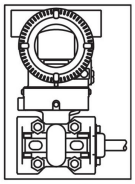
I. Transmitter body section

EJA118E – □□□□□ – □□□□□ – □□□□□□□□ – □□□□



F05E.ai

Model	Suffix codes	Description
EJA118E	· ·	Diaphragm sealed differential 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)	**M** ·	2.5 to 100 kPa (10 to 400 inH_2O)
	H ·	25 to 500 kPa (100 to 2000 inH_2O)
—	**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**.

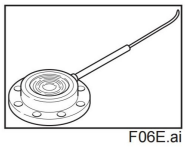
*6: Not applicable for output signal code **F**.

*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)

EJA118E–□□□□□–□□□□□–W□ 3/2 □□□□□–□□□□


F06E.ai

Model	Suffix codes	Description
EJA118E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-W**	Flush type
Flange rating	**J1**	JIS 10K
	J2	JIS 20K
	J4	JIS 40K
	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	**SW**	[Diaphragm] 316L SST; [Others] 316L SST
	HW	Hastelloy C-276*9#; Hastelloy C-276*9#
	TW	Tantalum *7; Tantalum *7
	UW	Titanium; Titanium (for 3-inch process flange only)
Flushing connection ring*2	**0**	[Ring] None; [Vent/Drain plugs] —; [Material] —
►	**1**	Straight type; R 1/4 connections; 316 SST #
	2	Straight type; 1/4 NPT connections; 316 SST #
Extension	**0**	None
Fill fluid*5		[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
	2 ...	2 m
	3 ...	3 m
	4 ...	4 m
	5 ...	5 m
	6	6 m
	7	7 m
	8	8 m
	9	9 m
	A	10 m
Option codes		/□ Optional specification

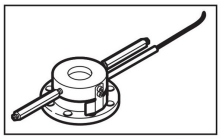
The "►" marks indicate the most typical selection for each specification.
Example: EJA118E-DMSCG-912EN-WA13B1SW00-BA25/□

*1: See table 3 ‘Gasket contact surface’ on page 6.
*2: When specified flushing connection ring code 1 or 2, exclusive gaskets are 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) and TW (Tantalum) for 2-inch process flange, specify capillary length from 1 to 5m.
*7: Not applicable for flashing connection ring code 1 and 2.
*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)

EJA118E – □□□□□ – □□□□□ – W □ 8 □□□□□ – □□□□



F07E.ai

Model	Suffix codes	Description
EJA118E	– □□□□□ – □□□□□	Transmitter body section (I)
Process connection style	-W	Flush type
Flange rating	J1	JIS 10K
	J2	JIS 20K
	J4	JIS 40K
	A1	ANSI class 150
	A2	ANSI class 300
	A4	ANSI class 600
	P1	JPI class 150
	P2	JPI class 300
	P4	JPI class 600
Process connection size (Process flange size)	8	1 1/2-inch (40 mm)
Flange material	► A	JIS S25C
	► B	304 SST *6
	C	316 SST *6
Gasket contact surface*1	1	Serration (for ANSI flange only)
	2	Flat (no serration)
Wetted parts material*5	SW	[Diaphragm] 316L SST / [Others] 316L SST
Flushing connection ring*2	3	[Ring] Reducer type / [Vent/Drain plugs] R 1/4 connections*4 / [Material] 316 SST #
	4	[Ring] Reducer type / [Vent/Drain plugs] 1/4 NPT connections / [Material] 316 SST #
Extension	0	None
Fill fluid	-A	For general use (silicone oil) [Process temperature] –10 to 250°C [Ambient temperature] –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)*3 –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	A	Side of diaphragm seal unit
—	2	Always 2
Capillary length	1 ...	1 m
	2 ...	2 m
	3 ...	3 m
	4 ...	4 m
	5 ...	5 m
	6	6 m
	7	7 m
	8	8 m
	9	9 m
	A	10 m
Option codes	/□	Optional specification

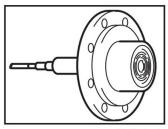
The "►" marks indicate the most typical selection for each specification.
Example: EJA118E-DMSCG-912EN-WA18B1SW40-BA25/□

*1: See table 3 'Gasket contact surface' on page 6.
*2: When specified flushing connection ring code 3 or 4, exclusive gaskets are 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)

EJA118E–□□□□□–□□□□□–E □ (4/3) □□□□□–□□□□



F08E.ai

Model	Suffix codes	Description
EJA118E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-E**	Extended type
Flange rating	**J1** ..... **J2** ..... **A1** ..... **A2** ..... **P1** ..... **P2** ..... **D2** **D4**	JIS 10K JIS 20K 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] 316L SST; [Pipe] 316 SST; [Others] 316 SST
Flushing connection ring	**0**	None
Extension	**2** ..... **4** **6**	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: EJA118E-DMSCG-912EN-EA14B1SE02-BB25/□

*1: See table 3 'Gasket contact surface' on page 6.

*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.

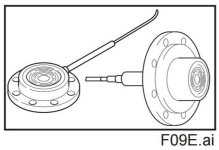
*5: Forged version of the material may be used.

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

II. Diaphragm seal section (Combination type)

● **Process connection size: High pressure side; 4-inch (100 mm) • • • Extended type**
Low pressue side; 3-inch (80 mm) • • • Flush type

EJA118E–□□□□□–□□□□□–**Y** ■**W**■■■■–■■■■



F09E.ai

Model	Suffix codes	Description
EJA118E	–□□□□□–□□□□□	Transmitter body section (I)
Process connection style	**-Y**	Combination type (Extended and Flush)
Flange rating	**J1** ..... **J2** ..... **A1** ..... **A2** ..... **P1** ..... **P2** ..... **D2** **D4**	JIS 10K JIS 20K ANSI class 150 ANSI class 300 JPI class 150 JPI class 300 DIN PN10/16 DIN PN25/40
Process connection size (Process flange size)	**W**	High pressure side 4-inch (100 mm) Low pressure side 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	**SY**.....	[Diaphragm] [Pipe] [Others] High pressure side: 316L SST 316 SST 316 SST Low pressure side: 316L SST — 316L 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		[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
	-C	For high temperature use (silicone oil) 10 to 310°C 10 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 60°C
	-2	High temp. and high vacuum use (Silicone oil) 10 to 310°C 10 to 60°C
	-4	High vacuum use (Silicone oil) –10 to 100°C –10 to 60°C
Capillary connection	**C**.....	High pressure side: Back of diaphragm seal unit Low pressure side: Side 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: EJA118E-DMSCG-912EN-YA1WB1SY01-BC25/□

*1: See table 3 'Gasket contact surface' on page 6.

*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.

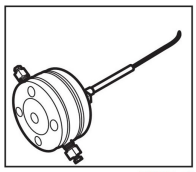
*3: The specified capillary length of high pressure side (extended side) includes the extension length (X_2) and the flange thickness (t).

*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.

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

EJA118E – □□□□□ – □□□□□ – A ■ 6/7/1 ■■■■■■ – ■■■■



F06E.ai

Model	Suffix codes	Description
EJA118E	–□□□□□–□□□□□ ·····	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[*8] — **P4** ···· JPI class 600[*8]
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[*2]	**0** ·····	None
Extension	**0** ·····	None
Fill fluid[*5]		[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
Capillary treatment[*6]	**1** ·····	Bundled capillary (1 m separated)
	2 ·····	Standard
Capillary length[*7]	**1** ·····	1 m[*6] — **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: EJA118E-DMSCG-912EN-AA16E2SA00-BB15/□/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 high-temperature 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.

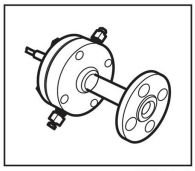
*6: In case where capillary length code **1** (1 m) is selected, capillary treatment must be selected code **2** (None).

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

*8: 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)



F07E.ai

EJA118E – □□□□□ – □□□□□ – **D** ▭ (**6**/**7**/**1**) ▭▭▭▭▭ – ▭▭▭▭

Model	Suffix codes	Description
EJA118E	–□□□□□–□□□□□ ·	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*8
	P1 ·	JPI class 150
	P2 ·	JPI class 300
	P4 ·	JPI class 600*8
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
Capillary treatment*6	**1** ·	Bundled capillary (1 m separated)
	2 ·	Standard
Capillary length*7	**1** ·	1 m*6 **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: EJA118E-DMSCG-912EN-DA16D2SD00-BB15/□/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 high-temperature 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 where capillary length code **1** (1 m) is selected, capillary treatment must be selected code **2** (None).

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

*8: 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**

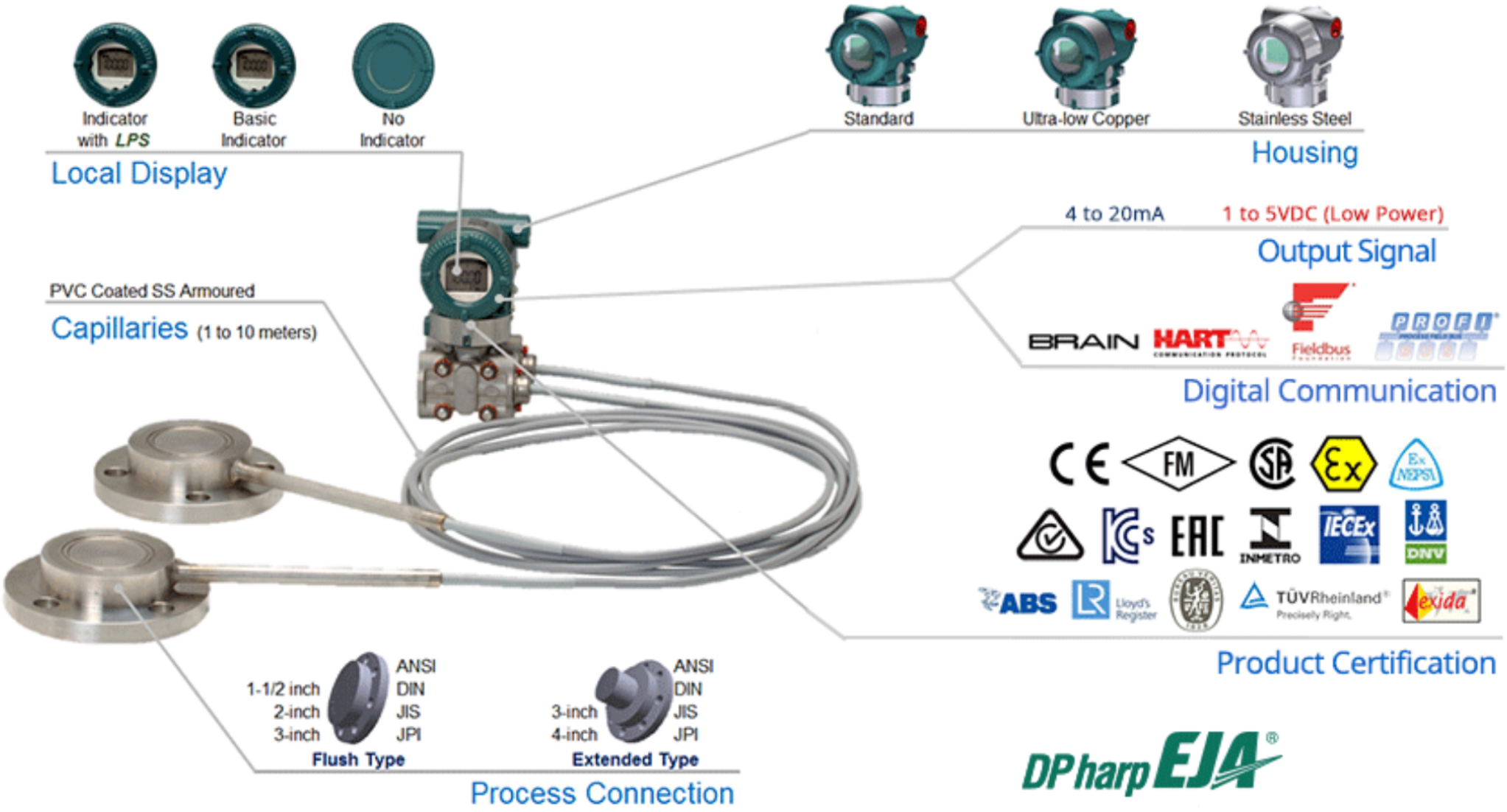
IECEx	IECEx Flameproof Approval *1 Applicable Standard: IEC 60079-0, IEC 60079-1, IEC 60079-31 Certificate: IECEx DEK 14.0046X Enclosure: IP66/IP67 Ex db IIC T6...T4 Gb, Ex tb IIIC T85°C Db Amb. Temp. (Tamb) for gas-proof : T4; –50 to 75°C (–58 to 167°F), T5; –50 to 80°C (–58 to 176°F), T6; –50 to 75°C (–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)	
		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
		Nitrogen Gas *9 Retention time: one minute		
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, optional code /**HP** (High pressure-proof structure) must be selected.
*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.


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
Fieldbus
PROFI
Digital Communication
PVC Coated SS Armoured
Capillaries (1 to 10 meters)
FM
INMETRO
IECEx
DNV
ABS
Lloyd's Register
TÜVRheinland
Precisely Right.
exida
Product Certification
1-1/2 inch
2-inch
3-inch
ANSI
DIN
JIS
JPI
Flush Type
3-inch
4-inch
ANSI
DIN
JIS
JPI
Extended Type
Process Connection
DPharp EJA®

EJA118E Overview

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

Measurement Types	
Primary Variable	Differential Pressure (DP)
Secondary Variable	Static Pressure (SP)
Reference Accuracy	
Primary Variable	±0.2% of DP Span
Secondary Variable	±0.5% of SP Span
Response Time	
Primary Variable	200 msec
Secondary Variable	500 msec
Rangeability	
Primary Variable	M-Capsule: 40:1 H-Capsule: 20:1
Specification Conformance	
EJX-A Series	±3σ