

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 (3.39 in x 4.76 in)	86 mm D x 121 mm H (3.39 in x 4.76 in)	86 mm D x 121 mm H (3.39 in x 4.76 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:	0.125 m to 3 m (0.41 ft to 10 ft)	0.3 m to 6 m (0.98 ft to 20 ft)	0.3 m to 10.1 m (0.98 ft to 33 ft)	0.5 m to 15 m (1.64 ft to 50 ft)
Frequency:	125kHz	75kHz	50kHz	41kHz
Beam Angle:	<10°	<10°	<10°	<8°
Accuracy	2 mm (0.08 in)	4 mm (0.16 in)	3 mm (0.12 in) up to 6 m (20 ft) range 6 mm (0.24 in) over 6 m (20 ft) range	5 mm (0.2 in) up to 10 m (33 ft) 10 mm (0.39 in) over 10 m (33 ft) range
Resolution:	1 mm (0.04 in)	2 mm (0.08 in)	3 mm (0.12 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

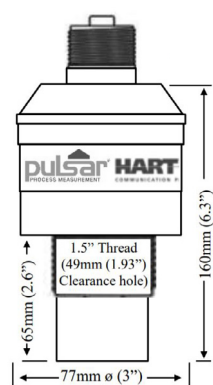
Input voltage range:	10-28 V DC
Output:	4-20mA output, resolution 1µa
Current Consumption:	3.8-22mA

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

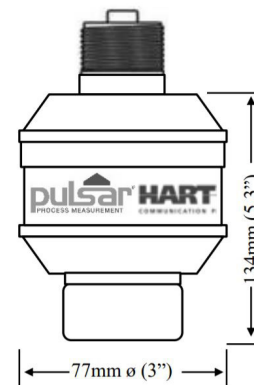
Communications Protocol: HART 7

TRANSDUCER OPTIONS

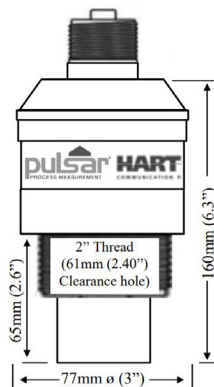
	dBi3	dBi6	dBi10	dBi15
PVDF:		✓	✓	
Front Threaded / PVDF:	✓	✓	✓	
Submergence Shield:	✓	✓	✓	✓
Flanged DIN / ANSI:		✓	✓	✓
Foam Face:			✓	✓
Sanitary Flange	✓	✓	✓	
Intrinsically Safe of All the Above:	✓	✓	✓	✓



dBi3 & dBi6 Front Thread



dBi3 Rear Thread



dBi10 Front Thread



dBi6 & dBi10 Rear Thread



dBi15 Rear Thread



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