

COMPACT PRESSURE SENSOR

DATA SHEET

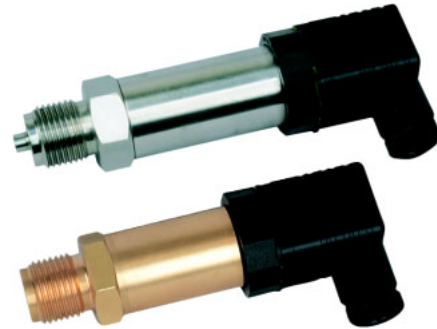
FCK

The compact pressure sensor measures the pressure or absolute pressure of liquids, gases or steam, and outputs a current signal.

A compact and simple structure procures high reliability and long-term stability. The instrument can be mounted on any of general industrial facilities, and is best suited for automation, labor-saving, efficient operation, etc. of equipment.

FEATURES

1. **Compact and simple structure facilitating an installation**
The structure is compact, lightweight and simple. Mounting is easy with direct screwing-in requiring no fixtures.
2. **Abundant range of products**
Pressure sensors and absolute pressure sensors are available. Current output is usable. The pressure measuring range includes very low to high pressure. All these features destine the instruments to different applications.
3. **Coping with environmental conditions**
The dust and water-proof structure complies with IEC IP65.



SPECIFICATIONS

Measuring principle:

FCK23 (pressure measurement);
Strain gauge
FCK33 (pressure measurement);
Strain gauge

Measuring range:

See Table 1
Accuracy: FCK23; $\pm 0.5\%$ of full span (typical at 25°C)
FCK33; $\pm 0.25\%$ of full span (typical at 25°C)

Stability: FCK23; 0.3% of full span/year for any of zero and span
FCK33; 0.25% of full span/year for any of zero and span

Temperature effect:

FCK23; 0.3%/10°C full span
FCK33; 0.25%/10°C full span

Material:

Type	Diaphragm	Process connection	O-ring	Case	Plug, connector
FCK23	Ceramic	Brass	Viton	Brass	Plastic
FCK33	SUS316	SUS316	Viton	SUS316	Plastic

Mass: FCK23; About 0.2 kg
FCK33; About 0.25 kg

Output signal: 4 to 20 mA DC (two-wire system)

99% response time:

0.1 sec max.

Power supply: 10 to 36 V DC

Permissible load resistance:

700 Ω max. at source voltage 24 V DC

Ambient temperature:

-25 to +85°C

Storage temperature:

-50 to +100°C

Fluid temperature:

-30 to +120°C

Housing: Dust and water-proof (IP65)

Dimensions: See outline diagram

Mounting method: Direct screwing-in

Process connection:

FCK23; G1/2A (male thread) and G1/8A (female thread)

FCK33; G1/2A (male thread) only

Output signal wiring:

M3 screw terminal (crimp terminal M3 x 1.25)

Table 1 Measuring range (fixed)

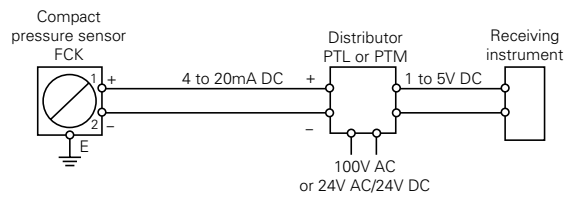
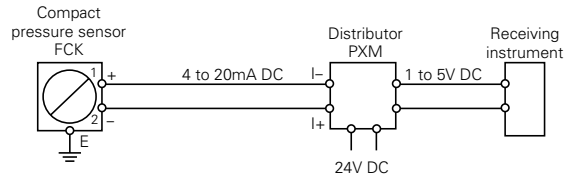
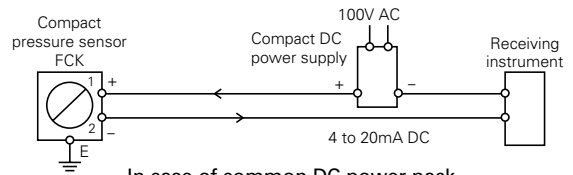
Permissible over-pressure in ()

Type	Pressure measuring range
FCK23	0 to 1.6 (3.2), 0 to 2.5 (5) MPa
FCK33	0 to 600 (1200) kPa 0 to 1 (2), 0 to 1.6 (3.2), 0 to 2.5 (5) MPa 0 to 4 (8), 0 to 6 (12), 0 to 10 (20) MPa

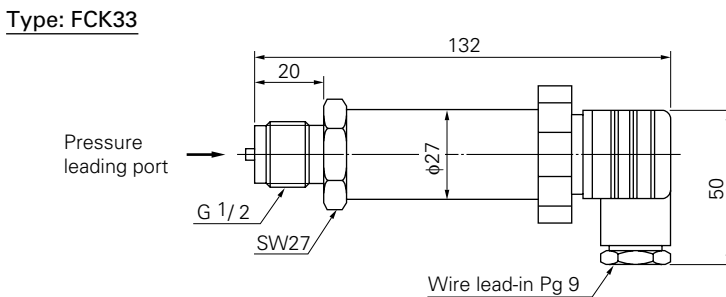
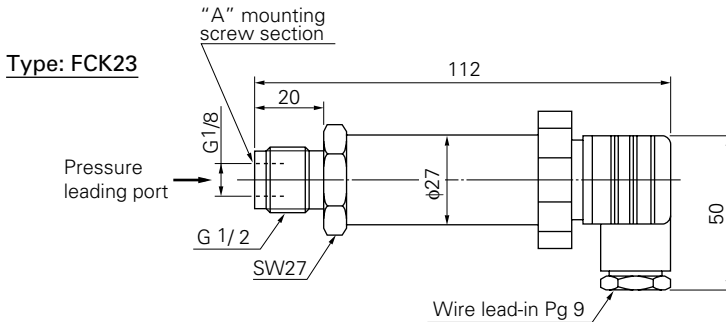
CODE SYMBOLS

Digit	Description	Note	4	5	6	7	8	9	10
4	Measuring range	<Pressure sensor, accuracy 0.5%> 0 to 1.6MPa	2	3	C	B			
5		0 to 2.5MPa	2	3	C	D			
6		<Pressure sensor, accuracy 0.25%> 0 to 600kPa	3	3	B	G			
7		0 to 1.0MPa	3	3	C	A			
		0 to 1.6MPa	3	3	C	B			
		0 to 2.5MPa	3	3	C	D			
		0 to 4.0MPa	3	3	C	E			
		0 to 6.0MPa	3	3	C	G			
		0 to 10MPa	3	3	D	A			
8	Revision No.						1		
9	Output signal	4 to 20 mA DC (two-wire system)						1	
10	Option	None							Y

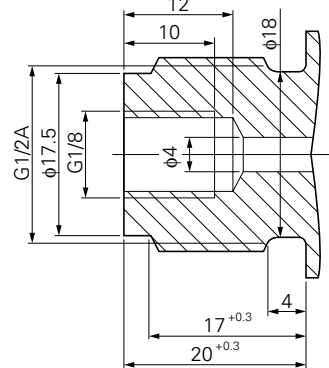
Examples of configuration according to power supplies



OUTLINE DIAGRAM (Unit : mm)



Detail of "A" mounting screw section



⚠ Caution on Safety

*Before using this product, be sure to read its instruction manual in advance.

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