

Electronic Vacuum Switch with Digital Display

VDX Series – 2 Switched Outputs



VDXN-QD-6

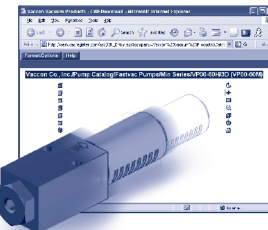
The VDX Series compact all-in-one output device and digital gauge reduces the number of components in your system. With 2 switched outputs it's possible to monitor the high and low limits for vacuum control. In pick & place and robotic material handling applications, use the first switch for part present so that the robot or tooling can move, and the second switch to signal the working vacuum level has been achieved. The VDX Series can be directly mounted to a wide variety of Vaccon pumps. Complete with M8, 4-pin connector.

2 Models Available:

- VDXN-QD-6 (NPN)
- VDXP-QD-6 (PNP)

Accessory Options:

- Cordset with M8, 4-pin female connector with 5M lead wire



On-line Configurator and CAD Drawings @ www.vaccon.com

New powerful design tool saves you time by configuring the pump you need on-line. When complete, simply download the CAD drawing in any one of 13 different CAD formats and insert it right into your design.

**Get the product you need,
in the format you like!**

Ideal Applications:

- Robotic control
- Pick & place
- Part present detection
- Material handling
- Monitoring vacuum
- Leak testing

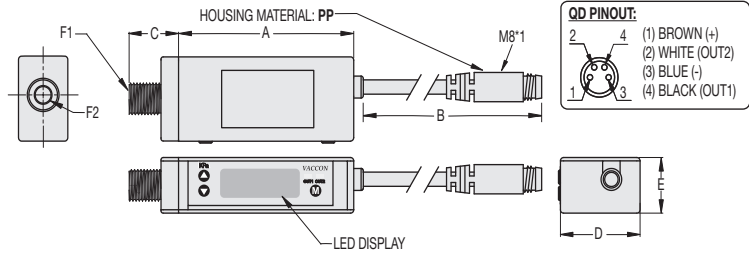
Features/Benefits:

- Fully Programmable – simple push button calibration – no tools required
- 2 switched outputs
- Convenient – standard with M8, 4-pin Quick Disconnect with 6" Pigtail
- Vacuum port – Available with 1/8" NPT w/ 10-32 female, or G 1/8M w/ M5 female fitting
- Full 3 digit display – red LED
- Globally accepted display scales: "Hg, mmHg, PSI, bar, mbar, gf/cm sq, kgf/cm sq, kPa
- Dust and drip proof enclosure to IP65 IEC standards
- RoHS compliant

VDX(N, P)-QD-6 Series Switch/Sensor



VDX Series Switch/Sensor

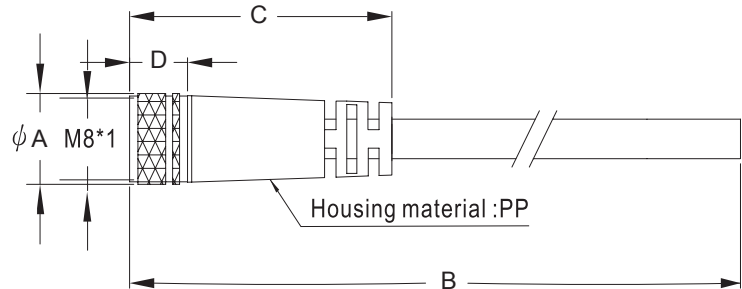


Model #	Dimensions								Weight (with male connection)
		A	B	C	D	E	F1	F2	
VDX(N) (P)-QD-6	in.	2.17	6.0	0.49	0.98	0.65	1/8 NPT	10-32	1.20 oz.
I-VDX(N) (P)-QD-6	mm	55.0	152.4	12.5	25.0	16.5	G 1/8	M5	34.02g

Cordset with M8, 4-Pin Female Connector with 5M Lead Wire

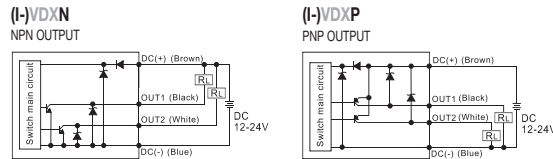


Cordset



Model #	Dimensions					Weight
		A	B	C	D	
QDS-8-4F	in.	0.35	16.4 ft.	1.26	0.28	4.9 oz
	mm	9	5M	32	7	140g

Wiring Schematic for VDX-Series



VDX(N)(P)-QD-6 Series Specifications:

		(I-)VDXN-QD-6	(I-)VDXP-QD-6
Rated Pressure Range:		-101.3 ~ 0.0 kPa (-29.9 ~ 0"Hg)	
Setting Pressure Range:		-101.3 ~ 10.0 kPa (-29.9"Hg ~ 1.45 PSI)	
Withstand Pressure:		300 kPa (43.5 PSI)	
Fluid:		Air, Non-Corrosive Gases, Incombustible Gases	
Set Pressure Resolution	kPa	0.1	
	MPa	—	
	kgf/cm ²	0.001	
	bar	0.001	
	PSI	0.01	
	InHg	0.1	
	mmHg	1	
	mmH ₂ O	0.1	
Power Supply Voltage:		12 to 24VDC ± 10%, Ripple (P-P) 10% or less	
Current Consumption:		≤ 55mA	
Switch Output:		2 NPN open collector Max. load current: 80mA Max. supply voltage: 30VDC Residual voltage: ≤ 1V (load current 80mA)	2 PNP open collector Max. load current: 80mA Max. supply voltage: 24VDC Residual voltage: ≤ 1V (load current 80mA)
Repeatability (Switch Output):		≤ ±0.2% F.S. ±1 digit	
Hysteresis: Hysteresis Mode		Adjustable	
Window Comparator Mode		Fixed (3 digits)	
Response Time:		≤ 2.5ms (chattering-proof function: 24ms, 192ms, and 768ms selections)	
Output Short Circuit Protection:		Yes	
7 Segment LCD Display:		3 digit LED 7 segment display (Sampling rate: 5 times/1 sec.)	
Indicator Accuracy:		≤ ±2% F.S. ±1 digit (ambient temperature: 25 ± 3°C)	
Switch On Indicator:		Green LED (OUT 1) Red LED (OUT 2)	
Environment	Enclosure	IP 40	
	Amb. temp range	Operation: 0~50°C, Storage: -20 ~ 60°C (no condensation or freezing)	
	Amb. humidity range	Operation/Storage: 35 ~ 85% RH (no condensation)	
	Withstand Voltage	1000VAC in 1-min (between case and lead wire)	
	Insulation resistance	50Mohm min. (at 500VDC between case and lead wire)	
	Vibration	Total amplitude 1.5mm, 10Hz-55Hz-10Hz scan for 1 minute, two hours each direction of X, Y, and Z	
	Shock	980m/s ² (100g), 3 times each in direction of X, Y, and Z	
Temperature Characteristic:		≤ ±2% F.S. of detected pressure (25°C) at temp. Range of 0~50°C	
Port Size:		1/8" NPT, G 1/8, 10-32, M5	
Lead Wire:		Oil Resistance cable (0.15M)	
Weight:		Approx. *34g (with male connector)	