

EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter	∅ 6.5		∅ 6.5			
● Shielded ○ non-Shielded	●	○	●	○		
Switching Distance, Sn: mm	2 mm	4 mm	2 mm	4 mm		
Housing Material	Stainless steel		Stainless steel			
● With LED ○ Without LED	●	○	●	○		
Picture						
Dimensions (unit: mm)						
Ripple	<10%		<10%			
No Load Current	<10mA		<10mA			
Max. Load current	200mA		200mA			
Leakage Current	<0.01mA		<0.01mA			
Voltage Drop	<1.5V		<1.5V			
Switching Frequency	2KHz	1KHz	2KHz	1KHz		
Response Time	0.1ms/0.1ms	0.2ms/0.2ms	0.1ms/0.1ms	0.2ms/0.2ms		
Switching Hysteresis	<15%(Sr)		<15%(Sr)			
Repeat Accuracy	<1.0%(Sr)		<1.0%(Sr)			
Protection Category	IP67		IP67			
Operating Temperature	-25°C - +70°C		-25°C - +70°C			
Temperature Drift	<10%(Sr)		<10%(Sr)			
Short Circuit Protection	Yes		Yes			
Overload Trip Point	220mA		220mA			
Material Active Face	POM		POM			
Connecting type	2M Cable (2.9 ∅ 3x0.15)		2M Cable (2.9 ∅ 3x0.15)			
Weight	approx.36 g		approx.40 g			
DC 3 wire 10-30V NPN N.O.	ISS-S6.502N-A1VS2	1*	ISN-S6.504N-A1VS2	ISS-S6.502N-A1VN2	1*	ISN-S6.504N-A1VN2
DC 3 wire 10-30V NPN N.C.	ISS-S6.502N-B1VS2	2	ISN-S6.504N-B1VS2	ISS-S6.502N-B1VN2	2	ISN-S6.504N-B1VN2
DC 3 wire 10-30V PNP N.O.	ISS-S6.502P-A1VS2	3	ISN-S6.504P-A1VS2	ISS-S6.502P-A1VN2	3	ISN-S6.504P-A1VN2
DC 3 wire 10-30V PNP N.C.	ISS-S6.502P-B1VS2	4	ISN-S6.504P-B1VS2	ISS-S6.502P-B1VN2	4	ISN-S6.504P-B1VN2
DC 3 wire 10-55V NPN N.O.						
DC 3 wire 10-55V NPN N.C.						
DC 3 wire 10-55V PNP N.O.						
DC 3 wire 10-55V PNP N.C.						
DC 3 wire 5-36 V NPN N.O.						
DC 3 wire 5-36 V NPN N.C.						
DC 3 wire 5-36 V PNP N.O.						
DC 3 wire 5-36 V PNP N.C.						

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 to Page 015.

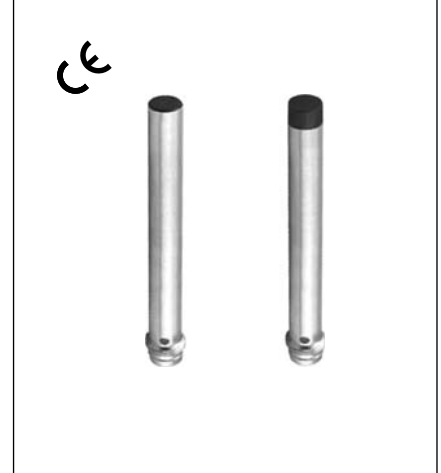
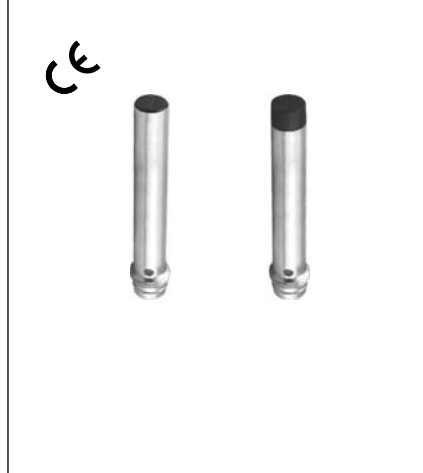
EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

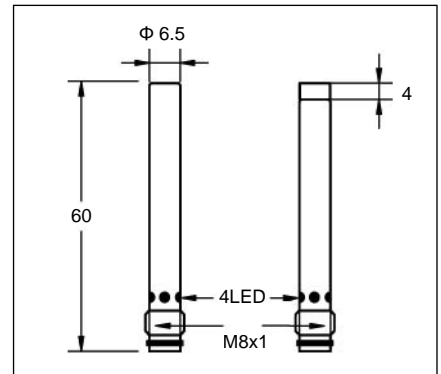
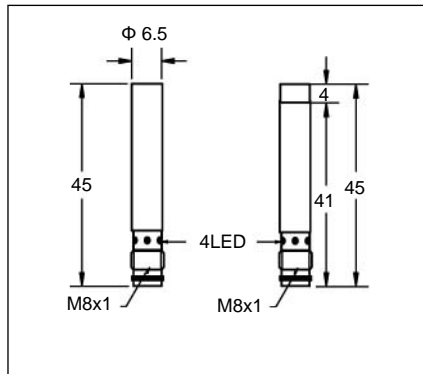
φ 6.5	
●	○
2 mm	4 mm
Stainless steel	
●	

φ 6.5	
●	○
2 mm	4 mm
Stainless steel	
●	

Picture



Dimensions (unit: mm)



Ripple
No Load Current
Max. Load current
Leakage Current
Voltage Drop
Switching Frequency
Response Time
Switching Hysteresis
Repeat Accuracy
Protection Category
Operating Temperature
Temperature Drift
Short Circuit Protection
Overload Trip Point
Material Active Face

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

Connecting type
Weight

M8 connector
approx. 14 g

M8 connector
approx. 18 g

DC 3 wire 10-30V NPN N.O.
DC 3 wire 10-30V NPN N.C.
DC 3 wire 10-30V PNP N.O.
DC 3 wire 10-30V PNP N.C.
DC 3 wire 10-55V NPN N.O.
DC 3 wire 10-55V NPN N.C.
DC 3 wire 10-55V PNP N.O.
DC 3 wire 10-55V PNP N.C.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

ISS-S6.502N-A1PS3	1*	ISN-S6.504N-A1PS3
ISS-S6.502N-B1PS3	2	ISN-S6.504N-B1PS3
ISS-S6.502P-A1PS3	3	ISN-S6.504P-A1PS3
ISS-S6.502P-B1PS3	4	ISN-S6.504P-B1PS3

ISS-S6.502N-A1PN3	1*	ISN-S6.504N-A1PN3
ISS-S6.502N-B1PN3	2	ISN-S6.504N-B1PN3
ISS-S6.502P-A1PN3	3	ISN-S6.504P-A1PN3
ISS-S6.502P-B1PN3	4	ISN-S6.504P-B1PN3

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 and Page 014.

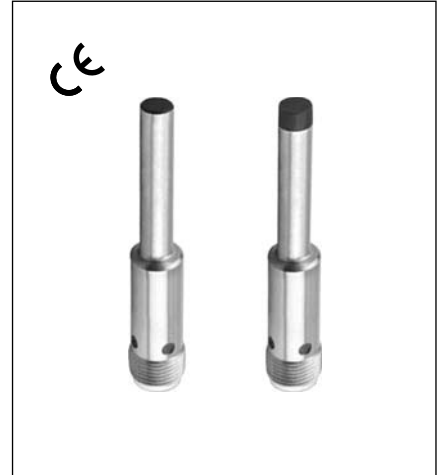
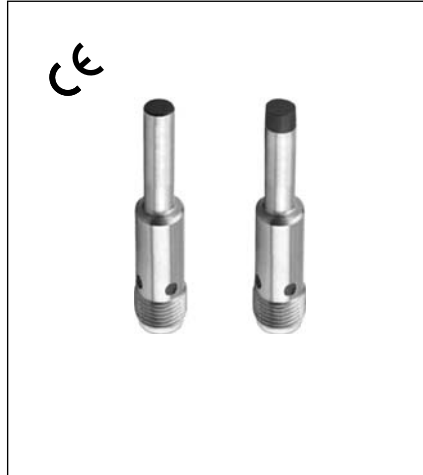
EXTENDED RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

Diameter
● Shielded ○ non-Shielded
Switching Distance, Sn: mm
Housing Material
● With LED ○ Without LED

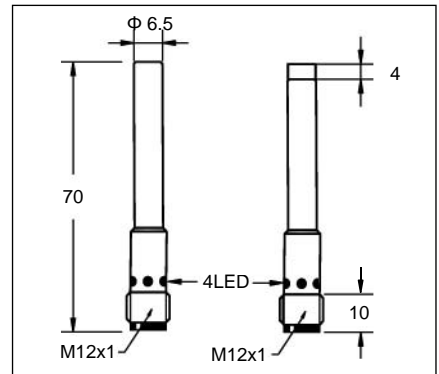
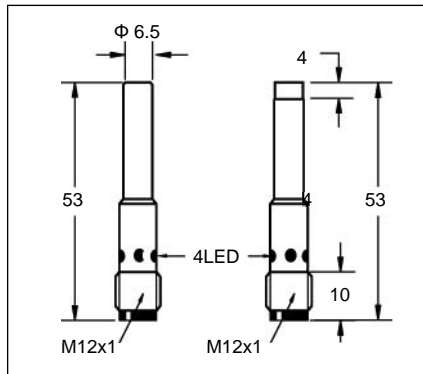
φ 6.5	
●	○
2 mm	4 mm
Stainless steel	
●	

φ 6.5	
●	○
2 mm	4 mm
Stainless steel	
●	

Picture



Dimensions (unit: mm)



Ripple
No Load Current
Max. Load current
Leakage Current
Voltage Drop
Switching Frequency
Response Time
Switching Hysteresis
Repeat Accuracy
Protection Category
Operating Temperature
Temperature Drift
Short Circuit Protection
Overload Trip Point
Material Active Face

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<1.5V
2KHz 1KHz
0.1ms/0.1ms 0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

Connecting type
Weight

M12 connector
approx.20 g

M12 connector
approx.25 g

DC 3 wire 10-30V NPN N.O.
DC 3 wire 10-30V NPN N.C.
DC 3 wire 10-30V PNP N.O.
DC 3 wire 10-30V PNP N.C.
DC 3 wire 10-55V NPN N.O.
DC 3 wire 10-55V NPN N.C.
DC 3 wire 10-55V PNP N.O.
DC 3 wire 10-55V PNP N.C.
DC 3 wire 5-36 V NPN N.O.
DC 3 wire 5-36 V NPN N.C.
DC 3 wire 5-36 V PNP N.O.
DC 3 wire 5-36 V PNP N.C.

ISS-S6.502N-A1ES4	1*	ISN-S6.504N-A1ES4
ISS-S6.502N-B1ES4	2	ISN-S6.504N-B1ES4
ISS-S6.502P-A1ES4	3	ISN-S6.504P-A1ES4
ISS-S6.502P-B1ES4	4	ISN-S6.504P-B1ES4

ISS-S6.502N-A1EN4	1*	ISN-S6.504N-A1EN4
ISS-S6.502N-B1EN4	2	ISN-S6.504N-B1EN4
ISS-S6.502P-A1EN4	3	ISN-S6.504P-A1EN4
ISS-S6.502P-B1EN4	4	ISN-S6.504P-B1EN4

* Wiring diagram number. Please see the relevant wiring diagram shown on Page 013 to Page 015.