8. Yokogawa EJA transmitters

GTX Sales-Specific Course

Date	
Name	
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INDEX

Internal use only

I. Yokogawa EJX series & EJA series

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Internal use only

- **According to Yokogawa home-page** (http://www.yokogawa.com/fld/PRESSURE/pressure.htm)
  - The Dpharp EJX series of pressure transmitters/ differential pressure transmitters are the latest addition to the Dpharp family's EJA series. Dpharp EJX pressure and differential pressure transmitters employ a next-generation multi-sensing technology that provides virtually the highest level of performance and precision in the market.
  - Models:
    - EJX110A D.P.
    - EJX120A D.P.
    - EJX130A D.P.
    - EJX210A Flange mounted D.P.
    - EJX310A Absolute P.
    - EJX430A Gauge P.
    - EJX440A Gauge P.
    - EJX510A/530A Absolute and Gauge P.
    - EJX118A Diaphragm sealed D.P.
    - EJX438A Diaphragm sealed Gauge P.
    - EJX115A Low Flow Transmitter
    - EJX810A Multivariable Transmitter
    - EJXMVTool™ EJX-MV Configuration DTM (FSA120)

I. Yokogawa EJX series & EJA series

- **According to Yokogawa home-page** (http://www.yokogawa.com/fld/PRESSURE/pressure.htm)
  - The Dpharp **EJA series** of intelligent differential pressure and pressure transmitter features high performance, durability and reliability. The pressure detector, the core of the transmitter, uses a silicon resonant sensor that has proven to be highly reliable in the field and offers a complete product lineup.
  - Models:
    - EJA110A D.P.
    - EJA120A Draft range D.P.
    - EJA130A High static D.P.
    - EJA210A/220A Flange mounted D.P.
    - EJA310A Absolute P.
    - EJA430A Gauge P.
    - EJA440A High static Gauge P.
    - EJA510A/530A Absolute and Gauge P.
    - EJA118 Diaphragm Sealed D.P.
    - EJA438 Diaphragm Sealed Gauge P.
    - EJA115 Low Flow Transmitter

I. Yokogawa EJX series & EJA series

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Difference between GTX and EJA

Series Name	AT9000 Model GTX	Yokogawa EJA	Emerson
Model No.	GTX31D	EJA110A	3051CD
Measuring Means	Piezo Resistive Sensor		
Sensor	NPS (Yamatake original)		
Measuring Span	0.5 ~ 100kPa (200:1)	1 ~ 100kPa (100:1)	0.62 ~ 62kPa (100:1)
Measuring Range	-100 ~ 100kPa	-100 ~ 100kPa	-62 ~62kPa
Output signal Analog Digital	 4~20mADC (HART/SFN) Fieldbus/DE	 4~20mADC (HART/BRAIN) Fieldbus	 4~20mADC(HART) Fieldbus
Accuracy (Linear Output) Analog mode	 ±0.04% for $X^{*1} \geq$10kPa ±(0.008+0.032 x 10/X^{*1})% for X^{*1} <10kPa	 ±0.075% for $X^{*1} \geq$10kPa ±(0.025+0.05 x 10/X^{*1})% for X^{*1} <10kPa	 ±0.065% for $X^{*1} \geq$6.2kPa ±(0.015+0.005 x 6.2/X^{*1})% for X^{*1} <6.2kPa
Zero Stability	±0.1%/10years	±0.1%/5years	±0.125%/5years
Working pressure Range	21MPa	14MPa	25MPa
Ambient Temperature Range Normal Operation Operative Limit Storage Conditions	 - 40 ~ +85ºC - 50 ~ +93ºC - 50 ~ +85ºC	 - 40 ~ +85ºC	 - 40 ~ +85ºC
Response time	Below 100msec.	Approx. 600msec	100msec

I. Yokogawa EJX series & EJA series

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Internal use only

Difference between GTX and EJA

Series Name	AT9000 Model GTX	Yokogawa EJA	Emerson
Model No.	GTX31D	EJA110A	3051CD
Damping	Adjustable 0~32sec. By 10steps	Adjustable 0.2 ~ 64sec.	Adjustable 0 t~36sec.
Failure Alarm	Available in Option	Available in Option (Up scale is std.)	Available in Option
External Zero & Span	Available in Option	Standard	Available in Option
Lightning protection	Standard equipment		
Indicator	5 digits, Eng.Units, other information		
Write protection	Standard (Hard switch, software)		
Contact output	Available as Option	Not available	Not available
Weight	Approx. 3.4kg	Approx. 3.9kg	Approx 3.9kg
Safety approvals	SIL 2	Not available	Not available
Diagnostics	Self diagnostics	Self diagnostics	Self diagnostics
	Status records	Not available	Not available
	Zero drift record	Not available	Not available

*1 : Accuracy is shown for each item are the percentage ratio for "*X*", which is the greatest value of either the upper range value (URV), the lower range value (LRV) or the span.

II. Model number conversion table

Internal use only

A) EJA1□0A : Differential pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Max. Working Press.	Replace to
Low differential pressure	EJA110A L capsule	-10 to 100 kPa	0.5 to 10kPa	3.5MPa	GTX30D
Standard Middle differential pressure	EJA110A M capsule	-100 to 100 kPa	1 to 100kPa	16MPa	GTX30D GTX31D
Standard Middle differential pressure	EJA130A M capsule	-100 to 100 kPa	1 to 100kPa	32MPa	GTX32D
Standard High differential pressure	EJA110A H capsule	-500 to 500kPa	20 to 500kPa	16MPa	GTX40D GTX41D GTX42D
Standard High differential pressure	EJA130A H capsule	-500 to 500kPa	20 to 500kPa	32MPa	GTX42D
Standard Highest differential pressure	EJA110A V capsule	-0.5 to 14MPa	0.14 to 14MPa	16MPa	GTX41D GTX42D GTX71D/72D

Normal model

Highest static pressure model (32MPa)

II. Model number conversion table

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Internal use only

B) EJA4□0A : Gauge pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Replace to
Standard Gauge pressure	EJA430A A capsule	-0.1 to 3MPa	0.06 to 3MPa	GTX60G
Standard Middle Gauge pressure	EJA430A B capsule	-0.1 to 14MPa	0.46 to 14kPa	GTX71G
Standard High Gauge pressure	EJA440A C capsule	-0.1 to 32MPa	5 to 32MPa	GTX82G
Standard High Gauge pressure	EJA440A D capsule	-0.1 to 50MPa	5 to 50MPa	GTX82G

C) EJA310A : Absolute pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Replace to
Standard Gauge pressure	EJA310A L capsule	0 to 10kPa abs	0.67 to 10kPa	GTX30A
Standard Middle Gauge pressure	EJA310A M capsule	0 to 130kPa abs	1.3 to 130kPa	GTX30A GTX60A
Standard High Gauge pressure	EJA310A A capsule	0 to 3MPa abs	0.03 to 3MPa	GTX60A

II. Model number conversion table

D) EJA2□0A : Flange Mounted differential pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Replace to
Standard Middle differential pressure	EJA210A/220A M capsule	-100 to 100 kPa	1 to 10kPa	GTX35F
Standard High differential pressure	EJA210A/220A H capsule	-500 to 500kPa	25 to 500kPa	GTX60F

II. Model number conversion table

E) EJA118□ : Remote-sealed type Differential pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Replace to
Standard Middle differential pressure	EJA118W/N/H M capsule	-100 to 100 kPa	2.5 to 100kPa	GTX35R
Standard High differential pressure	EJA118W/N/H H capsule	-500 to 500kPa	25 to 00kPa	GTX60R

F) EJA438□ : Remote-sealed type pressure transmitter

Product name	Model	Measuring Range	Measuring Span	Replace to
Standard Middle differential pressure	EJA438W/N A capsule	-0.1 to 3MPa	1 to 3MPa	GTX60U
Standard High differential pressure	EJA438W/N B capsule	-0.1 to 14MPa	25 to 14MPa	GTX71U

III. Differentiation between EJA std. and GTX std.

- **EJA standard**
  - External zero adjustment
  - Burn out feature upper limit (110% : 21.6mA)
  - In case of Remote-sealed type, Capillary tube with PVC-sheathed
  - Flange gasket surface for flange mounting and remote-sealed, ANSI are serrated as ANSI B16.5
- **GTX standard**
  - Built-in lightning arrester
  - Sealing treatment to SUS630 nuts

✧ When replacement from EJA to GTX, you have to add their standard as GTX's option.

✧ Also in the case of the other competitors brand (model), this is the same, you have to investigate what the standard of the competitors' is.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition**

EJA [Model] [ ] - [ ] [Option] /

[TOKUMI "Z"]

Basic specification (9digits)			
I	Output signal	VI	Installation
II	Measurement span (capsule)	VII	Electrical connection
III	Wetted parts material	VIII	Integral indicator
IV	Process connection	IX	Mounting bracket
V	Bolt and nuts material		

- When "Z" is attached, the contents cannot be identified on model number.
  - You have to check the final drawing/specification which Yokogawa had submitted to the customer.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA■■0A- □□□□□□□□/Options

  - **Basic model number**

Model	Description
EJA110A	Differential pressure transmitter
EJA120A	Differential pressure transmitter (for draft application)
EJA130A	Differential pressure transmitter (high static type :32MPa max.)
EJA430A	Gauge pressure transmitter
EJA440A	Gauge pressure transmitter (high static type : 32MPa and 50MPa)
EJA310A	Absolute pressure transmitter

  - Only type (such as differential pressure, gauge pressure, or absolute pressure) can become clear from basic model number.
  - The performance is classified according to [Capsule] of code II.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- ■□□□□□□□□/Options

  I. Code I : Output signal

Code	Description
-D	4 to 20mA DC with digital communication (BRAIN protocol)
-E	4 to 20mA DC with digital communication (HART protocol)
-F	Digital communication (FOUNDATION Fieldbus protocol)
-G	Digital communication (PROFIBUS PA protocol)

– Only existing EJA□□0A has code [D] or [E], you can replace to GTX.

EJA	GTX-■□□□□□□- □□□□□□-options			
-D	Selection 1	code I	A	4 to 20mA DC (SFN Communication)
-E			B	4 to 20mA DC (HART Communication)
-F			-	Not available at now.
-G			-	Not available at now.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □■□□□□□□□/Options

  II. Code II : Measurement span (Capsule)

Code	Description	Code	Description
L	0.5 ~ 10kPa	A	0.03 ~ 3MPa
M	1 ~ 100kPa	B	0.14 ~ 14MPa
H	5 ~ 500kPa	C	5 ~ 32MPa
V	0.14 ~ 14MPa	D	5 ~ 50MPa
E	0.1 ~ 1kPa		

  - [Capsule] means their center body structure.
  - The following performance was decided by the kind of [Capsule].

    Reference accuracy, Output accuracy, Ambient temperature effect, Static pressure effect, Effect on Zero, Overpressure effect, Stability, Span & Range limits, Damping time constant, Working pressure limit,
  - Suitable GTX model should be chosen.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□■□□□□□□/Options

  III. Code III : Wetted parts material

Code	Body	Capsule	Vent/plug
S	SCS14A	SUS316L	SUS316
H	SCS14A	Hastelloy C-276	SUS316
M	SCS14A	Monel	SUS316
T	SCS14A	Tantalum	SUS316
A	Hatselloy C equivalent	Hastelloy C-276	Hastelloy C-276
D	Hastelloy C equivalent	Tantalum	Hastelloy C-276
B	Monel equivalent	Monel	Monel

  - The body means [cover flanges] and [process connection].
  - Code B [Monel/Monel/Monel], As for GTX, model is not standard. TOKUMI should be issued.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

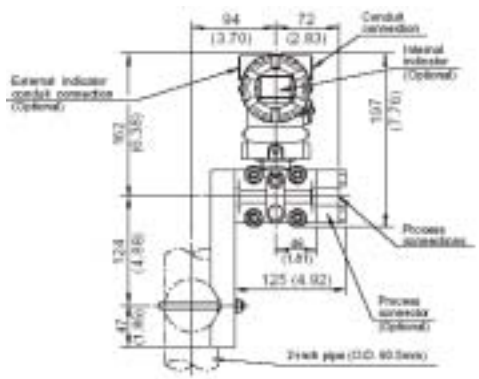
- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□■□□□□□/Options

  IV. Code IV : Process connections

Code	Description
0	Without process connector (RC1/4 female on the cover flange)
1	With Rc1/4 female process connector
2	With Rc1/2 female process connector
3	With 1/4NPT female process connector
4	With 1/2NPT female process connector
5	Without process connector (1/4NPT female on the cover flange)

– **[Process connector] is the same as our [Adaptor flange].**



III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□■□□□□/Options

  V. Code V : Bolts and nuts material

Code	Description
A	SCM435
B	SUS630
C	SUH660

  - Their maximum working pressure is limited for the kind of capsule.
  - [SCM435 (Chromium molybdenum steel)] is kind of carbon steel material. For replacement to GTX, you can select Carbon steel [Code VII : A].
  - [SUH660] is a kind of stainless steel and the difference from 630SST are content of the nickel and its proof-strength which is 2.6 times of 630SST.
    - You should select 304SST or 630SST.
    - Primary select the 304SST, if process pressure excess the maximum working pressure of 304SST, then select the 630SST.

      ✧ 304SST is limited for working pressure.

III. Model number conversion table

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Internal use only

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□■□□□/Options

VI. Code VI : Installation

Code	Description
-2	Vertical impulse piping type, right side high pressure, process connector upside
-3	Vertical impulse piping type, right side high pressure, process connector downside
-6	Vertical impulse piping type, left side high pressure, process connector upside
-7	Vertical impulse piping type, left side high pressure, process connector downside
-8	Horizontal impulse piping type, right side high pressure
-9	Horizontal impulse piping type, left side high pressure

- EJA can be selected high pressure side (HP side) in right side or left side.
- As for GTX, high pressure side (HP side) in right side is standard.
- In case of existing EJA has code [6], [7], or [9], TOKUMI should be issued.

- As for GTX32D/42D/72D and GTX82G do not have front connection (Horizontal). Please offer to the customer top or bottom connection.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□□■□□/Options

  VII. Code VII : Electrical connection

Code	Description
0	G1/2 female, one electrical connection
2	1/2NPT female, two electrical connections without blind plug
3	PG 13.5 female, two electrical connections without blind plug
4	M20 female, two electrical connections without blind plug
5	G1/2 female, two electrical connections and a blind plug
7	1/2NPT female, two electrical connections and a blind plug
8	PG 13.5 female, two electrical connections and a blind plug
9	M20 female, two electrical connections and a blind plug
A	G1/2 female, two electrical connections and a SUS316 blind plug
C	1/2NPT female, two electrical connections and a SUS316 blind plug
D	M20 female, two electrical connections and a SUS316 blind plug

- GTX has two (2) types as standard which are [A: 1/2NPT] and [B: M20].
- Therefore, in the case of existing EJA has code [0], [3], [5], [8], or [A], you should suggest alternatives to customer.

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□□□■□/Options

  VIII. Code VIII : Integral indicator

Code	Description
D	Digital indicator
E	Digital indicator with the range setting switch
N	None

  - **As for [E], the range setting switch is the same as GTX's [Span adjustment trim switch].**
  - **And more, External Zero adjustment is the EJA's standard.**
  - **Therefore, for replacement to GTX, you should always add [External zero/span adjustment : Option code A2].**

III. Model number conversion table

A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□□□□■/Options

IX. Code VIII : Mounting bracket

Code	Description	
A	SECC Carbon steel	2-inch pipe mounting (flat type)
B	SUS304	2-inch pipe mounting (flat type)
J	SUS316	2-inch pipe mounting (flat type)
C	SECC Carbon steel	2-inch pipe mounting (L-type)
D	SUS304	2-inch pipe mounting (L-type)
K	SUS316	2-inch pipe mounting (L-type)
N	None	

- In the case of existing EJA has code [J] or [K], you should suggest 304SST for replacement.
- If customer requires 316 SST mounting bracket, TOKUMI should be issued.

III. Model number conversion table

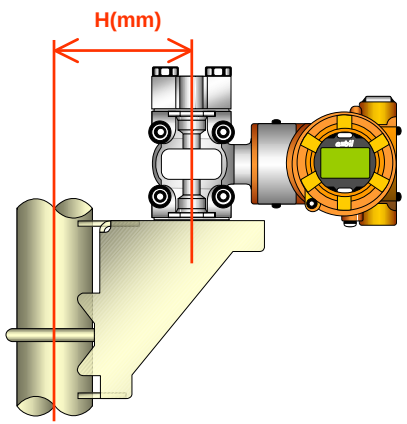
A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□□□□/Options

  X. Dimensions difference between EJA and GTX [Top & Bottom connection]

  - **When it replaces from EJA to GTX, a difference occurs in the distance from the 2-inch pipe to transmitter.**
    - **It's means that process connection does not become the same position.**
  - **Please explain to the customer and take necessary measures, such as bending the impulse line, etc.**



EJA		GTX		
H(mm)	Model	H(mm)	Model	Center body
97.0	EJA110A EJA120A EJA130A EJA430A EJA440A EJA310A	118.0	GTX30D/40D/31D/41D/60G/71G	316SST, ASTM B575
			GTX15D/71D/30A/60A	316SST
		105.7	GTX32D/42D/72D	316SST
			GTX82G	316SST, ASTM B575
		105.4	GTX31D/41D/60G/71G	Tantalum, 316L SST
			GTX71D/30A/60A	Tantalum, 316L SST, ASTM B575
			GTX31D/41D/60G/30A/60A	PVC

III. Model number conversion table

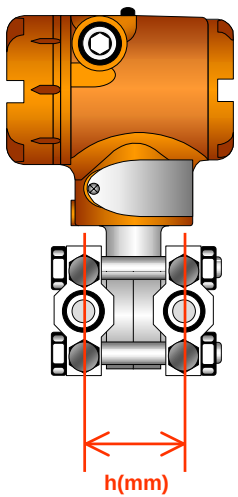
A) Standard type ; Differential/Gauge/Absolute Pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□0A- □□□□□□□□/Options

  X. Dimensions difference between EJA and GTX [Face to face dimension]

  - **When it replaces from EJA to some GTX model, a difference occurs in the distance between process connection (face to face dimension).**
    - **It's means that process connection does not become the same position.**
  - **Please explain to the customer and take necessary measures, such as bending the impulse line, etc.**



EJA		GTX		
h(mm)	Model	h(mm)	Model	Center body
54.0	EJA110A EJA120A EJA130A EJA430A EJA440A EJA310A	54.0	GTX30D/40D/31D/41D/60G/71G	316SST, ASTM B575
			GTX15D/71D/30A/60A	316SST
		64.0	GTX32D/42D/72D	316SST
			GTX82G	316SST, ASTM B575
		82.0	GTX31D/41D/60G/71G	Tantalum, 316L SST
			GTX71D/30A/60A	Tantalum, 316L SST ASTM B575
			GTX31D/41D/60G/30A/60A	PVC

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition**

EJA [Model] [ ] - [ ] [Option] /

[TOKUMI "Z"]

Basic specification (11digits for EJA210A, 12 digits for EJA220A)			
I	Output signal	VII	LP side process connection
II	Measurement span (capsule)	VIII	Bolts and nuts material
III	HP side wetted parts material	IX	Installation [-9 : Horizontal impulse piping type, left side high pressure]
IV	Process flange rating		
[V]	Diaphragm extension length (for EJA220A)	X	Electrical connection
		XI	Integral indicator
VI	Process flange size/material	XII	Always [N]

– When "Z" is attached, the contents cannot be identified on model number.
  – You have to check the final drawing/specification which Yokogawa had submitted to the customer.

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA2■0A- □□□□□□□□□-9□□N/Options

  - **Basic model number**

Model	Description
EJA210A	Flange mounted type (Flange size 2B,3B flush)
EJA220A	Flange mounted type (Extended type, flange size 3B, 4B)

  - **It has distinguished in [Flush diaphragm] or [Extended diaphragm] in Basic model number.**
  - **The performance is classified according to [Capsule] of code II.**

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA2□0A- ■□□□□□□□□-9□□N/Options

  I. Code I : Output signal

Code	Description
-D	4 to 20mA DC with digital communication (BRAIN protocol)
-E	4 to 20mA DC with digital communication (HART protocol)
-F	Digital communication (FOUNDATION Fieldbus protocol)
-G	Digital communication (PROFIBUS PA protocol)

– Only existing EJA2□0A has code [D] or [E], you can replace to GTX.

EJA	GTX-■□□□□□□- □□□□□□-options			
-D	Selection 1	code I	A	4 to 20mA DC (SFN Communication)
-E			B	4 to 20mA DC (HART Communication)
-F			-	Not available at now.
-G			-	Not available at now.

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA2□0A- □■□□□□□□□-9□□N/Options

  II. Code II : Measurement span (Capsule)

Code	Description	Code	Description
M	1 ~ 100kPa	H	5 ~ 500kPa

  - [Capsule] means their center body structure.
  - The following performance was decided by the kind of [Capsule].

    Reference accuracy, Ambient temperature effect, Span & Range limits, Damping time constant
  - Suitable GTX model should be chosen.

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA2□0A- □□■□□□□□□-9□□N/Options

  III. Code III : HP side (Process flange side) wetted parts material

Code	Diaphragms	Others	Pipe (for extended type)
S	SUS316L	SUS316	SUS316
H	Hastelloy C-276	Hastelloy C-276	
T	Tantalum	Tantalum	
W	Hastelloy C-276	SUS316	SUS316

  – **LP side (reference side) wetted parts material are ;**

  Cover flange : SCS14A

  Process connection : SCS14A

  Capsule : SUS316L (Diaphragm material : Hastelloy C-276)

  Vent & Plug : SCS14A

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA2□0A- □□□■□□□□□-9□□N/Options

  IV. Code IV : Process flange rating

Code	Description	Code	Description
J1	JIS10K	P1	JPI Class 150
J2	JIS20K	P2	JPI Class 300
A1	ANSI Class 150	D2	DIN PN10/16
A2	ANSI Class 300	D4	DIN PN25/40

  - GTX have not had [JIS], [JPI], and [DN] flange at now.
  - In case of EJA2□0A has the above flange rating, TOKUMI should be issued.
  - ANSI flange had serrated (ANSI B16.5).
    - If the model number does not have option [Q: no serration], TOKUMI should be issued

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

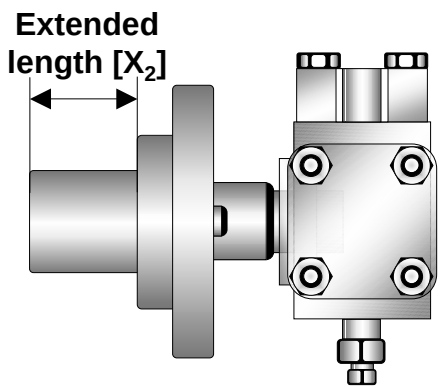
- **Model number composition (Attention in replacement)**

  EJA220A- □□□□■□□□-9□□N/Options

  V. Code V : Diaphragm extension length (only for EJA220A)

Code	Description
2	X_2 = 500mm
4	X_2 = 100mm
6	X_2 = 150mm

  – This code is only for EJA220A to decide the extension length of diaphragm.



III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA210A- □□□□■□□-9□□N/Options

  EJA220A- □□□□□■□□-9□□N/Options

VI. Process flange size/material

(Code V for EJA210A, Code VI for EJA220A)

Code	Description
A	2-inches (50mm) / S25C
B	2-inches (50mm) / SUS304
C	2-inches (50mm) / SUS316
G	4-inches (100mm) / S25C
H	4-inches (100mm) / SUS304
J	4-inches (100mm) / SUS316
D	3-inches (80mm) / S25C
E	3-inches (80mm) / SUS304
F	3-inches (80mm) / SUS316

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA210A- □□□□□■□-9□□N/Options

  EJA220A- □□□□□□■□-9□□N/Options

Please refer to Page 19 for comment of replacement.

VII. LP side (Reference side) process connection (Code VI for EJA210A, Code VII for EJA220A)

Code	Description
0	Without process connector (RC1/4 female on the cover flange)
1	With Rc1/4 female process connector
2	With Rc1/2 female process connector
3	With 1/4NPT female process connector
4	With 1/2NPT female process connector
5	Without process connector (1/4NPT female on the cover flange)

– EJA flange mounting type is only for horizontal. GTX is vertical.

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA210A- □□□□□□■-9□□N/Options

  EJA220A- □□□□□□□■-9□□N/Options

Please refer to Page 20 for comment of replacement.

VIII. Bolts and nuts material

(Code VII for EJA210A, Code VIII for EJA220A)

Code	Description
A	SCM435
B	SUS630
C	SUH660

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA210A- □□□□□□□-9■□N/Options

  EJA220A- □□□□□□□□-9■□N/Options

Please refer to Page 22 for comment of replacement.

IX. Electrical connection

(Code IX for EJA210A, Code X for EJA220A)

Code	Description
0	G1/2 female, one electrical connection
2	1/2NPT female, two electrical connections without blind plug
3	PG 13.5 female, two electrical connections without blind plug
4	M20 female, two electrical connections without blind plug
5	G1/2 female, two electrical connections and a blind plug
7	1/2NPT female, two electrical connections and a blind plug
8	PG 13.5 female, two electrical connections and a blind plug
9	M20 female, two electrical connections and a blind plug
A	G1/2 female, two electrical connections and a SUS316 blind plug
C	1/2NPT female, two electrical connections and a SUS316 blind plug
D	M20 female, two electrical connections and a SUS316 blind plug

III. Model number conversion table

B) Flange mounted type differential pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA210A- □□□□□□□-9□■N/Options

  EJA220A- □□□□□□□□-9□■N/Options

Please refer to Page 23 for comment of replacement.

X. Integral indicator

(Code X for EJA210A, Code XI for EJA220A)

Code	Description
D	Digital indicator
E	Digital indicator with the range setting switch
N	None

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition**

EJA Model [ ] - [ ] Option /

TOKUMI "Z"

Basic specification (13 digits for flush type, 14 digits for extended type)			
I	Output signal	VIII	Fill fluid
II	Measurement span (capsule)	IX	No meaning ? (Just alphabet)
III	Wetted parts material	X	Capillary length
IV	Process flange rating	XI	Installation [-9 : Horizontal impulse type, left side high pressure]
[V]	Diaphragm extension length (for extended type)	XII	Electrical connection
VI	Process flange size/material	XIII	Integral indicator
VII	Cover flange bolts material	XIV	Mounting bracket

– When "Z" is attached, the contents cannot be identified on model number.
  – You have to check the final drawing/specification which Yokogawa had submitted to the customer.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA■■8■- □□□□□□□□□□-9□□□/Options

  - **Basic model number**

Model	Description
EJA118W	Remote-sealed △P transmitter (Flange size 2B, 3B, Flush diaphragm)
EJA118N	Remote-sealed △P transmitter (Flange size 3B, 4B, Extended diaphragm)
EJA118Y	Remote-sealed △P transmitter (Combination of Flush and extended)
EJA438W	Remote-sealed GP transmitter (Flange size 2B, 3B, Flush diaphragm)
EJA438N	Remote-sealed GP transmitter (Flange size 3B,4B, extended diaphragm)

  - It is shown that the first 2 digits are differential pressure type [11] or gauge pressure type [43], and shows that the last 1 digit is flush diaphragm [W] or extended diaphragm [N] (or combination type [Y]).
  - The performance is classified according to [Capsule] of code II.
  - In the case of existing EJA is EJA118Y, TOKUMI should be issued.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8□- ■□□□□□□□□□-9□□□/Options

I. Code I : Output signal

Code	Description
-D	4 to 20mA DC with digital communication (BRAIN protocol)
-E	4 to 20mA DC with digital communication (HART protocol)
-F	Digital communication (FOUNDATION Fieldbus protocol)
-G	Digital communication (PROFIBUS PA protocol)

– **Only existing EJA□□8□ has code [D] or [E], you can replace to GTX.**

EJA	GTX-■□□□□□□- □□□□□□-options			
-D	Selection 1	code I	A	4 to 20mA DC (SFN Communication)
-E			B	4 to 20mA DC (HART Communication)
-F			-	Not available at now.
-G			-	Not available at now.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8□- □■□□□□□□□□-9□□□/Options

II. Code II : Measurement span (Capsule)

Code	Description	Code	Description
M	2.5 ~ 100kPa	A	0.06 ~ 3MPa
H	25 ~ 500kPa	B	0.46 ~ 14MPa

- [Capsule] means their center body structure.
- The following performance was decided by the kind of [Capsule].

  Reference accuracy, Ambient temperature effect, Span & Range limits, Damping time constant
- Suitable GTX model should be chosen.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8□- □□■□□□□□□□-9□□□/Options

  III. Code III : Wetted parts material

Code	Diaphragms	Others	Pipe (for extended type)
S	JIS SUS316L	JIS SUS316L	JIS SUS316L
H	Hastelloy C-276	Hasetlloy C-276	--
T	Tantalum	Tantalum	--
U	Titanium	Titanium	--

- In case of existing EJA□□8W has code [U], TOKUMI should be issued.
  - GTX has not had wetted parts material Titanium as standard.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8□- □□□■□□□□□□-9□□□/Options

IV. Code IV : Process flange rating

Code	Description	Code	Description
J1	JIS 10K	P1	JPI Class 150
J2	JIS 20K	P2	JPI Class 300
J4	JIS 40K	P4	JPI Class 600
A1	ANSI Class 150	D2	DIN PN10/16
A2	ANSI Class 300	D4	DIN PN25/40
A4	ANSI Class 600	D5	DIN PN64

- GTX have not had [JIS], [JPI], and [DN] flange at now.
- In case of EJA□□8□ has the above flange rating, TOKUMI should be issued.
- For ANSI flange had serrated (ANSI B16.5).
  - If the model number does not have option [Q: no serration], TOKUMI should be issued

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

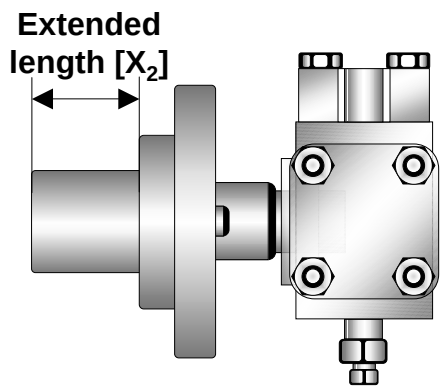
- **Model number composition (Attention in replacement)**

  EJA□□8N/Y- □□□□■□□□□□-9□□□/Options

  V. Code V : Diaphragm extension length (for EJA□□8N/Y)

Code	Description
2	X_2 = 500mm
4	X_2 = 100mm
6	X_2 = 150mm

  – This code is only for EJA□□8N/Y to decide the extension length of diaphragm.



III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□■□□□□-9□□□/Options

  EJA□□8N/Y- □□□□□■□□□□-9□□□/Options

VI. Process flange size/material

(Code V for EJA□□8W, Code VI for EJA□□8N/Y)

Code	Description	Code	Description
A	2-inch (50mm) / JIS S25C	P	HP side 4-inch / JIS S25C LP side 3-inch / JIS S25C
B	2-inch (50mm) / JIS SUS304		
C	2-inch (50mm) / JIS SUS316	Q	HP side 4-inch / JIS SUS304 LP side 3-inch / JIS SUS304
D	3-inch (80mm) / JIS S25C		
E	3-inch (80mm) / JIS SUS304	R	HP side 4-inch / JIS SUS316 LP side 3-inch / JIS SUS316
F	3-inch (80mm) / JIS SUS316		
G	4-inch (100mm) / JIS S25C		
H	4-inch (100mm) / JIS SUS304		
J	4-inch (100mm) / JIS SUS316		

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□■□□□-9□□□/Options

  EJA□□8N/Y- □□□□□□■□□□-9□□□/Options

Please refer to Page 20 for comment of replacement.

VII. Cover flange bolts material

(Code VI for EJA□□8W, Code VII for EJA□□8N/Y)

Code	Description
A	SCM435
B	SUS630

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□■□□-9□□□/Options

  EJA□□8N/Y- □□□□□□□■□□-9□□□/Options

VIII. Fill fluid (Code VII for EJA□□8W, Code VIII for EJA□□8N/Y)

Code	EJA specification	Sp.Gr.	Process temp.	Ambient temp
-A	For general use (Silicon oil)	1.07	-10 ~ +250°C	-10 ~ +60°C
-B	For general use (Silicon oil)	0.94	-30 ~ +180°C	-15 ~ +60°C
-C	For high temperature use (Silicon oil)	1.09	+10 ~ +300°C	+10 ~ +60°C
-D	For oil-prohibited use (fluorinated oil)	1.92	-20 ~ +120°C	-10 ~ +60°C
-E	For low temperature use (ethylene glycol)	1.09	-50 ~ +100°C	-40 ~ +60°C

Code	GTX specification	Sp.Gr.	Process temp.	Ambient temp
A	Regular type (Silicon oil)	0.935	-40 ~ +180°C	-50 ~ +80°C
B	For high temperature service (Silicon oil)	1.07	-5 ~ +280°C	-10 ~ +60°C
C	For high-temp./vacuum (silicon oil)	1.07	-5 ~ +280°C	-10 ~ +60°C
D	For high-temp./high-vacuum (silicon oil)	1.09	-10 ~ +300°C	-10 ~ +60°C
F	For low-temp./fast response type	0.873	-40 ~ +120°C	-30 ~ +80°C
H	For Oxygen service (Fluorine oil)	1.87	-10 ~ +120°C	-40 ~ +80°C
J	For Chlorine service (Fluorine oil)	1.87	-10 ~ +120°C	-40 ~ +80°C

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□■□□-9□□□/Options

  EJA□□8N/Y- □□□□□□□■□□-9□□□/Options

  VIII. Fill fluid (Code VII for EJA□□8W, Code VIII for EJA□□8N/Y)

  - **In case of existing EJA has code [A], [B], or [C] ;**
    - **Need to confirm the actual process temperature to customer or in their request for quotation (RFQ).**
    - **You should select GTX code [A] or [B] depend on the actual process temperature.**
  - **In case of existing EJA has code [D] ;**
    - **You should select GTX code [H : Oxygen service] or [J : Chlorine service].**
    - **Code [J] is only use for chlorine service. Whetted parts material is limited as Tantalum.**
  - **In case of existing EJA has code [E] ;**
    - **Need to confirm the actual process temperature to customer or in their RFQ.**
    - **You can select GTX code [F : low-temp./fast response], if necessary.**
    - **TOKUMI should be issued except small size model (1/2B model).**

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□□■□-9□□□/Options

  EJA□□8N/Y- □□□□□□□□■□-9□□□/Options

  IX. No meaning ? (Code VIII for EJA□□8W, Code IX for EJA□□8N/Y)

Code	Description
A	Always [A] in EJA118W and EJA438W
B	Always [B] in EJA118N and EJA438N
C	Always [C] in EJA118Y

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□□□■-9□□□/Options

  EJA□□8N/Y- □□□□□□□□□■-9□□□/Options

  X. Capillary length (Code IX for EJA□□8W, Code X for EJA□□8N/Y)

Code	Description
□□	Specify capillary length from 1 to 10m in □□ (Example for 2m : 02)

  - Capillary protection tube of EJA is SUS304 with PVC-sheathed.
    - In case of you clearly identify where atmosphere has corrosiveness condition, you should select GTX capillary tube with Olefin cover.
    - In case of the atmosphere has no corrosiveness condition, need to confirm the customer that they need Olefin cover or not.
  - Yokogawa said in their specification sheet that ;
    - The △P transmitter should be installed at least 600mm below the HP process connection. However, this value (600mm) may be affect by ambient temperature, operating pressure, fill fluid or material of the wetted parts.
    - ✧GTX can be installed at least 10cm. Moreover, GTX has the function for avoiding such affect.
    - ✧You should explain detail to customer the GTX's advantages.

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□□□□-9■□□/Options

  EJA□□8N/Y- □□□□□□□□□-9■□□/Options

Please refer to Page 22 for comment of replacement.

XI. Electrical connection

(Code XI for EJA□□8W, Code XII for EJA□□8N/Y)

Code	Description
0	G1/2 female, one electrical connection
2	1/2NPT female, two electrical connections without blind plug
3	PG 13.5 female, two electrical connections without blind plug
4	M20 female, two electrical connections without blind plug
5	G1/2 female, two electrical connections and a blind plug
7	1/2NPT female, two electrical connections and a blind plug
8	PG 13.5 female, two electrical connections and a blind plug
9	M20 female, two electrical connections and a blind plug
A	G1/2 female, two electrical connections and a SUS316 blind plug
C	1/2NPT female, two electrical connections and a SUS316 blind plug
D	M20 female, two electrical connections and a SUS316 blind plug

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□□□□-9□■□/Options

  EJA□□8N/Y- □□□□□□□□□-9□■□/Options

Please refer to Page 23 for comment of replacement.

XII. Integral indicator

(Code XII for EJA□□8W, Code XIII for EJA□□8N/Y)

Code	Description
D	Digital indicator
E	Digital indicator with the range setting switch
N	None

III. Model number conversion table

C) Remote-sealed type differential pressure/gauge pressure transmitter

- **Model number composition (Attention in replacement)**

  EJA□□8W - □□□□□□□□□-9□□■/Options

  EJA□□8N/Y- □□□□□□□□□-9□□■/Options

Please refer to Page 24 for comment of replacement.

XIII. Mounting bracket

(Code XIII for EJA□□8W, Code XIV for EJA□□8N/Y)

Code	Description	
A	SECC Carbon steel	2-inch pipe mounting (flat type)
B	SUS304	2-inch pipe mounting (flat type)
J	SUS316	2-inch pipe mounting (flat type)
N	None	

III. Model number conversion table

D) Options (Attention in replacement)

EJA	Description	GTX		
FF1	FM Explosion Approval	Selection 2	Code II	F1
FS1	FM Intrinsically safe Approval	Selection 2	Code II	F2
FU1	Combined FF1 and FS1	Selection 2	Code Ii	(F6)
KF2	CENELEC ATEX (KEMA) Flameproof Approval	Selection 2	Code II	A1
KS2	CENELEC ATEX (KEMA) Intrinsically safe Approval	Selection 2	Code II	A2
KU2	Combined KF2, KS2 and Type n	Selection 2	Code II	A5
CF1	CSA Explosion-proof Approval	Selection 2	Code II	--
CS1	CSA Intrinsically safe Approval	Selection 2	Code II	--
CU1	Combined CF1 and CS1	Selection 2	Code II	--
SU2	IECEx Intrinsically safe, type n and Flameproof Approval	Selection 2	Code II	E□
JF3	TIIS Flameproof Approval	Selection 2	Code II	( )
JS3	TIIS Intrinsically safe Approval	Selection 2	Code II	( )
G11	Attached flameproof packing adapter 1Pc (G1/2 female)	--		
G12	Attached flameproof packing adapter 2Pcs (G1/2 female)	--		

"( )" in GTX column means, not available at now (for future).
"[ ]" in GTX column means, we can provide it as TOKUMI.

III. Model number conversion table

D) Options (Attention in replacement)

EJA	Description	GTX		
HAC	High accuracy type	Ask to AAC		
P□	Color change (Amplifier cover only)	--		
PR	Color (Amplifier cover and terminal cover, M. 7.5R4/14)	--		
X1	Coating change : Epoxy resin-baked coating	Selection 2	Code IV	B
HC	316 SST exterior parts	TOKUMI		
A	Lightning protector	Standard		
K1	Oil-prohibited use : Degrease cleansing treatment		Options	K3
K2	[K1] with fluorinated oil-filled capsule		Options	K3
K5	Oil-prohibited use with dehydrating treatment		Options	K1
K6	[K5] with fluorinated oil-filled capsule		Options	K1
D1	Calibration units : psi unit		Options	R1W1
D3	Calibration units : bar unit		Options	R1
D4	Calibration units : kgf/cm2 unit		Options	R1W1
Y	Sealing treatment to SUS630 nuts	Standard		

"( )" in GTX column means, not available at now (for future).
"[ ]" in GTX column means, we can provide it as TOKUMI.

III. Model number conversion table

D) Options (Attention in replacement)

EJA	Description	GTX		
U	Long vent		Options	[G4]
F1	Fast response		Options	R1
C1	Failure alarm down-scale (-5% : 3.2mA)	Selection 2	Code V	B
		+	Options	R1
C2	NAMUR NE43 compliant ; down-scale failure (-5% :3.2mA)	Selection 2	Code V	B
		+	Options	Q2R1
C3	NAMUR NE43 compliant ; up-scale failure (110% : 21.6mA)	Selection 2	Code V	A
		+	Options	Q2
PE3	European pressure Equipment Directive (PED 97/23/EC)		Options	F1
E1	Stainless steel amplifier housing	---		
A1	Gold-plate		Options	[L1]
R1	Custom software configuration		Options	R1
CA	Data configuration at factory for HART Protocol	---		
N4	Stainless steel tag plate wired onto transmitter	TOKUMI		

"( )" in GTX column means, not available at now (for future).
"[ ]" in GTX column means, we can provide it as TOKUMI.

III. Model number conversion table

D) Options (Attention in replacement)

EJA	Description	GTX		
N1	Body option : Right side HP, without drain and vent	TOKUMI		
N2	[N1] with process connection DIN19213 with 7/16” x 20	--- [TOKUMI]		
N3	[N1], [N2] with Mill certificate	TOKUMI		
S1	130Pa abs (1mmHg abs) calibration for EJA310A	TOKUMI		
Q	No serration work on the flange gasket surface (ANSI)	Standard		
T	FEP Teflon film for Flange type		Options	N1
R	Operating temperature correction for remote-sealed type	Standard		
V	Capillary without PVC sheaths	Standard		
M□□	Mill certificate		Options	[T2]
T□□	Pressure test/ Leak test Certificate		Options	[T1]

“( )” in GTX column means, not available at now (for future).
“[ ]” in GTX column means, we can provide it as TOKUMI.

III. Model number conversion table

D) Options (Attention in replacement)

- For Explosion proof
  - At GTX, we can continue to acquire consecutive explosion-proof standard.
  - Presently, even with not yet approval in the midst of the standard acquisition applying, in the future there are also some which become correspondence possible.
    - Please check the latest information in IB-NET, etc., always.
    - [SU2] : IECEx intrinsically safe, type n and Flameproof approval.
      - At EJA, three (3) IECEx standard are covered by one (1) code.
      - It is necessary to confirm in which kind is applied with the customer facility.
      - Following GTX code is selected according to the standard kind.

        == Section 2 Code II ==

        [E1] IECEx Explosion proof approval

        [E2] IECEx Intrinsically safe approval

        [E5] IECEx Type n

III. Model number conversion table

D) Options (Attention in replacement)

High accuracy type [HAC]

- EJA120A (Draft application type DP) and EJA310A (Absolute pressure type) has [HAC].

Model	Accuracy	Where X equals :
EJA120A	±0.1% of span For span below X $\pm(0.05 + 0.05 \frac{X}{Span})$% of span	Capsule [E] : 0.4kPa
EJA310A	±0.075% of span For span below X $\pm(0.15 + 0.05 \frac{X}{Span})$% of span	Capsule [L] : 5.4kPa Capsule [M]: 21.8kPa Capsule [A] : 250kPa

- In the case of existing EJA has option code [HAC];
  - You should calculate GTX's accuracy based on requirement measurement span.
  - If the span is bigger than the EJA's, please contact to AAC.

III. Model number conversion table

D) Options (Attention in replacement)

- **Painting color change [P□, PR]**
  - Currently, we can propose only our standard color.
  - Please confirm to customer.

- **Painting coating change [X1 : Epoxy resin-baked coating]**
  - EJA's standard painting is "Polyurethan painting".
  - They said in their specification sheet that ;
    - Standard Polyurethan painting can be used in acid atmosphere.
    - Epoxy resin-baked coating [X1] is can be used in alkaline atmosphere.
    - Anti-corrosion coating, the combination of polyurethan and epoxy resin-baked coating, is available by special order as sea water, alkaline, and acid resistant.
  - You can select GTX selection 2 Code IV [B] as same as EJA's [X1].
    - For GTX ;
      - Standard
        Corrosion-resistant paint (Baked acrylic paint)
      - [A : Corrosion-resistance finish]
        Corrosion-resistant paint (Baked acrylic paint), fungus-proof finish
      - [B : Corrosion-proof finish]
        Corrosion-proof paint (Baked epoxy paint), fungus-proof finish
      - [D : Corrosion-resistance finish (Silver paint)]
        Transmitter case in coated with silver paint in addition to the above corrosion-resistant finish.

III. Model number conversion table

D) Options (Attention in replacement)

☐ 316SST exterior parts [HC]

- Exterior parts on the amplifier housing (name plate, tag plate, zero-adjustment screw, stopper screw) will become 316SST.
- In case of [HCE1], 316SST is changed to 316L SST.
- We can also propose this specification as TOKUMI.
  - GTX's zero/span adjustment trim is attached in built-in indicator. (behind the glass.)

☐ Sealing treatment to SUS630 nuts [Y]

- Sealant (liquid silicone rubber) is coated on JIS SUS630 cover flange mounting nuts against stress corrosion cracking.
- This is GTX standard.

☐ Long vent [U]

- In case of existing EJA has option code [U], the vent length change to 119mm or 130mm (standard 34mm).
- The GTX's standard 27mm and option [G4] can be changed to 60mm.
- If need the same length (119mm or 130mm), TOKUMI should be issued.

III. Model number conversion table

D) Options (Attention in replacement)

☐ Fast response [F1]

- In case EJA has option code [F1], they provide following performance.
  - Update time : 0.125 sec or less
  - Damping time constant : 0.1 to 64sec. in 9 increments
  - Response time : Max.0.3, 0.5, or 0.6sec. depends on the model with minimum damping time

- For GTX specification ;
  - Damping time constant : 0, 0.16, 0.48, 1, 2, 4, 8, 16, 32 sec.
  - Response tine : Approx. 0.4sec (for GTX30D/31D : 100msec)

- In case of existing EJA has option code [F1], you should add GTX option code [R1 : custom calibration] and be designated "damping time constant 0sec"
  - Damping time constant as a default value is decided by setting span. (Refer to "Ordering information" sheet)

III. Model number conversion table

D) Options (Attention in replacement)

- Failure alarm down-scale [C1]
- NAMUR NE43 Compliant [C2], [C3]
  - EJA's failure alarm setting is as follows.
    - Standard & [C3] : Up-scale 110% (21.6mADC)
    - Option [C1] & [C2] : Down-scale -5% (3.2mADC)
    - Option [F1C1] : Down-scale -2.5% (3.6mADC)
  - Our GTX specification is ;
    - Selection 2 Code V [A] : Up-scale 110% (21.6mADC)
    - Selection 2 Code V [B] : Down-scale -2.5% (3.6mADC)
  - Burn out failure (CPU failure) must be same value with existing transmitter due to severe related to DCS alarm set-point.
    - In case of existing EJA has option code [C1] or [C2], you should select GTX selection 2 Code V [B] with options [R1:custom calibration]
      - -5%(3.2mA) should be designated at ordering information.
    - In case of existing EJA has option code [F1C1], it is same as GTX [B] specification. No need option [R1] for designated the value.

III. Model number conversion table

D) Options (Attention in replacement)

- **Stainless steel amplifier housing [E1]**
  - GTX can not be offered the stainless steel housing.
    - GTX housing is Aluminum alloy.

- **Data configuration at factory for HART protocol [CA]**
  - Description into “Descriptor” parameter of HART protocol had set at factory.
  - We have not set HART parameter at factory.
  - You should set these by HART communicator at customer site or your office.
  - If you wants to request the setting at factory, TOKUMI might be issued.

- **Stainless steel tag plate wired onto transmitter [N4]**
  - We can provide this requirement as TOKUMI.

III. Model number conversion table

D) Options (Attention in replacement)

- **Body option : Right side high pressure, without drain and vent plug [N1]**
  - GTX standard is right side high pressure with drain and vent plug.
  - Surly no need the drain and vent, TOKUMI should be issued.

- **Body option : [N1] with process connection, based on DIN 19213 [N2]**
  - [N1] with process connection, based on DIN 19213 with 7/16 inch x 20 unf female thread, on both sides of cover flange with blind kidney flanges on back.
  - TOKUMI might be issued.

- **Body option : [N1], [N2] with Mill certificate**
  - The mill certificate is for cover flange, diaphragm, capsule body, and blind kidney flange.
  - TOKUMI might be issued for [N1] and [N2]

III. Model number conversion table

D) Options (Attention in replacement)

- Operation temperature correction [R]
  - They request for specify the process operating temperature for Zero correction.
  - For GTX, it is standard function with SFN communication or external zero adjustment.
    - Even if the process temperatures fluctuate occurs, the error margin can be canceled by zero point adjusting at the time of its generating.

- That this code exists is telling that their remote-sealed type transmitter does not have good temperature characteristics.
  - Zero point calibration by actual process temperature is needed at their factory for keeping its performance.
- GTX is good the temperature characteristic even in the standard, and can improve it more by various settings.
- Please appeal it to the customer this difference by all means.

III. Model number conversion table

D) Options (Attention in replacement)

☐ Mill certificate [M☐☐]

- We can submit the mill certificate when options [T2] is selected.
- Mill certificate can be submitted only wetted parts such as diaphragm, center body.
- If the customer requested other part mill certificate as same as EJA level, TOKUMI should be issued.

EJA	Part of the mill certificate
M01	Cover flange
M11	Cover flange, Process connector
M03	HP side : Process flange and block, LP side : Cover flange
M13	HP side : Process flange and block, LP side : Cover flange and process connector
M04	[M03] for EJA220A
M14	[M13] for EJA220A
M05	Process flange, block (for Remote-sealed type)
M06	Process flange, block, pipe, base (for Remote-sealed type)
M07	HP side : Process flange, block, pipe, base, LP side : Process flange, block

III. Model number conversion table

D) Options (Attention in replacement)

- **Pressure test/ Leak test certificate [T☐☐]**
  - The following is our standard procedure ;
    - Test pressure : x1.5 of maximum working pressure or flange rating value
    - Retention time : 5minutes by Nitrogen (N2) gas or water
      - The test pressure is below 15MPa, N2 gas is used.
      - The test pressure is over 15MPa, water is used.
  - We can also perform the test based on customer's requirement by TOKUMI.

EJA	Test pressure	Retention time
T01	3.5MPa	N2 gas @ 10min.
T12	16MPa	
T04	50kPa	
T09	32MPa	
T03	3MPa	
T02	14MPa	
T09	32MPa	N2 gas or water @10min.
T08	50MPa	
T31/T41	2MPa @JIS 10K flange	N2 gas @ 10min
T42	3MPa @JIS 20K flange	

EJA	Test pressure	Retention time
T32	5MPa @JIS 20K flange	N2 gas @ 10min
T33	10MPa @JIS 40K flange	
T43	3MPa @JIS 40K flange	
T45	3MPa @JIS 63K flange	
T36/T46	3MPa @ANSI 150# flange	
T37	7.7MPa @ANSI 300# flange	
T47	3MPa @ANSI 300# flange	
T38	7MPa @ANSI 300# flange	
T39	14MPa @ANSI 600# flange	
T49	3MPa @ANSI 600# flange	