

dB3 Transducer datasheet



Pulsar's dB3 non-contacting ultrasonic transducers offer compact, robust measurement for liquids and short range 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: 0.42ft. – 10.0 ft. (0.125m – 3.0m)

Performance

Accuracy: 0.1% of max range.

Resolution: 0.02 inch (0.5mm)

Operating Temperature: -22 to 176°F (-30 to +80°C)

Beam Angle: Effective 3° full beam angle with algorithms
<10° full beam angle at -3dB, 125KHz

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 and front

Enclosure Material: Valox 357 PBT (Polybutylene terephthalate)

Optional Mounting

1.5" NPT front nose mount

Harsh Chemical Suitable: 1.5" NPT front nose mount – PVDF nose

Harsh Chemical Suitable: Sanitary Flange 2", 3" – PTFE face

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

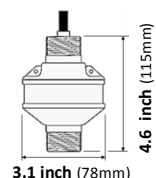
Cable Connection

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.)

dB3



Submersible Shield



Front Nose Mount



PVDF Front Nose Mount



Sanitary Flange PTFE face

