

■ MODEL AND SUFFIX CODES

Model	Suffix Codes	Description									
EJA510E EJA530E	Absolute pressure transmitter Gauge pressure transmitter									
Output signal	-D -J -F -G -Q	4 to 20 mA DC Output with digital communication (BRAIN protocol) 4 to 20 mA DC Output with digital communication (HART 5/HART 7 protocol)* ¹ Digital communication (FOUNDATION Fieldbus protocol, refer to GS 01C31T02-01EN) Digital communication (PROFIBUS PA protocol, refer to GS 01C31T04-01EN) Low Power, 1 to 5 V DC with digital communication (HART 7 protocol)									
Measurement span (capsule)	A B C D	10 to 200 kPa (1.45 to 29 psi) 0.1 to 2 MPa (14.5 to 290 psi) 0.5 to 10 MPa (72.5 to 1450 psi) 5 to 50 MPa (720 to 7200 psi)* ¹⁰									
Wetted parts material * ²	S H	<table border="0"> <tr> <td><u>Process connector</u></td> <td><u>Diaphragm</u></td> <td><u>Others</u></td> </tr> <tr> <td>316L SST #</td> <td>Hastelloy C-276 *^{3#}</td> <td>316L SST #</td> </tr> <tr> <td>Hastelloy C-276 *^{3#}</td> <td>Hastelloy C-276 *^{3#}</td> <td>Hastelloy C-276 *^{3#}</td> </tr> </table>	<u>Process connector</u>	<u>Diaphragm</u>	<u>Others</u>	316L SST #	Hastelloy C-276 * ^{3#}	316L SST #	Hastelloy C-276 * ^{3#}	Hastelloy C-276 * ^{3#}	Hastelloy C-276 * ^{3#}
<u>Process connector</u>	<u>Diaphragm</u>	<u>Others</u>									
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Process connections * For a diaphragm seal system, refer to process connections code table (p.6).	4 7 8 9	1/2 NPT female 1/2 NPT male G1/2 DIN 16 288 male * ⁴ M20×1.5 DIN 16 288 male * ⁴									
—	N	Always N									
—	-0	Always 0									
Amplifier housing	▶ 1 3 2	Cast aluminum alloy Cast aluminum alloy with corrosion resistance properties * ⁵ ASTM CF-8M stainless steel * ⁶									
Electrical connection	▶ 0 2 4 5 7 9 A C D	G1/2 female, one electrical connection without blind plugs 1/2 NPT female, two electrical connections without blind plugs M20 female, two electrical connections without blind plugs G1/2 female, two electrical connections with a blind plug* ⁷ 1/2 NPT female, two electrical connections with a blind plug* ⁷ M20 female, two electrical connections with a blind plug* ⁷ G1/2 female, two electrical connections and a 316 SST blind plug 1/2 NPT female, two electrical connections and a 316 SST blind plug M20 female, two electrical connections and a 316 SST blind plug									
Integral indicator	D ▶ E N	Digital indicator * ⁸ Digital indicator with the range setting switch (push button) * ⁹ (None)									
Mounting bracket	▶ L N	316 SST 2-inch pipe mounting None									
Optional Codes		<input type="checkbox"/> Optional specification									

The “▶” marks indicates the most typical selection for each specification. Example: EJA530E-DAS4N-012NN/□.

*1: HART 5 or HART 7 is selectable. Specify upon ordering.

*2: ⚠ Users must consider the characteristics of selected wetted parts material and the influence of process fluids. The use of inappropriate materials can result in the leakage of corrosive process fluids and cause injury to personnel and/or damage to plant facilities. It is also possible that the diaphragm itself can be damaged and that material from the broken diaphragm and the fill fluid can contaminate the user’s process fluids.

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.

*3: Hastelloy C-276 or ASTM N10276.

*4: Not applicable for combination of capsule code D and wetted parts material code H. Threads are based on the withdrawn DIN 16 288.

*5: Not applicable for electrical connection code 0, 5, 7, 9 and A.

*6: Not applicable for electrical connection code 0, 5, 7 or 9.

*7: Material of a blind plug; aluminum alloy for code 5 and 9, and SUS304 for code 7.

*8: Not applicable for output signal code G.

*9: Not applicable for output signal code F.

*10: 5 to 70 MPa (720 to 10150 psi) when /HG is specified.

The ‘#’ marks indicate the construction materials conform to NACE material recommendations per MR0175/ISO 15156. Please refer to the latest standards for details. Selected materials also conform to NACE MR0103.

[Process Connections Code for Diaphragm Seal System]

Following table shows the code dedicated for EJAC50E Diaphragm Seal System. The code cannot be specified without a diaphragm seal system. Please also refer to the GS 01C25W01-01EN for EJAC50E.

Process Connections Code	Description
P	Direct Mount Diaphragm seal system

OPTIONAL SPECIFICATIONS (For Explosion Protected type) “◇”

For other agency approvals and marine approvals, please refer to GS 01C25A20-01EN.

Item	Description	Code
Factory Mutual (FM)	<p>FM Explosionproof Approval *1 Applicable Standard: FM3600, FM3615, FM3810, NEMA 250, ANSI/UL 61010-1, ANSI/UL 61010-2-30 Explosionproof for Class I, Division 1, Groups B, C and D, Dust-ignitionproof for Class II/III, Division 1, Groups E, F and G, in Hazardous locations, indoors and outdoors (Enclosure: Type 4X) “FACTORY SEALED, CONDUIT SEAL NOT REQUIRED.” Temperature class: T6, Amb. Temp.: -40 to 60°C (-40 to 140°F)</p>	FF1
	<p>FM Intrinsically safe Approval *1*3 Applicable Standard: FM 3600, FM 3610, FM 3611, FM 3810, ANSI/ISA-60079-0, ANSI/ISA-60079-11, ANSI/ISA-61010-1, NEMA 250 Intrinsically Safe for Class I, Division 1, Groups A, B, C & D, Class II, Division 1, Groups E, F & G and Class III, Division 1, Class I, Zone 0, in Hazardous Locations, AEx ia IIC Nonincendive for Class I, Division 2, Groups A, B, C & D, Class II, Division. 2, Groups F & G, Class I, Zone 2, Group IIC, in Hazardous Locations Enclosure: Type 4X, Temp. Class: T4, Amb. Temp.: -60 to 60°C (-75 to 140°F) Intrinsically Safe Apparatus Parameters [Groups A, B, C, D, E, F and G] Vmax=30 V, Imax=200 mA, Pmax=1 W, Ci=6 nF, Li=0 µH [Groups C, D, E, F and G] Vmax=30 V, Imax=225 mA, Pmax=1 W, Ci=6 nF, Li=0 µH</p>	FS1
	Combined FF1 and FS1 *1*3	FU1
ATEX	<p>ATEX Flameproof Approval *1 Applicable Standard: EN IEC 60079-0, EN 60079-1, EN 60079-31 Certificate: KEMA 07ATEX0109 X II 2G, 2D Ex db IIC T6...T4 Gb, Ex tb IIIC T85°C Db Degree of protection: IP66/IP67 Amb. Temp. (Tamb) for gas-proof : T4; -50 to 75°C (-58 to 167°F), T5; -50 to 80°C (-58 to 176°F), T6; -50 to 75°C (-58 to 167°F) Process Temp. for gas-proof (Tp): T4; -50 to 120°C (-58 to 248°F), T5; -50 to 100°C (-58 to 212°F), T6; -50 to 85°C (-58 to 185°F) Max. surface Temp. for dust-proof: T85°C (Tamb: -30 to 75°C, Tp: -30 to 85°C) *2</p>	KF22
	<p>ATEX Intrinsically safe Approval *1*3 Applicable Standard: EN 60079-0, EN 60079-11 Certificate: DEKRA 11ATEX0228 X II 1G, 2D Ex ia IIC T4 Ga, Ex ia IIIC T85°C T100°C T120°C Db Degree of protection: IP66/IP67 Amb. Temp. (Tamb) for EPL Ga: -50 to 60°C (-58 to 140°F) Maximum Process Temp. (Tp) for EPL Ga: 120°C Electrical data: Ui=30 V, li=200 mA, Pi=0.9 W, Ci=27.6 nF, Li=0 µH Amb. Temp. for EPL Db: -30 to 60°C *2 Max. surface Temp. for EPL Db: T85°C (Tp: 80°C), T100°C (Tp: 100°C), T120°C (Tp: 120°C)</p>	KS21
	<p>Combined KF22, KS21 and ATEX Intrinsically safe Ex ic *1*3 [ATEX Intrinsically safe Ex ic] Applicable Standard: EN 60079-0, EN 60079-11 II 3G Ex ic IIC T4 Gc, Amb. Temp.: -30 to 60°C (-22 to 140°F) *2 Ui=30 V, Ci=27.6 nF, Li=0 µH</p>	KU22

<p>Canadian Standards Association (CSA)</p>	<p>CSA Explosionproof Approval *1 Certificate: 2014354 Applicable Standard: C22.2 No. 25, C22.2 No. 30, CAN/CSA-C22.2 No. 94, CAN/CSA-C22.2 No. 61010-1, CAN/CSA-C22.2 No. 61010-2-030, CAN/CSA-C22.2 No. 60079-0, CAN/CSA-C22.2 No. 60079-1, CAN/CSA-C22.2 No. 60529 Explosion-proof for Class I, Groups B, C and D. Dustignition-proof for Class II/III, Groups E, F and G. When installed in Division 2, "SEAL NOT REQUIRED" Enclosure: Type 4X, Temp. Code: T6...T4 Ex d IIC T6...T4 Enclosure: IP66/IP67 Max.Process Temp.: T4;120°C(248°F), T5;100°C(212°F), T6; 85°C(185°F) Amb.Temp.: -50 to 75°C(-58 to 167°F) for T4, -50 to 80°C(-58 to 176°F) for T5, -50 to 75°C(-58 to 167°F) for T6 *2 Process Sealing Certification Dual Seal Certified by CSA to the requirement of ANSI/ISA-12.27.01 No additional sealing required Primary seal failure annunciation: at the zero adjustment screw</p>	<p>CF1</p>
	<p>CSA Intrinsically safe Approval *1*3 Certificate: 1606623 [For Division System] Applicable Standard: C22.2 No.0, C22.2 No.94, C22.2 No.157, C22.2 No.213, C22.2 No.61010-1, C22.2 No.61010-2-030 Intrinsically Safe for Class I, Division 1, Groups A, B, C & D, Class II, Division 1, Groups E, F & G, Class III, Division 1, Nonincendive for Class I, Division 2, Groups A, B, C & D, Class II, Division 2, Groups F & G, Class III, Division 1 Enclosure: Type 4X, Temp. Code: T4 Amb. Temp.: -50 to 60°C(-58 to 140°F) *2 Electrical Parameters: [Intrinsically Safe] Vmax=30V, Imax=200mA, Pmax=0.9W, Ci=10nF, Li=0 µH [Nonincendive] Vmax=30V, Ci=10nF, Li=0 µH [For Zone System] Applicable Standard: CAN/CSA-C22.2 60079-0, CAN/CSA-E60079-11, CAN/CSA-E60079-15, CAN/CSA-C22.2 No.60529 Ex ia IIC T4, Ex nL IIC T4 Enclosure: IP66/IP67 Amb. Temp.: -50 to 60°C(-58 to 140°F) *2, Max. Process Temp.: 120°C(248°F) Electrical Parameters: [Ex ia] Ui=30V, Ii=200mA, Pi=0.9W, Ci=10nF, Li=0 µH [Ex nL] Ui=30V, Ci=10nF, Li=0 µH Process Sealing Certification Dual Seal Certified by CSA to the requirement of ANSI/ISA-12.27.01 No additional sealing required Primary seal failure annunciation: at the zero adjustment screw</p>	<p>CS1</p>
	<p>Combined CF1 and CS1 *1*3</p>	<p>CU1</p>
<p>IECEX</p>	<p>IECEX Flameproof Approval *1 Applicable Standard: IEC 60079-0, IEC60079-1 Certificate: IECEX CSA 07.0008 Flameproof for Zone 1, Ex d IIC T6...T4 Gb Enclosure: IP66/IP67 Max.Process Temp.: T4;120°C(248°F), T5;100°C(212°F), T6; 85°C(185°F) Amb.Temp.: -50 to 75°C(-58 to 167°F) for T4, -50 to 80°C(-58 to 176°F) for T5, -50 to 75°C(-58 to 167°F) for T6</p>	<p>SF2</p>
	<p>IECEX Intrinsically safe and Flameproof Approval *1*3 Intrinsically safe Ex ia Certificate: IECEX DEK 11.0081X Applicable Standard: IEC 60079-0, IEC 60079-11 Ex ia IIC T4 Ga Enclosure: IP66/IP67 Amb. Temp.: -50 to 60 °C(-58 to 140 °F), Max. Process Temp.: 120 °C(248 °F) Electrical Parameters: Ui=30 V, Ii=200 mA, Pi=0.9 W, Ci=27.6 nF, Li=0 µH Intrinsically safe Ex ic Certificate: IECEX DEK 13.0061X Applicable Standard: IEC 60079-0, IEC 60079-11 Ex ic IIC T4 Gc IP code: IP66 Amb. Temp.: -30 to 60°C(-22 to 140°F) *2, Max. Process Temp.: 120°C(248°F) Electrical Parameters: Ui=30V,Ci=27.6 nF, Li=0 µH Flameproof Certificate: IECEX CSA 07.0008 Applicable Standard: IEC 60079-0, IEC60079-1 Flameproof for Zone 1, Ex d IIC T6...T4 Gb Enclosure: IP66/IP67 Max.Process Temp.: T4;120°C(248°F), T5;100°C(212°F), T6; 85°C(185°F) Amb.Temp.: -50 to 75°C(-58 to 167°F) for T4, -50 to 80°C(-58 to 176°F) for T5, -50 to 75°C(-58 to 167°F) for T6</p>	<p>SU21</p>

*1: Applicable for Electrical connection code 2, 4, 7, 9, C and D.

*2: Lower limit of temperature is -15°C (5°F) when /HE is specified.

*3: Not applicable for output signal code Q.

■ OPTIONAL SPECIFICATIONS

Item		Description	Code	
High accuracy type* ¹⁶ * ²³		High accuracy	HAC	
Painting	Color change	Amplifier cover only* ²	P□	
		Amplifier cover and terminal cover, Munsell 7.5 R4/14	PR	
	Coating change	Anti-corrosion coating* ¹	X2	
316 SST exterior parts		316 SST zero-adjustment screw and setscrews* ¹⁴	HC	
Fluoro-rubber O-ring		All O-rings of amplifier housing. Lower limit of ambient temperature: -15°C (5°F)	HE	
Lightning protector		Transmitter power supply voltage: 10.5 to 32 V DC (10.5 to 30 V DC for intrinsically safe type, 9 to 32 V DC for Fieldbus communication type.) Allowable current: Max. 6000 A (1×40 μs), Repeating 1000 A (1×40 μs) 100 times Applicable Standards: IEC 61000-4-4, IEC 61000-4-5	A	
Oil-prohibited use* ²³		Degrease cleansing treatment	K1	
		Degrease cleansing treatment with fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)	K2	
Oil-prohibited use with dehydrating treatment* ²³		Degrease cleansing and dehydrating treatment	K5	
		Degrease cleansing and dehydrating treatment with fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)	K6	
Capsule fill fluid* ²³		Flourinated oil filled in capsule Operating temperature -20 to 80°C (-4 to 176°F)	K3	
Calibration units* ³		P calibration (psi unit)	(See Table for Span and Range Limits.)	
		bar calibration (bar unit)		
		M calibration (kgf/cm ² unit)		
Output limits and failure operation* ⁴		Failure alarm down-scale : Output status at CPU failure and hardware error is -5%, 3.2mA DC or less for 4 to 20 mA output type and -5%, 0.8V DC or less for 1 to 5 V output type.	C1	
		NAMUR NE43 Compliant Output signal limits: 3.8 mA to 20.5 mA* ¹⁷	Failure alarm down-scale: Output status at CPU failure and hardware error is -5%, 3.2 mA DC or less.	C2
			Failure alarm up-scale: Output status at CPU failure and hardware error is 110%, 21.6 mA or more.	C3
Gold-plated diaphragm* ¹³ * ²³		Surface of isolating diaphragms are gold plated, effective for hydrogen permeation.	A1	
Wired tag plate		316 SST tag plate wired onto transmitter	N4	
Data configuration at factory* ⁵		Data configuration for HART communication type	Software damping, Descriptor, Message	
		Data configuration for BRAIN communication type	Software damping	
European Pressure Equipment Directive* ¹⁵ * ¹⁶ * ²³		PED 2014/68/EU Category: III, Module: H, Type of Equipment: Pressure Accessory-Vessel, Type of Fluid: Liquid and Gas, Group of Fluid: 1 and 2	PE3	
Material certificate* ⁶ * ²³		Process Connector	M15	
		Process connector, Diaphragm, Capsule body	MA2	
Pressure test/ Leak test certificate* ¹² * ²³		Test Pressure: 200 kPa (29 psi) * ⁷	Nitrogen Gas or Water* ¹¹ Retention time: one minute	
		Test Pressure: 2 MPa (290 psi) * ⁸		
		Test Pressure: 10 MPa (1450 psi) * ⁹		
		Test Pressure: 50 MPa (7200 psi) * ¹⁰		
		Test Pressure: 70 MPa (10150 psi)* ¹⁹		
High Pressure-proof structure* ¹⁸ * ²³		Maximum pressure limit and maximum span : 70 MPa.	HG	
Parameter list* ²⁰		List of setting and adjustment parameters	YP	
Functional safety(SIL)* ²¹ * ²²		Low temperature expansion of functional safety Amb.Temp.: -55 to 85°C	SLT	

- *1: Not applicable with color change option. Not applicable for amplifier housing code 2.
- *2: Not applicable for amplifier housing code 2 and 3.
- *3: The unit of MWP (Max. working pressure) on the name plate of a housing is the same unit as specified by option codes D1, D3, and D4.
- *4: Applicable for output signal codes D and J. The hardware error indicates faulty amplifier or capsule.
- *5: Also see 'Ordering Information'.
- *6: Material traceability certification, per EN 10204 3.1 B.
- *7: Applicable for capsule code A.
- *8: Applicable for capsule code B.
- *9: Applicable for capsule code C.
- *10: Applicable for capsule code D without /HG.
- *11: Dry nitrogen gas or pure water is used for oil-prohibited use (option codes K1 and K2).
- *12: The unit on the certificate is always kPa/MPa regardless of selection of option code D1, D3 and D4.
- *13: Applicable for wetted parts material code S.
- *14: 316 or 316L SST. The specification is included in amplifier code 2.
- *15: Applicable for measurement span code D. If compliance with category III is needed, specify this option code.
- *16: Not applicable for output signal code Q.
- *17: The 1 to 5 V voltage output corresponding to 4 to 20 mA current output is applied to output signal code Q which is non-compliant to NAMUR NE43.
- *18: Applicable for capsule code D.
- *19: Applicable for capsule code D with /HG specified.
- *20: Applicable for output signal code D and J.
- *21: Not applicable for EJA510E.
- *22: Not applicable for output signal code F, G, Q, process connections code for diaphragm seal system.
- *23: Not applicable with process connections code for diaphragm seal system P.

■ OPTIONAL SPECIFICATIONS (for Diaphragm Seal System)

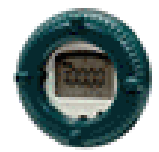
Following table shows the option codes dedicated for EJAC50E Diaphragm Seal System. These codes cannot be specified without a diaphragm seal system. Please also refer to the GS 01C25W01-01EN for EJAC50E.

Item	Description	Code
Oil-prohibited use	Degrease cleansing treatment	K11
	Degrease cleansing treatment and fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)	K12
Oil-prohibited use with dehydrating treatment	Degrease cleansing and dehydrating treatment	K15
	Degrease cleansing and dehydrating treatment with fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)	K16
Capsule fill fluid	Fluorinated oil filled in capsule Operating temperature -20 to 80°C (-4 to 176°F)	K13

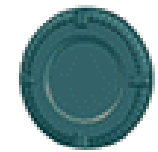
DPharp EJA[®]



Indicator with LPS



Basic Indicator



No Indicator

Local Display



Standard



Ultra-low Copper



Stainless Steel

Housing



4 to 20mA

1 to 5VDC (Low Power)

Output Signal

BRAIN

HART
COMMUNICATION PROTOCOL

Fieldbus
FOUNDATION

PROFI
NET

Digital Communication



Product Certification

Specifications

Refer to the General Specification sheet located under the 'Downloads' tab for detailed specifications.

Measurement Types	
Primary Variable	Gauge Pressure
Reference Accuracy	
Primary Variable	±0.055% of Span ±0.04% of Span (/HAC option)
Stability (All Normal Operating Conditions)	
Primary Variable	±0.1% of URL per 10 years
Response Time	
Primary Variable	90 msec
Rangeability	
Primary Variable	A capsule 20:1 B, C and D capsules: 100:1
Burst Pressure (Absolute)	
EJA510E	A, B, and C Capsules: 4,350 psi (30 MPa) D Capsule: 19,100 psi (132 MPa)
Specification Conformance	
EJX-A Series	±3σ