



# DFM 6.1

## Technical Specifications:

Pulsar Measurement Doppler Flow Meters monitor the flow rate of dirty or aerated liquids including: wastewater, sewage, slurries, abrasives, and viscous liquids. Recommended for full pipes and any fluid that contains solids or bubbles.



### GENERAL SPECIFICATIONS

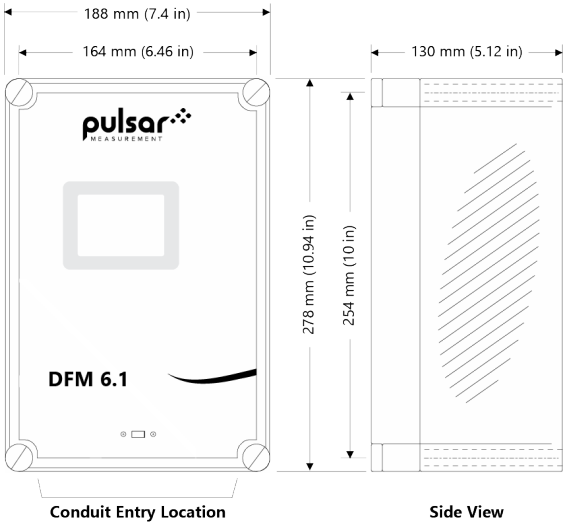
Operating Parameters:	Liquids containing suspended solids or bubbles minimum size of 100 microns, minimum concentration 75 ppm
Programming:	Built-in 5-button keypad with English, French, or Spanish language selection
Electronics Enclosure:	NEMA4X (IP66) polyester with a clear polycarbonate face
Accuracy:	±2% of reading or 30 mm/s (1.2 in/s) whichever is greater. Requires solids or bubbles minimum size of 100 microns, minimum concentration 75 ppm. Repeatability: ±0.1%, Linearity ±0.5%
Display:	White, backlit matrix — displays flow rate, relay states, 16-digit totalizer, operating mode, and calibration menu
Power Input:	<ul style="list-style-type: none"><li>• 100-240 V AC 5,060 Hz, 10 VA maximum</li><li>• Optional: 9-32 V DC, 10 W maximum</li></ul>
Analog Output:	Isolated 4-20mA (1 kΩ load max.) or 0-5 VC (field selectable)
Control Relays:	Qty 2, rated 5 A SPDT, programmable flow alarm, and/or proportional pulse
Data Logger:	Built-in 26 million point logger with USB output and Windows software
Operating Temp. (Electronics):	-23 °C to 60 °C (-10 °F to 140 °F)
Approximate Shipping Weight:	6.3 kg (14 lb)
Approvals:	CE, CSA/UL/EN 61010-1

### TRANSDUCER SPECIFICATIONS

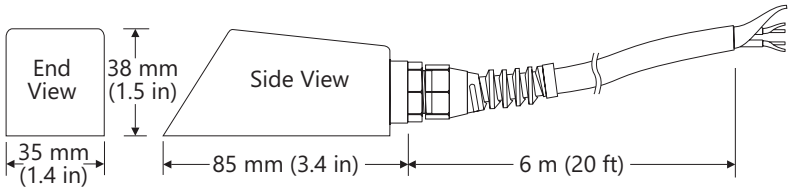
Transducer:	SE4 single-head stainless steel ultrasonic with 7.6 m (25 ft) shielded cable.
Pipe Diameter:	Any pipe ID from 12.7 mm to 4.5 m (0.5 in to 15 ft)
Flow Rate Range:	±0.03 m/s to 12.2 m/s (±0.1 ft/s to 40 ft/s)
Pipe Materials:	Steel, stainless steel, cast iron, ductile iron, concrete-lined ductile iron, PVC, HDPE, or any contiguous pipe material that conducts sound, including lined pipes with a liner bonded to the pipe wall. Avoid pipes with loose insertion liners and pipe walls that contain air.
Operating Temperature:	-40 °C to 150 °C (-40 °F to 300 °F)
Transducer Mounting Kit:	Adjustable stainless steel mounting kit for pipes 12.7 mm (0.5 in) ID or larger.
Ingress Protection	IP68, able to withstand submersion to 7m (22.9ft) of depth for 24 hours
Hazardous Locations:	Standard: Certified Non-Incendive for sensor mounting in Class I, Division 2, Groups A, B, C, D hazardous locations Optional: Certified Intrinsically Safe for sensor mounting in Class I, Division 1, Groups C and D; Class II, Groups E, F, and G; Class III; Type 4 Optional: Certified Intrinsically Safe for sensor mounting in ATEX/IECEx Zone 0, Ex ia IIB T4 Ga, hazardous locations

POPULAR OPTIONS

Industrial Automation Protocols:	Modbus RTU via RS485 or HART (field selectable)
Transducer Cables:	<ul style="list-style-type: none"><li>• 15.2 m (50 ft) continuous shielded coaxial pair</li><li>• 30.5 m (100 ft) continuous shielded coaxial pair, or splice up to 152.4 m (500 ft) with juntion box.</li></ul>
Enclosure Heater:	Thermostatically controlled to -40 °C (-40 °F)
Sunscreen:	Enclosure sunscreen for outdoor installations



DFM 6.1 Front & Side View



SE4 Ultrasonic Doppler Sensor

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.

For more information, please visit our website:

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



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