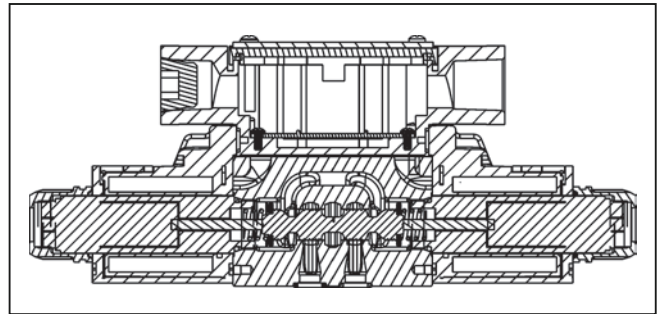
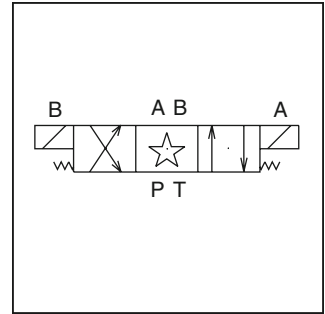
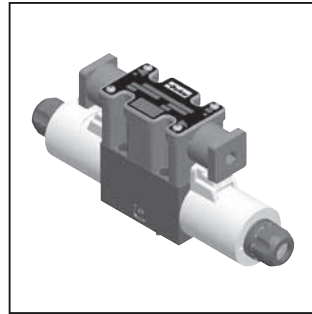


### General Description

Series D1VW directional control valves are high performance, 4-chamber, direct operated, wet armature solenoid controlled, 3 or 4-way valves. They are available in 2 or 3-position and conform to NFPA's D03, CETOP 3 mounting patterns.

### Features

- Soft shift available.
- 19 standard spool styles available (for other spools – Consult Factory).
- Proportional spools.
- DC surge suppression.
- Eight electrical connection options.
- AC & DC lights available (CSA approval for solenoids and lights).
- Internally ground.
- Easy access mounting bolts.
- Waterproof (meets NEMA 4, up to IP67 on some models).
- Explosion proof.
- CSA approvals.



- U.L. recognized available - Contact the division.
- No tools required for coil removal.
- AC rectified coils.

### Specifications

<b>Mounting Pattern</b>	NFPA D03, CETOP 3, NG 6	<b>Leakage Rates*</b> <b>100 SSU @ 49°C (120°F)</b>	Maximum Allowable: 19.7 cc (1.2 Cu. in.) per Minute/Land @ 69 Bar (1000 PSI)* 73.8 cc (4.5 Cu. in.) per Minute/Land @ 207 Bar (3000 PSI)*
<b>Mounting Interface</b>	DIN 24340-A6 ISO 4401-AB-03-4-A CETOP R35H 4.2-4-03, NFPA D03		
<b>Maximum Pressure</b>	P, A, B 345 Bar (5000 PSI) Standard 207 Bar (3000 PSI) 10 Watt CSA  276 Bar (3750 PSI) Tank: 103 Bar (1500 PSI) AC only 207 Bar (3000 PSI) DC/AC Rectified Standard 207 Bar (3000 PSI) AC Optional CSA  103 Bar (1500 PSI)	*#008 and #009 Spools may exceed these rates. Consult Factory	Typical: 4.9 cc (0.3 Cu. in.) per Minute/Land @ 69 Bar (1000 PSI)* 26.2 cc (1.6 Cu. in.) per Minute/Land @ 345 Bar (5000 PSI)

### Response Time

Response time (milliseconds) at 345 Bar (5000 PSI) is 32 LPM (8.5 GPM).

Solenoid Type	Pull-In	Drop-Out
AC	13	20
DC 10 Watt	61	22
DC 30 Watt	51	21

	Orifice Size	Spool Center Condition					
		Closed		Open		2-Position	
Soft Shift		Energize	De-Energize	Energize	De-Energize	Energize	De-Energize
S2	0.020	125 ms	920 ms	200 ms	275 ms	51 ms	100 ms
S5	0.050	51 ms	675 ms	50 ms	27 ms	51 ms	21 ms





Code	Description
<b>C*</b>	<b>Leadwire Conduit Box</b>
D**	Metric Plug (M12X1), DESINA
E†	Explosion Proof
<b>G††</b>	<b>Plug-In Conduit Box</b>
<b>J#</b>	<b>Deutsch (DT06-2S)</b>
M#	Metri-Pack (150)
<b>P</b>	<b>DIN with Plug</b>
S#	Dual Spade
<b>W†</b>	<b>DIN w/o Plug</b>

\* No variations – See Plug-in.  
 \*\* DC only, lights, diode surge suppressor, not CSA approved.  
 † Not available with lights.  
 †† Required for variations on conduit box style. Must have lights.  
 # DC only, no lights, not CSA approved.

Code	Description
<b>Omit*</b>	<b>High Watt</b>
D**	Explosion Proof, EEXD ATEX
E**	Explosion Proof, EEXME ATEX
F†	Low Watt
L††	10 Watt
O**	Explosion Proof, MSHA
T#	Explosion Proof, Ex d IIC ATEX/CSA
U**	Explosion Proof, UL/CSA

\* AC ambient temperature must not exceed 60°C (140°F).  
 \*\* 60 Hz only on AC, no options.  
 † AC only.  
 †† DC and AC rectified only.  
 # J, K and Y voltages only. Dual frequency on AC, no options.

Code	Description
<b>Omit</b>	<b>No Options</b>
J**	Diode Surge Suppressor
Z†	Rectified Coil

† DC tube standard.  
 \*\* DC only. DIN coil must have plug with lights.

Code	Description
<b>Omit</b>	<b>Standard</b>
T*†	No Override
P*	Extended Manual Override w/Boot

\* Manual override options not available on explosion proof or soft shift.  
 † DC/AC rectified only.

Code	Description
<b>Omit</b>	<b>Standard Pressure</b>
	<b>103.5 Bar (1500 PSI) AC</b>
	<b>207 Bar (3000 PSI) DC</b>
<b>H*</b>	<b>High Pressure, AC only</b>
	<b>207 Bar (3000 PSI)</b>

\* Not available with CSA.

Code	Description
<b>Omit</b>	<b>Standard Response</b>
S2*	Soft Shift, 0.020" Orifice
S3*	Soft Shift, 0.030" Orifice
S4*	Soft Shift, 0.040" Orifice
S5*	Soft Shift, 0.050" Orifice
17**	Monitor Switch Direct Op. End Stroke
18**	Monitor Switch Direct Op. Start Stroke

\* Not available with 10 watt. AC DIN coil must include plug.  
 \*\* Single solenoid models only. Not CE or CSA approved.

Code	Description
<b>Omit</b>	<b>Standard Valve</b>
3*†	CSA US
<b>4*#</b>	<b>CSA Canada</b>

\* Not available with AC high pressure tube.  
 † B, C, H styles only. J, K, Y, U voltages only. C, G, W sol. connections only. Conforms to UL429.  
 # Valve is derated.

Code	Description
<b>Omit</b>	<b>No Variations</b>
<b>5**</b>	<b>Signal Lights</b>
<b>56*</b>	<b>Manplug (Mini) with Lights</b>
7B*	Manplug (Micro) with Lights
<b>1C*</b>	<b>Manplug (Mini) Single Sol. 5-pin, with Lights</b>
1D*	Manplug (Micro) Single Sol. 5-pin, with Lights
1M*	Manplug Opposite of Normal
4D†	Twist & Lock Override (Old 5426, 33 Ford wiring)
4E†	Push Manual Override (Old x5450)
4F	Heavy Duty Detent
1P	Painted Body
7Y*	4-pin M12x1 Manplug, special wiring with lights (Old B755)

\* Plug-in Conduit Box  
 \*\* Plug-in, DIN, or DESINA only  
 † DC/AC Rectified only. Not available with soft shift.

**Valve Weight:**  
 Single Solenoid 1.36 kg (3.0 lbs.)  
 Double Solenoid 1.6 kg (3.5 lbs.)

**Standard Bolt Kit:** BK209  
**Metric Bolt Kit:** BKM209  
**Seal Kit:**  
 Nitrile SKD1VWN91  
 Fluorocarbon SKD1VWV91

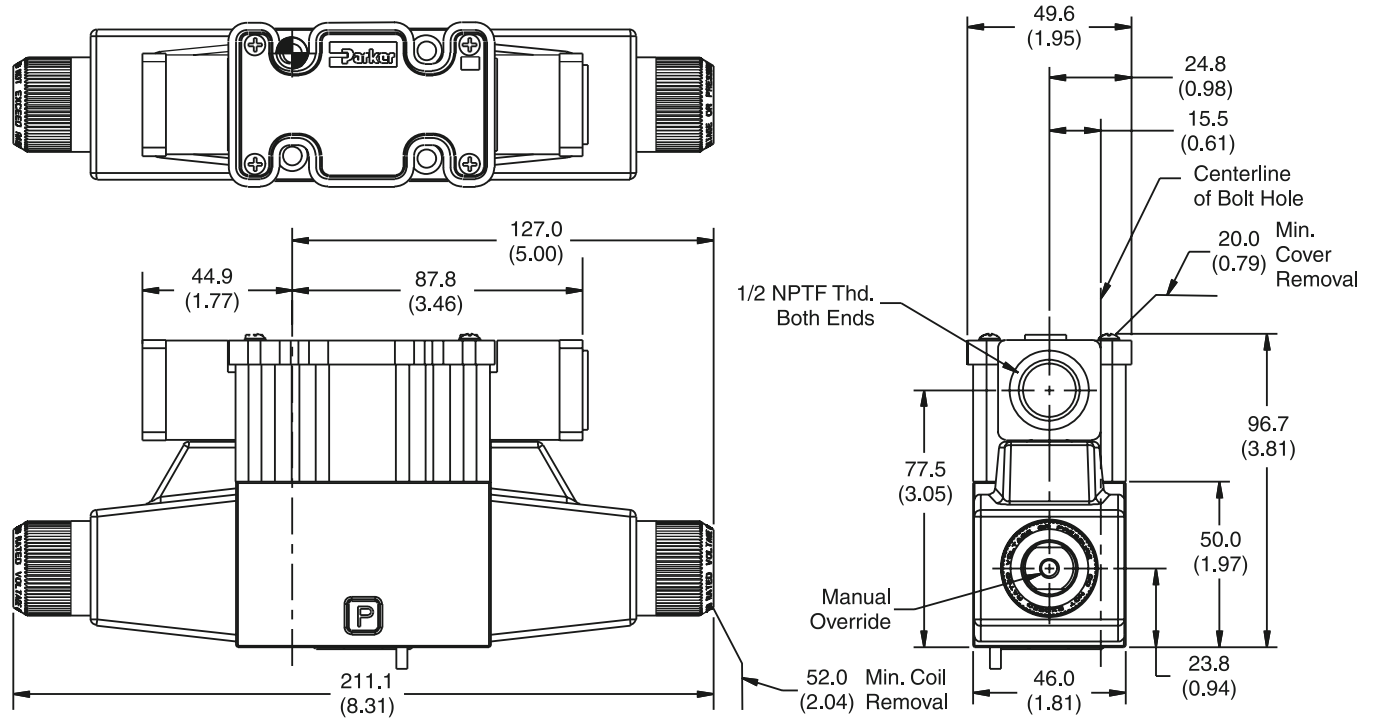
**Bold: Designates Tier I products and options.**

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

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

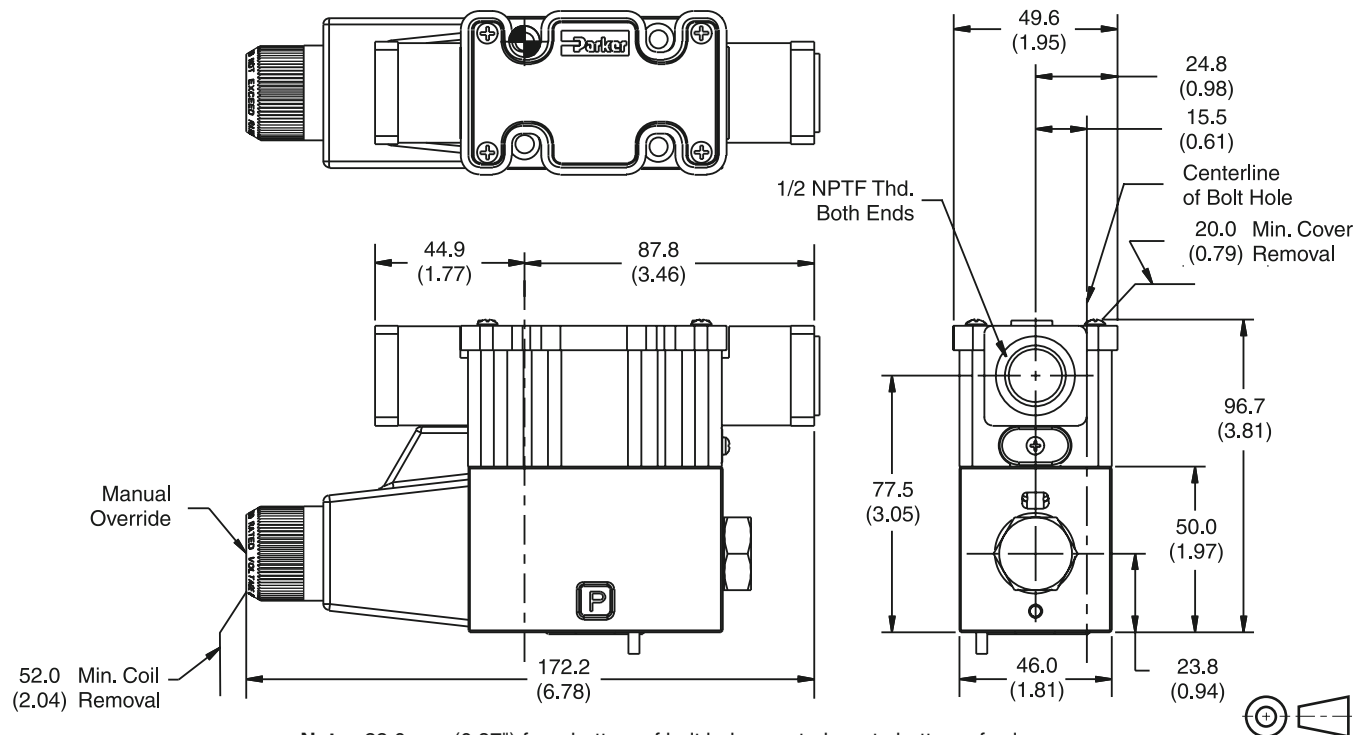
**A**

**AC Leadwire Conduit Box Connector, without Lights, Double Solenoid, "C" Option**



Note: 22.0 mm (0.87") from bottom of bolt hole counterbore to bottom of valve.

**AC Leadwire Conduit Box Connector, without Lights, Single Solenoid, "C" Option**



Note: 22.0 mm (0.87") from bottom of bolt hole counterbore to bottom of valve.