

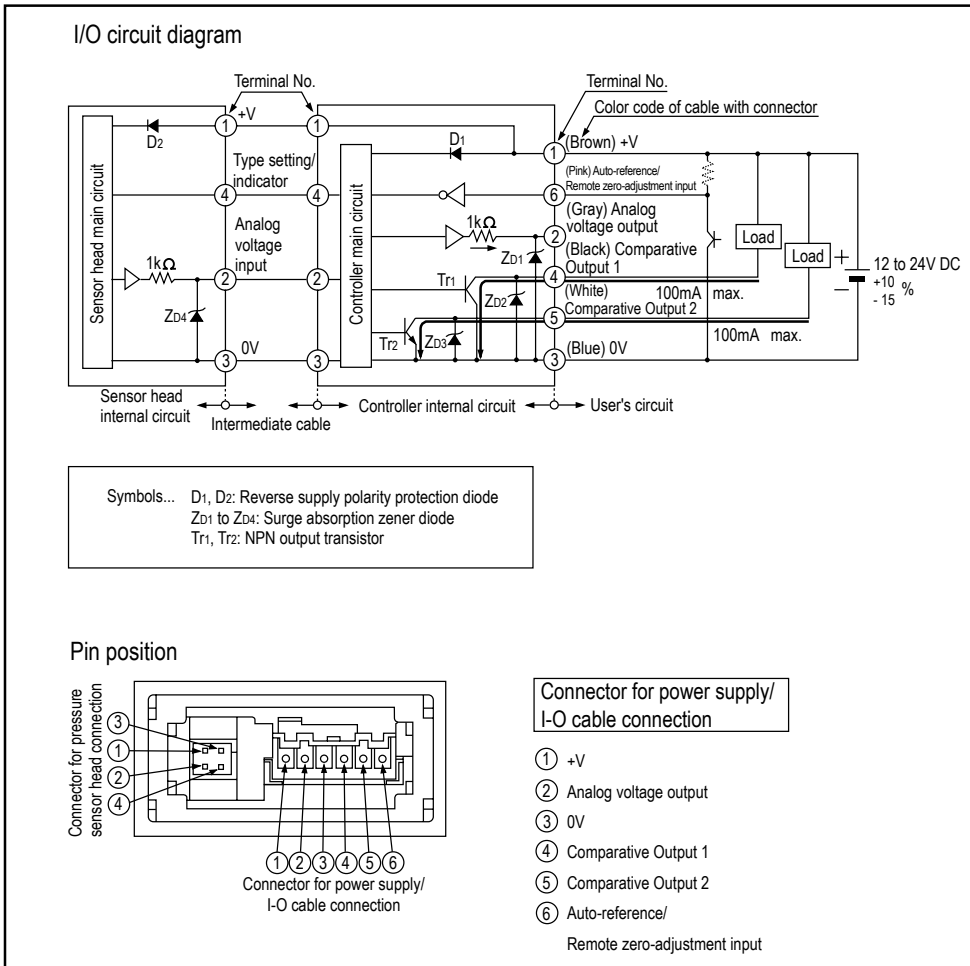
A-PSE5 Series Digital Switch

The A-PSE5 Series Digital Switch offers independent use of vacuum / pressure switch head. Data can be controlled by taking the analog voltage output (1 to 5V) from the sensor head and feeding it to a digital panel meter. Mounting the detachable head close to the detecting section minimizes piping and enables response time of 1ms, the fastest in the industry, as well as greatly decreasing tact time delay. In addition, the ultra-small and light-weight design of the head means it can easily be mounted on moving sections.

Features:

- 1ms Response - Fastest in the Industry
- Detachable Head
- Switch Head with operation Indicator
- Convenient Intermediate Cable
- Easy Mounting, Mobile Pressure Port
- Two Types of Output, NPN and PNP - for Worldwide Use

ANVER Item No.	Description
A-PSE511-01	Vacuum / Pressure Switch Head
A-PSE5	Vacuum / Pressure Switch Controller
A-PS5-CC3	Standard Intermediate Cable: 3m



Specification for A-PSE5 Series Digital Switch appear on the subsequent pages.



Vacuum System Accessories

Vacuum and Pressure Switches

Specifications for A-PSE511-01 Vacuum / Pressure Switch Head

Vacuum Pressure	-101kPa type	
Rated Pressure Range (Note 1)	0 to -101.3kPa	
Pressure Withstandability	500kPa	
Applicable Fluid	Non-Corrosive Gas	
Supply Voltage	12 to 24 DC +10% to -15% Ripple P-P 10% or less	
Current Consumption	15mA or less (operation indicator off) / 17mA or less (operation indicator on)	
Analog Voltage Output	Output Voltage:	1 to 5V (over pressure range)
	Zero Point:	within 1V±2%F.S. (vacuum/positive pressure type) within 3V±3%F.S. (compound pressure type)
	Span:	within 4V±3.5%F.S.
	Linearity:	within ±1%F.S.
Environmental Resistance	Output Impedance:	1k ohm approx.
	Pollution Degree	3 (Industrial Environment)
	Protection	IP40 (IEC)
	Ambient Temperature	0 to +50°C (No Dew Condensation), Storage: -10 to +60°C
	Ambient Humidity	35 to 85% RH, Storage: 35 to 85% RH
	EMC	Emission: EN50081-2, Immunity: EN50082-2
	Voltage Withstandability	1,000V AC for one min. between all supply terminals connected together and enclosure
Environmental Resistance	Insulation Resistance	50M ohm, or more, with 500V DC megger
	Vibration Resistance	10 to 500Hz frequency, 3mm amplitude, or 5G in X, Y and Z directions for two hours each
	Shock Resistance	1,000m/s ² Acceleration in X, Y and Z direction for three times each
	Operation indicator	Orange LED light
Temperature Characteristics	Over Ambient Temperature Range +10 to +40°C:	within ±1%F.S. of detected pressure at +25°C
	Over Ambient Temperature Range 0 to +50°C:	within ±3%F.S. of detected pressure at +25°C
Voltage Characteristics	Within ±0.5%F.S. for ±10% fluctuation of the supply voltage	
Pressure Port	A-PSE11-01 NPT 1/8 male thread / 10-32UNF female thread	
Material	Enclosure: PBT, Pressure Port: Brass (nickel plated)	
Connecting Method	Connector	
Cable	0.2mm ² 4-core connector attached oil resistant cabtyre cable, 100mm long	
Cable Extension	Extension up to total 10m is possible with 0.3mm ² , or more, cable	
Weight	10g approx.	

6060201 ➔ This spec sheet was adapted for print from our website. Additional information and photos are available at www.anver.com.

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Vacuum System Accessories



Vacuum and Pressure Switches

Specifications for A-PSE5 Vacuum / Pressure Switch Controller

PNP Output Type	PSE5	
Rated Pressure Range (Note 1)	Vacuum Pressure: 0 to -101.3kPa	
Set Pressure Range (Note 1)	Vacuum Pressure: 101.3kPa (1.033 to -1.033kgf/cm ² , 14.70 to -14.70psi, 1.013 to -101.3bar, 760 to -760mmHg, 29.9 to -29.9inHg)	
Supply Voltage/Current Consumption	12 to 24 DC +10% to -15% Ripple P-P 10% or less / 60mA or less (not including pressure sensor head)	
Sensor Supply Voltage	Same as Supply Voltage	
Comparative Output (Comparative Output 1 Comparative Output 2)	PNP Open-Collector Transistor (2 outputs) <ul style="list-style-type: none"> • Maximum source current: 100mA • Applied Voltage: Same as supply voltage (between comparative output and +V) • Residual Voltage: 2V or less (at 100mA source current) 	
Utilization Category	DC-12 or DC-13	
Output Operation	NO/NC, selectable by key operation	
Output Modes	Equipped with 4 types of modes: hysteresis mode, window comparator mode, leak test mode, forced output mode (selectable by key operation)	
Hysteresis	1 digit (however, set response time is +2ms when auto-reference/remote zero-adjustment input is applied)	
Repeatability	Vacuum/positive pressure type sensor head: within ±0.2%F.S. ±1 digit (±3 digits)	
Response Time	1ms, 16ms, 128ms, 512ms, or less, selectable by key operation (however, set response time is ±2ms when auto-reference/remote zero-adjustment input is applied)	
Short-Circuit Protection	Incorporated	
Input	Pressure Sensor Head Input	Input Voltage Range: 1 to 5V DC (over rated pressure range)
	Auto-Reference/Remote Zero-Adjustment Input	Input Condition: PNP non-contact input [operates in High (rise) state] Signal Condition: High... 5 to 30V, Low... 0.4V or less, or open, High Level Input Time... 2ms or more
Analog Voltage Output	<ul style="list-style-type: none"> • Output Voltage: 1 to 5V DC (over rated pressure range) • Zero Point: within 1V ±2.5%F.S. (vacuum/positive pressure type) within 3V ±3.5%F.S. (compound pressure) • Span: within 4V ±4%F.S. • Linearity: within ±1%F.S. • Output Impedance: 1k ohm approx. 	
Display	3½ digit LCD Display (with red and green backlight) (Display refresh cycle: 256ms, 512ms, or 1024ms selectable by key operation)	
Displayable Pressure Range	Vacuum Pressure: 5.1 to -101.3kPa (0.052 to -1.033kgf/cm ² , 0.74 to -14.70psi, 0.05 to -1013bar, 38 to -760mmHg, 1.5 to -29.9inHg)	
Operation Display	LCD Segment is red when comparative output is ON, and green when it is OFF (output is selected via supplementary settings)	
Analog Bar Display	Bar Display in steps of 14% F.S. approx.	
Operation Indicator	Orange LED (lights up when comparative output is ON), green LED (lights up when comparative output 2 is ON)	

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Vacuum System Accessories

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Specifications for A-PSE5 Vacuum / Pressure Switch Controller (Cont.)

Environmental Resistance	Pollution Degree	3 (Industrial Environment)
	Protection	IP40 (IEC)
	Ambient Temperature	0 to +50°C (No dew condensation), Storage: -10 to +60°C
	Ambient Humidity	35 to 85% RH, Storage: 35 to 85% RH
	EMC	Emission: EN50081-2, Immunity: EN50082-2
	Voltage Withstandability	1,000V AC for one min. between all supply terminals connected together and enclosure
	Insulation Resistance	50M ohm, or more, with 500V DC megger between all supply terminals connected together and enclosure
	Vibration Resistance	10 to 150Hz frequency, 0.75mm amplitude, or 5G in X, Y and Z directions for two hours each
	Shock Resistance	100m/s ² Acceleration in X, Y and Z directions for three times each
Temperature Characteristics	Over Ambient Temperature Range 0 to +50°C: within ±0.5%F.S. of detected pressure at +25°C (not including pressure sensor head)	
Material	Front Case: ABS, LCD display section: PET, Rear case: PBT	
Connecting Method	Connector	
Suitable Cable	Conductor Cross-Section Area (Note 2)	0.16 to 32mm ² (AWG#25 to #22)
	Lead Wire Diameter	ø1.2 to ø1.8mm
	Wire Material	Tin plated, soft, twisted, copper wire
Cable Extension	Extension up to total 100m is possible with 0.3mm ² , or more, cable	
Weight	20g approx.	