



# 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

Model Options:	dBR8 & dBR16
Sensor Body Dimensions	90 mm D x 130 mm H (3.5 in x 5.1 in)
Weight	Nominal 1.1 kg (2.4 lb)
Measurement Range	dBR8: 8 m (26.2 ft); dBR16: 16 m (52.5 ft)
Frequency	V-band
Beam Angle	8°
Effective Beam Angle (using DATEM)	3°
Sensor Body Material	Valox 357U
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) in 10 m (32.8 ft) increments
Maximum Separation	500 m (1,640 ft)
Mounting Connection	1" BSP or 1" NPT
Mounting Options	ANSI or DIN flange

### ENVIRONMENTAL

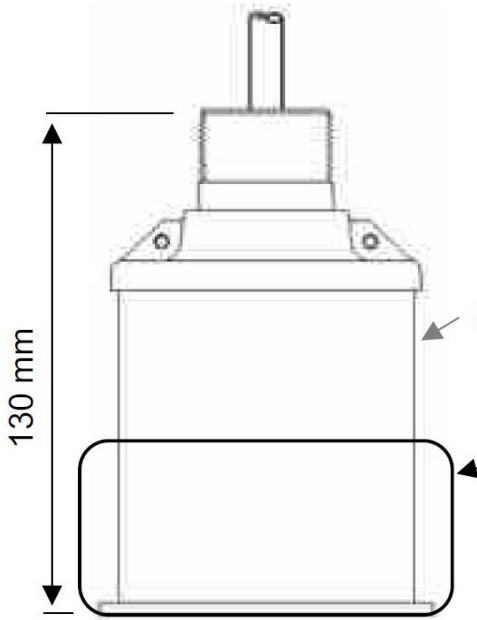
Enclosure Protection	IP68/NEMA 6P
Max. & Min. Temperature (Electronics)	-20 °C to +80 °C (-4 °F to +176 °F)
Process Pressure	-1 to +4 bar (-14.5 to 58 psi)

### APPROVALS

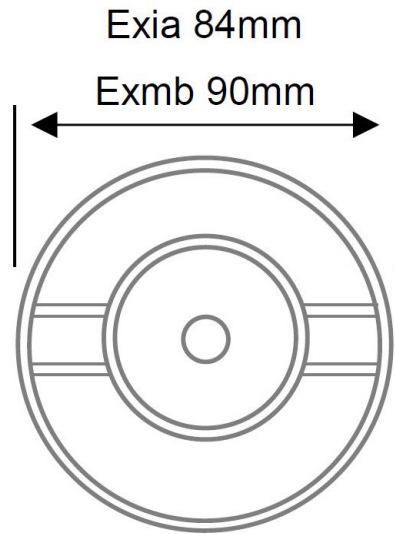
CE Approvals	Complies with EN61326-1:2013 for emissions and immunity Complies with EN302-729:2016 for radar emissions and immunity
ATEX	ATEX Zone 0 (Ex ia): Ex II 1 G Ex ia IIC T4 Ga Ta = -20 °C to +80 °C, Ex II 1 D Ex ia IIIC T135°C Da Ta = -20 °C to +80 °C. ATEX Zones 1 & 2: Ex II 2 G Ex mb IIC T4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

### PERFORMANCE

Accuracy	±2 mm (0.08 in)
Repeatability	±1 mm (0.04 in)
Resolution	±1 mm (0.04 in)
Near Blanking Distance	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 global partners 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, allows 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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