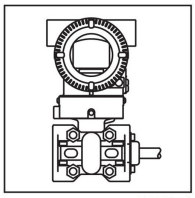
I. Transmitter body section

EJA438E – □□□□□ – □□□□□ – □□□□□□□□ – □□□□



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Model	Suffix codes	Description
EJA438E	· ·	Diaphragm sealed gauge pressure transmitter
Output signal	**-D** ·	4 to 20 mA DC with digital communication (BRAIN protocol)
	-J ·	4 to 20 mA DC with digital communication (HART 5/HART 7 protocol)*1
	-F ·	Digital communication (FOUNDATION Fieldbus protocol, refer to GS 01C31T02-01EN)
	-G ·	Digital communication (PROFIBUS PA protocol, refer to GS 01C31T04-01EN)
	-Q ·	Low Power, 1 to 5 V DC with digital communication (HART 7 protocol)*7
Measurement span (capsule)	**A** ·	0.06 to 3.5 MPa (8.6 to 500 psi)
	B ·	0.46 to 16 MPa (67 to 2300 psi)
—	**S** ·	Always S
—	**C** ·	Always C
Coverflange bolts and nuts material	**J** ·	B7 carbon steel
	G ·	316L SST
	C ·	660 SST
Installation	**-9** ·	Horizontal piping type and left side high pressure
Amplifier housing	**1** ·	Cast aluminum alloy
	3 ·	Cast aluminum alloy with corrosion resistance properties*2
	2 ·	ASTM CF-8M Stainless Steel*3
Electrical connection	**0** ·	G 1/2 female, one electrical connection without blind plugs
	► **2** ·	1/2 NPT female, two electrical connections without blind plugs
	4 ·	M20 female, two electrical connections without blind plugs
	5 ·	G 1/2 female, two electrical connections with a blind plug*4
	7 ·	1/2 NPT female, two electrical connections with a blind plug*4
	9 ·	M20 female, two electrical connections with a blind plug*4
	A ·	G1/2 female, two electrical connections and a 316 SST blind plug
	C ·	1/2 NPT female, two electrical connections and a 316 SST blind plug
	D ·	M20 female, two electrical connections and a 316 SST blind plug
Integral Indicator	**D** ·	Digital indicator*5
	E ·	Digital indicator with the range setting switch (push button)*6
	► **N** ·	None
Mounting braket	**B** ·	304 SST 2-inch pipe mounting, flat type (for horizontal piping)
	J ·	316 SST 2-inch pipe mounting, flat type (for horizontal piping)
	► **N** ·	None
Diaphragm seal section		–□□□□□□□□–□□□□□ Continued on diaphragm seal section (II)

The "►" marks indicate the most typical selection for each specification.

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

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

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

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

*5: Not applicable for output signal code **G**.

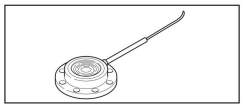
*6: Not applicable for output signal code **F**.

*7: As CE marking is still pending, not applicable for those countries which require CE marking.

II. Diaphragm seal section (Flush type)

● Process connection size: 3-inch (80mm) / 2-inch (50mm)

EJA438E– □□□□□ – □□□□□ – W□ 3/2 □□□□□□ – □□□□



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Model	Suffix codes	Description
EJA438E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-W**.....	Flush type
Flange rating	**J1**.....	JIS 10K
	J2.....	JIS 20K
	J4.....	JIS 40K
	J6.....	JIS 63K
	A1.....	ANSI class 150
	A2.....	ANSI class 300
	A4.....	ANSI class 600
	D2.....	DIN PN10/16
	D4.....	DIN PN25/40
	D5.....	DIN PN64
	P1.....	JPI class 150
	P2.....	JPI class 300
	P4.....	JPI class 600
Process connection size (Process flange size)	**3**.....	3-inch (80 mm)
	2.....	2-inch (50 mm)
Flange material	**A**.....	JIS S25C
	► **B**.....	304 SST *11
	C.....	316 SST *11
Gasket contact surface*1	**1**.....	Serration (for ANSI flange with wetted parts material SW only)
	2.....	Flat (no serration)
Wetted parts material*10		[Diaphragm] / [Others]
	SW.....	316L SST / 316L SST
	HW.....	Hastelloy C-276*9# / Hastelloy C-276*9#
	TW.....	Tantalum *7 / Tantalum *7
	UW.....	Titanium / Titanium
Flushing connection ring*2		[Ring] / [Vent/Drain plugs] / [Material]
	► **0**.....	None / — / —
	A.....	Straight type / R 1/4 connections*8 / 316 SST #
	B.....	Straight type / 1/4 NPT connections / 316 SST #
Extension	**0**.....	None
Fill fluid		[Process temperature] / [Ambient temperature]
	-A.....	For general use (silicone oil)*3 –10 to 250°C / –10 to 60°C
	► **-B**.....	For general use (silicone oil) –30 to 180°C / –15 to 60°C
	-C.....	For high temperature use (silicone oil)*4 *7 10 to 310°C / 10 to 60°C
	-D.....	For oil-prohibited use (fluorinated oil)*5 –20 to 120°C / –10 to 60°C
	-E.....	For low temperature use (ethylene glycol) –50 to 100°C / –40 to 60°C
	-1.....	High temp. and high vacuum use (Silicone oil)*3*12 –10 to 250°C / –10 to 60°C(50°C)*13
	-2.....	High temp. and high vacuum use (Silicone oil) *4*7*12 10 to 310°C / 10 to 60°C(50°C)*13
	-4.....	High vacuum use (Silicone oil) *12 –10 to 100°C / –10 to 60°C(50°C)*13
Capillary connection	**A**.....	Side of diaphragm seal unit
—	**2**.....	Always 2
Capillary length*6	**1**...	1 m / **6**..... 6 m
	2...	2 m / **7**..... 7 m
	3...	3 m / **8**..... 8 m
	4...	4 m / **9**..... 9 m
	5...	5 m / **A**..... 10 m
Option codes		/□ Optional specification

The "►" marks indicate the most typical selection for each specification.
Example: EJA438E-DASCG-912EN-WA13B1SW00-BA25/□

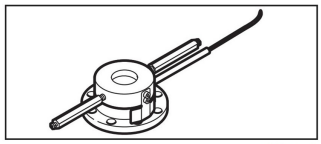
*1: See table 3 'Gasket contact surface' on page 5.
*2: When specified flushing connection ring code A or B, exclusive gasket is provided for transmitter side.
*3: In case of wetted parts material code TW (Tantalum), the process temperature limit is –10 to 200°C.
*4: Wetted parts material code TW (Tantalum) cannot be applied.
*5: Even in case where fill fluid code D (fluorinated oil) is selected, if degrease cleansing treatment or both degrease cleansing and dehydrating treatment for the wetted parts is required, specify option code K1 or K5.
*6: In case of wetted parts material code HW (Hastelloy C), TW (Tantalum), and UW (Titanuym) for 2-inch pressure flange, specify capillary length from 1 to 5 m.
*7: Not applicable for flashing connection ring code A and B.
*8: Not applicable for gasket contact surface code 1.
*9: Hastelloy C-276 or N10276.
*10: ⚠ 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 hightemperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.
*11: Forged version of the material may be used.
*12: Not applicable for wetted parts material code UW.
*13: The upper ambient temperature limit is 50°(122°F) when specifying process connection size code 2 (2-inch).

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.

II. Diaphragm seal section (Flush type)

● Process connection size: 1 1/2-inch (40 mm)

EJA438E– □□□□□ – □□□□□ – **W**□ **8** □□□□□ – □□□□



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Model	Suffix codes	Description
EJA438E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-W**.....	Flush type
Flange rating	**J1**..... **J2**..... **J4**..... **A1**..... **A2**..... **A4**..... **P1**..... **P2**..... **P4**.....	JIS 10K JIS 20K JIS 40K ANSI class 150 ANSI class 300 ANSI class 600 JPI class 150 JPI class 300 JPI class 600
Process connection size (Process flange size)	**8**.....	1 1/2-inch (40 mm)
Flange material	► **A**..... ► **B**..... ► **C**.....	JIS S25C 304 SST *6 316 SST *6
Gasket contact surface*1	**1**..... **2**.....	Serration (for ANSI flange only) Flat (no serration)
Wetted parts material*5	**SW**.....	[Diaphragm] [Others] 316L SST 316L SST
Flushing connection ring*2	**C**..... **D**.....	[Ring] [Vent/Drain plugs] [Material] Reducer type R 1/4 connections*4 316 SST # Reducer type 1/4 NPT connections 316 SST #
Extension	**0**.....	None
Fill fluid	**-A**..... ► **-B**..... **-D**..... **-E**..... **-1**..... **-4**.....	[Process temperature] [Ambient temperature] For general use (silicone oil) –10 to 250°C –10 to 60°C For general use (silicone oil) –30 to 180°C –15 to 60°C For oil-prohibited use (fluorinated oil)*3 –20 to 120°C –10 to 60°C For low temperature use (ethylene glycol) –50 to 100°C –40 to 60°C High temp. and high vacuum use (Silicone oil) –10 to 250°C –10 to 50°C High vacuum use (Silicone oil) –10 to 100°C –10 to 50°C
Capillary connection	**A**.....	Side of diaphragm seal unit
—	**2**.....	Always 2
Capillary length	**1**... **2**... **3**... **4**... **5**...	1 m 2 m 3 m 4 m 5 m **6**..... 6 m **7**..... 7 m **8**..... 8 m **9**..... 9 m **A**..... 10 m
Option codes		/□ Optional specification

The "►" marks indicate the most typical selection for each specification.
Example: EJA438E-DASCG-912EN-WA18B1SWD0-BA25/□

*1: See table 3 'Gasket contact surface' on page 5.

*2: When specified flushing connection ring code C or D, exclusive gasket is provided for transmitter side.

*3: Even in case where fill fluid code D (fluorinated oil) is selected, if degrease cleansing treatment or both degrease cleansing and dehydrating treatment for the wetted parts is required, specify option code K1 or K5.

*4: Not applicable for gasket contact surface code 1.

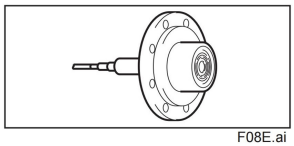
*5: ⚠ Users must consider the characteristics of selected wetted parts material and the influence of process fluids. The use of inappropriate materials can result in the leakage of corrosive process fluids and cause injury to personnel and/or damage to plant facilities. It is also possible that the diaphragm 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 hightemperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.

*6: Forged version of the material may be used.

II. Diaphragm seal section (Extended type)

● Process connection size: 4-inch (100 mm) / 3-inch (80 mm)

EJA438E– □□□□□ – □□□□□ – E □ 4/3 □□□□□□ – □□□□



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Model	Suffix codes	Description
EJA438E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-E**	Extended type
Flange rating	**J1** ..... **J2** ..... **J4** ..... **A1** ..... **A2** ..... **P1** ..... **P2** ..... **D2** **D4**	JIS 10K JIS 20K JIS 40K ANSI class 150 ANSI class 300 JPI class 150 JPI class 300 DIN PN10/16 DIN PN25/40
Process connection size (Process flange size)	**4** **3**	4-inch (100 mm) 3-inch (80 mm)
Flange material	► **A** ..... ► **B** ..... **C**	JIS S25C 304 SST *5 316 SST *5
Gasket contact surface*1	**1** **2**	Serration (for ANSI flange only) Flat (no serration)
Wetted parts material*4	**SE**.....	[Diaphragm] [Pipe] [Others] 316L SST 316 SST 316 SST
Flushing connection ring	**0**	None
Extension	**1** ..... **3** **5**	Length (X_2) = 50 mm Length (X_2) = 100 mm Length (X_2) = 150 mm
Fill fluid	**-A** ..... ► **-B** ..... **-C** ..... **-D** ..... **-E** ..... **-1** ..... **-2** ..... **-4**	[Process temperature] [Ambient temperature] For general use (silicone oil) –10 to 250°C –10 to 60°C For general use (silicone oil) –30 to 180°C –15 to 60°C For high temperature use (silicone oil) 10 to 310°C 10 to 60°C For oil-prohibited use (fluorinated oil)*2 –20 to 120°C –10 to 60°C For low temperature use (ethylene glycol) –50 to 100°C –40 to 60°C High temp. and high vacuum use (Silicone oil) –10 to 250°C –10 to 60°C(50°C)*6 High temp. and high vacuum use (Silicone oil) 10 to 310°C 10 to 60°C(50°C)*6 High vacuum use (Silicone oil) –10 to 100°C –10 to 60°C(50°C)*6
Capillary connection	**B**.....	Back of diaphragm seal unit
–	**2**.....	Always 2
Capillary length*3	**1**... **2**... **3**... **4**... **5**...	1 m 2 m 3 m 4 m 5 m **6**..... 6 m **7**..... 7 m **8**..... 8 m **9**..... 9 m **A**..... 10 m
Option codes		/□ Optional specification

The "►" marks indicate the most typical selection for each specification.
Example: EJA438E-DASCG-912EN-EA14B1SE01-BB25/□

*1: See table 3 'Gasket contact surface' on page 5.

*2: Even in case where fill fluid code D (fluorinated oil) is selected, if degrease cleansing treatment or both degrease cleansing and dehydrating treatment for the wetted parts is required, specify option code K1 or K5.

*3: The specified capillary length includes the extension length (X_2) and the flange thickness (t).

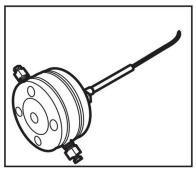
*4: ⚠ Users must consider the characteristics of selected wetted parts material and the influence of process fluids. The use of inappropriate materials can result in the leakage of corrosive process fluids and cause injury to personnel and/or damage to plant facilities. It is also possible that the diaphragm 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 hightemperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.

*5: Forged version of the material may be used.

*6: The upper ambient temperature limit is 50°(122°F) when specifying process connection size code 3 (3-inch).

II. Diaphragm seal section (Inner diaphragm, Adapter connection type)

EJA438E– □□□□□ – □□□□□ – A [6/7/1] □□□□□ – □□□□



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Model	Suffix codes	Description
EJA438E	–□□□□□–□□□□□ ·	Transmitter body section (I)
Process connection style	**-A** ·	Inner Diaphragm, Adapter connection type
Flange rating	**J1** ·	JIS 10K
	J2 ·	JIS 20K
	J4 ·	JIS 40K
	A1 ·	ANSI class 150 **P1** · · · · JPI class 150
	A2 ·	ANSI class 300 **P2** · · · · JPI class 300
	A4 ·	ANSI class 600*7 **P4** · · · · JPI class 600*7
Process connection size (Process flange size)	**6** ·	1/2 inch (15 mm)
	7 ·	3/4 inch (20 mm)
	1 ·	1 inch (25 mm)
Flange material*3	**E** ·	316 SST (Adapter material)*4
Gasket contact surface*1	**1** ·	Serration (for ANSI flange only)
	2 ·	Flat (no serration)
Wetted parts material*3		[Diaphragm] [Others]
	SA ·	316L SST 316 SST (include Adapter)*4
	WA ·	Hastelloy C-276 *5# 316 SST (include Adapter)*4#
Flushing connection ring	**0** ·	None
Extension	**0** ·	None
Fill fluid		[Process temperature] [Ambient temperature]
	-A ·	For general use (silicone oil) –10 to 250°C –10 to 60°C
►	**-B** ·	For general use (silicone oil) –30 to 180°C –15 to 60°C
	-D ·	For oil-prohibited use (fluorinated oil)*2 –20 to 120°C –10 to 60°C
	-E ·	For low temperature use (ethylene glycol) –50 to 100°C –40 to 60°C
	-1 ·	High temp. and high vacuum use (Silicone oil) –10 to 250°C –10 to 50°C
	-4 ·	High vacuum use (Silicone oil) –10 to 100°C –10 to 50°C
Capillary connection	**B** ·	Back of diaphragm seal unit
—	**2** ·	Always 2
Capillary length*6	**1** ·	1 m **6** · · · · · 6 m
	2 ·	2 m **7** · · · · · 7 m
	3 ·	3 m **8** · · · · · 8 m
	4 ·	4 m **9** · · · · · 9 m
	5 ·	5 m **A** · · · · 10 m
Option codes and Tokuchu code		/□ Optional specification and /Z

The "►" marks indicate the most typical selection for each specification. Example: EJA438E-DASCG-912DN-AA16E1SA00-BB25/□/Z

*1: See table 3 'Gasket contact surface' on page 5.

*2: Even in case where fill fluid code **D** (fluorinated oil) is selected, if degrease cleansing treatment or both degrease cleansing and dehydrating treatment for the wetted parts is required, specify option code **K1** or **K5**.

*3: ⚠ 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 hightemperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.

*4: Forged version of the material may be used.

*5: Hastelloy C-276 or N10276.

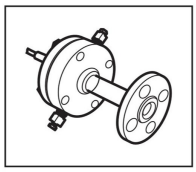
*6: In case of wetted parts material code **WA** (Hastelloy C), specify capillary length from 1 to 5 m.

*7: In case where flange rating code **A4** (ANSI class 600) or **P4** (JPI class 600) is selected, It must be selected optional code /**HP** (High pressure-proof structure).

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.

II. Diaphragm seal section (Inner Diaphragm, Flange connection type)

EJA438E– □□□□□ – □□□□□ – D ▭ 6/7/1 ▭▭▭▭▭ – ▭▭▭▭



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Model	Suffix codes		Description		
EJA438E	–□□□□□–□□□□□		Transmitter body section (I)		
Process connection style	**-D**		Inner Diaphragm, Flange connection type		
Flange rating	**J1**		JIS 10K		
	J2		JIS 20K		
	J4		JIS 40K		
	A1		ANSI class 150		
	A2		ANSI class 300		
	A4		ANSI class 600*7		
	P1		JPI class 150		
	P2		JPI class 300		
	P4		JPI class 600*7		
Process connection size (Process flange size)	**6**		1/2 inch (15 mm)		
	7		3/4 inch (20 mm)		
	1		1 inch (25 mm)		
Flange material*3	**D**		316 SST (Flange and Pipe material)*4		
Gasket contact surface*1	**1**		Serration (for ANSI flange only)		
	2		Flat (no serration)		
Wetted parts material*3			[Diaphragm]	[Others]	
	SD		316L SST	316 SST*4	
	WD		Hastelloy C-276*5#	316 SST*4#	
Flushing connection ring	**0**		None		
Extension	**0**		None		
Fill fluid				[Process temperature]	[Ambient temperature]
		-A	For general use (silicone oil)	–10 to 250°C	–10 to 60°C
	►	**-B**	For general use (silicone oil)	–30 to 180°C	–15 to 60°C
		-D	For oil-prohibited use (fluorinated oil)*2	–20 to 120°C	–10 to 60°C
		-E	For low temperature use (ethylene glycol)	–50 to 100°C	–40 to 60°C
		-1	High temp. and high vacuum use (Silicone oil)	–10 to 250°C	–10 to 50°C
		-4	High vacuum use (Silicone oil)	–10 to 100°C	–10 to 50°C
Capillary connection	**B**		Back of diaphragm seal unit		
—	**2**		Always 2		
Capillary length*6	**1**		1 m	**6**	6 m
	2		2 m	**7**	7 m
	3		3 m	**8**	8 m
	4		4 m	**9**	9 m
	5		5 m	**A**	10 m
Option codes and Tokuchu code			/ ☐ Optional specification and /Z		

The "►" marks indicate the most typical selection for each specification. Example: EJA438E-DASCG-912DN-DA16D1SD00-BB25/☐/Z

*1: See table 3 'Gasket contact surface' on page 5.

*2: Even in case where fill fluid code **D** (fluorinated oil) is selected, if degrease cleansing treatment or both degrease cleansing and dehydrating treatment for the wetted parts is required, specify option code **K1** or **K5**.

*3: ⚠ 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 hightemperature steam (150°C [302°F] or above). Contact Yokogawa for detailed information of the wetted parts material.

*4: Forged version of the material may be used.

*5: Hastelloy C-276 or N10276.

*6: In case of wetted parts material code **WD** (Hastelloy C), specify capillary length from 1 to 5 m.

*7: In case where flange rating code **A4** (ANSI class 600) or **P4** (JPI class 600) is selected, It must be selected optional code **/HP** (High pressure-proof structure).

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.

■ OPTIONAL SPECIFICATIONS (For Explosion Protected type) "◇"

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

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 *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)	**FF1**
	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	**FS1**
	Combined FF1 and FS1 *1*3	**FU1**
ATEX	ATEX Flameproof Approval *1*3 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) *2	**KF22**
	ATEX Intrinsically safe Approval *1*3 Applicable Standard: EN IEC 60079-0, EN 60079-11 Certificate: DEKRA 11ATEX0228 X II 1 G Ex ia IIC T4 Ga, II 2 D 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, Ii=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)	**KS21**
	Multiple types of protection (KF22, KS21 or Intrinsically safe Ex ic) *1*3 Applicable Standard: EN IEC 60079-0, EN 60079-11 II 3 G 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	**KU22**

Canadian Standards Association (CSA)	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	**CF1**
	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	**CS1**
	Combined CF1 and CS1 *1*3	**CU1**
IECEx	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	**SF2**
	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	**SU21**

IECEx	IECEx Flameproof Approval *1 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) *2	**SF22**
	IECEx Intrinsically safe and SF22 *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=30V, Ii=200mA, Pi=0.9W, Ci=27.6nF, 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 Refer to SF22	**SU22**

*1: Applicable for Electrical connection code **2**, **4**, **7**, **9**, **C** and **D**.
*2: Lower limit of ambient temperature is –15°C (5°F) when **/HE** is specified.
*3: Not applicable for output signal code Q.

■ OPTIONAL SPECIFICATIONS

Item		Description			Code
Painting	Color change	Amplifier cover only*1			P□
		Amplifier cover and terminal cover, Munsell 7.5 R4/14			PR
	Coating change	Anti-corrosion coating*2			X2
316 SST exterior parts		316 SST zero-adjustment screw and setscrews*3			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.) 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		Degrease cleansing treatment			K1
Oil-prohibited use with dehydrating treatment		Degrease cleansing treatment and dehydrating treatment			K5
Calibration units *4		P calibration (psi unit)	(See table for Span and Range Limits.)		D1
		bar calibration (bar unit)			D3
		M calibration (kgf/cm^2 unit)			D4
Operating temperature correction *5		Adjusting range : 80°C to Maximum temperature of specified fill fluid.			R
Capillary without PVC sheaths		When ambient temperature exceeds 100°C, or use of PVC is prohibited			V
Output limits and failure operation *6		Failure alarm down-scale : Output status at CPU failure and hardware error is –5%, 3.2 mA 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 *11	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		Inside of isolating diaphragms (fill fluid side) are gold plated, effective for hydrogen permeation.			A1
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 BRAIN communication type	Software damping		CB
Material certificate		Adapter (Flange), Block	Adapter connection type		M2A
		Adapter (Flange), Block, Bolt for Block, Stud bolt and nut, Bolt and nut for cover flange			M8A
		Flange, Base, Block, Pipe	Flange connection type		M2D
		Flange, Base, Block, Pipe, Bolt for block, Bolt and nut for cover flange			M8D
Pressure test/ Leak test Certificate *8		[Flange rating]	[Test pressure]		
	For A-Capsule	JIS 10K	2 MPa (290 psi)	Nitrogen Gas *9 Retention time: one minute	T51
		JIS 20K, 40K	3.5 MPa (500 psi)		T53
		ANSI/JPI Class 150	3 MPa (430 psi)		T52
		ANSI/JPI Class 300, 600	3.5 MPa (500 psi)		T53
	For B-Capsule	JIS 10K	2 MPa (290 psi)		T51
		JIS 20K	5 MPa (720 psi)		T54
		JIS 40K	10 MPa (1450 psi)		T57
		ANSI/JPI Class 150	3 MPa (430 psi)		T52
		ANSI/JPI Class 300	8 MPa (1160 psi)		T56
		ANSI/JPI Class 600	16 MPa (2300 psi)		T58
Long Vent		For inner diaphragm use only. Total length: 119 mm (standard: 34 mm); Total length when combining with option code K1, K2, K5, and K6: 130 mm. Material: 316 SST			U2
High pressure-proof structure*10		High pressure-proof structure for ANSI/JPI class 600 flange.			HP
Parameter list*12		List of setting and adjustment parameters			YP

*1: Not applicable for amplifier housing code **2** and **3**.
*2: Not applicable with color change option. Not applicable for amplifier housing code 2.
*3: 316 or 316L SST. The specification is included in amplifier housing code **2**.
*4: The unit of MWP (Max. working pressure) on the name plate of a housing is the same unit as specified by option code **D1**, **D3**, and **D4**.
*5: Specify the process operating temperature for zero correction. Example: Zero correction by process temperature 90°C.
*6: Applicable for output signal code **D** and **J**. The hardware error indicates faulty amplifier or capsule.
*7: Also see 'Ordering Information.'
*8: The unit on the certificate is always MPa regardless of selection of option code **D1**, **D3**, or **D4**.
*9: Dry nitrogen gas is used for oil-prohibited use (option code **K1** and **K5**.)
*10: In case where flange rating code **A4** (ANSI class 600) or **P4** (JPI class 600) is selected, It must be selected optional code /**HP** (High pressure-proof structure).
*11: 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.
*12: Applicable for output signal code D and J.

DPharp EJA®


Indicator with LPS


Basic Indicator


No Indicator

Local Display


Standard


Ultra-low Copper


Stainless Steel

Amplifier Housing

4 to 20mA

1 to 5VDC (Low Power)

Output Signal

BRAIN HART Fieldbus PROFIBUS

Digital Communication

Product Certifications


1-1/2 inch
2-inch
3-inch
Flush Type

ANSI
DIN
JIS
JPI


3-inch
4-inch
Extended Type

Process Connection

PVC Coated SS Armoured

Capillaries

(1 to 10 meters)

EJA438E Overview

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

Measurement Types	
Primary Variable	Gauge Pressure
Reference Accuracy	
Primary Variable	±0.2% of Span
Response Time	
Primary Variable	200 ms
Specification Conformance	
EJA-E Series	±3σ