



Process Pipeline Solenoid Valves DVD-2A Series



Part No. DVD-2AC3A-24D

Valve
Symbol



2-way, 2-pos

The NITRA™ DVD-2A Series valves are 2-way, 2-position, normally closed valves for the control of air, oil, water, or media that is compatible with valve materials of manufacture. These valves feature an all brass body and a zero minimum pressure differential while still boasting a full flow 1/2" orifice. Available in 1/4", 3/8" and 1/2" FNPT port sizes, the DVD-2A valves can handle pressures to 230psi. The encapsulated coil construction ensures that the valve functions well under long periods of energization (100% duty), as well as providing a high degree of environmental protection (NEMA Type 4). The inner valve functions as a direct assist using a flat diaphragm and orifice plate. Pressure differentials shift the valve to full open. A push, non-locking manual override is standard.

Features

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



See www.AutomationDirect.com
for a wide variety of fitting and
cable options



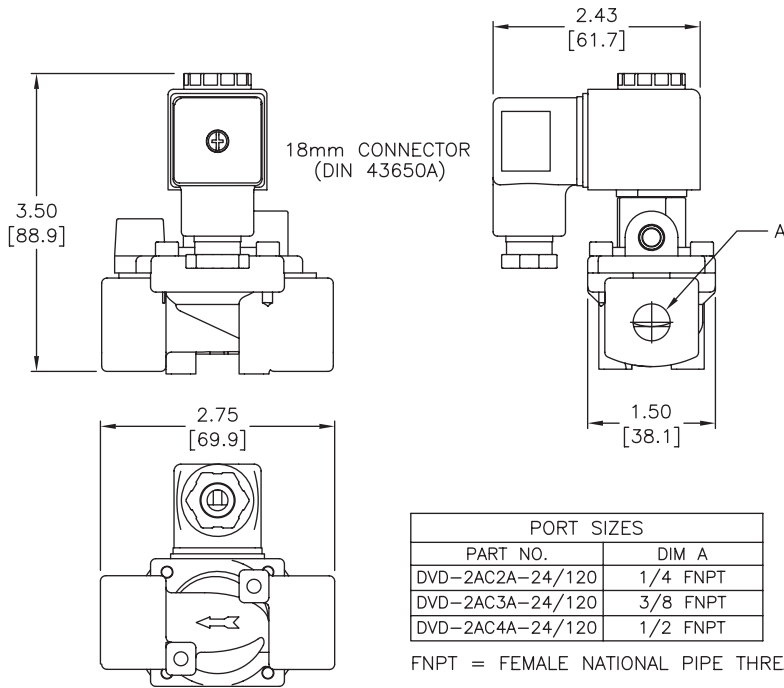
DVD-2A Series Solenoid Valve Specifications									
Model	DVD-2AC2A-24D	DVD-2AC2A-24A	DVD-2AC2A-120A	DVD-2AC3A-24D	DVD-2AC3A-24A	DVD-2AC3A-120A	DVD-2AC4A-24D	DVD-2AC4A-24A	DVD-2AC4A-120A
Price	\$77.00	\$77.00	\$77.00	\$77.00	\$77.00	\$77.00	\$77.00	\$77.00	\$77.00
Weight (lbs)	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0
Valve Type	2-way, 2-position								
Acting	Diaphragm, normally closed, spring return								
Port Size	1/4" FNPT			3/8" FNPT			1/2" FNPT		
Orifice Size	1/2" [12.7 mm]								
Cv	1.55			1.95			2.45		
Media	Air, oil, water, emulsion, inert gases								
Pressure Range	1-180 psi [0-12.4 bar]	1-160 psi [0-11.0 bar]	0-230 psi [0-15.9 bar]	1-180 psi [0-12.4 bar]	1-160 psi [0-11.0 bar]	0-230 psi [0-15.9 bar]	1-180 psi [0-12.4 bar]	1-160 psi [0-11.0 bar]	0-230 psi [0-15.9 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	-	10.5 VA		-	10.5 VA		-	10.5 VA	
Power Consumption	10W	8VA		10W	8VA		10W	8VA	
Max Freq	12.5 Hz								
Insulation	Class F (continuous duty)								
Min Response	20-80 ms complete cycle								
Temperature	Max fluid 194 deg F (90 deg C); Ambient 14 deg F to 122 deg F (-10 deg C to 50 deg C)								
Lubrication	Not required								
Protection	NEMA Type 4								
Connection	18mm DIN terminal								
Construction	Brass body; Viton seals; Operator Brass								
Life Cycle	10 million								
Agency Approvals	CE								



Process Pipeline Solenoid Valves DVD-2A Series

Dimensions

inches [mm]



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

Accessories

DVD-2A Series Solenoid Valve Accessories			
Part No.	Description	Price	Weight (lbs)
DVD-1VSEAL	Seal kit, replacement, Viton, for DVD-2AC series NITRA pneumatic solenoid valves. Includes one Viton diaphragm.	\$9.00	0.1



Part No. DVD-1VSEAL

Solenoid Valve Cables and Connectors



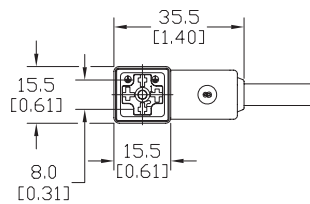
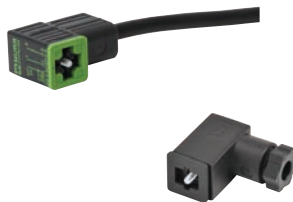
These high quality connectors and over-molded cables help reduce wiring time. The lower voltage models, 24V or 110V AC/DC, include built-in surge suppression, Yellow LED indicator and are rated for connecting with electronics. The 230V AC/DC models are rated for straight wired products. All models are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

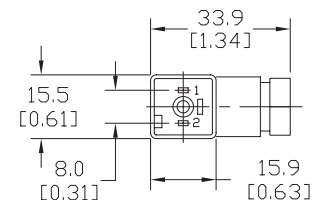
8mm Connectors

Dimensions shown
mm [inches]



Height = 25mm [0.98in]

Connector with Cable



Height = 26mm [1.02]

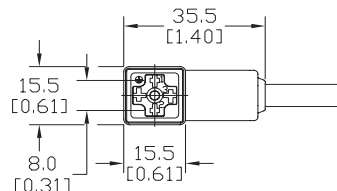
Field Wireable Connector

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	\$12.00	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	\$14.50										0.65	
SC8-LS110-3	\$15.00	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	\$17.50										0.63	
SC8-3	\$10.00	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	2	m2.5-0.45x25mm/ 0.5 Nm (4.4 in lb)	0.39	none
SC8-0	\$5.50										0.10	
SC8-1	\$11.00										0.10	
SC8-5	\$13.50			67	18 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

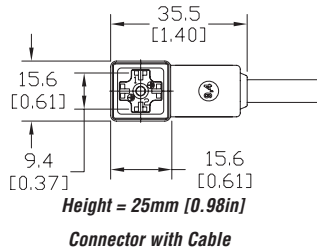
8mm (4-pole) Connectors (per DIN 43650 Form C)												
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
SC8-5T	\$18.50	230	max 6A	67	18 AWG	0.26	yes	none	8	m3-0.5x42mm/ 0.5 Nm (4.4 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

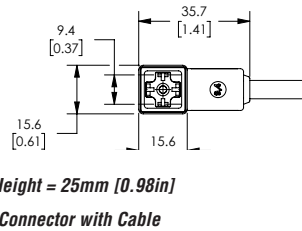
Dimensions shown
mm [inches]



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
SC9-LS24-3	\$12.00	24 ±20%	max 4A	67	18 AWG	0.23	yes	zener diode (D-Z D0-15 47V 2W)	1	m3-0.5x26mm/ 0.4 Nm (3.5 in lb)	0.40	CSA (080128-0-000)
SC9-LS24-5	\$14.50										0.64	
SC9-LS110-3	\$15.00	110 ±10%	max 6A	67	18 AWG	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40	none	
SC9-LS110-5	\$17.50									0.64		
SC9-3	\$10.00	230	max 6A	67	18 AWG	no	none	2	m3-0.5x26mm/ 0.5 Nm (4.4 in lb)	0.40	none	
SC9-5	\$13.50									0.64		

9.4mm Connectors

Dimensions shown
mm [inches]

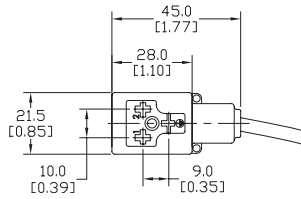


9.4mm (4-pole) Connectors (DIN Style, Form C Industrial)													
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia.	Cable Length	LED	Surge Protection	Wiring Figure	Screw Size/Torque	Weight (lbs)	Agency Approval
7000-94141-6270300	\$14.00	230 VAC/ VDC	max 6A	IP67	18 AWG	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
7000-94141-6270500	\$19.00						16.4ft/5m					0.79	

Solenoid Valve Cables and Connectors

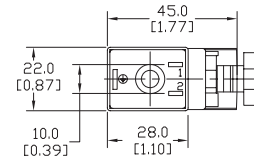
10mm Connectors

Dimensions shown
mm [inches]



Height = 30mm [1.18in]

Connector with Cable



Height = 41mm [1.61in]

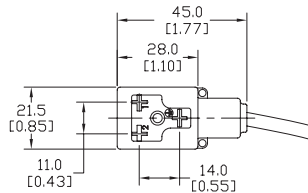
Field Wireable Connector

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	
SC10-LS24-3	\$12.00	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	\$14.50										0.68		
SC10-LS110-3	\$15.00	110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200 2W)	6		0.43		
SC10-LS110-5	\$17.50										0.68		
SC10-3	\$10.00	230	max 10A					no	none		3		0.43
SC10-5	\$13.50												0.68
SC10-LS24-0	\$10.00	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	\$11.00	110 ±10%	max 1A					mov (SIOV S10 K130)	5		0.07		
SC10-0	\$8.25	230	max 10A					no	none		9		0.06

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

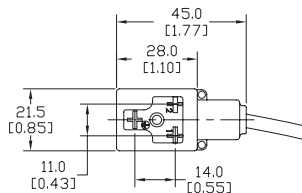
11mm Connectors

Dimensions shown
mm [inches]



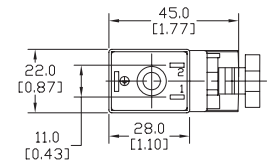
Height = 30mm [1.18in]

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	\$12.00	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	\$14.50										0.67	
SC11-LS110-3	\$15.00	110 ±10%	max 1A					zener diode (D-Z DO-41 ZY200 2W)	6		0.44	
SC11-LS110-5	\$17.50										0.67	
SC11-LS24-3R	\$12.00	24 ±20%	max 4A					zener diode (D-Z DO-15 47V 2W)	10		0.44	
SC11-LS24-5R	\$14.50										0.67	
SC11-LS110-3R	\$15.00	110 ±10%	max 1A	zener diode (D-Z DO-41 ZY200 2W)	6	0.44						
SC11-LS110-5R	\$17.50					0.67						
SC11-3	\$10.00	230	max 10A	no	none	3	0.44					
SC11-5	\$13.50						0.67					
SC11-LS24-0	\$10.00	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	\$11.00	110 ±10%	max 1A					mov (SIOV S10 K130)	5		0.07	
SC11-0	\$8.25	230	max 10A					no	none		9	

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

Solenoid Valve Cables and Connectors Wiring Diagrams

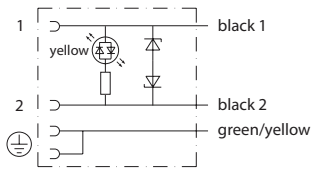


Figure No. 1

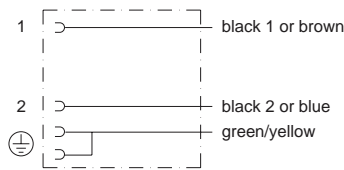


Figure No. 2

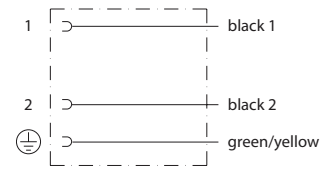


Figure No. 3

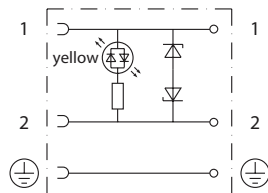


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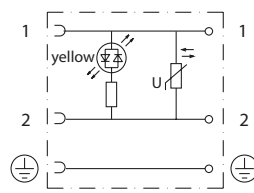


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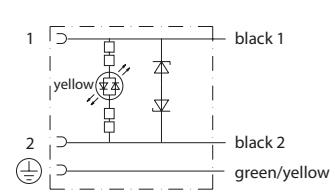


Figure No. 6

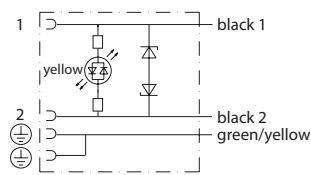


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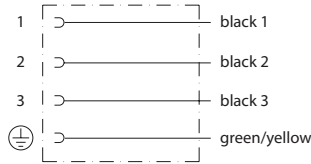


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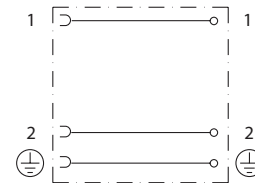


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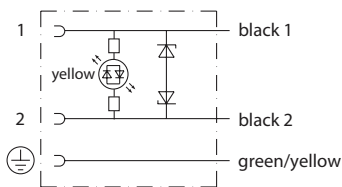


Figure No. 10