LEVEL TRANSMITTER

DATA SHEET **FKE···5/FDE···5**

The FCX -AIII level transmitter accurately measures level, and converts it into an output signal of 4~20mA DC.
The transmitter utilizes a unique micromachined capacitance silicon sensor with state-of-the-art microprocessor tech nology to provide exceptional performance and functionality.It's small volume, light weight, good environment adaptability, and applicable to all fields. If using the hand held communicator(sold separately), it can be set and display via remote operation, without affecting the DC 4~20mA output signal of transmitter. FCX-AIII series transmitters with safety funtion have obtained the certificate of SIL certification by TÜV.

Features

1. High accuracy
   Level transmitter can be carried out with high accuracy measurement in the range of 0.32 ~ 3000kPa.
   Standard accuracy: ± 0.1%
   High accuracy(optional)：± 0.065%
   There's no need to linear calibration when carrying out zero elevation or suppression.
2. Excellent environmental adaptaboility
   The advanced floating cell protects sensor from temperature and overpressure effect, and controls the total measurement error of the filed to the minimun.
3. Excellent operability and easy to use
   It has an excellent operability and easy to use in any application.
   - All range meet the requirements of explosion-proof.
   - 5-digit digital indiactor
   - Stainless steel AMP case
   - Built-in RFI filter and lightning arrester
   - Various anti-corrosive materials
   - Products used for high temperature and high vacuum
   - Built-in local configurator with 3 push buttons
4. The transmitter can communicate using FUJI, HART, communication protocol, and also can use FOUNDATION FIELDBUS or PROFIBUS protocol after changing the electronic circuit.

Specifications

Functional specifications

- Measured fluid: Liquid, gas, or bapor
- Measuring range:

Model	Span limit [kPa]		Range limit [kPa]	
	Min.	Max.	Lower	Upper
FKE□□3 FDE□□3	0.32	32	-32	32
FKE□□5 FDE□□5	1.3	130	-130	130
FKE□□6 FDE□□6	5	500	-500	500
FKE□□8 FDE□□8	30	3000	-3000	3000

Note: Recommended span should be greater than 1/40 of max. span.

- Operating pressure: Up to the maximun operating pressure of flange.
- Process temperature, Lower range limit:

Fill fluid	13th digit Code	Process Temperature	Lower range limit
Fluorinated oil	W, A, D	-20 ~ 80°C	Above atmospheric pressure
Silicone oil	H	-15 ~ 315°C	
Silicone oil	J	20 ~ 350°C	
Silicone oil	Y, G	-45 ~ 205°C	Above 2.7kPa abs See Figure1
Silicone oil	S	-15 ~ 250°C	
Silicone oil	T	20 ~ 320°C	
Silicone oil	K	-15 ~ 150°C	Above 0.13kPa abs See Figure2
Food grade oil(Neobee)		–15 ~ 120°C	Above atmospheric pressure
Low temperature oil	X	–75 ~ 150°C	Above atmospheric pressure

Note: The process temperature of low pressure side should below 120°C.

- Remote function: Refer to table 1
  Note: HHC's version must be higher than 7.0 (or FXW□□□□1-□4).
- Output signal: (1)FKE: DC4~20mA+HART protocol
  (2)FDE: FOUNDATION Fieldbus protocol or PROFIBUS-PA
- Allowable load resistance: 0 ~ 600Ω (at DC 24V)
  (Refer to figure 2) For communication with HHC, min. of 250Ω resistor is required.
- Power supply:
  (Refer to figure 2)

General	DC10.5 ~ 45V
Intrinsic safety	DC10.5 ~ 26V
With arrestor	DC10.5 ~ 32V

- Condition of communication line: Length: up to 2km
  (0.75 ~ 1.25mm² Using twisted pair cable when instrument control cable is more than 1km.)
  Load resistance: 250 ~ 600Ω
  (DC24V, including resistance of cable)
  Load capacitance: 0.22μF or less
  Load inductance: 3.3mH or less
  sapcing with power line: 15cm or more
  (Please avoid parallel wiring.)
  Note: Line condition of intrinsic safety and explosion-proof is different, please refer to the instruction manual.

- Saturation current: Upper limit 20.0 ~ 22.5mA(variable)
  Lower limit 3.2 ~ 4.0mA(variable)
  (Settable in increments of 0.1mA with HHC or local configurator unit with LCD display.)
- Damping: The time constant is adjustable from 0.06 to 32 seconds.
- Adjustment function: Zero and span are adjustable by the external adjustment screw, or by local configurator with 3 push buttons, or by HHC.
- Zero elevation/suppression: Zero can be elevated or suppressed within the range of -100% to100% URL.
- Normal/reverse action: Selectable from HHC or LCD unit with local adjustment function.
- Burnout direction: Output hold
  Output 20.0 ~ 22.5mA (variable)
  Output 3.2 ~ 4.0mA (variable)
  (Settable in increments of 0.1mA with HHC or local configurator unit with LCD display.)
- Explosion proof: Refer to table 6
- Ambient temperature: -40 ~ +85°C

  With arrester: -40 ~ +60°C
  Filling Fluorinated oil: -10 ~ +60°C
  Silicone oil J,T,H,S,K: -10 ~ +85°C
  Note: 1)When silicone oil is J,T, please wrap the thermal insulation material on the capillary.
  2)The optimum operating temperature of digital indicator is -30 ~ +80°C, response is slow below -30°C.
- Storage temperature: -40～+90°C
- Weather resistance: DIN 40040 GPC
- EMC applicable standard: EN61326-1: 2006 CE

Performance specifications

Silicone oil fill, SUS316L diaphragms

- Accuracy rating: (including linearity, hysteresis, repeatability)
  (Standard)
  For spans greater than 1/10 of URL:
  ± 0.1%
  For spans below 1/10 of URL:
  $\pm\left(0.05+0.05\frac{0.1\times URL}{x}\right)\%$
  (Optional) (21th digit code: H,K)
  For spans greater than 1/10 of URL:
  ± 0.065%
  For spans below 1/10 of URL:
  $\pm\left(0.05+0.05\frac{0.1\times URL}{x}\right)\%$
- Stability: Zero shift ±0.2% of upper range limit (URL) for 10 years.
- Ambient temperature effect: Changed per 28°C in the range of -40°C ~ +85°C.
  (Standard) Zero shift: $\pm\left(0.35\frac{URL}{x}\right)\%$
  Total shift: $\pm\left(0.5\frac{URL}{x}\right)\%$
  (Optional) (21th digit code: J, K)
  Zero shift:
  ± 0.3%(x≥ 1/4URL)
  $\pm\left(0.1+0.2\frac{0.25\times URL}{x}\right)\%$(x<1/4URL)
  Total shift:
  ± 0.4%(x≥ 1/4URL)
  $\pm\left(0.2+0.2\frac{0.25\times URL}{x}\right)\%$(x<1/4URL)
  In the formual : x: SPAN
  URL: Upper range limit

  Note: (1) It's the output change when remote flange and transmitter body at the same height and temperature.
  (2) When there is temperature difference between remote flange, capillary and transmitter body, the error will increase.
- Unidirectional overrange effect: Zero shift ± 0.1% of URL /flange nominal pressure.
  In case of 7th digit code(material) is not "V,N", the value is 2 times of above.
- Static pressure effect: Zero shift ± 0.2% of URL /1MPa
  In case of 7th digit code(material) is not "V,N", the value is 2 times of above.
  Span shift -0.2±0.2% of SPAN/1MPa
- Mounting location effect: 0.3kPa /10°(no extension)
  But when 13th digit code(treatment of wetted parts ,fill fluid) "W,D,A", the value is 2 times of above.
- Overrange effect: Zero shift ±0.2% of URL for nominal flange pressure.
- Supply voltage effect: ± 0.005% /1V(DC 16.1 ~ 45V)
- Insulation strength: 500VAC, 50/60Hz, 1 min, between circuit and earth.
- Insulation resistance: More than 100MΩ at 500V DC, between circuit and earth.
- Update rate: 60ms
- Response time:

Model	*Time constant [s]	Dead time [s]
FKE□□3 FDE□□3	0.55	approx. 0.12
FKE□□$^{5}_{6}$ FDE□□$^{5}_{6}$	0.3	

Note: *Value at 23°C.

Structure and material

・Flange materials: SUS304、SUS316 or carbon steel

・Detecting unit materials:

Material code	H.P. side(mounting flange side)		L.P. side	
	diaphragm	Other wetted parts	diaphragm	Cover
V	SUS316L	SUS316	SUS316L	SCS14A
N	SUS316L	SUS304	SUS316L	SCS14A
J	SUS316·Gold-plated	SUS316	SUS316L	SCS14A
C	Hastelloy-C	SUS316	SUS316L	SCS14A
D	Manel	SUS316	SUS316L	SCS14A
E	Tantalum	SUS316	SUS316L	SCS14A
H	Hastelloy-C	Hastelloy-C	Hastelloy-C	SCS14A
M	Manel	Manel	Manel	SCS14A
T	Tantalum	Tantalum	Tantalum	SCS14A
L	Manel	Manel	Manel	Manel
P	Titanium	Titanium	SUS316L	SCS14A
R	Zirconium	Zirconium	SUS316L	SCS14A

SCS14A(JIS G 5121)……CF8M (ASTM A351/A351M) Equivalent

・Amp case and case cover materials:
Aluminium die casting + Polyester coating (case color: silvery, case cover color: blue) or stainless steel(SCS14)

・Structure of case: Immersion protected type JIS C 0920 (Equivalent to IEC IP67， NEMA 6/6P)

・Outline dimension: According to the outline drawing.

・Weight: approx. 10~20kg

・Conduit connection: G1/2, 1/2-14NPT, M20× 1.5, Pg13.5 (Refer to the model code table for details.)

・External terminal: M3.5 Screw

・L.P. side connection: Rc1/4 or 1/4–18NPT(Refer to the model code table for details.)

・Flange part specification: JIS standard:
(According to data sheet) 10K 80A,10K 100A,30K 80A,30K 100A
ANSI/JPI standard:
150LB 3B,150LB 4B,300LB 3B,300LB
GB/T/HG standard:
PN10 DN80，PN10 DN100,PN50 DN80,
PN50 DN100

・Diaphragm Extension length: 0, 50, 100, 150, 200mm (according to data sheet)

・Mounting method: Flange mounted

・Direction of AMP unit: Amp unit can be turned clockwise or counterclockwise by 90°or 180°, relative to the direction of detecting unit.

Optional specifications

・Analog indicator: Built in amplifer unit
Class 2.5, moving-coil, movement 90°, 0 ~ 100% evenly divided scale or actual scale

・Digital indicator: Built in amplifer unit, 5 digit LCD and unit dispaly,0 ~ 100% scale display or actual scale display. Optimum operating temperature range: -30 ~ +80°C,

・Digital indicator: DIsplaying or setting the items of table 1 (with 3 push buttons) via 3 push buttons of digital indicator.

・Arrester: Built in amplifer unit
Lightning performance: 4kV(1.2× 50μs)

・Degreasing treatment for oxygen: Filling fluorinated oil, degreasing and cleaning for wetted parts, available only for 7th digit code (material) "V,N".

・Chlorine measurement: Filling fluorinated oil, available only for 7th digit code (material) "H,T".

・Anti-corrosive coating of detecting unit: Epoxy and polyurethane double coating

・Stainless steel tag plate: The plate can be engraved up to 14 characters (lettters and numbers)

The product conforms to the requoirments of European EMC directive "Electromagnetic Compatibility Directive2004/108/EC". The detail content is recorded in the techiacal construction file nmber TN5A0704. The applicable standards are as follows:

Emission list:
EN 61326-1 : 2006 Class A (Industrial location)

Frequency range	Limits	Reference standard
30 ~ 230MHz	40dB(μV/m) quasi peak, measured at 10m distance	EN55011:1998 +A1:1999 +A2:2002 (Group1 Class A)
230 ~ 1000MHz	47dB(μV/m) quasi peak, measured at 10m distance	

Immunity requirements:
EN 61326-1 : 2006 Table2 (Industrial location)

Phenomenon	Test value	Basic standard	P.C.
Electrostatic discharge	2/4kV (Contact) 2/4/8kV (Air)	IEC 61000-4-2:1995 +A1:1998+A2:2001	B
Electromagnetic field	10V/m(80 ~ 1000MHz) 3V/m(1.4 ~ 2.0GHz) 1V/m(2.0 ~ 2.7GHz) 80%AM(1kHz)	IEC 61000-4-3:2002 +A1:2002	A
Rated power frequency magnetic field	30 A/m 50/60 Hz	IEC 61000-4-8:1993 +A1:2001	A
Burst	2kV	IEC 61000-4-4:2004	B
Surge	1.2/50μs(Voltage) 8.0/20μs(Current) 0.5/1kV line to line 0.5/1/2kV line to ground	IEC 61000-4-5:1995 +A1:2001	B
Conducted RF	0.15 ~ 80MHz 3V 80%AM(1kHz)	IEC 61000-4-6:1996 +A1:2001	A

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

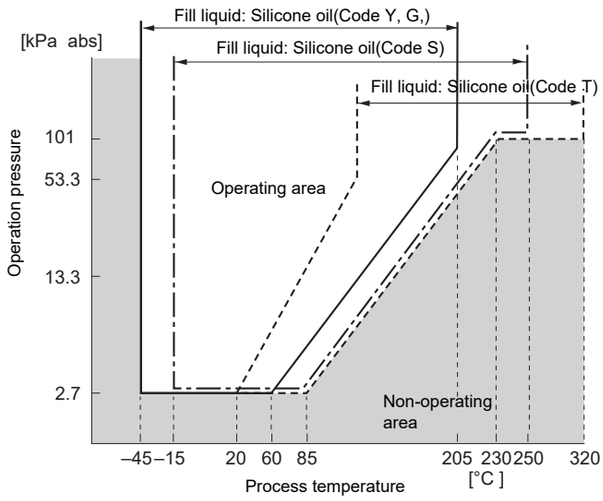


Figure 1 Relation between process temperature and operating pressure

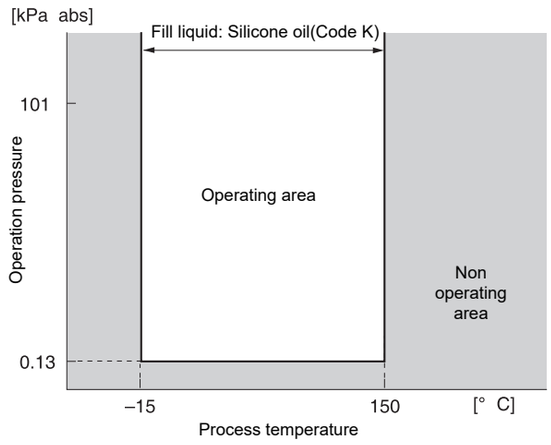
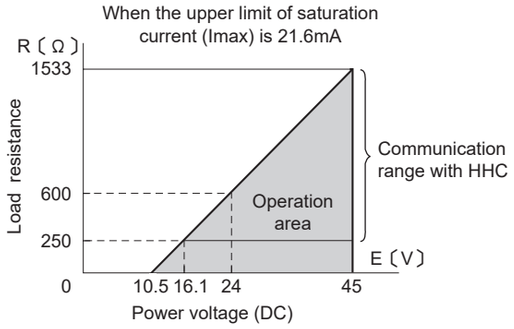


Figure 2 Relation between process temperature and operating pressure



〔Note〕The load resistance varies according to the upper limit of saturation current.

$$R〔\Omega〕 = \frac{E〔V〕- 10.5}{(Imax〔mA〕 + 0.9)\times 10^{-3}}$$

Figure 3 Operation area of power voltage and load resistance

Table1 Adjustment function

No.	Items	HHC (Model:FXW)Note1)		Local configurator (With 3 push buttons)	
		Display	Set	Dispaly	Set
1	Tag No.	○	○	○	○
2	Type	○	○	○	○
3	Serial No. & Software Version	○	—	○	—
4	Engineering unit	○	○	○	○
5	Range Limit	○	—	○	—
6	Measuring range	○	○	○	○
7	Damping	○	○	○	○
8	Output mode	○	—	○	—
9	Burnout direction	○	○	○	○
A	Zero/span calibration	○	○	○	○
B	Calibration of output circuit	—	○	—	○
C	Measured data	○	—	○	—
D	Self-diagnosis	○	—	○	—
E	Printer function	○	—	—	—
F	Lock of adj. function	○	○	○	○
G	Indication of digital indicator	○	○	○	○
H	Linzearize	○	○	—	—
I	Rerange	○	○	○	○
J	Saturation current Write	○	○	○	○
K	protect	○	○	○	○
L	History -Calibration history -Temperature history	 ○ ○	 ○ —	 ○ ○	 ○ —

Nore1) The version of HHC must be higher than 7.0 when it supports FCX-AIII series transmitter(or FXW□□□□1–□4).
It can upgrade the version by changing ROM, please consult our company's windows or agency shop nearby for deatils.

Scope of delivery

Instrument body

Related products

・Hand held communicator (Model: FXW):
Hand held, built-in battery, setting, display
For the details, please refer to data sheet (CSDS8-47).

Ordering information

1. Model code
2. Span
3. Please select the direction of output (Notuse/OVER/UNDER) when the transmitter is fault (Burnout). If unspecified, it is Notuse.
4. If the scale of indicator is selected to actual scale (9th code: D、H、P、S), please select the items of display (digit, scale, unit , etc).
5. Please select the tag plate according to need.(up to 14 digit, consist of lettters and numbers).

Model code

Digit	Discription				Note	1 2 3 4 5 6 7 8 – 9 10 11 12 13 – 14 15 16 17 18 – 21 22 ← Digit No.
	Level transmitter DC4~20mA+HART FOUNDATION Fieldbus and PROFIBUS					F E F K E 5 F D E 5
4	<Process cover> <Preocess conn.>	<Oval flange screw>	<AMP case> <Conduit conn.>	<Case type>		
	Rc1/4	7/16-20UNF	G1/2	T type		5
	1/4-18NPT	7/16-20UNF	1/2-14NPT	T type		6
	1/4-18NPT	M10	Pg 13.5	T type		7
	1/4-18NPT	M10	M20× 1.5	T type		8
	1/4-18NPT	7/16-20UNF	Pg 13.5	T type		9
	Rc1/4	7/16-20UNF	G1/2	L type		S
	1/4-18NPT	7/16-20UNF	1/2-14NPT	L type		T
	1/4-18NPT	M10	Pg 13.5	L type		V
	1/4-18NPT	M10	M20× 1.5	L type		W
	1/4-18NPT	7/16-20UNF	Pg 13.5	L type		X
5	<Flange materials>		<Flange specifications>			
	SUS304		JIS 10K 80A			0
	SUS304		JIS 10K 100A			1
	SUS304		JIS 20K 80A			M
	SUS304		JIS 30K 80A			2
	SUS304		JIS 30K 100A			3
	SUS304		ANSI/JPI 150LB 3B			4
	SUS304		ANSI/JPI 150LB 4B			5
	SUS304		ANSI/JPI 300LB 3B			6
	SUS304		ANSI/JPI 300LB 4B			7
	SUS304		DIN PN40 DN80			8
	SUS304		DIN PN16 DN100			9
	SUS304		ANSI/JPI 600LB 3B			R
	Carbon steel		JIS 10K 80A			A
	Carbon steel		JIS 10K 100A			B
	Carbon steel		JIS 30K 80A			C
	Carbon steel		JIS 30K 100A			D
	Carbon steel		ANSI/JPI 150LB 3B			E
	Carbon steel		ANSI/JPI 150LB 4B			F
	Carbon steel		ANSI/JPI 300LB 3B			G
	Carbon steel		ANSI/JPI 300LB 4B			H
	Carbon steel		DIN PN40 DN80			J
	Carbon steel		DIN PN16 DN100			K
	SUS316		JIS 10K 80A			S
	SUS316		ANSI/JPI 150LB 3B			T
	SUS316		ANSI/JPI 150LB 4B			U
	SUS316		ANSI/JPI 300LB 3B			V
	SUS316		ANSI/JPI 300LB 4B			W
	SUS316		ANSI/JPI 600LB 3B			X
	Chinese flange				Note19	Y
	Others				Note13	Z
6	<Span limit [kPa] >					
	0.32… 32				Note1	3
	1.3… 130				Note1	5
	5…… 500				Note1	6
	30…… 3000				Note1	8
7	<H.P. Materials(Mounting flange side)>		<L.P. Materials>			
	(Diaphragm)	(Other wetted parts)	(Diaphragm)	(Process cover)		
	SUS316L	SUS316	SUS316L	SCS14A	Note21	V
	SUS316L	SUS316	SUS316L	SCS14A	Note21	X
	SUS316L	SUS304	SUS316L	SCS14A	Note21	N
	Hastelloy C	Hastelloy C	SUS316L	SCS14A		C
	Monel	Monel	SUS316L	SCS14A		D
	Tantalum	Tantalum	SUS316L	SCS14A		E
	SUS316L·Gold-plated	SUS316	SUS316L	SCS14A		J
	Hastelloy C	Hastelloy C	Hastelloy C	SCS14A		H
	Monel	Monel	Monel	SCS14A		M
	Tantalum	Tantalum	Tantalum	SCS14A		T
	Monel	Monel	Monel	Monel	Note2	L
	Titanium	Titanium	SUS316L	SCS14A	Note2	P
	Zirconium	Zirconium	SUS316L	SCS14A	Note2	R
8	<Version>				Note22	5
9	<Field indicator>		<Indicator scale>	<Arrester>		
	None			None		A
	Analog		0 ~ 100% evenly divided scale	None		B
	Analog		Actual scale	None		D
	None			Yes		E
	Analog		0 ~ 100% evenly divided scale	Yes		F
	Analog		Actual scale	Yes		H
	Digital		0 ~ 100% scale display	None		L
	Digital		Actual scale display	None		P
	Digital		0 ~ 100% scale display	Yes		Q
	Digital		Actual scale display	Yes		S

FKE

Digit	Discription			Note	1 2 3 4 5 6 7 8	9 10 11 12 13	14 15 16 17 18	21 22 ← Digit No.
	Level transmitter DC4~20mA+HART FOUNDATION Fieldbus and PROFIBUS				F E F K E 5 F D E 5	–	–	–
9	Digital(with local adj. function)	0 ~ 100% scale display	None			1		
	Digital(with local adj. function)	Actual scale display	None			2		
	Digital(with local adj. function)	0 ~ 100% scale display	Yes			4		
	Digital(with local adj. function)	Actual scale display	Yes			5		
	None	Foundation Fieldbus	None	Note14		A		
	None	Foundation Fieldbus	Yes	Note14		E		
	Digital	Foundation Fieldbus	None	Note14		P		
	Digital	Foundation Fieldbus	Yes	Note14		S		
	None	Profibus	None	Note14		R		
	None	Profibus	Yes	Note14		V		
	Digital	Profibus	None	Note14		T		
	Digital	Profibus	Yes	Note14		W		
10	<Explosion proof specifications>							
	General Non explosion proof					A		
	TIIS (Cable gland seel) explosion proof			Note16		C		
	TIIS intrinsic safety					G		
	FM Flameproof			Note18		D		
	FM Intrinsic safety					H		
	FM Combined of flameproof and intrinsic safety			Note18		V		
	ATEX Flameproof			Note17		X		
	ATEX Intrinsic safety					K		
	ATEX Type n					P		
	ATEX Combined of flameproof and intrinsic safety			Note17		M		
	IECEx Flameproof			Note17		R		
	IECEx Intrinsic safety					T		
	CSA Flameproof			Note18		E		
	CSA Intrinsic safety					J		
	NEPSI Flameproof					F		
	NEPSI Intrinsic safety					S		
	NEPSI Combined of flameproof, intrinsic safety and dust ignition proof					U		
11	<Diaphragm extension length [mm]>							
	0			Note3			Y	
	50			Note4			A	
	100			Note4			B	
	150			Note4			C	
	200			Note4			D	
	50			Note5			E	
	100			Note5			F	
	150			Note5			G	
	200			Note5			H	
	50			Note15			J	
	100			Note15			K	
	150			Note15			L	
	200			Note15			M	
	50			Note20			5	
	100			Note20			6	
	150			Note20			7	
	200			Note20			8	
12	<Special specification>							
	Standard specification						Y	
	Stainless steel tag plate						B	
	Anti-corrosive coating of detecting unit						M	
	Anti-corrosive coating of detecting unit, SS tag plate						N	
	Anti-corrosive coating of detecting unit,SS AMP case			Note11			P	
	Anti-corrosive coating of detecting unit,SS AMP case,SS tag plate			Note11			Q	
13	<Treatment of wetted parts>	<Fill fluid>						
	Standard	Silicone oil (General)					Y	
	Standard	Fluorinated oil					W	
	Standard	Food grade oil(Neobee M20)					F	
	Degreasing	Silicone oil					G	
	Standard	Low temperature oil(Syltherm XLT, -75°C~150°C. When process temperature is -120°C~60°C, this code is "C").					X	
	Oxygen service	Fluorinated oil		Note4			A	
	Chlorine service	Fluorinated oil		Note6			D	
	Standard	Silicone oil(for high temperature: -15~315°C)		Note7			H	
	Standard	Silicone oil(for high temperature: 20~350°C)		Note7			J	
	Standard	Silicone oil(for high temperature and vacuum: -15~250°C)		Note8			S	
	Standard	Silicone oil(for high temperature and vacuum: 20~320°C)		Note8			T	
	Standard	Silicone oil(for high temperature and high vacuum: -15~150°C)		Note8			K	
14	<Teflon diaphragm>	<Oval flange>						
	None	None						B
	Yes	None		Note9				D
	None	Yes(SUS304)						E
	Yes	Yes (SUS304)		Note9				F
	None	Yes(SUS316)						G
	Yes	Yes (SUS316)		Note9				H

Digit	Discription		Note	1 2 3 4 5 6 7 8	9 10 11 12 13	14 15 16 17 18	21 22 ← Digit No.
	Level transmitter DC4~20mA+HART FOUNDATION Fieldbus and PROFIBUS			F E F K E 5 F D E 5	–	–	–
15	<Vent/Drain plug type>	<Bolt/Nut material of L.P. side process vover>	Note10				
	Standard	Standard(Cr-Mo hexagon socket bolt/carbon steel nut)				A	
	Standard	Cr-Mo hexagon head bolt/carbon steel nut				B	
	Standard	SUS304· SUS304				E	
	Standard	SUS316· SUS316				U	
16	<Flange specifications>	<Flange Materials>	Note19				
17	GB/T/ HG DN80 PN10/16	Carbon steel	Note19			B 8 C	
18	GB/T / HG DN80 PN10/16	SUS304	Note19			B 8 U	
	GB/T / HG DN80 PN10/16	SUS316	Note19			B 8 W	
	GB/T/ HG DN80 PN20(class 150)	Carbon steel	Note19			C 8 C	
	GB/T / HG DN80 PN20(class 150)	SUS304	Note19			C 8 U	
	GB/T / HG DN80 PN20(class 150)	SUS316	Note19			C 8 W	
	GB/T/ HG DN80 PN50(class 300)	Carbon steel	Note19			D 8 C	
	GB/T / HG DN80 PN50(class 300)	SUS304	Note19			D 8 U	
	GB/T / HG DN80 PN50(class 300)	SUS316	Note19			D 8 W	
	GB/T/ HG DN80 PN25/40	Carbon steel	Note19			E 8 C	
	GB/T / HG DN80 PN25/40	SUS304	Note19			E 8 U	
	GB/T / HG DN80 PN25/40	SUS316	Note19			E 8 W	
	GB/T/ HG DN80 PN63	Carbon steel	Note19			F 8 C	
	GB/T / HG DN80 PN63	SUS304	Note19			F 8 U	
	GB/T / HG DN80 PN63	SUS316	Note19			F 8 W	
	GB/T/ HG DN80 PN100	Carbon steel	Note19			G 8 C	
	GB/T / HG DN80 PN100	SUS304	Note19			G 8 U	
	GB/T / HG DN80 PN100	SUS316	Note19			G 8 W	
	GB/T/ HG DN100 PN10/16	Carbon steel	Note19			B 0 C	
	GB/T / HG DN100 PN10/16	SUS304	Note19			B 0 U	
	GB/T / HG DN100 PN10/16	SUS316	Note19			B 0 W	
	GB/T/ HG DN100 PN20(class 150)	Carbon steel	Note19			C 0 C	
	GB/T / HG DN100 PN20(class 150)	SUS304	Note19			C 0 U	
	GB/T / HG DN100 PN20(class 150)	SUS316	Note19			C 0 W	
	GB/T/ HG DN100 PN50(class 300)	Carbon steel	Note19			D 0 C	
	GB/T / HG DN100 PN50(class 300)	SUS304	Note19			D 0 U	
	GB/T / HG DN100 PN50(class 300)	SUS316	Note19			D 0 W	
	GB/T/ HG DN100 PN25/40	Carbon steel	Note19			E 0 C	
	GB/T / HG DN100 PN25/40	SUS304	Note19			E 0 U	
	GB/T / HG DN100 PN25/40	SUS316	Note19			E 0 W	
	GB/T/ HG DN100 PN63	Carbon steel	Note19			F 0 C	
	GB/T / HG DN100 PN63	SUS304	Note19			F 0 U	
	GB/T / HG DN100 PN63	SUS316	Note19			F 0 W	
	GB/T/ HG DN100 PN100	Carbon steel	Note19			G 0 C	
	GB/T / HG DN100 PN100	SUS304	Note19			G 0 U	
	GB/T / HG DN100 PN100	SUS316	Note19			G 0 W	
21	<Other>		Note12				
	None						Y
	High accuracy type						H
	Low temperature type						J
	H+J						K
	Vent/drain plug mounted on the upper side						C
	Inspection report						F
22	<Flush ring>	<Companion flange>	Note12				
	Yes	None					A
	None	Yes					B
	Yes	Yes					C

Note1) Not available for 7th digit code "R".
Note2) Avaliable only for 80A, 3B, DN80 flange.
Note3)Be sure to select 11th digit code "Y", when 7th digit code isn't "V,N,H,C".
Note4) Available only for 7th digit code "V, N".
Note5) Available only for 7th digit code "H, C".
Note6) Available only for 7th digit code "H, T, C, E".
Note7) Available only for 7th digit code "V, N, C , H".
Note8) Available only for 7th digit code "V, N".
Note9) Available only for 80A, 3B, DN80 flange and 11th digit code "Y".
Not available for 13th digit code "H,J,S,T,K".
The operating pressure and temperature for using teflon diaphragm:
· Atmospheric pressure~max. operating pressure of flange(not available for vacuum)
· 0 ~ 120° C

Note10) Please select SUS bolts and nuts for tropical area.
Note11) Not available for 10th digit code "C".
Note12) The digit is blank when not needed.
Note13) 900LB or other standard flanges are available.
Note14) Please note when select Fieldbus or Profibus transmitter. (Under development)
Note15) Available only for 7th digit code "E, T".
Note16) Available only for 4th digit code "5, S".
Note17) Available only for 4th digit code "6, 8, T, W".
Note18) Available only for 4th digit code "6, T".
Note19) Please specify the flange specifications at "16th,17th,18th" digit code, when 5th digit code "Y"(Chinese flange).
Note20) Available only for 7th digit code "J".
Note21) The ultra thick diaphragm is for the requirements of wear resistance or process condition of solid particle erosion.
Note22) The 8th digit code can be seleced as "S", this means that it's the transmitter with safety function. SIL2 capability for single transmitter use, SIL3 capability for dual transmitter use.

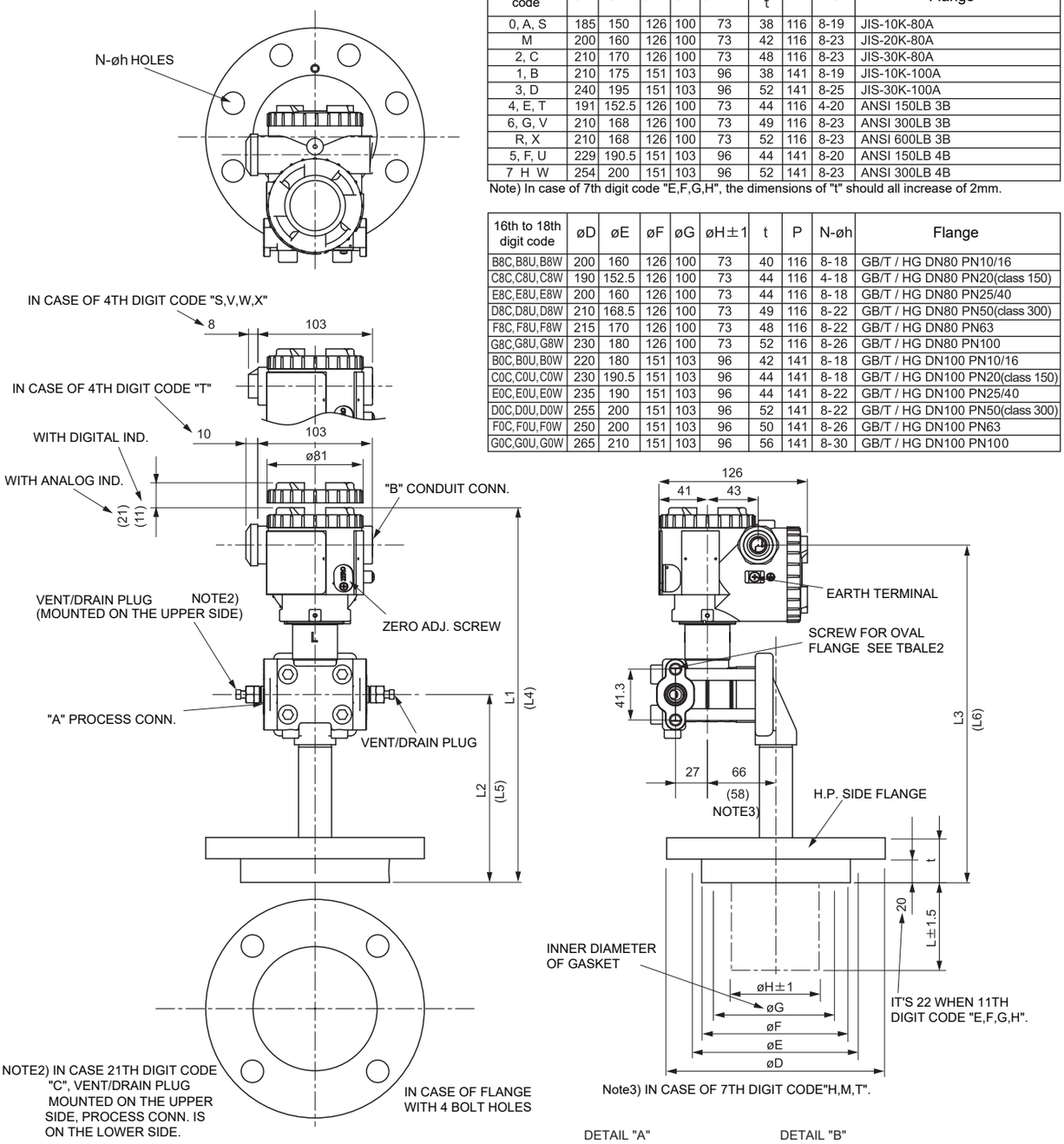
OUTLINE DIAGRAM (Unit: mm)

<AMP. CASE: L TYPE> EXCEPT 7TH DIGIT CODE "L"

5th digit code	øD	øE	øF	øG	øH±1	Note) t	P	N-øh	Flange
0, A, S	185	150	126	100	73	38	116	8-19	JIS-10K-80A
M	200	160	126	100	73	42	116	8-23	JIS-20K-80A
2, C	210	170	126	100	73	48	116	8-23	JIS-30K-80A
1, B	210	175	151	103	96	38	141	8-19	JIS-10K-100A
3, D	240	195	151	103	96	52	141	8-25	JIS-30K-100A
4, E, T	191	152.5	126	100	73	44	116	4-20	ANSI 150LB 3B
6, G, V	210	168	126	100	73	49	116	8-23	ANSI 300LB 3B
R, X	210	168	126	100	73	52	116	8-23	ANSI 600LB 3B
5, F, U	229	190.5	151	103	96	44	141	8-20	ANSI 150LB 4B
7 H W	254	200	151	103	96	52	141	8-23	ANSI 300LB 4B

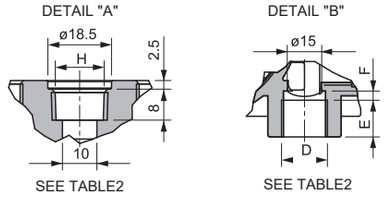
Note) In case of 7th digit code "E,F,G,H", the dimensions of "t" should all increase of 2mm.

16th to 18th digit code	øD	øE	øF	øG	øH±1	t	P	N-øh	Flange
B8C,B8U,B8W	200	160	126	100	73	40	116	8-18	GB/T / HG DN80 PN10/16
C8C,C8U,C8W	190	152.5	126	100	73	44	116	4-18	GB/T / HG DN80 PN20(class 150)
E8C,E8U,E8W	200	160	126	100	73	44	116	8-18	GB/T / HG DN80 PN25/40
D8C,D8U,D8W	210	168.5	126	100	73	49	116	8-22	GB/T / HG DN80 PN50(class 300)
F8C,F8U,F8W	215	170	126	100	73	48	116	8-22	GB/T / HG DN80 PN63
G8C,G8U,G8W	230	180	126	100	73	52	116	8-26	GB/T / HG DN80 PN100
B0C,B0U,B0W	220	180	151	103	96	42	141	8-18	GB/T / HG DN100 PN10/16
C0C,C0U,C0W	230	190.5	151	103	96	44	141	8-18	GB/T / HG DN100 PN20(class 150)
E0C,E0U,E0W	235	190	151	103	96	44	141	8-22	GB/T / HG DN100 PN25/40
D0C,D0U,D0W	255	200	151	103	96	52	141	8-22	GB/T / HG DN100 PN50(class 300)
F0C,F0U,F0W	250	200	151	103	96	50	141	8-26	GB/T / HG DN100 PN63
G0C,G0U,G0W	265	210	151	103	96	56	141	8-30	GB/T / HG DN100 PN100



4th digit code	Conduit conn.			Process conn.	Oval flange screw
	D	E	F	H	
S	G1/2	18	2	Rc 1/4	7/16-20UNF SCREW DEPTH 15
T	1/2-14NPT	16	4	1/4-18NPT	7/16-20UNF SCREW DEPTH 15
V	Pg13.5	10.5	4.5	1/4-18NPT	M10 SCREW DEPTH 15
W	M20×1.5	16	4	1/4-18NPT	M10 SCREW DEPTH 15
X	Pg13.5	10.5	4.5	1/4-18NPT	7/16-20UNF SCREW DEPTH 15

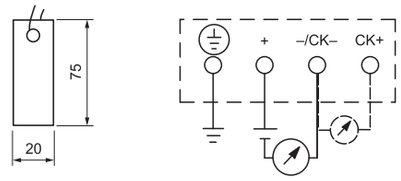
Table 2



11th digit code	L±1.5	Weight(kg)	L1	L2	L3	Note3) L4	L5	L6
Y	0	10.2 ~ 13.7	309	151	278	320	159	289
A, E	50	10.7 ~ 17.7	304	146	273	315	154	284
B, F	100	11.2 ~ 18.2						
C, G	150	11.7 ~ 18.7						
D, H	200	12.2 ~ 19.2						

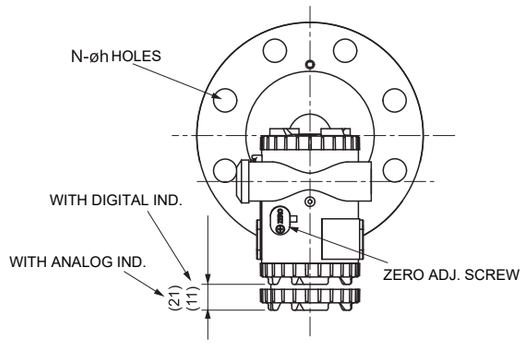
Note) In case of 11th digit code "E,F,G,H", the dimensions of L1~L6 should all increase of 2mm.

<SS TAG PLATE(OPTIONAL)> <CONNECTION DIAGRAM>



<OPTIONAL PARTS FOR FLAMEPROOF OF TIIS> (OMITTED)

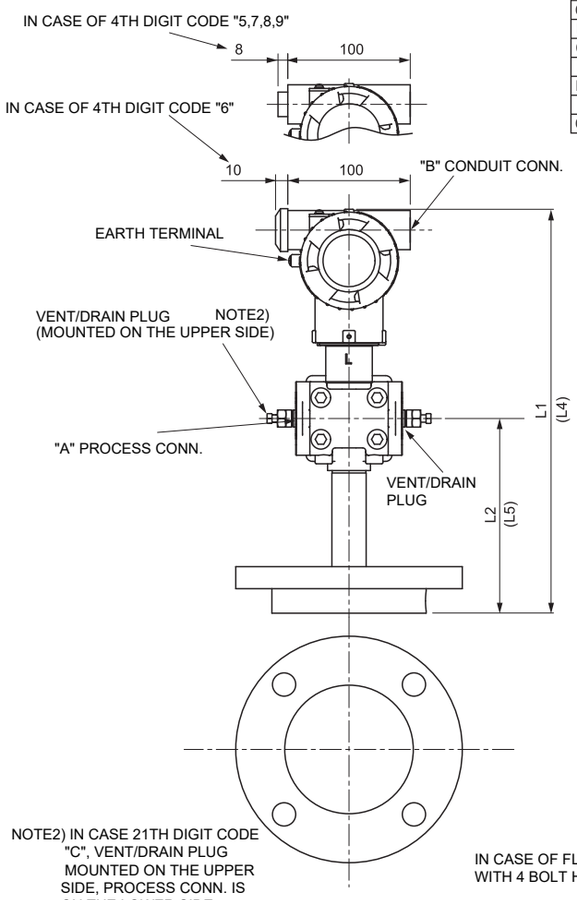
<AMP. CASE: T TYPE> EXCEPT 7TH DIGIT CODE "L"



5th digit code	øD	øE	øF	øG	øH±1	Note) t	P	N-øh	Flange
0, A, S	185	150	126	100	73	38	116	8-19	JIS-10K-80A
M	200	160	126	100	73	42	116	8-23	JIS-20K-80A
2, C	210	170	126	100	73	48	116	8-23	JIS-30K-80A
1, B	210	175	151	103	96	38	141	8-19	JIS-10K-100A
3, D	240	195	151	103	96	52	141	8-25	JIS-30K-100A
4, E, T	191	152.5	126	100	73	44	116	4-20	ANSI 150LB 3B
6, G, V	210	168	126	100	73	49	116	8-23	ANSI 300LB 3B
R, X	210	168	126	100	73	52	116	8-23	ANSI 600LB 3B
5, F, U	229	190.5	151	103	96	44	141	8-20	ANSI 150LB 4B
7, H, W	254	200	151	103	96	52	141	8-23	ANSI 300LB 4B

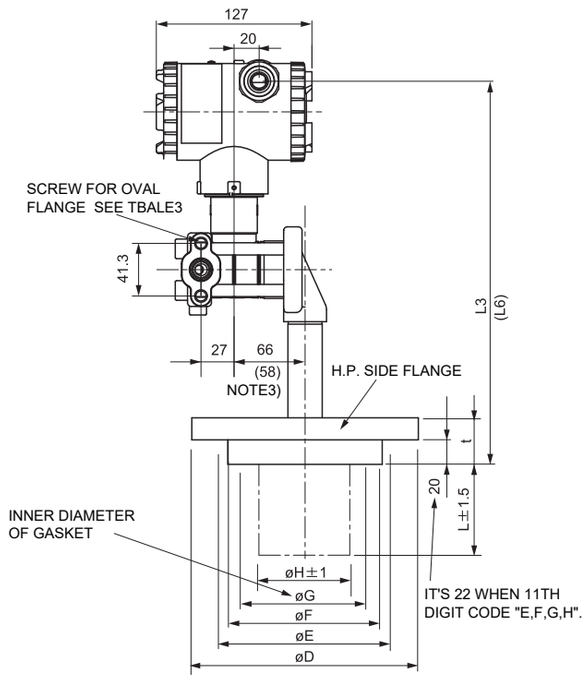
Note) In case of 7th digit code "E,F,G,H", the dimensions of "t" should all increase of 2mm.

16th to 18th digit code	øD	øE	øF	øG	øH±1	t	P	N-øh	Flange
B8C,B8U,B8W	200	160	126	100	73	40	116	8-18	GB/T / HG DN80 PN10/16
C8C,C8U,C8W	190	152.5	126	100	73	44	116	4-18	GB/T / HG DN80 PN20(class 150)
E8C,E8U,E8W	200	160	126	100	73	44	116	8-18	GB/T / HG DN80 PN25/40
D8C,D8U,D8W	210	168.5	126	100	73	49	116	8-22	GB/T / HG DN80 PN50(class 300)
F8C, F8U, F8W	215	170	126	100	73	48	116	8-22	GB/T / HG DN80 PN63
G8C,G8U,G8W	230	180	126	100	73	52	116	8-26	GB/T / HG DN80 PN100
B0C, B0U, B0W	220	180	151	103	96	42	141	8-18	GB/T / HG DN100 PN10/16
C0C, C0U, C0W	230	190.5	151	103	96	44	141	8-18	GB/T / HG DN100 PN20(class 150)
E0C, E0U, E0W	235	190	151	103	96	44	141	8-22	GB/T / HG DN100 PN25/40
D0C, D0U, D0W	255	200	151	103	96	52	141	8-22	GB/T / HG DN100 PN50(class 300)
F0C, F0U, F0W	250	200	151	103	96	50	141	8-26	GB/T / HG DN100 PN63
G0C,G0U,G0W	265	210	151	103	96	56	141	8-30	GB/T / HG DN100 PN100



NOTE2) IN CASE 21TH DIGIT CODE "C", VENT/DRAIN PLUG MOUNTED ON THE UPPER SIDE, PROCESS CONN. IS ON THE LOWER SIDE.

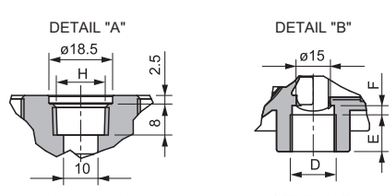
IN CASE OF FLANGE WITH 4 BOLT HOLES



Note3) IN CASE OF 7TH DIGIT CODE"H,M,T".

4th digit code	Conduit conn.			Process conn.	Screw for oval flange
	D	E	F	H	
5	G1/2	18	2	Rc 1/4	7/16-20UNF SCREW DEPTH 15
6	1/2-14NPT	16	4	1/4-18NPT	7/16-20UNF SCREW DEPTH 15
7	Pg13.5	10.5	4.5	1/4-18NPT	M10 SCREW DEPTH 15
8	M20×1.5	16	4	1/4-18NPT	M10 SCREW DEPTH 15
9	Pg13.5	10.5	4.5	1/4-18NPT	7/16-20UNF SCREW DEPTH 15

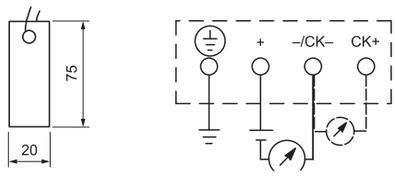
Table 3



11th digit code	L±1.5	Weight(kg)	L1	L2	L3	Note3) L4	L5	L6
Y	0	10.2 ~ 13.7	322	151	305	333	159	316
A, E	50	10.7 ~ 17.7	317	146	300	328	154	311
B, F	100	11.2 ~ 18.2						
C, G	150	11.7 ~ 18.7						
D, H	200	12.2 ~ 19.2						

Note) In case of 11th digit code "E,F,G,H", the dimensions of L1~L6 should all increase of 2mm.

<SS TAG PLATE(OPTIONAL)> <CONNECTION DIAGRAM>



<OPTIONAL PARTS FOR FLAMEPROOF OF TIIS> (OMITTED)

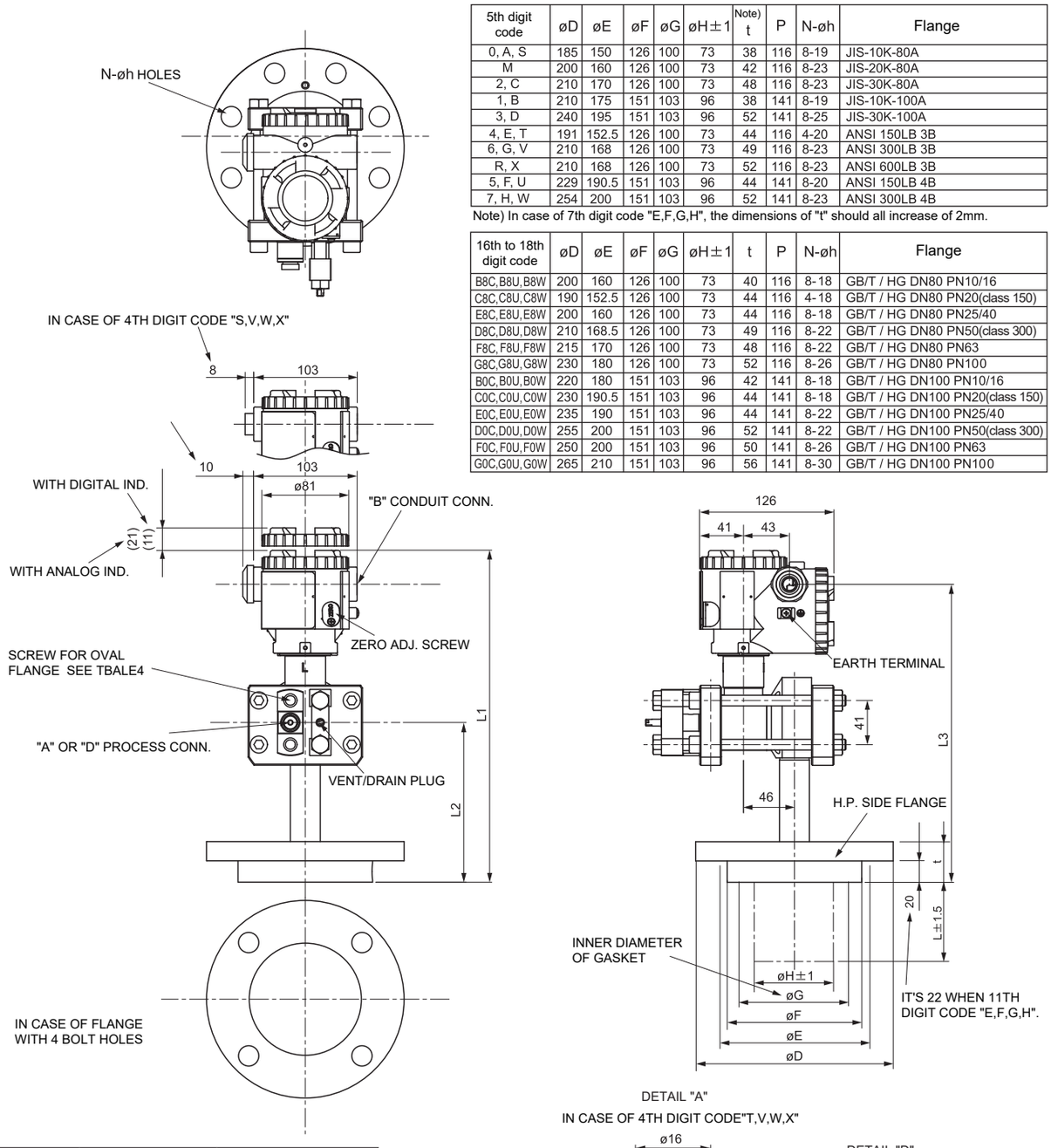
FKE

<AMP. CASE: L TYPE> 7TH DIGIT CODE "L"

5th digit code	øD	øE	øF	øG	øH±1	Note) t	P	N-øh	Flange
0, A, S	185	150	126	100	73	38	116	8-19	JIS-10K-80A
M	200	160	126	100	73	42	116	8-23	JIS-20K-80A
2, C	210	170	126	100	73	48	116	8-23	JIS-30K-80A
1, B	210	175	151	103	96	38	141	8-19	JIS-10K-100A
3, D	240	195	151	103	96	52	141	8-25	JIS-30K-100A
4, E, T	191	152.5	126	100	73	44	116	4-20	ANSI 150LB 3B
6, G, V	210	168	126	100	73	49	116	8-23	ANSI 300LB 3B
R, X	210	168	126	100	73	52	116	8-23	ANSI 600LB 3B
5, F, U	229	190.5	151	103	96	44	141	8-20	ANSI 150LB 4B
7, H, W	254	200	151	103	96	52	141	8-23	ANSI 300LB 4B

Note) In case of 7th digit code "E,F,G,H", the dimensions of "t" should all increase of 2mm.

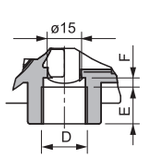
16th to 18th digit code	øD	øE	øF	øG	øH±1	t	P	N-øh	Flange
B8C,B8U,B8W	200	160	126	100	73	40	116	8-18	GB/T / HG DN80 PN10/16
C8C,C8U,C8W	190	152.5	126	100	73	44	116	4-18	GB/T / HG DN80 PN20(class 150)
E8C,E8U,E8W	200	160	126	100	73	44	116	8-18	GB/T / HG DN80 PN25/40
D8C,D8U,D8W	210	168.5	126	100	73	49	116	8-22	GB/T / HG DN80 PN50(class 300)
F8C, F8U,F8W	215	170	126	100	73	48	116	8-22	GB/T / HG DN80 PN63
G8C,G8U,G8W	230	180	126	100	73	52	116	8-26	GB/T / HG DN80 PN100
B0C,B0U,B0W	220	180	151	103	96	42	141	8-18	GB/T / HG DN100 PN10/16
C0C,C0U,C0W	230	190.5	151	103	96	44	141	8-18	GB/T / HG DN100 PN20(class 150)
E0C,E0U,E0W	235	190	151	103	96	44	141	8-22	GB/T / HG DN100 PN25/40
D0C,D0U,D0W	255	200	151	103	96	52	141	8-22	GB/T / HG DN100 PN50(class 300)
F0C, F0U,F0W	250	200	151	103	96	50	141	8-26	GB/T / HG DN100 PN63
G0C,G0U,G0W	265	210	151	103	96	56	141	8-30	GB/T / HG DN100 PN100



4th digit code	Conduit conn.			Screw for oval flange
	D	E	F	
S	G1/2	18	2	7/16-20UNF SCREW DEPTH 15
T	1/2-14NPT	16	4	7/16-20UNF SCREW DEPTH 15
V	Pg13.5	10.5	4.5	M10 SCREW DEPTH 15
W	M20×1.5	16	4	M10 SCREW DEPTH 15
X	Pg13.5	10.5	4.5	7/16-20UNF SCREW DEPTH 15

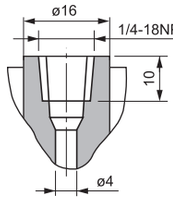
Table 4

DETAIL "B"

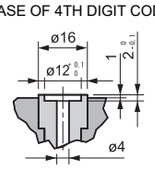


SEE TABLE4

DETAIL "A"
IN CASE OF 4TH DIGIT CODE"T,V,W,X"



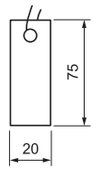
DETAIL "D"
IN CASE OF 4TH DIGIT CODE"S"



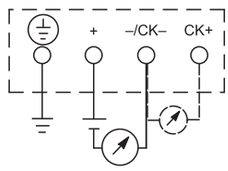
11th digit code	L±1.5	Weight(kg)	L1	L2	L3
Y	0	11.3 ~ 14.8	311	150	280
A, E	50	11.8 ~ 18.8	305	144	274
B, F	100	12.3 ~ 19.3			
C, G	150	12.8 ~ 19.8			
D, H	200	13.3 ~ 20.3			

Note) In case of 11th digit code "E,F,G,H", the dimensions of L1~L6 should all increase of 2mm.

<SS TAG PLATE(OPTIONAL)>



<CONNECTION DIAGRAM>



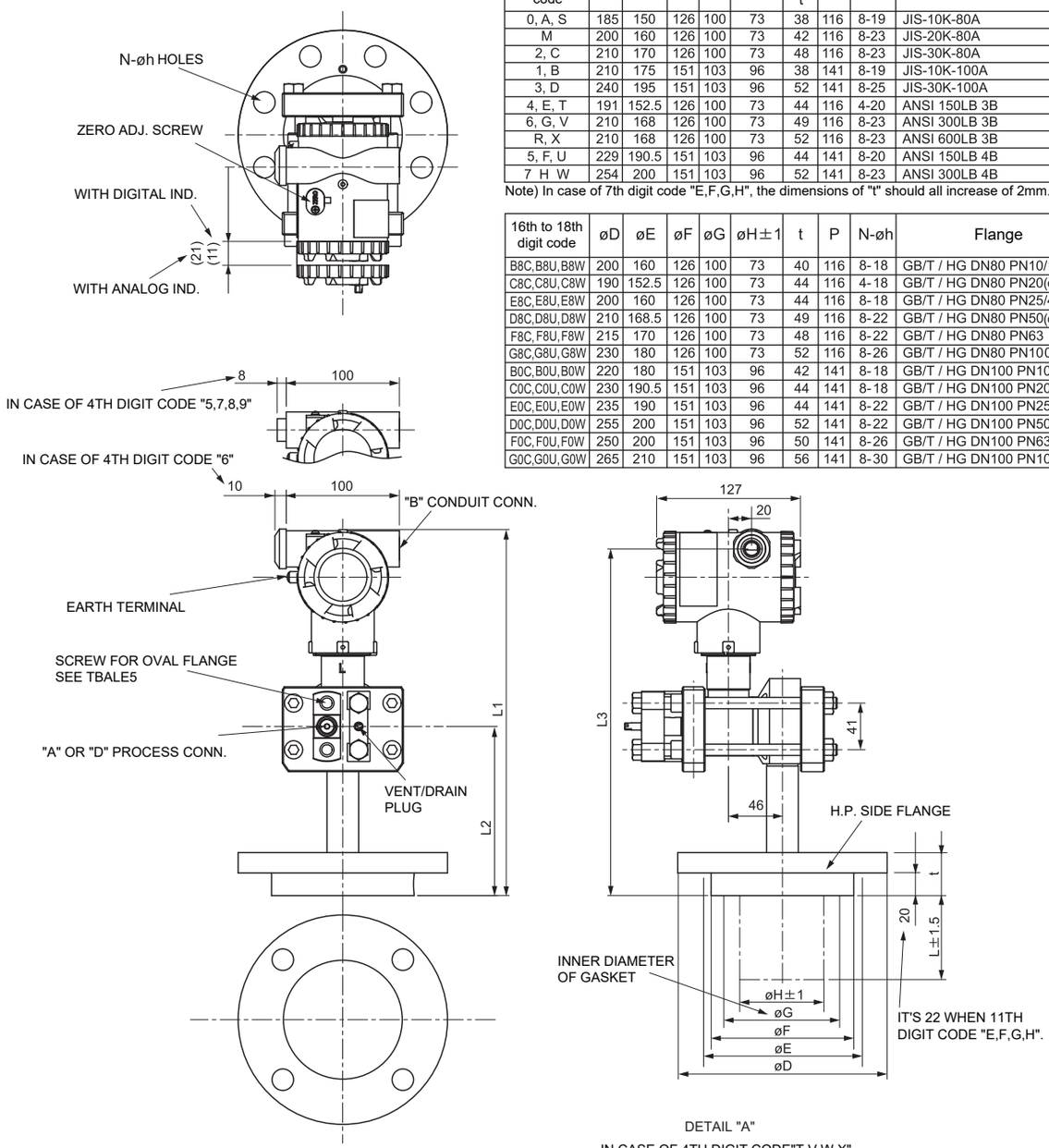
<OPTIONAL PARTS FOR FLAMEPROOF OF TIIS> (OMITTED)

<AMP. CASE: T TYPE> 7TH DIGIT CODE "L"

5th digit code	øD	øE	øF	øG	øH±1	Note) t	P	N-øh	Flange
0, A, S	185	150	126	100	73	38	116	8-19	JIS-10K-80A
M	200	160	126	100	73	42	116	8-23	JIS-20K-80A
2, C	210	170	126	100	73	48	116	8-23	JIS-30K-80A
1, B	210	175	151	103	96	38	141	8-19	JIS-10K-100A
3, D	240	195	151	103	96	52	141	8-25	JIS-30K-100A
4, E, T	191	152.5	126	100	73	44	116	4-20	ANSI 150LB 3B
6, G, V	210	168	126	100	73	49	116	8-23	ANSI 300LB 3B
R, X	210	168	126	100	73	52	116	8-23	ANSI 600LB 3B
5, F, U	229	190.5	151	103	96	44	141	8-20	ANSI 150LB 4B
7 H W	254	200	151	103	96	52	141	8-23	ANSI 300LB 4B

Note) In case of 7th digit code "E,F,G,H", the dimensions of "t" should all increase of 2mm.

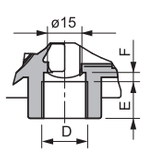
16th to 18th digit code	øD	øE	øF	øG	øH±1	t	P	N-øh	Flange
B8C,B8U,B8W	200	160	126	100	73	40	116	8-18	GB/T / HG DN80 PN10/16
C8C,C8U,C8W	190	152.5	126	100	73	44	116	4-18	GB/T / HG DN80 PN20(class 150)
E8C,E8U,E8W	200	160	126	100	73	44	116	8-18	GB/T / HG DN80 PN25/40
D8C,D8U,D8W	210	168.5	126	100	73	49	116	8-22	GB/T / HG DN80 PN50(class 300)
F8C, F8U, F8W	215	170	126	100	73	48	116	8-22	GB/T / HG DN80 PN63
G8C,G8U,G8W	230	180	126	100	73	52	116	8-26	GB/T / HG DN80 PN100
B0C,B0U,B0W	220	180	151	103	96	42	141	8-18	GB/T / HG DN100 PN10/16
C0C,C0U,C0W	230	190.5	151	103	96	44	141	8-18	GB/T / HG DN100 PN20(class 150)
E0C,E0U,E0W	235	190	151	103	96	44	141	8-22	GB/T / HG DN100 PN25/40
D0C,D0U,D0W	255	200	151	103	96	52	141	8-22	GB/T / HG DN100 PN50(class 300)
F0C, F0U, F0W	250	200	151	103	96	50	141	8-26	GB/T / HG DN100 PN63
G0C,G0U,G0W	265	210	151	103	96	56	141	8-30	GB/T / HG DN100 PN100



4th digit code	Conduit conn.			Screw for oval flange
	D	E	F	
5	G1/2	18	2	7/16-20UNF SCREW DEPTH 15
6	1/2-14NPT	16	4	7/16-20UNF SCREW DEPTH 15
7	Pg13.5	10.5	4.5	M10 SCREW DEPTH 15
8	M20×1.5	16	4	M10 SCREW DEPTH 15
9	Pg13.5	10.5	4.5	7/16-20UNF SCREW DEPTH 15

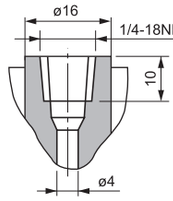
Table 5

DETAIL "B"

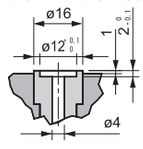


SEE TABLE5

DETAIL "A"
IN CASE OF 4TH DIGIT CODE"T,V,W,X"



DETAIL "D"
IN CASE OF 4TH DIGIT CODE"S"

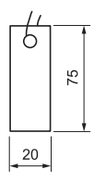


11th digit code	L±1.5	Weight(kg)	L1	L2	L3
Y	0	11.3 ~ 14.8	324	150	307
A, E	50	11.8 ~ 18.8	318	144	301
B, F	100	12.3 ~ 19.3			
C, G	150	12.8 ~ 19.8			
D, H	200	13.3 ~ 20.3			

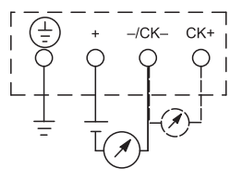
Note) In case of 11th digit code "E,F,G,H", the dimensions of L1~L6 should all increase of 2mm.

<OPTIONAL PARTS FOR FLAMEPROOF OF TIIS> (OMITTED)

<SS TAG PLATE(OPTIONAL)>



<CONNECTION DIAGRAM>



FKE

Table 6 Explosion proof

Authorities	Intrinsic safety
ATEX	Ex II 1 G Ex ia II C T5 Tamb = -40°C ~ +50°C Ex ia II C T4 Tamb = -40°C ~ +70°C Entity Parameters: Ui = 28V, Ii = 94.3mA, Pi = 0.66W Ci = 26nF(without arrester), Li = 0.6mH(without analog indicator) Ci = 36nF(with arrester), Li = 0.7mH(with analog indicator)
FM	Class I II III DIV.1 Groups A, B, C, D, E, F, G T4 Entity Type 4X Entity Parameters: Vmax = 28V, Imax = 94.3mA, Pi = 0.66W, Ci = 35.98nF, Li = 0.694mH
CSA	Class I Div.1 Groups A, B, C, D Class II Div.1 Groups E, F, G Class III Div.1 Temp code T5 Tamb max = +50°C Temp code T4 Tamb max = +70°C Entity Parameters: Vmax = 28V Imax = 94.3mA Ci = 25nF(without arrester), Li = 0.6mH(without analog indicator) Ci = 36nF(with arrester), Li = 0.7mH(with abalig indicator)
TIIS	Ex ia IIC T4 Tamb max = +60°C Entity Parameters: Ui = 28V, Ii = 94.3mA, Pi = 0.66W, Ci = 38.4nF, Li = 0.694mH
IECEx Scheme	Ex ia II C T4 Tamb = -40°C ~ +70°C Ex ia II C T5 Tamb = -40°C ~ +50°C Entity Parameters: Ui = 28V Ii = 94.3mA Pi = 0.66W Ci = 26nF(without arrester), Li = 0.6mH(without analog indicator) Ci = 36nF(with arrester), Li = 0.7mH(with abalig indicator)
NEPSI	Ex ia IIC T4 Ex d IIB+H_2T6/Ex ia IIC T4 Entity Parameters: Ui = 42.4V, Ii = 113mA, Pi = 1W, Ci = 35.98nF, Li = 0.694mH

Model		Tamb
9th digit	13th digit	
A,B,D	Y,G,N	-40°C ~ +85°C
L,P,1,2	Y,G,N	-20°C ~ +80°C
Q,S,4,5	Y,G,N	-20°C ~ +60°C
E,F,H	Y,G,N	-40°C ~ +60°C
–	W,A,D	-10°C ~ +60°C

Model		Tamb
9th digit	13th digit	
A,B,D	Y,G,N	-40°C ~ +85°C
L,P,1,2	Y,G,N	-20°C ~ +80°C
Q,S,4,5	Y,G,N	-20°C ~ +60°C
E F H	Y,G,N	-40°C ~ +60°C
–	W,A,D	-10°C ~ +60°C

Authorities	Flameproof
ATEX	Ex II 2 GD EEx d II C T6 IP66/67 T85°C Tamb = -40°C ~ +65°C EEx d II C T5 IP66/67 T100°C Tamb = -40°C ~ +85°C
FM	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_2 T4 Tamb max = +60°C Maximum process temp. = +120°C
IECEx Scheme	Ex d II C T5 IP66/67 Tamb = -40°C ~ +85°C Ex d II C T6 IP66/67 Tamb = -40°C ~ +65°C
NEPSI	Ex d II B+H_2 T6 Tamb = -40°C ~ +60°C

Authorities	Type n Nonincendive
ATEX	Ex II3 GD EEx nL IIC T5 Tamb = -40°C ~ +50°C EEx nL IIC T4 Tamb = -40°C ~ +70°C Specific Parameters: Model without arrester: Ui=42.4V, Ii=113mA, Pi=1W, Ci=25.18nF, Li=0.694mH Model with arrester: Ui=32V, Ii=113mA, Pi=1W, Ci=35.98nF, Li=0.694mH EEx nAL IIC T5 Tamb = -40°C ~ +50°C EEx nAL IIC T4 Tamb = -40°C ~ +70°C Specific Parameters: Model without arrester: Umax=42.4V, Imax=113mA, Pmax=1W Model with arrester: Umax=32V, Imax=113mA, Pmax=1W
FM	Class I II III Div.2 Groups A、B、C、D、F、G T4 Entity Type 4X
CSA	Class I Div.2 Groups A, B, C, D Class II Div.2 Groups E, F, G Class III Div.2 Temp code T5 Tamb max = +50°C Temp code T4 Tamb max = +70°C Entity Parameters: Vmax=28V,Ci=25.18nF (without arrester), Ci=35.98nF (with arrester), Li=0.694mH

Model		Tamb
9th digit	13th digit	
A,B,D	Y,G,N	-40°C ~ +85°C
L,P,1,2	Y,G,N	-20°C ~ +80°C
Q,S,4,5	Y,G,N	-20°C ~ +60°C
E,F,H	Y,G,N	-40°C ~ +60°C
–	W,A,D	-10°C ~ +60°C

⚠ Caution on Safety

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