

# dBR RADAR TRANSDUCERS

## Technical Specifications:

The dBR radar transducers are non-contacting transducers for level, volume, flow measurement, and pump control. They are compatible with all Pulsar controllers so that you have a specific solution to suit your application requirements. Radar transducers are also retrofittable to all existing Pulsar controllers in the field. Compact, lightweight, and effective radar sensing.



### PHYSICAL

<b>Model Options:</b>	dBR8 & dBR16
<b>Sensor Body Dimensions</b>	90 mm D x 130 mm H (3.54 in x 5.11 in)
<b>Weight</b>	Nominal 1.1 kg (2.4 lb)
<b>Measurement Range</b>	dBR8: 8 m (26 ft); dBR16: 16 m (52.5 ft)
<b>Frequency</b>	V-band
<b>Beam Angle</b>	8°
<b>Sensor Body Material</b>	Valox 357U
<b>Cable Lengths</b>	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) in 10 m (32.8 ft) increments
<b>Maximum Separation</b>	500 m (1,640 ft)
<b>Mounting Connection</b>	1" BSP or NPT
<b>Mounting Options</b>	ANSI or DIN flange

### ENVIRONMENTAL

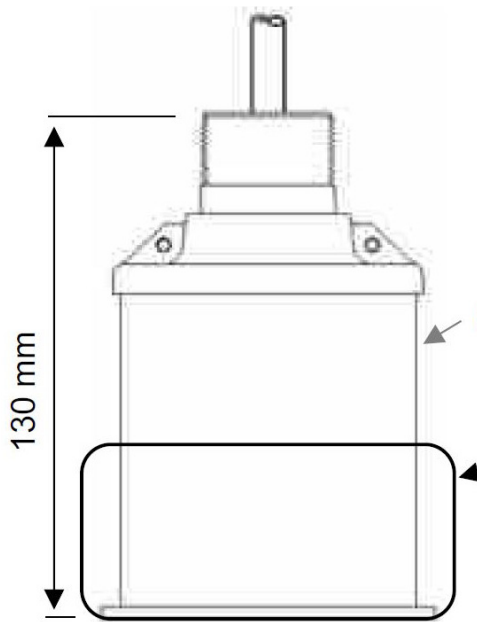
<b>Enclosure Protection</b>	IP68/NEMA 6P
<b>Max. &amp; Min. Temperature (Electronics)</b>	-20 °C to +80 °C (-4 °F to +176 °F)
<b>Process Pressure</b>	-1 to +4 bar (-14.5 to 58 psi)

### APPROVALS

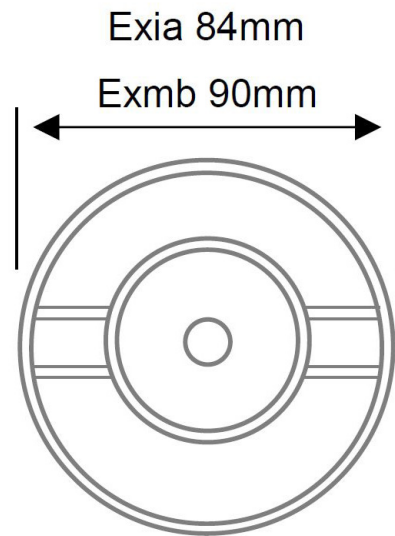
<b>CE Approvals</b>	Complies with EN61326-1:2013 for emissions and immunity Complies with EN302-729:2016 for radar emissions and immunity
<b>ATEX</b>	ATEX Zone 0 (Ex ia): Ex II 1 G Ex ia IIC T4 Ga Ta = -20 °C to +80 °C, Ex II 1 D Ex ia IIIC T135°C Da Ta = -20 °C to +80 °C. ATEX Zones 1 & 2: Ex II 2 G Ex mb IIC T4 Gb, Ex II 2 D Ex mb IIIC T135 °C Db

### PERFORMANCE

<b>Accuracy</b>	±2 mm (0.08 in)
<b>Repeatability</b>	±1 mm (0.04 in)
<b>Resolution</b>	±1 mm (0.04 in)
<b>Near Blanking Distance</b>	77 mm (3.03 in) from the drip shield



Radar Drawing with Drip Shield



Radar Diameter Drawing

## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of reps and distributors all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia allow us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

[www.pulsarmeasurement.com](http://www.pulsarmeasurement.com)



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