



# ABSOLUTE PRESSURE TRANSMITTER

DATA SHEET FKA...4

The FCX-AII absolute pressure transmitter accurately measures absolute 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

# **FEATURES**

#### 1. High accuracy

0.2% accuracy for all calibrated spans is a standard feature for all AP models covering 1.6kPa {0.016bar} range to 3000kPa {30bar} high pressure range. 0.1% accuracy is available as option. Fuji's micro-capacitance silicon sensor assures this accuracy for all suppressed calibration ranges without additional adjustment.

#### 2. Minimum environmental influence

The "Advanced Floating Cell" design which protects the pressure sensor against changes in temperature, and overpressure substantially reduces total measurement error in actual field applications.

3. 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.

#### 4. Application flexibility

Various options that render the FCX - AII 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

#### 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.

#### 6. 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 [kPa abs]		Range limit [kPa abs]	Overrange limit [MPa]	
	Min.	Max.	{bar abs}	{bar}	
FKA□01	1.6 {0.016}	16 {0.16}	0 to +16 {0 to +0.16}	0.5 {5}	
FKA□02	1.6	130	0 to +130 {0 to +1.3}	0.5 {5}	
FKA□03	5 {0.05}	500 {5}	0 to +500 {0 to +5}	1.5 {15}	
FKA□04	30 {0.3}	3000 3000	0 to +3000 {0 to +30}	9 {90}	

Remark: To minimize environmental influence, span should be greater than 1/40 of the max. span in most applications.

 The maximum span of each sensor can be converted to different units using factors as below.

 $1 MPa abs=10^3 kPa abs=10 bar abs=10.19716 kgf/cm^2 abs$ =145.0377psi abs

1kPa abs =10mbar abs=101.9716mmH<sub>2</sub>O abs

=4.01463inH<sub>2</sub>O abs=7.50062mmHg abs

Output signal: 4 to 20mA DC with digital signal super-

imposed on the 4 to 20mA signal.

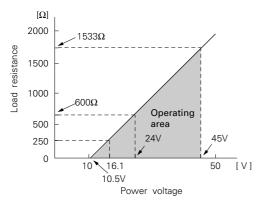
Power supply: Transmitter operates on 10.5V to 45V DC

at transmitter terminals.

10.5V to 32V DC for the units with op-

tional arrester.

# Load limitations: see figure below



Note: For communication with HHC  $^{\!\scriptscriptstyle (1)}$  (Model: FXW), min. of 250  $\!\Omega$  is required.

## Hazardous locations:

Authorities	Flameproof
ATEX	Ex II 2 GD  EEx d IIC T6 IP66/67 T85°C  Tamb = -40°C to +65°C  EEx d IIC T5 IP66/67 T100°C  Tamb = -40°C to +85°C
Factory Mutual	Class I Div.1 Groups B, C, D T6 Type 4X Class II III Div.1 Groups E, F, G T6 Type 4X Tamb max = +60°C
CSA	Class I Div.1 Groups C, D Class II Div.1 Groups E, F, G Class III Div.1 Note) "Seal Not Required" enclosure is allowed.
TIIS	Ex do IIB+H <sub>2</sub> T4 Tamb max = +55°C Maximum process temp. = +120°C
IECEx Scheme /SAA	Ex d IIC T5 IP66/67 pending Tamb = -40°C to +85°C Ex d IIC T6 IP66/67 pending Tamb = -40°C to +65°C

Authorities	Intrinsic safety
ATEX	Ex II 1 GD  EEx ia IIC T5 Tamb = -40°C to +40°C  EEx ia IIC T4 Tamb = -40°C to +80°C  Entity Parameters:  Ui=28V, Ii=93.3mA, Pi=0.66W,  Ci=27nF (Without Arrester),  Ci=34.2nF (With Arrester), Li=1.134mH
Factory Mutual	Class I II III Div.1 Groups A, B, C, D, E, F, G T4 Entity Type 4X  Model code 9th digit A,B,D -40°C to +85°C L,P,1,2 -20°C to +80°C Q,S,4,5 -20°C to +60°C E,F,H -40°C to +60°C Entity Parameters: Vmax=42.4V, Imax=113mA, Pi=1W, Ci=34.2nF, Li=1.134mH
CSA	Class I Div.1 Groups A, B, C, D Class II Div.1 Groups E, F, G Class III Div.1 Temp Code T4 Tamb max = +40°C Temp Code T3C Tamb max = +85°C Entity Parameters: Vmax=28V, Imax=93mA, Ci=27nF (Without Arrester), Ci=34.2nF (With Arrester), Li=1.4mH
TIIS	Ex ia IIC T4 Tamb max = +60°C Entity Parameters: Ui=28V, Ii=94.3mA, Pi=0.66W, Ci=32.6nF, Li=1.134mH
IECEx Scheme /SAA	Ex ia IIC T4 IP66/67 Tamb = $-40^{\circ}$ C to $+70^{\circ}$ C Ex ia IIC T5 IP66/67 Tamb = $-40^{\circ}$ C to $+50^{\circ}$ C Entity Parameters: Ui=28V, Ii=93.3mA, Pi=0.66W, Ci=0.033 $\mu$ F, Li=1.034mH

	Type n		
Authorities	Nonincendive		
ATEX	Ex II 3 GD  EEX nL IIC T5 Tamb = -40°C to +40°C  EEX nL IIC T4 Tamb = -40°C to +80°C  Specific Parameters:  Model without arrester:  Ui=42.4V, Ii=113mA, Pi=1W, Ci=27nF, Li=1.134mH  Model with arrester:  Ui=32V, Ii=113mA, Pi=1W, Ci=34.2nF, Li=1.134mH		
	EEx nAL IIC T5 Tamb = -40°C to +40°C EEx nAL IIC T4 Tamb = -40°C to +80°C Specific Parameters: Model without arrester: Umax=42.4V, Imax=113mA, Pmax=1W Model with arrester: Umax=32V, Imax=113mA, Pmax=1W		
Factory Mutual	Class I II III Div.2 Groups A, B, C, D, F, G T4 Entity Type 4X    Model code   Tamb     4,B,D		
CSA	Class I Div.2 Groups A, B, C, D Class II Div.2 Groups E, F, G Class III Div.2 Temp Code T4 Tamb max = +40°C Temp Code T3C Tamb max = +85°C Entity Parameters: Vmax=28V, Ci=27nF (Without Arrester), Ci=34.2nF (With Arrester), Li=1.4mH		
TIIS	-		
IECEx Scheme /SAA	-		

### Zero/span adjustment:

Zero and span are adjustable from the HHC<sup>(1)</sup>. 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 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":

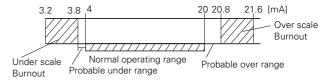
Output signal is hold as the value just before failure happens.

"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: -40 to +85°C

(-20 to +80°C for LCD indicator) (-40 to +60°C for arrester option) For explosionproof units (flameproof or intrinsic safety), ambient temperature must be within the limits specified by each standard.

Process: -40 to +85°C for silicone fill sensor

Storage: -40 to +90°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 recon-

> Note: HHC's version must be more than 6.0 (or FXW □□□□1-□3), for FCX-АⅡ.

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	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

## Performance specifications

Reference conditions, silicone oil fill, 316SS 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: ±0.2% of span For spans below 1/10 of URL:

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

(Option) (code: 21th digit H)

(Not available for Max span 16kPa abs, 130kPa abs) For spans greater than 1/10 of URL: ±0.1% of span

For spans below 1/10 of URL:

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

Stability: ±0.2% of upper range limit (URL) for 3

Temperature effect:

Effect per 28°C change between the

limits of -40°C and +85°C

Zero shift:  $\pm \left(0.125+0.1 \frac{\text{URL}}{\text{Span}}\right)\%$ Total effect:  $\pm \left(0.15+0.1 \frac{\text{URL}}{\text{Span}}\right)\%$ 

Overrange effect: Zero shift; ±0.2% of URL for any overrange

to maximum limit

Supply voltage effect:

Less than 0.005% of calibrated span per

RFI effect: Less than 0.2% of URL for the frequencies of 20 to 1000MHz and field strength

30V/m when electronics covers on. (Classification: 2-abc: 0.2% span per

SAMA PMC 33.1)

120 msec \*) Update period:

Time constant: 0.2 s\*) Step response:

Dead time: 0.2 s\*)

(without electrical damping)

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

Mounting position effect:

Zero shift, less than 0.1kPa{1mbar} for a

10° tilt in any plane.

No effect on span. This error can be cor-

rected by adjusting zero.

Dielectric strength:

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

and earth.

Insulation resistance:

More than  $100M\Omega$  at 500V DC.

Turn-on time: 4 sec

Internal resistance for external field indicator:

 $12\Omega$  or less

## Physical specifications

#### Electrical connections:

 $G^{1/2}$ ,  $^{1/2}$ -14NPT, Pg13.5, or M20 x 1.5

conduit, as specified.

1-port (standard) or 2-port with each

conduit, as specified.

#### Process connections:

1/4-18 NPT or Rc1/4 on 54mm centers, as specified.

#### Process-wetted parts material:

Material code (7th digit in "Code symbols")	Process cover	Diaphragm	Wetted sensor body	Vent/drain
V	316 stainless	316L	316	316/316L
	steel (*1)	stainless steel	stainless steel	stainless steel
Н	316 stainless	Hastelloy-C	Hastelloy-C	316/316L
	steel (*1)	,	lining	stainless steel
M	316 stainless	Monel	Monel lining	316/316L
	steel (*1)			stainless steel
Т	316 stainless	Tantalum	Tantalum	316/316L
·	steel (*1)	rantalan	lining	stainless steel
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Note: (\*1) SCS14A per JIS G 5121 (equivalent CF8M per ASTM A351/A351M)

Remarks: Sensor O-rings: Viton

Availability of above material design depends on ranges. 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 (SCS14A per JIS G5121), as specified.

Bolts and nut: Cr-Mo alloy (standard) or

304 stainless steel Fill fluid: Silicone 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,

or direct process mounting.

Mass{weight}: Transmitter approximately 3.4kg without

options.

Add; 0.5kg for mounting bracket 0.8kg for indicator option

4.5kg for stainless steel housing

option

## Optional features

Indicator: A plug-in analog indicator (2.5% 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 func-

tion, is available.

Arrester: A built-in arrester protects the electronics

from lightning surges. Lightning surge immunity:

 $4kV (1.2 \times 50\mu s)$ 

**Degreasing:** Process-wetted parts are cleaned, but the

fill fluid is standard silicone oil. Not for use on oxygen or chlorine measurement.

NACE specification:

Metallic materials for all pressure boundary parts comply with NACE MR-01-75. 304 stainless steel bolts and nuts, ASTM B7M or L7M bolts and 2HM nuts (Class

II) are available.

Optional tagplate:

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.

## **ACCESSORIES**

Oval flanges: (Model FFP, refer to Data Sheet No.

EDS6-10)

Converts process connection to 1/2-14 NPT or to Rc $^{1}/2$ ; in carbon steel or in 316

stainless steel. Hand held communicator:

(Model FXW, refer to Data Sheet No.EDS

8-47)

**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.

# **CODE SYMBOLS**

igit					N.	1234		'nг	$\top$	12 13 14 15 21
_		Descrip	ition		Note	FKA		4]-	44	<u></u> —Ш-Ш-Щ
4	<connections></connections>	018	County's							
ļ	Process	Oval flange	Conduit				1 1	1		
	connection	screw	connection							
ļ	Rc1/4	<sup>7</sup> /16-20UNF	$G^{1/2}$ (×1)	Combination with		A	1 1			
ļ	1/4-18NPT	7/16-20UNF	1/2-1/NPT (>1)	12th digit code		В	- 1			
ļ	1/4-18NPT	M10	Pa 13 b (>1) >	•		l cl	1 1	1		
ļ	1/4-18NPT	M10	M20×15 (×1)	"C, E, P, Q" are not						
ļ	1/4-18NPT	7/16-20UNF	Pg 13.5 (×1)	available.		l lel	- 1			
ļ	Rc1/4	7/16-20UNF	$G^{1/2}$ (×2)			<u>-</u>	- 1			
ļ	1/4-18NPT	7/16-20UNF	1/2-14NPT (×2)			l I	1 1			
ļ	1/4-18NPT	l '						1		
ļ		M10	Pg 13.5 (×2)				- 1			
ļ	1/4-18NPT	M10	M20×1.5 (×2)			W	- 1			
	1/4-18NPT	<sup>7</sup> /16-20UNF	Pg 13.5 (×2)			X	1 1	- 1	1 1	
, 7	<span limit=""></span>									
ļ	Span limit	Process cover	Diaphragm	Wetted cell body						
ļ	[kPa abs]{bar abs}(*1)				Note1					
ļ	1.616	316 stainless steel	316L stainless steel	316 stainless steel			1V			
ļ	{0.0160.16}	316 stainless steel	Hast. C	Hast. C lining			1H			
ļ		316 stainless steel	Monel	Monel lining			1M	1		
ļ	1.6130	316 stainless steel	316L stainless steel	316 stainless steel			2V	1		
ļ	{0.0161.3}	316 stainless steel		Hast. C lining			2H			
	(3.0 13 1.0)	316 stainless steel		Monel lining			2M		1 1	
ļ				Tantalum lining			2T			
ļ	E 500	316 stainless steel					- +			1
ļ	5500			316 stainless steel			3V	- 1		
ļ	{0.055}	316 stainless steel		Hast. C lining			3H		+	
ļ		316 stainless steel		Monel lining			3M		11	
ļ		316 stainless steel		Tantalum lining	ļ		3T			
ļ	303000		316L stainless steel	316 stainless steel			4V			
ļ	{0.330}	316 stainless steel	Hast. C	Hast. C lining			4H	- 1	1 1	1
ļ		316 stainless steel	Monel	Monel lining			4M			
ļ		316 stainless steel	Tantalum	Tantalum lining			4T			
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	None (for ordina TIIS, Flameproof TIIS, Flameproof FM, Flameproof CSA, Flameproof ATEX, Flameproof IECEX Scheme/S. TIIS, Intrinsic safe CSA, Intrinsic safe ATEX, Intrinsic safe ATEX, Type n IECEX Scheme/S. FM, Combined o	ry locations) (Conduit seal) (Cable gland seal) (or explosionproof) f (or explosionproof of AA, Flameproof ( <b>Ap</b> ety ety and nonincendiv fety and nonincendiafety AA, Intrinsic safety f Flameproof and In	(Available for 4th of	digit code "A", "S") digit code "B", "T")					C D E X R G H J K P T	
	None (for ordina TIIS, Flameproof TIIS, Flameproof FM, Flameproof CSA, Flameproof ATEX, Flameproof IECEx Scheme/S. TIIS, Intrinsic safe FM, Intrinsic safe CSA, Intrinsic safe ATEX, Intrinsic safe ATEX, Type n IECEx Scheme/S. FM, Combined o	ry locations) (Conduit seal) (Cable gland seal) (or explosionproof) f (or explosionproof of AA, Flameproof ( <b>Ap</b> ety ety and nonincendiv fety and nonincendiv afety AA, Intrinsic safety Flameproof and In mounting bracket>	(Available for 4th of	digit code "A", "S") digit code "B", "T")					C D E X R G H J K P T	
	None (for ordina TIIS, Flameproof TIIS, Flameproof CSA, Flameproof ATEX, Flameproof IECEX Scheme/S. TIIS, Intrinsic safe CSA, Intrinsic safe CSA, Intrinsic safe ATEX, Intrinsic safe ATEX, Type n IECEX Scheme/S. FM, Combined o Vent/drain and Vent/drain Standard	ry locations) (Conduit seal) (Cable gland seal) (or explosionproof) f (or explosionproof of AA, Flameproof (Ap ety ety and nonincendiv fety and nonincendia afety  AA, Intrinsic safety f Flameproof and In mounting bracket>  Mounting None	(Available for 4th of	digit code "A", "S") digit code "B", "T")					C D E X R G H J K P T	
	None (for ordina TIIS, Flameproof TIIS, Flameproof CSA, Flameproof ATEX, Flameproof IECEX Scheme/S. TIIS, Intrinsic safe CSA, Intrinsic safe CSA, Intrinsic safe ATEX, Intrinsic safe ATEX, Intrinsic safe TM, Intrinsic SATEX, Intrinsic SATEX, Type n IECEX Scheme/S. FM, Combined o	ry locations) (Conduit seal) (Cable gland seal) (or explosionproof) f (or explosionproof of AA, Flameproof (Ap ety ety and nonincendiv fety and nonincendiafety  AA, Intrinsic safety f Flameproof and In mounting bracket> Mounting	(Available for 4th of	digit code "A", "S") digit code "B", "T")					C D E X R G H J K P T	

Note1: (\*1) 100: 1 turn down is possible, but should be used at a span greater than 1/40 of the maximum span for better performance.

						1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 21
Digit			Description		Note	F K A 0 4 - 0 of code
12	<options< td=""><td>S&gt;</td><td></td><td></td><td></td><td></td></options<>	S>				
	Extra S	S tag plate	Stainless steel elec. housing	Coating of cell		
	None	)	None	None		Y
	Yes		None	None		B    ; ; ; ;
	None	(*0)	Yes	None		
	Yes	\(\dagger)	Yes	None	Note2	<u> </u>
	None		None	Yes		M   ; ; ; ;
	Yes		None	Yes		N
	None		Yes	Yes		P
	Yes	J	Yes	Yes		Q
13	1 '	applications a				
	Treatme		Fill fluid			
	Standard		Silicone oil			Y
	Degreasi	•	Silicone oil			G
	NACE sp	ecification	Silicone oil (7th digit code "T" and	d 15th digit code		N
			"A", "B" are not available)			
14	<sensor< td=""><td>O-ring&gt;</td><td></td><td></td><td></td><td></td></sensor<>	O-ring>				
	Viton					A
15	<bolt nu<="" td=""><td></td><td></td><td></td><td>Note 3</td><td></td></bolt>				Note 3	
	1	, ,	ocket head cap screw/carbon steel	nut		<u>A</u>   ;
		lloy hexagon b				B
	1		A193 B7M/A194 2HM)			
			A320 L7M/A194 2HM)			
			/304 stainless steel nut			E
21		ptions> (*4)			Note4	
		uracy type	Instruction manual atta	ched		H
		on manual una				L
	High acc	uracy type	Instruction manual una	ttached		T

Note2: (\*2) Customer tag number can be engraved on standard stainless steel

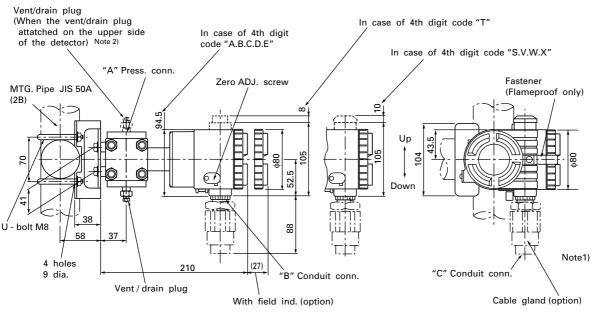
name plate. If extra tag plate is required, select "Yes".

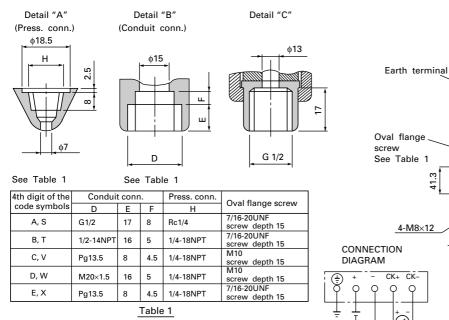
Note3: (\*3) In case of tropical use, select stainless bolts and nuts.

Note3: (\*4) If other option is not necessary, 21st digit code is blank.

In case of 21st digit code is blank, instruction manual attached.

# **OUTLINE DIAGRAM** (Unit:mm)





Note 1) Cable gland is supplied in case of flamproof packing type.  $\phi 11$  cable is suitable.

Note 2) The pressure connector is located on the down side surface of the detector, when the vent/drainplug is attached on the upper side of the detector. (When the 21st digit of the code symbols: C, E or D).

155

43

60

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	4 / 1 /	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)	EN61000-4-2	В
Electromagnetic field	80 to 1000MHz 10V/m 80%AM (1kHz)	EN61000-4-3	А
Rated power frequency magnetic field	30A/m 50Hz	EN61000-4-8	A
Burst	2kV 5kHz	EN61000-4-4	В
Surge	1.2μs/50μs 1kV (Line to line) 2kV (Line to ground)	EN61000-4-5	В
Conducted RF	0.15 to 80MHz 3V 80%AM (1kHz)	EN61000-4-6	А

 $\label{eq:Note} \textbf{Note) Definition of performance criteria}$ 

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

# **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.

## ▲ Caution on Safety

\*Before using this product, be sure to read its instruction manual in advance.

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