The Pulsar dBi HART Transducer Series are a range of self-contained, intelligent non-contacting ultrasonic level measurement transducers which make use of HART communication protocols to make plant integration simple. Four range choices are available with either 3m, 6m, 10m or 15m range (10ft, 20ft, 33ft or 49ft).

**Technical Specification:**

**TRANSDUCER SPECIFIC:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Weight</th>
<th>Measurement Range</th>
<th>Frequency</th>
<th>Beam Angle</th>
<th>Accuracy</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>dBi3</td>
<td>77D x 134Hmm</td>
<td>1.0kg (2.2lb)</td>
<td>0.125 - 3m (0.41-10ft)</td>
<td>125kHz</td>
<td>&lt;10°</td>
<td>2mm (0.08in)</td>
<td>1mm (0.04in)</td>
</tr>
<tr>
<td>dBi6</td>
<td>86D x 121Hmm</td>
<td>1.2kg (2.7lb)</td>
<td>0.3 - 6m (0.98-20ft)</td>
<td>75kHz</td>
<td>&lt;10°</td>
<td>4mm (0.16in)</td>
<td>2mm (0.08in)</td>
</tr>
<tr>
<td>dBi10</td>
<td>86D x 121Hmm</td>
<td>1.3kg (2.9lb)</td>
<td>0.3 - 10m (0.98-33ft)</td>
<td>50kHz</td>
<td>&lt;10°</td>
<td>3mm (0.12in) up to 6m (20ft) range</td>
<td>3mm (0.12in)</td>
</tr>
<tr>
<td>dBi15</td>
<td>86D x 135Hmm</td>
<td>1.4kg (3.1lb)</td>
<td>0.5 - 15m (1.64-50ft)</td>
<td>41kHz</td>
<td>&lt;8°</td>
<td>5mm (0.2in) up to 10m (33ft) range</td>
<td>5mm (0.2in)</td>
</tr>
</tbody>
</table>

**ALL TRANSDUCERS:**

**PHYSICAL:**

- Sensor body material: Valox 357 PBT
- Cable lengths: Standard = 5m, 10m, 20m or 30m (16.4ft, 32.8ft, 65.6ft or 98.4ft), Optional: up to 150m (492ft) maximum (increments of 10m / 32.8ft 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)

**APPROVALS:**

- CE approval: Listed in the Certificate of Conformity within the manual
- ATEX approval: Standard: Zones 1 & 2 - Ex II 2 G Ex mb IIC T4 Gb, Ex II 2 D Ex mb IIIIC T130°C Db, Tamb= -40°C to +80°C Optional: Zone 0 - Ex II 1 G Ex ia IIC T4 Ga, Ex II 1 D Ex ia IIIIC T130°C Da, Tamb= -40°C to +80°C

**PERFORMANCE:**

- Input voltage range: 10-28Vdc
- Output: 4-20mA output, resolution 1μA
- Current consumption: 3.8mA to 22mA
- Boot time: From power-up to stable reading: Cold boot = 9 seconds, Warm boot (within 12hrs 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
- I.S. of all the above