

ROSEMOUNT™ PDS42 Acoustic PIG Detector

Reliable and compact transmitter
for accurate detection of PIG
passage in real time

Pigging operations are critical to sustain increased hydrocarbon production and transportation performance. The accumulation of debris, corrosion proliferation, and other phenomena can jeopardize the pipeline's integrity and block the passage of pigs.

Get Real-Time PIG Passage Signal

The Rosemount PDS42 Acoustic Pig Detector utilizes the latest in acoustic technology, enabling operators to pinpoint the precise location of pigs within the pipeline during maintenance activities.

Reduce complexity with an easy-to-install device

With the latest in non-intrusive acoustic technology, the Rosemount PDS42 enables easy retrofitting to any location without incurring additional costs due to modifications to the existing infrastructure.

Optimize pipeline cleaning

Real-time indication of the scraped debris will help you plan the subsequent pig runs until the pipe is clean of debris, and ready to resume production.

Ensure efficient operations even in high temperature

Detect any type of pig in any fluid condition and get peace of mind that no event was missed. Rosemount PDS42 offers a flexible operating range between -40 °F (-40 °C) to 554 °F (290 °C) at pipe surface, covering most pipe diameters, up to 48".



Rosemount PDS42 Acoustic PIG Detector for efficient operations in pipeline cleaning



Compact Explosion Proof



Digital Remote Indication

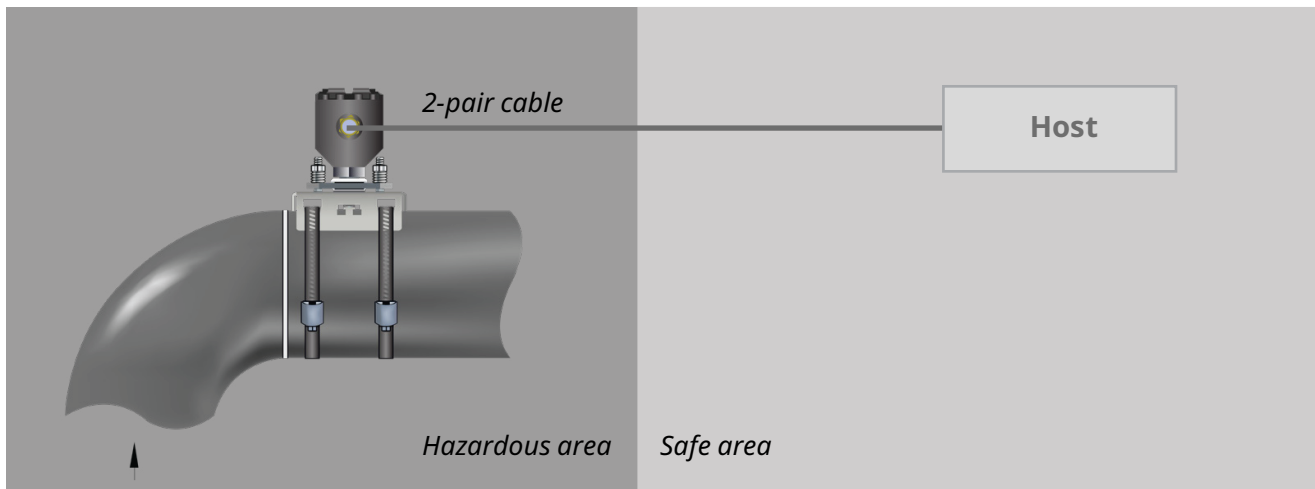


Real-time Debris Indication



High Temperature

REAL-TIME ACOUSTIC PIG DETECTION



System diagram showing how the Rosemount PDS42 Acoustic Pig Detector Ex d connects to the Host system.

Explosion proof/Flameproof installation scenario

Designed to be compact, the Rosemount PDS42 maintains a small footprint when mounted on pipework. Within this compact design the signal processing has been embedded, meaning that there is no need for software. The Rosemount PDS42 will simply send the messages and alerts directly to your DCS. All of this to offer the simplest in-field installation process and reduced maintenance costs.

Key Specifications	
Communication protocol	Modbus RS 485
Uncertainty	Up to +/- 2 seconds, depending on flow regimes and calibration level
Minimum velocity	Minimum 0.05 m/s depending on PIG material <ul style="list-style-type: none">• Steel PIG: minimum 0.05 m/s• Polymer PIG: > 0.5 m/s
Power consumption	0.13W
Hazardous area approvals	ATEX, IECEx, USA and Canada Explosion-proof, Ordloc
Temperature at pipe surface	<ul style="list-style-type: none">• Standard Temperature: -40 °F (-40 °C) to 266 °F (130 °C)• High Temperature: -40 °F (-40 °C) to 554 °F (290 °C)

*See product datasheet for full specifications

For more information, visit
[Emerson.com/RosemountPDS42](https://www.emerson.com/RosemountPDS42)

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