10.2 Model and Suffix Codes

Model	Suffix Codes	Description
EJX910A	. . . . .	Multivariable transmitter
Output signal	**-E**	4 to 20 mA DC with digital communication (HART protocol)*8
	-J	4 to 20 mA DC with digital communication (HART 5/HART 7 protocol)*9
	-F	Digital communication (FOUNDATION Fieldbus protocol)
	-M	Digital communication (RS485 Modbus protocol)
Measurement span (capsule)	**L**	0.1 to 10 kPa (0.4 to 40 inH_2O)
	M	0.5 to 100 kPa (2 to 400 inH_2O)
	H	2.5 to 500 kPa (10 to 2000 inH_2O)
Wetted parts material *1	**S**	Refer to Table 10.2
Process connections	**0**	without process connector (Rc1/4 female on the cover flanges)
	1	with Rc1/4 female process connector
	2	with Rc1/2 female process connector
	3	with 1/4 NPT female process connector
	4	with 1/2 NPT female process connector
►	**5**	without process connector (1/4 NPT female on the cover flanges)
Bolts and nuts material	**J**	ASTM-B7M carbon steel
	G	316L SST (ISO A4-70) stainless steel
	C	ASTM grade 660 stainless steel
Installation	**-7**	Vertical piping, left side high pressure, and process connection downside
	-8	Horizontal piping and right side high pressure
►	**-9**	Horizontal piping and left side high pressure
	-B	Bottom Process Connection, left side high pressure
Amplifier housing	**1**	Cast alluminum alloy
	2	ASTM CF-8M Stainless steel
Electrical connection	**F**	G 1/2 female, two electrical connections (One connection for RTD)
	2	1/2NPT female, two electrical connections (One connection for RTD)
	4	M20 female, two electrical connections (One connection for RTD)
	5	G 1/2 female, two electrical connections and a blind plug *2*6*7
	7	1/2NPT female, two electrical connections and a blind plug *2*6*7
	9	M20 female, two electrical connections and a blind plug *2*6*7
	A	G 1/2 female, two electrical connections and a 316 SST blind plug *2
	C	1/2 NPT female, two electrical connections and a 316 SST blind plug *2
	D	M20 female, two electrical connections and a 316 SST blind plug *2
Integral indicator	**D**	Digital indicator
►	**N**	None
Mounting bracket	**B**	304 SST 2-inch pipe mounting, flat type (for horizontal piping)
	D	304 SST or SCS13A 2-inch pipe mounting, L type (for vertical piping)
	J	316 SST 2-inch pipe mounting, flat type (for horizontal piping)
	K	316 SST or SCS14A 2-inch pipe mounting, L type (for vertical piping)
	M	316 SST 2-inch pipe mounting (for bottom process connection type)
►	**N**	None
External temperature input *3	**-0**	Fixed temperature (without cable) *5
	-1	RTD input with 0.5 m (1.64 ft) of shielded cable and two cable glands *7*10
	-2	RTD input with 4 m (13.1 ft) of shielded cable and two cable glands *7*10
	-3	RTD input with 7.5 m (24.6 ft) of shielded cable and two cable glands *7*10
	-4	RTD input with 25 m (81 ft) of shielded cable and two cable glands *7*10
	-B	RTD input with 4 m (13.1 ft) of shielded cable without cable gland *4
	-C	RTD input with 7.5 m (24.6 ft) of shielded cable without cable gland *4
	-D	RTD input with 25 m (81 ft) of shielded cable without cable gland *4
Measurement function	**A**	Multi Sensing (DP, P and T)
►	**B**	Mass Flow Measurement (Flow, DP, P and T) (Applicable for Output signal codes -E, -J, and -F).
Optional 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 10.1. 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 10.3 whether the cable glands are attached or not.

Model	Suffix Codes	Description
EJX930A	. . . . .	Multivariable transmitter
Output signal	**-E**	4 to 20 mA DC with digital communication (HART protocol) *9
	-J	4 to 20 mA DC with digital communication (HART 5/HART 7 protocol) *10
	-F	Digital communication (FOUNDATION Fieldbus protocol)
	-M	Digital communication (RS485 Modbus protocol)
Measurement span (capsule)	**M**	1 to 100 kPa (4 to 400 inH_2O)
	H	5 to 500 kPa (20 to 2000 inH_2O)
Wetted parts material *1	**S**	Refer to Table 10.2
Process connections	**3**	with 1/4 NPT female process connector *8
	4	with 1/2 NPT female process connector *8
	► **5**	without process connector (1/4 NPT female on the cover flanges)
Bolts and nuts material	**J**	ASTM-B7 carbon steel
	G	316L SST stainless steel
	C	ASTM grade 660 stainless steel
Installation	**-7**	Vertical piping, left side high pressure, and process connection downside
	-8	Horizontal piping and right side high pressure
	► **-9**	Horizontal piping and left side high pressure
Amplifier housing	**1**	Cast alluminum alloy
	2	ASTM CF-8M Stainless steel
Electrical connection	**F**	G 1/2 female, two electrical connections (One connection for RTD)
	2	1/2NPT female, two electrical connections (One connection for RTD)
	4	M20 female, two electrical connections (One connection for RTD)
	5	G 1/2 female, two electrical connections and a blind plug *2*6*7
	7	1/2NPT female, two electrical connections and a blind plug *2*6*7
	9	M20 female, two electrical connections and a blind plug *2*6*7
	A	G 1/2 female, two electrical connections and a 316 SST blind plug *2
	C	1/2 NPT female, two electrical connections and a 316 SST blind plug *2
	D	M20 female, two electrical connections and a 316 SST blind plug *2
Integral indicator	**D**	Digital indicator
	► **N**	None
Mounting bracket	**B**	304 SST 2-inch pipe mounting, flat type (for horizontal piping)
	D	304 SST or SCS13A 2-inch pipe mounting, L type (for vertical piping)
	J	316 SST 2-inch pipe mounting, flat type (for horizontal piping)
	K	316 SST or SCS14A 2-inch pipe mounting, L type (for vertical piping)
	► **N**	None
External temperature input *3	**-0**	Fixed temperature (without cable) *5
	-1	RTD input with 0.5 m (1.64 ft) of shielded cable and two cable glands *7*11
	-2	RTD input with 4 m (13.1 ft) of shielded cable and two cable glands *7*11
	-3	RTD input with 7.5 m (24.6 ft) of shielded cable and two cable glands *7*11
	-4	RTD input with 25 m (81 ft) of shielded cable and two cable glands *7*11
	-B	RTD input with 4 m (13.1 ft) of shielded cable without cable gland *4
	-C	RTD input with 7.5 m (24.6 ft) of shielded cable without cable gland *4
	-D	RTD input with 25 m (81 ft) of shielded cable without cable gland *4
Measurement function	**A**	Multi Sensing (DP, P and T)
	► **B**	Mass Flow Measurement (Flow, DP, P and T) (Applicable for Output signal codes -E, -J, and -F).
Optional 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 10.1 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: Lower limit of ambient and process temperature is –15°C.

*9: Output signal code E: HART 5.

*10: 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.)

*11: Refer to Table 10.3 whether the cable glands are attached or not.

Table 10.1 Applicable External Temperature Cable

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

Table 10.2 Wetted Parts Materials

[EJX910A]

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

[EJX930A]

Wetted parts material code	Cover flange	Process connector	Capsule	Capsule gasket	Vent/Drain plug
S	F316 SST	ASTM CF-8M *1	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.

Table 10.3 Attached Cable glands for EJX910A and EJX930A

		Flameproof approval				Intrinsically safe approval			General Application
		FM CSA	ATEX	IECEx Scheme	NEPSI KOSHA INMETRO	FM	ATEX	NEPSI KOSHA INMETRO	
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

10.3 Optional Specifications

Some of the codes may not be mentioned here. Please refer to the latest General Specifications sheet.

Item	Description	Code
Factory Mutual (FM)	FM Explosionproof *4	FF1
	FM Intrinsically Safe and Nonincendive *1 *3 *4	FS15
ATEX	ATEX Flameproof *4	KF22
	ATEX Intrinsically safe *1 *3 *4	KS26
Canadian Standards Association (CSA)	CSA Explosionproof *4 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 *4 Special fastener: ClassA2-50(A4-50) or more	SF2
NEPSI	NEPSI Flameproof Approval *2*4	NF2
	NEPSI Flameproof and Dust Ignition Proof Approval *2*4	NF21
KOREA	Korea Flameproof Approval *2*4	PF22
	Korea Flameproof and Dust Ignition Proof approval *2*4	PF23
INMETRO	INMETRO Flameproof Approval *2*4	UF1
Marine Certificate	American Bureau of Shipping Type Approval	WCA
	Bureau Veritas Type Approval	WCB
	Det Norske Veritas Type Approval	WCD
	Lloyd's Register of Shipping Type Approval	WCL

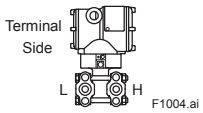
Contact Yokogawa representative for the codes indicated as '—'

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

*2: For details, please read the following manuals;
NF2, NF21: IM 01C25A00-12E (Printed manual, attached to the products upon shipment.)
PF22, PF23: IM 01C25A01-01KO (Printed manual, attached to the products upon shipment.)
UF1: IM 01C25A11-01P-Y (CD-ROM manual, attached to the products upon shipment.)

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

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

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 name plate, tag plate and zero-adjustment screw*17		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		A
Oil-prohibited use *2		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 *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
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
Gold-plated diaphragm		Surface of isolating diaphragm is gold plated, effective for hydrogen permeation.		A1
Plug option		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
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
Stainless steel tag plate		316 SST tag plate wired onto transmitter		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 *15		(For FOUNDATION Fieldbus protocol type) PID control function		LC1
Advanced diagnostics (For HART or FOUNDATION Fieldbus protocol type)		Multi-sensing process monitoring • Impulse line blockage detection *19 • Heat trace monitoring	HART communication type	DG6
			Fieldbus communication type *18	DG1

Item	Description		Code
Software downloading function *15	(For FOUNDATION Fieldbus protocol type) Based on FOUNDATION Fieldbus Specification (FF-883) Download class: Class1		EE
European Pressure Equipement Directive *16	PED 97/23/EC Category III, Module H, type of equipment: Pressure accessory-vessel, Tupe of fluid: Liquid and Gas, Group of fluid: 1 and 2 Lower limit of Process and Ambient temperature for EJX910A: –29°C		PE3
Material certificate *8	Cover flange *9		M01
	Cover flange, Process connector *10		M11
Pressure test Leak test certificate *11	Test Pressure: 16 MPa (2300 psi) *12	Nitrogen (N_2) Gas *14 Retention time: one minute	T12
	Test Pressure: 25 MPa (3600 psi) *13		T13
	Test Pressure: 32 MPa (4500 psi) *21	Nitrogen (N_2) Gas or Water *20 Retention time: one minute	T09

*1: Not applicable with color 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: Applicable for EJX910A capsule code L.
*13: Applicable for EJX910A capsule codes M and H.
*14: Dry nitrogen gas is used for oil-prohibited use (option codes K1, K2, K5, and K6).
*15: Applicable for output signal code -F.
*16: Applicable for measurement span code M and H. If compliance with category III is needed, specify this code.
*17: 316 or 316L SST. The specification is included in amplifier code 2. Not applicable for external temperature input code -1, -2, -3 and -4.
*18: This option code must be specified with option code EE.
*19: The change of pressure fluctuation is monitored and then detects the impulse line blockage. See TI 01C25A31-01E for detailed technical information required for using this function.
*20: Dry nitrogen gas or pure water is used for oil-prohibited use (option codes K1, K2, K5, and K6).
*21: Applicable for EJX930A.