

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

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

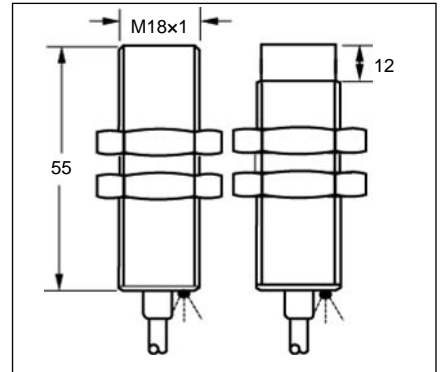
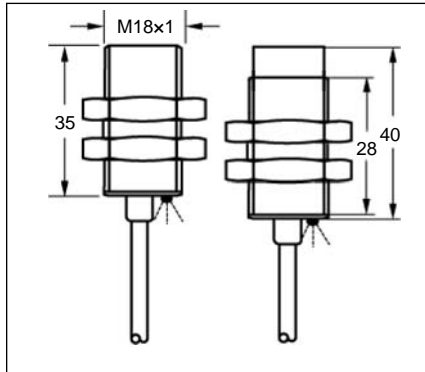
M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

Picture



Dimensions (unit: mm)



Ripple	<10%
No Load Current	<10mA
Max. Load current	200mA
Leakage Current	<0.01mA
Voltage Drop	<2.0V
Switching Frequency	300Hz 100Hz
Response Time	0.5ms/0.5ms 1ms/1ms
Switching Hysteresis	<15%(Sr)
Repeat Accuracy	<1.0%(Sr)
Protection Category	IP67
Operating Temperature	-25°C - +70°C
Temperature Drift	<10%(Sr)
Short Circuit Protection	Yes
Overload Trip Point	220mA
Material Active Face	PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
300Hz 100Hz
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IP67
-25°C - +70°C
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<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

Connecting type	2M Cable (5.0 φ 3x0.34)
Weight	approx. 132 g

2M Cable (5.0 φ 3x0.34)
approx. 132 g

2M Cable (5.0 φ 3x0.34)
approx. 150 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.

IBS-M1812N-A1VS2	1*	IBN-M1820N-A1VS2
IBS-M1812N-B1VS2	2	IBN-M1820N-B1VS2
IBS-M1812P-A1VS2	3	IBN-M1820P-A1VS2
IBS-M1812P-B1VS2	4	IBN-M1820P-B1VS2

IBS-M1812N-A1VN2	1*	IBN-M1820N-A1VN2
IBS-M1812N-B1VN2	2	IBN-M1820N-B1VN2
IBS-M1812P-A1VN2	3	IBN-M1820P-A1VN2
IBS-M1812P-B1VN2	4	IBN-M1820P-B1VN2

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

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Housing Material
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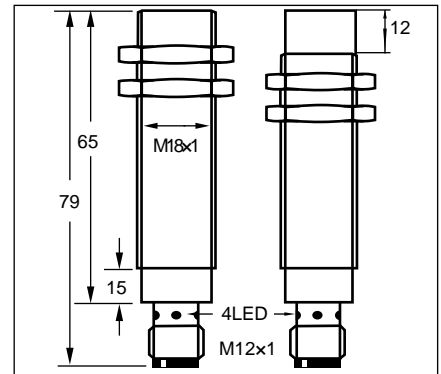
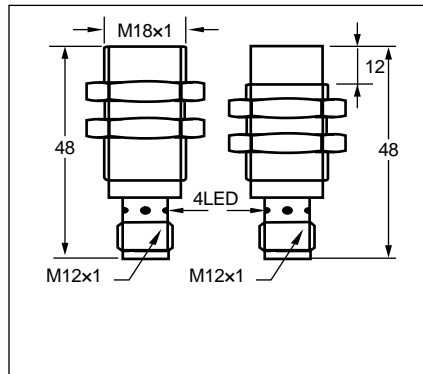
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●	○
12 mm	20 mm
Nickel plated brass	
●	

M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

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
<2.0V
300Hz 100Hz
0.5ms/0.5ms 1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
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220mA
PBT

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<10mA
200mA
<0.01mA
<2.0V
300Hz 100Hz
0.5ms/0.5ms 1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

M12 connector
approx.52 g

M12 connector
approx.95 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.

IBS-M1812N-A1ES4	1*	IBN-M1820N-A1ES4
IBS-M1812N-B1ES4	2	IBN-M1820N-B1ES4
IBS-M1812P-A1ES4	3	IBN-M1820P-A1ES4
IBS-M1812P-B1ES4	4	IBN-M1820P-B1ES4

IBS-M1812N-A1EN4	1*	IBN-M1820N-A1EN4
IBS-M1812N-B1EN4	2	IBN-M1820N-B1EN4
IBS-M1812P-A1EN4	3	IBN-M1820P-A1EN4
IBS-M1812P-B1EN4	4	IBN-M1820P-B1EN4

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