

TANK GAUGING SYSTEM

DATA SHEET FOR HYDROSTATIC LEVEL TRANSMITTER

MODEL 171 - HLT

Sr No		Specification	Description
1	General	Make	SBEM Pvt LTD,Pune
2		Model	171 HLT
3	Mounting Variation	Mounting Variation	Cable Suspended ,Cable Suspended Clamp, Pole Mounted ,External Flanged or External Threaded on Tank.
4	Performance	Accuracy	±0.2% of calibrated span OR ±0.5% of calibrated span
5		Temperature Drift	±0.015% /°C
6		Measuring Range	1 to 30 m H2O
7		Nominal Pressure Range	A- 1 to 3.5 m H2O B- 1.75 to 7 m H2O C- 2.5 to 10.5 m H2O D- 5 to 20 m H2O E- 7.5 to 30 m H2O F - 0.4 to 1 m H2O
8		Pressure Sensor Over Limit	2 x Range
9		Power Supply	13 to 30VDC For Ex Version drop across barrier at 20mA = 9V.
10		Output Signal	2Wire -4-20mA
11		Load Resistance	R = 50 x (Supply voltage – 13V) Ω ,Typically 550Ω @ 24VDC (Cable resistance + Indicator input resistance + Barrier resistance)
12	Construction	Process connection	Mounting Connection :- <u>Sensor Construction</u> :-Diaphragm: stainless steel 316L (Standard)/ Ceramic <u>Housing</u> : Stainless Steel 316L (Standard) /SS321/Titanium (Gr 5) or Duplex A996 (CF 3MNGR 5A)
13		Wetted Parts	
14		Sensor Material	High Stable and High Accurate Piezoresistive Pressure Sensor / Ceramic (96% AL2O3) measuring cell
15		Sensor Type	Piezoresistive Sensor
16		Diaphragm Material	SS316L,Titanium, Gold Plated
17		Housing Material	SS316, SS316L, Titanium
18		Cable Material	PVC/Polyethylene
19		Ingress Protection	IP68 (Suitable for Continuous Immersion)
20	Environment	Operating Temperature	-10 to +70°C
21		Storage Temperature	-40°C to +85°C
22		Compensated Temperature Range	0°C to 60°C
23		Humidity Limit	0 to 100% RH
24	Accessories	Accessories	IP 65/66 Junction Box with Breather Opening to atmospheric pressure. FLP version also possible OR certified 171-ZBI (FLP / WP / DIN) for IS applications.
25	Approval	Explosion Safety	Intrinsic Safe Ex ia IIB T6 Ga IP-68 (-10°C to +60°C)
26		Marine Approval	Indian Register of Shipping (IRS)
27	Safety	EMI-EMC	As per IEC 61000-4-2 to 6
28		Environmental	As per IEC 60068-2
29	Cable Length	Max Cable length from 171-HLT to Indicator	For Non IS version :- Cable Resistance = [(50 X (Supply Voltage - 13)) - Indicator input resistance Ω] For IS version, Cable Resistance = [(50 X (Supply Voltage - 13))- 445(Barrier resistance Ω) - Indicator input resistance Ω]

DS-171-0101-R04

Note :- The maximum cable length from 171-HLT to Indicator is selected so as minimum 13 VDC should reach to 171 - HLT (*Refer point no 29 for details)