

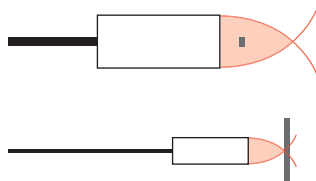
Inductive Proximity Sensors

THE MOST POPULAR AUTOMATION SENSOR

Technology:	Inductive (Eddy Current)	Typical Housings
Jargon:	Prox, Proximity Switch, Prox Switch, Prox Sensor	
Types of Targets:	Metals, Ferrous and Non-ferrous	
Typical Sensing Range:	0.5 mm to 50 mm (depends on size)	
Area of Application:	Inductive proxies are used to detect metal parts and metal machine components.	
How It Works:	An oscillating electromagnetic field is projected from the active surface. Metal targets entering the field absorb a tiny amount of power from the oscillator through the eddy current effect. When the power transfer reaches a threshold level, target detection is confirmed and the sensor output changes state.	

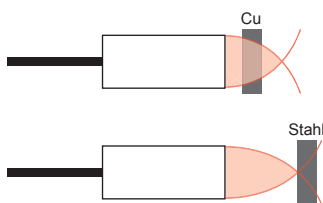
Three Gotcha's

Target Size



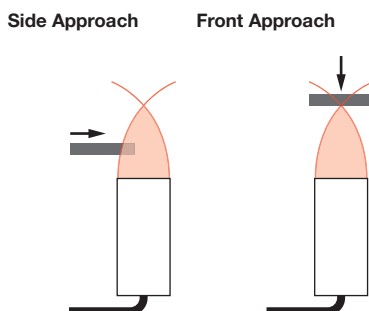
- A small target is hard to see with a big sensor
- Targets larger than sensing face are easier to see

Target Material



- Reduced range for non-ferrous metals
- The more conductive, the less range

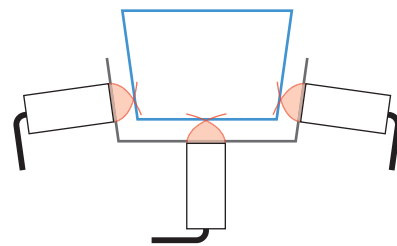
Target Approach Direction



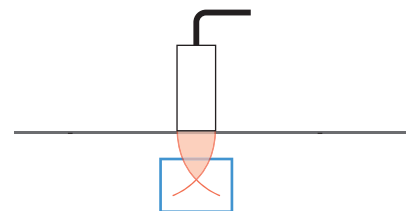
- Different switch point Side vs Front Approach

Common Applications

Part Seated/Nested



Part Presence



Cylinder End of Stroke

