



# Process Pipeline Solenoid Valves

## DVP-2B & DVP-3B Series

Part No. **DVP-2BC1C-24D**

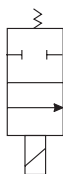
The NITRA™ DVP-2B and DVP-3B Series valves are composite body solenoid valves offered in both 2-way and 3-way normally closed styles. Component features include the proven solenoid operator available in brass/stainless or all stainless pilot design. The glass filled composite material is media compatible, eliminating the need for stocking multiple body materials.

### Features

- 2-way and 3-way poppet style valves
- 1/8" FNPT ports
- 2-position, normally closed, spring return
- 24VDC, 24VAC or 120VAC solenoids
- DIN style wiring connectors



### Valve Symbols



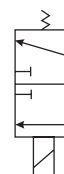
2-way, 2-pos, NC



3-way, 2-pos, NC



3-way, 2-pos, Mixing



3-way, 2-pos, Diverting



See [www.AutomationDirect.com](http://www.AutomationDirect.com)  
for a wide variety of fitting and cable options



### DVP-2B & DVP-3B Series Solenoid Valve Specifications

Model	<b>DVP-2BC1C-24D</b>			<b>DVP-3BC1C-120A</b>		
Price	\$28.00	\$28.00	\$28.00	\$28.00	\$28.00	\$28.00
Weight (lbs)	0.3	0.3	0.3	0.3	0.3	0.3
Valve Type	2-way, 2-position			3-way, 2-position		
Acting	Poppet valve, normally closed, spring return			Poppet valve, normally closed, spring return		
Port Size	1/8" FNPT					
Orifice Size	0.059" [1.5 mm]					
Cv	0.8			0.8 (exhaust 0.08)		
Media	Air, oil, inert gas, water, caustics*					
Pressure Range	0–200 psi [0–13.8 bar]			1–150 psi [0–10.3 bar]		
Voltage (±10%)	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz
Inrush AC	–	10VA		–	10VA	
Power Consumption	6.5 W	8.5 VA		6.5 W	8.5 VA	
Max Freq	71.4 Hz					
Insulation	Class F (continuous duty)					
Min Response	12–14 ms complete cycle					
Temperature	14°F to 122°F [–10°C to 50°C]					
Lubrication	Not Required					
Protection	NEMA Type 4					
Connection	11mm DIN terminal					
Construction	Glass filled nylon body; Viton seals; Operator Brass					
Life Cycle	20 million					
Agency Approvals	CE					

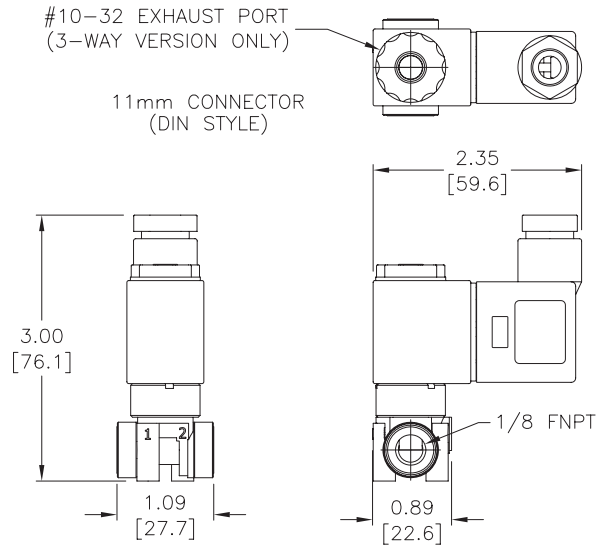
\* Check the chemical compatibility of the valve materials with the process media being used.



# Process Pipeline Solenoid Valves DVP-2B & DVP-3B Series

## Dimensions

inches [mm]



FNPT = FEMALE NATIONAL PIPE THREAD

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

# Solenoid Valve Cables and Connectors



These high quality connectors and over-molded cables help reduce wiring time. The lower voltage models, 24V or 110V AC/DC, include built-in surge suppression, Yellow LED indicator and are rated for connecting with electronics. The 230V AC/DC models are rated for straight wired products. All models are available in five sizes based on DIN 43650.

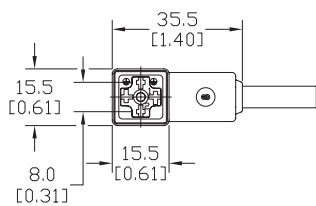
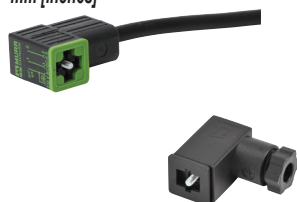
## Features

- 8mm, 9.4mm, 10mm, 11mm and 18mm square DIN styles
- Fits most popular solenoid valves and sensors
- Suppression and LED indication available in 24V or 110V AC/DC models
- PVC jacketed cables in 1, 3 or 5 meter lengths on select connectors
- Field wireable connectors on select models
- Polarity insensitive (follow solenoid, sensor, or other devices wiring diagram)



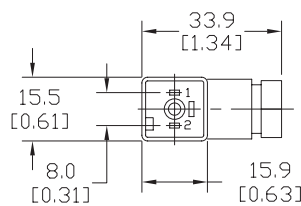
### 8mm Connectors

Dimensions shown  
mm [inches]



Height = 25mm [0.98in]

Connector with Cable



Height = 26mm [1.02]

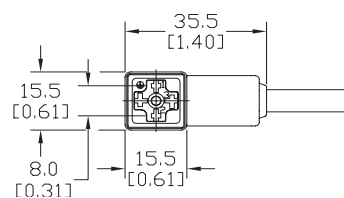
Field Wireable Connector

8mm (3-pole) Connectors (per DIN 43650 Form C)												
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
SC8-LS24-3	\$15.50	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z DO-15 47V 2W)	1	m2.5-0.45x25mm/ 0.4 Nm (3.5 in lb)	0.40	CSA (080128-0-000)
SC8-LS24-5	\$18.50										0.65	
SC8-LS110-3	\$19.00	110 ±10%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z DO-41 ZY200 2W)	7	m2.5-0.45x25mm/ 0.5 Nm (4.4 in lb)	0.41	
SC8-LS110-5	\$22.00										0.63	
SC8-3	\$12.50	230	max 6A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.20 to 0.24	no	none	9	m2.5-0.45x25mm/ 0.5 Nm (4.4 in lb)	0.39	none
SC8-0	\$8.25										0.10	
SC8-1	\$16.50										0.10	
SC8-5	\$17.50										0.68	

Last digit in part number denotes cable length in meters, a 0 indicates field termination.

### 8mm Transmitter Connector

Dimensions shown  
mm [inches]



Height = 25mm [0.98in]

Connector with Cable

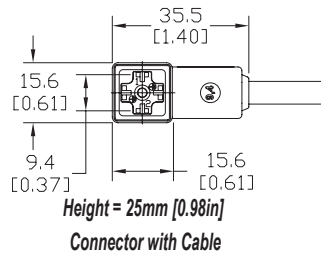
8mm (4-pole) Connectors (per DIN 43650 Form C)												
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
SC8-5T	\$23.50	230	max 6A	67	18 AWG	0.26	yes	none	8	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.80	CSA (080128-0-000)

Last numeric digit in part number denotes cable length in meters, a 0 indicates field termination.

# Solenoid Valve Cables and Connectors

## 9.4mm Connectors

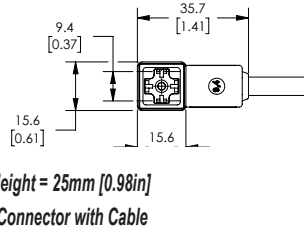
Dimensions shown  
mm [inches]



9.4mm (3-pole) Connectors (DIN Style, Form C Industrial)												
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
<a href="#">SC9-LS24-3</a>	\$15.50	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z DO-15 47V 2W)	1	m3-0.5x26mm/ 0.4 Nm (3.5 in lb)	0.40	CSA (080128-0-000)
<a href="#">SC9-LS24-5</a>	\$18.50								7		0.64	
<a href="#">SC9-LS110-3</a>	\$19.00	110 ±10%	max 6A	67	18 AWG	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40	none	
<a href="#">SC9-LS110-5</a>	\$22.00							7		0.64		
<a href="#">SC9-3</a>	\$12.50	230	max 6A	67	18 AWG	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40	none	
<a href="#">SC9-5</a>	\$17.50							7		0.64		

## 9.4mm Connectors

Dimensions shown  
mm [inches]

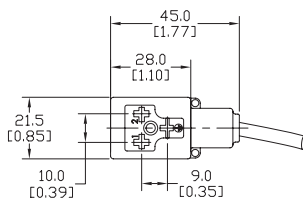


9.4mm (4-pole) Connectors (DIN Style, Form C Industrial)													
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia.	Cable Length	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
<a href="#">7000-94141-6270300</a>	\$18.00	230 VAC/ VDC	max 6A	IP67	18 AWG	5.6-6.2 mm	9.8ft/3m	no	none	8	m3-0.5x26mm/ 0.4 Nm (3.5 in lb)	0.50	CSA (080128-0-000)/ RoHS
<a href="#">7000-94141-6270500</a>	\$24.00						16.4ft/5m					0.79	

# Solenoid Valve Cables and Connectors

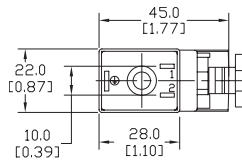
## 10mm Connectors

Dimensions shown  
mm [inches]



Height = 30mm [1.18in]

Connector with Cable



Height = 41mm [1.61in]

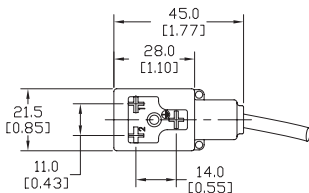
Field Wireable Connector

10mm (3-pole) Connectors (per DIN 43650 Form B)																	
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval					
<a href="#">SC10-LS24-3</a>	\$15.50	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z DO-15 47V 2W)	10	m3-0.5x30mm/ 0.4 Nm (3.5 in lb)	0.43	CSA (080128-0-000)					
<a href="#">SC10-LS24-5</a>	\$18.50										0.68						
<a href="#">SC10-LS110-3</a>	\$19.00	110 ±10%	max 1A				no	none	3		zener diode (D-Z DO-41 ZY200 2W)		6	0.43			
<a href="#">SC10-LS110-5</a>	\$22.00													0.68			
<a href="#">SC10-3</a>	\$12.50	230	max 10A				65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.24 to 0.32		yes		zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.43	none
<a href="#">SC10-5</a>	\$17.50															0.68	
<a href="#">SC10-LS24-0</a>	\$12.50	24 ±20%	max 4A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.24 to 0.32	yes	zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.07	none					
<a href="#">SC10-LS110-0</a>	\$14.00	110 ±10%	max 1A								mov (SIOV S10 K130)		5	0.07			

Last digit in part number denotes cable length in meters, a 0 indicates field termination.

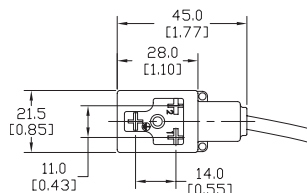
## 11mm Connectors

Dimensions shown  
mm [inches]



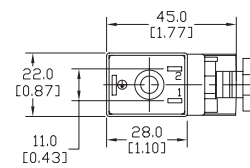
Height = 30mm [1.18in]

Connector with Cable



Height = 30mm [1.18in]

Reverse Connector with Cable



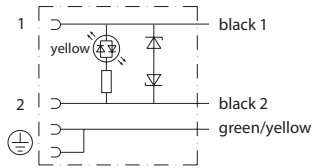
Height = 41mm [1.61in]

Field Wireable Connector

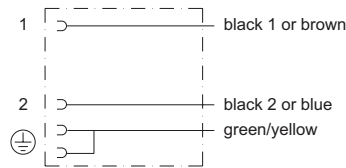
11mm (3-pole) Connectors (DIN Style, Form B Industrial)																	
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval					
<a href="#">SC11-LS24-3</a>	\$15.50	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z DO-15 47V 2W)	10	m3-0.5x30mm/ 0.4 Nm (3.5 in lb)	0.44	CSA (080128-0-000)					
<a href="#">SC11-LS24-5</a>	\$18.50										0.67						
<a href="#">SC11-LS110-3</a>	\$19.00	110 ±10%	max 1A				no	zener diode (D-Z DO-41 ZY200 2W)	6		zener diode (D-Z DO-15 47V 2W)		10	0.44			
<a href="#">SC11-LS110-5</a>	\$22.00													0.67			
<a href="#">SC11-LS24-3R</a>	\$15.50	24 ±20%	max 4A				65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.24 to 0.32		yes		zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.44	none
<a href="#">SC11-LS24-5R</a>	\$18.50															0.67	
<a href="#">SC11-LS110-3R</a>	\$19.00	110 ±10%	max 1A	no	zener diode (D-Z DO-41 ZY200 2W)	6	no	none	3	0.44							
<a href="#">SC11-LS110-5R</a>	\$22.00									0.67							
<a href="#">SC11-3</a>	\$12.50	230	max 10A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.24 to 0.32	yes	zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.44	none					
<a href="#">SC11-5</a>	\$17.50										0.67						
<a href="#">SC11-LS24-0</a>	\$12.50	24 ±20%	max 4A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	field wireable gland size 0.24 to 0.32	yes	zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)	0.07	none					
<a href="#">SC11-LS110-0</a>	\$14.00	110 ±10%	max 1A								mov (SIOV S10 K130)		5	0.07			
<a href="#">SC11-0</a>	\$10.50	230	max 10A	no	none	9	no	none	9	0.07							

Last numeric digit in part number denotes cable length in meters, a 0 indicates field termination.

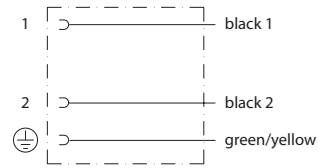
# Solenoid Valve Cables and Connectors Wiring Diagrams



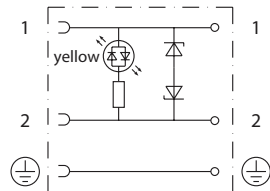
**Figure No. 1**



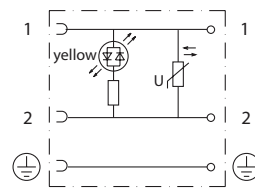
**Figure No. 2**



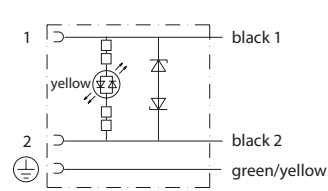
**Figure No. 3**



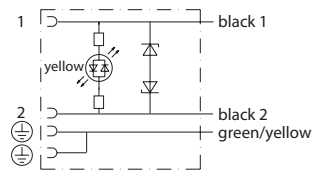
**Figure No. 4**



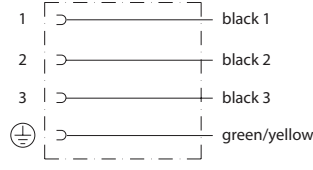
**Figure No. 5**



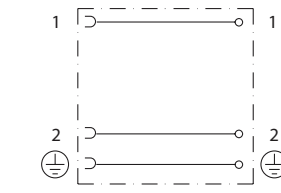
**Figure No. 6**



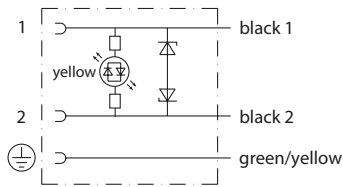
**Figure No. 7**



**Figure No. 8**



**Figure No. 9**



**Figure No. 10**