

Inductive Proximity Sensor

Sensing Distance (Sn)

The sensing distance of the inductive proximity sensor varies with different target materials. The sensing distance of inductive sensor on this catalog use a steel target. The sensing distance for other materials can be calculated by multiply a correction factor shown on the table below:

Material	Attenuation coefficient
Steel	1
Stainless steel	0.85
Aluminum	0.4
Brass	0.4
Copper	0.3

The sensing distance will also vary with different size and shape of the target. Square target block will result in a longer sensing distance than a round one. Bigger target will have a longer sensing distance.

None: Operating frequency of the inductive proximity switch is measured at 1/2 Sn.

Repeat Accuracy (R)

Ratio of the difference value between any of the two measurements and distance of checking (Sn).

Return Difference (H)

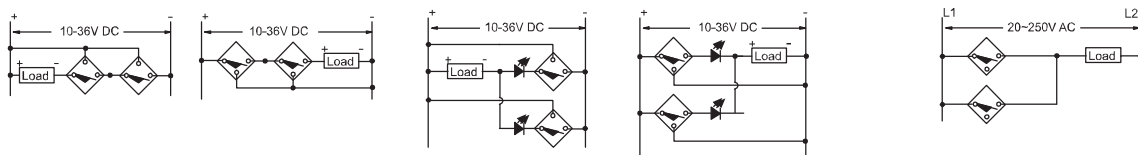
Distance between operating point when target metal moves close to proximity switch and reset point when target metal moves away from the proximity.

Wiring Diagram:

	Leadwire N.O.	Leadwire N.C.	Quick Connect N.O.	Quick Connect N.C.
NPN three-wire DC				
PNP three-wire DC				
two-wire AC				

None: Load with two-wire AC can be connected to either of the brown or blue leadwire.

Series and Parallel

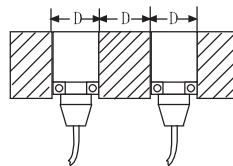
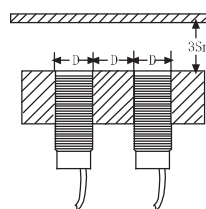


Note :

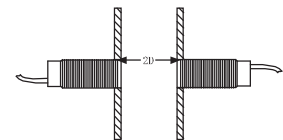
- 1) For series connection, if sensors do not operate stably, provide each with a 500 k to 10 M* resistor in parallel. This will stabilize the voltage and allow the sensors to operate stably.
- 2) Use parallel connect only when 2 or more sensors are not activated simultaneously. The leakage current, however, will be n times the value for each Sensor and reset failures will frequently occur.

Mounting Requirements

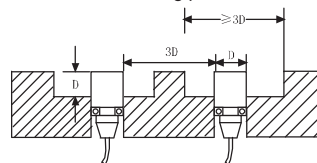
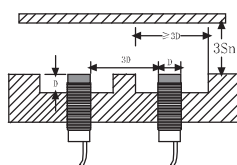
Shielded



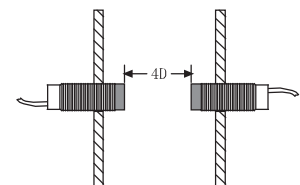
D = diameter or width of sensing panel; Sn = rated sensing distance



non-shielded



D = diameter or width of sensing panel; Sn = rated sensing distance



Inductive Proximity Switches

Ordering Codes

SL C - 12 - 4 - DE - ON - - - -

M8	08	Sensing Range	A	20-250VAC	Output Type	Blank	2 meter cable	Housing Type	Blank	Ni plated brass	Blank	30	XX mm
M12	12		D	10-36VDC		O	Normal open		5	5 meter cable		S	Stainless Steel
M18	18		E	Shielded		C	Normal close		H	M12 plug exit		P	Plastics
M30	30		N	Unshielded		V	Dual NO & NC		N	NPN		P	PNP

SLC-08 Series (Cylindrical Type) Inductive Proximity Switches

Operating Temperature: -25**70*

protection: Reverse Polarity Protection + Short circuit and overload protection

LED indicator: Red output energized,360 visibility

Degree of Protection: IP67 (EN 60529)

Applicable Standard: GB/T14048.10 EN 60947-5-2

Certification: UL Certification: E310408 CCC Certification: 20080103050268320



Dimensions (mm)

<p>SLC-08-1.5*E** SLC-08-2*E** Pre-wired, Shielded Style</p>	<p>SLC-08-3*N** SLC-08-4*N** Pre-wired, Unshielded Style</p>
<p>SLC-08-1.5*E**(30) SLC-08-2*E**(30) Pre-wired, Shielded, Short Style</p>	<p>SLC-08-3*N**(30) SLC-08-4*N**(30) Pre-wired, Unshielded, Short Style</p>
<p>SLC-08-1.5*E**-M12 SLC-08-2*E**-M12 Quick Connector (M12 Connector), Shielded Style</p>	<p>SLC-08-3*N**-M12 SLC-08-4*N**-M12 Quick Connector (M12 Connector), Unshielded Style</p>
<p>SLC-08-1.5*E**-M12(30) SLC-08-2*E**-M12(30) Quick Connector (M12 Connector), Shielded, Short</p>	<p>SLC-08-3*N**-M12(30) SLC-08-4*N**-M12(30) Quick Connector (M12 Connector), Unshielded, Short</p>

SLC-08 Series (Cylindrical Type) Inductive Proximity Switches

■ Specifications

Type	Model Number(s)	Sn Sensing Range Sn mm	Type		Supply voltage			Output					
			Shielded	Unshielded	10-30VDC	10-36VDC	20-250VAC	Normal open	Normal close	NPN	PNP	Load current (max) mA	Switching frequency Hz
3- wire DC	SLC-08-1.5DEON	1.5	*			*		*		*		150	2K
	SLC-08-1.5DEOP	1.5	*			*		*			*	150	2K
	SLC-08-1.5DECN	1.5	*			*			*	*		150	2K
	SLC-08-1.5DECP	1.5	*			*			*		*	150	2K
	SLC-08-3DNON	3		*		*		*		*		150	2K
	SLC-08-3DNOP	3		*		*		*			*	150	2K
	SLC-08-3DNCN	3		*		*			*	*		150	2K
	SLC-08-3DNCP	3		*		*			*		*	150	2K
3- wire DC Extended Distance	SLC-08-2DEON	2	*			*		*		*		150	2K
	SLC-08-2DEOP	2	*			*		*			*	150	2K
	SLC-08-2DECN	2	*			*			*	*		150	2K
	SLC-08-2DECP	2	*			*			*		*	150	2K
	SLC-08-4DNON	4		*		*		*		*		150	2K
	SLC-08-4DNOP	4		*		*		*			*	150	2K
	SLC-08-4DNCN	4		*		*			*	*		150	2K
	SLC-08-4DNCP	4		*		*			*		*	150	2K