FUJI ELECTRIC

FCX-AII Series

SMALL FLANGE REMOTE SEAL TYPE
PRESSURE TRANSMITTER

DATA SHEET

FKW···4

The FCX –A Ⅱ small flange remote seal type pressure transmitter accurately measures gauge pressure and transmits a proportional 4 to 20mA signal.
The transmitter utilizes a unique micromachined capacitance silicon sensor with state-of-the-art microprocessor technology to provide exceptional performance and functionality.
Totally welded construction of the seals assures excellent reliability in high temperature and highly corrosive process conditions.

FEATURES

1. Directly connectable to 1-1/2in and 2in flanges
   The transmitter is connectable to 1-1/2in and 2in pipes without a reducer.
2. Connectable to 1/2in and 3/4in pipes
   Use of direct mounting adapter allows the transmitter to be connected to the following process.
   1/2in and 3/4in flanges
   Screw connection 1/2-14NPT, 3/4-14NPT, Rc1/2, Rc3/4
3. Minimum environmental influence
   The "Floating Cell" design which protects the pressure sensor against changes in temperature, and overpressure substantially reduces total measurement error in actual field applications.
4. Fuji/HART® bilingual communications protocol and FOUNDATION™ fieldbus and Profibus™ compatibility
   FCX–AⅡ series transmitter offers bilingual communications to speak both Fuji proprietary protocol and HART®. Any HART® compatible devices can communicate with FCX–AⅡ. Further, by upgrading electronics FOUNDATION™ fieldbus and Profibus™ are also available.
5. Application flexibility
   Various options that render the FCX–A Ⅱ suitable for almost any process applications include:
   - Analog indicator at either the electronics side or terminal side
   - Full range of hazardous area approvals
   - Built-in RFI filter and lightning arrester
   - 5-digit LCD meter with engineering unit
   - Stainless steel electronics housing
   - Wide selection of materials
   - High temperature, vacuum seals
6. Burnout current flexibility (Under Scale: 3.2 to 3.8mA, Over Scale: 20.8 to 21.6mA)
   Burnout signal level is adjustable using Model FXW Hand Held Communicator (HHC) to comply with NAMUR NE43.
7. Dry calibration without reference pressure
   Thanks to the best combination of unique construction of mechanical parts (Sensor unit) and high performance electronics circuit (Electronics unit), reliability of dry calibration without reference pressure is at equal level as wet calibration.

SPECIFICATIONS

Functional specifications

Service: Liquid, gas, or vapour

Span, range, and overrange limit:

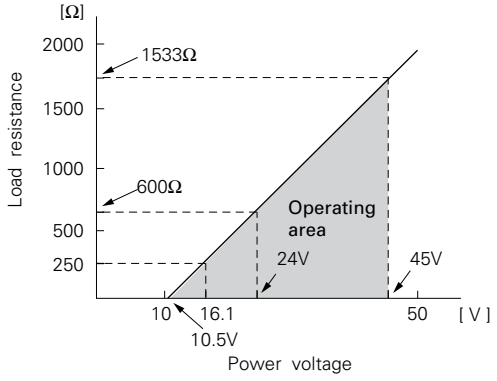
Type	Span limit [kPa]{bar}		Range limit [kPa]{bar}	Overrange limit [MPa] {bar}
	Min.	Max.		
F KW□□3	50 {0.5}	3000 {30}	–100 to +3000 {–1 to +30}	4.5 {45}
F KW□□4	250 {2.5}	10000 {100}	–100 to 10000 {–1 to 100}	15 {150}

– Lower range limit (vacuum limit) ;
  Silicone fill sensor: See Fig. 1
  Fluorinated fill sensor: Atmospheric pressure
– Conversion factors to different units;
  1MPa=10^3kPa=10bar=10.19716kgf/cm^2=145.0377psi
  1kPa=10mbar=101.9716mmH_2O=4.01463inH_2O

Output signal: 4 to 20mA DC with digital signal superimposed on the 4 to 20mA signal.

Power supply: Transmitter operates on 10.5V to 45V DC at transmitter terminals.
10.5V to 32V DC for the units with optional arrester.

Load limitations: see figure below



Note: For communication with HHC (Model: FXW), min. of 250Ω is required.

Hazardous locations:

Authorities	Flameproof	Intrinsic safety	Type n Nonincendive
ATEX	Ex II 2 GD - EExd IIC T5/T6	Ex II 1 GD - EExia IIC T4/T5	Ex II 3 GD - EExn IIC T4/T5
Factory Mutual	Class I II III Div. 1 Groups B thru. G	Class I II III Div. 1 Groups A thru. F	Class I II III Div. 2 Groups A thru. G
CSA	Class I II III Div. 1 Groups C thru. G	Class I II III Div. 1 Groups A thru. G	Class I II III Div. 2 Groups A thru. G
TIIS	Ex do IIB+H_2 T4	Ex ia II C T4 (*)	—

(*) Approval pending

Zero/span adjustment:
Zero and span are adjustable from the HHC(1). Zero and span are also adjustable externally from the adjustment screw (Span adjustment is not available with 9th digit code "L, P, Q, S").

Damping: Adjustable from HHC or local adjustment unit with LCD display.
The time constant is adjustable between 0.12 to 32 seconds.

Zero elevation/suppression:
Zero can be elevated or suppressed within the specified range limit of each sensor model.

Normal/reverse action:
Selectable from HHC(1)

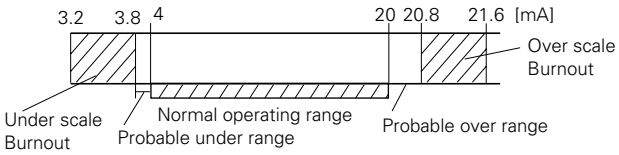
Indication: Analog indicator or 5-digit LCD meter, as specified.

Burnout direction: Selectable from HHC(1)
If self-diagnostic detect transmitter failure, the analog signal will be driven to either "Output Hold", "Output Overscale" or "Output Underscale" modes.

"Output Hold":
Output signal is hold as the value just before failure happens.

"Output Overscale":
Adjustable within the range 20.8mA to 21.6mA from HHC(1)

"Output Underscale":
Adjustable within the range 3.2mA to 3.8mA from HHC(1)



Loop-check output:
Transmitter can be configured to provide constant signal 3.8mA through 21.6mA by HHC(1).

Temperature limit:
Ambient: –15 to +65°C
(–15 to +60°C for arrester option)
(–10 to +60°C for fluorinated oil fill transmitter)
(–10 to +60°C for silicone oil "H", "S")
For explosionproof units (flameproof or intrinsic safety), ambient temperature must be within the limits specified by each standard.

Process:

Fill fluid	13th digit of "Code symbols"	Process temperature	Lower limit of static press.
Fluorinated oil	W, A and D	–20 to 120°C	Atmospheric pressure
Silicone oil	H	0 to 250°C	
	Y and G	–40 to 120°C	2.7kPa abs {20mmHg abs}
	S	0 to 250°C	

Storage: –40 to +70°C

Humidity limit: 0 to 100% RH

Communication: With HHC(1) (Model FXW, consult Data Sheet No. EDS8-47), following information can be remotely displayed or reconfigured.
Note: HHC's version must be more than 6.0 (or FXW □□□□1–□3), for FCX-AⅡ.

Items		Display	Set
Tag No.		*v*	*v*
Model No.		*v*	*v*
Serial No.		*v*	—
Engineering unit		*v*	*v*
Range limit		*v*	—
Measuring range		*v*	*v*
Damping		*v*	*v*
Output mode	Linear	*v*	*v*
	Square root	*v*	*v*
Burnout direction		*v*	*v*
Calibration		*v*	*v*
Output adjust		—	*v*
Data		*v*	—
Self diagnoses		*v*	—
Printer		—	—
External switch lock		*v*	*v*
Transmitter display		*v*	*v*
Linearize		*v*	*v*
Rerange		*v*	*v*

(Note) (1) HHC: Hand Held Communicator

Performance specifications

Reference conditions, silicone oil fill, SS316 isolating diaphragms, 4 to 20mA analog output in linear mode.

Accuracy rating: (including linearity, hysteresis, and repeatability)

(Standard)

For spans greater than 1/10 of URL: ±0.25% of span

For spans below 1/10 of URL:

$$\pm\left(0.17+0.08\ \frac{0.1 \times \text{URL}}{\text{Span}}\right)\%\ \text{of span}$$

(Option) (Code; 21th digit H)

For spans greater than 1/10 of URL: ±0.1% of span

For spans below 1/10 of URL:

$$\pm\left(0.05+0.05\ \frac{0.1 \times \text{URL}}{\text{Span}}\right)\%\ \text{of span}$$

Stability: ±0.2% of upper range limit (URL) for 6 month.

Temperature effect:

Effect per 28°C change between the limits of – 15°C and +65°C

Zero shift: ±0.5%/28°C
(x equal to 1/6.5 URL or more)

Zero shift; $\pm\ (0.5\ \frac{\text{URL}}{6.5 \times x})$%/28°C
(x less than 1/6.5 URL)

Total shift; ±0.75%/28°C
(x less than 1/6.5 URL or more)

Total shift; $\pm(0.25 + 0.5\ \frac{\text{URL}}{6.5 \times x})$%/28°C
(x less than 1/6.5 URL)

Where, x: Calibrated span
URL: Maximum span (Upper Range Limit)

Note : Above specifications are based on the conditions that flange and sensor unit are at the same temperature and in the same level. If temperature is different at flange, capillary or sensor unit, output variation may increase.

Overrange effect: Zero shift; 0.2% of URL/(1.5 x URL)

Supply voltage effect:

Less than 0.005% of calibrated span per 1V

RFI effect: Less than 0.2% of URL for the frequencies of 20 to 1000MHz and field strength 30 V/m when electronics covers on.
(classification: 2-abc: 0.2% span per SAMA PMC 33.1)

Step response: Time constant: 0.3s *)
Dead time: 0.2s *)
(without electrical damping)

*) Faster response is available as option (maximum update rate: 25 times per second).

Dielectric strength:

500V AC, 50/60Hz 1 min., between circuit and earth.

Insulation resistance:

More than 100MΩ/500V DC.

Turn-on time: 4 sec.

Internal resistance for external field indicator:

12Ω or less

Physical specifications

Electrical connections:

G1/2, 1/2-14 NPT, Pg13.5, or M20 x 1.5 conduit, as specified.
1-port (standard) or 2-port with each conduit, as specified.

Process connections:

JIS;
10K, 20K, 30K, 63K –40, 50A
10K, 20K, 30K, 63K –15, 20A (with Adapter)
ANSI/JPI;
150LB, 300LB, 600LB, –1 1/2", 2"
150LB, 300LB, 600LB, –1/2", 3/4" (with Adapter)
Screw connection (with Adapter) ;
Rc1/2, Rc3/4, 1/2-14NPT, 3/4-14NPT

Diaphragm extension:

0, 50, 100, 150, or 200mm as specified.
(See model code. Extended diaphragm is available only with 316L stainless steel diaphragm)

Process-wetted parts material:

Diaphragm: 316L stainless steel, Hastelloy-C Monel or Tantalum
Flange face: 316 stainless steel, Hastelloy-C lining, Monel lining or Tantalum lining
Extension: 316 stainless steel
(Refer to "Code symbols")

Non-wetted parts material:

Electronics housing: Low copper die-cast aluminum alloy finished with epoxy/polyurethane double coating (standard), or 316 stainless steel (SCS14 per JIS G5121), as specified.
Capillary: In case of 11th code "D. E. L", PVC armored stainless steel.
In case of 11th code "Q. R. S", stainless steel armored stainless steel.
Mounting flange: 304 stainless steel or carbon steel, as specified.
Fill fluid: Silicone oil (standard) or fluorinated oil
Mounting bracket: 304 stainless steel.

Environmental protection:

IEC IP67 and NEMA 6/6P

Mounting: On 60.5mm (JIS 50A) pipe using mounting bracket, direct wall mounting

Mass {weight}: Transmitter approximately 10kg without options.
Add; 0.5kg for mounting bracket
0.8kg for indicator option
4.5kg for stainless steel housing option
1.5kg per 50mm extension of diaphragm

Optional features

Indicator: A plug-in analog indicator (1.5% accuracy) can be housed in the electronics compartment or in the terminal box of the housing.
An optional 5-digit LCD meter with engineering unit is also available.

Local adjustment unit with LCD display:
An optional 5-digit LCD meter with Zero/Span adjustment function, loop-check function and damping adjustment function, is available.

Arrester: A built-in arrester protects the electronics from lightning surges.
Lightning surge immunity: 4kV (1.2 x 50μs).

Oxygen service: Special cleaning procedures are followed throughout the process to maintain all process wetted parts oil-free.
The fill fluid is fluorinated oil.

Chlorine service: Oil-free procedures as above. Includes fluorinated oil for fill.

Degreasing: Process-wetted parts are cleaned, but the fill fluid is standard silicone oil. Not for use on oxygen or chlorine measurement.

Vacuum and high temperature service:
Special silicone oil and filling procedure are applied.
See Fig.1.

Optional tag plate:
An extra stainless steel tag for customer tag data is wired to the transmitter.

Coating of cell: Cell's surface is finished with epoxy/polyurethane double coating. Specify if environment is extremely corrosive.

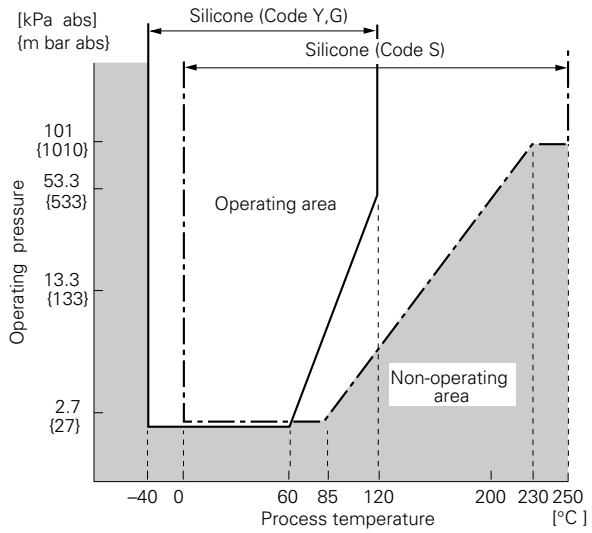


Fig. 1 Relation between process temperature and operating pressure

ACCESSORIES

Hand-held communicator:
(Model FXW, refer to Data Sheet No. EDS8-47)

Z/S board: Parts No.=ZZPFCX4-A070
When Z/S board is mounted on the FCX–AII amplifier unit, external adjustment screw will be available for zero and span adjustment.

The product conforms to the requirements of the Electromagnetic compatibility Directive 94/9/EC as detailed within the technical construction file number TN513035. The applicable standards used to demonstrate compliance are :

EMI (Emission) EN61326 : 1997
Class A (standard for Industrial Location)

Frequency range MHz	Limits	Reference standard
30 to 230	40dB (μV/m) quasi peak, measured at 10m distance	CISPR16-1 and CISPR16-2
230 to 1000	47dB (μV/m) quasi peak, measured at 10m distance	

EMI (Immunity) EN61326: 1997
Annex A (standard for Industrial Location)

Phenomenon	Test value	Basic standard	Performance criteria
Electrostatic discharge	4kV (Contact) 8kV (Air)	IEC61000-4-2	B
Electromagnetic field	80 to 1000MHz 10V/m 80%AM (1kHz)	IEC61000-4-3	A
Rated power frequency magnetic field	30A/m 50Hz	IEC61000-4-8	A
Burst	2kV 5kHz	IEC61000-4-4	B
Surge	1.2μs/50μs 1kV (Line to line) 2kV (Line to ground)	IEC61000-4-5	B
Conducted RF	0.15 to 80MHz 3V 80%AM (1kHz)	IEC61000-4-6	A

Note) Definition of performance criteria
A: During testing, normal performance within the specification limits.
B: During testing, temporary degradation, or loss of function or performance which is self-recovering.

CODE SYMBOLS

Digit	Description			Note	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ← Digit No. of code
					F K W [ ] [ ] [ ] 4 - [ ] [ ] [ ] [ ] [ ] - [ ] 0 [ ] [ ] - [ ] [ ] [ ]
4	<Conduit connection>				
	G1/2	(×1)	Combination with 12th digit code "C, E, P, Q" are not available.		A
	1/2 - 14NPT	(×1)			B
	Pg13.5	(×1)			C
	M20×1.5	(×1)			D
	G1/2	(×2)			S
	1/2 - 14NPT	(×2)			T
	Pg13.5	(×2)			V
	M20 X 1.5	(×2)			W
5	<Flange>				
	Material	Size and rating			
	304 stainless steel	JIS 10K 40A			0
		JIS 10K 50A			1
		JIS 20K 40A			2
		JIS 20K 50A			3
		JIS 30K 40A			4
		JIS 30K 50A			5
		JIS 63K 40A			6
		JIS 63K 50A			7
		ANSI/JPI 150LB 1 1/2"			A
		ANSI/JPI 150LB 2"			B
		ANSI/JPI 300LB 1 1/2"			C
		ANSI/JPI 300LB 2"			D
		ANSI/JPI 600LB 1 1/2"			E
		ANSI/JPI 600LB 2"			F
	Carbon steel	JIS 10K 40A			G
		JIS 10K 50A			H
		JIS 20K 40A			J
		JIS 20K 50A			K
		JIS 30K 40A			L
		JIS 30K 50A			M
		JIS 63K 40A			N
		JIS 63K 50A			P
		ANSI/JPI 150LB 1 1/2"			Q
		ANSI/JPI 150LB 2"			R
		ANSI/JPI 300LB 1 1/2"			S
		ANSI/JPI 300LB 2"			T
		ANSI/JPI 600LB 1 1/2"			U
		ANSI/JPI 600LB 2"			V
	None	40A, 1 1/2B			W
	(Wafer type)	50A, 2B			X
	——	Direct mounting adapter connection (* 1)		Note 1	Y
6	<Span limit [kPa] {m bar} >				
	50.....3000(0.5...30)				3
	250...10000(2.5...100)				4
7	<Material/diapharagm extension>				
	Diaphragm	Flange face	Diaphragm extension (mm)		
	316L stainless steel	316 stainless steel	0		V
			50 (* 2)	Note 2	A
			100 (* 2)		B
			150 (* 2)		C
			200 (* 2)		D
	316L stainless steel +Au coating		0		J
	Hastelloy-C	Hastelloy-C	0		H
	Monel	Monel	0		M
	Tantalum	Tantalum	0		T

Note1: (*1) Direct mounting adapter type is specified at 16th to 20th digit.
Direct mounting adapter is available only for 7th digit code "V".

Note2: (*2) Diaphragm extension is available only for 2" (50A) flanges.

Digit	Description	Note	Code
9	<Indicator and arrester> Indicator / Arrester None / None (Z/S board attached.)		A
	Analog, 0 to 100% linear scale / None (Approval pending for 10th digit code "G, H, K, P")		B
	Analog, custom scale / None		D
	None / Yes		E
	Analog, 0 to 100% linear scale / Yes		F
	Analog, custom scale / Yes		H
	Digital, 0 to 100% / None		L
	Digital, custom scale / None		P
	Digital, 0 to 100% / Yes		Q
	Digital, custom scale / Yes		S
	Digital, 0 to 100% (Local adjustment unit with LCD display) / None (Approval pending for 10th digit code "D, G, H, K, P")		1
	Digital, custom scale (Local adjustment unit with LCD display) / None		2
	Digital, 0 to 100% (Local adjustment unit with LCD display) / Yes		4
	Digital, custom scale (Local adjustment unit with LCD display) / Yes		5
10	<Approvals for hazardous locations> None (for ordinary locations)		A
	TIIS, Flameproof (Conduit seal)(Available for 4th digit code "A", "S")		B
	TIIS, Flameproof (Cable gland seal)(Available for 4th digit code "A", "S")		C
	FM, Flameproof (or explosionproof)(Available for 4th digit code "B", "T")		D
	ATEX, Flameproof		X
	TIIS, Intrinsic safety (Approval pending)		G
	FM, Intrinsic safety and Nonincendive		H
	ATEX, Intrinsic safety		K
	ATEX, Type n		P
11	<Capillary and mounting bracket> Mounting bracket / Capillary / Armor of Capillary Stainless steel / 1.5m / PVC (*5)	Note5	D
	3m		E
	5m		L
	1.5m / Stainless steel		Q
	3m		R
	5m		S
12	<Options> Extra SS tag plate / Stainless steel elec. housing / Coating of cell None / None / None		Y
	Yes / None / None		B
	None / Yes / None		C
	Yes (*3) / Yes / None	Note3	E
	None / None / Yes		M
	Yes / None / Yes		N
	None / Yes / Yes		P
	Yes / Yes / Yes		Q
13	<Special applications and fill fluid> Treatment / Fill fluid Standard / Silicone oil		Y
	Standard / Fluorinated oil		W
	Degreasing / Silicone oil		G
	Oxygen service / Fluorinated oil (7th digit code "V", "A", "B", "C" and "D")		A
	Chlorine service / Fluorinated oil (7th digit code "H" and "T")		D
	High temp. 250°C / Silicone oil (7th digit code "V", "A", "B", "C" and "D")		H
	High temp. and vacuum (250°C) / Silicone oil (7th digit code "V", "A", "B", "C" and "D")		S
14	<Teflon membrane> None		Y
	Yes (Available for 7th digit code "V", "H", "M" and "T". Not available for 5th digit code "Y" and 13th digit code "H", "S".)		C
15	<Bolt/nut> (*4) None / 6th digit code "3"	Note4	Y
	Cr-Mo alloy hexagon socket head cap bolt/carbon steel nut / 6th digit code "4"		A
	Cr-Mo alloy hexagon bolt/carbon steel nut / 6th digit code "4"		B
	304 stainless steel bolt/304 stainless steel nut / 6th digit code "4"		E

Digit No. of code: 1 2 3 4 5 6 7 8 9 10 11 12 13 - 14 15 16 17 18 - 19 20 21

Note3: (*3) Customer tag number can be engraved on standard stainless steel name plate. If extra tag plate is required, select "Yes".
Note4: (*4) In case of tropical use, select stainless bolts and nuts.
Note5: (*5) Available for 13th digit code "Y, W, G, A, D".

Specifications of Direct Mounting Adapter {for 15, 20A (1/2, 3/4") connection} and others

Note 1. When odering the instrument with direct mounting adapter, specify "Y" in the 5th digit of Code Symbol, and specify 16th digit to 20th digit.
When odering the instrument without direct mounting adapter, nothing should be filled in the 16th to 20th digit.
2. Unless otherwise described in the specifications, leave the 21st digit blank.

Digit	Description	Note	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ← Digit No. of code
			F K W 4 - - -
16, 17	<Process connection (direct mounting adapter)>		
	JIS 10K 15A		1 1
	JIS 10K 20A		1 2
	JIS 20K 15A		2 1
	JIS 20K 20A		2 2
	JIS 30K 15A		3 1
	JIS 30K 20A		3 2
	JIS 63K 15A		6 1
	JIS 63K 20A		6 2
	ANSI/JPI 150LB 1/2"		1 H
	ANSI/JPI 150LB 3/4"		1 T
	ANSI/JPI 300LB 1/2"		2 H
	ANSI/JPI 300LB 3/4"		2 T
	ANSI/JPI 600LB 1/2"		4 H
	ANSI/JPI 600LB 3/4"		4 T
	Screw connection Rc1/2		S R
	Screw connection Rc3/4		S 2
	Screw connection Rc1/2 - 14NPT		S N
	Screw connection Rc3/4 - 14NPT		S T
18	<Material (direct mounting adapter)>		
	Adapter Bolts/nuts (* 1)	Note 1	
	316 Stainless Steel Cr-Mo steel/carbon steel		W
19	<Vent/drain (for direct mounting adapter)>		
	Standard		A
	Long type		N
20	<Gasket (for direct mounting adapter)>		
	Standard (Teflon)(Only Y, W, G, A and D can be specified on 13th digit).		1
	For high temperature (spiral gasket) (Only H and S can be specified on 13th digit).		2
21	<Other options>		
	High accuracy type		H

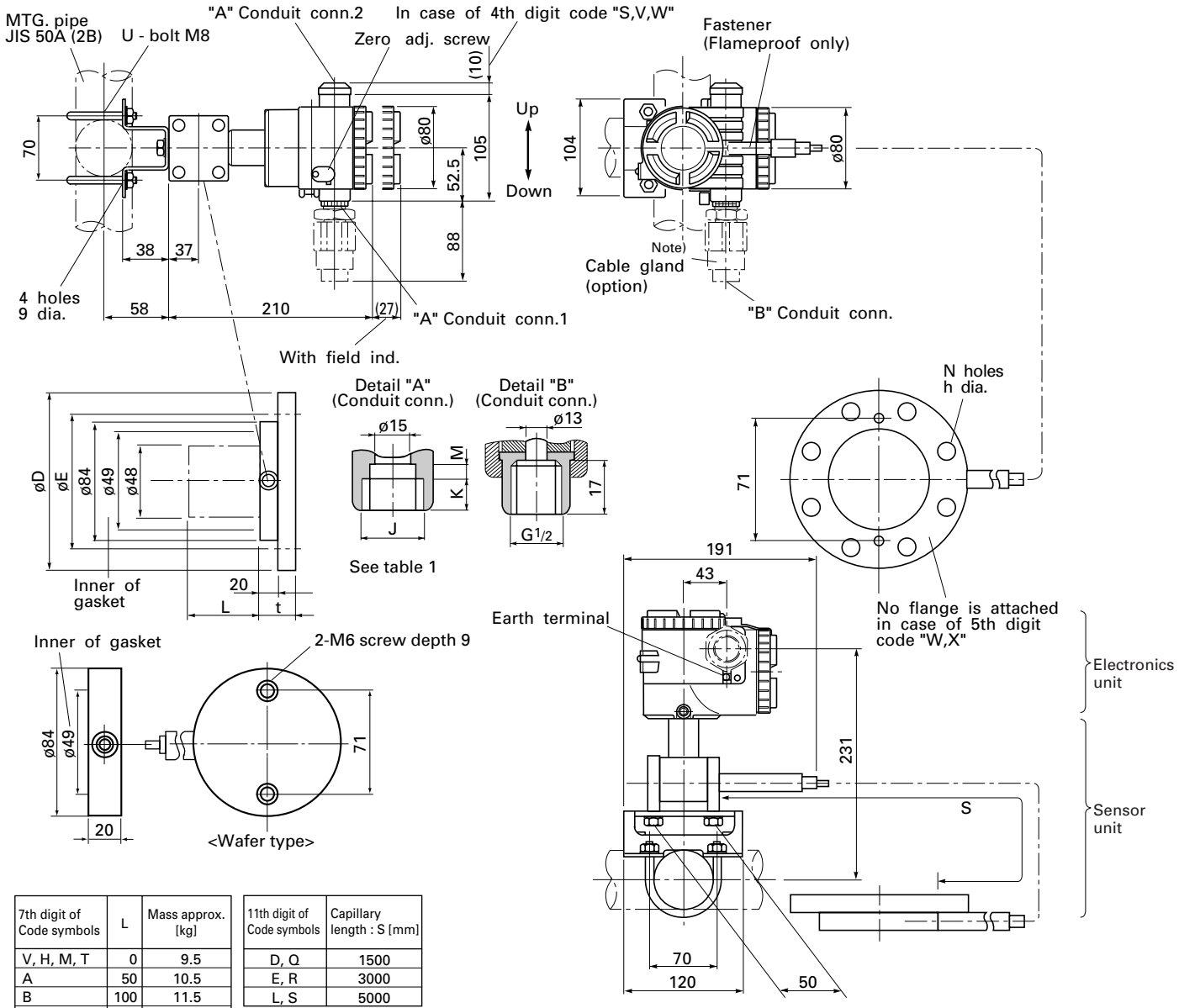
Note1: (* 1) For connection of transmitter receiving pressure unit and direct mounting adapter

ORDERING INFOMATION

When ordering this instrument, specify.

1. CODE SYMBOLS
2. Measuring range.
3. Output orientation (burnout direction) when abnormality is occurred in the transmitter.
   Hold / Overscale (21.6mA) / Underscale (3.2mA)
   Unless otherwise specified, output hold function is supplied.
4. Indication method (indicated value and unit) in case of the actual scale (code D, H, P, S on 9th digit).
5. Tag No. (up to 26 alphanumerical characters), if required.

OUTLINE DIAGRAM (Unit:mm)



7th digit of Code symbols	L	Mass approx. [kg]
V, H, M, T	0	9.5
A	50	10.5
B	100	11.5
C	150	12
D	200	12.5

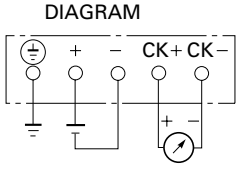
11th digit of Code symbols	Capillary length : S [mm]
D, Q	1500
E, R	3000
L, S	5000

5th digit of code symbols	øD	øE	øt	N-øh	(Flange)
0,G	140	105	36	4-19	JIS-10K-40A
1,H	155	120	36	4-19	JIS-10K-50A
2,J	140	105	38	4-19	JIS-20K-40A
3,K	155	120	38	8-19	JIS-20K-50A
4,L	160	120	42	4-23	JIS-30K-40A
5,M	165	130	42	8-19	JIS-30K-50A
6,N	175	130	52	4-25	JIS-63K-40A
7,P	185	145	54	8-23	JIS-63K-50A
A,Q	127	98.4	37.5	4-16	ANSI/JPI-150LB-1 1/2B
B,R	152	120.6	39.5	4-20	ANSI/JPI-150LB-2B
C,S	156	114.3	41	4-23	ANSI/JPI-300LB-1 1/2B
D,T	165	127	42.5	8-20	ANSI/JPI-300LB-2B
E,U	156	114.3	42.5	4-23	ANSI/JPI-600LB-1 1/2B
F,V	165	127	45.5	8-20	ANSI/JPI-600LB-2B

4TH DIGIT OF THE CODE SYMBOLS	Conduit conn.		
	J	K	M
A, S	G1/2	17	8
B, T	1/2-14NPT	16	5
C, V	Pg13.5	8	4.5
D, W	M20×1.5	16	5

Table 1

CONNECTION DIAGRAM

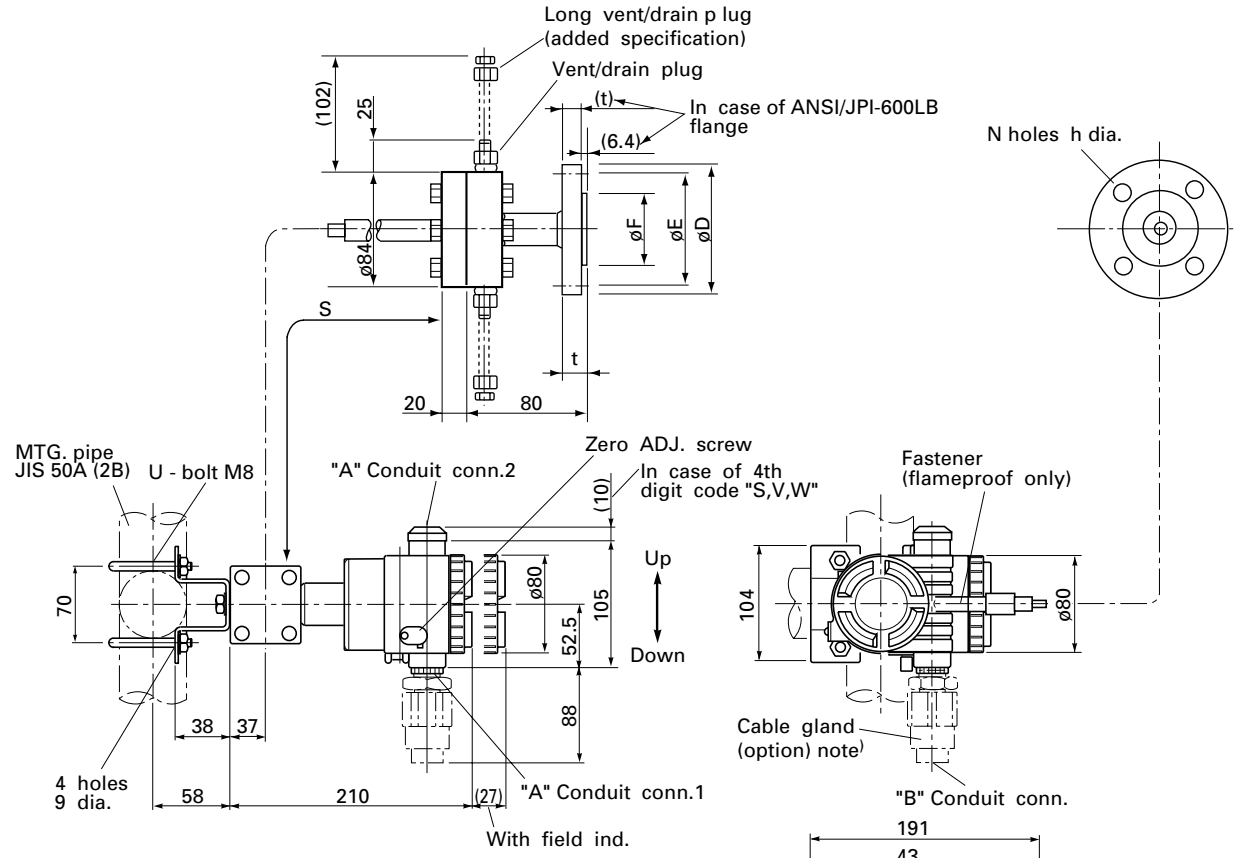


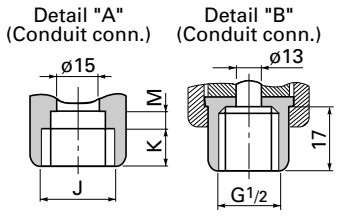
(M4 screws)

Note) Cable gland is supplied in case of 10th digit code "C".
ø11 cable is suitable.

OUTLINE DIAGRAM (Unit:mm)

<With direct mount adaptor>





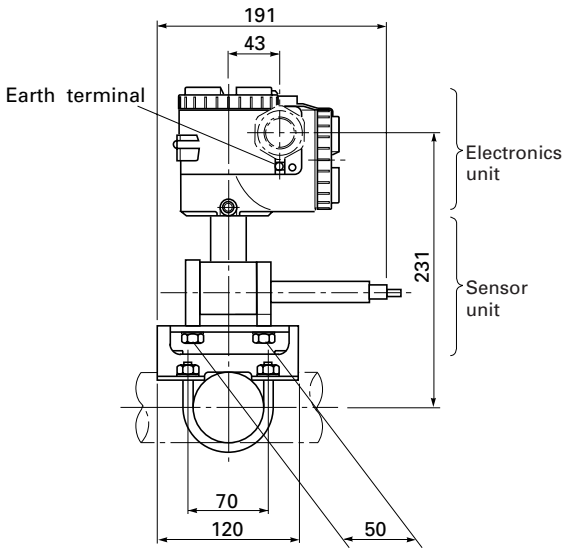


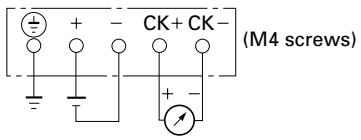
Table 1

4TH DIGIT OF THE CODE SYMBOLS	CONDUIT CONN.		
	J	K	M
A, S	G1/2	17	8
B, T	1/2-14NPT	16	5
C, V	Pg13.5	8	4.5
D, W	M20×1.5	16	5

11th digit of Code symbols	Capillary length : S [mm]
D, Q	1500
E, R	3000
L, S	5000

16th of code symbols	17th of code symbols	øD	øE	øF	t	N-øh	Flange
1	1	95	70	51	12	4-15	JIS-10K-15A
1	2	100	75	56	14	4-15	JIS-10K-20A
2	1	95	70	51	14	4-15	JIS-20K-15A
2	2	100	75	56	16	4-15	JIS-20K-20A
3	1	115	80	55	18	4-19	JIS-30K-15A
3	2	120	85	60	18	4-19	JIS-30K-20A
6	1	120	85	55	23	4-19	JIS-63K-15A
6	2	135	95	60	25	4-23	JIS-63K-20A
1	H	89	60.3	34.9	11.5	4-16	ANSI/JPI-150LB 1/2B
1	T	98	69.9	42.9	13	4-16	ANSI/JPI-150LB 3/4B
2	H	95	66.7	34.9	14.5	4-16	ANSI/JPI-300LB 1/2B
2	T	117	82.5	42.9	16	4-20	ANSI/JPI-300LB 3/4B
4	H	95	66.7	34.9	14.5	4-16	ANSI/JPI-600LB 1/2B
4	T	117	82.5	42.9	16	4-20	ANSI/JPI-600LB 3/4B

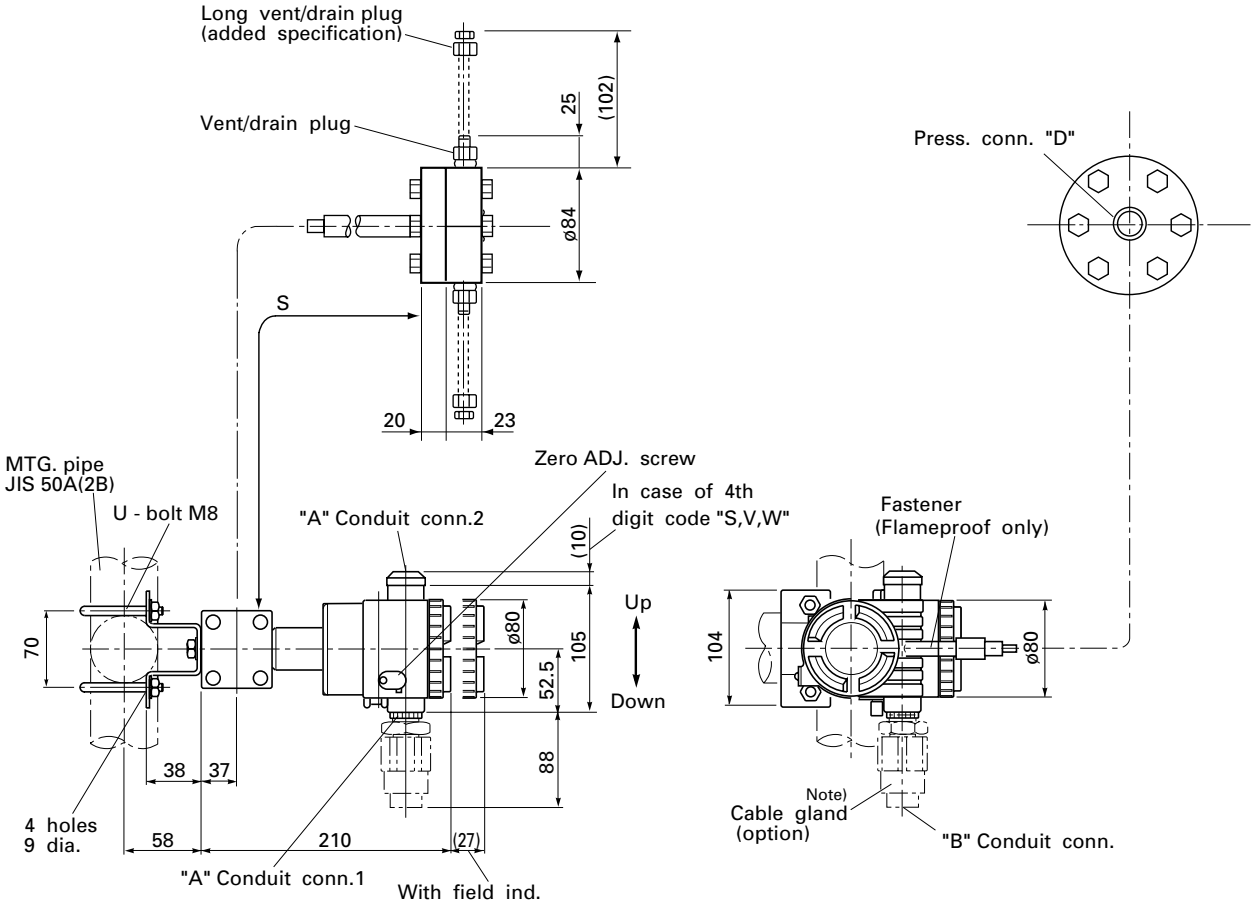
CONNECTION DIAGRAM

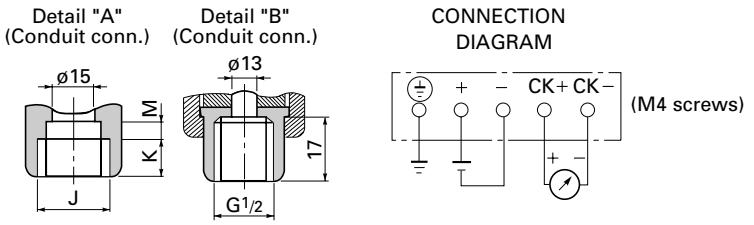


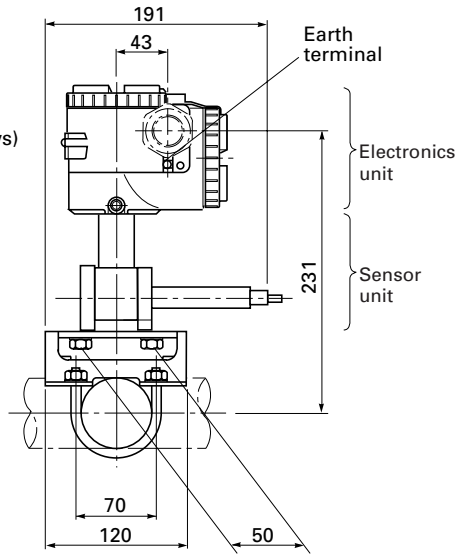
NOTE) Cable gland is supplied in case of 10th digit code "C". ø11 cable is suitable.

OUTLINE DIAGRAM (Unit:mm)

<With direct mount adaptor (screw connection type)>







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11th digit of Code symbols	Capillary length : S [mm]
D, Q	1500
E, R	3000
L, S	5000

16th digit of Code symbols	17th digit of Code symbols	Press. conn."D"
S	R	Rc1/2
S	N	1/2 -14NPT
S	2	Rc3/4
S	T	3/4 -14NPT

Note) Cable gland is supplied in case of 10th digit code "C".
ø11 cable is suitable.

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