General Specifications

EJA510E and EJA530E Absolute and Gauge Pressure Transmitter



GS 01C31F01-01EN [Style: S2]

The high performance absolute and gauge pressure transmitter EJA510E and EJA530E feature single crystal silicon resonant sensor and are suitable to measure liquid, gas, or steam pressure. EJA510E and EJA530E output a 4 to 20 mA DC signal corresponding to the measured pressure. It also features quick response, remote setup and monitoring via BRAIN or HART communications and self-diagnostics. FOUNDATION Fieldbus, PROFIBUS PA and 1 to 5 V DC with HART (Low Power) protocol types are also available.

EJA-E series models in their standard configuration, with the exception of the Fieldbus, PROFIBUS and Low Power types, are certified as complying with SIL 2 for safety requirement.

■ STANDARD SPECIFICATIONS

Refer to GS 01C31T02-01EN for Fieldbus communication type and GS 01C31T04-01EN for PROFIBUS PA communication type for the items marked with "\0."

SPAN AND RANGE LIMITS

(For EJA510E, values are in absolute pressure and lower range limits are 0.)

Measurement Span/Range		MPa	psi (/D1)	bar (/D3)	kgf/cm ² (/D4)
А	Span	10 to 200 kPa	1.45 to 29	0.1 to 2	0.1 to 2
	Range	−100 to 200 kPa	-14.5 to 29	-1 to 2	-1 to 2
	Span	0.02 to 2	2.9 to 290	0.2 to 20	0.2 to 20
В	Range	-0.1 to 2	-14.5 to 290	-1 to 20	-1 to 20
С	Span	0.1 to 10	14.5 to 1450	1 to 100	1 to 100
	Range	-0.1 to 10	-14.5 to 1450	-1 to 100	-1 to 100
D	Span *	0.5 to 50	72.5 to 7200	5 to 500	5 to 500
	Range *	-0.1 to 50	-14.5 to 7200	-1 to 500	-1 to 500

^{*:} Maximum value shall be 70 MPa, 10150 psi, 700 bar or 700 kgf/cm² respectively when /HG is specified.

PERFORMANCE SPECIFICATIONS

Zero-based calibrated span, linear output, wetted parts material code 'S' and silicone oil, unless otherwise mentioned.

For Fieldbus and PROFIBUS PA communication types, use calibrated range instead of span in the following specifications.



Specification Conformance

EJA-E series ensures specification conformance to at least ±3σ.

Reference Accuracy of Calibrated Span

(includes the effects of terminal-based linearity, hysteresis, and repeatability)

Measurement	Reference Accuracy		
span	Span≥X	Span <x< th=""></x<>	
Α			
В	.0.0550/	±(0.0055 URL/ span)% of Span	
С	±0.055% of Span		
D		±(0.0088 *50 MPa/ span)% of Span	

[When /HAC is specified]

Measurement	Reference Accuracy		
span	Span≥X	Span <x< th=""></x<>	
Α	±0.04% of Span	±(0.004 URL/ span)% of Span	
В		±(0.005+0.0035 URL/ span) %	
С		of Span	
D		±(0.0064 *50 MPa/ span)% of Span	

Measurement span	Α	В	С	D
Х	20 kPa	0.2 MPa	1 MPa	8 MPa
	(2.9 psi)	(29 psi)	(145 psi)	(1160 psi)
URL	200 kPa	2 MPa	10 MPa	50 MPa
(Upper range limit)	(29 psi)	(290 psi)	(1450 psi)	(7200 psi)



Item # EJA530E-FCH8N-02DDL/KF22, Model EJA530E Gauge Pressure Transmitter

The high performance absolute and gauge pressure transmitter EJA510E and EJA530E feature single crystal silicon resonant sensor and are suitable to measure liquid, gas, or steam pressure.

EJA510E and EJA530E output a 4 to 20 mA DC signal corresponding to the measured pressure. It also features quick response, remote setup and monitoring via BRAIN or HART communications and selfdiagnostics.

FOUNDATION Fieldbus and PROFIBUS PA protocol types are also available.

All EJA-E series models in

more



Specifications | Approval | Optional Specification

Specifications

Model	EJA530E: Gauge pressure transmitter
Output Signal	F: Digital communication (FOUNDATION Fieldbus protocol, refer to GS 01C25T02-01EN)
Measurement Span (Capsule)	C: 0.5 to 10 MPa (72.5 to 1450 psi)
Wetted Parts Material ¹	H: Process connector: HC-276; Diaphragm: HC-276; Others: HC-276
Process Connections	8: G1/2 DIN 16 288 male
Amplifier Housing	2: ASTM CF-8M stainless steel
Electrical Connection	D: M20 female, two electrical connections and a 316 SST blind plug

Integral Indicator

D: Digital indicator

Mounting Bracket

L: 316 SST 2-inch pipe mounting

Approval

Select Approval

KF22: ATEX - Flameproof Approval

Optional Specification

are Download Function (Fieldbus Communication)

None

Painting - Color change (Optional)

None

Oil-prohibited Use (Optional)

None

Calibration Unit (Optional)

None

¹ Be very careful with highly corrosive process fluids such as hydrochloric acid, sulfuric acid, hydrogen sulfide, sodium hypochlorite, and high-temperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material

Model EJA530E: Gauge pressure transmitter

Measurement Span (Capsule) C: 0.5 to 10 MPa (72.5 to 1450 psi)

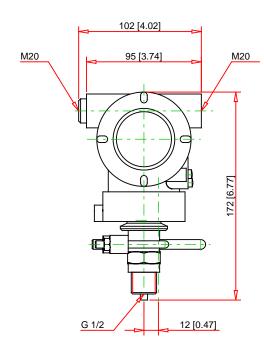
H: Process connector: HC-276; Diaphragm: HC-276; Others: HC-276 Wetted Parts Material

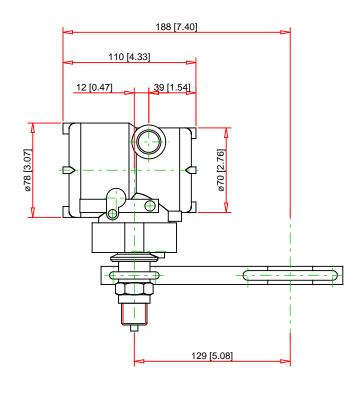
Process Connections 8: G1/2 DIN 16 288 male

Electrical Connection D: M20 female, two electrical connections and

a 316 SST blind plug

Mounting Bracket L: 316 SST 2-inch pipe mounting





Note: Drawing is not certified, dimensions are nominal/typical and vary slightly from actual product. Certified drawings are available upon request at http://www.yokogawa.com/fld/doc/sd/index.htm.

EJA530E-FCH8N-02DDL/KF22

Part No.:

Note: - Drawing not to Scale

- Dimensions subject to change

- Unit: mm [Inch]

Description:

Model EJA530E Gauge Pressure Transmitter

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