

Pressure Sensor

E8MS/E8M

Four-channel Pressure Sensor Offering Versatile Functions and High Precision Without Errors

- The industry's smallest pressure sensor, compact, lightweight - ideal for robot arms or other moving components
- A highly sensitive minute-pressure sensor model detects very small differences in air pressure
- No wiring conduit required - can be located for sensing in small places
- Simple display panel for efficient space-saving, though, providing large LEDs
- Easy sensitivity adjustment using the teach function and channel-to-channel copy function



Ordering Information

Sensors

Sensors

E8MS

Pressure range		Output form	Model
Positive pressure	0 to 100 kPa	Linear output 1 to 5 V	E8MS-01
	0 to 1 MPa		E8MS-10
Negative pressure	0 to -101 kPa		E8MS-N0

E8M

Pressure range		Output form	Model
Minute differential pressure sensor	Differential pressure from 0 to 1,000 Pa (0 to 0.145 psi) between positive and negative ports	Linear output 1 to 5 V	E8M-A1
Positive pressure	0 to 1 MPa		E8M-10
Negative pressure	0 to -101 kPa		E8M-N0



Controller

Supply voltage	Output form	Number of sensor inputs	Model
24 VDC	NPN open collector	4	K3C-MP8-T1Z
		2CH	K3C-DP8-T1Z

Note: 1 ch model available.


Accessories (Order Separately)

Sensor I/O Connectors

Applicable type	Shape	Model	Specifications	Quantity	Remarks
E8M		E89-M3 (see note)	4-pin connector with 3 m long cable	1	Supplied with one XS8A-0442 Pin Controller Connector
E8MS		E89-M4	3-pin connector with 3 m long cable		

Note: E8M-A1 does not require the Sensor I/O Connector.

Pin Controller Connector


Shape	Model	Fitting conductors size (mm)	Quantity	Minimum order unit	Remarks
	XS8A-0442	0.14 to 0.2	1	10	E89-M3 and E89-M4 supplied with one XS8A-0442 each

Note: Orders are accepted in multiples of the minimum order unit.

Power and output connector


Model	Specifications	Quantity
K32-MP2W	7-pin connector with 2-m-long cable	1

Adapter


Shape	Model	Quantity	Minimum order unit	Remarks
	Y92F-30	1	10	One Adapter is attached to the K3C Controller.

Note: Orders are accepted in multiples of the minimum order unit.

Soft Cover

Shape	Model
	Y92A-48F1

Hard Cover

Shape	Model
	Y92A-48

Sensor and Controller Combinations

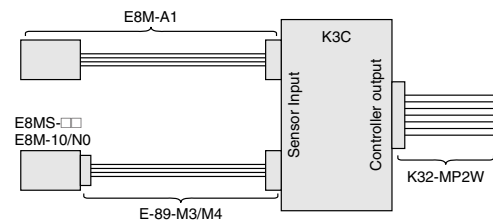
Use the Pressure Controllers in the following combinations.

The E89-M3/M4 is required when using the Sensor as a single unit.

Model	E89-M3	E89-M4	K3C-MP8-T1Z K3C-DP8-T1Z	K32-MP2W
E8MS-01	X	O	O	O
E8MS-10	X	O	O	O
E8MS-N0	X	O	O	O
E8M-A1	X	X	O	O
E8M-10	O	X	O	O
E8M-N0	O	X	O	O

O: Required; X: Not required.

Sensor and Controller Connection

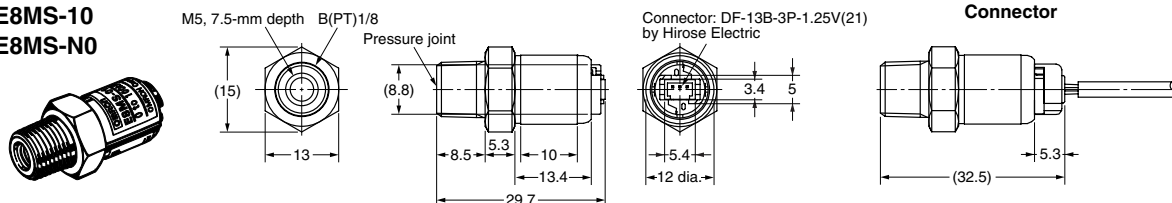


Dimensions (Unit: mm)

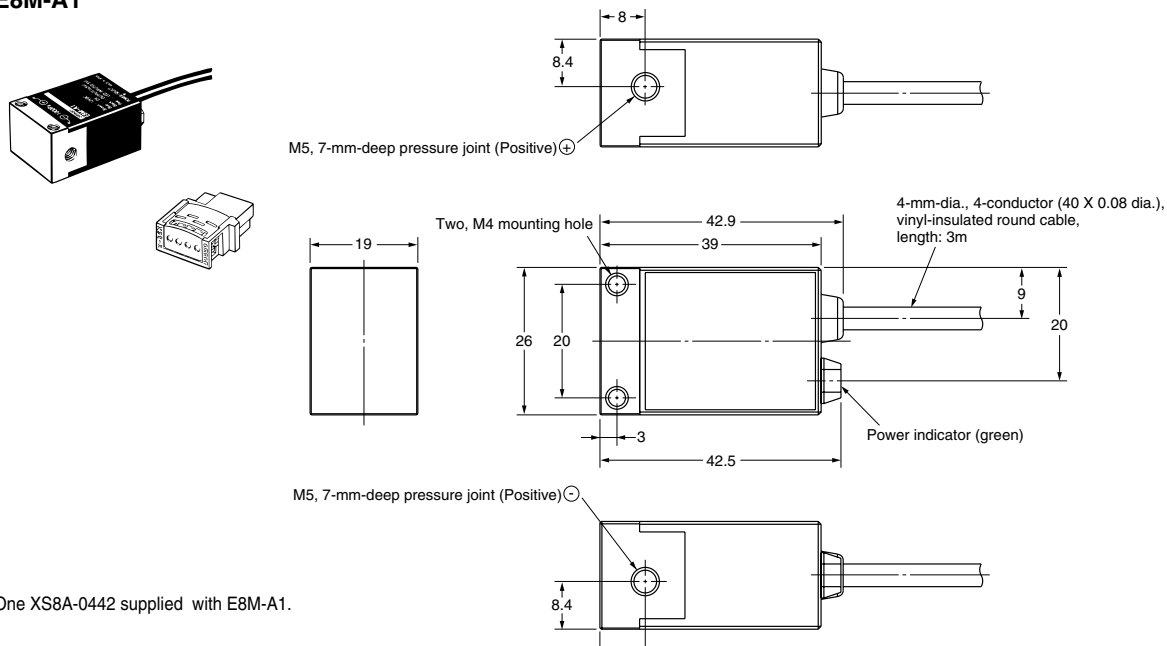
Sensors

Sensors

E8MS-01
E8MS-10
E8MS-N0

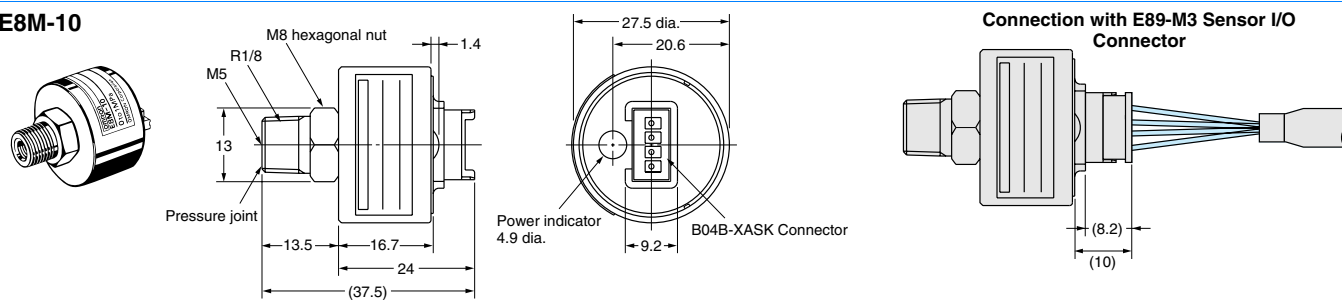


E8M-A1

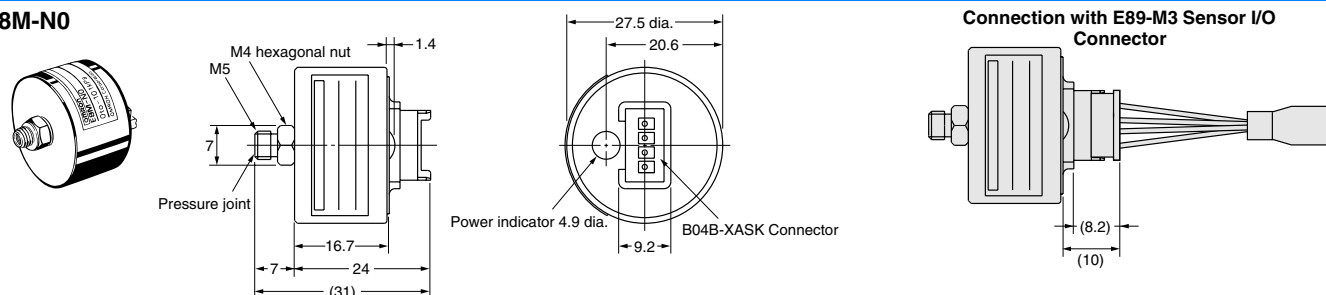


One XS8A-0442 supplied with E8M-A1.

E8M-10

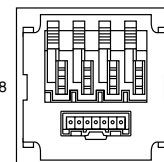
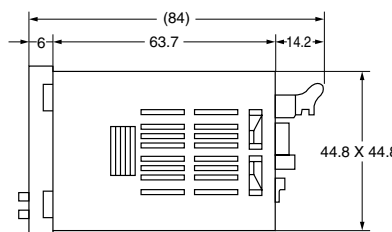
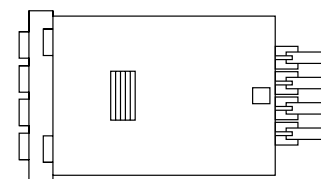
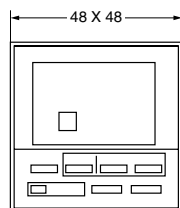
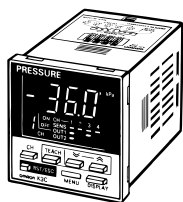


E8M-N0



Controller

K3C-□P8-T1Z



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Mouser Electronics

Authorized Distributor

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Omron:

Y92A-48F1