

Better Pigprox Better Solution



EddyFlex Drive Inspection Robot

Cable-Free Self-Propelled

Bidirectional Travel

Up to 12,000 m per Run



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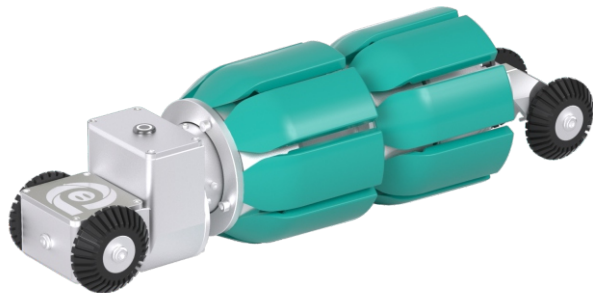
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EddyFlex Drive Overview

PIGPROX EddyFlex Drive Inspection Robot (EFD) is a cable-free, self-propelled eddy current ILI robot based on the EddyFlex platform.

It operates independently of pipeline media, supports bidirectional movement up to 1 m/s, and uses high-sensitivity EddyFlex probes with edge computing to detect metal loss, pinholes, dents, wrinkles, weld anomalies, and other defects. Designed for short industrial and stainless-steel pipelines without launching or receiving facilities, optional vision and gauging modules are available.



Features & Benefits

01 Cable-free self-propelled operation
No media driving required; suitable for shutdown inspection of short-distance pipelines without launchers and receivers.

02 Bi-directional autonomous movement
Supports speed control, start-stop, and reversing with speeds up to 1 m/s and up to 12,000 m per charge.

03 Accurate defect identification
Detects internal metal loss, pinholes, dents, wrinkles, weld anomalies and other internal defects.

04 Wider application scenarios
Applicable to short-distance industrial pipelines, stainless-steel pipelines and intermittent-service pipelines.

Technical Specifications

Item	PIGPROX EddyFlex Drive Inspection Robot
Applicable Diameter	4" to 12"
Tool Size	Length: 0.3 – 0.8 m (0.98 – 2.62 ft); Weight: 1.9 – 50.0 kg (4.19 – 110.23 lb)
Probe Configuration (8"as example)	20 EddyFlex eddy current probes
Applicable Materials	Carbon steel, stainless steel, alloy steel, bimetallic composite pipes and other conductive materials
Feature Identification Capability	Girth welds, tees, bends, valves, flanges, branch connections, etc.
Defect Detection Capability	Internal surface cracks, pinholes, internal metal loss, dents, wrinkles and weld anomalies

Power Module Specifications (6" as example)

Item	PIGPROX EddyFlex Drive Inspection Robot
Operating Speed	≤1.00 m/s (≤3.28 ft/s)
Movement Direction	Bi-directional movement
Travel Distance per Charge	12,000 m (39,370 ft / 7.46 mi)
Operating Time per Charge	6 h
Maximum Climbing Angle	≤15°

Sizing Accuracy

Defect Detection Threshold	POD = 90 %	1.5mm
Depth sizing accuracy	90 %Certainty	± 1.5mm
Length sizing accuracy		± 15mm
Width sizing accuracy		± 20mm
Axial positioning accuracy (from adjacent girth weld)		± 0.1m
Circumferential positioning accuracy		± 5°