Channel ACTION ALERT!

OMRON AUTOMATION & SAFETY

NO: **PR-005** **PRODUCT:** **E8CC, E8AA Pressure Sensors**
DATE: **April 2013** **TYPE:** **Discontinuation Notice**

E8CC and E8AA Pressure Sensors will be Discontinued March 2014; Use E8F2 to Replace E8CC

E8CC

E8AA

Effective Date: Last order date is February 28, 2014

Precautions in Applying Recommended Replacement

E8CC * Shape changes from Slim type with LCD to Square block type with LED digital display.
* Wiring changes from 4 wired to 5 wired.
* Withstand pressure changes from 490kPa (E8CC-A01 and E8CC-AN0C) to 400kPa (E8F2-A01C and E8F2-AN0C).

E8AA No Omron replacement; SMC Corporation PSE560 Series is similar.

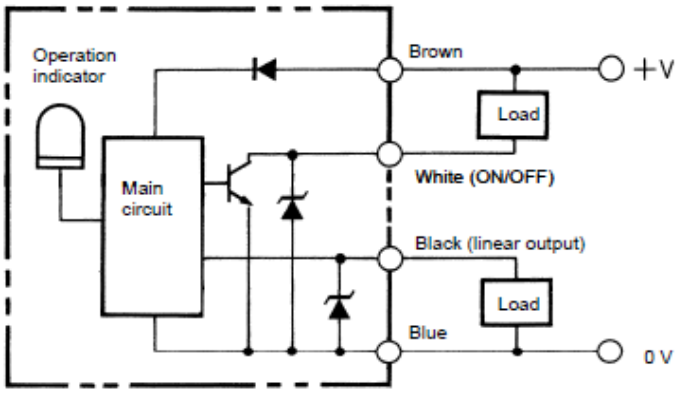
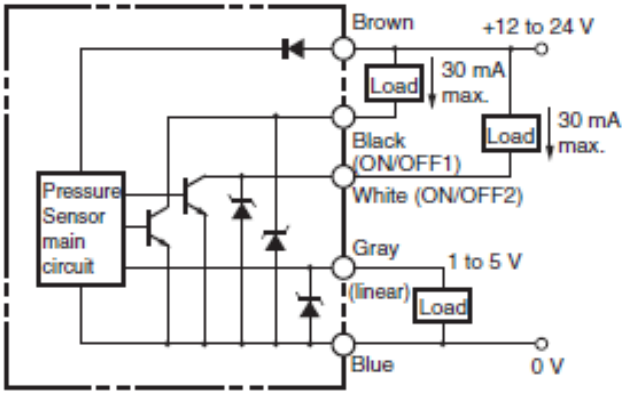
Affected Parts

Product discontinuation		Recommended replacement
Slim Digital Pressure Sensor		Digital Pressure Sensor
Model E8CC Series	→	**Model E8F2 Series**
Model E8CC-A01C 2M		Model E8F2-A01C
Model E8CC-AN0C 2M		Model E8F2-AN0C
Model E8CC-B10C 2M		Model E8F2-B10C
Bracket for E8CC		No recommended replacement

Product discontinuation		Recommended replacement
Pressure Sensor		No Omron replacement
Model E8AA Series	→	**Use SMC Corporation PSE560 Series**
Model E8AA-M05 0-500 2M		Model PSE564-02-28
Model E8AA-M10 0-1000 2M		Model PSE560-02-28
Model E8AA-M10 0-1000 10M		Model PSE560-02-28

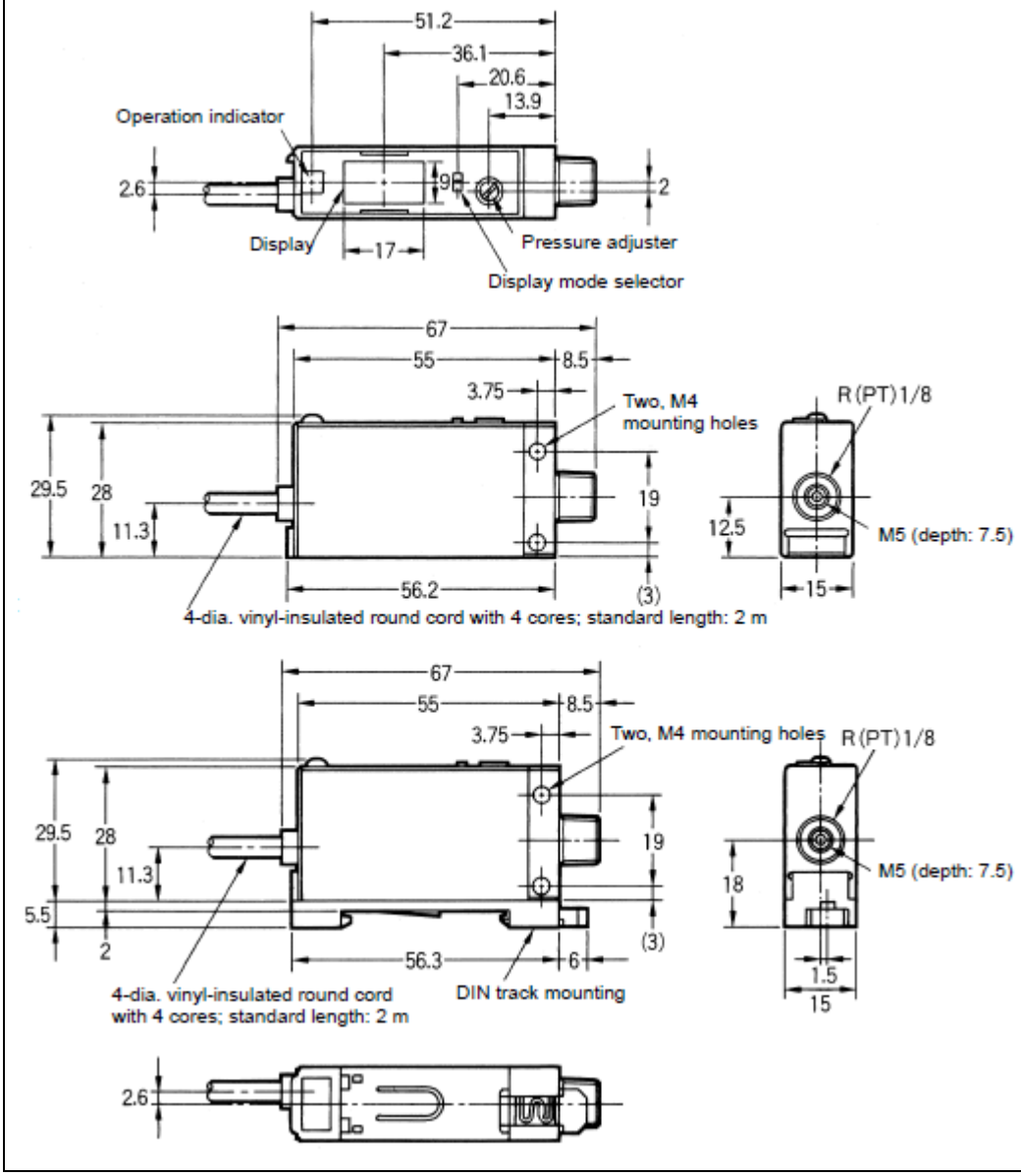
See the following pages for differences between models.

Wiring Diagram

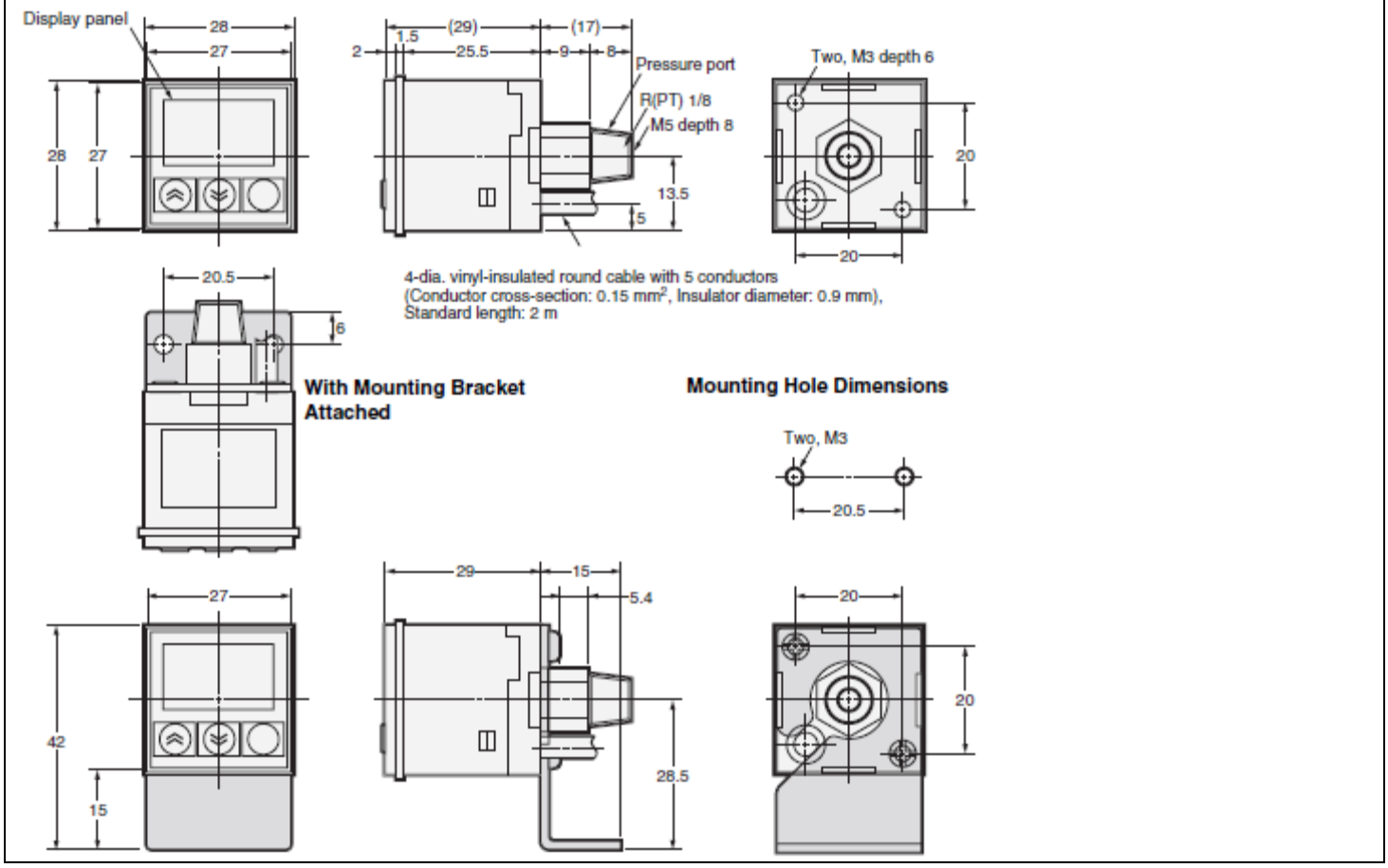
Product discontinuation Model E8CC Series	Recommended replacement Model E8F2 Series
	

Dimensions

Product discontinuation
Model E8CC Series



Recommended replacement
Model E8F2 Series



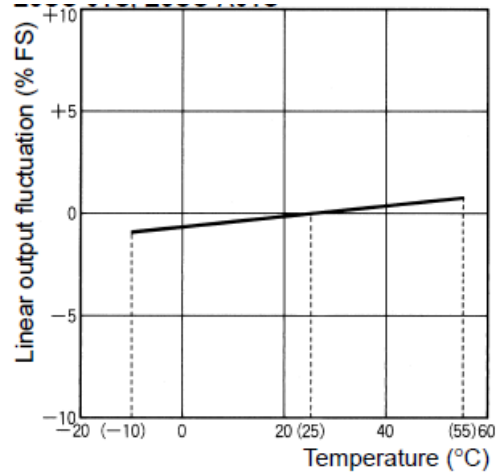
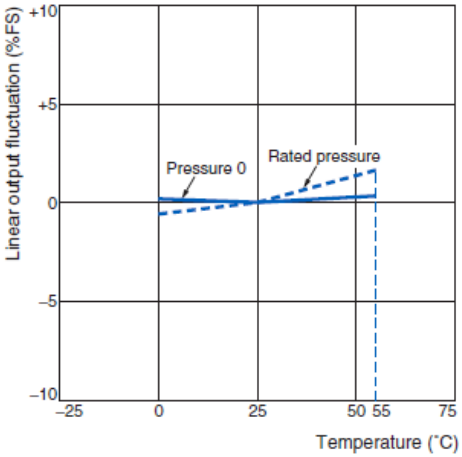
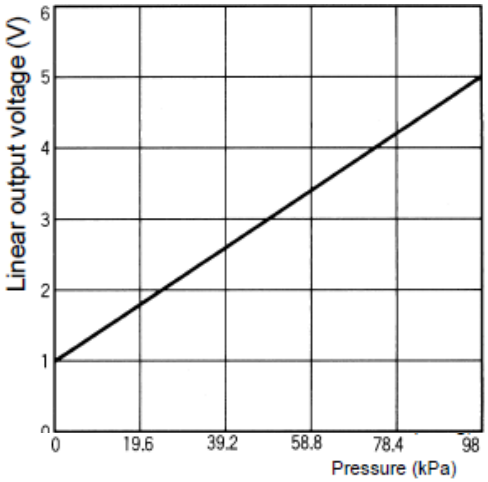
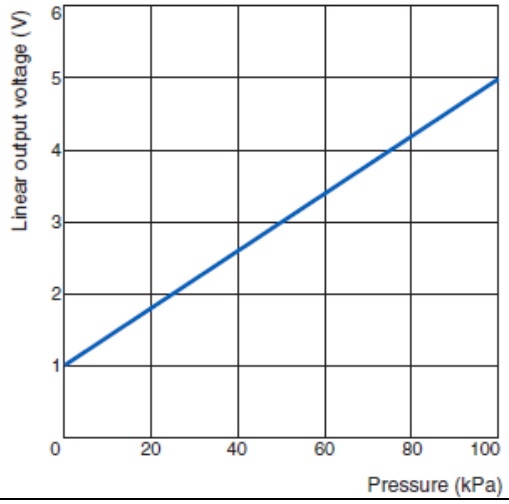
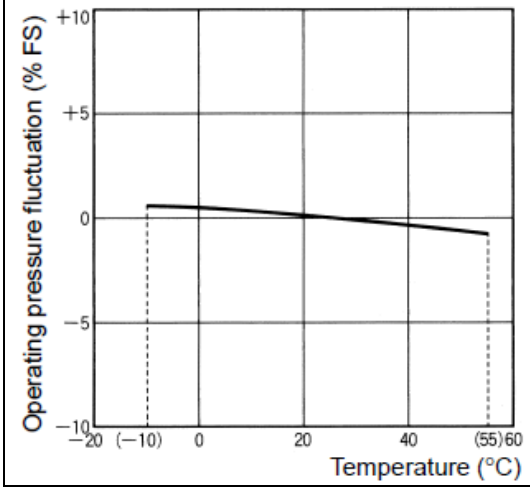
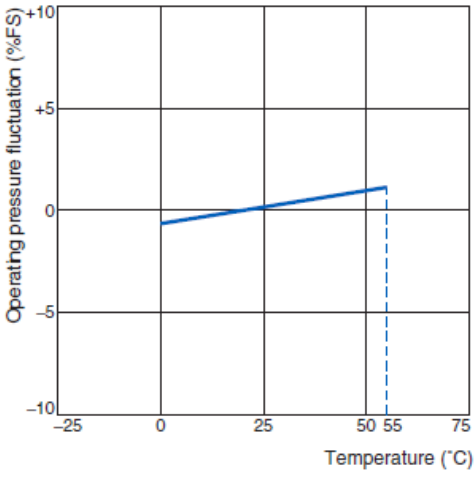
Specifications

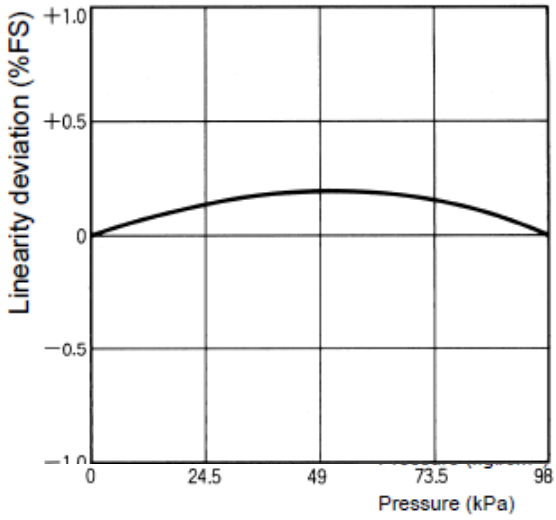
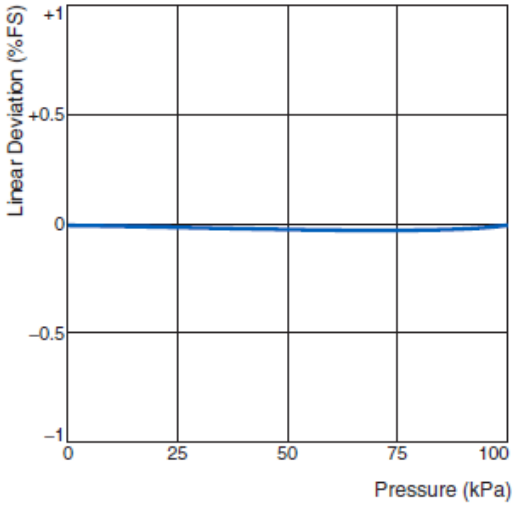
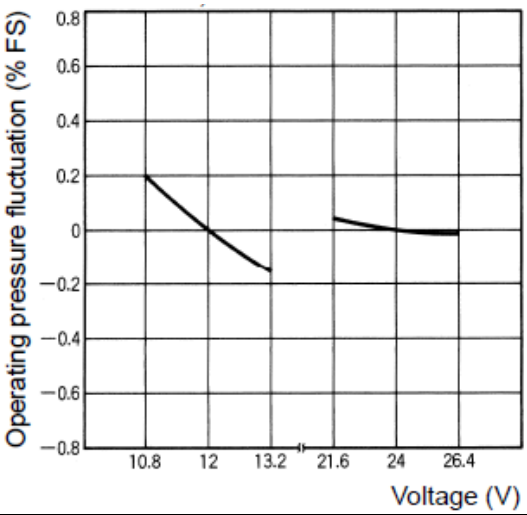
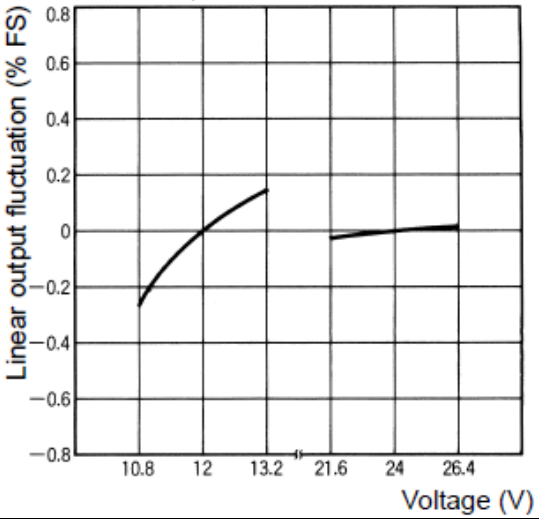
Item / Model	Product discontinuation Model E8CC Series			Recommendable replacement Model E8F2 Series		
	E8CC-A01C	E8CC-AN0C	E8CC-B10C	E8F2-A01C	E8F2-AN0C	E8F2-B10C
Power supply voltage	12 to 24 VDC ±10% with a ripple (p-p) of 5% max.			12 to 24 VDC ±10% with a ripple (p-p) of 10% max.		
Current consumption	30 mA max.			70 mA max.		
Pressure type	Gauge pressure			Gauge pressure		
Permissible pressure range	0 to 98 kPa	0 to -101 kPa	0 to -980 kPa	0 to 100 kPa	0 to -101 kPa	0 to 1MPa
Pressure setting range	0 to 98 kPa	0 to -101 kPa	0 to -980kPa	0 to 100 kPa	0 to -101 kPa	0 to 1MPa
Withstand pressure	490 kPa		1.5 MPa	400 kPa		1.5 MPa
Applicable fluid	Noncorrosive and nonflammable gases			Noncorrosive and nonflammable gases		
Repeat accuracy (ON/OFF output)	±1% FS max.			±1% FS max.		
Accuracy (linear output)	±3% FS max.					
Differential travel (ON/OFF output)	±2% FS max.					
Linearity (linear output)	±1% FS max.			±1% FS max.		

Specifications continued

Item / Model	Product discontinuation Model E8CC Series			Recommendable replacement Model E8F2 Series		
	E8CC-A01C	E8CC-AN0C	E8CC-B10C	E8F2-A01C	E8F2-AN0C	E8F2-B10C
Response time	5 ms max.			5 ms max.		
Linear output	1 to 5 V with an output impedance of 20 Ω and a permissible resistive load of 10 kΩ min.			1 to 5 V with an output impedance of 1 kΩ and a permissible resistive load of 500 kΩ.		
ON/OFF output	NPN open collector			NPN open collector		
Load current	80 mA max.			30 mA max.		
Output applied voltage	30 VDC max.			30 VDC max.		
Residual voltage	1 V max. (with a load current of 80 mA) and 0.4 V max. (with a load current of 20 mA)			1 V max. with 30 mA load current		
Protection circuits	Reversed power supply connection, load short-circuit protection			Reverse polarity protection, load short-circuit protection		
Display	21/2-digit display Red LED ON with output transistor turned ON			3.5-digit red LED Green LED bar indicator The orange LED is lit for two independent outputs with output transistor turned ON. Green unit indicator		
Display accuracy	±3% FS ±1 digit max. (within a temperature range between 0°C and 50°C)			±3% FS ±1 digit max.		
	±4% FS ±1 digit max. (within a temperature range between 50°C and 55°C)					
	±5% FS ±1 digit max. (within a temperature range between 0°C and -10°C)					
Ambient temperature	Operating: –10°C to 55°C (with no icing) Storage: –25°C to 70°C (with no icing)			Operating: 0 to 55°C (with no icing) Storage: −10 to 60°C (with no icing)		
Ambient humidity	Operating/Storage: 35% to 95% (with no icing)			Operating/Storage: 35% to 85% (with no condensation)		
Temperature influence	±0.12% FS/°C between 0°C and 50°C , ±0.2% FS/°C max. between –10°C and 0°C or 50°C and 55°C			±3% FS max.		
Voltage influence	±1.5% FS max.			±1.5% FS max.		
Insulation resistance	50 MΩ min. (at 500 VDC) between current carrying parts and case			100 MΩ min. (at 500 VDC) between current-carrying parts and case		
Dielectric strength	1,000 VAC at 1 min			1,000 VAC at 1 min		
Vibration resistance (destruction)	10 to 500 Hz, 1.5-mm double amplitude or 100 m/s^2 (10 G) for 2 hours each in X, Y, and Z directions			10 to 500 Hz, 1.0-mm double amplitude or 150 m/s^2, three times each for 11 min in the X, Y, and Z directions		
Shock resistance (destruction)	1,000 m/s^2 (100 G) 3 times each in X, Y, and Z directions			300 m/s^2 3 times each in the X, Y, and Z directions		
Degree of protection	IP50 (IEC)			IP50 (IEC)		
Pressure port	R (PT) 1/8 and M5 female screws			R (PT) 1/8 taper screw and M5 female screw		
Connection method	Prewired (standard cord length: 2 m)			Prewired (standard cord length: 2 m)		
Weight (packaged)	Approx. 80 g			Approx. 110 g		
Material (Pressure port)	Aluminum			Aluminum die-cast		
Accessories	Mounting Bracket for DIN rail, Instruction manual			Mounting Bracket, Instruction manual		

Operation Ratings

Product discontinuation Model E8CC Series	Recommended replacement Model E8F2 Series
Temperature vs. Linear Output Fluctuation (Typical) **E8CC-01C, E8CC-A01C** 	**Temperature vs. Linear Output Fluctuation (Typical)** **E8F2-A01□** 
Pressure vs. Linear Output Voltage (Typical) **E8CC-A01C** 	**Pressure vs. Linear Output Voltage** **E8F2-A01□** 
Temperature vs. Operating Pressure (Typical) **E8CC-01C, E8CC-A01C** 	**Temperature vs. Operating Pressure Fluctuation** **E8F2-A01□** 

Product discontinuation Model E8CC Series	Recommended replacement Model E8F2 Series
Linearity (Typical) **E8CC-01C, E8CC-A01C**  	**Linearity** **E8F2-A01□** 
Voltage vs. Operating Pressure Fluctuation (Typical) **E8CC-AN0C**  	No data
Voltage vs. Linear Output Fluctuation (Typical) **E8CC-CN0C2B, E8CC-AN0C**  	No data

Reference Documentation

Description	Media	Publication number
E8CC Data Sheet	PDF	CSM_E8CC_DS_E_3_1
E8F2 Data Sheet	PDF	CSM_E8F2_DS_E_4_2
E8AA Data Sheet	PDF	CSM_E8AA_DS_E_3_1
PSE560 General Purpose Flow Pressure Sensor Data Sheet	PDF	PSE