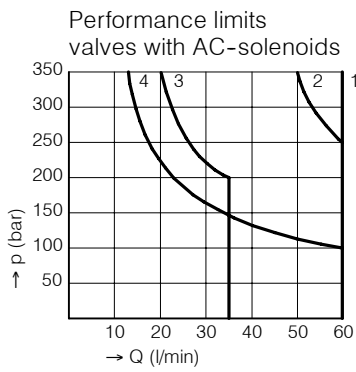
Designation		4/2 and 4/3 directional spool valve
Design		direct acting
Mounting method		manifold mounting
Size		nominal size 6 mm, ISO 4401 size 3 interface
Weight	kg	1 solenoid = 1,6; 2 solenoids = 2,1
Mounting attitude		unrestricted, except for detented valves (..C.): mount these with spool horizontal
Flow direction		see symbols
Operating pressure	bar	max. 350 in P, A and B
Operating pressure in T (dynamic)	bar	AC models: max. 160 DC models: max. 210
Flow rate, Q max.	l/min	80, see performance graphs and performance limits
Fluids		HL and HLP hydraulic oils to DIN 51 524 / water-in-oil emulsions / water glycols / phosphate esters (except Alkyl-based); for other fluids, please consult BUCHER
Fluid temperature range	°C	mineral oils: -25 ... +80 water-containing fluids: +10 ... +54
Ambient temperature	°C	-25 ... +50
Viscosity range	mm ² /s (cSt)	10 ... 500, recommended 15 ... 250
Minimum fluid cleanliness level		18/14 to ISO 4406 / CETOP RP70H; 8 ... 9 to NAS 1638
Nominal voltages	VAC VDC	115 / 230, 50 Hz 12 / 24 for other voltages, please consult BUCHER
Nominal voltage tolerance	%	± 10
Nominal power consumption VAC	VA	Inrush 265 / Holding 54
Nominal power consumption VDC	W	at 20°C: 30
Relative duty cycle	%	100
Enclosure protection		IP 65 to DIN 40 050
Electrical connection		3-pin square plug to ISO 4400 / DIN 43 650

Note: AC-coils must not be used on DC valves and vice versa

4. Performance graphs

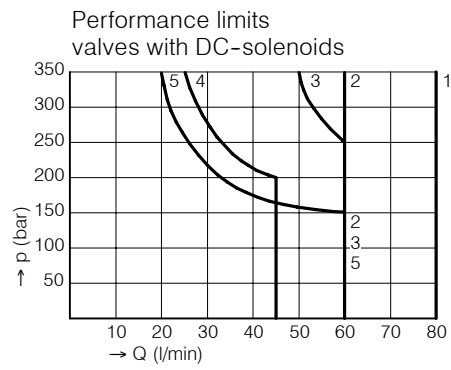
Measured with oil viscosity 36 mm²/s (cSt) coil at steady-state temperature, 10% under-voltage





Spool type	Curve
A	2
B	2
C	2
D	1
F	1
G	4
H	1
J	3

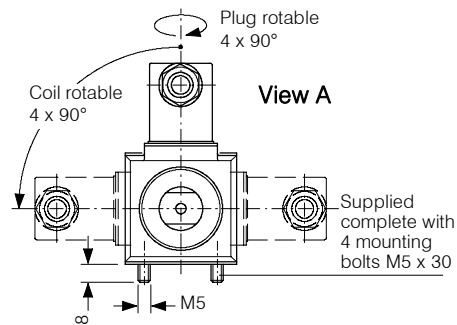
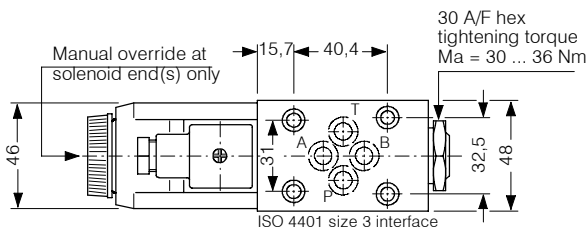
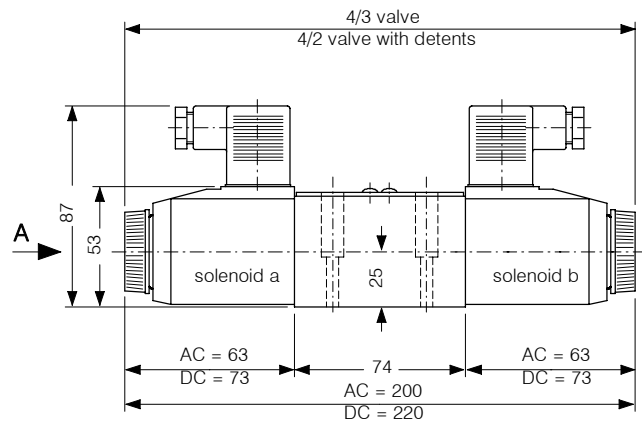
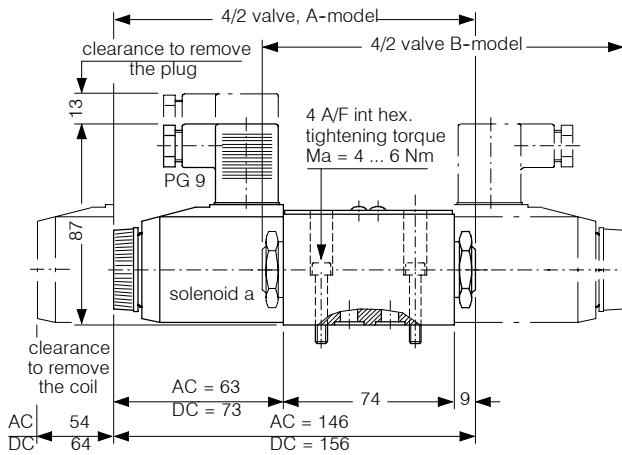
The quoted max. flow rates apply when symmetrical flows pass through the valve. For non-symmetrical flows, the max. flows are substantially reduced, in worst cases to only 30 % of the above valves.



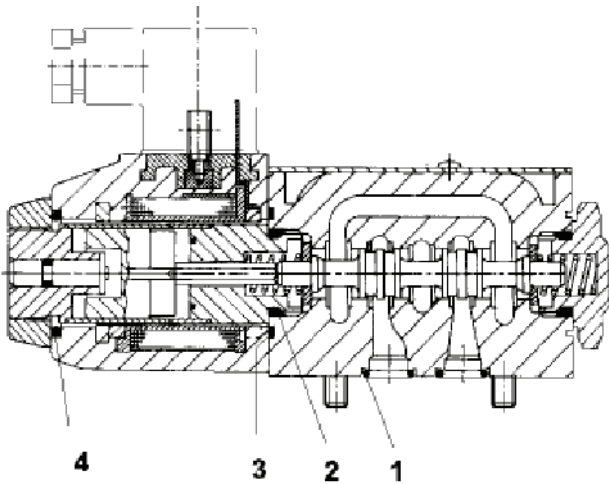
Spool type	Curve
A	3
B	3
C	3
D	1
F	2
G	5
H	2
J	4

Switching times at 40 l/min. and 175 bar	AC solenoids		DC solenoids	
	ON	OFF	ON	OFF
	15 ms	23 ms	45 ms	28 ms

5. Dimensions



6. Schematic section



Seal kit no. DS-150-V (Viton), comprising *):

Itm.	Qty.	Qty.	Description	Size
1	4*)	4	O-ring no. 012	Ø 9,25 x 1,78
2	2*)	2	O-ring no. 114	Ø 15,54 x 2,62
3	2*)	1	O-ring no. 022	Ø 25,12 x 1,78
4	2*)	1	O-ring no. 213	Ø 23,39 x 3,53

4/2 valves
4/3 valves / detented models

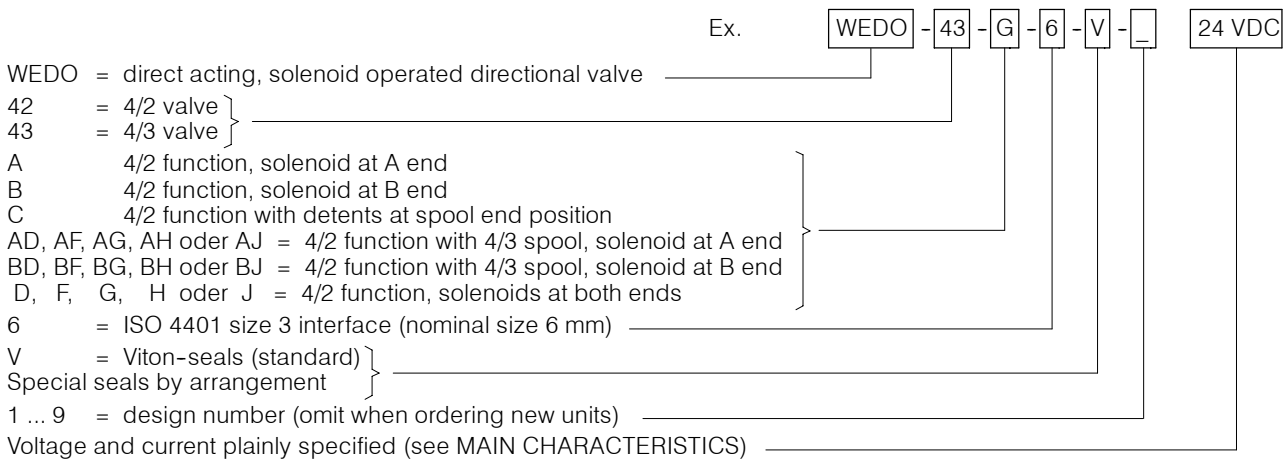
7. Installation and servicing

All installation and servicing must be carried out with care, and by qualified personnel only. At installation, be sure to mount the valve with all interface

connections lining up properly. Use the specified tightening torque when fitting the valve mounting bolts. When changing seals, the new seals should be thor-

oughly oiled or greased before they are fitted. Use the specified tightening torque when fitting the threaded end plug.

8. Ordering code



9. Related data sheets

Old no. New no.
 i - 31 400-P-030501-E ISO 4401 size 3 interface (DIN 24 340 A6)

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