



# FD-05

## Miniature Hydrostatic Level Transmitter

### Features

- / Slender 0.63" (16mm)
- / Accuracy 0.25% or 0.1%
- / Up to 200 m water-column
- / 2- or 3-wire-technology
- / <50 ms reaction time
- / Desiccant filter

### Description:

This miniature hydrostatic level transmitter measures the height of a water-column, residing above a stainless-steel membrane, via the hydrostatic pressure. A piezoresistive probe converts the registered pressure into a 4...20 mA signal, proportional to the fluids level. The corresponding current output operates with 10 to 33 VDC power supply. The suspension can be carried over the cable and the proven 2- or 3-wire-technology keep the installation costs very low.

### Application:

This level transmitter can be used everywhere, where an exact and stable output signal about the level is needed. The sensors very small diameter even enables mounting it through a hole in a tank. With its small membrane, the FD-05 is to be used best with clear fluids, and non-polluted liquids. Possible areas of application could be balast tanks, remote maintenance, ground water monitoring, flood monitoring, surface-water monitoring, drainage systems, environment monitoring, tight pipes & narrow plants and drill hole monitoring.



## Technical Specifications:

<b>Service /</b>	compatible liquids
<b>Accuracy /</b>	±0.25% or ±0.10% FS. 4.3...4.9 psi (10...11.54 in w.c.) configured ranges are ±0.30% FS accuracy
<b>max. Pressure /</b>	2X FS
<b>max. Media temperature /</b>	-4 to 176°F (-20...80°C)
<b>Compensated temperature limits /</b>	0.25%: 32...158°F (0...70°C) 0.10% FS: 32...140°F (0...60°C)
<b>Thermal effect /</b>	0.25%: ±0.45% FS TEB 0.10%: ±0.30% FS TEB
<b>Wetted materials /</b>	
Body and nose:	316 ss
Cable:	Polyether polyurethane or ETFE
Seals:	Fluoroelastomer
<b>Mounting connection /</b>	Suspended below point being monitored
<b>Weight /</b>	Body: 0.235 lb (0.107 kg) Cable: 0.037 lb (0.17 kg) per foot

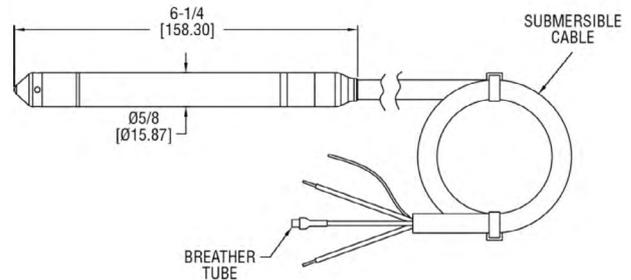
## Ordering Codes:

<b>Order Number</b>	<b>FD-05.</b>	<b>1.</b>	<b>3.</b>	<b>1.</b>	<b>C.</b>	<b>X</b>
<b>FD-05 Miniature Hydrostatic Level Transmitter</b>						
<b>Accuracy /</b>						
1 = 0.10% FS						
2 = 0.25% FS						
<b>Output /</b>						
1 = 4...20 mA						
2 = 0...2 V						
3 = 0...2.5 V						
4 = 0...3 V						
5 = 0...4 V						
6 = 0...5 V						
7 = 1...5 V						
<b>Cable Material /</b>						
1 = ETFE						
9 = polyurethane						
<b>Pressure range /</b>						
A = 5 m watercolumn, cable length 12.2 m (only ±0.25% FS)						
B = 10 m watercolumn, cable length 15.2 m						
C = 20 m watercolumn, cable length 26 m						
D = 30 m watercolumn, cable length 36 m						
E = 40 m watercolumn, cable length 46 m						
F = 60 m watercolumn, cable length 66 m						
G = 100 m watercolumn, cable length 106 m						
H = 200 m watercolumn, cable length 206 m						
<b>Option /</b>						
X = none						
Y = Desiccant filter for vent tube. Removes humidity for protection of the sensor. Changes color to show saturation.						

## Electrical Specifications:

<b>Power requirements /</b>	
Current output:	10...33 VDC
Voltage output:	8...33 VDC
<b>max. Current /</b>	5 mA (no load)
<b>Output signal /</b>	4 to 20 mA DC 2-wire or 0...5 V
<b>Response time /</b>	< 50 ms
<b>max. Loop resistance /</b>	1000 Ω @ 30 VDC (current output)
<b>Voltage output impedance /</b>	10 Ω + 4.4 Ω / 100' cable (voltage output)
<b>Electrical connections /</b>	bare cable ends
<b>Electrical protection /</b>	Surge/lightning protected per EN61000-4-5, Class 5
<b>Agency approvals /</b>	CE

## Dimensions:



## Wiring Diagram:

