

dBi HART INTELLIGENT TRANSDUCERS

Technical Specifications:

The Pulsar dBi HART Transducer Series is a range of self-contained, intelligent non-contacting ultrasonic level measurement transducers which make use of HART communication protocols to make plant integration simple.



PHYSICAL: TRANSDUCER SPECIFIC:

| | dBi3 | dBi6 | dBi10 | dBi15 |
|--------------------------------|----------------------------------|--------------------------------------|---|--|
| Sensor Body Dimensions: | 77 mm D x 134 mm H (3 in x 5 in) | 86 mm D x 121 mm H (3.4 in x 4.8 in) | 86 mm D x 121 mm H (3.4 in x 4.8 in) | 86 mm D x 121 mm H (3.4 in x 4.8 in) |
| Weight: | 1 kg (2.2 lb) | 1.2 kg (2.7 lb) | 1.3 kg (2.9 lb) | 1.4 kg (3.1 lb) |
| Measurement Range: | 125 mm to 3 m (4.9 in to 9.8 ft) | 300 mm to 6 m (11.8 in to 19.7 ft) | 300 mm to 10 m (11.8 in to 32.8 ft) | 500 mm to 15 m (19.7 in to 49.2 ft) |
| Frequency: | 125kHz | 75kHz | 50kHz | 41kHz |
| Beam Angle: | <10° | <10° | <10° | <8° |
| Accuracy | 2 mm (0.08 in) | 4 mm (0.2 in) | 3 mm (0.1 in) up to 6 m (19.7 ft) range 6 mm (0.2 in) over 6 m (19.7 ft) range | 5 mm (0.2 in) up to 10 m (32.8 ft) 10 mm (0.4 in) over 10 m (32.8 ft) range |
| Resolution: | 1 mm (0.04 in) | 2 mm (0.08 in) | 3 mm (0.1 in) | 5 mm (0.2 in) |

PHYSICAL: ALL TRANSDUCERS

Sensor Body Material: Valox 357 PBT

Cable Lengths: Standard: 5 m, 10 m, 20 m, or 30 m (16.4 ft, 32.8 ft, 65.6 ft, or 98.4 ft)
Optional: up to 150 m (492 ft) maximum (increments of 10 m (32.8 ft) only)

Mounting Connection: BSP or 1" NPT

ENVIRONMENTAL

Enclosure Protection: IP68 / NEMA 6P

Max. And Min. Temperature (Electronics): -40 °C to +80 °C (-40 °F to +176 °F), options for front thread and flange mounting

APPROVALS

CE Approval: Listed in the Certificate of Conformity within the manual

ATEX Approval: Standard: Zones 1 & 2 to Ex II 2 G Ex mb IIC T4 Gb, Ex II 2 D Ex mb IIIC T130 °C Db, Tamb= -40 °C to +80 °C
Optional: Zone 0 to Ex II 1 G Ex ia IIC T4 Ga, Ex II 1 D Ex ia IIIC T130 °C Da, Tamb= -40 °C to +80 °C

PERFORMANCE

Input voltage range: 10-28 V DC

Output: 4-20mA output, resolution 1µa

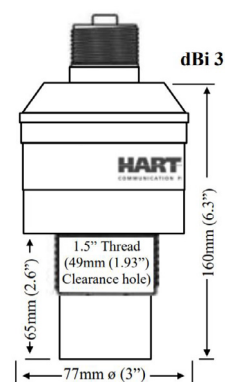
Current Consumption: 3.8-22mA

Boot Time: From power-up to stable reading:
Cold boot = 9 seconds,
Warm boot (within 12 hours from last start-up) = 4 seconds

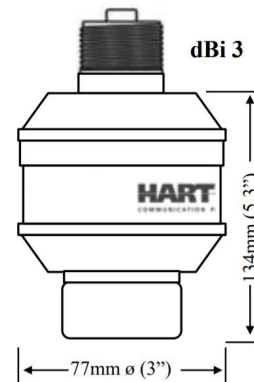
Communications Protocol: HART 7

TRANSDUCER OPTIONS

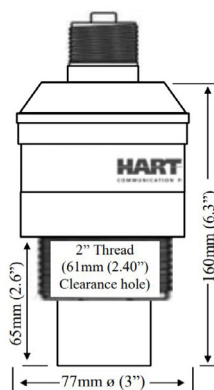
| | dBi3 | dBi6 | dBi10 | dBi15 |
|---|------|------|-------|-------|
| PVDF: | | ✓ | ✓ | |
| Front Threaded / PVDF: | ✓ | ✓ | ✓ | |
| Submergence Shield: | ✓ | ✓ | ✓ | ✓ |
| Flanged DIN / ANSI: | | ✓ | ✓ | ✓ |
| Foam Face: | | | ✓ | ✓ |
| Sanitary Flange | ✓ | ✓ | ✓ | |
| Intrinsically Safe of All the Above: | ✓ | ✓ | ✓ | ✓ |



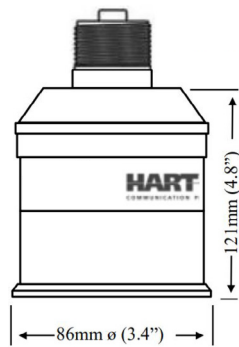
dBi3 & dBi6 Front Thread



dBi3 Rear Thread



dBi10 Front Thread



dBi6 & dBi10 Rear Thread



dBi15 Rear Thread



INFO@PULSARMEASUREMENT.COM

Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.

Copyright © 2020 Pulsar Measurement
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales

Delivering the Measure of Possibility

United States
11451 Belcher Road South
Largo, FL 33773
+1 888-473-9546

Canada
16456 Sixsmith Drive
Long Sault, Ont. K0C 1P0
+1 855-300-9151

United Kingdom
Cardinal Building, Enigma
Commercial Centre
Sandy's Road, Malvern WR14 1JJ
+44 (0) 1684 891371

Rev 3.0