dBi15 Intelligent Transducer

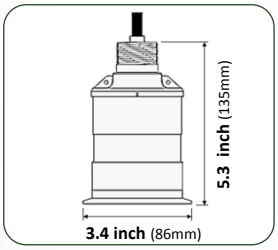
HART data sheet

Pulsar's **dBi15 Intelligent Transducer** is non contact ultrasonics combining compact sensor and controller in one innovative design, using HART or a 4-20mA output. Pulsar has incorporated a low voltage device, that uses digital echo processing, and enjoys the full benefits of Pulsar's advanced DATEM echo processing, for a reliable, consistent result.

dBi15 - General

Function:	Level, Distance, Space or Volume
Mounting:	1" NPT rear standard (other option available)
Housing Material:	Valox 357 PBT (Polybutylene terephthalate) (other option available)
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
Boot Up Time:	4 seconds for a valid reading
Supply	
Power Supply:	4-20mA loop 10-28V DC
Power Consumption:	0.48W (20mA at 24vDC)
Performance	
Range:	1.6 ft. – 50.0 ft. (0.5m – 15.0m)
Temperature:	FM/FMc = -40 to 147°F (-40 to 64°C) / I.S. = -40 to 176°F (-40 to 80°C)
Accuracy:	0.20 inch (5mm) - up to 33ft. (10m) range 0.39 inch (10mm) - over 33ft. (10m) range
Resolution:	0.20 inch (5mm)
Beam Angle:	Effective 3° full beam angle <8°-10° full beam angle at -3dB
Output	
Analogue Output:	loop 4-20mA (3.8 – 22mA), HART Signaling
Protocol Output:	HART, FSK (Frequency Shift Keying) modulation of 1200-2400Hz
Output Functions:	Level, Distance, Space or Volume
Programming	
Programming:	Signal over cable, for setup and data collection using HART protocol (version 7) via Intelligent Transducer PC Software
HART Configuration:	Individually addressable transducers
PC Interface:	Pulsar HART PC - all parameters accessible and echo traces viewable
Echo Processing	
Echo Processing:	Digital Echo Processing
Processing Feature:	DATEM Obstruction Masking (unique patented intelligent masking technology, continually adapting to prevent false levels being shown)

dBi15



Submersible Shield

Flange PTFE Face

Foam Face