

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



Part No. DVP-2DC1D-24D

2-way, 2-pos, NC

Valve Symbols

The Nitra DVP-2D and DVP-3D Series valves are composite body solenoid valves offered in both 2-way and 3-way normally closed styles in three orifice sizes. Features include a direct acting solenoid utilizing a long-life spring compensated poppet at the heart of an all stainless solenoid operator. Body construction is glass filled nylon with Viton seals, making the valves compatible with air, oil, inert gas, water and caustics*. Operating voltages of 24VDC, 24VAC or 120VAC are available.

Features

- 2-way and 3-way poppet style valves
- 1/8, 1/4 or 3/8" FNPT ports
- 2-position, normally closed, spring return
- 24VDC, 24VAC or 120VAC solenoids
- DIN style wiring connector



for a wide variety of fitting and cable options



CE ROHS



		DVP-2D	Series So	lenoid Va	lve Speci	fications			
Model	DVP-2DC1D-24D	DVP-2DC1D-24A	DVP-2DC1D-120A	DVP-2DC2E-24D	DVP-2DC2E-24A	DVP-2DC2E-120A	DVP-2DC3F-24D	DVP-2DC3F-24A	DVP-2DC3F-120A
Price	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
Weight (lbs)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Valve Type				2	-way, 2-positio	n			
Acting		Poppe	t valve, normall	y closed, spring	g return		Poppet val	ve, normally clo return	sed, spring
Port Size		1/8" FNPT			1/4" FNPT			3/8" FNPT	
Orifice Size		0.062" [1.6 mm]		0.094" [2.4 mm]		0.118" [3.0 mm]
Cv		0.12			0.245			0.315	
Media				Air, oil, in	ert gas, water,	caustics*			
Pressure Range				50 psi .2 bar]			0–15 [0–10	0–250 psi [0–17.2 bar]	
Voltage (±10%)	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz
Inrush AC	_	26	VA	_	26	VA	_	26	iVA
Power Consumption	10W	11.	5 VA	10W	11.5	5 VA	10W	11.5	5 VA
Max Freq					25Hz				
Insulation				Class	F (continuous	duty)			
Min Response					16–40 ms				
Temperature				14°F to	122°F [-10°C 1	to 50°C]			
Lubrication					Not Required				
Protection					NEMA Type 4				
Connection					Imm DIN termir				
Construction			Glass fi	lled nylon body		perator Stainle	ss Steel		
Life Cycle					10 million				
Agency Approvals					CE				

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



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

Valve Symbols







3-way, 2-pos, NC

3-way, 2-pos, Mixing

3-way, 2-pos, Diverting

		DVP-3D	Series So	lenoid Va	lve Spec	ifications					
Model	DVP-3DC1D-24D	DVP-3DC1D-24A	DVP-3DC1D-120A	DVP-3DC2E-24D	DVP-3DC2E-24A	DVP-3DC2E-120A	DVP-3DC3F-24 <u>D</u>	DVP-3DC3F-24A	DVP-3DC3F-120A		
Price	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00		
Weight (lbs)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
Valve Type				3	3-way, 2-positio	n					
Acting				Poppet valve,	normally close	d, spring return					
Port Size		1/8" FNPT			1/4" FNPT			3/8" FNPT			
Orifice Size	(0.062" [1.6 mm]	(0.094" [2.4 mm]		0.118" [3.0 mm]		
Cv	0.12	(exhaust port	0.08)	0.245	0.245 (exhaust port 0.08) 0.315 (exhaust port 0.08)						
Media				Air, oil, in	ert gas, water,	caustics*					
Pressure Range		0–220 psi [0–15.2 bar]			0 psi 3 bar]	1–150 psi [0–10.3 bar]		2 psi 7 bar]	1–90 psi [0–6.2 bar]		
Voltage (±10%)	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz	24VDC	24VAC 50/60 Hz	120VAC 50/60 Hz		
Inrush AC	_	26	VA	_	26	VA	- 26		VA		
Power Consumption	10W	11.5	5 VA	10W	11.	5 VA	10W	11.5	5 VA		
Max Freq					25Hz						
Insulation				Class	F (continuous	duty)					
Min Response					16–40 ms						
Temperature				14°F to	122°F [-10°C	to 50°C]					
Lubrication					Not Required						
Protection		NEMA Type 4									
Connection				18	mm DIN termin	nal					
Construction			Gla	ss filled nylon l	oody; Viton sea	ıls; Operator Br	ass				
Life Cycle					10 million						
Agency Approvals					CE						

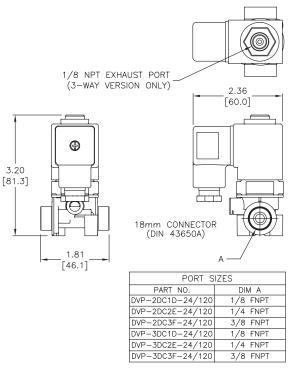
^{*} Check the chemical compatibility of the valve materials with the process media being used.



Process Pipeline Solenoid Valves DVP-2D & DVP-3D 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

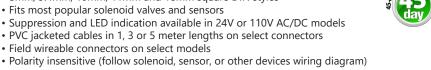


These high quality connectors and over-molded cables help reduce wiring time. The lower voltage models, 24V or 110V AC/DC, include built-in surge suppression, Yellow LED indicator and are rated for connecting with electronics. The 230V AC/DC models are rated for straight wired products. All models are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

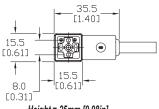
Features

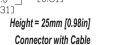
- 8mm, 9.4mm, 10mm, 11mm and 18mm square DIN styles
- Suppression and LED indication available in 24V or 110V AC/DC models

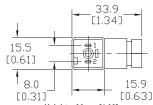
- Polarity insensitive (follow solenoid, sensor, or other devices wiring diagram)











Height = 26mm [1.02] Field Wireable Connector

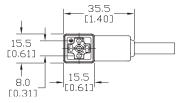
				8mm	(3-pole) C	onnecto	rs (p	er DIN 43650 Fo	rm C)			
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval
SC8-LS24-3	\$15.50	24 ±20%						zener diode	1	m2.5-	0.40	
SC8-LS24-5	\$18.50	24 ±20 /0	max 4A				yes	(D-Z DO-15 47V 2W)	'	0.45x25mm/ 0.4 Nm (3.5 in lb)	0.65	CSA (080128-0-000)
SC8-LS110-3	\$19.00	110 ±10%	max 4A	67	18 AWG	0.23		zener diode	7		0.41	
SC8-LS110-5	\$22.00	110 ±10 /0						(D-Z DO-41 ZY200 2W)	,	(3.3 111 10)	0.63	
SC8-3	\$12.50								2		0.39	
<u>SC8-0</u>	\$8.25	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 SC8-5	\$16.50 \$17.50			67	18 AWG 0.23				2	(1.11110)	0.10 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)		

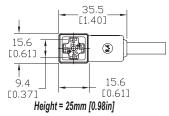
Last numeric digit in part number denotes cable length in meters, a 0 indicates field termination.

Solenoid Valve Cables and Connectors

9.4mm Connectors

Dimensions shown mm [inches]





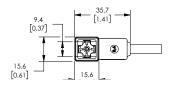
Connector with Cable

			9.4mr	n (3-p	ole)	Connect	(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%	max 4A				V00	(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%						18		yes	zener diode	7	(3.5 in lb)	0.40
SC9-LS110-5	\$22.00	110 ± 10%		67	AWG	0.23		(D-Z DO-41 ZY200 2W)	'	, ,	0.64			
<u>SC9-3</u>	\$12.50						no			m3-0.5x26mm/	0.40			
<u>SC9-5</u>	\$17.50	230	max 6A					none	2	0.5 Nm (4.4 in lb)	0.64	none		

9.4mm Connectors

Dimensions shown mm [inches]

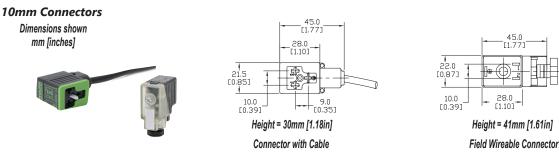




Height = 25mm [0.98in] Connector with Cable

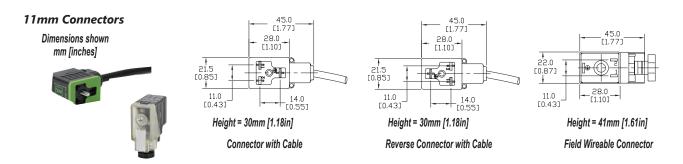
	9.4mm (4-pole) Connectors (DIN Style, Form C Industrial)													
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia.	Cable Length	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval	
7000-94141-6270300	\$18.00	220 1/40/			10	F G G O	9.8ft/3m				m3- 0.5x26mm/	0.50	CSA	
<u>7000-94141-6270500</u>	\$24.00	230 VAC/ VDC	max 6A	IP67	18 AWG	5.6–6.2 mm	16.4ft/5m	no	none	8	0.5x26fffff/ 0.4 Nm (3.5 in lb)	0.79	(080128-0-000)/ RoHS	

Solenoid Valve Cables and Connectors



			10m	ım (3-	-pole) Con	nectors	(pe	r DIN 43650 For	m B)							
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED		Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval				
<u>SC10-LS24-3</u>	\$15.50	24 ±20%	may 1A					zener diode	10		0.43					
<u>SC10-LS24-5</u>	\$18.50	24 ±20%	max 4A				V00	(D-Z DO-15 47V 2W)	10		0.68					
SC10-LS110-3	\$19.00	110 ±10% ma	110 . 100/	110 ±10%	110 ±10%	110 ±10% may	max 1A	67	18 AWG	0.00	yes	zener diode	6	m3-0.5x30mm/ 0.4 Nm	0.43	CSA (080128-0-
SC10-LS110-5	\$22.00		IIIaX IA	07	10 AWG	0.23		(D-Z DO-41 ZY200 2W)	О	(3.5 in lb)	0.68	000)				
<u>SC10-3</u>	\$12.50	220	230	max 10A				no		3		0.43				
<u>SC10-5</u>	\$17.50	230	max TUA				no	none	3		0.68					
SC10-LS24-0	\$12.50	24 ±20%	max 4A	65	Solid 12 AWG Stranded 14	field wireable	V00	zener diode (D-Z DO-15 47V 2W)	4	m3-0.5x42mm/ 0.5 Nm	0.07	nono				
<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	none				

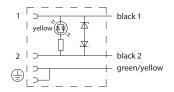
Last digit in part number denotes cable length in meters, a 0 indicates field termination.



			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 /0	IIIax 4A					(D-Z DO-15 47V 2W)	10		0.67			
<u>SC11-LS110-3</u>	\$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 /0	IIIax IA				VOC	(D-2 DO-41 21200 2W)	0		0.67			
<u>SC11-LS24-3R</u>	\$15.50	24 ±20%	may 11	max 4A	may 11	67	18 AWG	0.23	yes	zener diode	10	m3-0.5x30mm/ 0.4 Nm	0.44	CSA
<u>SC11-LS24-5R</u>	\$18.50	24 ±20 /0	IIIax 4A	07	10 AWG	0.23		(D-Z DO-15 47V 2W)	10	(3.5 in lb)	0.67	(080128-0-000)		
<u>SC11-LS110-3R</u>	\$19.00	110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200	6		0.44			
<u>SC11-LS110-5R</u>	\$22.00	110 ±10 /6	IIIax IA					(D-2 DO-41 21200 2W)	0		0.67			
<u>SC11-3</u>	\$12.50	230	max 10A				no	none	3		0.44			
<u>SC11-5</u>	\$17.50	230	IIIax IUA				no	Hone	3		0.67			
<u>SC11-LS24-0</u>	\$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



black 1 or brow
black 2 or blue
green/yellow

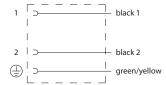


Figure No. 1

Figure No. 2

Figure No. 3

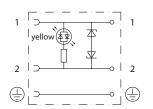


Figure No. 4

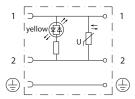


Figure No. 5

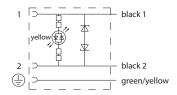


Figure No. 6

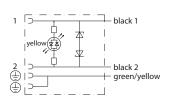


Figure No. 7



Figure No. 8

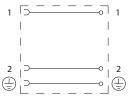


Figure No. 9

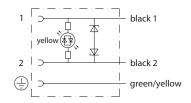


Figure No. 10