



LEVEL / LEAK DETECTORS 586

ELECTRO-OPTIC TYPE LEVEL SENSOR

FEATURES

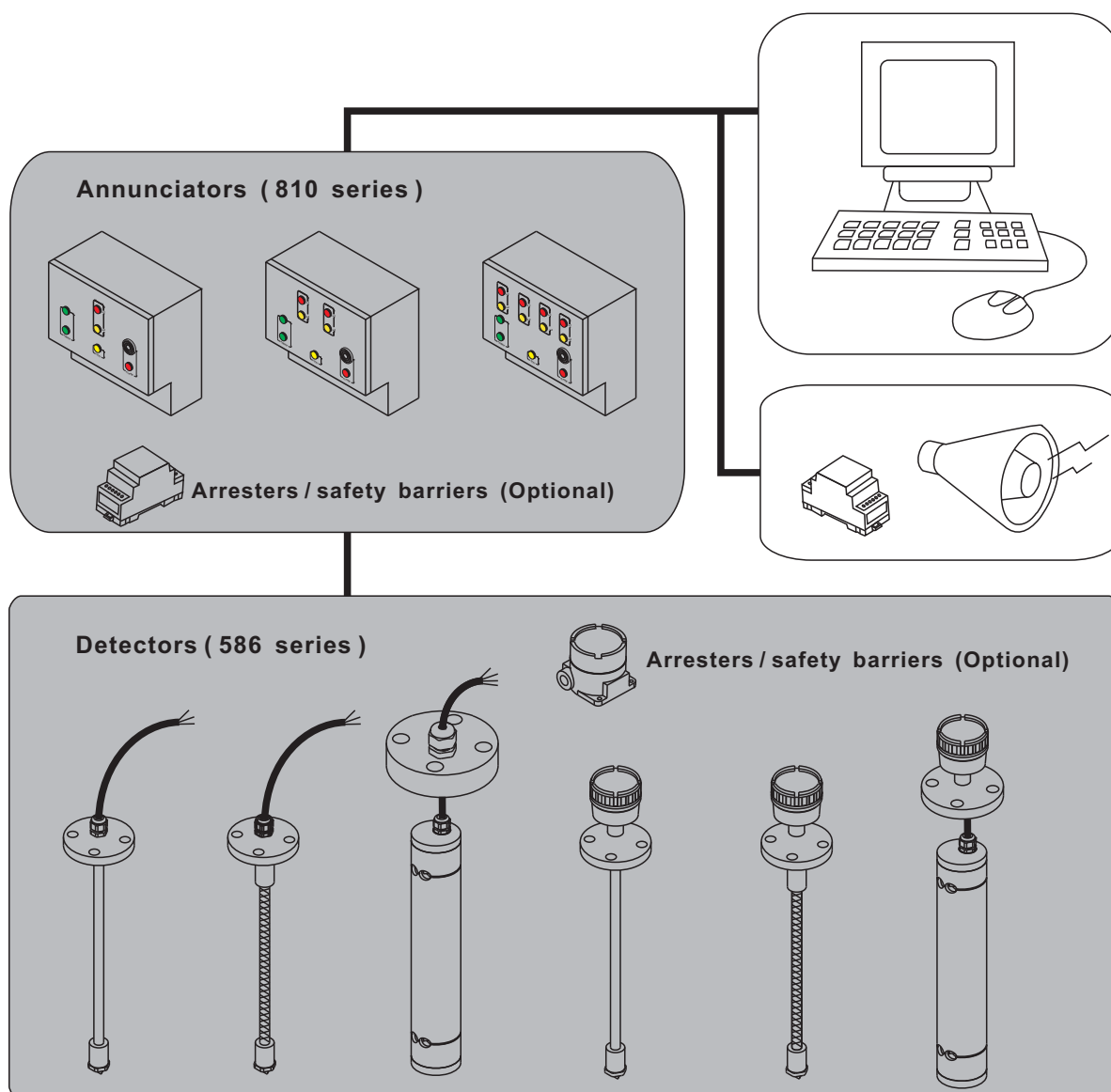
- EASY TO INSTALL / MAINTENANCE FREE
- DETECTOR BY ELECTRO-OPTIC SENSOR
- UNAFFECTED BY HYDROCARBON VAPORS OR CONDENSATION
- HIGH REALIABILITY & ACCURACY
- SIX TYPES OF DETECTOR FOR TANKS(VESSEL) LEAKAGE
- DETECT LIQUIDS FROM ANY ANGLES
- 586B-0 & 586B-1/2 SENSORS FOR DRY DOUBLE-WALL FIBERGLASS TANKS
- INTRINSICALLY SAFE DESIGN AND AMP, FEATURED BY THE USE OF UL RECOGNIZED PARTS
- ARRESTER CAN BE ADDED FOR PROTECTION OF ELECTRONIC DEVICES
- SAFETY BARRIER CAN BE ADDED TO CREATE INTRINSICALLY SAFE SYSTEM



Exd IIC T6, IP68

TD0601S0 (ETC) 2019 07-00003X
(P/N:AA1-5A / AA1-6A for housing only)

SYSTEM CONFIGURATIONS



SPECIFICATIONS

SERIES / TYPE

High or low level for 586A-0, 586A-1/2
Double-wall dry fiberglass for 586B-0, 586B-1/2
Brine-filled double-wall tank for 586C-0, 586C1/2

ELEMENT

Phototransistors

POWER SUPPLY

5V DC (st'd) or options (12V DC or 24V DC)

LOAD CURRENT

≤ 100mA

POWER CONSUMPTION

5V @ 10mA

SIGNAL CONDITION

Empty – Beam light NC

Alarm – Beam light opens-refract

BEAM ACCURACY / RESOLUTION

± 4mm

REPEATABILITY

± 1mm

RESPONSE TIME

Immediate

MATERIALS—WET PARTS

UPVC (St'd), CPVC or PVDF for options

–Housing

ADC with polyester epoxy painted(st'd), or 316SS(option)

–Cable

CVVS #22 AWG 3C or 4C

CABLE LENGTH

6m (st'd) up to 60m max. (for options)

CONNECTION

3" ANSI 150# flange (st'd) or options

HOUSING ENCLOSURE

IP68(St'd) or Exd IIC T6 (option)-by TS approved

OPERATING TEMPERATURE

-5°C ~ +60°C

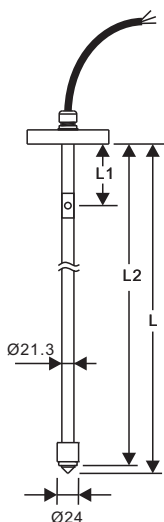
AMBIENT TEMPERATURE

-10°C ~ +80°C

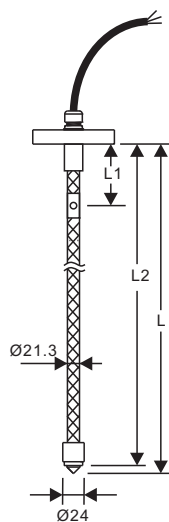
DIMENSIONS

Unit : mm

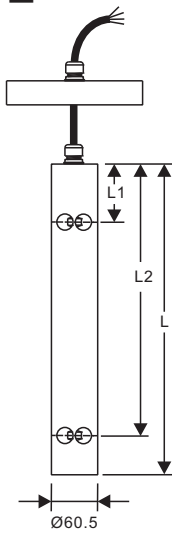
586A-0



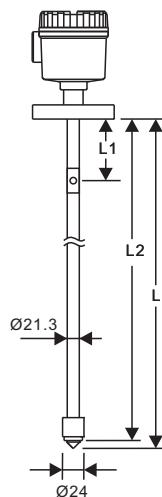
586B-0



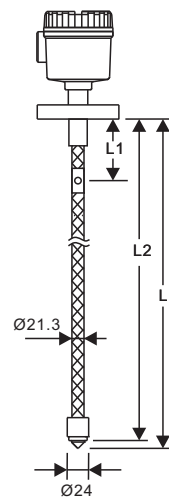
586C-0



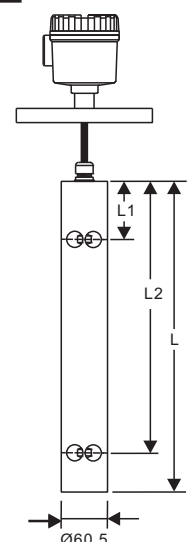
586A-1/2



586B-1/2

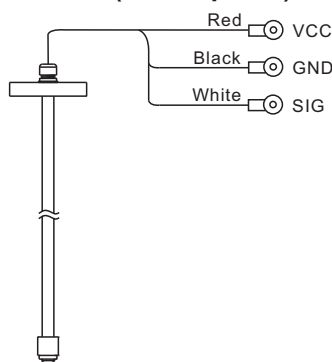


586C-1/2

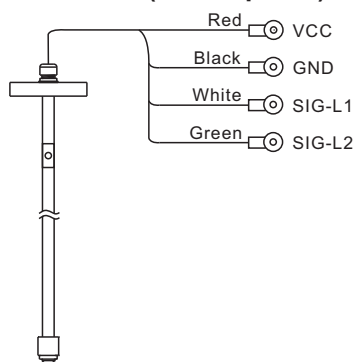


WIRING CONNECTIONS

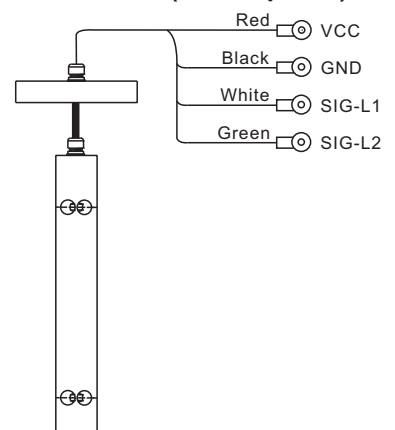
586A/B-0 (For 1-point)



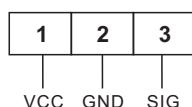
586A/B-1/2 (For 2-point)



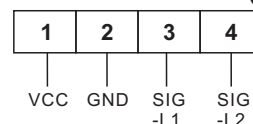
586C-0/1/2 (For 2-point)



586A/B-11 / 586A/B-21 (For 1-point)



586A/B-12 / 586A/B-22 (For 2-point)

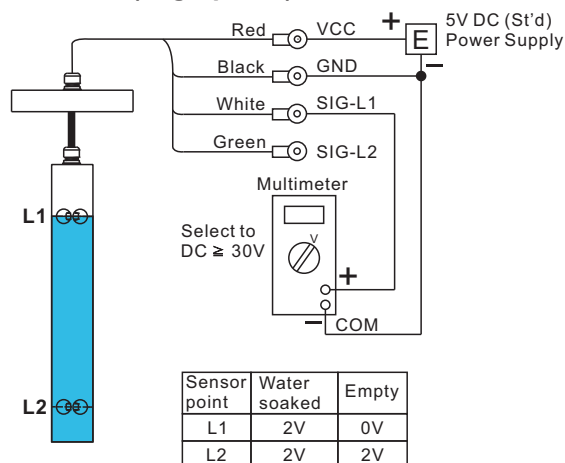


MODEL SELECTIONS

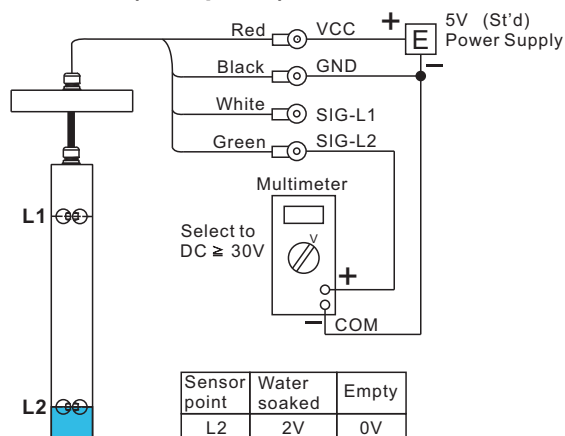
ITEMS	CODE	SPECIFICATIONS			
① MODEL	586A	Level/leak detector for sump pits or tanks			
	586B	Level/leak detector for dry double-wall tank			
	586C	Level/leak detector for brine-filled double-wall tank			
	586D	To be specified			
② ASSEMBLY	— 0	With an extension cable			
	— 1	With housing IP68 (by TS approved)			
	— 2	With explosion-proof housing Exd IIC T6, IP68 (by TS approved)			
	— 3	To be specified			
③ DETECTING POINTS	1	1-point per set			
	2	2-points per set			
	3	To be specified			
④ PROCESS CONNECTION	0	3" ANSI 150# flange (St'd)			
	1	4" ANSI 150# flange			
	2	3" NPSM coupler			
	3	4" NPSM coupler			
	4	To be specified			
⑤ WETTED MATERIALS	CODE	CONNECTION	PROBE OF 586A / C	PROBE OF 586B	SENSOR BODY
	— A	UPVC	UPVC (≤ 40°C)	PVC Tube (≤ 6 bar)	PC
	— B	UPVC	CPVC (≤ 60°C)	PVC +SS Tube (≤ 10 bar)	PES
	— C	UPVC	PVDF (≤ 100°C)	PTFE +SS Tube (≤ 10 bar)	PES
	— D	To be specified			
⑥ CABLE / HEAD MATERIALS	CODE	586 □ — 0 (Cable version)		586 □ — 1/2 (With housing)	
	A	VCT/WRC approved (0.3mm²-3C/4C)		Aluminium ally w / painting	
	B	CVVS 22AWG (3C / 4C)		316SS	
	C	To be specified			
⑦ CABLE CONDUIT	A	M15 cable gland		1/2" NPT (F)	
	B	To be specified			
⑧ L-LENGTH (PROBE LENGTH)	A	Less than 500mm			
	B	Less than 1000mm			
	C	To be specified			
⑨ OPTIONAL	/ A	Not required		/ C	With Annunciator (810 series)
	/ B	With signal transducer (355 series)		/ D	To be specified

FUNCTIONAL TESTING AT FIELD SITE

■ For L1 (High point)



■ For L2 (Low point)

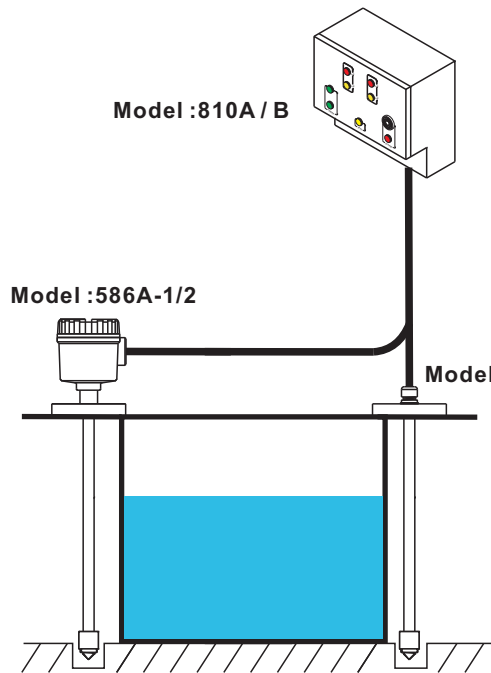


Directions:

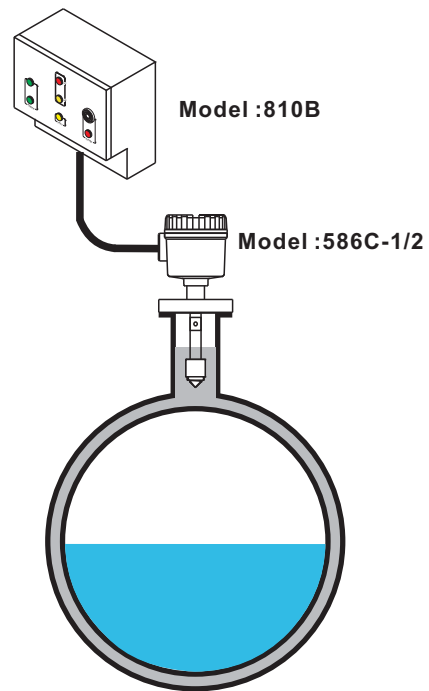
- 1). Before testing, prepare the multimeter and water vessel.
- 2). The functional position of the multimeter should be selected at the position of DC voltage above 30V.
- 3). The depth of the water vessel should be able to measure at least the sensor point of L1.
- 4). When the sensor point is immersed in water, the multimeter will display approx. 2V or approx. 0V when the sensor point is waterless.
Such test results indicate that the sensor is in normal operation.

APPLICATIONS OF 810 & 586 SERIES

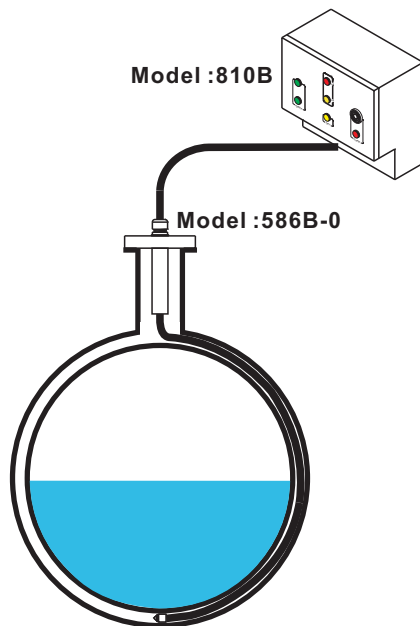
FOR SUMP PITS



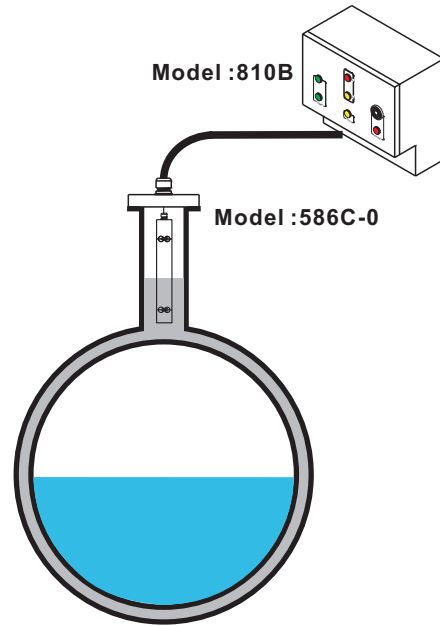
FOR BRINE-FILLED DOUBLE-WALL TANK



FOR DRY DOUBLE-WALL TANK



FOR BRINE-FILLED DOUBLE-WALL TANK



Important

When carrying or moving the detector, do not bump or place it in an unclean or high-temperature environment during installation or functional testing.

Ensure wires are connected correctly within permissible range of voltage.

Disclaimers

Doers accepts no legal liabilities and void warranty against any change and/or adjustments made to the structure of the product or parts, or use of partial system (detector to annunciator) unless official written authorisation is provided by Doers.

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