General Specifications

EJX-A Series and EJA-E Series
Explosion Protected Type and
Marine Certificate Type

DPharp EJX™
DPharp EJA™

GS 01C25A20-01EN

■ Outline

In this General Specifications, EJX-A Series and EJA-E Series optional specifications for some explosion protected types and marine certificate types are stated. For standard specifications, functions, and other optional specifications, please refer to the standard General Specifications of each model.

■ Model

EJX□□□A and EJA□□□E

■ Explosion Protected Type and Local Standards

Item	Description	Code
NEPSI	NEPSI Flameproof and Dust ignition Proof Approval *1*9 Applicable Standard: GB/T 3836.1, GB/T 3836.2, GB/T 3836.31 Certificate: GYJ22.1941X Ex db IIC T6...T4 Gb, Ex tb IIIC T85°C Db Process Temp.(Tp) for gas-proof: 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) Ambient 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) Max. surface Temp. for dust-proof: T85°C (Tamb: –30 to 75°C, Tp: –30 to 85°C) *7 Enclosure: IP66 / IP67	**NF21**
	NEPSI Intrinsic safety Approval for HART/BRAIN Protocol Type *1*2*3*4 Applicable Standard: GB/T 3836.1, GB/T 3836.4 Certificate: GYJ22.1766X Ex ia IIC T4 Ga Ambient Temp.: –50 to 60°C (–58 to 140°F) Enclosure: IP66/IP67 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	**NS21**
	NEPSI Intrinsic safety Approval for Fieldbus Type *1*3*4*5 Applicable Standard: GB/T 3836.1, GB/T 3836.4 Certificate: GYJ21.1008X Ex ia IIC/IIB T4 Ga Ambient Temp.: –55 to 60°C (–67 to 140°F) Enclosure: IP66/IP67 Max. Process Temp.: 120°C (248°F) Electrical parameters: [Entity] Ui = 24 V, Ii= 250 mA, Pi = 1.2 W, Ci = 3.52 nF, Li = 0 µH [FISCO IIC] Ui = 17.5 V, Ii = 380 mA, Pi = 5.32 W, Ci = 3.52 nF, Li = 0 µH [FISCO IIB] Ui = 17.5 V, Ii = 460 mA, Pi = 5.32 W, Ci = 3.52 nF, Li = 0 µH	**NS25**
	NEPSI Intrinsic safety for Digital Remote Sensor *1*3*4*6*8 Applicable Standard: GB/T 3836.1, GB/T 3836.4 Certificate: GYJ22.1765X Ex ia IIC T4 Ga Ambient Temp. : –50 to 60°C (–58 to 140°F) Max. Process Temp.: 120°C (248°F) Enclosure: IP66/IP67 Electrical Parameters [EJX****-P] Supply/Output Circuit (Terminal: + and –) Ui: 30 V, Ii: 200 mA, Pi: 0.9 W, Ci: 27.6 nF, Li: 0 mH Communication Circuit (Connector) Uo: 8.2 V, Io: 160 mA, Po: 0.3 W, Co: 7.6 µF, Lo: 1 mH [EJX****-S] Ui: 8.2 V, Ii: 200 mA, Pi: 0.4 W, Ci: 6 µF, Li: 0 mH	**NS24**

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Item	Description	Code
Korea	Korea Flameproof and Dust Ignition Proof approval *1*2*5*9 Applicable Standard: Ministry of Labor Notice 2019-15, Harmonized with EN 60079-0, EN 60079-1, EN 60079-31 Certificate: 19-AV4BO-0402X (Flameproof), 19-AV4BO-0403X (Dust ignition proof) Type of Protection and Marking Code: Ex d IIC T6...T4, Ex tD A21 IP66/IP67 T85°C Temperature Class for gas-proof: T6, T5, and T4 Ambient Temperature (Tamb)*7 for gas-proof: –50 to 75°C (T6), –50 to 80°C (T5), and –50 to 75°C (T4) Maximum Process Temperature (Tp.) for gas-proof: 85°C (T6), 100°C (T5), and 120°C (T4) Maximum Surface Temperature for dust-proof: T85°C (Tamb.: –30 to 75°C, Tp.: –30 to 85°C) *7 Degree of Protection of Enclosure: IP66 / IP67	**PF23**
	Korea Intrinsically safe Approval *1*2*3*4 Applicable Standard: Notice of Ministry of Labor No. 2010-36, Harmonized with EN 60079-0, EN 60079-11 Certificate: 13-AV4BO-0680(EJX), 13-AV4BO-0679(EJA) Ex ia IIC T4 Ambient Temp.: –50 to 60°C Maximum Process Temp.: 120°C Electrical data: Ui=30 V, Ii=200 mA, Pi=0.9 W, Ci=27.6 nF, Li=0 µH	**PS21**
INMETRO	INMETRO Flameproof Approval *1*9 Applicable Standard: ABNT NBR IEC 60079-0 Versão Corrigida, ABNT NBR IEC 60079-1 Versão Corrigida Certificate: DEKRA 22.0003X Ex db IIC T6...T4 Gb Amb. Temp. (Tamb): 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.(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)	**UF1**
	INMETRO Intrinsically safe Approval *1*2*3*4 Applicable Standard: ABNT NBR IEC 60079-0 Versão Corrigida, ABNT NBR IEC 60079-11 Versão Corrigida Certificate: DEKRA 22.0002X Ex ia IIC T4 Ga Ambient Temp.: –50 to +60°C (–58 to +140°F) Max Process Temp.(Tp): +120°C (+248°F) Electrical data: Ui=30 V, Ii=200 mA, Pi=0.9 W, Ci=27.6 nF, Li=0 µH	**US1**
	INMETRO Intrinsically safe Approval *1*3*4*6*8 Applicable Standard: ABNT NBR IEC 60079-0 Versão Corrigida 2, ABNT NBR IEC 60079-11 Versão Corrigida Certificate: ABNT 23.0004X Ex ia IIC T4 Ga Ambient Temp.: –50 to 60°C (–58 to 140°F) Max Process Temp.(Tp): 120°C (248°F) Electrical Parameters [EJX****-P] Supply/Output Circuit (Terminal: + and –) Ui: 30 V, Ii: 200 mA, Pi: 0.9 W, Ci: 27.6 nF, Li: 0 mH Communication Circuit (Connector) Uo: 8.2 V, Io: 160 mA, Po: 0.3 W, Co: 7.6 µF, Lo: 1 mH [EJX****-S] Ui: 8.2 V, Ii: 200 mA, Pi: 0.4 W, Ci: 6 µF, Li: 0 mH	**US24**

Item	Description	Code
EAC	EAC approval and Russian pattern approval marking	**VR** *11
	EAC approval marking without Russian pattern approval marking	**VE** *11
EAC (Ex)	EAC Flameproof approval *1*9 Applicable Standard: ГОСТ 31610.0, ГОСТ IEC 60079-1, ГОСТ IEC 60079-31 Certificate: ЕАЭС RU C-JP.AA87.B.01332/24 Type of protection and Marking Code: 1Ex db IIC T6…T4 Gb X, Ex tb IIIC T85°C Db X Temperature Class for gas-proof : T6, T5 and T4 Ambient Temperature for gas-proof : -60 TO 75°C (T6), -60 TO 80°C (T5) and -60 TO 75°C (T4) Maximum Process Temperature for gas-proof(Tp) : 85°C (T6), 100°C (T5), 120°C (T4) Maximum Surface Temperature for dust-proof : T85°C (Tamb.: –30*7 to 75°C, Tp.: –30*7 to 85°C) Degree of protection of Enclosure : IP66 / IP67	**GF12** *11
	EAC Intrinsic safety approval *1*2*3*4 Applicable Standard: ГОСТ 31610.0, ГОСТ 31610.11 Certificate: ЕАЭС RU C-JP.AA87.B.01332/24 0Ex ia IIC T4 Ga X Ta: –55 TO 60°C Tp.: 120°C Ex ia IIIC T85°C...T120°C Db X Ta: –30 *7 TO 60°C Maximum surface temperature: T85°C (Tp.: 80°C), T100°C (Tp.: 100°C), T120°C (Tp.: 120°C) IP66 / IP67 Ui= 30 V, Ii= 200 mA, Pi= 0.9 W, Ci= 27.6 nF, Li= 0 µH	**GS12** *11
	Multiple types of protection (GF12 or GS12) *2	**GU12** *11
	EAC Intrinsic safety approval *1*3*4*6 Applicable Standard: ГОСТ 31610.0, ГОСТ 31610.11 Certificate: ЕАЭС RU C-JP.AA87.B.01332/24 Type of Protection: 0Ex ia IIC T4 Ga X Ambient temperature: –50 TO 60°C Maximum Process Temperature (Tp.): 120°C Degree of Protection: IP66 / IP67 Electrical Data [EJX****-P, EJA****-P] Supply/Output Circuit (Terminals: +, -) Ui= 30 V, Ii= 200 mA, Pi= 0.9 W, Ci= 27.6 nF, Li= 0 µH Communication Circuit (Connector) Uo= 8.2 V, Io= 160 mA, Po= 0.3 W, Co= 7.6 µF, Lo= 1 mH [EJX****-S, EJA****-S] Ui= 8.2 V, Ii= 200 mA, Pi= 0.4 W, Ci= 6 µF, Li= 0 mH	**GS14** *11
	Multiple types of protection (GF12 or GS14) *6	**GU14** *11
	EAC Intrinsic safety approval *1*3*5 Applicable Standard: ГОСТ 31610.0, ГОСТ 31610.11 Certificate: ЕАЭС RU C-JP.AA87.B.01332/24 0Ex ia IIC T4 Ga X, 0Ex ia IIB T4 Ga X Ta: -55°C*15 to 60°C Tp.:120°C Ex ia IIIC T85°C...T120°C Db X Ta: –30 *7 TO 60°C Maximum surface temperature: T85°C (Tp.: 80°C), T100°C (Tp.: 100°C), T120°C (Tp.: 120°C) IP66 / IP67 FISCO (IIC) Ui= 17.5 V, Ii= 380 mA, Pi= 5.32 W, Ci= 3.52 nF, Li= 0 µH FISCO (IIB) Ui= 17.5 V, Ii= 460 mA, Pi= 5.32 W, Ci= 3.52 nF, Li= 0 µH Entity Ui= 24 V, Ii= 250 mA, Pi= 1.2 W, Ci= 3.52 nF, Li= 0 µH Sensor Circuit Uo= 7.63 V, Io= 3.85 mA, Po= 8 mW, Co= 4.8 µF, Li= 100 mH *10	**GS16** *11

Item	Description	Code
UKCA	UK Conformity Assessed (UKCA) Marking *12*13	**UK*11**
UKEX	UKEX Flameproof approval *1 Certificate: DEKRA 23UKEX0129X Applicable Standard: EN IEC 60079-0, EN 60079-1, EN 60079-31 II 2 G Ex db IIC T6...T4 Gb II 2 D Ex tb IIIC T85°C Db IP66/IP67 EPL Gb: T6: −50°C ≤ Ta ≤ +75°C, −50°C ≤ Tp ≤ +85°C T5: −50°C ≤ Ta ≤ +80°C, −50°C ≤ Tp ≤ +100°C T4: −50°C ≤ Ta ≤ +75°C, −50°C ≤ Tp ≤ +120°C EPL Db: T85°C (−30°C ≤ Ta ≤ +75°C, −30°C ≤ Tp ≤ +85°C) *7	**BF21**
	UKEX Intrinsically safe approval*1*2*3*4*14 Certificate: DEKRA 23UKEX0132X Applicable Standard: EN IEC 60079-0, EN 60079-11 II 1 G Ex ia IIC T4 Ga II 2 D Ex ia IIIC T85°C T100°C T120°C Db IP66/IP67 EPL Ga: −50°C ≤ Ta ≤ +60°C, −50°C ≤ Tp ≤ +120°C EPL Db: −30°C ≤ Ta ≤ +60°C*7 T85°C: −30°C ≤ Tp ≤ +80°C*7, T100°C: −30°C ≤ Tp ≤ +100°C*7, T120°C: −30°C ≤ Tp ≤ +120°C*7 Ui=30 V, Ii=200 mA, Pi=0.9 W, Ci=27.6 nF, Li=0 µH	**BS21**
	Multiple types of protection (BF21, BS21 or Intrinsically safe Ex ic) *1 *2*3*4*14 Applicable Standard: EN IEC 60079-0, EN 60079-11 II 3 G Ex ic IIC T4 Gc −30°C ≤ Ta ≤ +60°C*7, −30°C ≤ Tp ≤ +120°C*7 Ui=30 V, Ci=27.6 nF, Li=0 µH	**BU21**
	UKEX Intrinsically safe approval*1*4*5*14 Certificate: DEKRA 23UKEX0131X Applicable Standard: EN IEC 60079-0, EN 60079-11 II 1 G Ex ia IIC/IIB T4 Ga II 2 D Ex ia IIIC T85°C T100°C T120°C Db IP66/IP67 EPL Ga: −55°C ≤ Ta ≤ +60°C, −55°C ≤ Tp ≤ +120°C EPL Db: −30°C ≤ Ta ≤ +60°C*7 T85°C: −30°C ≤ Tp ≤ +80°C*7, T100°C: −30°C ≤ Tp ≤ +100°C*7, T120°C: −30°C ≤ Tp ≤ +120°C*7 [FISCO (IIC)] Ui = 17.5 V, Ii = 380 mA, Pi = 5.32 W, Ci = 3.52 nF, Li = 0 µH [FISCO (IIB)] Ui = 17.5 V, Ii = 460 mA, Pi = 5.32 W, Ci = 3.52 nF, Li = 0 µH [Entity] Ui = 24 V, Ii = 250 mA (resistively limited), Pi = 1.2 W, Ci = 3.52 nF, Li = 0 µH	**BS26**
	UKEX Intrinsically safe Ex ic*1*4*5*14 Applicable Standard: EN IEC 60079-0, EN 60079-11 II 3 G Ex ic IIC T4 Gc −30°C ≤ Ta ≤ +60°C*7, −30°C ≤ Tp ≤ +120°C*7 Ui=32 V, Ci=3.52 nF, Li=0 µH	**BN26**
ATEX	ATEX Flameproof approval *1*7*14	**KF22**
	ATEX Intrinsically safe approval *1*2*3*4*7*14	**KS21**
	ATEX Intrinsically safe approval *1*4*5*7*14	**KS26**
	Multiple types of protection (KF22, KS21 or Intrinsically safe Ex ic) *1*2*3*4*7*14	**KU22**
	ATEX Intrinsically safe Ex ic *1*4*5*7*14	**KN26**

*1: Applicable for electrical connection code 2, 4, 7, 9, C, and D.
*2: Applicable for output signal code D, E, and J (E is only for EJX-A series).
*3: Not applicable for option code /AL (/AL is only for EJX-A series).
*4: Not applicable for EJX910A and EJX930A.
*5: Applicable for output signal code F and G.
*6: Applicable for output signal code P and S.
*7: Lower limit of Ambient temperature(Tamb) is –15°C (5°F) when /HE is specified.
*8: Not applicable for SIL certification.
*9: For EJX910A and EJX930A, see table1 below to confirm whether the cable glands are attached or not.
For EJXC40A cable glands are not attached for this option.
In the case where the cable glands are not attached, prepare the certified cable gland applicable to the cable of ø8.5 mm diameter.
To insert the cable into cable gland from the connector's side, inner diameter of the cable gland must be larger than ø13 mm.
*10: Applicable only for EJX910A and EJX930A.
*11: Contact YOKOGAWA for availability.
*12: Not applicable for option code /PE3.
*13: Only following ATEX and UKEX specifications are applicable for combination with explosion protection type.
*14: See the General Specifications of each model and communication type for detail.
*15: Lower limit is -40°C (5°F) when EJX910A and EJX930A is specified.

Table 1. Attached Cable Glands for EJX910A and EJX930A

		Flameproof Approval		Intrinsically Safe Approval		General Application (Without Ex-proof Approval)
		NEPSI, Korea, INMETRO, EAC	UKEX	NEPSI, Korea, INMETRO, EAC	UKEX	
External Temperature Input Code	-0	No	No	N/A	No	No
	-1, -2, -3, -4	No	Yes		Yes	Yes
	-B, -C, -D	No	N/A		N/A	No

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

■ Marine Certificate Type

Item	Description	Code
Marine Certificate	American Bureau of Shipping Product Design assessment *1*3*4*6 Certificate No.: 21-2138001-PDA	**WCA**
	Bureau Veritas Type Approval *1*3*4*6*7*8 Certificate No.: 42655/B0 BV	**WCB**
	Det Norske Veritas Type Approval *1*3*4*6 Certificate No.: TAA00000X0 Rev1	**WCD**
	Lloyd's Register of Shipping Type Approval *1*2*3*4*5*6 Certificate No.: LR2503193TA	**WCL**
	Nippon Kaiji Kyokai (NK) Type Approval *1*3*4*6 Certificate No.: TA21139M	**WCN**

*1: Applicable for output signal code D, E, and J (E is only for EJX-A series).
*2: Not applicable for measurement range 70 MPa (EJX6□0A D range and EJA5□0E /HG).
*3: Applicable only for process connection code 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or A, for those models which have a definition of "process connection" in their suffix code structure.
Not applicable for a diaphragm seal system (EJXC40A, EJXC50A, EJAC50E, EJXC8□A or EJAC8□E)
*4: Not applicable for EJX910A and EJX930A.
*5: Not applicable for bolts and nuts material code C, G, J of EJX130A and EJA130E.
*6: Not applicable with option code AL.
*7: Not applicable for measurement span code V of EJX130A and EJA130E.
*8: Not applicable for bolts and nuts material code K or H of EJX130A and EJA130E.