

Compact Pressure Sensor 11 Series

Compact Sensor heads for Positive/Negative pressure (Switch output and analog output types)

Safety instructions for this product

Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) Type

Code	SEU	VUS
Type	Positive pressure sensor	Negative pressure sensor

(2) Display type

1 1: Without display

(3) Connecting port type and size

Code	Union		Plug-in		Male thread	
	Tube O.D. (mm)		Push-in fitting size (mm)		Metric thread	Taper pipe thread
Code	4U ^(*)	6U ^(*)	4	6	M5 ^(**)	O1
Size	ø4	ø6	ø4	ø6	M5×0.8	R1/8

*1 Union type comes with a mounting bracket.

*2 The gasket of Metric thread is SUS304 + NBR.

(4) Output type

Code	A	AR	S	SR
Output type	Analog output	Compound press. type/ Analog output	NPN open collector	Compound press.type/ NPN open collector

* Compound press. type: "AR" and "SR" are available with VUS11 type only.

(5) -S3 spec. (Metal option)

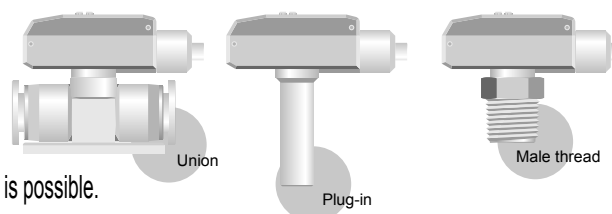
Code	No code	-S3 ^(*)
Metal material	Standard spec.	No copper-based metallic material used in flow paths.
Seal rubber material	Standard spec.	HNBR or FKM

*-S3 specification is applied only to air path part and not corresponding to electronic parts or electrical wires.

Characteristics

■ Compact pressure sensor (Width: 10mm, Length: 24.5mm)

■ Three types of pressure port configuration



■ With use of an separate type indicator, separation of sensor head and the indicator is possible.

*Use an analog output type display.

■ 3 types of pressure range and 2 types of output spec. result in 6 types.

Positive, Negative and Compound pressure type for pressure range. Switch output and analog output type for output spec.

■ 3 m is standard length for a cable.

● -S3 spec. (Optional) * For air path parts only.

■ No copper-based metallic material used in flow paths.

■ HNBR or FKM, which are good in ozone resistance, is used for seal rubber.

Related product



Indicator for Analog output sensor

► P.188

Specifications

■ Switch output type

Specifications	SEU11	VUS11	VUS11-R
Fluid medium	Air, Inert gas		
Pressure detection	Diffused metaloxide semiconductive pressure switch		
Power supply	VDC 10.8 to 30 ripple included.		
Power consumption	20 mA or less (no-load at 24VDC)		
Operating pressure range	0 to 1 MPa	-100 to 0 kPa	-100 to 300 kPa
Proof pressure	1.5 MPa	200 kPa	600 kPa
Storage temperature range	-20 to 70°C (Atmospheric pressure, Humidity 60% or less)		
Operating temperature range	0 to 60°C (No freezing)		
Operating humidity pressure	35 to 85%RH (No dew condensation)		
Protective structure	IP40 equiv.		
Switch output	No. of press. setting	1	
	Switch output	NPN open collector output: 30 V 80 mA max., Residual voltage 0.8 V max.	
	Operation indicator	N.O. (Red LED turns on when pressure is above setting.)	
	Hysteresis	Fixed (2% F.S. max.)	
	Operating accuracy	±3%F.S. max. (standard ref. temp. at 25 °C)	
	Response	About 1msec.	
	Press. setting range	0 to 1 MPa	-100 to 300 kPa

■ Analog output type

Specifications	SEU11	VUS11	VUS11-R
Fluid medium	Air, Inert gas		
Pressure detection	Diffused metaloxide semiconductive pressure switch		
Power supply	VDC 10.8 to 30 ripple included.		
Power consumption	20 mA or less (no-load at 24VDC)		
Operating pressure range	0 to 1 MPa	-100 to 0 kPa	-100 to 300 kPa
Proof pressure	1.5 MPa	200 kPa	600 kPa
Storage temperature range	-20 to 70°C (Atmospheric pressure, Humidity 60% or less)		
Operating temperature range	0 to 60°C (No freezing)		
Operating humidity pressure	35 to 85%RH (No dew condensation)		
Protective structure	IP40 equiv.		
Analog output	Output voltage	1 to 5V	
	Zero-point voltage	1±0.1V	
	Voltage at max. press.	5±0.1V	
	Output current	1mA max. (Load resistance: 5kΩ)	
	Temp. characteristics	±2%F.S. max. (standard ref. temp. at 25 °C)	
	Linearity	±0.5%F.S. max. (standard ref. temp. at 25 °C)	

RoHS2 (2011/65/EU+EU2015/863) compliant

Switch output type

Type	Model code	Type	Model code	Type	Model code
Union  SEU Positive VUS Negative	SEU11-4US ^⑤	Plug-in  SEU Positive VUS Negative	SEU11-4S ^⑤	Male thread  SEU Positive VUS Negative	SEU11-M5S ^⑤
	SEU11-6US ^⑤		SEU11-6S ^⑤		SEU11-01S ^⑤
	VUS11-4US ^⑤		VUS11-4S ^⑤		VUS11-M5S ^⑤
	VUS11-6US ^⑤		VUS11-6S ^⑤		VUS11-01S ^⑤
	VUS11-4USR ^⑤		VUS11-4SR ^⑤		VUS11-M5SR ^⑤
	VUS11-6USR ^⑤		VUS11-6SR ^⑤		VUS11-01SR ^⑤

Analog output type

Type	Model code	Type	Model code	Type	Model code
Union  SEU Positive VUS Negative	SEU11-4UA ^⑤	Plug-in  SEU Positive VUS Negative	SEU11-4A ^⑤	Male thread  SEU Positive VUS Negative	SEU11-M5A ^⑤
	SEU11-6UA ^⑤		SEU11-6A ^⑤		SEU11-01A ^⑤
	VUS11-4UA ^⑤		VUS11-4A ^⑤		VUS11-M5A ^⑤
	VUS11-6UA ^⑤		VUS11-6A ^⑤		VUS11-01A ^⑤
	VUS11-4UAR ^⑤		VUS11-4AR ^⑤		VUS11-M5AR ^⑤
	VUS11-6UAR ^⑤		VUS11-6AR ^⑤		VUS11-01AR ^⑤

 CAD data is available at PISCO website.

 Packaging specifications
1 pc. /bag

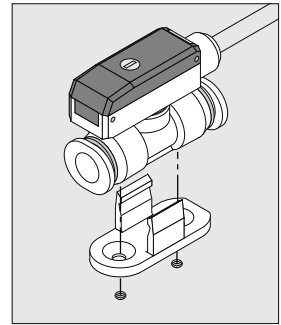
 Options
⑤ : -S3 ⇒ S3 spec.
* Material of gasket for S3 spec. is POM.

■ How to fix the body

Fixing Compact Pressure Sensor (Union type)

Use the fixing holes in the mounting bracket for Compact Pressure Sensor and fix with the included M3 screws.

(Refer to the dimensional drawings of Compact Pressure Sensor Union type for the hole pitch under Type & Price List on PISCO website. (<https://www.pisco.co.jp/en/product/p/p05/>))



Refer to the user's manual for the handling method.