

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.

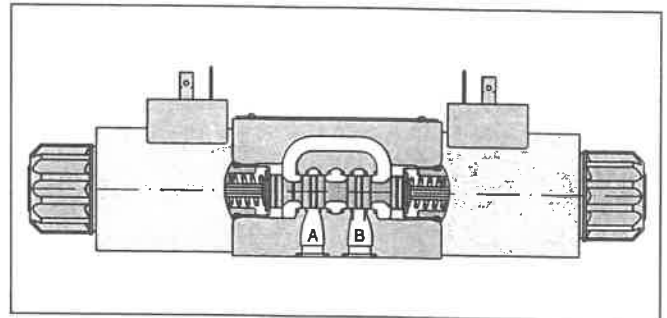
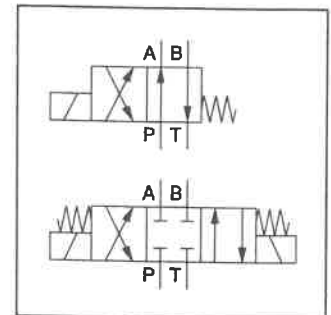
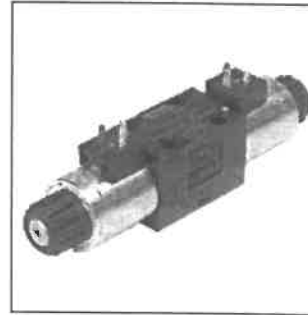
A wide variety of spool options allows to design an unlimited number of hydraulic circuits.

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 MSG11-3343/UK.

Download of the PDF file at www.parker.com/ISDE, see "Support".

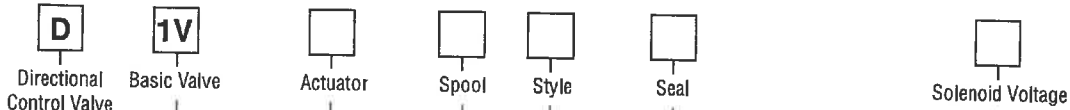


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Technical data

| General | | Design | | | | | |
|----------------------------|-----------------|--|--------|--------|---------|-----------------------------------|-----------------------------------|
| 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 ₀ 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] | | | | | |
| 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; 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 | | IP65 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 [W] | 32.7 W | 31 W | 31.9 W | 28.2 W | 70 / 70 VA | 70 / 70 VA |
| Power consumption | in rush [W] | 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.



NFPA D03
 CETOP 3
 DIN NG6

| Code | Description |
|------|-----------------------------|
| W* | Solenoid, Wet Pin, Screw-in |
| HW* | Reversed Wiring |

| Code | Description |
|------|--------------|
| N | Nitrile |
| V | Fluorocarbon |
| E* | EPR |

| Code | Description | Code | Description |
|------|-------------|------|---------------------|
| A** | 24/50 VAC | Q** | 100/60 VAC |
| D | 120 VDC | QD† | 100/60 - 100/50 VAC |
| G | 198 VDC | R | 24/60 VAC |
| J | 24 VDC | T | 240/60 - 220/50 VAC |
| K | 12 VDC | U | 98 VDC |
| L | 6 VDC | Y | 120/60 - 110/50 VAC |
| N*** | 220/50 VAC | Z | 250 VDC |
| P*** | 110/50 VAC | | |

* Valve schematic symbols are per NFPA/ANSI standards, providing flow P to A when energizing solenoid A. Note operators reverse sides for #008 and #009 spools. See installation information for details. To configure per DIN standards (A coil over A port, B coil over B port) code valves as D1VHW***.

* Contact HVD for availability.

** High Watt only
 *** Explosion Proof only.
 † Available in DIN only.

| Code | Symbol | Code | Symbol |
|-------------|--------|-------|--------|
| 001 | | 011 | |
| 002 | | 014 | |
| 003 | | 015 | |
| 004 | | 016 | |
| 005 | | 020* | |
| 006 | | 026* | |
| 007 | | 030** | |
| 008*, 009** | | 081 | |
| 010 | | 082 | |

| Code | Description | Symbol |
|------|--|--------|
| B* | Single solenoid, 2 position, spring offset. P to A and B to T in offset position. | |
| C | Double solenoid, 3 position, spring centered. | |
| D† | Double solenoid, 2 position, detent. | |
| E | Single solenoid, 2 position, spring centered. P to B and A to T when energized. | |
| F‡ | Single solenoid, 2 position. Spring offset, energized to center. Position spool spacer on A side. P to A and B to T in spring offset position. | |
| H* | Single solenoid, 2 position, spring offset. P to B and A to T in offset position. | |
| K | Single solenoid, 2 position, spring centered. P to A and B to T when energized. | |
| M‡ | Single solenoid, 2 position, spring offset, energized to center position. Spool spacer on B side. P to B and A to T in spring offset position. | |

* 008, 020 & 026 spools have closed crossover.
 ** 009 & 030 spools have open crossover.

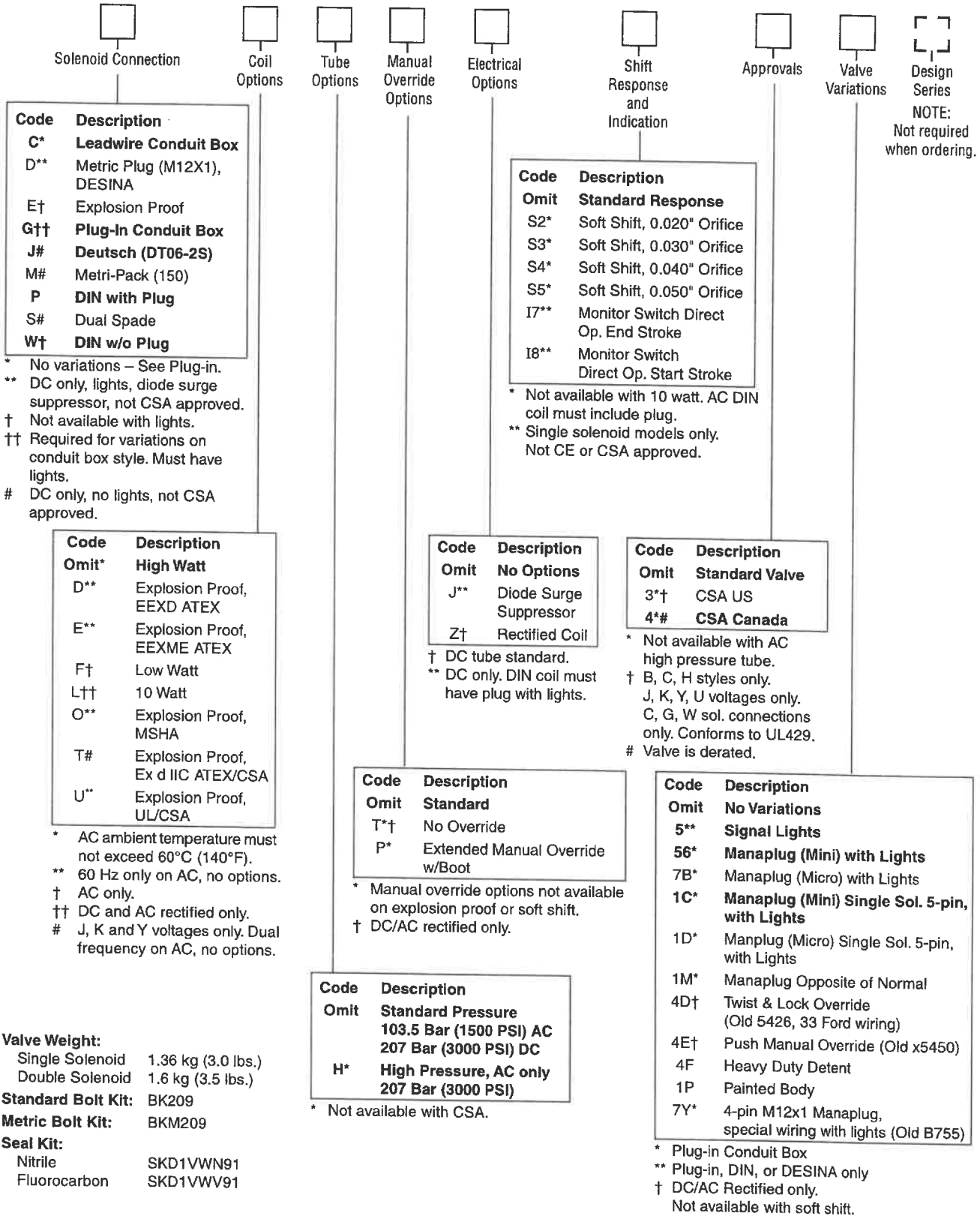
* 020, 026 and 030 spools only.
 † 020 and 030 spools only.
 ‡ High Watt only.

Bold: Designates Tier I products and options.

Non-Bold: Designates Tier II products and options. These products will have longer lead times.

D1.indd, dd



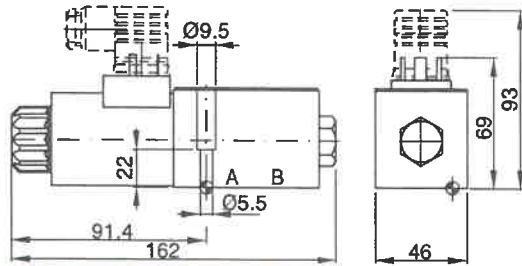


Bold: Designates Tier I products and options.

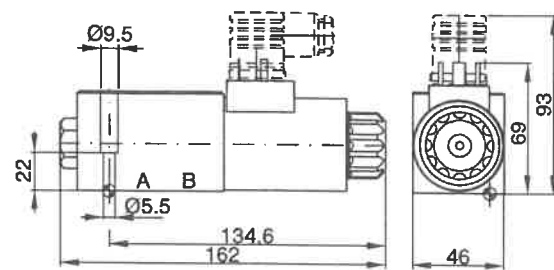
Non-Bold: Designates Tier II products and options. These products will have longer lead times.

D1.indd, dd

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

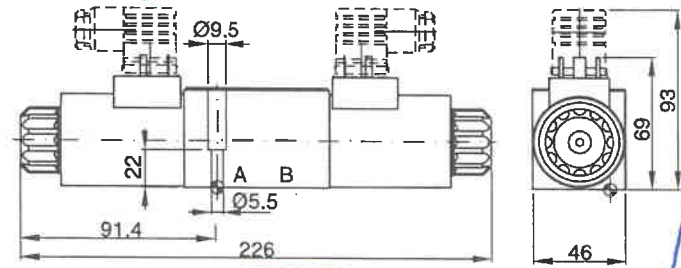


H, K, M -style

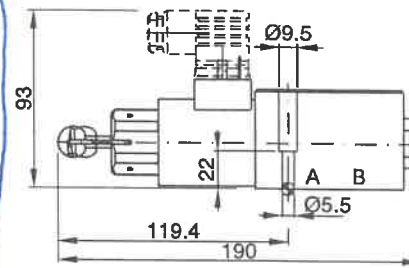


C, D -style

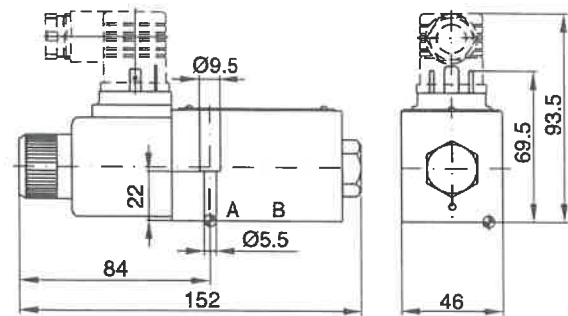
Plug Not Included



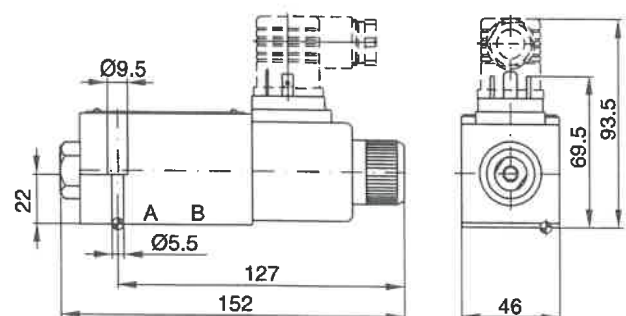
**Option 4N, with lockable manual override
 (available for all styles, DC only)**



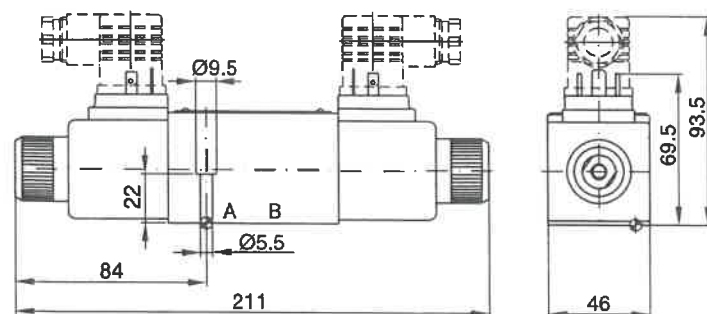
**Interface EN 175301-803, AC solenoid
 B, E, F -style**



H, K, M -style



C, D -style



| Surface finish | Kit | Kit | Kit | Kit |
|---|-------|---------------------------|-----------------|--|
| $\sqrt{R_{max} 6.3}$ $\square 0.01/100$ | 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.