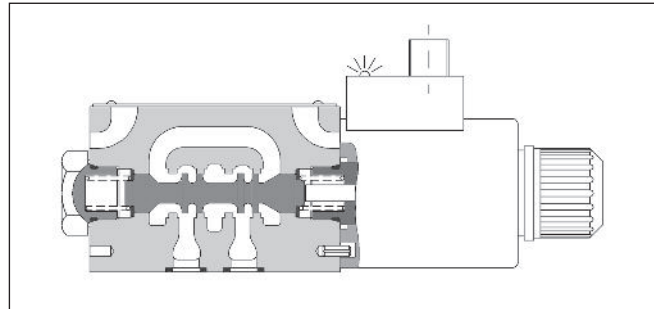
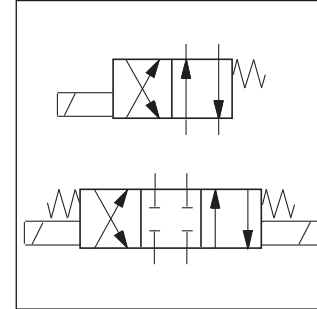
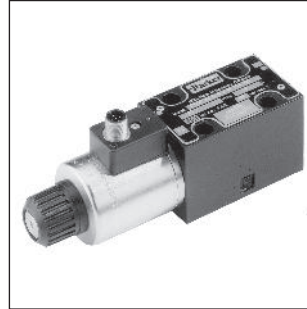


The D1VW direct-controlled hydraulic valves are direct-operated 4 way high-performance valves. They are available with 2 or 3 positions. The valves are intended for manifold and subplate assembly, the interface corresponds to DIN 24340 A6. These valves are designed for industrial hydraulic applications requiring high cycle rates, long service life, high efficiency, and low energy consumption.

The range of application of the 8 watt valve is the tool machining industry, especially for transfer lines with many valves. Because of the low current consumption (< 0.5 A) and the design with M12x1 on the solenoids, a direct connection to PLC or a BUS knot is possible.

Parker offers a concurring solution for the Decentralised and Standardised Installation technique at machine tool (DESINA).



2

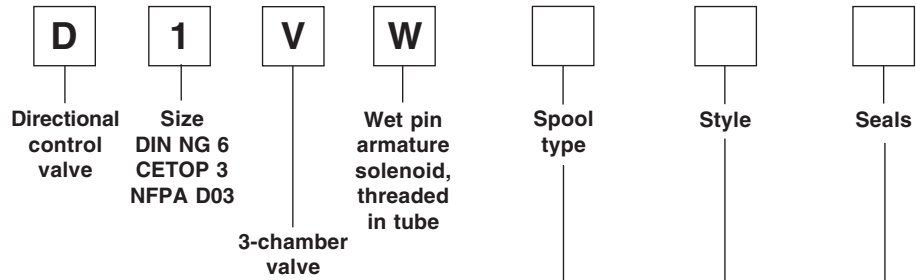
Technical data

General		
Design		Directional spool valve
Actuation		Solenoid
Size		DIN NG6 / CETOP 03 / NFPA D03
Mounting interface		DIN 24340 A6 / ISO 4401 / CETOP RP 121-H / NFPA D03
Mounting position		Unrestricted, preferably horizontal
Ambient temperature	[°C]	-25...+50
Weight	[kg]	1.5 (1 solenoid), 2.1 (2 solenoids)
Hydraulic		
Max. operating pressure	[bar]	P, A B: 350 T: 210
Fluid		Hydraulic oil in accordance with DIN 51524 / 51525
Fluid temperature	[°C]	-25 ... +70
Viscosity permitted	[mm²/s]	2.8...400 (2.8...400 cSt)
Viscosity recommended	[mm²/s]	30...80
Filtration		ISO 4406 (1999); 18/16/13 (meet NAS 1638: 7)
Flow max.	[l/min]	45
Leakage at 50 bar	[ml/min]	Up to 10 per flow path, depending on spool
Static / Dynamic		
Step response at 95%	[ms]	Energized: 80...120 De-energized: 35...55
Electrical characteristics		
Duty ratio		100% ED; CAUTION: coil temperature up to 70 °C possible
Max. switching frequency	[1/h]	10000
Protection class		IP 65 in accordance with DIN 40050 (plugged and mounted)
	Code	J
Supply voltage	[V]	24 VDC
Tolerance supply voltage	[%]	±10
Current consumption	hold [A]	0.33
Power consumption	hold [W]	8
Solenoid connection		Connector as per EN 175301-803, solenoid identification as per ISO 9461. Plug M12x1 on coil. Conduit box with central plug M12x1 and plug-in coils.
Wiring min.	[mm²]	3 x 1.5 recommended
Wiring length max.	[m]	50 recommended

With electrical connections the protective conductor (PE ↓) must be connected according to the relevant regulations.

D1VW 8WATT.PMD RH





2

3 position spools	
Code	Spool type
1	
2	
3	
4	
5	
6	
7	
10	
11	
14	
15	
16	
76	
78	
81	
82	
102	

3 position spools	
Code	Spool type
8	
9	

2 position spools	
Code	Spool type
20	
26	
30	
101	

3 position spools (except spool 8 and 9)	
Code	Description
C	3 positions . Spring offset in position "0". Operated in position "a" or "b".
E	2 positions. Spring offset in position "0". Operated in position "a".
K	2 positions. Spring offset in position "0". Operated in position "b".

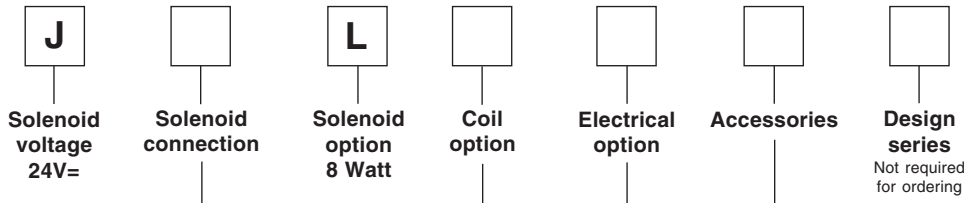
3 position spools (only for spool 8 and 9)	
Code	Description
C	3 positions . Spring offset in position "0". Operated in position "a" or "b".
E	2 positions. Spring offset in position "0". Operated in position "b".
K	2 positions. Spring offset in position "0". Operated in position "a".

2 position spools	
Code	Description
B	2 positions Spring offset in position "b". Operated in position "a".
D ¹⁾	2 positions, detent. Operated in position "a" or "b". No centre or offset position.
H	2 positions. Spring offset in position "a". Operated in position "b".

¹⁾ Only for spool 20 available.

Code	Seals
N	NBR
V	FPM

**Bold letters =
 Short-term availability**



2

Code	Solenoid connection
D	M12x1 on coil without plug
G	Conduit box with plug-in coil
W ²⁾	Connector as per EN 175301-803, without plug

²⁾ Please order plug separately. See chapter 2, Accessories.

Code	Accessories
omit	Standard valve Only available for solenoid connection "W" and "D"
5	LED direct on coil. Only available for code "DLJ"
7W ³⁾	M12 x 1 plug (4pin) pin1: not connected pin2: solenoid A 24V pin3: common 0V pin4: solenoid B 24V
7Y ³⁾	M12 x 1 plug (4pin) pin1: not connected pin2: solenoid B 24V pin3: common 0V pin4: solenoid A 24V

³⁾ Only available for solenoid connection code "G".

Solenoid identification acc. to ISO 9461

Code	Electrical option
omit	Standard valve (only available in combination with code "W" and "D")
J	Surge diode with LED, max. voltage peak 50V (only available in combination with solenoid conn. "G" and "D")

Code	Coil option
omit	Standard valve (only available in combination with code "W" and "D")
M	Plug in coil (only available in combination with code "G")

Further spool types on request.
 To get a DESINA valve, order the combination: JDLJ5

D1VW 8WATT.PMD RH



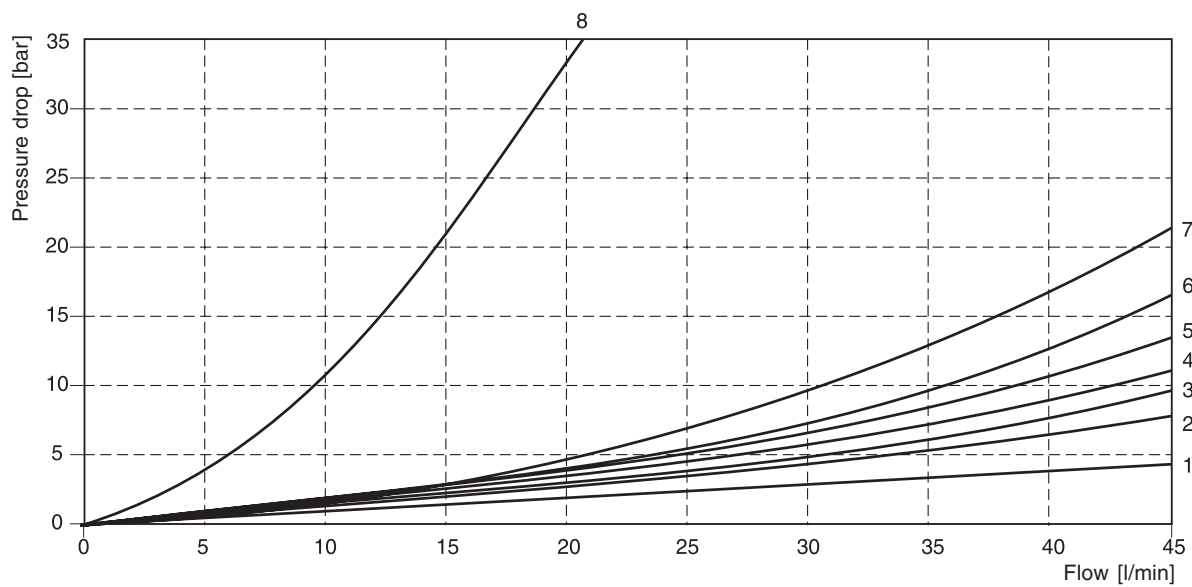
The flow curve diagram shows the flow versus pressure drop curves for all spools shown. To read the values in the diagram, the curve number for the selected spool and

desired operating position must first be determined from the table below.

2

Spool	Position "b"		Position "a"		Position "0"					
	P->A	B->T	P->B	A->T	P->A	P->B	A->T	B->T	P->T	A->B
1	3	1	3	1	-	-	-	-	-	-
2	2	1	2	1	2	2	1	1	2	1
3	5	1	5	1	-	-	1	-	-	-
4	4	1	4	1	-	-	1	1	-	8
5	4	2	5	2	7	-	-	-	-	-
6	2	4	2	4	7	7	-	-	-	7
7	6	1	4	2	-	2	-	1	4	-
10	6	-	5	-	-	-	-	-	-	-
11	6	2	6	2	-	-	8	8	-	-
14	4	2	6	1	2	-	1	-	4	-
15	5	1	5	1	-	-	-	1	-	-
16	5	2	4	2	-	7	-	-	-	-
20	5	3	5	3	-	-	-	-	-	-
26	6	-	6	-	-	-	-	-	-	-
30	3	1	3	1	-	-	-	-	-	-
	P->B	A->T	P->A	B->T	P->A	P->B	A->T	B->T	P->T	A->B
8	6	6	6	6	-	-	-	-	7	-
9	6	7	6	7	-	-	-	-	3	-

Flow curve



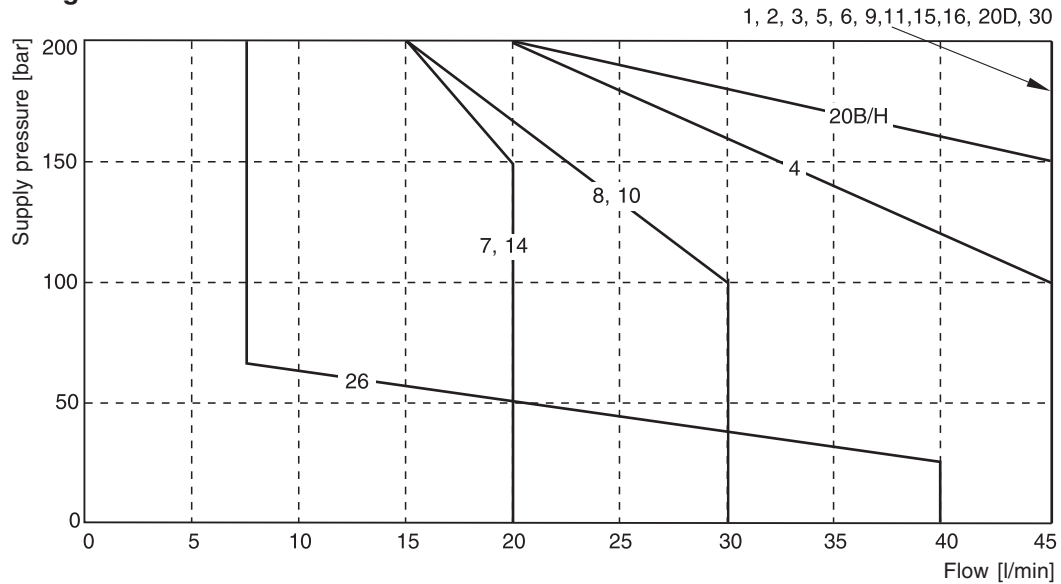
D1VW 8WATT.PMD RH



The diagram below specifies the shift limits for valves with DC voltage solenoids. The specifications apply to a viscosity of 35 mm²/s and equal flow at A and B port. These values can be considerably lower than the repre-

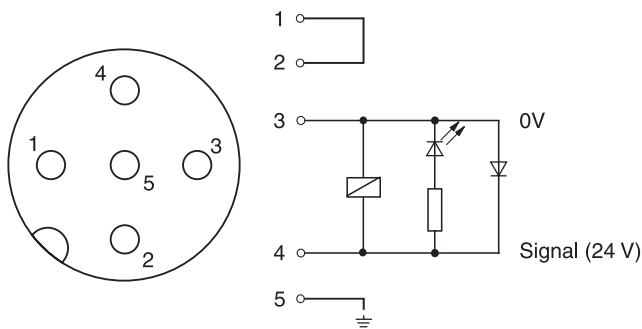
sented ones by unequal flow at A and B port. To avoid flow rates above the shift limits of the valve, a plug-in orifice can be inserted in the P channel.

Shift limit diagram

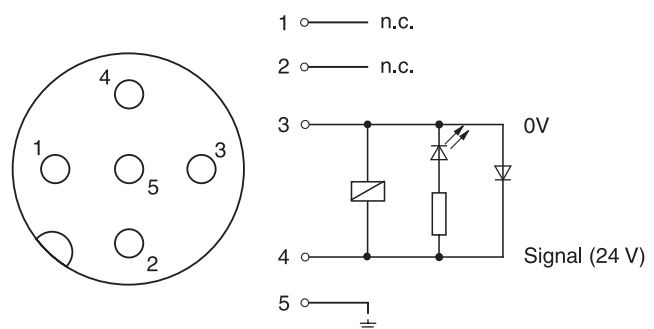


2

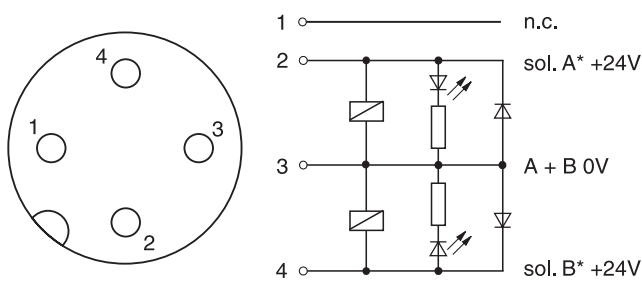
M12 pin assignment DESINA-design (code „JDLJ5“), Pins 1 and 2 connected



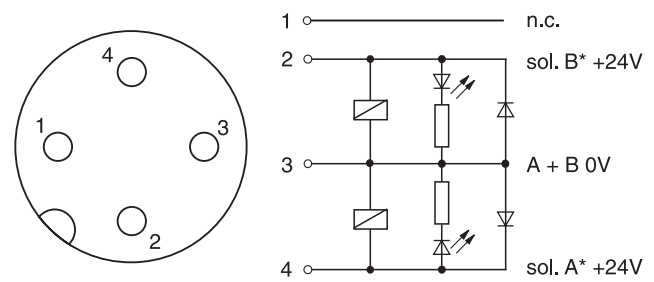
M12 pin assignment code “JDL“, Pins 1 and 2 not connected



Pin assignment code “7W“



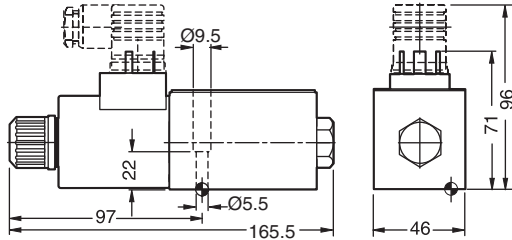
Pin assignment code “7Y“



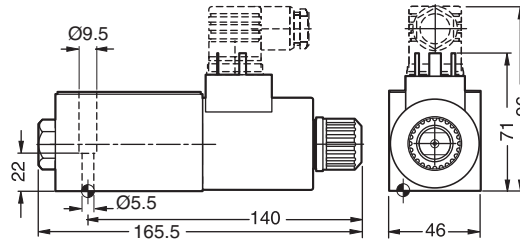
* Solenoid A: When energized, connects P to A.
 Solenoid B: When energized, connects P to B.
 (according to ISO 9461)

Interface EN 175301-803, DC solenoid

Style B, E

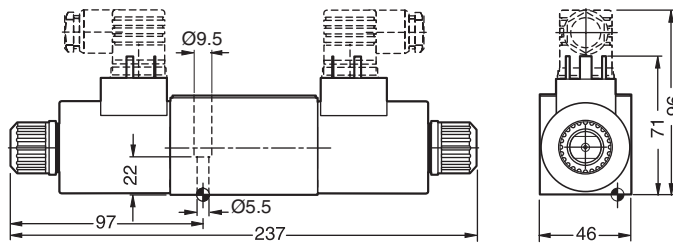


Style H, K



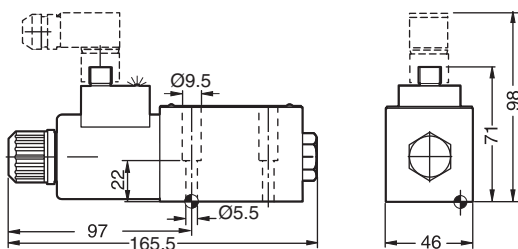
2

Style C, D

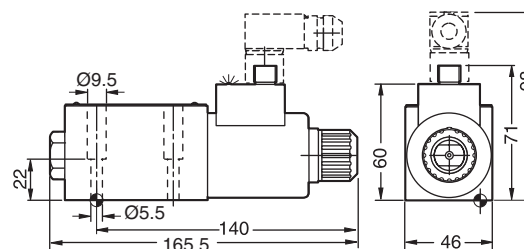


M12x1 connector, DC solenoid, JDLJ5 (DESINA) or JDL

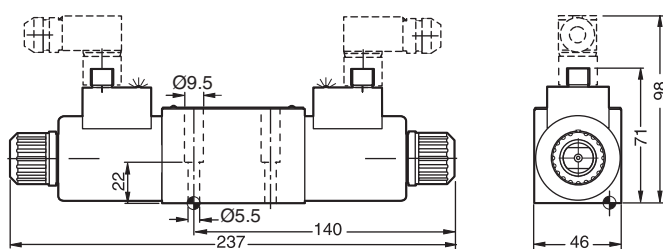
Style B, E



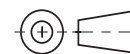
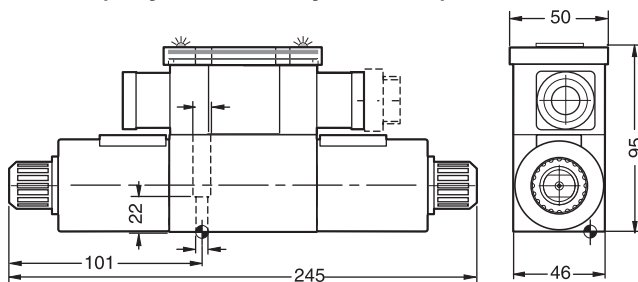
Style H, K





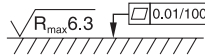


Style C, D



Conduit box (only DC C, D -style shown)



Surface finish	 Kit	 Kit	 Kit	 Kit
	BK375	4x M5x30 DIN 912 12.9	6.8 Nm ± 15%	NBR: SK-D1VW-70 FPM: SK-D1VW-V70

The space necessary to remove the plug per EN 175301-803, design type AF is at least 15 mm.
 The torque for the screw M3 of the plug has to be 0.5 to 0.6 Nm.

D1VW 8WATT.PMD RH