

# dB10 Transducer datasheet



Pulsar's dB10 non-contacting ultrasonic transducers offer compact, robust measurement for liquids and solid application. An innovative approach to transducer design in combating electrical noise, Pulsar has incorporated a low voltage communication and the use of digital echo processing, makes cable splicing issues a thing of the past.



## Measurement Range

Range: 1.0ft. – 33.0 ft. (0.3m – 10.0m)

## Performance

Accuracy: 0.1% of max range.

Resolution: 0.04 inch (1.0mm)

Operating Temperature: -40 to 194°F (-40 to +90°C)

Beam Angle: Effective 3° full beam angle with algorithms  
<10° full beam angle at -3dB, 50KHz

Return Echo: A digital current signal (for eliminating electrical noise) and returned back to the microprocessor for signal processing.

## Standard Mounting

Mounting: 1" NPT rear

Enclosure Material: Valox 357 PBT (Polybutylene terephthalate)

## Optional Mounting

Harsh Chemical Applications: 1" NPT rear - PVDF body

Standard Applications: 2.0" NPT front nose mount

Harsh Chemical Applications: 2.0" NPT front nose mount – PVDF nose

Harsh Chemical Applications: Flange ANSI 2" - 8" – PTFE flange face

Harsh Chemical Applications: Sanitary Flange 3" – PVDF

## Approvals

Enclosure Rating: NEMA 6P (IP68)

Area Classification: FM/FMC: Class I, Div. 1, Groups A-D and Class II, Div. 1, Groups E-G . ATEX EEx m IIC

Option Classification: Intrinsically Safe, ATEX EEx ia

## Other Options

Flood Applications: Submersible Shield

Intrinsically Safe: I.S. (EEx ia), ATEX Zone 0

Solid Application: Foam Face (solids applications)

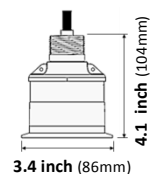
## Cable Connection

Cable Splicing: Cable splicing is not an issue.

Cable Extension: 3-conductor 20 AWG shield

Maximum Separation: 3,280 ft. (1km) between transducer and transceiver  
(12,600 ft. (3.8km) is achievable, contact manufacturer for more information.)

## dB10



**Submersible Shield**

**Front Nose Mount**

**PVDF Front Nose Mount**

**PVDF Body**

**Flange PTFE Face**

**Sanitary Flange PVDF**

**Foam Face**

