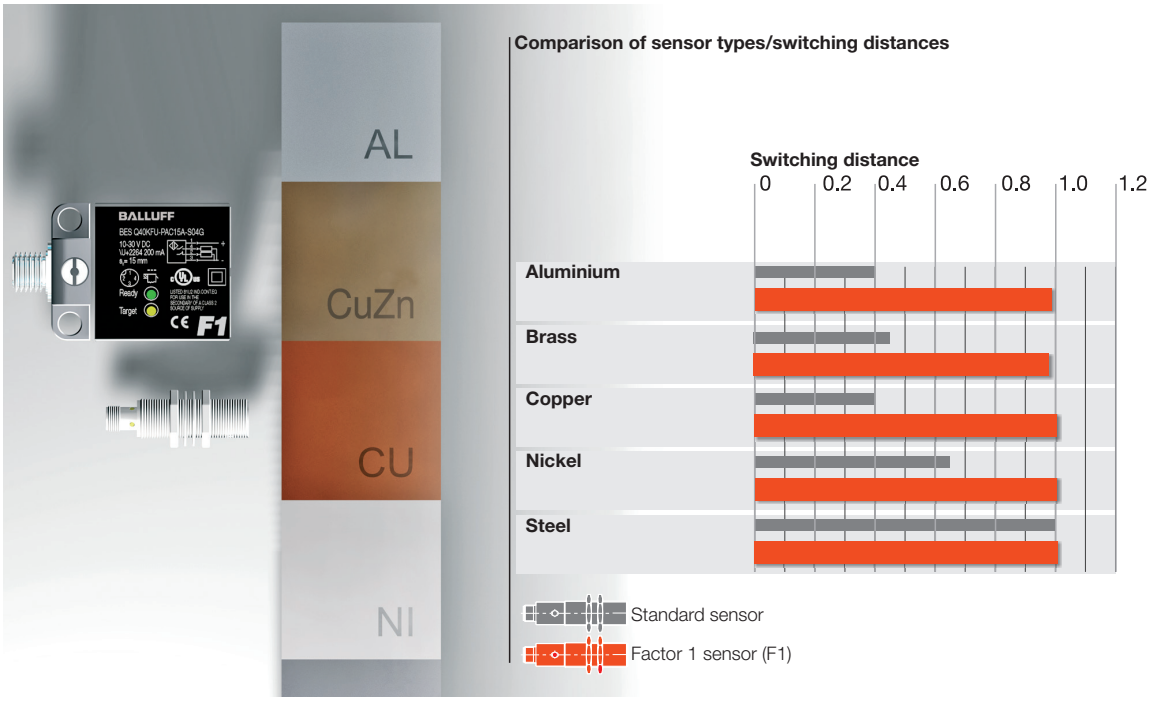
Standard Inductive Proximity Sensors vs. Factor 1 Inductive Proximity Sensors

COMPARISON OF SENSING A NON-FERROUS TARGET WITH INDUCTIVE SENSORS

How do I sense a non-ferrous target with inductive proximity sensors?

How it Works

Standard Inductive Proximity Sensors	vs.	Inductive Proximity Sensors with Factor 1
Standard Inductive Sensors are used for noncontact detection of metallic targets at ranges generally under 50mm (2 inches). Inductive proximity sensors emit an alternating electro-magnetic sensing field. When a steel (ferrous target) enters the sensing field, eddy currents are induced in the target, reducing the signal amplitude and triggering a change of state at the sensor output.		Factor 1 sensors are used for non-contact detection of metallic targets at ranges generally under 50mm (2 inches). Factor 1 proximity sensors emit an alternating electro-magnetic sensing field. When steel, aluminum or brass, (ferrous or non- ferrous) target enters the sensing field, eddy currents are induced in the target, reducing the signal amplitude and triggering a change of state at the sensor output.



Benefits and Info

■ Detects ferrous metal targets ■ Ignores water, oil, dirt ■ Larger product offering ■ Withstands high shock and vibration environments ■ Lower Cost	■ Detects ferrous and non-ferrous targets at the same operating distance ■ Immune to AC/DC magnetic fields ■ Saves time during installation as adjustments are minimized ■ Ignores water, oil, dirt ■ Withstands high shock and vibration environments

Gotchas

■ Reduced operating distance with non-ferrous targets ■ Correction factor needed	■ Same operation distance with ferrous and non-ferrous targets ■ No correction factor needed ■ Inherently immune to AC/DC magnetic fields (WFI)