



MODEL AND SUFFIX CODES

Model	Suffix Codes	Description
EJX910A	Multivariable transmitter
Output signal	-E -J -F -M	4 to 20 mA DC with digital communication (HART protocol) ^{*8} 4 to 20 mA DC with digital communication (HART 5/HART 7 protocol) ^{*9} Digital communication (FOUNDATION fieldbus protocol) Digital communication (RS485 Modbus protocol) When Output signal code -M is selected, option code A must also be selected.
Measurement span (capsule)	L M H	0.1 to 10 kPa (0.4 to 40 inH ₂ O) 0.5 to 100 kPa (2 to 400 inH ₂ O) 2.5 to 500 kPa (10 to 2000 inH ₂ O)
Wetted parts material ^{*1}	S	See Table 5.
Process connections	0 1 2 3 4 ▶ 5	without process connector (Rc1/4 female on the cover flanges) with Rc1/4 female process connector with Rc1/2 female process connector with 1/4 NPT female process connector with 1/2 NPT female process connector without process connector (1/4 NPT female on the cover flanges)
Bolts and nuts material	J G C	B7 carbon steel 316L SST 660 SST
Installation	-7 ▶ -8 -9 -B	Vertical piping, left side high pressure, and process connection downside Horizontal piping and right side high pressure Horizontal piping and left side high pressure Bottom Process Connection, left side high pressure
Amplifier housing	1 2	Cast aluminum alloy ASTM CF-8M stainless steel
Electrical connection	F 2 4 5 7 9 A C D	G 1/2 female, two electrical connections (One connection for RTD) 1/2NPT female, two electrical connections (One connection for RTD) M20 female, two electrical connections (One connection for RTD) G 1/2 female, two electrical connections and blind plug ^{*2*6*7} 1/2NPT female, two electrical connections and a blind plug ^{*2*6*7} M20 female, two electrical connections and a blind plug ^{*2*6*7} G 1/2 female, two electrical connections and a 316 SST blind plug ^{*2} 1/2 NPT female, two electrical connections and a 316 SST blind plug ^{*2} M20 female, two electrical connections and a 316 SST blind plug ^{*2}
Integral indicator	▶ D N	Digital indicator None
Mounting bracket	B D J K M P ▶ N	304 SST 2-inch pipe mounting, flat type (for horizontal piping) 304 SST 2-inch pipe mounting, L type (for vertical piping) 316 SST 2-inch pipe mounting, flat type (for horizontal piping) 316 SST 2-inch pipe mounting, L type (for vertical piping) 316 SST 2-inch pipe mounting (for bottom process connection type) 316 SST 2-inch pipe mounting, position adjustable L type (for vertical piping) ^{*13} None
External temperature input	-0 -1 -2 -3 -4 -B -C -D	Fixed temperature (without cable) ^{*5*11} RTD input with 0.5 m (1.64 ft) of shielded cable and two cable glands ^{*3 *7 *10} RTD input with 4 m (13.1 ft) of shielded cable and two cable glands ^{*3 *7 *10} RTD input with 7.5 m (24.6 ft) of shielded cable and two cable glands ^{*3 *7 *10} RTD input with 25 m (81 ft) of shielded cable and two cable glands ^{*3 *7 *10} RTD input with 4 m (13.1 ft) of shielded cable without cable gland ^{*3 *4} RTD input with 7.5 m (24.6 ft) of shielded cable without cable gland ^{*3 *4} RTD input with 25 m (81 ft) of shielded cable without cable gland ^{*3 *4}
Measurement function	▶ A. .. B. ..	Multi Sensing (DP, P and T) ^{*12} Mass Flow Measurement (Flow, DP, P and T) (Applicable for Output signal codes -E, -J, and -F).
Option codes		/□ Optional specification

The “▶” marks indicate the most typical selection for each specification.

*1: ⚠ 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.

*2: For External temperature input code 0 (Fixed temperature) .

*3: Recommended External Temperature Input Cable is as shown in Table 4. RTD is not provided.

*4: Specify when using conduit for RTD connection.

*5: Preset external temperature value is used for density compensation.



- *6: Material of a blind plug is aluminum alloy or 304 SST.
- *7: Not applicable for Amplifier housing code 2.
- *8: Output signal code E: HART 5.
- *9: Output signal code J: HART 5 or HART 7 selectable. Specify HART 5 or HART 7 when ordering. (Output signal code J is recommended for HART communication.)
- *10: Refer to table 6 whether the cable glands are attached or not.
- *11: If you use the saturated steam mode (external temperature is calculated from static pressure), set ET fixed parameter to Saturated Steam after shipping.
- *12: No flow calculation function. When using the flow calculation function, specify code B.
- *13: For position adjustable bracket, refer to SD 01C25B14-01EN.

□ Selection guide for HART 5 and HART 7

Select HART 5 or HART 7 as follow.

Output signal code	Specified item when ordering "HART protocol revision"	HART protocol revision	Selection guide		Note
			Requirement for HART 7 function	Other conditions	
-E	Not Available	HART 5	NO	Not available to switch to HART 7 protocol after delivery.	*
-J	Specify '5'			Available to switch to HART 7 protocol after delivery by user-configuration.	**
		Specify '7'	HART 7	YES In this case, be sure to confirm that HART configuration tool supports HART 7 by Table 3.	Available to switch to HART 5 protocol after delivery by user-configuration.

- *: This code will be unified to the new code "-J". Therefore the code "-J" is recommended for HART communication type.
- ** : In case of selecting HART 7 without conforming to Table 3, communication will not be available.

□ HART protocol revision and communication

Protocol revision supported by HART configuration tool must be the same or higher than that of the EJX multivariable transmitter.

Table 3. HART protocol revision and communication

		Protocol revision supported by HART configuration tool	
		HART 5	HART 7
Protocol revision of EJX multivariable transmitter	HART 5	Communication Available	Communication Available
	HART 7	Communication Not Available	Communication Available

□ Applicable External Temperature Cable

Table 4.

External Temperature Input Code		-1, -2, -3, -4	-B, -C, -D
General Application		✓	✓
Factory Mutual (FM)	Explosionproof Approval		✓
	Intrinsically Safe Approval Nonincendive		✓
ATEX	Flameproof Approval	✓	
	Intrinsically Safe Approval	✓	
Canadian Standards Association (CSA)	Explosionproof Approval		✓
IECEx Scheme	Flameproof Approval	✓	✓

□ Wetted Parts Materials

Table 5.

Wetted parts material code	Cover flange and process connector	Capsule	Capsule gasket	Vent/Drain plug
S #	ASTM CF-8M *1*3	Hastelloy C-276 *2 (Diaphragm) F316L SST, 316L SST (Others)	Teflon-coated 316L SST	316 SST

- *1: Cast version of 316 SST. Equivalent to SCS14A.
 - *2: Hastelloy C-276 or ASTM N10276.
 - *3: Intergranular corrosion test passed according to ASTM A262 Practice E.
- 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.

□ Attached Cable glands for EJX910A and EJX930A

Table 6.

		Flameproof approval				Intrinsically safe approval			General Application
		FM CSA	ATEX	IECEX Scheme	NEPSI KOSHA INMETRO EAC	FM	ATEX	NEPSI KOSHA INMETRO EAC	
External Temperature Input	-0	No	No	No	No	No	No	N/A	No
	-1, -2, -3, -4	N/A	Yes	Yes	No	N/A	Yes		Yes
	-B, -C, -D	No	N/A	No	No	No	N/A		No

Yes: Attached No: Not attached N/A: Not applicable

■ OPTIONAL SPECIFICATIONS (For Explosion Protected)

Please select appropriate equipment in accordance with the laws and regulations of the relevant country/region, when it is used in a location where explosive atmospheres may be present.

Item	Description	Code
Factory Mutual (FM)	FM Explosionproof Approval *4 Applicable Standard: FM3600:2018, FM3615:2018, FM3810:2018, NEMA 250:2003, ANSI/UL 61010-1:2012, ANSI/UL 61010-2-30:2012 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)	FF1
	FM Intrinsically Safe and Nonincendive Approval *1 *3 *4 Applicable Standard: FM 3600:2011, FM 3610:2010, FM 3611:2004, FM 3810:2005, ANSI/ISA-60079-0-2009, ANSI/ISA-60079-11-2009, ANSI/ISA-60079-27-2006, ANSI/ISA-61010-1-2004, NEMA 250:1991 Intrinsically Safe for Class I, II, & III, Division 1, Groups A, B, C, D, F & G, Entity, FISCO. Class I, Zone 0, AEx ia IIC, Enclosure: Type 4X, Temp. Class: T4, Amb. Temp.: -40 to 60°C (-40 to 140°F). Intrinsically Apparatus Parameters: [FISCO (IIC)] Ui=17.5 V, li=380 mA, Pi=5.32 W, Ci=3.52 nF, Li=0 µH [FISCO (IIB)] Ui=17.5 V, li=460 mA, Pi=5.32 W, Ci=3.52 nF, Li=0 µH [Entity] Ui=24 V, li=250 mA, Pi=1.2 W, Ci=3.52 nF, Li=0 µH Sensor Circuit: Uo=6.51 V, Io=4 mA, Po=6 mW, Co=34 µF, Lo=500 mH Nonincendive for Class I, Division 2, Groups A, B, C and D, NIFW, FNICO Class I, Zone 2, Group IIC, NIFW, FNICO Class II, Division 2, Groups F&G, and Class III, Division 1 Enclosure: Type 4X, Temp. Class: T4, Amb. Temp.: -40 to 60°C (-40 to 140°F) Nonincendive Apparatus Parameters: Vmax.=32 V, Ci=1.76 nF, Li=0 µH	FS15
ATEX	ATEX Flameproof Approval *4 Applicable Standard: EN IEC 60079-0, EN 60079-1, EN 60079-31 Certificate: KEMA 07ATEX0109 X II 2 G Ex db IIC T6..T4 Gb, II 2 D 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) *5	KF22
	ATEX Intrinsically Safe Approval *1 *3 *4 Applicable Standards: EN IEC 60079-0, EN 60079-11 Certificate: KEMA 06ATEX0278X II 1 G Ex ia IIC/IIB T4 Ga, II 2 D Ex ia IIIC T85°C T100°C T120°C Db Type of protection: IP66/IP67 Amb. Temp. for EPL Ga: -40 to 60°C (-40 to 140°F) Amb. Temp. for EPL Db: -30 to 60°C *5 Max. Process Temp. (Tp): 120°C (248°F) Max. Surface Temp. for EPL Db: T85°C (Tp:80°C), T100°C (Tp:100°C), T120°C (Tp:120°C) Ambient Humidity: 0 to 100% (No condensation) Electrical data: Supply/Output circuit (terminals + and -) [FISCO (IIC)] Ui=17.5 V, li=380 mA, Pi=5.32 W, Ci=3.52 nF, Li=0 µH [FISCO (IIB)] Ui=17.5 V, li=460 mA, Pi=5.32 W, Ci=3.52 nF, Li=0 µH [Entity] Ui=24 V, li=250 mA, Pi=1.2 W, Ci=3.52 nF, Li=0 µH External Temperature Input circuit (connector) Uo=7.63 V, Io=3.85 mA, Po=0.008 W, Co=4.8 µF, Lo=100 mH	KS26



Item	Description	Code
Canadian Standards Association (CSA)	CSA Explosionproof Approval *4 Certificate: 2014354 Applicable Standard: C22.2 No.0, C22.2 No.0.4, C22.2 No.0.5, C22.2 No.25, C22.2 No.30, C22.2 No.94, C22.2 No.60079-0, C22.2 No.60079-1, C22.2 No.61010-1, C22.2 No.61010-2-030 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 and 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 *5 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	CF1
IECEX Scheme	IECEx Flameproof Approval *4 Applicable Standard: IEC 60079-0, IEC 60079-1, IEC 60079-31 Certificate: IECEx DEK 14.0046X Enclosure: IP66/IP67 Ex db IIC T6...T4 Gb, Ex tb IIIC T85°C Db 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) *5	SF22

Contact Yokogawa representative for the codes indicated as '—'

*1: Not Applicable for Output signal codes -E and -J.

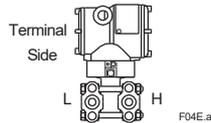
*2: Not Applicable for Output signal code -F.

*3: Not Applicable for Output signal code -M.

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

*5: Lower limit of ambient temperature is -15°C (5°F) when option code HE is specified.

OPTIONAL SPECIFICATIONS

Item		Description	Code	
Painting	Color change	Amplifier cover only	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 ^{*15}	HC	
Fluoro-rubber O-ring		All O-rings of amplifier housing. Lower limit of ambient temperature: -15°C (5°F)	HE	
Lightning protector		HART protocol type: Transmitter power supply voltage: 10.5 to 32 V DC 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 FOUNDATION fieldbus protocol 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 Modbus protocol type: Applicable Standards: IEC 61000-4-5 This option (option code A) must be selected when Modbus protocol type (Output signal code -M) is selected.	A	
Oil-prohibited use ^{*2}		Degrease cleansing treatment	K1	
		Degrease cleansing treatment and fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)	K2	
		Degrease cleansing treatment	With certificates	K41
		Degrease cleansing treatment and fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)		K42
Oil-prohibited use with dehydrating treatment ^{*2}		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	
		Degrease cleansing and dehydrating treatment	With certificates	K45
		Degrease cleansing and dehydrating treatment with fluorinated oilfilled capsule. Operating temperature -20 to 80°C (-4 to 176°F)		K46
Capsule fill fluid		Fluorinated 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.)	D1
		bar calibration (bar unit)		D3
		M calibration (kgf/cm ² unit)		D4
Plug option ^{*22}		Long vent ^{*4} Total length: 119 mm (standard: 34 mm); Total length when combining with option code K1,K2, K5, and K6: 130 mm. Material: 316 SST	U1	
		Without vent and drain plugs	UN	
Gold-plated ^{*2}		Surface of isolating diaphragms are gold plated, effective for hydrogen permeation. Overpressure effects for M and H capsules: ±0.06% of URL	A1	
Output limits and failure operation ^{*5} (for HART protocol type)		Failure alarm down-scale: Output status at CPU failure and hardware error is -2.5%, 3.6 mA DC or less.	C1	
		NAMUR NE43 Compliant Output signal limits: 3.8 mA to 20.5 mA	Failure alarm down-scale: Output status at CPU failure and hardware error is -2.5%, 3.6 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
Body option ^{*6} 		Right side high pressure, without drain and vent plugs	N1	
		N1 and Process connection, based on IEC61518 with female thread on both sides of cover flange, with blind kidney flanges on back.	N2	
		N2, and Material certificate for cover flange, diaphragm, capsule body, and blind kidney flange	N3	
Wired tag plate		316 SST tag plate wired onto transmitter (Tag No.: Maximum. 16 characters.)	N4	
Data configuration at factory ^{*7}		Data configuration for HART communication type	Software damping, Descriptor, Message	CA
		Data configuration for Fieldbus communication type	Software damping	CC
		Data configuration for Modbus communication type	Software damping, Descriptor, Message	CE
PID function ^{*13}		(For FOUNDATION Fieldbus protocol type) PID control function	LC1	



Item	Description	Code
Software downloading function ^{*13}	(For FOUNDATION Fieldbus protocol type) Based on FOUNDATION Fieldbus Specification(FF-883) Download class: Class1	EE
Advanced diagnostics (For HART or FOUNDATION Fieldbus protocol type)	Multi-sensing process monitoring • Impulse line blockage detection ^{*16} • Heat trace monitoring	HART protocol type DG6
		FOUNDATION Fieldbus protocol type ^{*17} DG1
European Pressure Equipment Directive ^{*14}	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 Lower limit of ambient and process temperature: -29°C	PE3
Material certificate ^{*8}	Cover flange ^{*9}	M01
	Cover flange, Process connector ^{*10}	M11
	Cover flange, Diaphragm, Capsule body ^{*9*22}	MA1
	Cover flange, Process connector, Diaphragm, Capsule body ^{*10*22}	MC1
	Cover flange, Bolt and Nut for cover flange, Diaphragm, Capsule body, Vent and Drain plug, Vent screw, Capsule gasket ^{*9*20*21}	MG1
	Cover flange, Process connector, Bolt and nut for cover flange, Bolt for process connector, Diaphragm, Capsule body, Vent and Drain plug, Vent screw, Capsule gasket ^{*10*20*21}	MH1
Pressure test/ Leak test certificate ^{*11}	Test Pressure: 16 MPa(2300 psi) ^{*18}	Nitrogen(N ₂) Gas ^{*12} T12
	Test Pressure: 25 MPa(3600 psi) ^{*19}	Retention time: one minute T13
Calibration certificate	Text, Traceability	L4
	Text, Traceability, Primary standards list	L5
	Text, Traceability, Primary standards list, Calibration equipment list	L6
	Text, Traceability, Primary standards list, Calibration equipment list, Calibration equipment certificate	L9
Bug screen ^{*23}	With bug screen to the process connection port of the low side cover flange	BS
Additional blind plug ^{*24}	Additional blind plug is attached to the conduit connection on both sides for storing transmitter	PP

- *1: Not applicable with color or coating change option.
- *2: Applicable for Wetted parts material code S.
- *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 vertical impulse piping type (Installation code 7) and Wetted parts material code S.
- *5: Applicable for Output signal codes -E and -J. The hardware error indicates faulty amplifier or capsule.
- *6: Applicable for Wetted parts material code S; Process connection codes 3, 4, and 5; Installation code 9; and Mounting bracket code N. Process connection faces on the other side of zero adjustment screw.
- *7: Also see 'Ordering Information'.
- *8: Material traceability certification, per EN 10204 3.1B.
- *9: Applicable for Process connections codes 0 and 5.
- *10: Applicable for Process connections codes 1, 2, 3, and 4.
- *11: The unit on the certificate is always Pa unit regardless of selection of option code D1, D3 or D4.
- *12: Dry nitrogen gas is used for oil-prohibited use (option codes K1, K2, K5, K6, K41, K42, K45, and K46).
- *13: Applicable for Output signal code -F.
- *14: Applicable for Measurement span codes M and H. If compliance with category III is needed, specify this code.
- *15: 316 or 316L SST. The specification is included in Amplifier code 2.
- *16: The change of pressure fluctuation is monitored and then detects the impulse line blockage. Refer to TI 01C25A31-01E for detailed technical information required for using this function.
- *17: This option code must be specified with option code EE.
- *18: Applicable for Capsule code L.
- *19: Applicable for Capsule codes M and H.
- *20: Not applicable with plug option code UN.
- *21: Not applicable with option code N1, N2 and N3.
- *22: Applicable for option code UN and N1.
- *23: Applicable for process connection 0, 1, 2, 3, 4, 5, C, D, Q, R.
- *24: Not applicable for electrical connection codes 0, 2, and 4.