

Ferromagnetic Gear Tooth & Target Proximity Sensor (P679 Series)

Direct Ferrous Metal (Steel / Iron) Detection Without External Magnet

Product Overview

Misensor Ferromagnetic Sensors incorporate an internal bias magnet with a high-sensitivity reed or magnetoresistive sensing element. Unlike standard magnetic sensors that require a separate magnet on the moving target, the P679 series directly detects the presence, proximity, or passing teeth of ferrous steel targets.

Key Features

- Directly senses carbon steel, iron gears, and ferr...
- No external magnet required on the moving part
- Hermetically sealed stainless steel or rugged plas...
- Zero standby power consumption (reed type) or high...
- IP67 waterproof and oil-resistant construction

Typical Applications

- Hydraulic cylinder piston & valve spool position d...
- Low-speed gear tooth counting & shaft rotation mon...
- Heavy machinery, agricultural equipment & railway ...

Technical Specifications & Model Selection

Model	Target Material	Sensing Distance	Contact / Output	Max Switching Voltage	Operating Temp	Protection
P679-01	Ferrous Steel (Fe)	1.5mm - 5.0mm	Form A (SPST-NO) 10W100V DC		-40°C to +105°C	IP67
P679-MR	Ferrous Gear / Slot	0.5mm - 3.5mm	NPN / Push-Pull	5V-24V DC	-40°C to +125°C	IP67