

# Inductive Proximity Sensors

**FESTO**



## Wide Range of Sensors

Festo is a single source supplier for a wide range of inductive proximity sensors. Festo offers solutions for all types of applications requiring an inductive sensor. The innovative design of these sensors allows for the detection of various metals at varying distances and speeds. The SIE family of sensors provides solutions for the automotive, welding and food and packaging industry.

## Flexibility

Festo inductive sensors can operate at a greater distance than conventional inductive

sensors. Not all are limited to ferromagnetic metals. Factor 1 sensors can sense other conductive metals such as copper and aluminum.

## Versatility

There are many different types of sensors in the Festo inductive sensor family. There is one for most types of application. The analog sensors can detect vibration in a machine, eliminating costly downtimes; and sensors with a high electromagnetic immunity can be used in the automotive welding industry.

## Housing Materials

The SIE type sensor comes in various housing materials, thus making it a solution for many different environments. These sensors are available in:

- Polyamide
- Stainless Steel
- Chrome plated Brass

## Robust Construction

Festo Inductive sensors are made for all different types of environments; they can handle harsh environments and have ratings up to IP67.

**SIE.PSI.US**

Product Short Information

# Inductive Proximity Sensors

Technical Data					
Type	SIES/SIEH	SIEA	SIEF	SIEH-3B	SIEN/SIED
Sensor Type	Standard & Increased Distance	Displacement Sensor	Factor 1	Increased Distance	Standard Distance
Shape	Round and block	Round	Round and block	Round	Round
Sizes	5x5, 40x40, M12, M18	M8, M12, M18, M30	M8, M12, M18, M30	Ø3 mm	M12, M18, M30
Sensing area	Up to 15 mm	Up to 20 mm	Up to 35 mm	1 mm	Up to 15 mm
Operating voltage	10 ... 30 V DC (±20%)	10 ... 30 V DC	10 ... 30 V DC (±20%)	10 ... 30 V DC (±10%)	10 ... 30 V DC 10 ... 300 V DC 20 ... 250 V AC
Output current	200 mA	NA	Up to 200 mA	100 mA	200 mA
Outputs	M12 plug, 4-pin PNP/NPN, NO	Analog, 0-10 V, 4-20 mA	M8, 3-pin M12, 4-pin	M8, 3-pin	2.5 m cable (PVC)
Switching frequency	Up to 3000 Hz	Up to 1600 Hz	Up to 3000 Hz	3000 Hz	Up to 2000 Hz
Mounting	Flush	Via lock nut	Flush or Non-Flush	Flush	Flush or Non-Flush
Polarity protection	Yes	Yes	Yes	Yes	Yes
Short circuit protection	Yes	Yes	Yes	Yes	Yes (only SIEN)
Protection class	IP67	IP67	IP67	IP67	IP65/IP67
Operating temperature	-25 ... +70°C	-25 ... +70°C	-30 ... +80°C	-25 ... +70°C	-25 ... +70°C
Housing material	Nickel Plated Brass or Stainless Steel	Chrome Plated Brass	Polyamide/ Stainless Steel Alloy; Chrome Plated Brass/ Polybutylene	Stainless Steel	Polyamide (PA-12)

## Applications

### Automotive Applications:

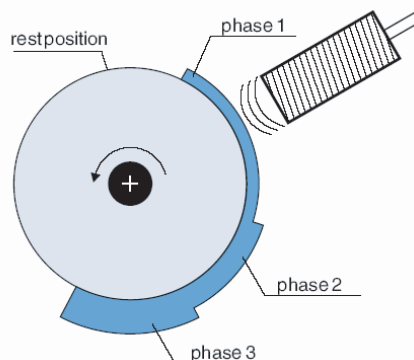
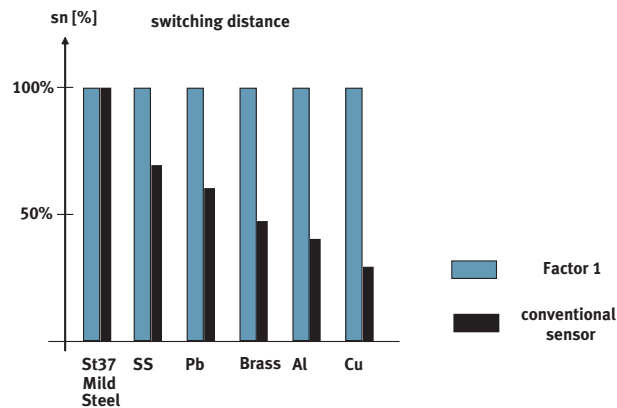
Weld immune types SIEF ... WA for weld areas. Factor 1 technology brings an equal sensing distance to most metals.

### Food and Packaging Applications:

Corrosion resistant types SIEH- ... CR stainless steel, AISI303 or SIEN- ... PA polyamide types.

### Distance Sensing:

SIEA ... with analog outputs can sense for various heights at 0.01 mm accuracy.



## Festo Corporation

For ordering assistance, or to find your nearest Festo Distributor,  
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