

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



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

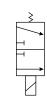




Symbols











for a wide variety of fitting and cable options



2-wa

ting

ay, 2-pos, NC	3-way, 2-pos, NC	3-way, 2-pos, Mixing	3-way, 2-pos, Diverti

DVF	-2B & DVP-	3B Series So	lenoid Valve	<b>Specification</b>	ons			
Model	DVP-2BC1C-24 <u>D</u>	DVP-2BC1C-24A	DVP-2BC1C-120A	DVP-3BC1C-24D	DVP-3BC1C-24A	DVP-3BC1C-120A		
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 valv	e, normally closed,	spring return	Poppet valv	e, normally closed,	spring return		
Port Size			1/8" I	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	_	10	VA	_	10	VA		
Power Consumption	6.5 W	8.5	VA	6.5 W	8.5	VA		
Max Freq			71.4	4 Hz				
Insulation			Class F (con	tinuous duty)				
Min Response			12–14 ms co	omplete cycle				
Temperature			14°F to 122°F	[-10°C to 50°C]				
Lubrication			Not Re	equired				
Protection			NEMA	Type 4				
Connection				N terminal				
Construction		Glass	filled nylon body; V	iton seals; Operator	Brass			
Life Cycle			20 m	nillion				
Agency Approvals			C	E				

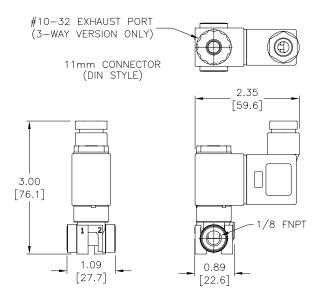
<sup>\*</sup> Check the chemical compatibility of the valve materials with the process media being used.



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

### **Dimensions**

inches [mm]



FNPT = FEMALE NATIONAL PIPE THREAD

See our website www.AutomationDirect.com for complete Engineering drawings.

**8mm Connectors** 

### **Solenoid Valve Cables and Connectors**

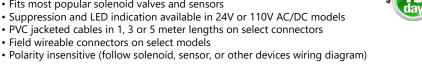


These high quality connectors and over-molded cables help reduce wiring time. The lower voltage models, 24V or 110V AC/DC, include built-in surge suppression, Yellow LED indicator and are rated for connecting with electronics. The 230V AC/DC models are rated for straight wired products. All models are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

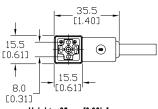
#### **Features**

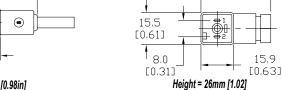
- 8mm, 9.4mm, 10mm, 11mm and 18mm square DIN styles
- Fits most popular solenoid valves and sensors

- Polarity insensitive (follow solenoid, sensor, or other devices wiring diagram)









Height = 25mm [0.98in] Connector with Cable

Field Wireable Connector

33.9

[1.34]

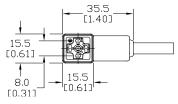
				8mm	(3-pole) C	onnecto	rs (p	er DIN 43650 Fo	rm C)			
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval
SC8-LS24-3	\$15.50	24 ±20%	max 4A					zener diode	1	m2.5- 0.45x25mm/ 0.4 Nm (3.5 in lb)	0.40	
SC8-LS24-5	\$18.50	24 ±20 /0					VOC	(D-Z DO-15 47V 2W)	1		0.65	CSA (080128-0-000)
SC8-LS110-3	\$19.00	110 ±10%		67	18 AWG	0.23	yes	zener diode	7		0.41	
SC8-LS110-5	\$22.00	110 ±10 /6						(D-Z DO-41 ZY200 2W)	1		0.63	
SC8-3	\$12.50								2		0.39	
<u>SC8-0</u>	\$9.00	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)	0.10	none
SC8-1	\$18.00			67	18 AWG	0.23			2	(1.11110)	0.10	
SC8-5	\$17.50			0/	10 AWG	0.23			2		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			
<u>SC8-5T</u>	\$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)			

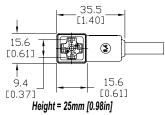
Last numeric digit in part number denotes cable length in meters, a 0 indicates field termination.

## **Solenoid Valve Cables and Connectors**

#### 9.4mm Connectors

Dimensions shown mm [inches]





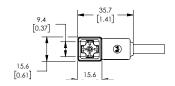
Connector with Cable

	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	\$15.50	24 ±20%						zener diode	1		0.40				
SC9-LS24-5	\$18.50	24 ±20%	may 1A		18 AWG	0.23	yes -	(D-Z DO-15 47V 2W)		m3-0.5x26mm/ 0.4 Nm	0.64	CSA (080128-0-000)			
SC9-LS110-3	\$19.00	110 ±10%	max 4A	67				zener diode	7	(3.5 in lb)	0.40	CSA (000 120-0-000)			
SC9-LS110-5	\$22.00	110 ± 10%						(D-Z DO-41 ZY200 2W)	1		0.64				
<u>SC9-3</u>	\$12.50									m3-0.5x26mm/	0.40				
<u>SC9-5</u>	\$17.50	230	max 6A				no	none	2	0.5 Nm (4.4 in lb)	0.64	none			

#### 9.4mm Connectors

Dimensions shown mm [inches]

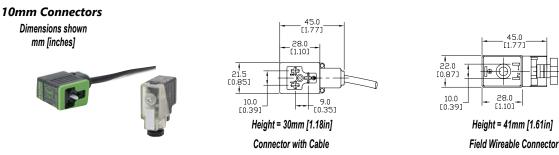




Height = 25mm [0.98in] Connector with Cable

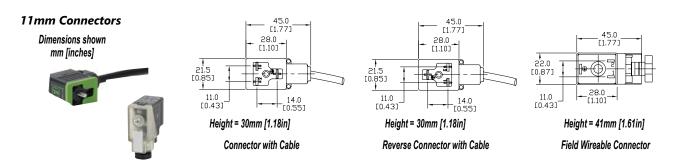
	9.4mm (4-pole) Connectors (DIN Style, Form C Industrial)														
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia.	Cable Length	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval		
7000-94141-6270300	\$20.00	230 VAC/ VDC		IP67	18 AWG	5.6–6.2 mm	9.8ft/3m		none		m3- 0.5x26mm/ 0.4 Nm (3.5 in lb)	0.50	CSA		
<u>7000-94141-6270500</u>	\$26.50		max 6A				16.4ft/5m	no		8		0.79	(080128-0-000)/ RoHS		

## **Solenoid Valve Cables and Connectors**



	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	\$15.50	24 ±20%	max 4A					zener diode	10		0.43				
SC10-LS24-5	\$18.50	24 ±20%	max 4A					(D-Z DO-15 47V 2W)	10		0.68	CSA (080128-0- 000)			
SC10-LS110-3	\$19.00	110 ±10%	max 1A	-	18 AWG	0.23	yes	zener diode	6	m3-0.5x30mm/ 0.4 Nm (3.5 in lb)	0.43				
SC10-LS110-5	\$22.00	110 ± 10%	max iA					(D-Z DO-41 ZY200 2W)	0		0.68				
<u>SC10-3</u>	\$12.50	220	230 max 10A				no	none	3		0.43				
<u>SC10-5</u>	\$17.50	230	IIIax IUA						3		0.68				
<u>SC10-LS24-0</u>	\$12.50	24 ±20%	max 4A	65	Solid 12 AWG Stranded 14	field wireable		zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm 0.5 Nm	0.07				
<u>SC10-LS110-0</u>	\$14.00	110 ±10%	max 1A	05	AWG w/Ferrule 16 AWG	gland size 0.24 to 0.32	yes	mov (SIOV S10 K130)	5	(4.4 in lb)	0.07				

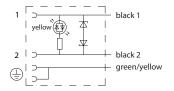
Last digit in part number denotes cable length in meters, a 0 indicates field termination.

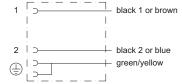


			11mm	(3-pol	e) Connec	tors (DI	N St	yle, Form B In	dustri	al)		
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval
SC11-LS24-3	\$15.50	24 ±20%	max 4A					zener diode	10		0.44	
<u>SC11-LS24-5</u>	\$18.50	24 ±20%	J70 IIIax 4A					(D-Z DO-15 47V 2W)	10		0.67	
SC11-LS110-3	\$19.00	110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200	6		0.44	
<u>SC11-LS110-5</u>	\$22.00	110 ± 10%   ff	IIIdX IA				V00	(D-2 DO-41 21200 2W)	0		0.67	
<u>SC11-LS24-3R</u>	\$15.50	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode	10	m3-0.5x30mm/ 0.4 Nm	0.44	CSA
SC11-LS24-5R	\$18.50	24 ±20%	IIIdX 4A	07	10 AWG	0.23		(D-Z DO-15 47V 2W)	10	(3.5 in lb)	0.67	(080128-0-000)
SC11-LS110-3R	\$19.00	110 ±10%	may 1 A					zener diode (D-Z DO-41 ZY200	6	, ,	0.44	,
SC11-LS110-5R	\$22.00	110 ± 10%	max 1A					2W)	0		0.67	
<u>SC11-3</u>	\$12.50	230	max 10A				no	nono	3		0.44	
<u>SC11-5</u>	\$17.50	230	IIIax IUA				no	none	3		0.67	
SC11-LS24-0	\$12.50	24 ±20%	max 4A		Solid 12 AWG Stranded 14	field wireable	ves	zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/	0.07	
<u>SC11-LS110-0</u>	\$14.00	110 ±10%	max 1A	65	AWG w/Ferrule 16	gland size 0.24 to	yes	mov (SIOV S10 K130)	5	0.5 Nm (4.4 in lb)	0.07	none
<u>SC11-0</u>	\$10.50	230	max 10A		AWG	0.32	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





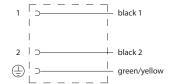


Figure No. 1

Figure No. 2

Figure No. 3

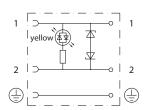


Figure No. 4

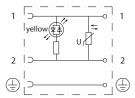


Figure No. 5

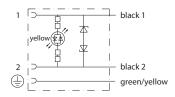


Figure No. 6

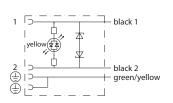


Figure No. 7



Figure No. 8



Figure No. 9

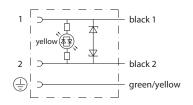


Figure No. 10