

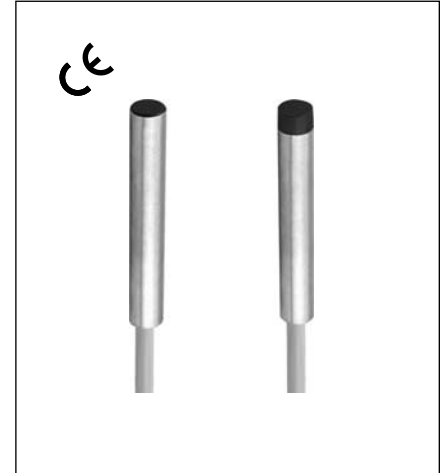
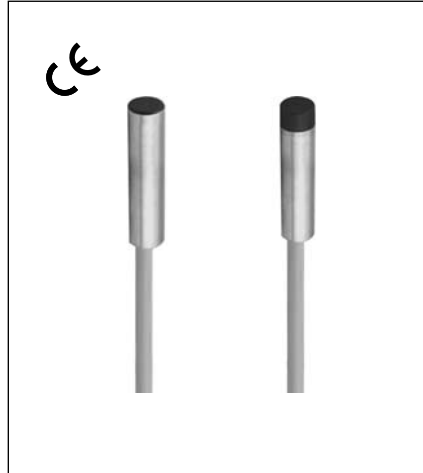
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

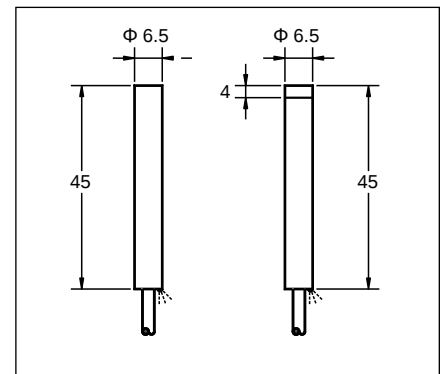
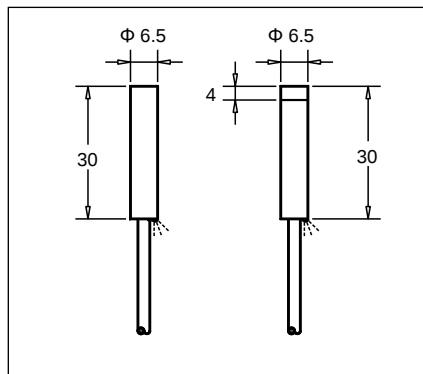
φ 6.5	
●	○
3 mm	6 mm
Stainless steel	
●	

φ 6.5	
●	○
3 mm	6 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
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25℃ - +70℃
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25℃ - +70℃
<10%(Sr)
Yes
220mA
POM

Connecting type
Weight

2M Cable (2.9 φ 3x0.15)
approx.36 g

2M Cable (2.9 φ 3x0.15)
approx.40 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-S6.503N-A1VS2	1*	ISN-S6.506N-A1VS2
ISS-S6.503N-B1VS2	2	ISN-S6.506N-B1VS2
ISS-S6.503P-A1VS2	3	ISN-S6.506P-A1VS2
ISS-S6.503P-B1VS2	4	ISN-S6.506P-B1VS2

ISS-S6.503N-A1VN2	1*	ISN-S6.506N-A1VN2
ISS-S6.503N-B1VN2	2	ISN-S6.506N-B1VN2
ISS-S6.503P-A1VN2	3	ISN-S6.506P-A1VN2
ISS-S6.503P-B1VN2	4	ISN-S6.506P-B1VN2

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

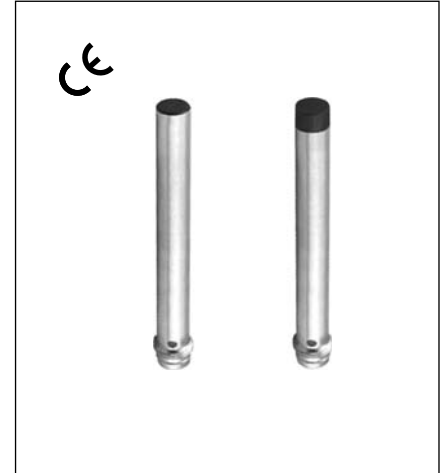
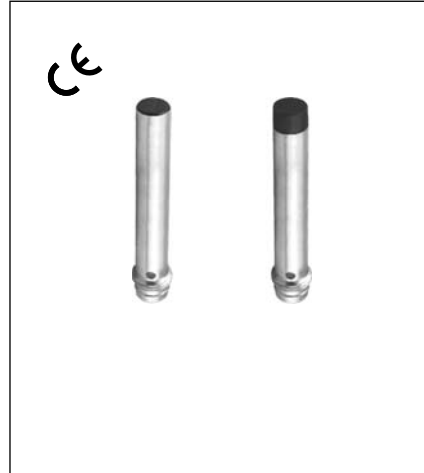
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

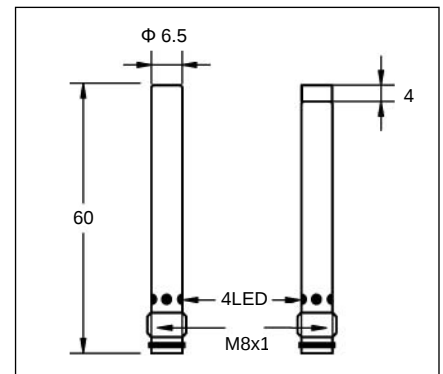
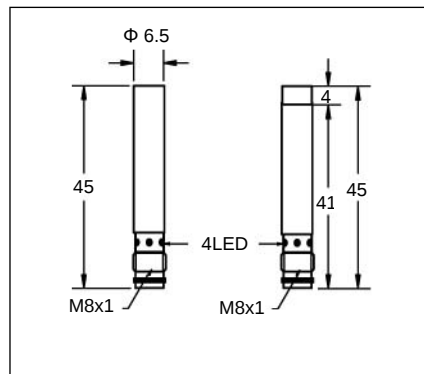
φ 6.5	
●	○
3 mm	6 mm
Stainless steel	
●	

φ 6.5	
●	○
3 mm	6 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
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<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-S6.503N-A1PS3	1*	ISS-S6.506N-A1PS3
ISS-S6.503N-B1PS3	2	ISS-S6.506N-B1PS3
ISS-S6.503P-A1PS3	3	ISS-S6.506P-A1PS3
ISS-S6.503P-B1PS3	4	ISS-S6.506P-B1PS3

ISS-S6.503N-A1PN3	1*	ISS-S6.506N-A1PN3
ISS-S6.503N-B1PN3	2	ISS-S6.506N-B1PN3
ISS-S6.503P-A1PN3	3	ISS-S6.506P-A1PN3
ISS-S6.503P-B1PN3	4	ISS-S6.506P-B1PN3

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

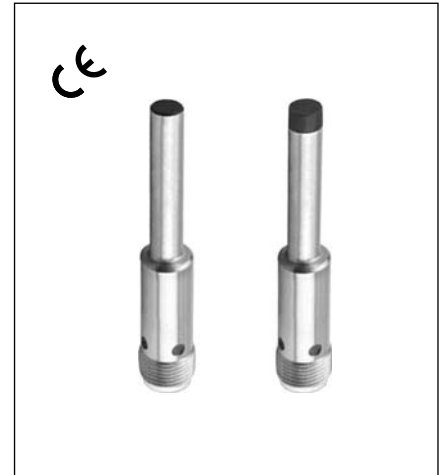
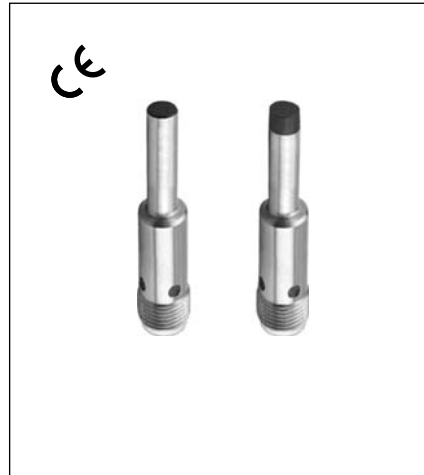
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

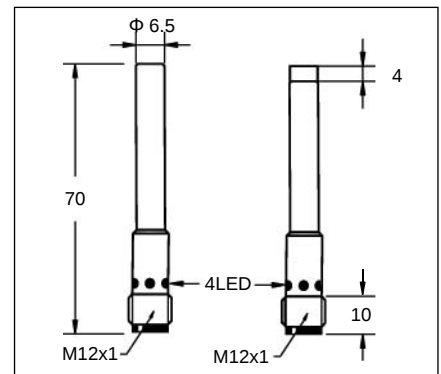
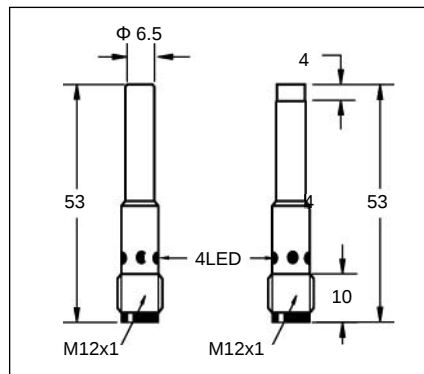
φ 6.5	
●	○
3 mm	6 mm
Stainless steel	
●	

φ 6.5	
●	○
3 mm	6 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
<2.0V
1KHz
500Hz
0.2ms/0.2ms
0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25℃ - +70℃
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz
500Hz
0.2ms/0.2ms
0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25℃ - +70℃
<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-S6.503N-A1ES4	1*	ISN-S6.506N-A1ES4
ISS-S6.503N-B1ES4	2	ISN-S6.506N-B1ES4
ISS-S6.503P-A1ES4	3	ISN-S6.506P-A1ES4
ISS-S6.503P-B1ES4	4	ISN-S6.506P-B1ES4

ISS-S6.503N-A1EN4	1*	ISN-S6.506N-A1EN4
ISS-S6.503N-B1EN4	2	ISN-S6.506N-B1EN4
ISS-S6.503P-A1EN4	3	ISN-S6.506P-A1EN4
ISS-S6.503P-B1EN4	4	ISN-S6.506P-B1EN4

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

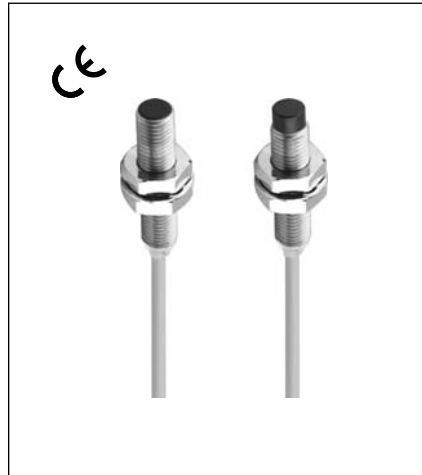
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

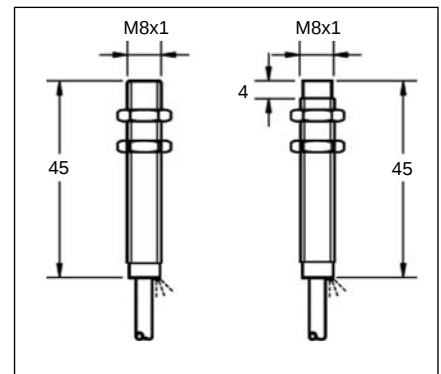
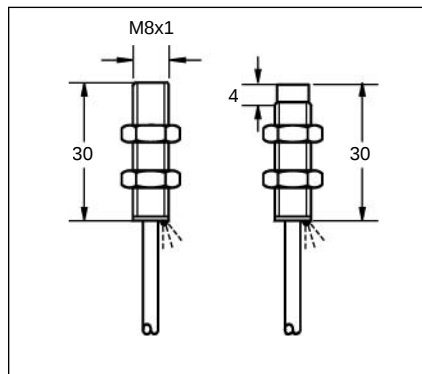
M8	
●	○
3 mm	6 mm
Stainless steel or Nickel plated brass	
●	

M8	
●	○
3 mm	6 mm
Stainless steel or 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
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

Connecting type
Weight

2M Cable (2.9 φ 3x0.15)
approx.45 g

2M Cable (2.9 φ 3x0.15)
approx.55 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-M803N-A1VS2	1*	ISN-M806N-A1VS2
ISS-M803N-B1VS2	2	ISN-M806N-B1VS2
ISS-M803P-A1VS2	3	ISN-M806P-A1VS2
ISS-M803P-B1VS2	4	ISN-M806P-B1VS2

ISS-M803N-A1VN2	1*	ISN-M806N-A1VN2
ISS-M803N-B1VN2	2	ISN-M806N-B1VN2
ISS-M803P-A1VN2	3	ISN-M806P-A1VN2
ISS-M803P-B1VN2	4	ISN-M806P-B1VN2

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

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

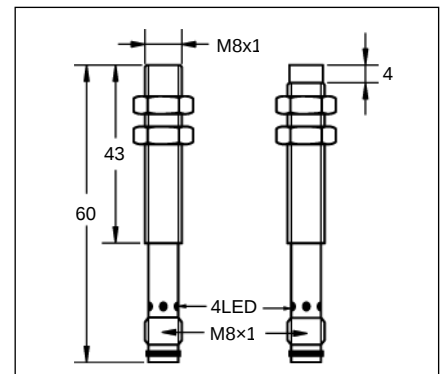
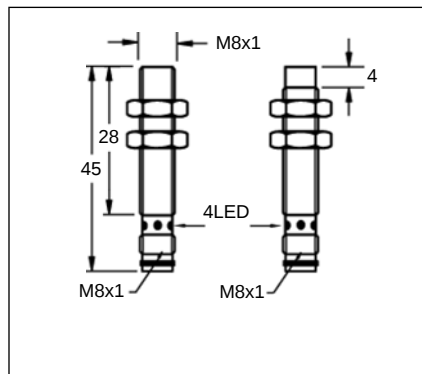
M8	
●	○
3 mm	6 mm
Stainless steel or Nickel plated brass	
●	

M8	
●	○
3 mm	6 mm
Stainless steel or 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
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<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.20 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-M803N-A1PS3	1*	ISN-M806N-A1PS3
ISS-M803N-B1PS3	2	ISN-M806N-B1PS3
ISS-M803P-A1PS3	3	ISN-M806P-A1PS3
ISS-M803P-B1PS3	4	ISN-M806P-B1PS3

ISS-M803N-A1PN3	1*	ISN-M806N-A1PN3
ISS-M803N-B1PN3	2	ISN-M806N-B1PN3
ISS-M803P-A1PN3	3	ISN-M806P-A1PN3
ISS-M803P-B1PN3	4	ISN-M806P-B1PN3

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

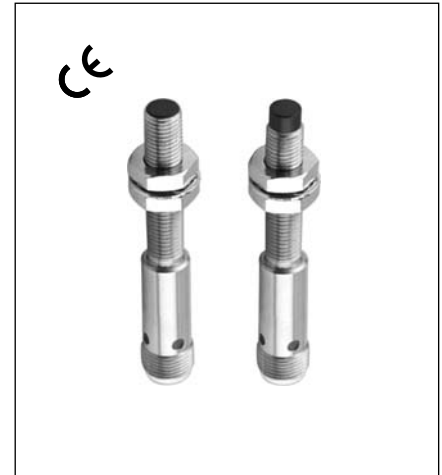
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

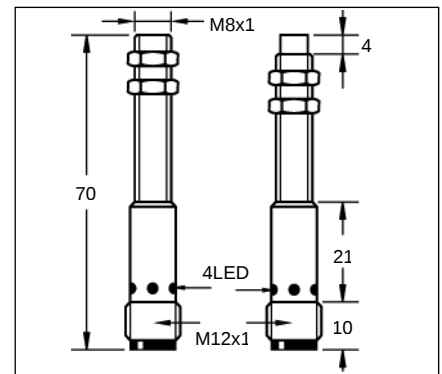
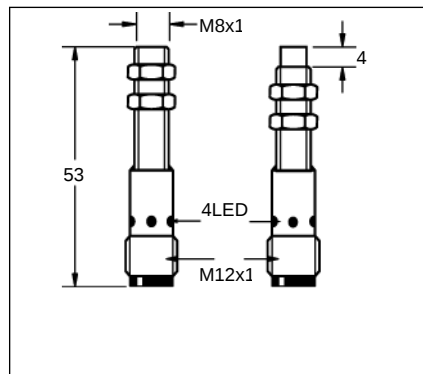
M8	
●	○
3 mm	6 mm
Nickel plated brass	
●	

M8	
●	○
3 mm	6 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
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM

<10%
<10mA
200mA
<0.01mA
<2.0V
1KHz 500Hz
0.2ms/0.2ms 0.5ms/0.5ms
<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.

IBS-M803N-A1ES4	1*	IBN-M806N-A1ES4
IBS-M803N-B1ES4	2	IBN-M806N-B1ES4
IBS-M803P-A1ES4	3	IBN-M806P-A1ES4
IBS-M803P-B1ES4	4	IBN-M806P-B1ES4

IBS-M803N-A1EN4	1*	IBN-M806N-A1EN4
IBS-M803N-B1EN4	2	IBN-M806N-B1EN4
IBS-M803P-A1EN4	3	IBN-M806P-A1EN4
IBS-M803P-B1EN4	4	IBN-M806P-B1EN4

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

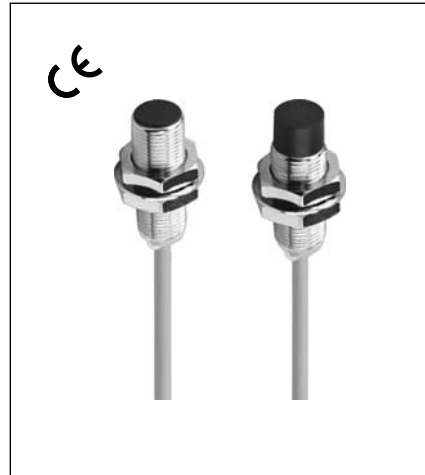
LONG RANGE INDUCTIVE PROXIMITY SENSOR (10-30VDC/10-55VDC/5-36VDC)

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

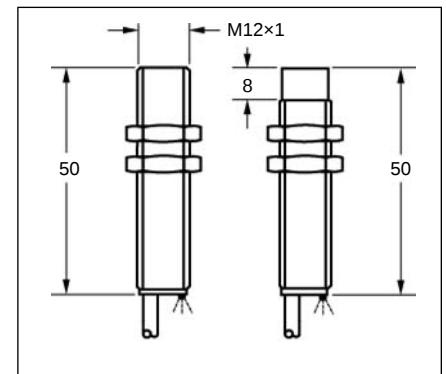
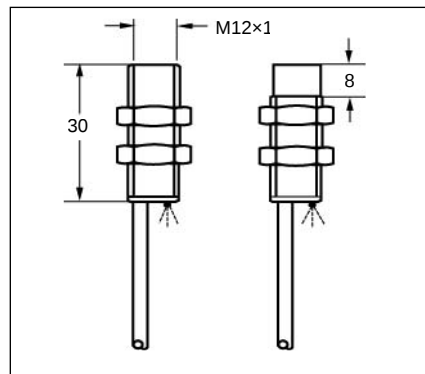
M12	
●	○
6 mm	10 mm
Nickel plated brass	
●	

M12	
●	○
6 mm	10 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	800Hz 400Hz
Response Time	0.2ms/0.2ms 0.5ms/0.5ms
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	POM PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
800Hz 400Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
800Hz 400Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM PBT

Connecting type
Weight

2M Cable (4.0 φ 3x0.25)
approx.60 g

2M Cable (4.0 φ 3x0.25)
approx.70 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-M1206N-A1VS2	1*	IBN-M1210N-A1VS2
IBS-M1206N-B1VS2	2	IBN-M1210N-B1VS2
IBS-M1206P-A1VS2	3	IBN-M1210P-A1VS2
IBS-M1206P-B1VS2	4	IBN-M1210P-B1VS2

IBS-M1206N-A1VN2	1*	IBN-M1210N-A1VN2
IBS-M1206N-B1VN2	2	IBN-M1210N-B1VN2
IBS-M1206P-A1VN2	3	IBN-M1210P-A1VN2
IBS-M1206P-B1VN2	4	IBN-M1210P-B1VN2

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

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

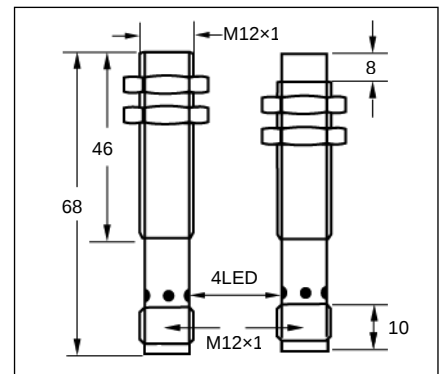
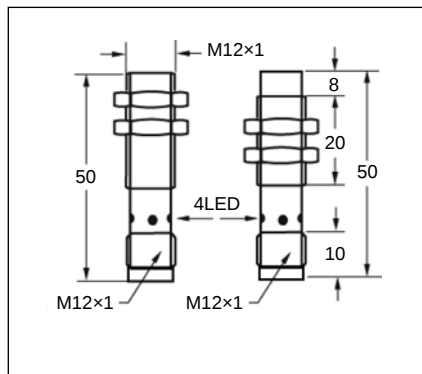
M12	
●	○
6 mm	10 mm
Nickel plated brass	
●	

M12	
●	○
6 mm	10 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
800Hz 400Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM PBT

<10%
<10mA
200mA
<0.01mA
<2.0V
800Hz 400Hz
0.2ms/0.2ms 0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
POM PBT

Connecting type
Weight

M12 connector
approx.25 g

M12 connector
approx.30 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-M1206N-A1ES4	1*	IBN-M1210N-A1ES4
IBS-M1206N-B1ES4	2	IBN-M1210N-B1ES4
IBS-M1206P-A1ES4	3	IBN-M1210P-A1ES4
IBS-M1206P-B1ES4	4	IBN-M1210P-B1ES4

IBS-M1206N-A1EN4	1*	IBN-M1210N-A1EN4
IBS-M1206N-B1EN4	2	IBN-M1210N-B1EN4
IBS-M1206P-A1EN4	3	IBN-M1210P-A1EN4
IBS-M1206P-B1EN4	4	IBN-M1210P-B1EN4

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

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

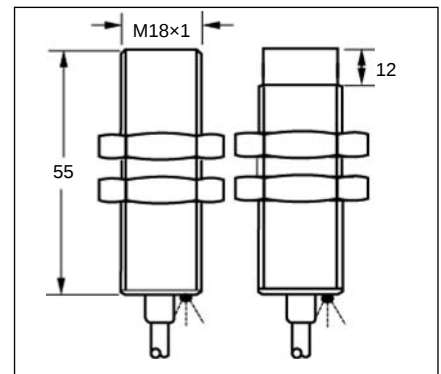
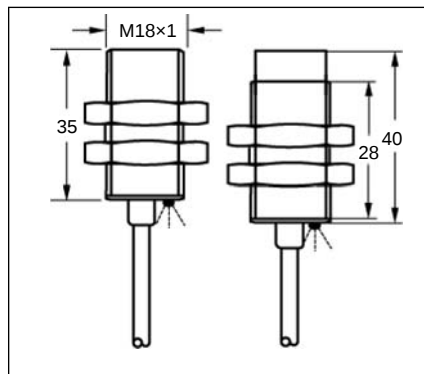
M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

Picture



Dimensions (unit: mm)



Ripple
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
<10%(Sr)
Yes
220mA
PBT

<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
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

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.

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

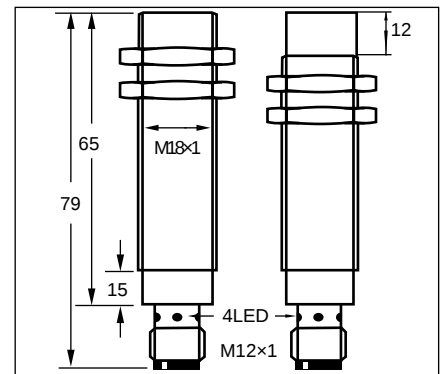
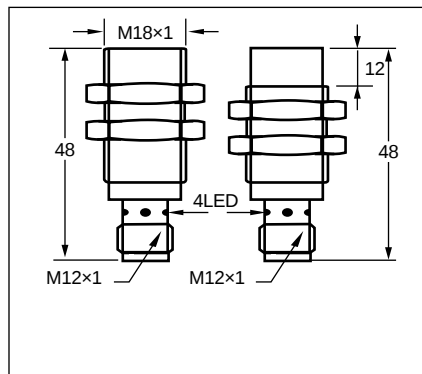
M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

M18	
●	○
12 mm	20 mm
Nickel plated brass	
●	

Picture



Dimensions (unit: mm)



Ripple
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
<10%(Sr)
Yes
220mA
PBT

<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
<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.

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

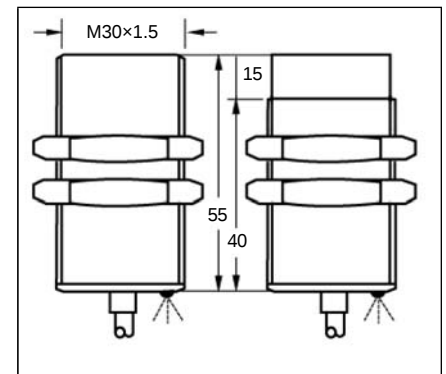
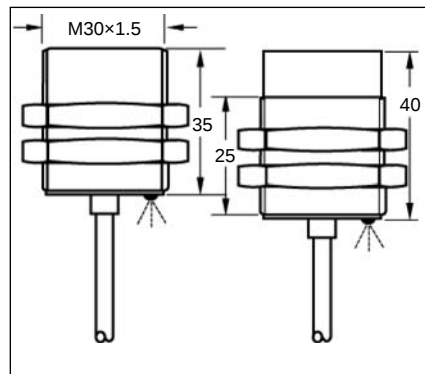
M30	
●	○
22 mm	40 mm
Nickel plated brass	
●	

M30	
●	○
22 mm	40 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
<10%(Sr)
Yes
220mA
PBT

<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
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

2M Cable (5.0 φ 3x0.34)
approx.182 g

2M Cable (5.0 φ 3x0.34)
approx.215 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-M3022N-A1VS2	1*	IBN-M3040N-A1VS2
IBS-M3022N-B1VS2	2	IBN-M3040N-B1VS2
IBS-M3022P-A1VS2	3	IBN-M3040P-A1VS2
IBS-M3022P-B1VS2	4	IBN-M3040P-B1VS2

IBS-M3022N-A1VN2	1*	IBN-M3040N-A1VN2
IBS-M3022N-B1VN2	2	IBN-M3040N-B1VN2
IBS-M3022P-A1VN2	3	IBN-M3040P-A1VN2
IBS-M3022P-B1VN2	4	IBN-M3040P-B1VN2

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

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

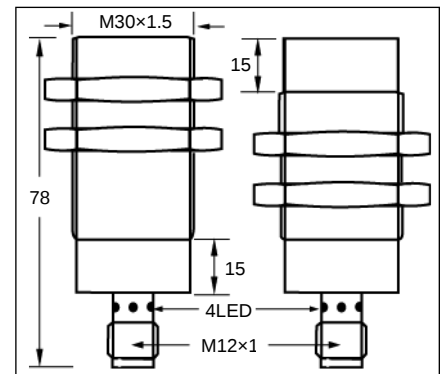
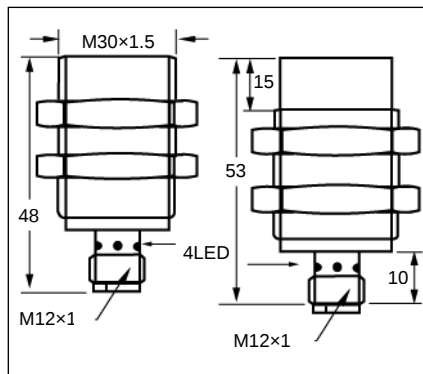
M30	
●	○
22 mm	40 mm
Nickel plated brass	
●	

M30	
●	○
22 mm	40 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
<10%(Sr)
Yes
220mA
PBT

<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
<10%(Sr)
Yes
220mA
PBT

Connecting type
Weight

M12 connector
approx.120 g

M12 connector
approx.185 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-M3022N-A1ES4	1*	IBN-M3040N-A1ES4
IBS-M3022N-B1ES4	2	IBN-M3040N-B1ES4
IBS-M3022P-A1ES4	3	IBN-M3040P-A1ES4
IBS-M3022P-B1ES4	4	IBN-M3040P-B1ES4

IBS-M3022N-A1EN4	1*	IBN-M3040N-A1EN4
IBS-M3022N-B1EN4	2	IBN-M3040N-B1EN4
IBS-M3022P-A1EN4	3	IBN-M3040P-A1EN4
IBS-M3022P-B1EN4	4	IBN-M3040P-B1EN4

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