

DOC. NO.: C3100L-E03B



AUTROL[®]

Smart Pressure Transmitter with Diaphragm Seal



MODEL
APT 3100L

SMS Sanayi Malzemeleri Üretim ve Satış A.Ş.

Merkez : Bostancı Yolu Cad. Kuru Sok. No:16 Y. Dudullu, 34776 Ümraniye / İstanbul - Türkiye
Tel: +90 (216) 364 34 05 (pbx) Fax: +90 (216) 364 37 57

Fabrika: Çerkeşli OSB Mah. Dilovası İMES OSB 5.Cad. No:6 - Kocaeli / Türkiye
Tel: +90 (262) 290 20 20 Fax: +90 (262) 290 20 21

www.sms-tork.com.tr

AUTROL®



Smart Pressure Transmitter with Diaphragm Seal

APT3100L

Function

- Flexible Sensor input : Measuring hydrostatic pressure head and transmitting liquid level
- Various output: 4 ~20mA(Analog), Digital Signals
- Automatic Compensation of Ambient Temperature
- Setting Various Parameters : Zero/Span, Fail-mode, Unit, Trim, etc.
- Self Diagnostic Function : Sensor, A/D Converter, Memory, Power, etc
- Digital Communication with HART protocol, Command.
- Explosion-proof Approval & Intrinsic Safety Approval : KOSHA, KTL, CSA, FM, ATEX

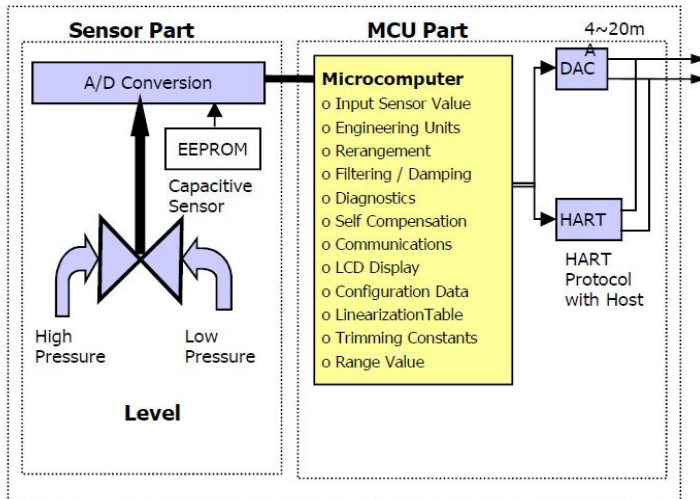
Description of Product

The APT-3100L Smart Pressure Transmitter is a micro processor-based high performance transmitter, which has flexible pressure calibration and output, automatic compensation of ambient temperature and process variable, configuration of various parameters, communication with HART protocol. All Data of Sensor(Tag No., Type, Range) is to be input, modified and stored in EEPROM.

Features

- Superior Performance
 - High Reference Accuracy : $\pm 0.075\%$ of Calibrated Span (without seal)
 - Long-Term Stability
 - High Rangeability (20 : 1)
- Flexibility
 - Data Configuration with HART Configurator
 - Zero Point Adjustment
- Reliability
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards (EN50081-2, EN50082-2)

Functional Block Diagram



Type of Sensor & Configure Tools

- Selection of Various Pressure
 - Using Capacitive Pressure Sensor
 - Screw type. Diaphragm Seal as to Process Connection method
 - User can select measuring sensor for DP, GP.
- Transmitter Output
 - Analog : 4 ~ 20mA DC
 - Digital : HART Digital Data.
- Configure Tools
 - Hand-Held Terminal : portable use in job-site, convenient input, change, review, up-down loading
 - The Configurator Software Package can be loaded on PC for users convenience

Smart Transmitter with Diaphragm Seal

General Specifications

1. Diaphragm Sealed Sensor Range (Rangeability : 20 : 1)

Class	Code	mmH2O	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 ~ 550 ohm	Isolation	500 Vrms (707V DC)
Update Time	0.25 Sec.	Turn-on Time	5 Sec.

3. Performance Specifications (without seal)

Reference Accuracy	$\pm 0.075\%$ of Span (0.2URL ≤ Span ≤ URL) $\pm [0.05 + 0.005 \times (\text{URL}/\text{Span})]\%$ of Span (0.05URL ≤ Span < 0.2URL)	Operating Temp.	-40 ~ +85 °C
		LCD Meter Operating Temp.	-30 ~ +80 °C
Ambient Temp. Effect	$\pm [0.025\% \text{URL} + 0.125\% \text{Span}] / 28$ °C	Humidity Limits	5% ~ 98% RH
Stability	$\pm 0.1\%$ URL for 12 Months	Process Temp. Limit	-40 ~ +205 °C
Static Pressure Effects	$\pm 0.1\%$ of URL per 7MPa (Zero Error) $\pm 0.2\%$ of Reading per 7MPa (Span Error)	Power Supply Effects	$\pm 0.005\%$ of Span per Volt
		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 (only transmitter)	3.9 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	Overseas Standards Approval
Flameproof Approval : Ex d IIC T6 (KOSHA) Intrinsic Safety Approval : Ex ia IIC T5 (KTL)	CSA Explosion proof Approval FM Explosion proof Approval ATEX Flame proof Approval:

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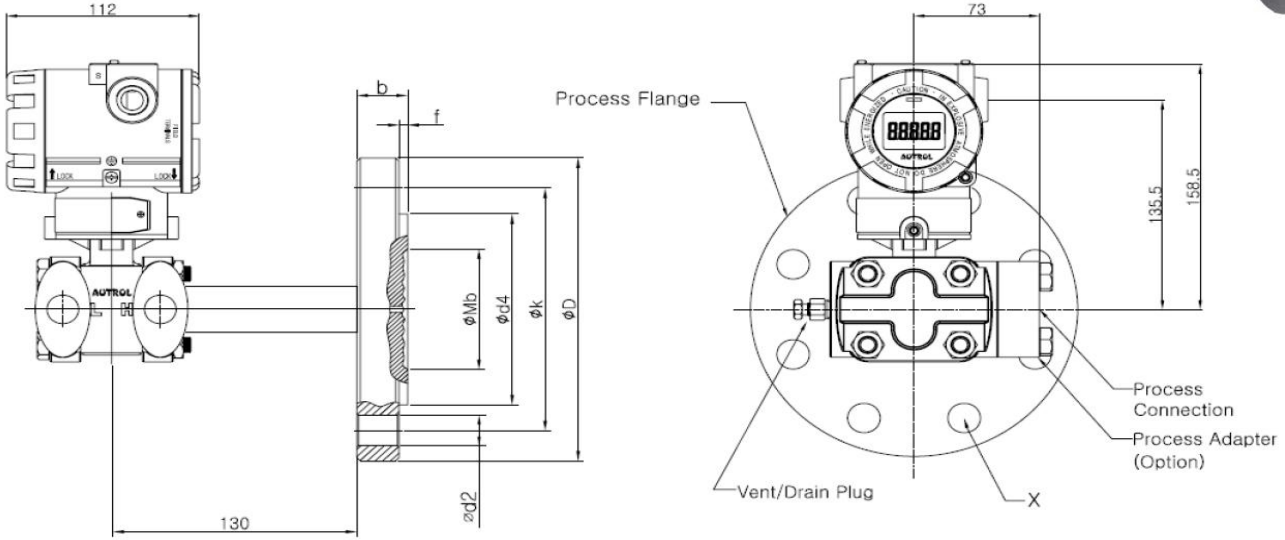
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AUTROL®

APT3100LFD

Dimensional Drawing (mm)

For Flush Diaphragm Seal and Direct Mount Type Transmitter



Flange Size : 80mm (3 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	x
ANSI Class150	89	190	24	20	152.5	2	127	4
ANSI Class300		210	29	22	168.5		127	8
JIS 10K	89	185	18	19	150	2	126	8
JIS 20K		200	22	23	160		132	
DIN PN 10/16	89	200	20	18	160	2	138	8
DIN PN 25/40			24					

Flange Size : 50mm (2 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	x
ANSI Class150	59	150	20	20	120.5	2	92	4
ANSI Class300		165	22.5		127			
JIS 10K	59	155	16	19	120	2	96	4
JIS 20K			18					
DIN PN 10/16	59	165	20	18	125	2	102	4
DIN PN 25/40								

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APT3100LFD

Smart Transmitter with Diaphragm Seal

Ordering Information

MODEL NO.	Code	Description	
APT3100	LFD	Flush Diaphragm Seal and Direct Mount Type 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 (0-34.5 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	S	DIAPHRAGM 316L SST	OTHERS 316L SST
	PT	PTFE + 316L SST	316L SST
	H	Hastelloy C-276	316L SST
	T	Tantalum	316L SST
	X	Special	Special
		FILL FLUID	TEMPERATURE LIMITS
Fill Fluid	2	D.C Silicone 200	-40 to 205 °C (-40 to 400 °F)
	7	D.C Silicone 704	0 to 315 °C (32 to 600 °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 Coated-Aluminum
	2	G1/2	Epoxy Coated-Aluminum
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	
	E1	ATEX(KEMA) Flameproof	
	*E2	ATEX(KEMA) Intrinsic Safety	
	C1	CSA Explosion proof	
	*C2	CSA Intrinsic Safety	
	F1	FM Explosion proof	
	*F2	FM Intrinsic Safety	
Option	M1	LCD Indicator	LP Lighting Protector
	W	SUS 304 Bolts and Nuts	ET External Terminal Block
	C6	Engineering Unit	ST Stainless Steel Housing
	K	Oil Free Finish	
	X	Special Order	

Note 1 : Request to manufacturer for Draft Range, Absolute (small pressure and vacuum) and Items marked " * " before order.

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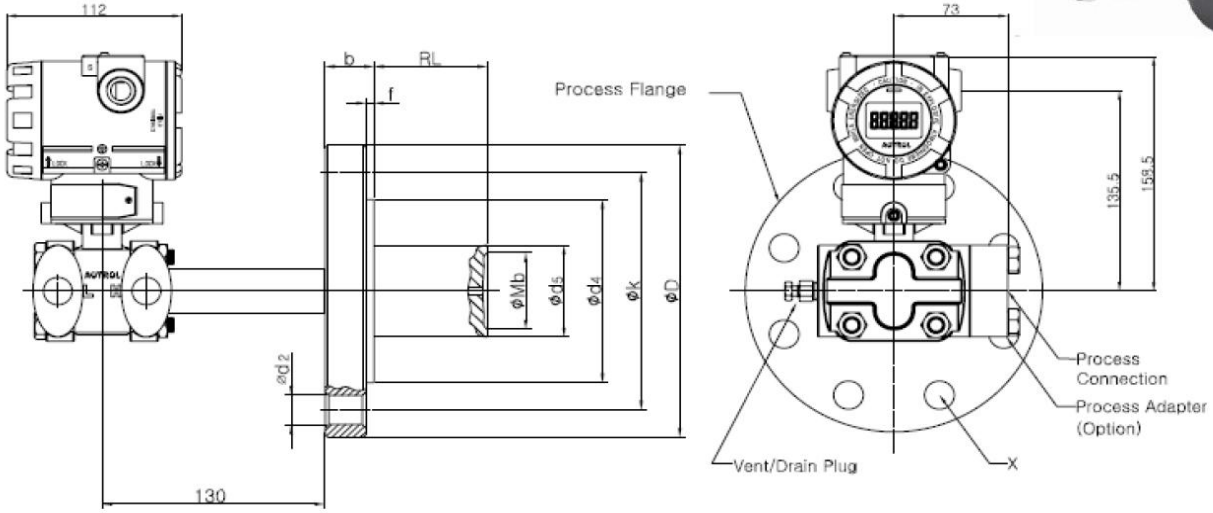
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APT3100LED

Dimensional Drawing (mm)

For Extended Diaphragm Seal and Direct Mount Type Transmitter



Flange Size : 80mm (3 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	72	190	24	20	152.5	1.6	127	76	4
ANSI Class300		210	29	22	168.5				8
JIS 10K	72	185	18	19	150	2	126	76	8
JIS 20K		200	22	23	160				
DIN PN 10/16	72	200	20	18	160	2	138	76	8
DIN PN 25/40			24						

Flange Size : 50mm (2 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	47	150	20	20	120.5	2	92	48.3	4
ANSI Class300		165	22.5		127				8
JIS 10K	47	155	16	19	120	2	96	48.3	4
JIS 20K			18						8
DIN PN 10/16	47	165	20	18	125	2	102	48.3	4
DIN PN 25/40									

Diaphragm Extension Length Code	RL
5	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

APT3100LED

Smart Transmitter with Diaphragm Seal

Ordering Information

MODEL NO.	Code	Description	
APT3100	- LED	Extended Diaphragm Seal and Direct Mount Type Transmitter	
Range	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 (0-34.5 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	
Extension Length		05	50mm (2in.)
	10	100mm (4in.)	
	15	150mm (6in.)	
	XX	Special	
Wetted Parts Material Diaphragm/Others	S	DIAPHRAGM 316L SST	OTHERS 316L SST
	PT	PTFE +316L SST	316L SST
	H	Hastelloy C-276	316L SST
	T	Tantalum	316L SST
	X	Special	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	0 to 315 °C (32 to 600 °F)
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 Coated-Aluminum
	2	G1/2	Epoxy Coated-Aluminum
Hazardous Locations Certifications	X	Special	
	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6.	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC	
	E1	ATEX(KEMA) Flameproof	
	*E2	ATEX(KEMA) Intrinsic Safety	
	C1	CSA Explosion proof	
	*C2	CSA Intrinsic Safety	
	F1	FM Explosion proof	
*F2	FM Intrinsic Safety		
Option	M1	LCD Indicator	LP Lighting Protector
	W	SUS 304 Bolts and Nuts	ET External Terminal Block
	C6	Engineering Unit	ST Stainless Steel Housing
	K	Oil Free Finish	
	X	Special Order	

Note 1 : Request to manufacturer for Draft Range, Absolute (small pressure and vacuum) and Items marked " * " before order.

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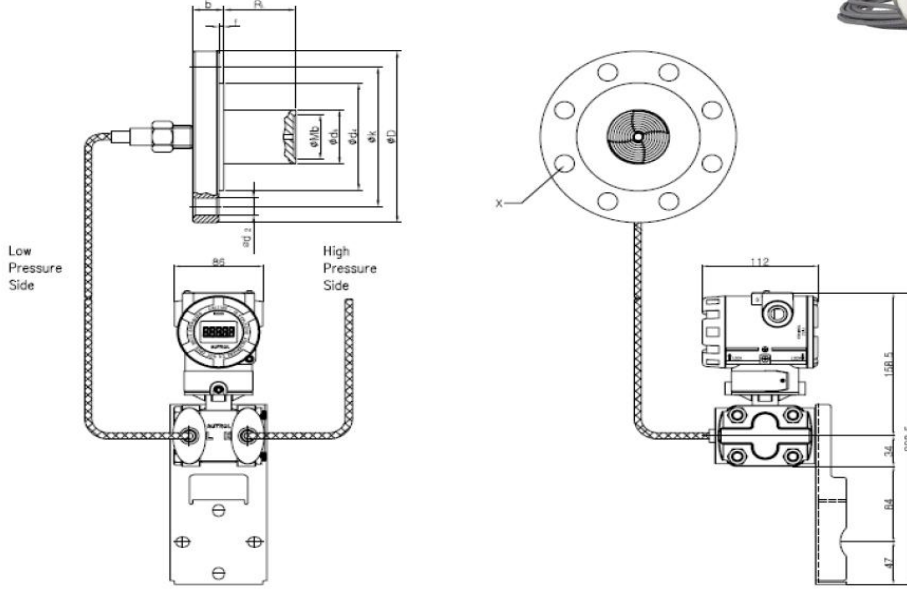
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AUTROL®

APT3100LEC

Dimensional Drawing (mm)

For Extended Diaphragm Seal and Capillary Type Transmitter



Flange Size : 80mm (3 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	72	190	24	20	152.5	1.6	127	76	4
ANSI Class300		210	29	22	168.5				8
JIS 10K	72	185	18	19	150	2	126	76	8
JIS 20K		200	22	23	160		132		
DIN PN 10/16	72	200	20	18	160	2	138	76	8
DIN PN 25/40			24						

Flange Size : 50mm (2 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	47	150	20	20	120.5	2	92	48.3	4
ANSI Class300		165	22.5		127				8
JIS 10K	47	155	16	19	120	2	96	48.3	4
JIS 20K			18						8
DIN PN 10/16	47	165	20	18	125	2	102	48.3	4
DIN PN 25/40									

Diaphragm Extension Length Code	R _L
5	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

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APT3100LEC

Smart Transmitter with Diaphragm Seal

Ordering Information

MODEL NO.	Code	Description	
APT3100	- LEC	Extended Diaphragm Seal and Capillary Type Transmitter (Two Remote Seal)	
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 (0-34.5 to 0-690 kPa)	
	X	Special	
Mounting Flange Size/Material	C2	50mm (2-inch)	C.Steel
	S2	50mm (2-inch)	SST
	C3	80mm (3-inch)	C.Steel
	S3	80mm (3-inch)	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	
Extension Length	5	50mm (2in.)	
	10	100mm (4in.)	
	15	150mm (6in.)	
	XX	Special	
Wetted Parts Material Diaphragm/Others	S	DIAPHRAGM 316L SST	OTHERS 316L SST
	PT	PTFE + 316L SST	316L SST
	H	Hastelloy C-276	316L SST
	T	Tantalum	316L SST
	X	Special	Special
Fill Fluid	2	FILL FLUID D.C Silicone 200	TEMPERATURE LIMITS -40 ~ 205 °C (-40 ~ 400 °F)
	7	D.C Silicone 704	0 to 315 °C (32 to 600 °F)
	X	Special	
Capillary Length (m)	□□	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 Coated-Aluminum
	2	G1/2	Epoxy Coated-Aluminum
Hazardous Locations Certifications	X	Special	
	K0	Maker Standard (Waterproof : IP67)	
	K1	KOSHA Flameproof Approval : Ex d IIC T6.	
	K2	KTL Intrinsic Safety Approval : Ex ia IIC	
	E1	ATEX (KEMA) Flameproof	
	*E2	ATEX (KEMA) Intrinsic Safety	
	C1	CSA Explosionproof	
	*C2	CSA Intrinsic Safety	
	F1	FM Explosion proof	
	*F2	FM Intrinsic Safety	
Option	M1	LCD Indicator	LP Lighting Protector
	W	SUS 304 Bolts and Nuts	ET External Terminal Block
	C6	Engineering Unit	ST Stainless Steel Housing
	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	
	X	Special Order	

Note 1 : Request to manufacturer for Draft Range, Absolute (small pressure and vacuum) and Items marked "*" before order.

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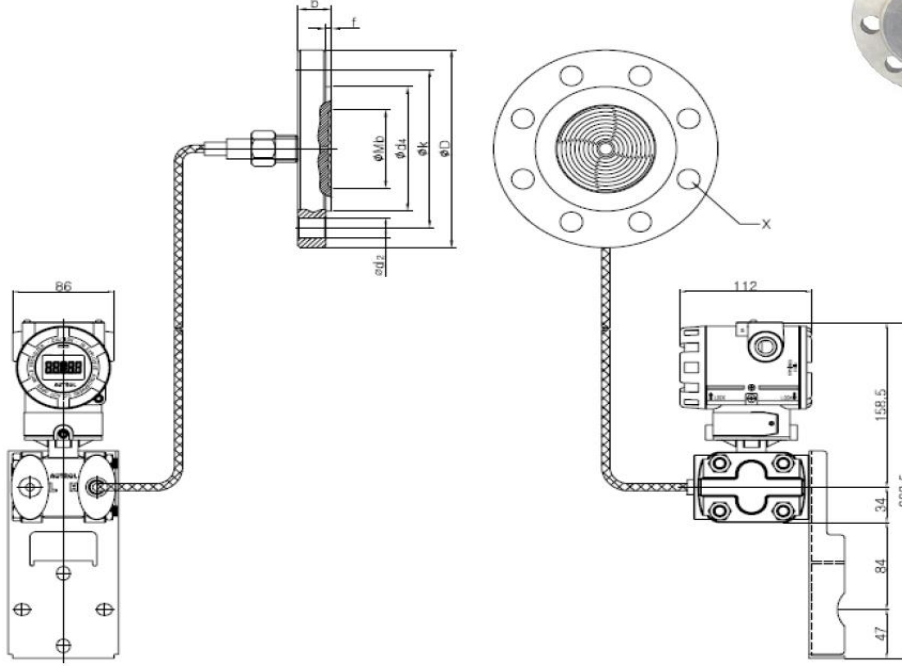
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AUTROL®

APT3100LFS

Dimensional Drawing (mm)

For Flush Diaphragm Seal and
Capillary Type Transmitter



Flange Size : 80mm (3 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	x
ANSI Class150	89	190	24	20	152.5	2	127	4
ANSI Class300		210	29	22	168.5		127	8
JIS 10K	89	185	18	19	150	2	126	8
JIS 20K		200	22	23	160		132	
DIN PN 10/16	89	200	20	18	160	2	138	8
DIN PN 25/40			24					

Flange Size : 50mm (2 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	x
ANSI Class150	59	150	20	20	120.5	2	92	4
ANSI Class300		165	22.5		127			8
JIS 10K	59	155	16	19	120	2	96	4
JIS 20K			18					8
DIN PN 10/16	59	165	20	18	125	2	102	4
DIN PN 25/40								

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APT3100LFS

Smart Transmitter with Diaphragm Seal

Ordering Information

MODEL NO.	Code	Description	
APT3100	- LFS	Flush Diaphragm Seal and Capillary Type Transmitter (One Remote Seal)	
Ranges	6	0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)	
	7	0-10565 to 0-211300mmH2O (0-103.4 to 0-2068 KPa)	
	8	0-35217 to 0-704340mmH2O (0-344.8 to 0-6895 KPa)	
	X	Special	
Mounting Flange Size/Material	C2	50mm (2-inch)	C.Steel
	S2	50mm (2-inch)	SST
	C3	80mm (3-inch)	C.Steel
	S3	80mm (3-inch)	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	
Wetted Parts Material Diaphragm/Others	XX	Special	
	S	DIAPHRAGM 316L SST	OTHERS 316L SST
	PT	PTFE + 316L SST	316L SST
	H	Hastelloy C-276	316L SST
	T	Tantalum	316L SST
Fill Fluid	X	Special	Special
		FILL FLUID	TEMPERATURE LIMITS
	2	D.C Silicone 200	-40 ~ 205 °C (-40 ~ 400 °F)
	7	D.C Silicone 704	0 to 315 °C (32 to 600 °F)
Capillary Length (m)	X	Special	
	□□	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 Coated-Aluminum
	2	G1/2	Epoxy Coated-Aluminum
	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	
	E1	ATEX (KEMA) Flameproof	
	*E2	ATEX (KEMA) Intrinsic Safety	
	C1	CSA Explosion proof	
	*C2	CSA Intrinsic Safety	
	F1	FM Explosion proof	
	*F2	FM Intrinsic Safety	
	Option	M1	LCD Indicator
W		SUS 304 Bolts and Nuts	ET External Terminal Block
C6		Engineering Unit	ST Stainless Steel Housing
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	
X		Special Order	

Note 1 : Request to manufacturer for Draft Range, Absolute (small pressure and vacuum) and Items marked " * " before order.

SMS Sanayi Malzemeleri Üretim ve Satış A.Ş.

Merkez : Bostancı Yolu Cad. Kuru Sok. No:16 Y. Dudullu, 34776 Ümraniye / İstanbul - Türkiye
Tel: +90 (216) 364 34 05 (pbx) Fax: +90 (216) 364 37 57

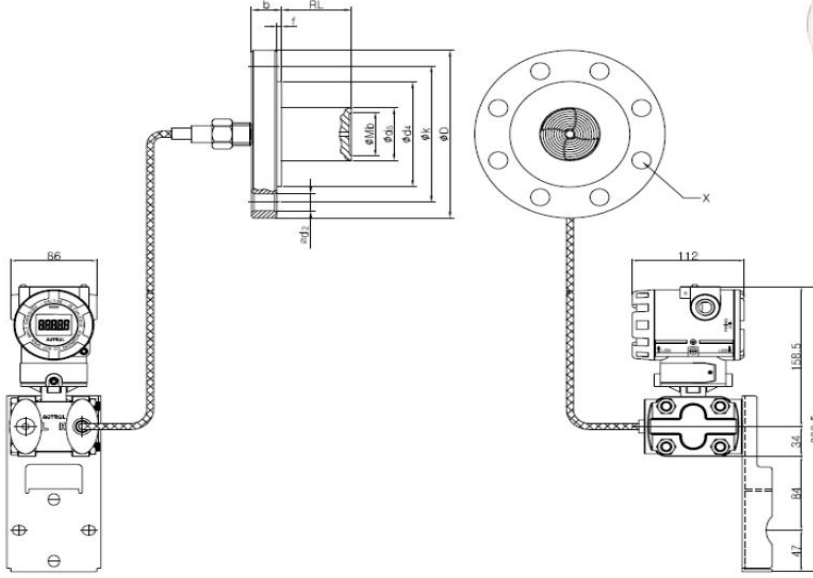
Fabrika: Çerkeşli OSB Mah. Dilovası İMES OSB 5.Cad. No:6 - Kocaeli / Türkiye
Tel: +90 (262) 290 20 20 Fax: +90 (262) 290 20 21

AUTROL®

APT3100LES

Dimensional Drawing (mm)

For Extended Diaphragm Seal and Capillary Type Transmitter



Flange Size : 80mm (3 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	72	190	24	20	152.5	1.6	127	76	4
ANSI Class300		210	29	22	168.5				8
JIS 10K	72	185	18	19	150	2	126	76	8
JIS 20K			200	22	23				
DIN PN 10/16	72	200	20	18	160	2	138	76	8
DIN PN 25/40			24						

Flange Size : 50mm (2 inch)

Unit : mm

Flange Rating	Mb	D	b	d2	k	f	d4	d5	x
ANSI Class150	47	150	20	20	120.5	2	92	48.3	4
ANSI Class300			22.5		127				8
JIS 10K	47	155	16	19	120	2	96	48.3	4
JIS 20K			18						8
DIN PN 10/16	47	165	20	18	125	2	102	48.3	4
DIN PN 25/40									

Diaphragm Extension Length Code	R _L
5	50mm (2 inch)
10	100mm (4 inch)
15	150mm (6 inch)

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APT3100LES

Smart Transmitter with Diaphragm Seal

Ordering Information

MODEL NO.	Code	Description
APT3100	- LES	Extended Diaphragm Seal and Capillary Type Transmitter (One Remote Seal)
Ranges	6	0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)
	7	0-10565 to 0-211300mmH2O (0-103.4 to 0-2068 KPa)
	8	0-35217 to 0-704340mmH2O (0-344.8 to 0-6895 KPa)
	X	Special
Mounting Flange Size/Material	C2	50mm (2-inch) C.Steel
	S2	50mm (2-inch) SST
	C3	80mm (3-inch) C.Steel
	S3	80mm (3-inch) SST
	XX	Special
	Mounting Flange Rating	A1
A2		ANSI Class 300
J1		JIS 10K
J2		JIS 20K
D1		DIN PN 10/16
D2		DIN PN 25/40
Extension Length	5	50mm (2inch)
	10	100mm (4inch)
	15	150mm (6inch)
	XX	Special
Wetted Parts Material Diaphragm/Others	S	DIAPHRAGM 316L SST
	PT	PTFE + 316L SST
	H	Hastelloy C-276
	T	Tantalum
	X	Special
		OTHERS 316L SST
Fill Fluid	2	FILL FLUID D.C Silicone 200
	7	D.C Silicone 704
	X	Special
		TEMPERATURE LIMITS -40 ~ 205 °C (-40 ~ 400 °F) 0 to 315 °C (32 to 600 °F)
Capillary Length (m)	□□	Capillary Length from 1 to 12m (Example for 3m : 03)
Materials of Construction	CS	FLANGE Plated C.Steel
	SS	316 SST
		VENT / DRAIN VALVE 316 SST
Electrical Connection	1	ELECTRICAL CONNECTION 1/2-14NPT
	2	G1/2
	X	Special
		MATERIAL Epoxy Coated-Aluminum
Hazardous Locations Certifications	K0	Maker Standard (Waterproof : IP67)
	K1	KOSHA Flameproof Approval : Ex d IIC T6.
	K2	KTL Intrinsic Safety Approval : Ex ia IIC
	E1	ATEX (KEMA) Flameproof
	*E2	ATEX (KEMA) Intrinsic Safety
	C1	CSA Explosion proof
	*C2	CSA Intrinsic Safety
	F1	FM Explosion proof
	*F2	FM Intrinsic Safety
	Option	M1
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
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Note 1 : Request to manufacturer for Draft Range, Absolute (small pressure and vacuum) and Items marked " * " before order.

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AUTROL®

APT3100L

Smart Transmitter with Diaphragm Seal

Direct Mount Type

APT3100LFD / LED



Two Remote Type

APT3100LFC / LEC



One Remote Type

APT3100LFS / LES

