

VACUUM SWITCHES

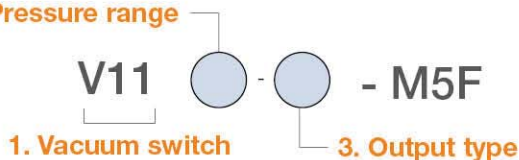
V11

I Specifications

Model		V11P	V11V	V11C
Rated pressure range		0.000 ~ 1.000 MPa	0.0 ~ 101.3 kPa	-100.0 ~ 100.0 kPa
Setting pressure range		-0.100 ~ 1.000 MPa	10.0 ~ 101.3 kPa	-101.0 ~ 101.0 kPa
Withstand pressure		1.5 MPa	500 kPa	500 kPa
Fluid		Filtered air, Non-corrosive / Non-flammable gas		
Set pressure resolution	kPa	-	0.1	0.1
	MPa	0.001	-	-
	Kgf/cm ²	0.01	0.001	0.001
	bar	0.01	0.001	0.001
	psi	0.1	0.01	0.01
	inHg	-	0.1	0.1
	mmHg	-	1	1
Power supply voltage		12 to 24V DC±10%, Ripple (P-P) 10% or less		
Current consumption		≤ 40mA (With no load)		
Switch output	Output type	2 NPN or 2 PNP open collector		
	Max. load current	125 mA		
	Max. supply voltage	30V DC (at NPN output), 24V DC (at PNP output)		
	Residual voltage	≤ 1.5V		
	Response time	≤ 2.5ms (chattering-proof function : 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms selections)		
	Output short circuit protection	Yes		
Analog output	Voltage output	Voltage Impedance	1 ~ 5V (±2.5%) About 1Ω	
	Linearity	±1% F.S.		
Display	LED display	4 digit, 7 segment (red)		
	Switch ON indicator	OUT 1 red / OUT 2 green		
	Updates time	About 0.2s		
	Indicator accuracy	±2% F.S. ±1 digit (ambient temperature : 25±3°C)		
Repeatability (Switch output)		±0.2% F.S. ±1 digit		
Environment	Enclosure	IP40		
	Operation ambient temp. range	0 ~ 50°C		
	Storage ambient temp. range	-10 ~ 60°C (No condensation or freezing)		
	Ambient humidity range	35 ~ 85% RH (No condensation)		
	Withstand voltage	1000V AC in -1min (between case and lead wire)		
	Insulation resistance	500MΩ (at 500V DC, between case and lead wire)		
	Vibration	Total amplitude 1.5mm or 10G, 10Hz-55Hz-10Hz scan for 1minute, two hours each direction of X, Y and Z		
	Shock	980m/s ² (10G), 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		M5		
Lead wire		26AWG, UL AWM 20276, 1000mm		
Weight		34.5g (with 1 meter lead wire)		

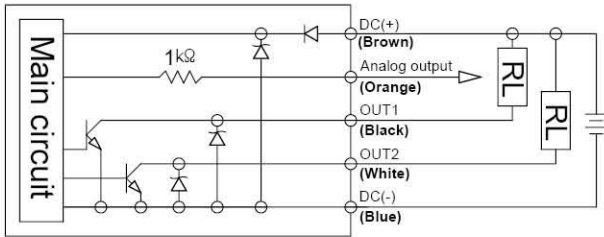
I Build an Ordering No.

2. Pressure range

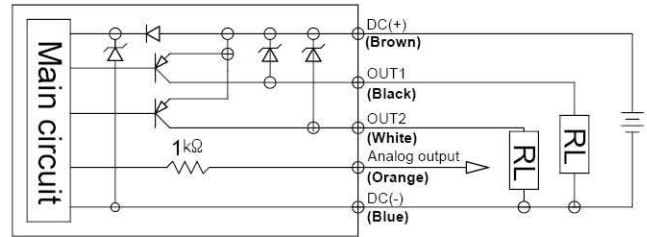


1. Vacuum switch	Description	Ordering No.
	Vacuum switch V11, Digital switch	V11
2. Pressure range	Description	Ordering No.
	Positive pressure	P
	Negative pressure	V
	Compound pressure	C
3. Output type	Description	Ordering No.
	2 NPN + Analog (voltage) output (1~5V)	010
	2 PNP + Analog (voltage) output (1~5V)	030

Circuit diagram



[NPN output + Analog output (1~5V)]



[PNP output + Analog output (1~5V)]

Dimensions

[Unit : mm]

