

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



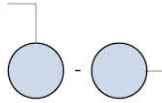
Specifications

| 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 -

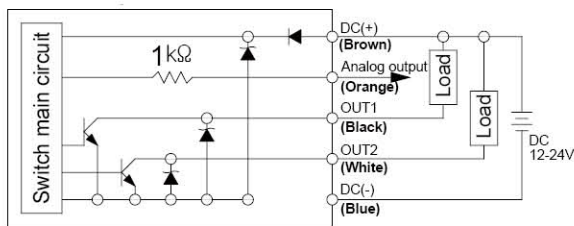


3. Analog output & Cable

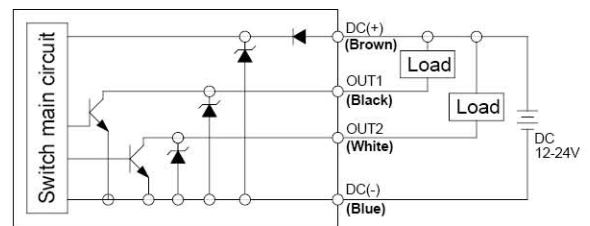
1. Vacuum switch

| 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 |

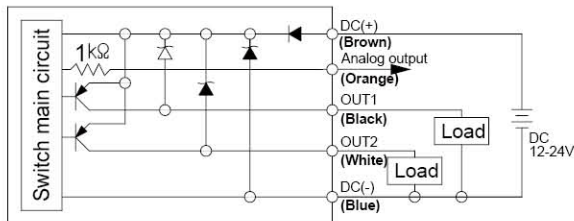
Circuit diagram



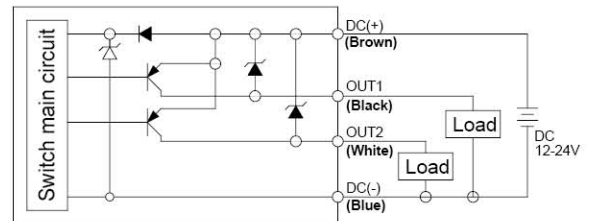
[V17-C & V17-G / NPN output]



[V17-GA / NPN output]



[V17-PG / PNP output]



[V17-PGA / PNP output]

Dimensions

[Unit : mm]

