SensorsX
SX-DRINF Series
Cylindrical Inductive Proximity Sensor



■ PRODUCT OVERVIEW

The SX-DRINF Series cylindrical inductive proximity sensors are designed for reliable, non-contact detection of metallic objects in industrial automation applications. Featuring dedicated sensing IC technology, the sensors provide stable detection performance, high resistance to electrical interference, and multiple sensing-distance options across M8, M12, M18, and M30 housing sizes. Available in flush and non-flush mounting styles with DC 2-wire and DC 3-wire (NPN/PNP) configurations, the series offers flexible installation solutions for machinery, assembly lines, and material handling systems.

■ KEY FEATURES

◆ Extended Sensing Range & High Noise Immunity Purpose-built sensor IC provides extended detection range and high resistance to electrical interference.	◆ Reverse-Polarity / Surge / Short-Circuit / Overload Protection Multiple protection circuits reduce sensor failure risk from wiring and power-supply faults.
◆ Simple Operation, High Reliability, Long Service Life Robust design provides reliable, durable long-term operation.	◆ 360° Visible Ring Indicator (Yellow) Output-status indicator ring is visible from any mounting orientation; sensor can be mounted at any angle.
◆ Strain-Relief Cable Entry Reinforced cable entry improves flex fatigue life and connection durability.	◆ IP67 Ingress Protection Rated for reliable operation in humid, dusty, and oil-mist industrial environments.
◆ Wide Application Compatibility Suitable as a direct replacement for many small mechanical limit switches.	◆ Oil-Mist-Resistant Cable Jacket Cable jacket resists degradation from hydraulic and cutting-fluid mist. IP67 protection is verified according to IEC testing requirements.
◆ Reinforced Housing Wall M12–M30 housings use a thickened outer wall for increased fastening strength; M8 housings are stainless steel for the same purpose.	◆ Custom housing length available upon request Standard-type housing length can be customized to order.

■ TYPICAL APPLICATIONS

- Factory Automation
- Machine Tools
- Packaging Machinery
- Elevators & Access Equipment
- Material Handling & Conveying
- Assembly Equipment

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■ ORDERING INFORMATION – SX-DRINF SERIES

Complete model number example: SX-DRINF-081B5BNA-2M

Thread Size / Housing Diameter	
08	M8 × 1 threaded cylindrical housing
12	M12 × 1 threaded cylindrical housing
18	M18 × 1 threaded cylindrical housing
30	M30 × 1.5 threaded cylindrical housing

Sensing Distance	
1B5	1.5 mm (0.06 in) nominal sensing distance
02	2 mm (0.08 in) nominal sensing distance
04	4 mm (0.16 in) nominal sensing distance
05	5 mm (0.20 in) nominal sensing distance
08	8 mm (0.31 in) nominal sensing distance
10	10 mm (0.39 in) nominal sensing distance
15	15 mm (0.59 in) nominal sensing distance
16	16 mm (0.63 in) nominal sensing distance *[Not available with Output Type = L — DC 2-Wire]*
30	30 mm (1.18 in) nominal sensing distance *[Not available with Output Type = L — DC 2-Wire]*

Mounting Style	
B	Flush / embeddable in metal
D	Non-flush / protruding

Output Type	
N	NPN open-collector, 3-wire DC
P	PNP open-collector, 3-wire DC
L	DC 2-wire

Output State	
A	NO (Normally Open)
B	NC (Normally Closed)
C	NO + NC (dual output) *[Not available with Output Type = L — DC 2-Wire]*

Electrical Connection	
2M	2 m (6.6 ft) standard lead-wire cable
E	M12×1, 4-pin connector
E1	M8, 4-pin connector (3-wire only) *[Not available with Output Type = L — DC 2-Wire]*
E2	M8, 3-pin connector

Optional / Customized	
D	Customized — specify requirements when ordering

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■ STANDARD (SINGLE-DISTANCE) TYPE — SELECTION TABLE

Mount	Size	Sensing Distance	Connection	NPN Model (NO / NC)	PNP Model (NO / NC)
Flush	M8	1.5 mm (0.06 in)	2 m Lead	SX-DRINF-081B5BNA-2M / SX-DRINF-081B5BNB-2M	SX-DRINF-081B5BPA-2M / SX-DRINF-081B5BPB-2M
Flush	M12	2 mm (0.08 in)	2 m Lead	SX-DRINF-1202BNA-2M / SX-DRINF-1202BNB-2M	SX-DRINF-1202BPA-2M / SX-DRINF-1202BPB-2M
Flush	M18	5 mm (0.20 in)	2 m Lead	SX-DRINF-1805BNA-2M / SX-DRINF-1805BNB-2M	SX-DRINF-1805BPA-2M / SX-DRINF-1805BPB-2M
Flush	M30	10 mm (0.39 in)	2 m Lead	SX-DRINF-3010BNA-2M / SX-DRINF-3010BNB-2M	SX-DRINF-3010BPA-2M / SX-DRINF-3010BPB-2M
Non-Flush	M8	2 mm (0.08 in)	2 m Lead	SX-DRINF-0802DNA-2M / SX-DRINF-0802DNB-2M	SX-DRINF-0802DPA-2M / SX-DRINF-0802DPB-2M
Non-Flush	M12	4 mm (0.16 in)	2 m Lead	SX-DRINF-1204DNA-2M / SX-DRINF-1204DNB-2M	SX-DRINF-1204DPA-2M / SX-DRINF-1204DPB-2M
Non-Flush	M18	8 mm (0.31 in)	2 m Lead	SX-DRINF-1808DNA-2M / SX-DRINF-1808DNB-2M	SX-DRINF-1808DPA-2M / SX-DRINF-1808DPB-2M
Non-Flush	M30	15 mm (0.59 in)	2 m Lead	SX-DRINF-3015DNA-2M / SX-DRINF-3015DNB-2M	SX-DRINF-3015DPA-2M / SX-DRINF-3015DPB-2M

Connector Models

Mount	Size	Sensing Distance	Connection	NPN Model (NO / NC)	PNP Model (NO / NC)
Flush	M8	1.5 mm (0.06 in)	M8 3-pin	SX-DRINF-081B5BNA-E2 / SX-DRINF-081B5BNB-E2	SX-DRINF-081B5BPA-E2 / SX-DRINF-081B5BPB-E2
Flush	M12	2 mm (0.08 in)	M12 4-pin	SX-DRINF-1202BNA-E / SX-DRINF-1202BNB-E	SX-DRINF-1202BPA-E / SX-DRINF-1202BPB-E
Flush	M18	5 mm (0.20 in)	M12 4-pin	SX-DRINF-1805BNA-E / SX-DRINF-1805BNB-E	SX-DRINF-1805BPA-E / SX-DRINF-1805BPB-E
Flush	M30	10 mm (0.39 in)	M12 4-pin	SX-DRINF-3010BNA-E / SX-DRINF-3010BNB-E	SX-DRINF-3010BPA-E / SX-DRINF-3010BPB-E
Non-Flush	M8	2 mm (0.08 in)	M8 3-pin	SX-DRINF-0802DNA-E2 / SX-DRINF-0802DNB-E2	SX-DRINF-0802DPA-E2 / SX-DRINF-0802DPB-E2
Non-Flush	M12	4 mm (0.16 in)	M12 4-pin	SX-DRINF-1204DNA-E / SX-DRINF-1204DNB-E	SX-DRINF-1204DPA-E / SX-DRINF-1204DPB-E
Non-Flush	M18	8 mm (0.31 in)	M12 4-pin	SX-DRINF-1808DNA-E / SX-DRINF-1808DNB-E	SX-DRINF-1808DPA-E / SX-DRINF-1808DPB-E
Non-Flush	M30	15 mm (0.59 in)	M12 4-pin	SX-DRINF-3015DNA-E / SX-DRINF-3015DNB-E	SX-DRINF-3015DPA-E / SX-DRINF-3015DPB-E

■ STANDARD (SINGLE-DISTANCE) TYPE — RATING TABLE

Sensing Distance	Flush: 1.5/2/5/10 mm (±10%) — M8/M12/M18/M30; Non-Flush: 2/4/8/15 mm (±10%) — M8/M12/M18/M30 (0.06–0.59 in)
Set (Operating) Distance	Flush: 0–1.2 / 0–1.6 / 0–4 / 0–8 mm; Non-Flush: 0–1.6 / 0–3.2 / 0–6.4 / 0–12 mm
Standard Target	Mild steel (Q235A / ASTM A36 equiv.), 8×8×1 to 45×45×1 mm depending on size/mount
Response Frequency	Flush: 2 / 1.5 / 1 / 0.5 kHz; Non-Flush: 1 / 0.8 / 0.4 / 0.1 kHz (M8/M12/M18/M30)
Hysteresis (Differential Travel)	1% – 15% of sensing distance
Repeatability	< 5% of sensing distance

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Power	
Supply Voltage	10 – 30 V DC
Current Consumption	< 15 mA (M8/M12/M18); < 20 mA (M30)
Output	
Output Type	NPN or PNP open-collector transistor
Load Current	< 100 mA (M8); < 200 mA (M12/M18/M30)
Residual (Saturation) Voltage	< 2 V at 100 mA load (2 m cable); < 2.5 V at 200 mA load (2 m cable)
Indicator	Yellow LED ring, illuminates at output ON
Circuit Protection	Reverse polarity, output short-circuit, surge absorption
Environmental	
Operating / Storage Temperature	−25 to +70 °C (−13 to +158 °F)
Operating / Storage Humidity	35 – 95% RH
Dielectric Strength	1000 V AC, 50/60 Hz, 1 min, between live parts and housing
Insulation Resistance	> 50 MΩ at 500 V DC, between live parts and housing
Vibration Resistance	10 – 55 Hz, 1.5 mm double amplitude, 2 h per axis (X, Y, Z)
Shock Resistance	500 m/s² (≈ 50 G), 3 shocks per axis (X, Y, Z)
Ingress Protection	IP67 (IEC)
Materials & Weight	
Housing Material	Nickel-plated brass (M8 housing: stainless steel); Front cap: PBT; Rear cap: PC
Lead-wire Connection	2 m (6.6 ft) standard cable
Approx. Lead-wire Weight (M8/M12/M18/M30)	50 g / 95 g / 115 g / 190 g (0.11 / 0.21 / 0.25 / 0.42 lb)
Connector Type (M8 / M12-M30)	M8 3-pin / M12 4-pin
Approx. Connector Weight (M8/M12/M18/M30)	20 g / 30 g / 60 g / 130 g (0.04 / 0.07 / 0.13 / 0.29 lb)

■ ENHANCED (DOUBLE-DISTANCE) TYPE — SELECTION TABLE

Mount	Size	Sensing Distance	Connection	NPN Model (NO / NC)	PNP Model (NO / NC)
Flush	M8	2 mm (0.08 in)	2 m Lead	SX-DRINF-0802BNA-2M / SX-DRINF-0802BNB-2M	SX-DRINF-0802BPA-2M / SX-DRINF-0802BPB-2M
Flush	M12	4 mm (0.16 in)	2 m Lead	SX-DRINF-1204BNA-2M / SX-DRINF-1204BNB-2M	SX-DRINF-1204BPA-2M / SX-DRINF-1204BPB-2M
Flush	M18	8 mm (0.31 in)	2 m Lead	SX-DRINF-1808BNA-2M / SX-DRINF-1808BNB-2M	SX-DRINF-1808BPA-2M / SX-DRINF-1808BPB-2M
Flush	M30	15 mm (0.59 in)	2 m Lead	SX-DRINF-3015BNA-2M / SX-DRINF-3015BNB-2M	SX-DRINF-3015BPA-2M / SX-DRINF-3015BPB-2M
Non-Flush	M8	4 mm (0.16 in)	2 m Lead	SX-DRINF-0804DNA-2M / SX-DRINF-0804DNB-2M	SX-DRINF-0804DPA-2M / SX-DRINF-0804DPB-2M
Non-Flush	M12	8 mm (0.31 in)	2 m Lead	SX-DRINF-1208DNA-2M / SX-DRINF-1208DNB-2M	SX-DRINF-1208DPA-2M / SX-DRINF-1208DPB-2M
Non-Flush	M18	16 mm (0.63 in)	2 m Lead	SX-DRINF-1816DNA-2M / SX-DRINF-1816DNB-2M	SX-DRINF-1816DPA-2M / SX-DRINF-1816DPB-2M
Non-Flush	M30	30 mm (1.18 in)	2 m Lead	SX-DRINF-3030DNA-2M / SX-DRINF-3030DNB-2M	SX-DRINF-3030DPA-2M / SX-DRINF-3030DPB-2M

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Connector Models

Mount	Size	Sensing Distance	Connection	NPN Model (NO / NC)	PNP Model (NO / NC)
Flush	M8	2 mm (0.08 in)	M8 3-pin	SX-DRINF-0802BNA-E2 / SX-DRINF-0802BNB-E2	SX-DRINF-0802BPA-E2 / SX-DRINF-0802BPB-E2
Flush	M12	4 mm (0.16 in)	M12 4-pin	SX-DRINF-1204BNA-E / SX-DRINF-1204BNB-E	SX-DRINF-1204BPA-E / SX-DRINF-1204BPB-E
Flush	M18	8 mm (0.31 in)	M12 4-pin	SX-DRINF-1808BNA-E / SX-DRINF-1808BNB-E	SX-DRINF-1808BPA-E / SX-DRINF-1808BPB-E
Flush	M30	15 mm (0.59 in)	M12 4-pin	SX-DRINF-3015BNA-E / SX-DRINF-3015BNB-E	SX-DRINF-3015BPA-E / SX-DRINF-3015BPB-E
Non-Flush	M8	4 mm (0.16 in)	M8 3-pin	SX-DRINF-0804DNA-E2 / SX-DRINF-0804DNB-E2	SX-DRINF-0804DPA-E2 / SX-DRINF-0804DPB-E2
Non-Flush	M12	8 mm (0.31 in)	M12 4-pin	SX-DRINF-1208DNA-E / SX-DRINF-1208DNB-E	SX-DRINF-1208DPA-E / SX-DRINF-1208DPB-E
Non-Flush	M18	16 mm (0.63 in)	M12 4-pin	SX-DRINF-1816DNA-E / SX-DRINF-1816DNB-E	SX-DRINF-1816DPA-E / SX-DRINF-1816DPB-E
Non-Flush	M30	30 mm (1.18 in)	M12 4-pin	SX-DRINF-3030DNA-E / SX-DRINF-3030DNB-E	SX-DRINF-3030DPA-E / SX-DRINF-3030DPB-E

■ ENHANCED (DOUBLE-DISTANCE) TYPE — RATING TABLE

Sensing Distance	Flush: 2/4/8/15 mm (±10%) — M8/M12/M18/M30; Non-Flush: 4/8/16/30 mm (±10%) — M8/M12/M18/M30 (0.08–1.18 in)
Set (Operating) Distance	Flush: 0–1.6 / 0–3.2 / 0–6.4 / 0–12 mm; Non-Flush: 0–3.2 / 0–6.4 / 0–12.8 / 0–24 mm
Standard Target	Mild steel (Q235A / ASTM A36 equiv.), 8×8×1 to 90×90×1 mm depending on size/mount
Response Frequency	Flush: 1.5 / 1 / 0.5 / 0.25 kHz; Non-Flush: 1 / 0.8 / 0.4 / 0.1 kHz (M8/M12/M18/M30)
Hysteresis (Differential Travel)	1% – 15% of sensing distance
Repeatability	< 5% of sensing distance
Power	
Supply Voltage	10 – 30 V DC
Current Consumption	< 10 mA (M8); < 15 mA (M12/M18); < 22 mA (M30)
Output	
Output Type	NPN or PNP open-collector transistor
Load Current	< 100 mA (M8); < 200 mA (M12/M18/M30)
Residual (Saturation) Voltage	< 2 V at 100 mA load (2 m cable); < 2.5 V at 200 mA load (2 m cable)
Indicator	Yellow LED ring, illuminates at output ON
Circuit Protection	Reverse polarity, output short-circuit, surge absorption
Environmental	
Operating / Storage Temperature	−25 to +70 °C (−13 to +158 °F)
Operating / Storage Humidity	35 – 95% RH
Dielectric Strength	1000 V AC, 50/60 Hz, 1 min, between live parts and housing
Insulation Resistance	> 50 MΩ at 500 V DC, between live parts and housing
Vibration Resistance	10 – 55 Hz, 1.5 mm double amplitude, 2 h per axis (X, Y, Z)
Shock Resistance	500 m/s² (≈ 50 G), 3 shocks per axis (X, Y, Z)
Ingress Protection	IP67 (IEC)
Materials & Weight	

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Housing Material	Nickel-plated brass (M8 housing: stainless steel); Front cap: PBT; Rear cap: PC
Lead-wire Connection	2 m (6.6 ft) standard cable
Approx. Lead-wire Weight (M8/M12/M18/M30)	50 g / 95 g / 115 g / 190 g (0.11 / 0.21 / 0.25 / 0.42 lb)
Connector Type (M8 / M12-M30)	M8 3-pin / M12 4-pin
Approx. Connector Weight (M8/M12/M18/M30)	20 g / 30 g / 60 g / 130 g (0.04 / 0.07 / 0.13 / 0.29 lb)

■ DC 2-WIRE TYPE — SELECTION TABLE

Mount / Connection	Size	Sensing Distance	Model (NO / NC)
Flush / Lead-wire	M8	1.5 mm (0.06 in)	SX-DRINF-081B5BLA-2M / SX-DRINF-081B5BLB-2M
Flush / Lead-wire	M12	2 mm (0.08 in)	SX-DRINF-1202BLA-2M / SX-DRINF-1202BLB-2M
Flush / Lead-wire	M18	5 mm (0.20 in)	SX-DRINF-1805BLA-2M / SX-DRINF-1805BLB-2M
Flush / Lead-wire	M30	10 mm (0.39 in)	SX-DRINF-3010BLA-2M / SX-DRINF-3010BLB-2M
Non-Flush / Lead-wire	M8	2 mm (0.08 in)	SX-DRINF-0802DLA-2M / SX-DRINF-0802DLB-2M
Non-Flush / Lead-wire	M12	4 mm (0.16 in)	SX-DRINF-1204DLA-2M / SX-DRINF-1204DLB-2M
Non-Flush / Lead-wire	M18	8 mm (0.31 in)	SX-DRINF-1808DLA-2M / SX-DRINF-1808DLB-2M
Non-Flush / Lead-wire	M30	15 mm (0.59 in)	SX-DRINF-3015DLA-2M / SX-DRINF-3015DLB-2M

Connector Models

Mount / Connection	Size	Sensing Distance	Model (NO / NC)
Flush / Connector	M8	1.5 mm (0.06 in)	SX-DRINF-081B5BLA-E2 / SX-DRINF-081B5BLB-E2
Flush / Connector	M12	2 mm (0.08 in)	SX-DRINF-1202BLA-E / SX-DRINF-1202BLB-E
Flush / Connector	M18	5 mm (0.20 in)	SX-DRINF-1805BLA-E / SX-DRINF-1805BLB-E
Flush / Connector	M30	10 mm (0.39 in)	SX-DRINF-3010BLA-E / SX-DRINF-3010BLB-E
Non-Flush / Connector	M8	2 mm (0.08 in)	SX-DRINF-0802DLA-E2 / SX-DRINF-0802DLB-E2
Non-Flush / Connector	M12	4 mm (0.16 in)	SX-DRINF-1204DLA-E / SX-DRINF-1204DLB-E
Non-Flush / Connector	M18	8 mm (0.31 in)	SX-DRINF-1808DLA-E / SX-DRINF-1808DLB-E
Non-Flush / Connector	M30	15 mm (0.59 in)	SX-DRINF-3015DLA-E / SX-DRINF-3015DLB-E

■ DC 2-WIRE TYPE — RATING TABLE

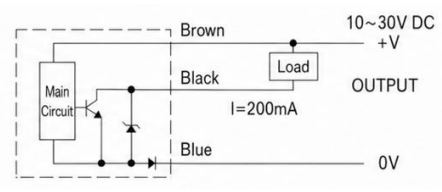
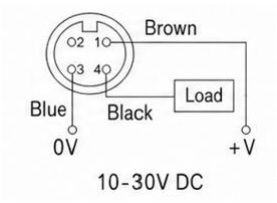
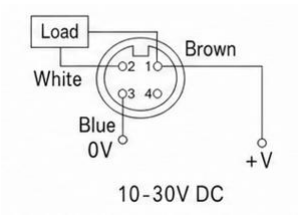
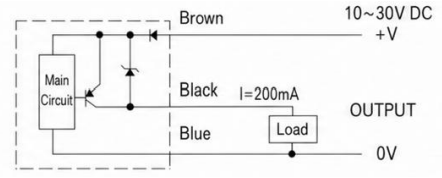
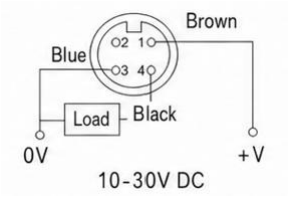
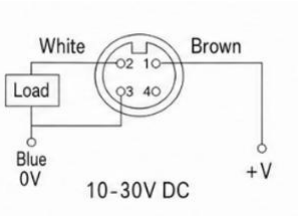
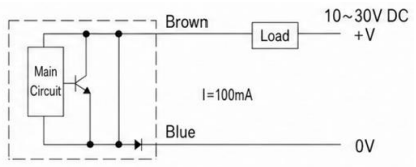
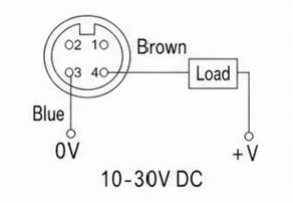
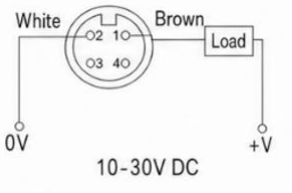
Sensing	
Sensing Distance	Flush M8/M12/M18/M30: 1.5 / 2 / 5 / 10 mm (±10%); Non-Flush: 2 / 4 / 8 / 15 mm (±10%)
Set (Operating) Distance	Flush M8/M12/M18/M30: 0-1.2 / 0-1.6 / 0-4 / 0-8 mm; Non-Flush: 0-1.6 / 0-3.2 / 0-6.4 / 0-12 mm
Standard Target	Flush M8/M12/M18/M30: 8×8×1 / 12×12×1 / 18×18×1 / 30×30×1 mm (Q235A); Non-Flush: 8×8×1 / 12×12×1 / 24×24×1 / 45×45×1 mm (Q235A)

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Response Frequency	Flush M8/M12/M18/M30: 2 / 1.5 / 1 / 0.5 kHz; Non-Flush: 1 / 0.8 / 0.4 / 0.1 kHz
Hysteresis (Differential Travel)	1%-15% of sensing distance
Repeatability	< 5% of sensing distance
Electrical / Output	Electrical / Output
Supply Voltage	10-30 V DC
Output Type / Action	DC 2-wire; NO or NC (A / B order code)
Load Current	< 100 mA
Residual Voltage	< 5 V
Indicator	Yellow LED, illuminates at output ON
Circuit Protection	Reverse polarity, output short-circuit, surge absorption
Environmental	Environmental
Operating / Storage Temperature	-25 to +70 °C / -25 to +70 °C (-13 to +158 °F)
Operating / Storage Humidity	35%-95% RH / 35%-95% RH
Dielectric Strength	1000 V AC, 50/60 Hz, 1 min, between live parts and housing
Insulation Resistance	> 50 MΩ at 500 V DC, between live parts and housing
Vibration Resistance	10-55 Hz, 1.5 mm double amplitude, 2 h per axis (X, Y, Z)
Shock Resistance	500 m/s² (approx. 50 G), 3 shocks per axis (X, Y, Z)
Ingress Protection	IEC IP67
Materials / Connection / Weight	Materials / Connection / Weight
Housing Material	Nickel-plated brass (M8 housing: stainless steel); Front cap: PBT; Rear cap: PC
Lead-wire Connection	2 m (6.6 ft) standard cable
Connector Type (M8 / M12-M30)	M8 3-pin / M12 4-pin
Approx. Lead-wire Weight (M8/M12/M18/M30)	50 g / 95 g / 115 g / 190 g (0.11 / 0.21 / 0.25 / 0.42 lb)
Approx. Connector Weight (M8/M12/M18/M30)	20 g / 30 g / 60 g / 130 g (0.04 / 0.07 / 0.13 / 0.29 lb)

■ WIRING DIAGRAM

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	Cable type NO/NC	Connector Type NO	Connector Type NC	
NPN Three-wire DC				Normally Open NO Target Present ON Absent OFF
PNP Three-wire DC				Normally Closed NC Target Present OFF Absent ON
Two-wire DC				

■ MOUNTING TORQUE

Model Series	Recommended Mounting Torque
SX-DRINF-08 (M8)	5.5 N·m (48.7 lbf·in)
SX-DRINF-12 (M12)	10 N·m (88.5 lbf·in)
SX-DRINF-18 (M18)	30 N·m (265.5 lbf·in)
SX-DRINF-30 (M30)	150 N·m (1327.7 lbf·in)

■ CORRECTION FACTORS (NON-FERROUS TARGETS)

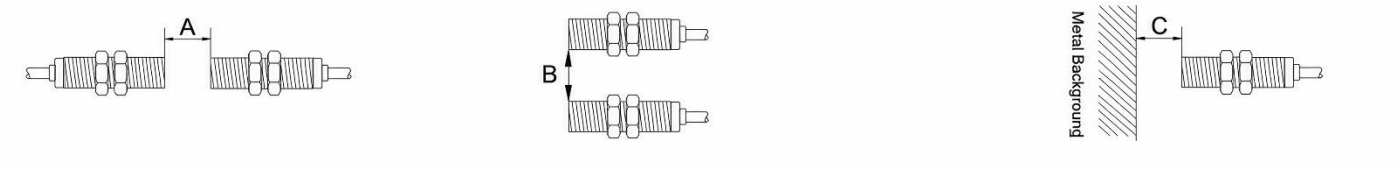
Target Material	Correction Factor
Mild Steel	1.0 (reference)
Stainless Steel (SUS 304)	≈ 0.65
Brass	≈ 0.42
Aluminum	≈ 0.41

■ MUTUAL INTERFERENCE — MINIMUM SPACING

Note: When two or more sensors are installed in a parallel arrangement or opposite arrangement, the minimum spacing distance specified in the table below must be strictly followed to avoid mutual interference.

Metal objects near the sensor may affect its detection performance. Please strictly follow the minimum spacing distance specified in the table below.

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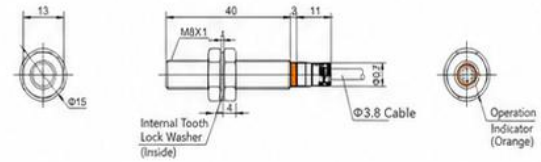
Sensor Type	A — min. face-to-face spacing	B — min. side-by-side spacing	C — min. distance to background metal
Single-Distance, Flush — M8/M12/M18/M30	15 / 20 / 50 / 100 mm (0.59/0.79/1.97/3.94 in)	16 / 24 / 38 / 60 mm (0.63/0.94/1.50/2.36 in)	4.5 / 6 / 15 / 30 mm (0.18/0.24/0.59/1.18 in)
Single-Distance, Non-Flush — M8/M12/M18/M30	20 / 40 / 80 / 150 mm (0.79/1.57/3.15/5.91 in)	16 / 24 / 38 / 60 mm (0.63/0.94/1.50/2.36 in)	6 / 12 / 24 / 45 mm (0.24/0.47/0.94/1.77 in)
Double-Distance, Flush — M8/M12/M18/M30	20 / 40 / 80 / 150 mm (0.79/1.57/3.15/5.91 in)	16 / 24 / 38 / 60 mm (0.63/0.94/1.50/2.36 in)	6 / 12 / 24 / 45 mm (0.24/0.47/0.94/1.77 in)
Double-Distance, Non-Flush — M8/M12/M18/M30	40 / 80 / 160 / 300 mm (1.57/3.15/6.30/11.81 in)	25 / 40 / 70 / 120 mm (0.98/1.57/2.76/4.72 in)	12 / 24 / 48 / 90 mm (0.47/0.94/1.89/3.54 in)

■ DIMENSIONS

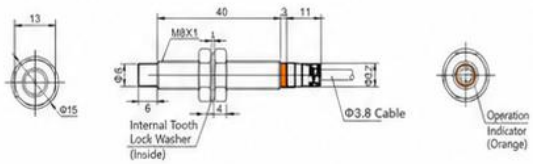
The information in this document is subject to change without notice. SensorsX Technology Inc. assumes no responsibility for errors or omissions.

■ Cable Type (Same Dimensions for Standard and Double Sensing Distance)

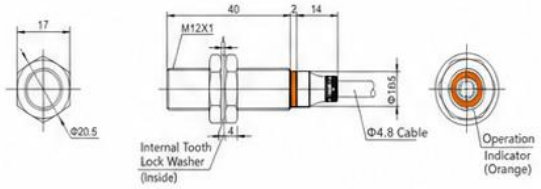
SX-DRINF-081B5/02B□□ Series — Flush



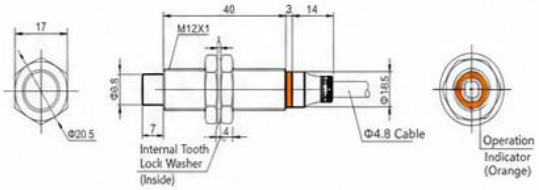
SX-DRINF-0802D/04D□□ Series — Non-flush



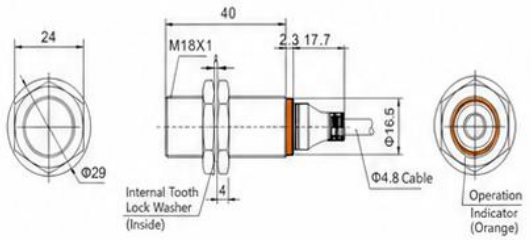
SX-DRINF-1202B/04B□□ Series — Flush



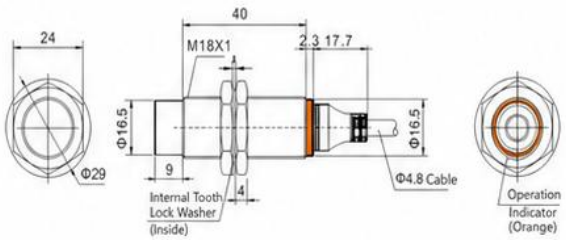
SX-DRINF-1204D/08D□□ Series — Non-flush



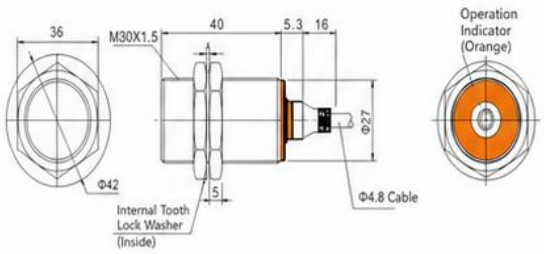
SX-DRINF-1805B/08B□□ Series — Flush



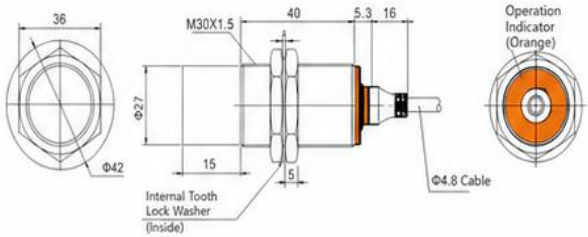
SX-DRINF-1808D/16D□□ Series — Non-flush



SX-DRINF-3010B/15B□□ Series — Flush



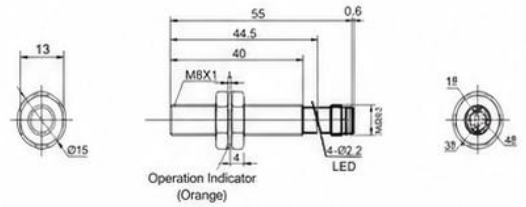
SX-DRINF-3015D/30D□□ Series — Non-flush



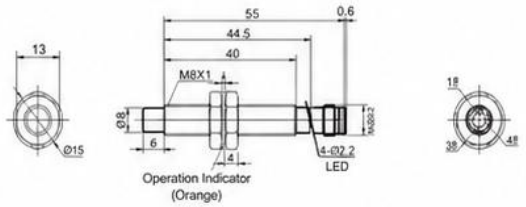
The information in this document is subject to change without notice. SensorsX Technology Inc. assumes no responsibility for errors or omissions.

■ Connector Type (Dimensions are the Same for Standard and Extended Sensing Distance)

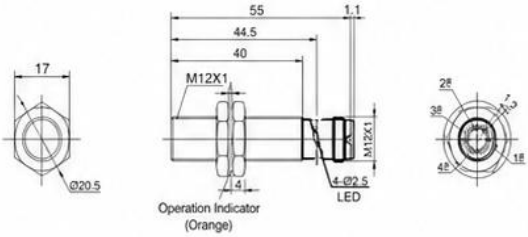
SX–DRINF–081B5/02B□□–E2 Series — Flush



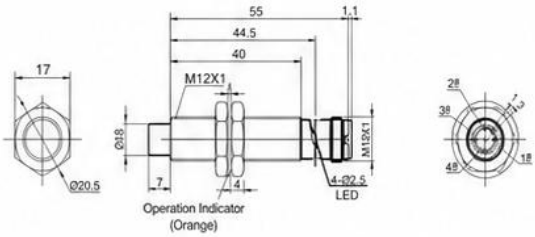
SX–DRINF–0802D/04D□□–E2 Series — Non-flush



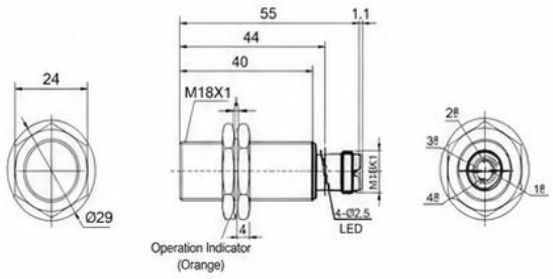
SX–DRINF–1202B/04B□□–E Series — Flush



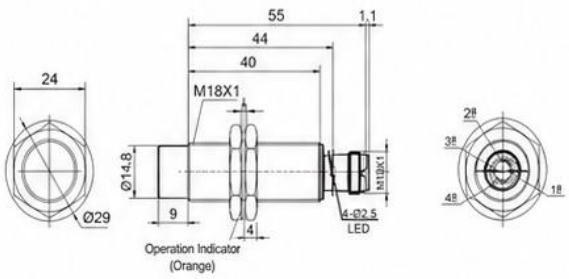
SX–DRINF–1204D/08D□□–E Series — Non-flush



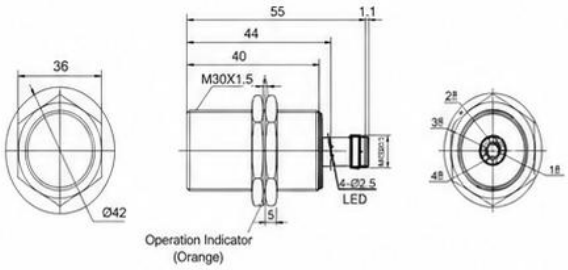
SX–DRINF–1805B/08B□□–E Series — Flush



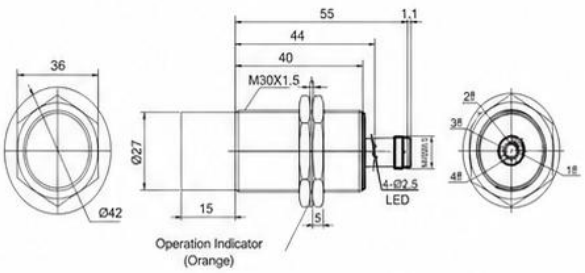
SX–DRINF–1808D/16D□□–E Series — Non-flush



SX–DRINF–3010B/15B□□–E Series — Flush



SX–DRINF–3015D/30D□□–E Series — Non-flush



Thread Size	Housing / Overall Length	Body Diameter (across flats)	Cable / Connector Exit
M8 × 1 (Lead-wire)	40 mm housing; rear section 2 + 11 mm	13 mm (0.51 in)	Ø3.8 mm (0.15 in) cable, axial
M12 × 1 (Lead-wire)	40 mm housing; rear section 2 + 14 mm	17 mm (0.67 in)	Ø4.8 mm (0.19 in) cable, axial

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Thread Size	Housing / Overall Length	Body Diameter (across flats)	Cable / Connector Exit
M18 × 1 (Lead-wire)	40 mm housing; rear section 2.3 + 17.7 mm	24 mm (0.94 in)	Ø4.8 mm (0.19 in) cable, axial
M30 × 1.5 (Lead-wire)	40 mm housing; rear section 5.3 + 16 mm	36 mm (1.42 in)	Ø4.8 mm (0.19 in) cable, axial
M8 × 1 (Connector)	55 mm overall; 44.5 mm reference	13 mm (0.51 in)	M8 connector, axial
M12 × 1 (Connector)	55 mm overall; 44.5 mm reference	17 mm (0.67 in)	M12 connector, axial
M18 × 1 (Connector)	55 mm overall; 44 mm reference	24 mm (0.94 in)	M12 connector, axial
M30 × 1.5 (Connector)	55 mm overall; 44 mm reference	36 mm (1.42 in)	M12 connector, axial

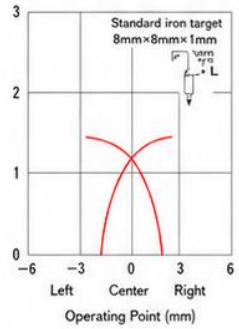
■ PERFORMANCE DATA TABLE

The information in this document is subject to change without notice. SensorsX Technology Inc. assumes no responsibility for errors or omissions.

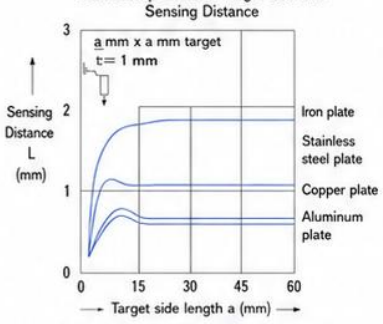
■ Standard Sensing Distance Type

SX-DRINF-081B5□□ Series — Flush

Sensing Area Characteristics



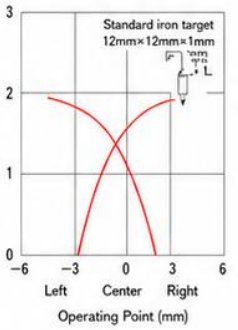
Relationship Between Target Size and Sensing Distance



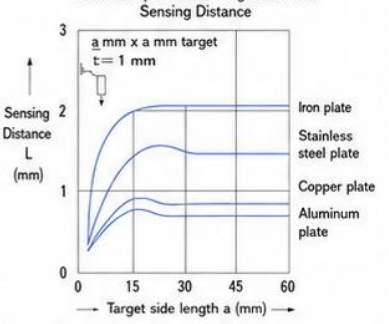
This graph shows the sensing distance when the target is smaller than the standard iron target (8mm × 8mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1202B□□ Series — Flush

Sensing Area Characteristics



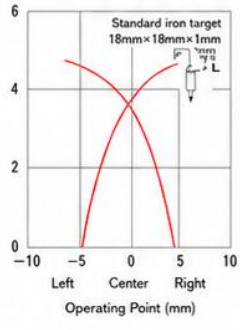
Relationship Between Target Size and Sensing Distance



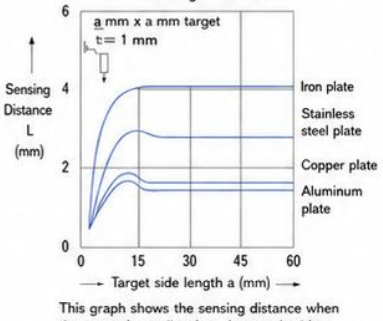
This graph shows the sensing distance when the target is smaller than the standard iron target (12mm × 12mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1805B□□ Series — Flush

Sensing Area Characteristics



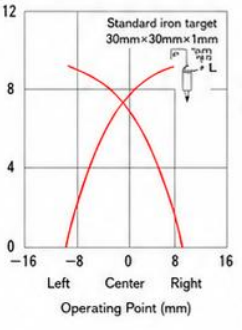
Relationship Between Target Size and Sensing Distance



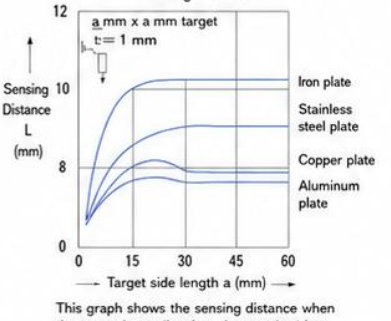
This graph shows the sensing distance when the target is smaller than the standard iron target (18mm × 18mm × 1mm). Actual sensing distance may differ.

SX-DRINF-3010B□□ Series — Flush

Sensing Area Characteristics



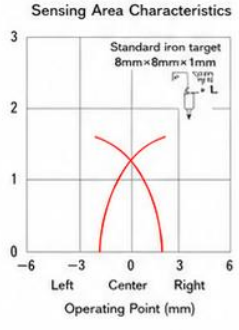
Relationship Between Target Size and Sensing Distance



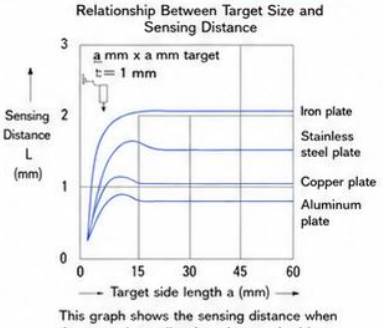
This graph shows the sensing distance when the target is smaller than the standard iron target (30mm × 30mm × 1mm). Actual sensing distance may differ.

SX-DRINF-0802D□□ Series — Non-flush

Sensing Area Characteristics



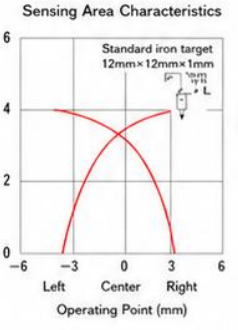
Relationship Between Target Size and Sensing Distance



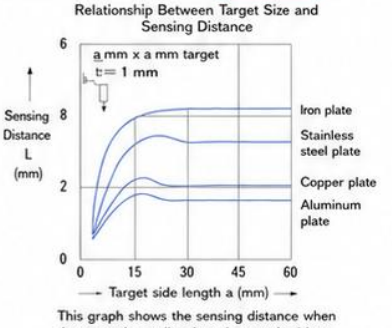
This graph shows the sensing distance when the target is smaller than the standard iron target (8mm × 8mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1204D□□ Series — Non-flush

Sensing Area Characteristics



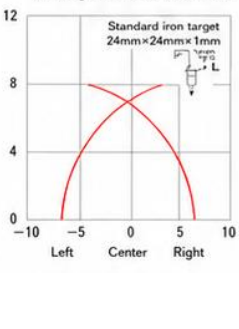
Relationship Between Target Size and Sensing Distance



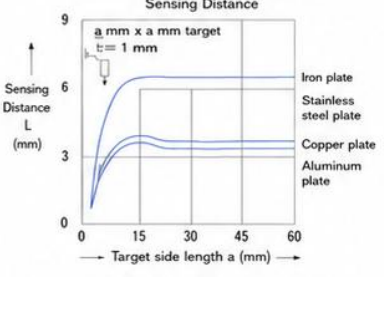
This graph shows the sensing distance when the target is smaller than the standard iron target (12mm × 12mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1808D□□ Series — Non-flush

Sensing Area Characteristics

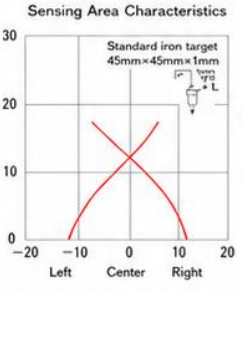


Relationship Between Target Size and Sensing Distance

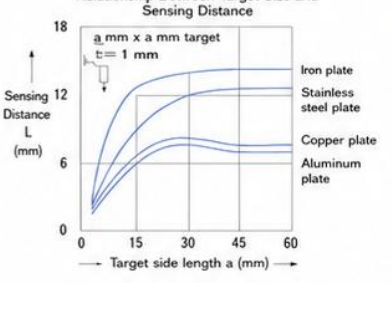


SX-DRINF-3015D□□ Series — Non-flush

Sensing Area Characteristics



Relationship Between Target Size and Sensing Distance

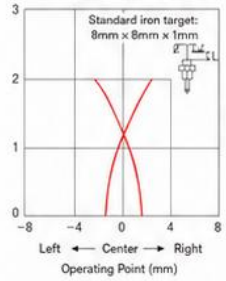


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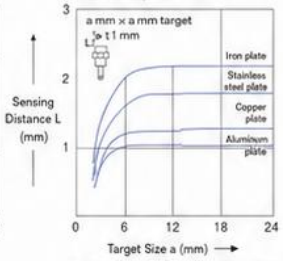
■ Double Sensing Distance Type

SX-DRINF-0802B□□ Series — Flush

Sensing Area Characteristics



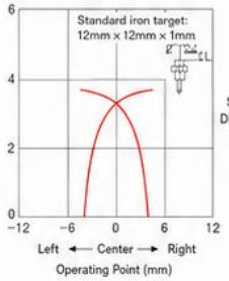
Relationship Between Target Size and Sensing Distance



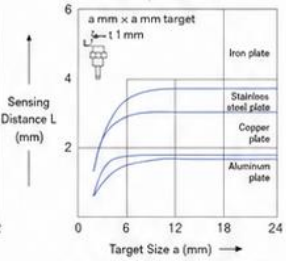
This graph shows the sensing distance when the target is smaller than the standard iron target (8mm × 8mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1204B□□ Series — Flush

Sensing Area Characteristics



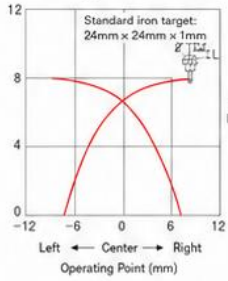
Relationship Between Target Size and Sensing Distance



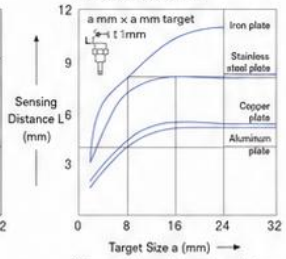
This graph shows the sensing distance when the target is smaller than the standard iron target (12mm × 12mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1808B□□ Series — Flush

Sensing Area Characteristics



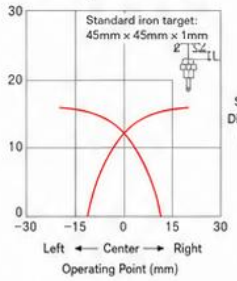
Relationship Between Target Size and Sensing Distance



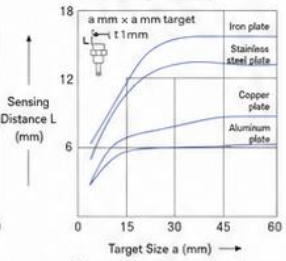
This graph shows the sensing distance when the target is smaller than the standard iron target (24mm × 24mm × 1mm). Actual sensing distance may differ.

SX-DRINF-3015B□□ Series — Flush

Sensing Area Characteristics



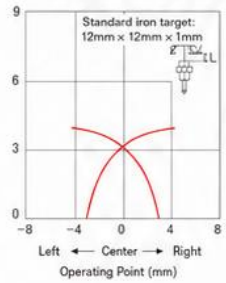
Relationship Between Target Size and Sensing Distance



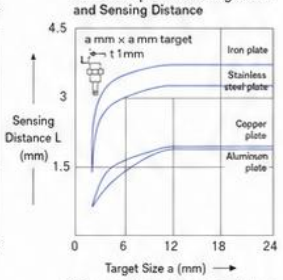
This graph shows the sensing distance when the target is smaller than the standard iron target (45mm × 45mm × 1mm). Actual sensing distance may differ.

SX-DRINF-0804D□□ Series — Non-flush

Sensing Area Characteristics



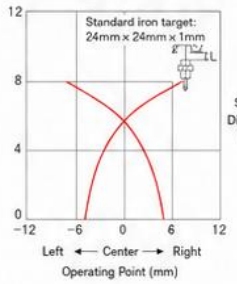
Relationship Between Target Size and Sensing Distance



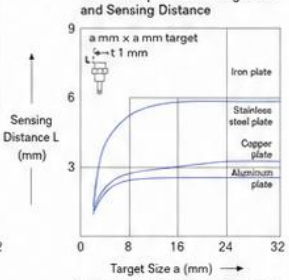
This graph shows the sensing distance when the target is smaller than the standard iron target (12mm × 12mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1208D□□ Series — Non-flush

Sensing Area Characteristics



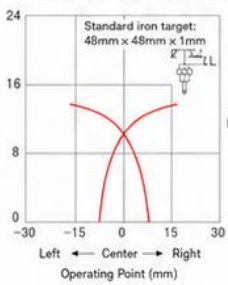
Relationship Between Target Size and Sensing Distance



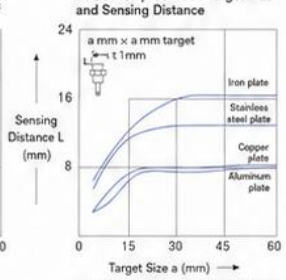
This graph shows the sensing distance when the target is smaller than the standard iron target (24mm × 24mm × 1mm). Actual sensing distance may differ.

SX-DRINF-1816D□□ Series — Non-flush

Sensing Area Characteristics



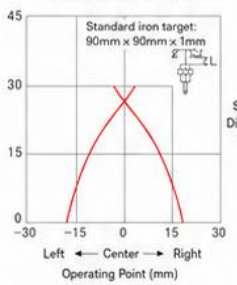
Relationship Between Target Size and Sensing Distance



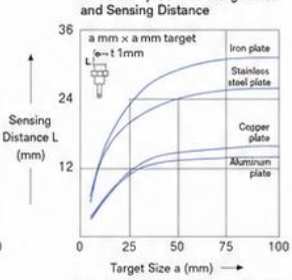
This graph shows the sensing distance when the target is smaller than the standard iron target (48mm × 48mm × 1mm). Actual sensing distance may differ.

SX-DRINF-3030D□□ Series — Non-flush

Sensing Area Characteristics



Relationship Between Target Size and Sensing Distance



This graph shows the sensing distance when the target is smaller than the standard iron target (90mm × 90mm × 1mm). Actual sensing distance may differ.

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