



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

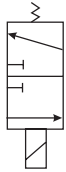


See [here](#) for a wide variety of fitting and cable options

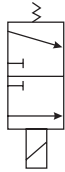
Valve Symbols



2-way, 2-pos, NC



3-way, 2-pos, NC



3-way, 2-pos, Mixing



3-way, 2-pos, Diverting

DVP-2B & DVP-3B Series Solenoid Valve Specifications						
Model	DVP-2BC1C-24D	DVP-2BC1C-24A	DVP-2BC1C-120A	DVP-3BC1C-24D	DVP-3BC1C-24A	DVP-3BC1C-120A
Price						
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					

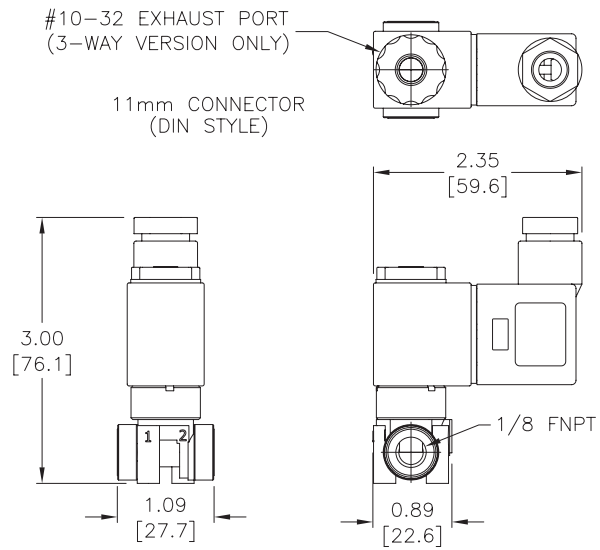
* Check the chemical compatibility of the valve materials with the process media being used.



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

Dimensions

inches [mm]



FNPT = FEMALE NATIONAL PIPE THREAD

*See our website
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.

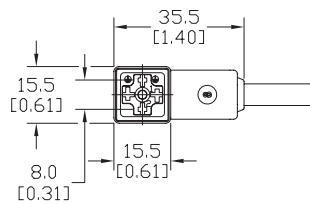
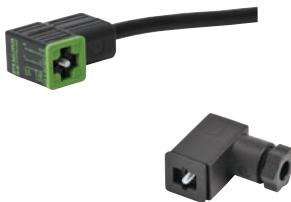


Features

- 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)

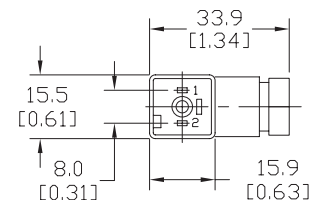
8mm Connectors

Dimensions shown
mm [inches]



Height = 25mm [0.98in]

Connector with Cable



Height = 26mm [1.02]

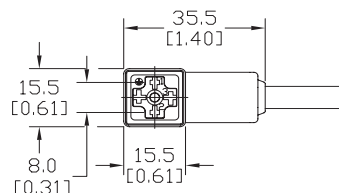
Field Wireable Connector

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		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	0.65											
SC8-LS110-3		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	0.63											
SC8-3		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	2	m2.5-0.45x25mm/ 0.5 Nm (4.4 in lb)	0.39	none
SC8-0	0.10											
SC8-1	0.10											
SC8-5	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

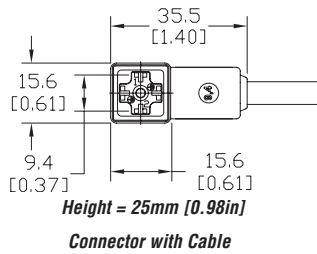
8mm (4-pole) Connectors (per DIN 43650 Form C)												
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
SC8-5T		230	max 6A	67	18 AWG	0.26	yes	none	8	m3-0.5x42mm/ 0.5 Nm (4.4 in lb)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

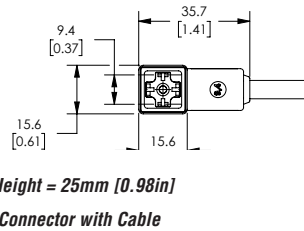
Dimensions shown
mm [inches]



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	
SC9-LS24-3		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)	
SC9-LS24-5	0.64												
SC9-LS110-3		110 ±10%	max 6A	67	18 AWG	0.23	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40		none
SC9-LS110-5	0.64												
SC9-3		230	max 6A	67	18 AWG	0.23	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40	none	
SC9-5	0.64												

9.4mm Connectors

Dimensions shown
mm [inches]

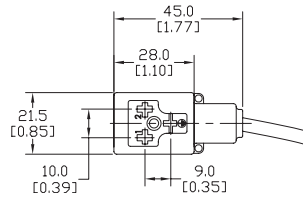


9.4mm (4-pole) Connectors (DIN Style, Form C Industrial)													
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia.	Cable Length	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
7000-94141-6270300		230 VAC/ VDC	max 6A	IP67	18 AWG	5.6-6.2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

Solenoid Valve Cables and Connectors

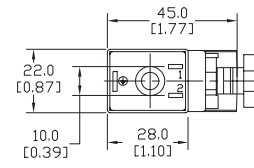
10mm Connectors

Dimensions shown
mm [inches]



Height = 30mm [1.18in]

Connector with Cable



Height = 41mm [1.61in]

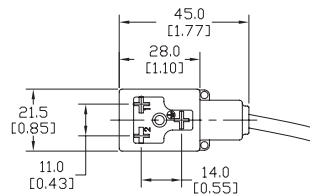
Field Wireable Connector

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
SC10-LS24-3		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)
SC10-LS24-5			0.68									
SC10-LS110-3		110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200 2W)	6		0.43	
SC10-LS110-5			0.68									
SC10-3		230	max 10A					no	none		3	
SC10-5				0.68								
SC10-LS24-0		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
SC10-LS110-0		110 ±10%	max 1A								mov (SIOV S10 K130)	
SC10-0		230	max 10A					no	none			

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

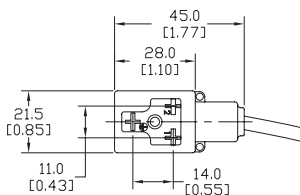
11mm Connectors

Dimensions shown
mm [inches]



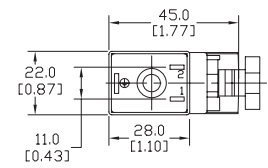
Height = 30mm [1.18in]

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
SC11-LS24-3		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)
SC11-LS24-5			0.67									
SC11-LS110-3		110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200 2W)	6		0.44	
SC11-LS110-5			0.67									
SC11-LS24-3R		24 ±20%	max 4A					zener diode (D-Z DO-15 47V 2W)	10		0.44	
SC11-LS24-5R			0.67									
SC11-LS110-3R		110 ±10%	max 1A	zener diode (D-Z DO-41 ZY200 2W)	6	0.44						
SC11-LS110-5R			0.67									
SC11-3		230	max 10A	no	none	3	0.44					
SC11-5				0.67								
SC11-LS24-0		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
SC11-LS110-0		110 ±10%	max 1A								mov (SIOV S10 K130)	
SC11-0		230	max 10A					no	none			

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

Solenoid Valve Cables and Connectors Wiring Diagrams

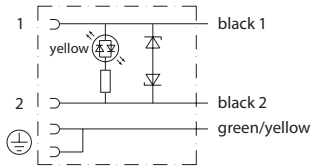


Figure No. 1

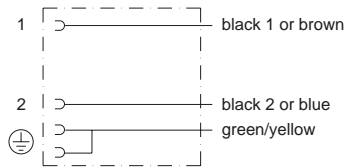


Figure No. 2

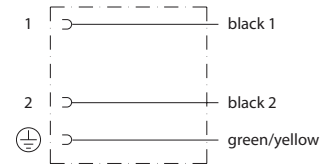


Figure No. 3

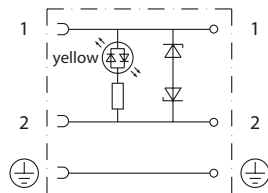


Figure No. 4

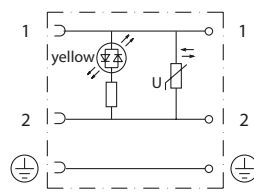


Figure No. 5

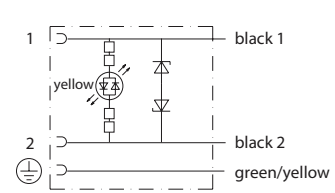


Figure No. 6

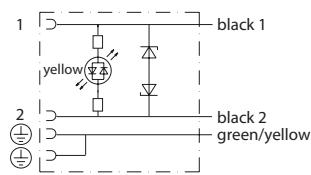


Figure No. 7

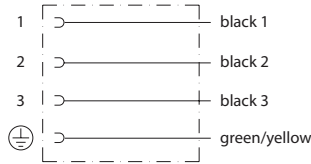


Figure No. 8

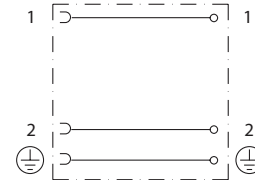


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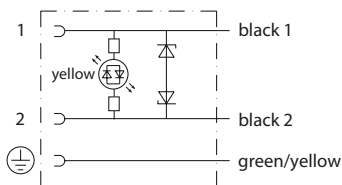


Figure No. 10