

Smart Pressure Transmitter for Level Measurement



TAPT3100-L



TAPT3100 - L

Smart Pressure Transmitter



Description of Product

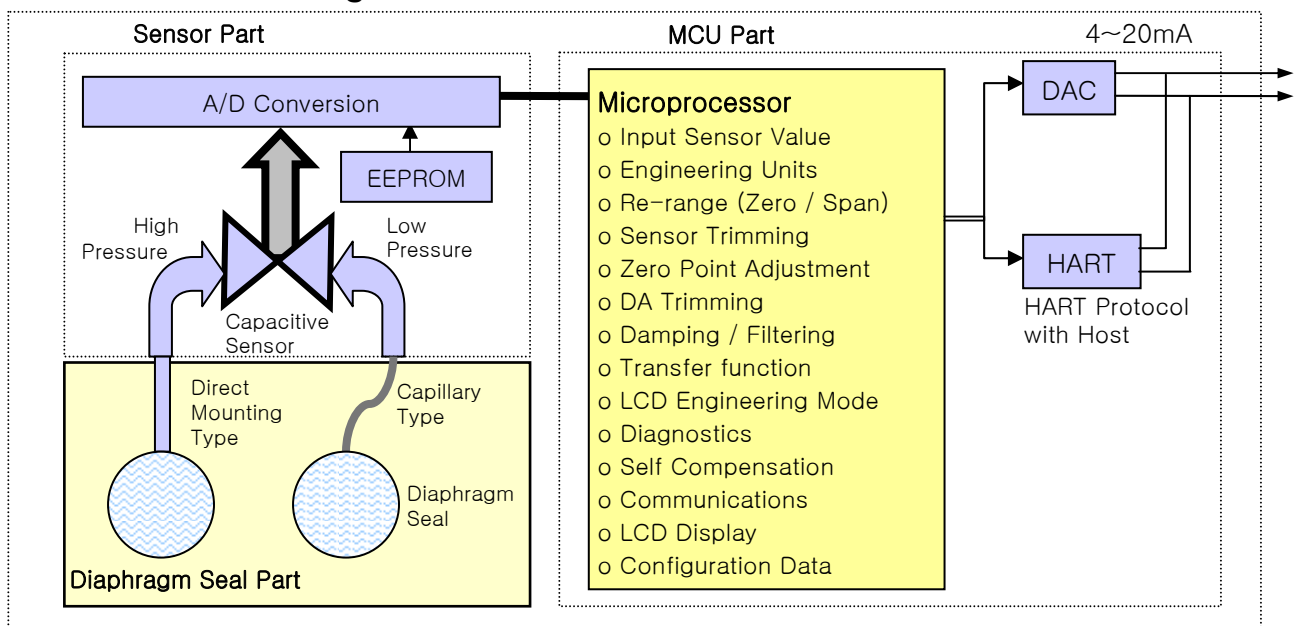
The TAPT3100-L Smart Pressure Transmitter is a high performance transmitter for level measurement, which has flexible pressure calibration and output, automatic compensation of ambient temperature and process variable, configuration of various parameters, communication with HART protocol. The TAPT3100-L consists of TAPT3100-D and extended Diaphragm Seal.

Features

- *Flexible Sensor input : Measuring hydrostatic pressure head and transmitting liquid level
- *Various output : 4~20mA, Digital Signals
- *Compensation of Ambient Temperature
- *Setting Various Parameters
- *Continuous Self Diagnostic Function
- *Digital Communication with HART protocol
- *Flameproof Approval and Intrinsic Safety

- *Superior Performance
 - Reference Accuracy : $\pm 0.075\%$ of Calibrated Span
 - Long-Term Stability
- *Flexibility
 - Configuration of data with HART configurator
 - High Rangeability (100 : 1)
 - Zero point Adjustment
- * Selection of Diaphragm Seal & Mounting Type
 - Flush Diaphragm seal
 - Extended Diaphragm seal
 - Direct mounting Type
 - Capillary Type
- *Reliability
 - EEPROM Write Protection
 - CE EMC Conformity Standard (EN50081-2,EN50082-2)

Functional Block Diagram



TAPT3100 - L

Smart Pressure Transmitter

General Specifications

1. TAPT3100-L Diaphragm Sealed Sensor Range (Rangeability = 100 : 1)

class	code	Measurement Range		Remark
		mmH ₂ O	kPa	
Low Level	4	0~194 to 0~3800	0~1.9 to 0~37.3	
Medium Level	5	0~960 to 0~19000	0~9.4 to 0~186.5	
High Level	6	0~3518 to 0~70000	0~34.5 to 0~690	

2. Electrical Specifications

Power Supply	11.9 ~ 45 V dc	Output Signal	4 ~ 20 mA dc /HART
HART loop resistance	250 ~ 600 ohm	Isolation	500 Vrms (707V DC)
Update Time	0.25 Sec.	Turn-on Time	5 Sec.

3. Performance Specifications

Reference Accuracy (without Diaphragm seal)	± 0.075% of Span (0.1URL ≤ Span ≤ URL) ± [0.05 + 0.005x(URL/Span)]% of Span (0.05URL ≤ Span < 0.1URL)	Operating Temp.	-40 ~ +85 °C
		LCD Meter Operating Temp.	-30 ~ +80 °C
		Humidity Limits	5% ~ 100% RH
Ambient Temp. Effect	± [0.025%URL + 0.125% Span] /28 °C	Process Temp. Limit	-40 ~ +205 °C
Stability	±0.1% URL for 12 Months	Power Supply Effects	±0.005% of Span per Volt
Static Pressure Effects	±0.1% of URL per 7MPa (Zero Error) ±0.2% of Reading per 7MPa (Span Error)	Mounting Position Effects	Zero Shift up to 350Pa No Span Effect

4. Physical Specifications

Isolating Diaphragm	316L SST	Process Connection Size	1/2" - 14 NPT
Drain & Vent Valve	316 SST	Diaphragm Seal (Flush / Extended)	2" or 3" / 3" or 4"
Flange & Adapter	316 SST	Electrical Connections	1/2" - 14 NPT with M4
O-ring	Viton, PTFE	Weight (excluding Option Items)	5.5 Kg
Electronic Housing	Aluminum	2" Pipe Stanchion Type bracket	Angle or Flat type
Bolts & Bolting Flange	304 SST	Housing Class	Waterproof (IP67)

5. Hazardous Location Certifications (option)

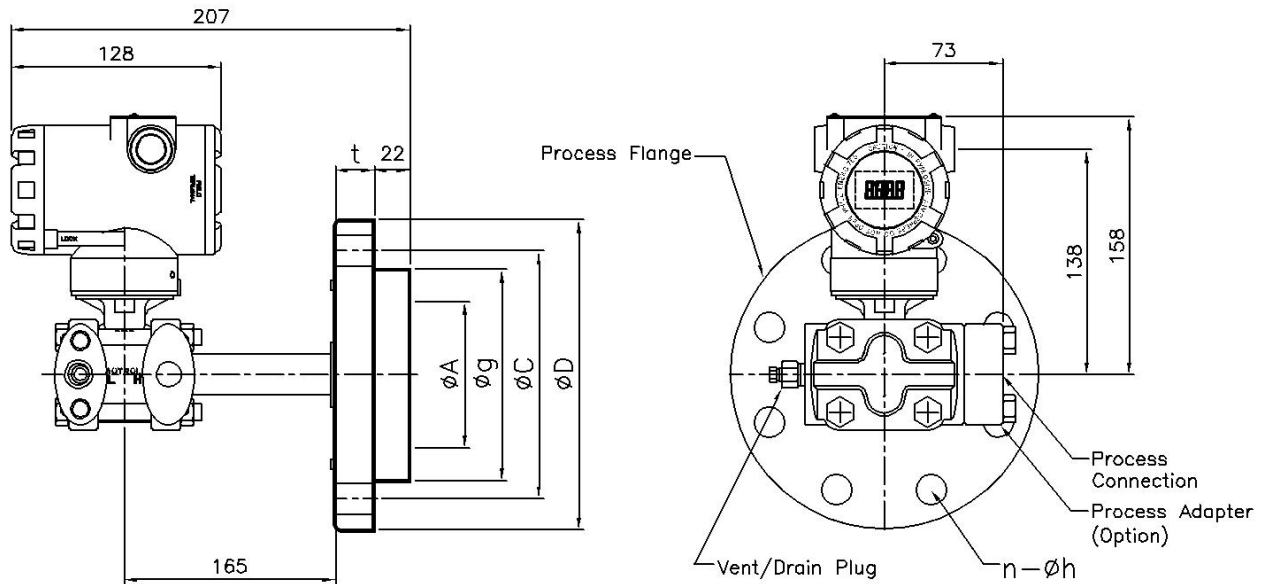
Korea Standards Approval	CSA (Canadian Standards Association) Approval
Flameproof Approval: Ex d IIC T6 (KOSHA) Intrinsic Safety Approval: Ex ia IIC T5 (KTL)	Explosionproof/DIP for Class I, II, III Div. 1, 2 Groups A~G Flameproof for Zone 1, Ex d IIC T6..T4 Type of Protection "nA" for Zone 2, Ex nA IIC T4

*Subject to change without notice

Dimensional Drawing

For Flush Diaphragm Seal and Direct Mount Type
Liquid Level Transmitter

TAPT3100-LFD



Flange Size : 3 inch (80mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	90 (3.54)	23.9(0.94)	4	19.1 (0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	90 (3.54)	28.5(1.12)	8	22.4 (0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	90 (3.54)	18 (0.71)	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	22 (0.87)	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	20 (0.79)	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	24 (0.94)	8	18 (0.71)

Flange Size : 2 inch (50mm)

Flange Rating	ØD	ØC	Øg	ØA	t	n	Øh
ANSI Class150	152.4(6.00)	120.7(4.75)	100 (3.94)	61 (2.40)	19.1(0.75)	4	19.1(0.75)
ANSI Class300	165.1(6.50)	127 (5.00)	100 (3.94)	61 (2.40)	22.4(0.88)	8	19.1(0.75)
JIS 10K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	16 (0.63)	4	19 (0.75)
JIS 20K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	18 (0.71)	8	19 (0.75)
DIN PN 10/16	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	18 (0.71)	4	18 (0.71)
DIN PN 25/40	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	20 (0.79)	4	18 (0.71)

TAPT3100 - L Smart Pressure Transmitter

Ordering Information

TAPT3100-LFD

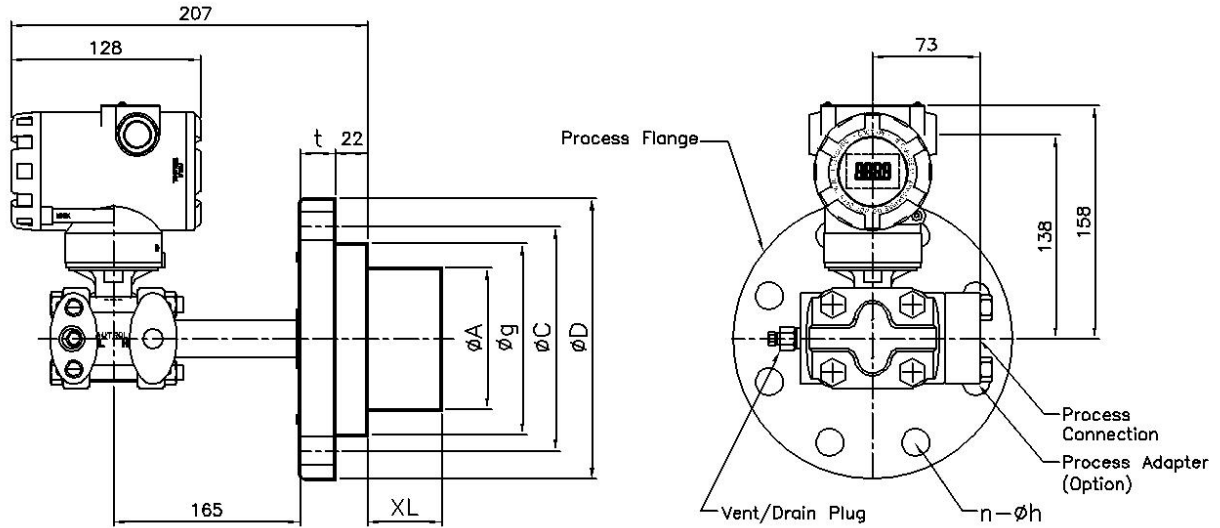
MODEL NO.	Code	Description	
TAPT3100	- LFD	Flush Diaphragm Seal and Direct Mount Type Liquid Level	
Transmitter Ranges	4	0-194 to 0-3800mmH ₂ O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH ₂ O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH ₂ O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C2	2-inch (50mm)	C.Steel
	S2	2-inch (50mm)	SST
	C3	3-inch (80mm)	C.Steel
	S3	3-inch (80mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	T	Tantalum	Tantalum
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Materials of Construction		FLANGE	VENT/DRAIN VALVE
	CS	C.Steel	316 SST
	SS	316 SST	316 SST
Low Side	W	without Process Adapter (1/4-18 NPT on the cover flange)	
	N	with 1/2-14 NPT Process Adapter (316 SST)	
	X	Special	
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	
	T	Teflon Covered Diaphragm	

TAPT3100 - L Smart Pressure Transmitter

Dimensional Drawing

TAPT3100-LED

For Extended Diaphragm Seal and Direct Mount Type
Liquid Level Transmitter



Flange Size : 4 inch (100mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	n	Øh
ANSI Class150	228.6(9.00)	190.5(7.50)	155 (6.10)	96 (3.78)	23.9(0.94)	8	19.1(0.75)
ANSI Class300	254(10.00)	200 (7.87)	155 (6.10)	96 (3.78)	31.8(1.25)	8	22.4(0.88)
JIS 10K	210 (8.27)	175 (6.89)	155 (6.10)	96 (3.78)	18 (0.71)	8	19 (0.75)
JIS 20K	225 (8.86)	185 (7.28)	155 (6.10)	96 (3.78)	24 (0.94)	8	23 (0.91)
DIN PN 10/16	220 (8.66)	180 (7.09)	155 (6.10)	96 (3.78)	20 (0.79)	8	18 (0.71)
DIN PN 25/40	235 (9.25)	190 (7.50)	155 (6.10)	96 (3.78)	24 (0.94)	8	22 (0.87)

Flange Size : 2 inch (50mm)

Flange Rating	ØD	ØC	Øg	ØA	t	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	71 (2.80)	23.9(0.94)	4	19.1(0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	71 (2.80)	28.5(1.12)	8	22.4(0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	71 (2.80)	18 (0.71)	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	22 (0.87)	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	20 (0.79)	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	24 (0.94)	8	18 (0.71)

Diaphragm Extension Length Code	XL
05	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

TAPT3100 - L Smart Pressure Transmitter

Ordering Information

TAPT3100-LED

MODEL NO.	Code	Description	
TAPT3100	- LED	Extended Diaphragm Seal and Direct Mount Type Liquid Level Transmitter	
Ranges	4	0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH2O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C3	3-inch (80mm)	C.Steel
	S3	3-inch (80mm)	SST
	C4	4-inch (100mm)	C.Steel
	S4	4-inch (100mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Extension Length	05	50mm (2in.)	
	10	100mm (4in.)	
	15	150mm (6in.)	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	X	Special	
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Materials of Construction		FLANGE	VENT/DRAIN VALVE
	CS	Plated C.Steel	316 SST
	SS	316 SST	316 SST
Low Side	W	without Process Adapter (1/4-18 NPT on the cover flange)	
	N	with 1/2-14 NPT Process Adapter (316 SST)	
	X	Special	
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	

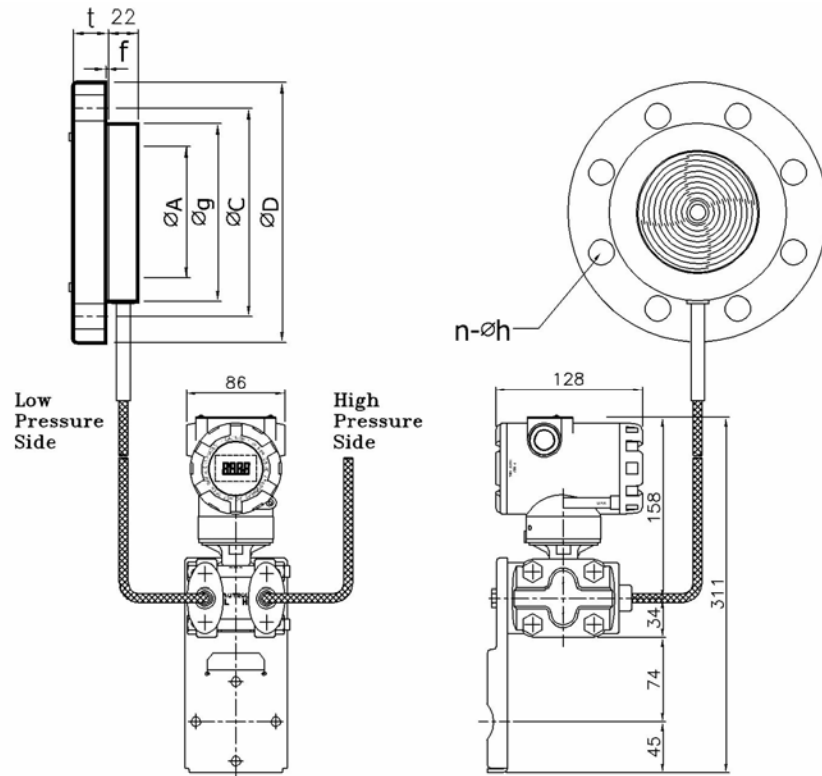
TAPT3100 - L

Smart Pressure Transmitter

Dimensional Drawing

For Flush Diaphragm Seal and Capillary Type
Liquid Level Transmitter

TAPT3100-LFC



Flange Size : 3 inch (80mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	90 (3.54)	23.9(0.94)	1.6 (0.06)	4	19.1 (0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	90 (3.54)	28.5(1.12)	1.6 (0.06)	8	22.4 (0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	90 (3.54)	18 (0.71)	0	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	22 (0.87)	0	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	24 (0.94)	0	8	18 (0.71)

Flange Size : 2 inch (50mm)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	152.4(6.00)	120.7(4.75)	100 (3.94)	61 (2.40)	19.1(0.75)	1.6 (0.06)	4	19.1(0.75)
ANSI Class300	165.1(6.50)	127 (5.00)	100 (3.94)	61 (2.40)	22.4(0.88)	1.6 (0.06)	8	19.1(0.75)
JIS 10K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	16 (0.63)	0	4	19 (0.75)
JIS 20K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	18 (0.71)	0	8	19 (0.75)
DIN PN 10/16	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	18 (0.71)	0	4	18 (0.71)
DIN PN 25/40	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	20 (0.79)	0	4	18 (0.71)

Ordering Information

TAPT3100-LFC

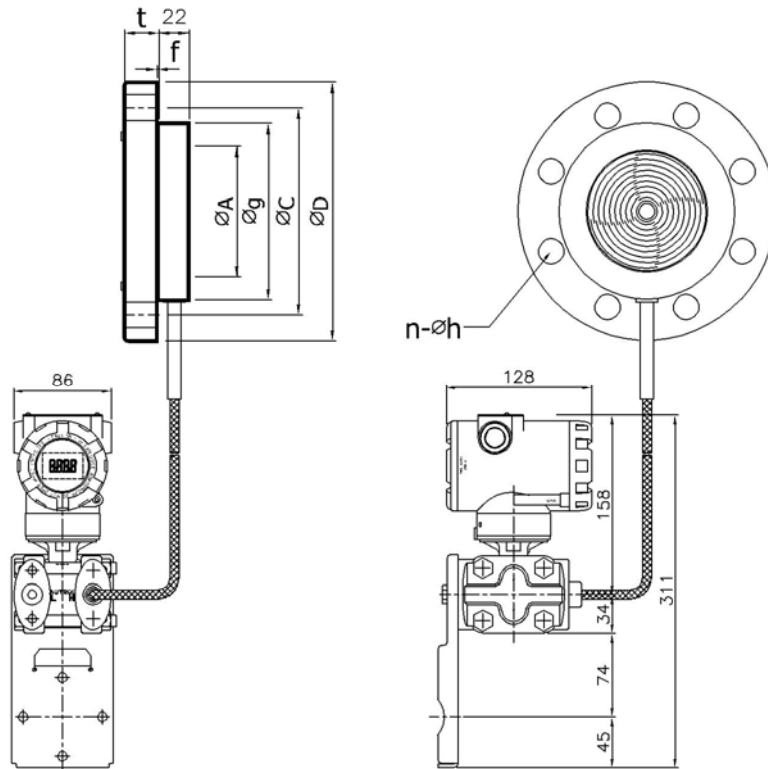
MODEL NO.	Code	Description	
TAPT3100	- LFC	Flush Diaphragm Seal and Capillary Type Liquid Level Transmitter	
Ranges	4	0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH2O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C2	2-inch (50mm)	C.Steel
	S2	2-inch (50mm)	SST
	C3	3-inch (80mm)	C.Steel
	S3	3-inch (80mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	T	Tantalum	Tantalum
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Capillary Length (m)	<input type="checkbox"/>	Capillary Length from 1 to 12m (Example for 3m : 03)	
Materials of Construction		FLANGE	VENT/DRAIN VALVE
	CS	Plated C.Steel	316 SST
	SS	316 SST	316 SST
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
		Special	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	
	T	Teflon Covered Diaphragm	
	P	PVC Coating on SST Armored	
	S	High Side Direct Type	
	BA	Stainless Steel Bracket (Angle type) with SST Bolts	
	BF	Stainless Steel Bracket (Flat type) with SST Bolts	
	CA	Painted Steel Mounting Bracket (Angle Type) with SST Bolts	
	CF	Painted Steel Mounting Bracket (Flat Type) with SST Bolts	

TAPT3100 - L Smart Pressure Transmitter

Dimensional Drawing

For Flush Diaphragm Seal and Capillary Type Liquid Level Transmitter

TAPT3100-LFS



Flange Size : 3 inch (80mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	90 (3.54)	23.9(0.94)	1.6 (0.06)	4	19.1 (0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	90 (3.54)	28.5(1.12)	1.6 (0.06)	8	22.4 (0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	90 (3.54)	18 (0.71)	0	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	22 (0.87)	0	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	90 (3.54)	24 (0.94)	0	8	18 (0.71)

Flange Size : 2 inch (50mm)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	152.4(6.00)	120.7(4.75)	100 (3.94)	61 (2.40)	19.1(0.75)	1.6 (0.06)	4	19.1(0.75)
ANSI Class300	165.1(6.50)	127 (5.00)	100 (3.94)	61 (2.40)	22.4(0.88)	1.6 (0.06)	8	19.1(0.75)
JIS 10K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	16 (0.63)	0	4	19 (0.75)
JIS 20K	155 (6.10)	120 (4.72)	100 (3.94)	61 (2.40)	18 (0.71)	0	8	19 (0.75)
DIN PN 10/16	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	18 (0.71)	0	4	18 (0.71)
DIN PN 25/40	165 (6.50)	125 (4.92)	100 (3.94)	61 (2.40)	20 (0.79)	0	4	18 (0.71)

TAPT3100 - L Smart Pressure Transmitter

Ordering Information

TAPT3100-LFS

MODEL NO.	Code	Description	
TAPT3100	- LFS	Flush Diaphragm Seal and Capillary Type Liquid Level Pressure Transmitter	
Ranges	4	0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH2O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C2	2-inch (50mm)	C.Steel
	S2	2-inch (50mm)	SST
	C3	3-inch (80mm)	C.Steel
	S3	3-inch (80mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	T	Tantalum	Tantalum
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Capillary Length (m)	<input type="checkbox"/>	Capillary Length from 1 to 12m (Example for 3m : 03)	
Materials of Construction		FLANGE	VENT/DRAIN VALVE
	CS	Plated C.Steel	316 SST
	SS	316 SST	316 SST
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof & Flameproof	
	*C2	CSA Intrinsic Safety	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	
	T	Teflon Covered Diaphragm	
	P	PVC Coating on SST Armored	
	BA	Stainless Steel Bracket (Angle type) with SST Bolts	
	BF	Stainless Steel Bracket (Flat type) with SST Bolts	
	CA	Painted Steel Mounting Bracket (Angle Type) with SST Bolts	
	CF	Painted Steel Mounting Bracket (Flat Type) with SST Bolts	

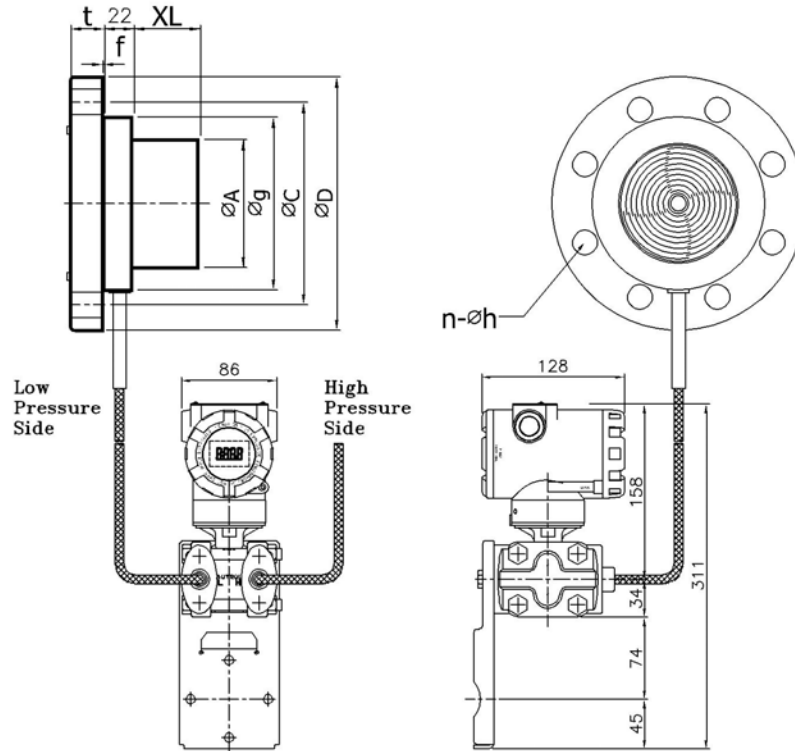
* <NOTE> : in Processing approval

TAPT3100 - L Smart Pressure Transmitter

Dimensional Drawing

For Extended Diaphragm Seal and Capillary Type
Liquid Level Transmitter

TAPT3100-LEC



Flange Size : 4 inch (100mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	228.6(9.00)	190.5(7.50)	155 (6.10)	96 (3.78)	23.9(0.94)	1.5 (0.06)	8	19.1(0.75)
ANSI Class300	254(10.00)	200 (7.87)	155 (6.10)	96 (3.78)	31.8(1.25)	1.5 (0.06)	8	22.4(0.88)
JIS 10K	210 (8.27)	175 (6.89)	155 (6.10)	96 (3.78)	18 (0.71)	0	8	19 (0.75)
JIS 20K	225 (8.86)	185 (7.28)	155 (6.10)	96 (3.78)	24 (0.94)	0	8	23 (0.91)
DIN PN 10/16	220 (8.66)	180 (7.09)	155 (6.10)	96 (3.78)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	235 (9.25)	190 (7.50)	155 (6.10)	96 (3.78)	24 (0.94)	0	8	22 (0.87)

Flange Size : 3 inch (80mm)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	71 (2.80)	23.9(0.94)	1.5 (0.06)	4	19.1(0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	71 (2.80)	28.5(1.12)	1.6 (0.06)	8	22.4(0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	71 (2.80)	18 (0.71)	0	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	22 (0.87)	0	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	24 (0.94)	0	8	18 (0.71)

Diaphragm Extension Length Code	XL
05	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

TAPT3100 - L

Smart Pressure Transmitter

Ordering Information

TAPT3100-LEC

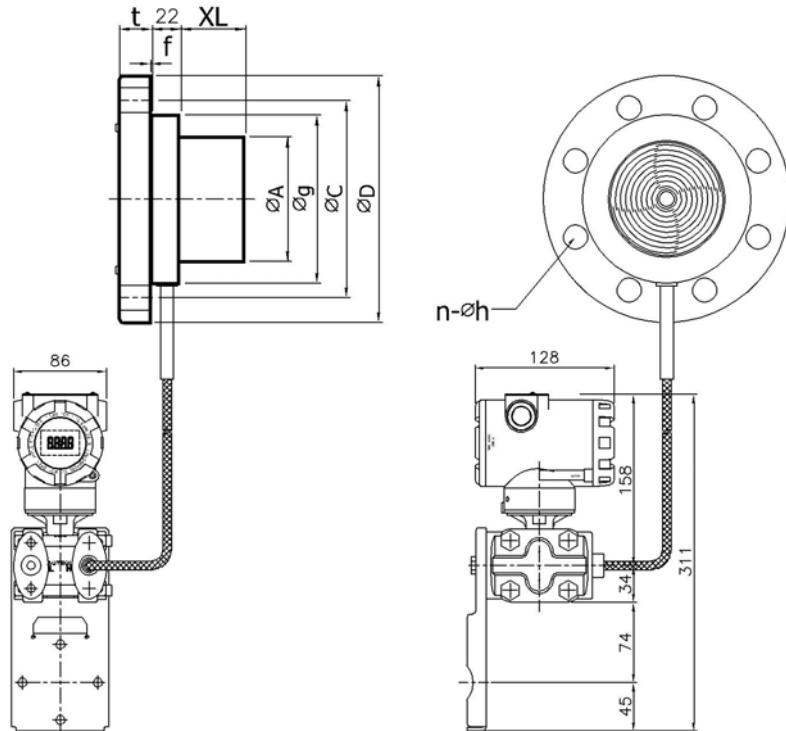
MODEL NO.	Code	Description	
TAPT3100	- LEC	Extended Diaphragm Seal and Capillary Type Liquid Level Transmitter	
Ranges	4	0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH2O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C3	3-inch (80mm)	C.Steel
	S2	3-inch (80mm)	SST
	C4	4-inch (100mm)	C.Steel
	S4	4-inch (100mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Extension Length	05	50mm (2in.)	
	10	100mm (4in.)	
	15	150mm (6in.)	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	T	Tantalum	Tantalum
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Capillary Length (m)	<input type="checkbox"/>	Capillary Length from 1 to 12m (Example for 3m : 03)	
Materials of Construction		FLANGE	VENT/DRAIN VALVE
	CS	Plated C.Steel	316 SST
	SS	316 SST	316 SST
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	
	P	PVC Coating on SST Armored	
	S	High Side Direct Type	
	BA	Stainless Steel Bracket (Angle type) with SST Bolts	
	BF	Stainless Steel Bracket (Flat type) with SST Bolts	
	CA	Painted Steel Mounting Bracket (Angle Type) with SST Bolts	
CF	Painted Steel Mounting Bracket (Flat Type) with SST Bolts		

Smart Pressure Transmitter

Dimensional Drawing

TAPT3100-LES

For Extended Diaphragm Seal and Capillary Type
Liquid Level Transmitter



Flange Size : 4 inch (100mm)

Unit : mm (approx. inch)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	228.6(9.00)	190.5(7.50)	155 (6.10)	96 (3.78)	23.9(0.94)	1.5 (0.06)	8	19.1(0.75)
ANSI Class300	254(10.00)	200 (7.87)	155 (6.10)	96 (3.78)	31.8(1.25)	1.5 (0.06)	8	22.4(0.88)
JIS 10K	210 (8.27)	175 (6.89)	155 (6.10)	96 (3.78)	18 (0.71)	0	8	19 (0.75)
JIS 20K	225 (8.86)	185 (7.28)	155 (6.10)	96 (3.78)	24 (0.94)	0	8	23 (0.91)
DIN PN 10/16	220 (8.66)	180 (7.09)	155 (6.10)	96 (3.78)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	235 (9.25)	190 (7.50)	155 (6.10)	96 (3.78)	24 (0.94)	0	8	22 (0.87)

Flange Size : 3 inch (80mm)

Flange Rating	ØD	ØC	Øg	ØA	t	f	n	Øh
ANSI Class150	190.5(7.50)	152.4(6.00)	130 (5.12)	71 (2.80)	23.9(0.94)	1.5 (0.06)	4	19.1(0.75)
ANSI Class300	209.6(8.25)	168.1(6.62)	130 (5.12)	71 (2.80)	28.5(1.12)	1.6 (0.06)	8	22.4(0.88)
JIS 10K	185 (7.28)	150 (5.91)	130 (5.12)	71 (2.80)	18 (0.71)	0	8	19 (0.75)
JIS 20K	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	22 (0.87)	0	8	23 (0.91)
DIN PN 10/16	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	20 (0.79)	0	8	18 (0.71)
DIN PN 25/40	200 (7.87)	160 (6.30)	130 (5.12)	71 (2.80)	24 (0.94)	0	8	18 (0.71)

Diaphragm Extension Length Code	XL
05	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

Smart Pressure Transmitter

Ordering Information

TAPT3100-LES

MODEL NO.	Code	Description	
TAPT3100	- LES	Extended Diaphragm Seal and Capillary Type Liquid Level Pressure Transmitter	
Ranges	4	0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 kPa)	
	5	0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 kPa)	
	6	0-3518 to 0-70000mmH2O (0-345 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C3	3-inch (80mm)	C.Steel
	S2	3-inch (80mm)	SST
	C4	4-inch (100mm)	C.Steel
	S4	4-inch (100mm)	SST
	XX	Special	
Mounting Flange Rating	A1	ANSI Class 150	
	A2	ANSI Class 300	
	J1	JIS 10K	
	J2	JIS 20K	
	D1	DIN PN 10/16	
	D2	DIN PN 25/40	
	XX	Special	
Extension Length	05	50mm (2inch)	
	10	100mm (4inch)	
	15	150mm (6inch)	
	XX	Special	
Wetted Parts Material Diaphragm/Others		DIAPHRAGM	OTHERS
	S	316L SST	316 SST
	H	Hastelloy C-276	Hastelloy C-276
	T	Tantalum	Tantalum
Fill Fluid		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	15 to 205 °C (60 to 400 °F)
	X	Special	
Capillary Length (m)	<input type="checkbox"/>	Capillary Length from 1 to 12m (Example for 3m : 03)	
Materials of Construction		FLANGE	VENT / DRAIN VALVE
	CS	Plated C.Steel	316 SST
	SS	316 SST	316 SST
Electrical Connection		ELECTRICAL CONNECTION	MATERIAL
	1	1/2-14NPT	Epoxy-Polyester Painted Aluminium
	2	G1/2	Epoxy-Polyester Painted Aluminium
	X	Special	
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC T5	
	*E1	CENELEC(KEMA) Flameproof	
	*E2	CENELEC(KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
Option	M1	LCD Indicator	
	W	SUS 304 Bolts and Nuts	
	C6	Engineering Unit	
	K	Oil Free Finish	
	P	PVC Coating on SST Armored	
	BA	Stainless Steel Bracket (Angle type) with SST Bolts	
	BF	Stainless Steel Bracket (Flat type) with SST Bolts	
	CA	Painted Steel Mounting Bracket (Angle Type) with SST Bolts	
	CF	Painted Steel Mounting Bracket (Flat Type) with SST Bolts	

Smart Pressure Transmitter

TAPT3100-LFD



Extended Diaphragm Seal and Direct Mount Type Liquid Level Transmitter

TAPT3100-LFS



Single Flush Diaphragm Seal and Capillary Type Liquid Level Transmitter

Two Flush Diaphragm Seal and Capillary Type Liquid Level Transmitter

TAPT3100-LFC

