# OMRON

# 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		E8MS-01
	0 to 1 MPa	Linear output 1 to 5 V	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		E8M-A1
Positive pressure	0 to 1 MPa	Linear output 1 to 5 V	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	_	Supplied with one XS8A-0442 Pin Controll	
E8MS		E89-M4	3-pin connector with 3 m long cable	1	Connector	

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	1				

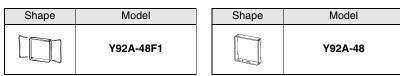
#### Adapter

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

## Hard Cover



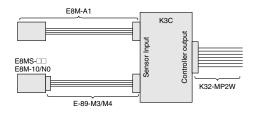
Sensor and Controller Combinations

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	Х	0	0	0
E8MS-10	Х	0	0	0
E8MS-N0	Х	0	0	0
E8M-A1	Х	Х	0	0
E8M-10	0	Х	0	0
E8M-N0	0	Х	0	0

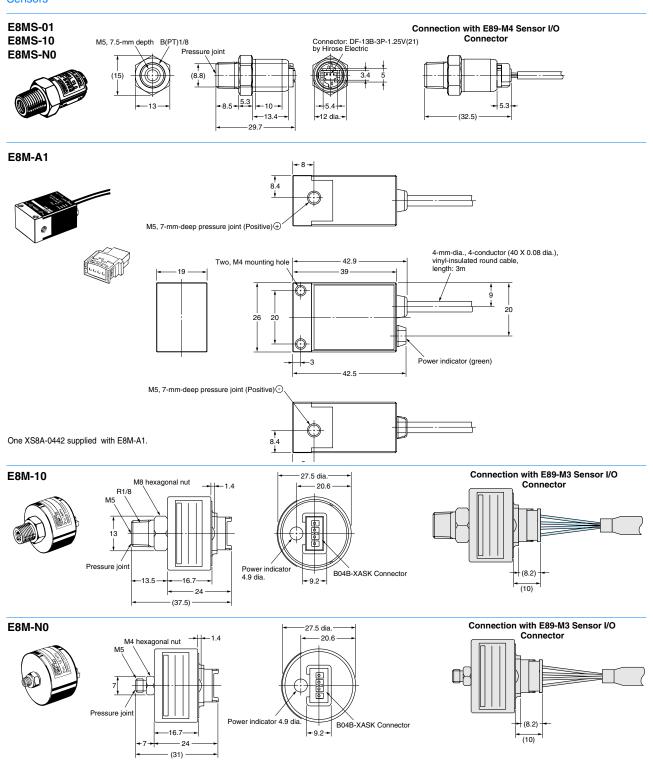
O:Required; X: Not required.

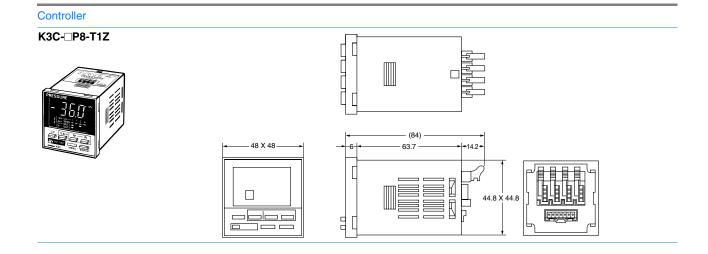
## Sensor and Controller Connection



# Dimensions (Unit: mm)

Sensors Sensors





ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

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

Cat. No. F041-E2-02-X

In the interest of product improvement, specifications are subject to change without notice.