

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



Part No. DVP-2CC1C-24A

The NITRA™ DVP-2C and DVP-3C Series valves can be stacked into a multiple output bank of solenoid valves. The DVP-2C and 3C valves feature a fully encapsulated coil, spring compensated plunger seats for long life, and a miniature stackable composite valve body. The advantage to this design is the versatility to stock single units and build, mix, and match to meet specifications. In most cases these valves reduce inventory costs and lower installation costs over a conventional manifold valve series. The coils are available with DIN connectors installed.

## **Features**

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





# Valve

**Symbols** 





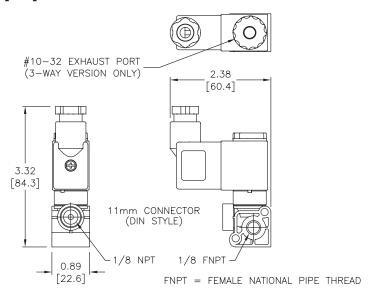
2-way, 2-pos, NC	3-way, 2-pos, N	U											
	DVP-2C & DV	P-3C Series So	lenoid Valve Sp	ecifications									
Model	DVP-2CC1C-24D	DVP-2CC1G-24A	DVP-2CC1C-120A	DVP-3CC1C-24D	DVP-3CC1C-24A	DVP-3CC1C-120A							
Price	\$21.50	\$21.50	\$21.50	\$21.50	\$21.50	\$21.50							
Weight (lbs)	0.3 0.3 0.3 0.3					0.3							
Valve Type	2-way, 2-position 3-way, 2-position												
Acting	Stackable poppet valve, normally closed, spring return												
Port Size		1/8" FNPT											
Orifice Size		0.6" [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]									
<i>Voltage</i> (± 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 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	quired									
Protection			NEMA	Type 4									
Connection				N terminal									
Construction		GI		iton seals; Operator Bra	ass								
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.



## **Dimensions**

## inches [mm]



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

## **Accessories**

	DVP-2C & DVP-3C Series Solenoid Valve Accessor	ies	
Part No.	Description	Price	Weight (lbs)
DVP-2BKT	Mounting kit for DVP-2C & 3C series valves, 2 station. Includes (2) #8-32 x 2 inch screws, (2) #8 lock nuts and (1) Viton o-ring.	\$4.25	0.1
DVP-3BKT	Mounting kit for DVP-2C & 3C series valves, 3 station. Includes (2) #8-32 x 3 inch screws, (2) #8 lock nuts and (2) Viton o-rings.	\$5.75	0.1
DVP-4BKT	Mounting kit for DVP-2C & 3C series valves, 4 station. Includes (2) #8-32 x 4 inch screws, (2) #8 lock nuts and (3) Viton o-rings.	\$7.25	0.1
DVP-5BKT	Mounting kit for DVP-2C & 3C series valves, 5 station. Includes (2) #8-32 x 5 inch screws, (2) #8 lock nuts and (4) Viton o-rings.	\$8.75	0.1
DVP-6BKT	Mounting kit for DVP-2C & 3C series valves, 6 station. Includes (2) #8-32 x 6 inch screws, (2) #8 lock nuts and (5) Viton o-rings.	\$10.50	0.1



Part No. DVP-4BKT

# **Solenoid Valve Cables and Connectors**



#### **8mm Connectors**

Dimensions shown mm [inches]

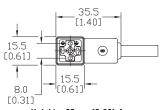




These high quality connectors and over-molded cables help reduce wiring time. The lower voltage models, 24V or 110V AC/DC, include built-in surge suppression, Yellow LED indicator and are rated for connecting with electronics. The 230V AC/DC models are rated for straight wired products. All models are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

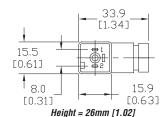
## **Features**

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





Connector with Cable



1161giil = 2011111 [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	\$11.00	24 ±20%						zener diode	1	m2.5- 0.45x25mm/ 0.4 Nm (3.5 in lb) m2.5- 0.45x25mm/ 0.5 Nm (4.4 in lb)	0.40	CSA (080128-0- 000)		
SC8-LS24-5	\$13.00	Z4 ±ZU%	max 4A			0.23	yes -	(D-Z D0-15 47V 2W)	'		0.65			
SC8-LS110-3	\$13.50	110 ±10%		67	18 AWG			zener diode	7		0.41			
SC8-LS110-5	\$16.00	110 ±10 /0						(D-Z D0-41 ZY200 2W)	1		0.63			
SC8-3	\$9.75						no	none	2		0.39	none		
SC8-0	\$5.00	230	max 6A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	gland size 0.20 to 0.24			9		0.10			
SC8-1	\$9.75			0.7	10 000	0.00			2		0.10			
SC8-5	\$12.00			67	18 AWG	0.23					0.68			

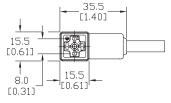
Please note: The above parts are not compatible with the AVP and AVS series valves, which have 11mm DIN plugs.

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	\$17.00	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)		

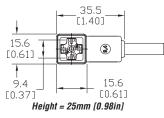
Last digit in part number denotes cable length in meters, a 0 indicates field termination.

# **Solenoid Valve Cables and Connectors**

#### 9.4mm Connectors

Dimensions shown mm [inches]





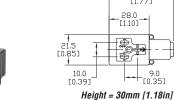
Connector with Cable

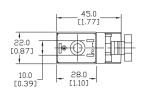
			9.4m	m (3-p	ole) Co	nnectors	(DIN	Style, Form C In	dustrial)			
Part No.	Price	Voltage (AC/DC)	Current Rating		Wire Size	Cable Dia. (in.)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval
SC9-LS24-3	\$11.00	24 ±20%	max 4A			0.23		zener diode	1		0.40	CSA (080128- 0-000)
SC9-LS24-5	\$13.00	24 ±20 %			18 AWG		yes -	(D-Z D0-15 47V 2W)	ı	m3-0.5x26mm/ 0.4 Nm (3.5 in lb)	0.64	
SC9-LS110-3	\$13.50	110 ±10%	IIIax 4A					zener diode	7		0.40	
SC9-LS110-5	\$16.00	110 ±10%		67				(D-Z D0-41 ZY200 2W)	'		0.64	
SC9-3	\$9.75						no		2	m3-0.5x26mm/	0.40	none
SC9-5	\$12.00	230	max 6A					none		0.5 Nm (4.4 in lb)	0.64	

Please note: The above parts are not compatible with the AVP and AVS series valves, which have 11mm DIN plugs. Last digit in part number denotes cable length in meters.

# 10mm Connectors Dimensions shown

mm [inches]





Height = 30mm [1.18in] Height = 41mm [1.61in]

Connector with Cable 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	\$11.00	24 ±20%	max 4A					zener diode	10	m3-0.5x30mm/ 0.4 Nm (3.5 in lb)	0.43	CSA (080128-0-000) none			
SC10-LS24-5	\$13.00	24 ±20%	IIIdX 4A	67			ves	(D-Z DO-15 47V 2W)	10		0.68				
SC10-LS110-3	\$13.50	110 ±10%	max 1A		18 AWG	0.23	yos	zener diode	6		0.43				
SC10-LS110-5	\$16.00	110 ±10%						(D-Z DO-41 ZY200 2W)	0		0.68				
SC10-3	\$9.75	230	max 10A					2020	_		0.43				
SC10-5	\$12.00	230	IIIax IUA				no	none	3		0.68				
SC10-LS24-0	\$9.50	24 ±20%	max 4A		Solid 12 AWG Stranded 14		yes	zener diode (D-Z D0-15 47V 2W)	4	m3-0.5x42mm/	0.07				
SC10-LS110-0	\$10.00	110 ±10%	max 1A	65	AWG w/Ferrule	gland size 0.24 to 0.32		mov (SIOV S10 K130)	5	0.5 Nm (4.4 in lb)	0.07				
SC10-0	\$7.50	230	max 10A		16 AWG		no	none	9	·	0.06				

Please note: The above parts are not compatible with the AVP and AVS series valves, which have 11mm DIN plugs.

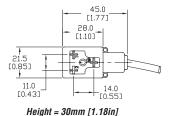
Last digit in part number denotes cable length in meters, a 0 indicates field termination.

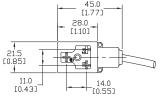
# **Solenoid Valve Cables and Connectors**

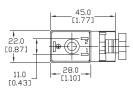
## 11mm Connectors

Dimensions shown mm [inches]









Height = 41mm [1.61in]

Height = 30mm [1.18in]

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Connector with Cable

Reverse Connector with Cable

Field Wireable Connector

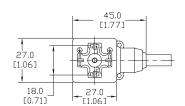
			11mm	(3-pol	e) Connector	s (DIN S	yle,	Form B Indust	rial)							
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval				
SC11-LS24-3	\$11.00	04 000/	44					zener diode	10		0.44					
SC11-LS24-5	\$13.00	24 ±20%	max 4A					(D-Z DO-15 47V 2W)	10		0.67					
SC11-LS110-3	\$13.50	110 +10%	mov 1A				VOC	zener diode	6		0.44					
SC11-LS110-5	\$16.00	110±10%	max 1A					(D-Z D0-41 ZY200 2W)	0		0.67					
SC11-LS24-3R	\$11.00	04 000/	24 ±20%	04 - 000/	04 - 000/	24 . 200/	max 4A	67	18 AWG	0.23	yes	zener diode	10	m3-0.5x30mm/	0.44	CSA (080128-0-
SC11-LS24-5R	\$13.00	24 ±20%	IIIax 4A	] 0/	10 AWG	0.23		(D-Z DO-15 47V 2W)	10	0.4 Nm (3.5 in lb)	0.67	000)				
SC11-LS110-3R	\$13.50	110 ±10%	max 1A					zener diode	6		0.44					
SC11-LS110-5R	\$16.00	110±10%						(D-Z D0-41 ZY200 2W)	0		0.67					
SC11-3	\$9.75	230	may 10A						3		0.44					
SC11-5	\$12.00	230	max 10A				no	none	3		0.67					
SC11-LS24-0	\$9.50	24 ±20%	max 4A		Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG	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					
SC11-LS110-0	\$10.00	110 ±10%	max 1A	65				mov (SIOV S10 K130)	5		0.07					
SC11-0	\$7.50	230	max 10A					none	9	, ,	0.07					

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

## **18mm Connectors**

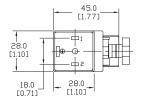
Dimensions shown mm [inches]





Height = 30mm [1.18in]

Connector with Cable



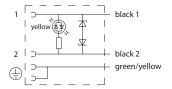
Height = 41mm [1.61in]
Field Wireable Connector

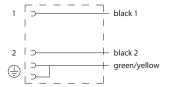
	18mm (3-pole) Connectors (per DIN 43650 Form A)														
Part No.	Price	Voltage (AC/DC)	Current Rating	IP Rating	Wire Size	Cable Dia. (in)	LED	Surge Protection	Wiring Figure	Screw Size/ Torque	Weight (lbs)	Agency Approval			
SC18-LS24-3	\$11.00	04 000/	44					zener diode			0.44				
SC18-LS24-5	\$13.00	24 ±20%	max 4A					(D-Z D0-15 47V 2W)	7		0.69				
SC18-LS110-3	\$13.50	110 .100/	110 .100/	110 ±10%	110 · 100/ may	1A	67	18 AWG	0.23	yes	zener diode	'	m3-0.5x30mm/	0.44	CSA (080128-0-
SC18-LS110-5	\$16.00	110±10%	max 1A	07	10 AWG	0.23		(D-Z DO-41 ZY200 2W)		0.4 Nm (3.5 in lb)	0.69	000)			
SC18-3	\$9.75	230	101					none	0		0.44				
SC18-5	\$12.00	230	max 10A				no		2		0.69				
SC18-LS24-0	\$9.50	24 ±20%	max 4A		0.11.440 AM/O	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				
SC18-LS110-0	\$10.00	110 ±10%	max 1A	65	Solid 12 AWG Stranded 14 AWG w/Ferrule 16 AWG			mov (SIOV S10 K130)	5		0.07	none			
SC18-0	\$7.50	230	max 10A				no	none	9		0.07				

Please note: The above parts are not compatible with the AVP and AVS series valves, which have 11mm DIN plugs.

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

# Solenoid Valve Cables and Connectors Wiring Diagrams





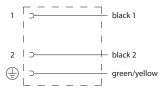


Figure No. 1

Figure No. 2

Figure No. 3

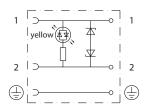


Figure No. 4

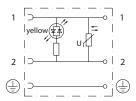


Figure No. 5

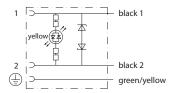


Figure No. 6

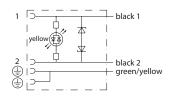


Figure No. 7

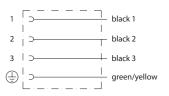


Figure No. 8



Figure No. 9

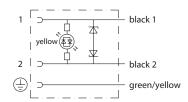


Figure No. 10