

DUET

Technical Specifications:

DUET is a unique twin-transducer design which provides the highest accuracy, non-contacting, ultrasonic flow measurement system available in the world (MCERTs Class 1 — 0.044% accuracy). DUET's two transducers fire together and continuously monitor the phase difference of the two echoes. As the distance between the transducer faces is known and constant, the speed of sound is continuously updated in real-time. The resulting accuracy and stability is exceptional and offers a unique, patented approach to the issue of accuracy when temperature and echo reflection time varies.



PHYSICAL

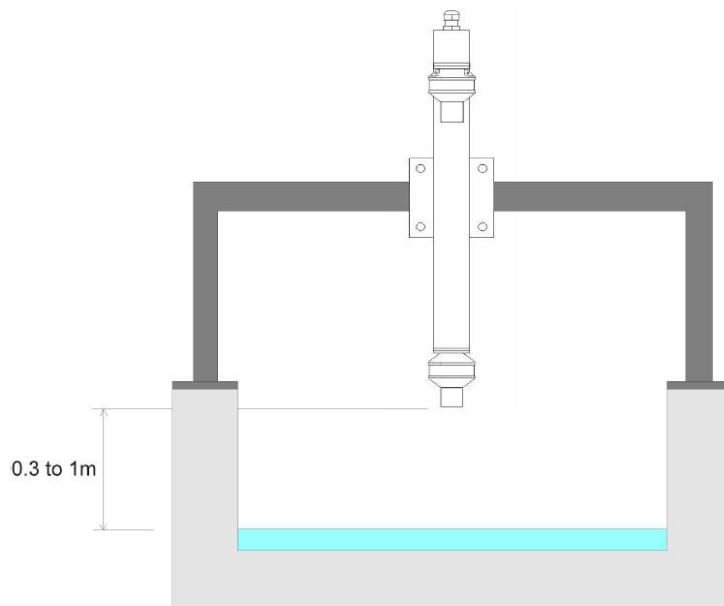
Dimensions:	Nominal 205 mm W x 640 mm H (8.1 in x 25.2 in)
Weight:	Nominal 4.7 kg (10.4 lb)
Materials:	<ul style="list-style-type: none"> • Transducers: Valox 357 U and syntactic foam face • Bracket: 304 stainless steel
Cable Lengths:	Standard = 5 m, 10 m, 20 m, or 30 m (16.4 ft, 32.8 ft, 65.6 ft, or 98.4 ft). Optional: up to 150 m (492 ft) maximum (increments of 10 m (32.8 ft) only)
Maximum Separation:	500 m (1,640 ft)
Mounting Connection:	BSP or 1" NPT

ENVIRONMENTAL

IP Rating:	IP68 / NEMA 6P
Max. & Min. Temperature (Electronics):	-40 °C to +90 °C (-40 °F to +194 °F)
MCERTS Certification:	0.044% combined accuracy — MCERTS Class 1 — Sira MC090154/00
CE Approval:	2014/30/EU — EMC & 2014/34/EU ATEX Directives. Standards applied: EN 60079-0:2012+A11:2013/ EN 60079-11:2012 / EN 60079-18:2009 / EN 60079-26:2007 / EN 61326-1:2013
ATEX Approval:	ATEX EEx m II T6 standard. FM/FMC approval available

PERFORMANCE

Measurement Range:	300 mm to 2 m (11.8 in to 6.6 ft) from the face of lower transducer (1.5 m (4.9 ft)) max. for MCERTS certification)
Frequency:	125 kHz
Beam Angle:	<10°
Controller Compatibility:	FlowCERT only



DUET 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



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*

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 4.0