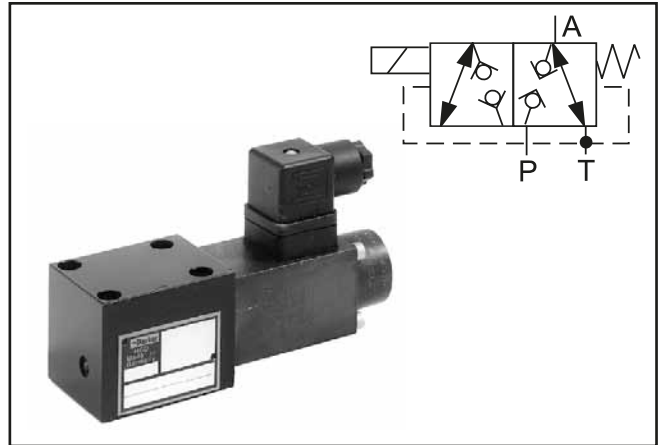


General Description

Series D1SE directional control valves are equipped with a wet pin armature solenoid, drain-free, tapered poppet valve and compatible with the standards DIN NG6, CETOP 3, and NPPA D03. Due to the 3/2 way design, port A is either connected with P or discharged in the tank. The neutral position (solenoid not activated) is taken automatically by a return spring. This position remains until the solenoid is energized.

The valve poppet including activation lever and armature of the solenoid are located in the pressurized oil chamber of connection T. The valve poppet is designed such that there can be no differential area in its axial operational direction (opening, closing). Thus it is statically pressure-balanced so that the valve can be switched in both flow directions even under pressure.

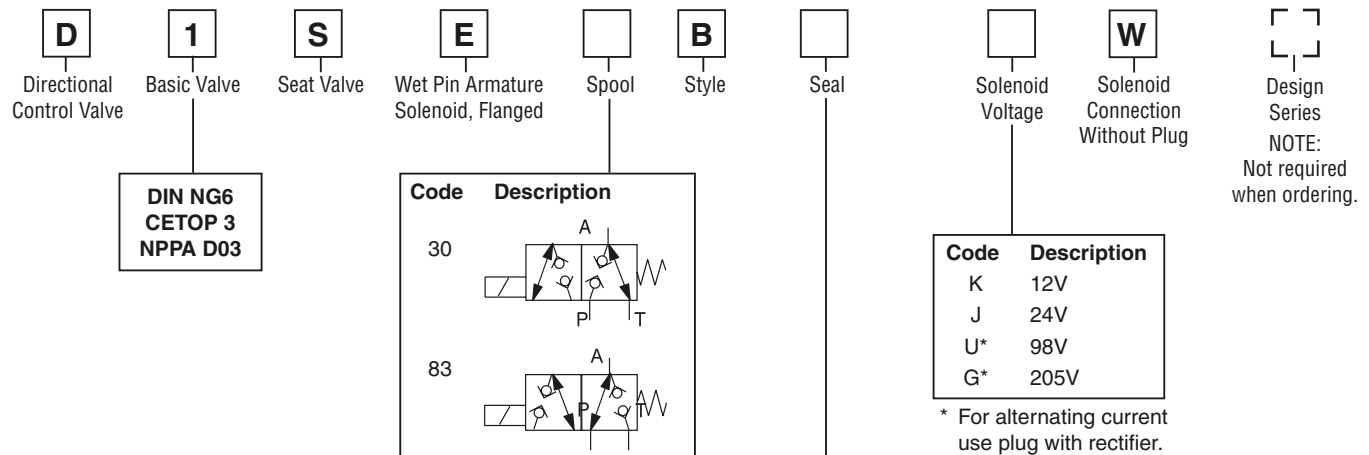
The unit has an all-steel design, the important functional inner parts are hardened, the poppet and seat are ground.



Features

- Low leakage poppet design.
- Fits NPPA D03 mounting.
- Pressure balanced.

Ordering Information



Coils for repair

Voltage	Ordering Code
12V	7329700 - 12V
24V	7329700 - 24V
98V	7329700 - 98V
205V	7329700 - 205V

Code	Description
N	Nitrile
V	Fluorocarbon

Weight: 0.8 kg (1.76 lbs)

Bold: Designates Tier I products and options.

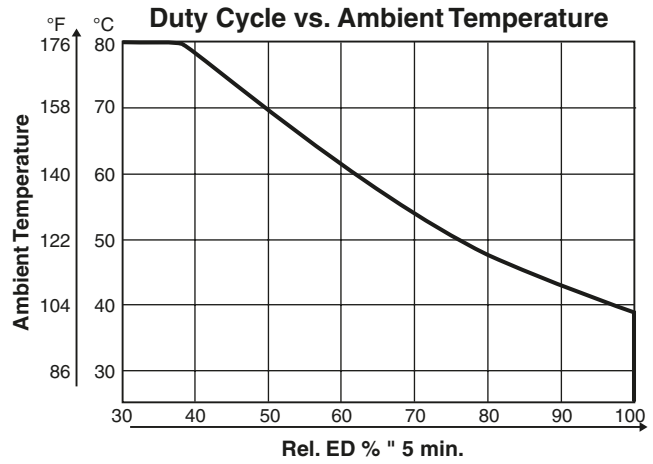
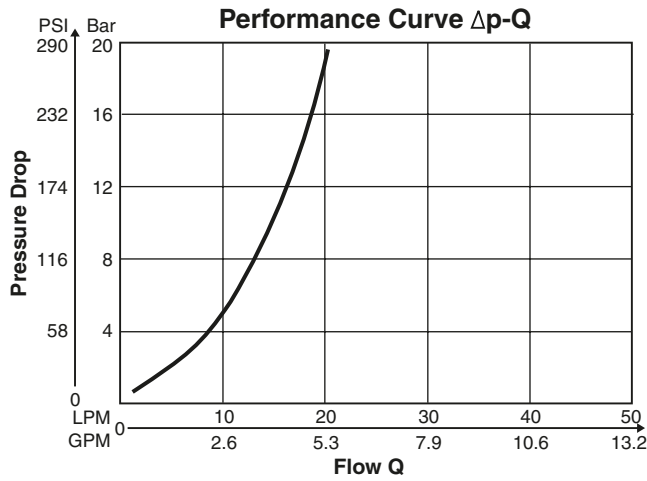
Non-Bold: Designates Tier II products and options.
 These products will have longer lead times.

A

General		Static / Dynamic					
Design	Directional poppet valve	Step Response	Energized: approx. 50 ms De-energized: approx. 60 ms				
Actuation	Solenoid	Electrical Characteristics					
Size	DIN NG6 / CETOP 3 / NFPA D03						
Mounting Interface	DIN 24340 A6 / ISO 4401 / CETOP RP 121-H / NFPA D03	Duty Ratio	See Diagram				
Mounting Position	Unrestricted	Max. Switching Frequency	2000 1/h				
Ambient Temperature	-25°C to +50°C (-13°F to +122°F), observe permissible duty cycle	Protection Class	IP 65 in accordance with DIN 40050 (plugged and mounted)				
Hydraulic			Code	K	J	U*	G*
Max. Operating Pressure	350 Bar (5075 PSI) (P, A, and T)	Supply Voltage	12 VDC	24 VDC	98 VDC	205 VDC	
Fluid	Hydraulic oil in accordance with DIN 51524 / 51525	Tolerance Supply Voltage	±10%	±10%	±10%	±10%	
Fluid Temperature	-25°C to +70°C (-13°F to +158°F)	Current Consumption	1.95A	1.1A	0.25A	0.13A	
Viscosity Permitted Recommended	10...500 cSt / mm ² /s (46...2318 SSU) 30...80 cSt / mm ² /s (139...371 SSU)	Power Consumption	23.4 W	26.4 W	24.3 W	26.6 W	
Filtration	ISO 4406 (1999); 18/16/13 (meet NAS 1638: 7)	Solenoid Connection	Connector as per EN 175301-803				
Internal Leakage	3-5 DPM per seat	Min. Wiring	3 x 1.5 mm ² recommended				
Maximum Flow	20 LPM (5.28 GPM) (at Δp = 10 bar)	Max. Wiring Length	50m (164') recommended				

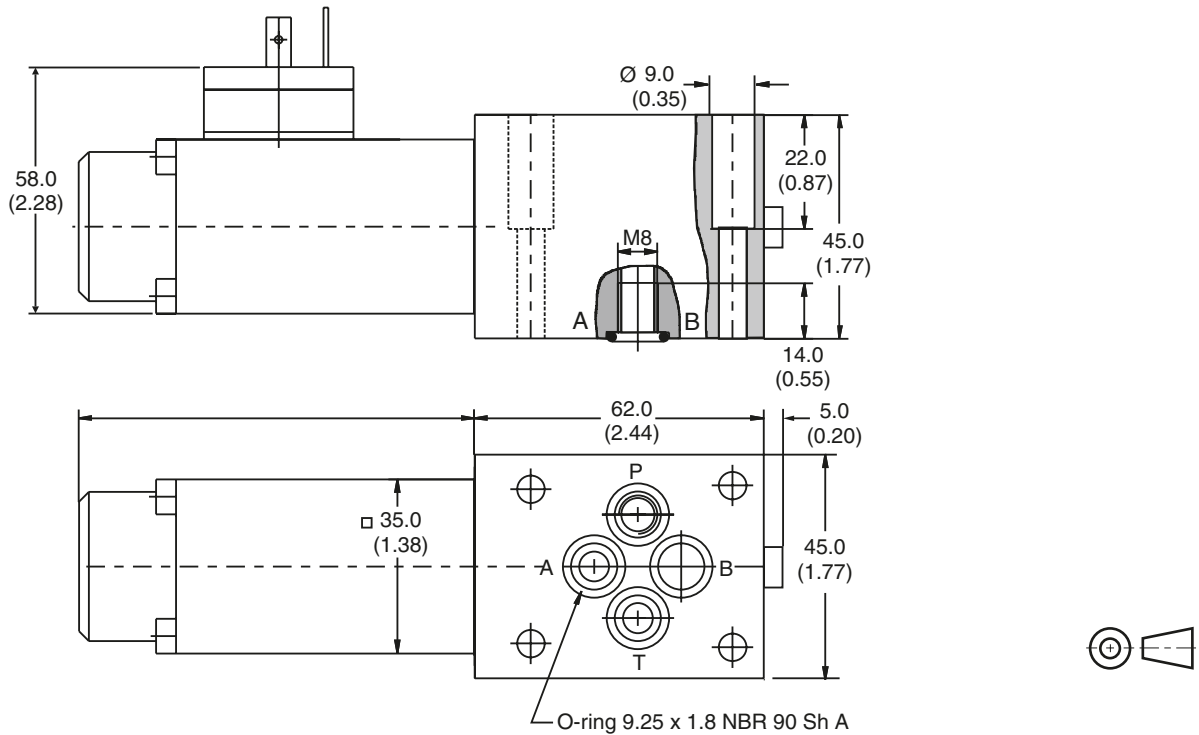
* For a silicon bridge rectifier, set up apart from unit for connecting to a 50 or 60 Hz power supply, 110 V~(98=) or 230V~ (205V=). With electrical connections the protective conductor (PE ↓) must be connected according to the relevant regulations.

Performance Curves



Dimensions

Inch equivalents for millimeter dimensions are shown in (**)



Surface Finish	Kit	Wrench	Torque	Seal Kit
$\sqrt{R_{max} 6.3}$ $\square 0.01/100$	BK375	4x M5x30 DIN 912 12.9	6.8 Nm ± 15%	Nitrile: SK-D1SE-70 Fluorocarbon: SK-D1SE-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.

