

VACUUM SWITCHES

V17

Features and Strengths

Converts adjusted vacuum levels to 2 separate digital outputs
 Digital vacuum level display
 Integrated cable with M8 connector included



Specifications

Model	V17 - PNP open collector	V17 - NPN open collector
Applicable fluid	Air, Non corrosive gases, Incombustible gases	Air, Non corrosive gases, Incombustible gases
Pressure range	-101.3 ~ 0 kPa	-101.3 ~ 0 kPa
Withstand pressure		
Pressure port	M5 female (Nylon material)	M5 female (Nylon material)
Power supply voltage	12 ~ 24 VDC \pm 10%, Ripple (P-P) 10% or less	12 ~ 24 VDC \pm 10%, Ripple (P-P) 10% or less
Power consumption	\leq 55 m A	\leq 55 m A
Output	PNP : open collector 2output Max. load current : 80mA Max. supply voltage : 24VDC Residual voltage : \leq 1V(load current 80mA)	NPN : open collector 2 output Max. load current : 80mA Max. supply voltage : 30VDC Residual voltage : \leq 1V(load current 80mA)
Analog output	Output voltage : 1~5V \leq 2.5%F.S (Within rated pressure range) Linearity : \leq \pm 1% F.S.	
Environment	Repeatability (switch output) Response time	\leq \pm 0.2% F.S. \pm 1digit \leq 25ms - Chattering-proof function : 24ms - 192 and 768ms selections
	Protection structure	IP40
	Operating ambient temp.($^{\circ}$ C)	Operation : 0 $^{\circ}$ C ~ 50 $^{\circ}$ C (No condensation or freezing) Storage : -20 $^{\circ}$ C ~ 60 $^{\circ}$ C (No condensation or freezing)
	Operating humidity	Operation / Storage : 35 ~ 85% RH (No condensation)
	Vibration resistance	Total amplitude 1.5mm 10Hz-55Hz-10Hz scan for 1minute Two hours each direction of X, Y and Z
	Shock resistance	980 m/s ² (100G), 3 times each in direction of X, Y and Z
Temperature characteristic	\leq \pm 2% F.S. of detected pressure (25 $^{\circ}$ C) at temp. Range	
Hysteresis mode	Adjustable	
Window comparator mode	Fixed (3digit)	
Indicator accuracy	\leq \pm 2% F.S. \pm 1 digi (ambient temp. : 25 \pm 3 $^{\circ}$ C)	
Cable	Oil-resistance cable (0.15mm ²)	

Build an Ordering No.

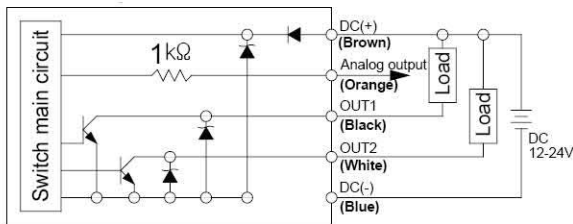
2. Output type

V17 -  3. Analog output & Cable

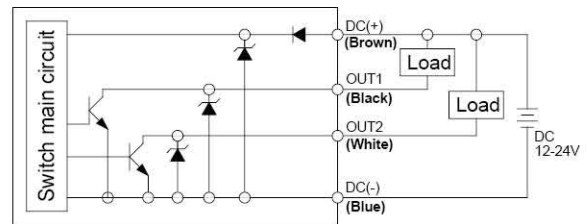
1. Vacuum switch

1. Vacuum switch	Description	Ordering No.
	Vacuum switch V17, LED-display	V17
2. Output type	Description	Ordering No.
	NPN open collector	Blank
	PNP open collector	P
3. Analog output & Cable	Description	Ordering No.
	No analog supply, M8 4-Pin male connector	C
	No analog supply, Grommet type 4-Core 2m lead wire	G
	Analog supply, Grommet type 5-Core 2m lead wire	GA

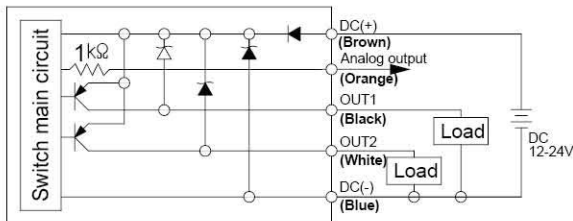
Circuit diagram



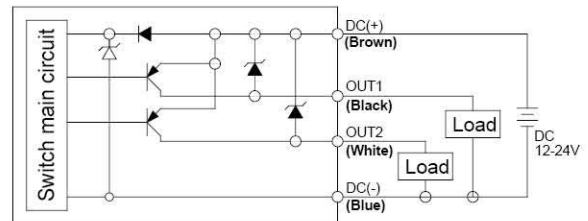
[V17-C & V17-G / NPN output]



[V17-GA / NPN output]



[V17-PG / PNP output]



[V17-PGA / PNP output]

Dimensions

[Unit : mm]

