The NG06 directional control valve series D1VW provides high functional limits up to 80 l/min in combination with a very low, energy-saving pressure drop.

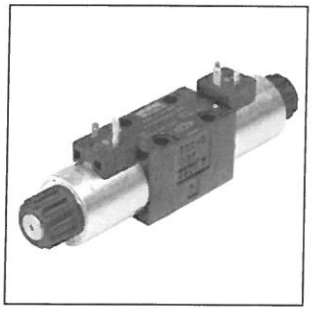
A wide variety of spool options allows to design an unlimited number of hydraulic circuits.

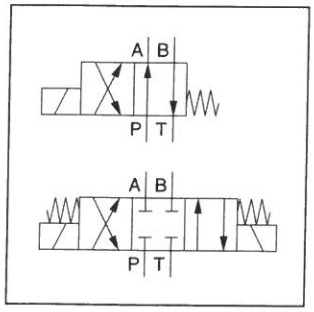
Versions with 8 watt coils, position control, ATEX approval, surface protection and connector variants are shown in the following chapters.

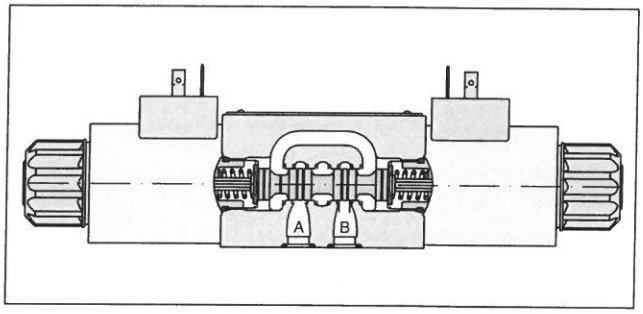
The valve is also available as sandwich type, see series Z1DW in chapter 7.

Valves with explosion proof solenoids Ex e mb II see series D1VW Explosion Proof in chapter 2 and catalogue HY11-3343.

Download: www.parker.com/euro_hcd - see "Literature"







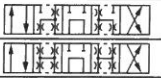
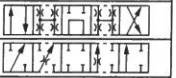
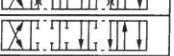
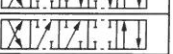
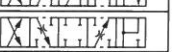
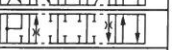
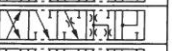
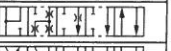
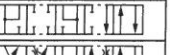
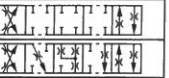
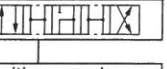
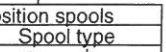
Technical data

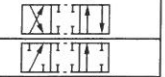
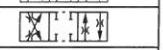
General							
Design		Directional spool valve					
Actuation		Solenoid					
Nominal size		DIN NG06 / CETOP 03 / NFPA D03					
Mounting interface		DIN 24340 A6 / ISO 4401 / CETOP RP 121-H / NFPA D03					
Mounting position		unrestricted, preferably horizontal					
Ambient temperature	[°C]	-25...+60					
$MTTF_D$ value	[years]	150					
Weight	[kg]	1.5 (1 solenoid), 2.1 (2 solenoids)					
Vibration resistance	[g]	10 Sinus 5...2000 Hz acc. IEC 68-2-6 30 Random noise 20...2000 Hz acc. IEC 68-2-36 15 Shock acc. IEC 68-2-27					
Hydraulic							
Max. operating pressure	[bar]	P, A, B: 350; T: 210 (DC), T: 140 (AC)					
Fluid		Hydraulic oil according to DIN 51524					
Fluid temperature	[°C]	-20 ... +70 (NBR: -25...+70)					
Viscosity permitted	[cSt] / [mm²/s]	2.8...400					
Viscosity recommended	[cSt] / [mm²/s]	30...80					
Filtration		ISO 4406 (1999); 18/16/13					
Flow max.	[l/min]	80 (see shift limits)					
Leakage at 50 bar	[ml/min]	Up to 10 per flow path, depending on spool, up to 15 per flow path for spool type 008 + 009					
Static / Dynamic							
Step response		see table response time					
Electrical characteristics							
Duty ratio	[%]	100 ED; CAUTION: coil temperature up to 150 °C possible					
Max. switching frequency	[1/h]	15000 (not for soft shift)					
Protection class		IP 65 in accordance with EN 60529 (with correctly mounted plug-in connector)					
	Code	K	J	U	G	Y	T
Supply voltage	[V]	12 V =	24 V =	98 V =	205 V =	110 V at 50 Hz/ 120 V at 60 Hz	230 V at 50 Hz/ 240 V at 60 Hz
Tolerance supply voltage	[%]	±10	±10	±10	±10	±5	±5
Current consumption hold	[A]	2.72	1.29	0.33	0.13	0.6 / 0.55	0.3 / 0.27
Current consumption in rush	[A]	2.72	1.29	0.33	0.13	2.5 / 2.4	1.25 / 1.2
Power consumption hold		32.7 W	31 W	31.9 W	28.2 W	70 / 70 VA	70 / 70 VA
Power consumption in rush		32.7 W	31 W	31.9 W	28.2 W	280 / 290 VA	280 / 290 VA
Solenoid connection		Connector as per EN 175301-803, solenoid identification as per ISO 9461 (code W).					
Wiring min.	[mm²]	3 x 1.5 recommended					
Wiring length max.	[m]	50 recommended					

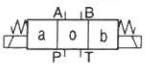
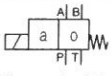
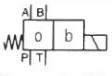
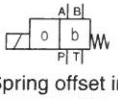
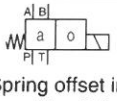
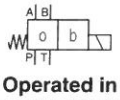
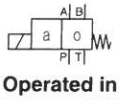
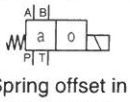
With electrical connections the protective conductor (PE ⏚) must be connected according to the relevant regulations.

2

D	1	V	W		
Directional control valve	Size DIN NG06 CETOP 03 NFPA D03	3-chamber valve	Wet pin armature solenoid, threaded in tube	Spool type	Spool position

3 position spools	
Code	Spool type a 0 b
001	
002	
003	
004	
005	
006	
007	
008 [1]	
009 [1]	
010	
011	
014	
015	
016	
021	
022	
031	
032	
034	
035	
061	
081	
082	
102	
204 [1]	
205 [1]	

2 position spools	
Code	Spool type a b
020	
026	
030	
083 [1]	
101	
208	

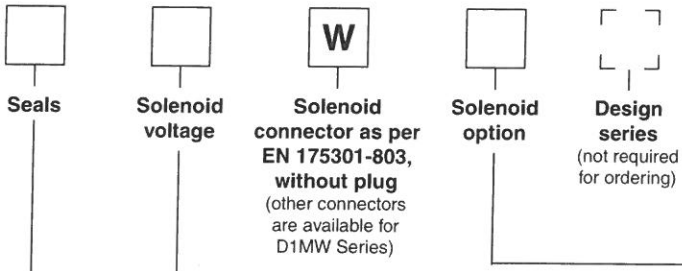
3 position spools			
Code	Spool position		
C			**3 positions.** **Spring offset in position "0".** **Operated in position "a" or "b".**
	Standard	Spool type 008,009, 204, 205	
E	 **Operated in position "a".**	 **Operated in position "b".**	**2 positions.** **Spring offset in position "0".**
F	 Spring offset in position "b".	 Spring offset in position "a".	2 positions. Operated in position "0".
K	 **Operated in position "b".**	 **Operated in position "a".**	**2 positions.** **Spring offset in position "0".**
M	 Spring offset in position "a".	 Spring offset in position "b".	2 positions. Operated in position "0".

2 position spools			
Code	Spool position		
	Standard	Spool type 083	
B			**2 positions.** **Spring offset in position "b".** **Operated in position "a".**
D			**2 positions.** **Operated in position "a" or "b".** **No center or offset position.**
H			**2 positions.** **Spring offset in position "a".** **Operated in position "b".**

[1] Consider specific spool position.

[2] To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.

[3] DC only



Code	Solenoid option
omit	**manual override (Standard)**
T	without manual override
S2 [3]	Soft shift orifice size 0.5 mm.
S3 [3]	Soft shift orifice size 0.75 mm.
4N [3]	with lockable manual override

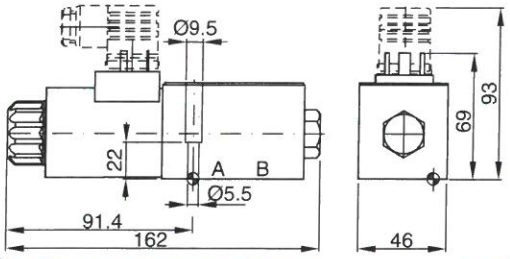
Code	Voltage
K	**12 V =**
J	**24 V =**
U [2]	98 V =
G [2]	205 V =
Y	110 V 50 Hz / 120 V 60 Hz
T	230 V 50 Hz / 240 V 60 Hz

Code	Seals
N	**NBR**
V	FPM

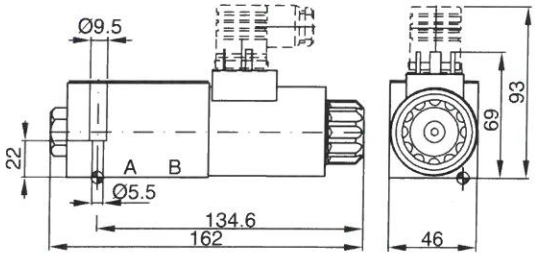
Bold letters =
Short-term availability

Further spool types, solenoid voltages and connectors on request.

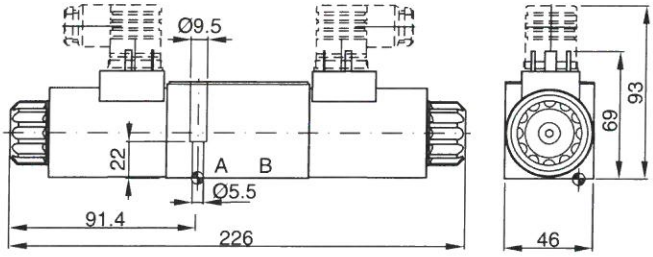
Interface EN 175301-803, DC solenoid
B, E, F -style



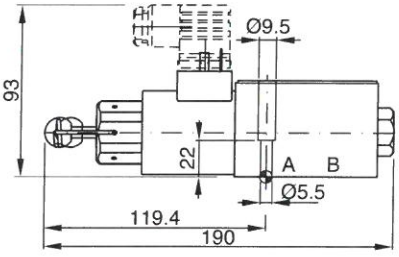
H, K, M -style



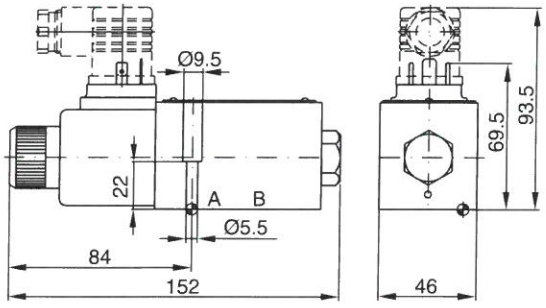
C, D -style



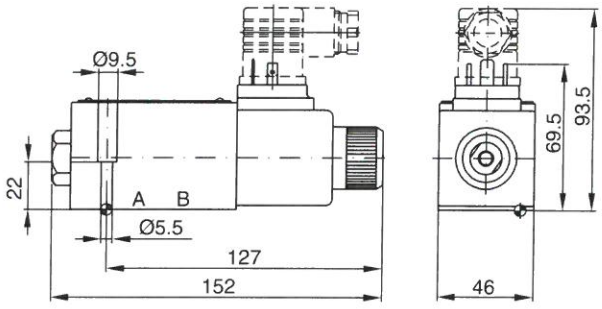
Option 4N, with lockable manual override (available for all styles, DC only)



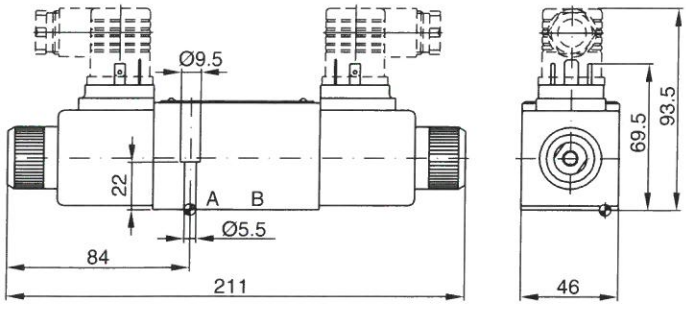
Interface EN 175301-803, AC solenoid
B, E, F -style



H, K, M -style



C, D -style



Surface finish	Kit			Kit
$\sqrt{R_{max}6.3}$ ⏥ 0.01/100	BK375	4x M5x30 ISO 4762-12.9	7.6 Nm ±15 %	NBR: SK-D1VW-N-91 FPM: SK-D1VW-V-91

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.