

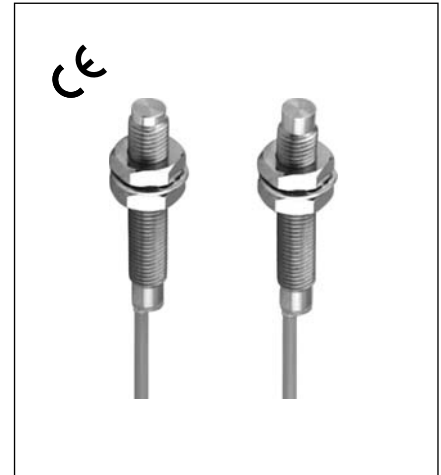
METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

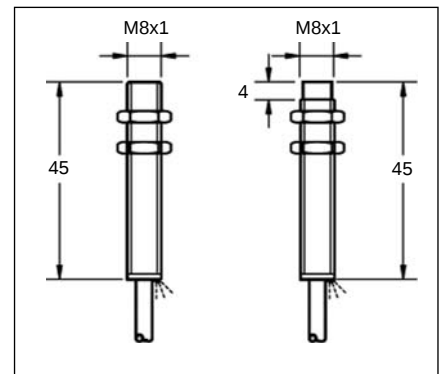
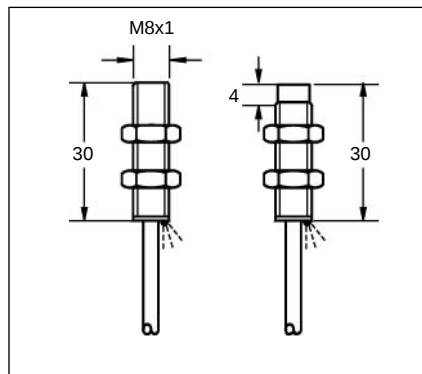
M8	
●	○
2 mm	4 mm
Stainless steel	
●	

M8	
●	○
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
Stainless steel

<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
Stainless steel

Connecting type
Weight

2M Cable (2.9 ϕ 3x0.15)
approx.40 g

2M Cable (2.9 ϕ 3x0.15)
approx.53 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.

IVS-M802N-A1VS2	1*	IVN-M804N-A1VS2
IVS-M802N-B1VS2	2	IVN-M804N-B1VS2
IVS-M802P-A1VS2	3	IVN-M804P-A1VS2
IVS-M802P-B1VS2	4	IVN-M804P-B1VS2

IVS-M802N-A1VN2	1*	IVN-M804N-A1VN2
IVS-M802N-B1VN2	2	IVN-M804N-B1VN2
IVS-M802P-A1VN2	3	IVN-M804P-A1VN2
IVS-M802P-B1VN2	4	IVN-M804P-B1VN2

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

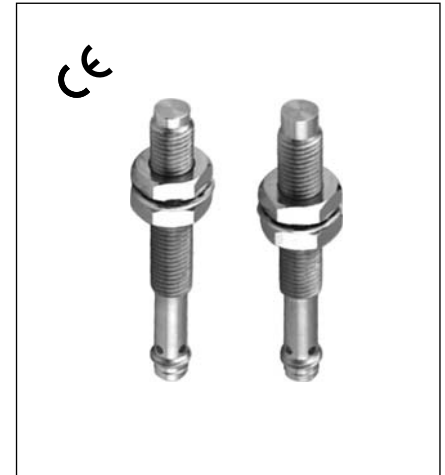
METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

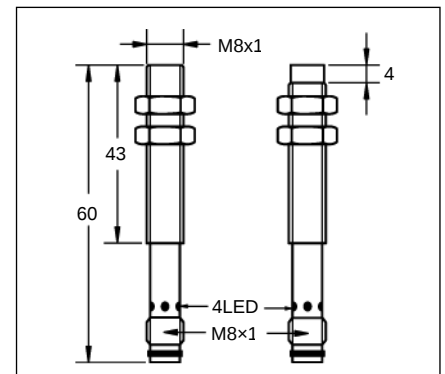
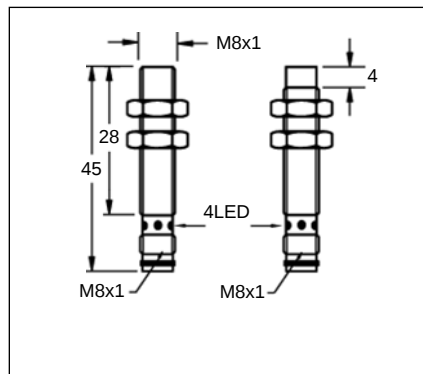
M8	
●	○
2 mm	4 mm
Stainless steel	
●	

M8	
●	○
2 mm	4mm
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
Stainless steel

<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
Stainless steel

Connecting type
Weight

M8 connector
approx.15 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.

IVS-M802N-A1PS3	1*	IVN-M804N-A1PS3
IVS-M802N-B1PS3	2	IVN-M804N-B1PS3
IVS-M802P-A1PS3	3	IVN-M804P-A1PS3
IVS-M802P-B1PS3	4	IVN-M804P-B1PS3

IVS-M802N-A1PN3	1*	IVN-M804N-A1PN3
IVS-M802N-B1PN3	2	IVN-M804N-B1PN3
IVS-M802P-A1PN3	3	IVN-M804P-A1PN3
IVS-M802P-B1PN3	4	IVN-M804P-B1PN3

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

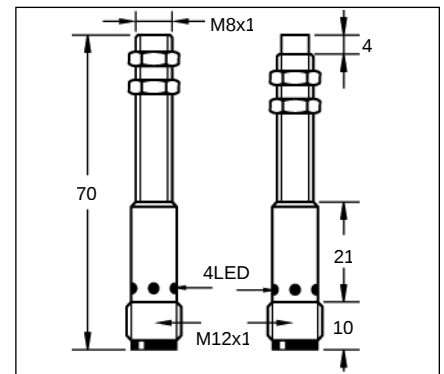
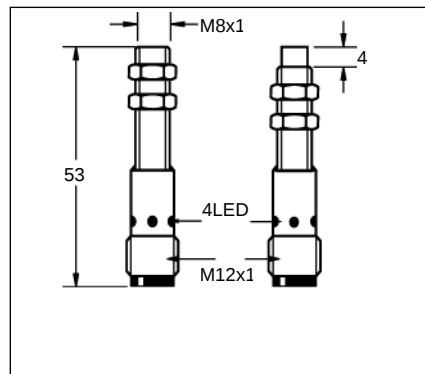
M8	
●	○
2 mm	4 mm
Stainless steel	
●	

M8	
●	○
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
Stainless steel

<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
Stainless steel

Connecting type
Weight

M12 connector
approx.18 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.

IVS-M802N-A1ES4	1*	IVN-M804N-A1ES4
IVS-M802N-B1ES4	2	IVN-M804N-B1ES4
IVS-M802P-A1ES4	3	IVN-M804P-A1ES4
IVS-M802P-B1ES4	4	IVN-M804P-B1ES4

IVS-M802N-A1EN4	1*	IVN-M804N-A1EN4
IVS-M802N-B1EN4	2	IVN-M804N-B1EN4
IVS-M802P-A1EN4	3	IVN-M804P-A1EN4
IVS-M802P-B1EN4	4	IVN-M804P-B1EN4

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

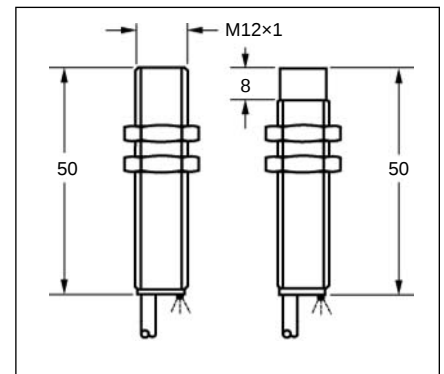
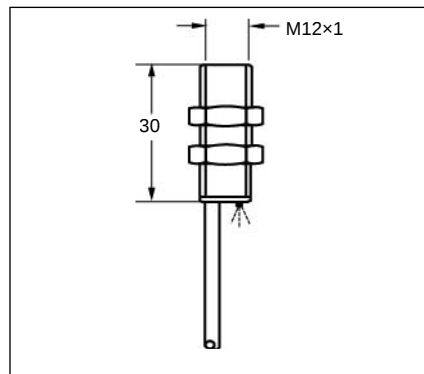
M12
●
4 mm
Stainless steel
●

M12
● ○
4 mm 8 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
1KHz
0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

<10%
<10mA
200mA
<0.01mA
<1.5V <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
Stainless steel

Connecting type
Weight

2M Cable (4.0 φ 3x0.25)
approx.65 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.

IVS-M1204N-A1VS2	1*
IVS-M1204N-B1VS2	2
IVS-M1204P-A1VS2	3
IVS-M1204P-B1VS2	4

IVS-M1204N-A1VN2	1*	IVN-M1208N-A1VN2
IVS-M1204N-B1VN2	2	IVN-M1208N-B1VN2
IVS-M1204P-A1VN2	3	IVN-M1208P-A1VN2
IVS-M1204P-B1VN2	4	IVN-M1208P-B1VN2

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

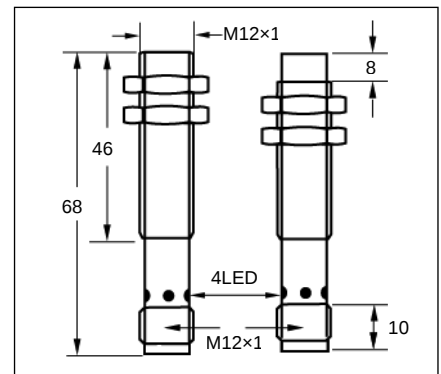
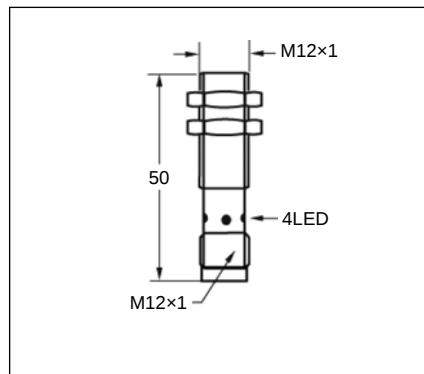
M12
●
4 mm
Stainless steel
●

M12
● ○
4 mm 8 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
1KHz
0.2ms/0.2ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

<10%
<10mA
200mA
<0.01mA
<1.5V <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
Stainless steel

Connecting type
Weight

M12 connector
approx.28 g

M12 connector
approx.35 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.

IVS-M1204N-A1ES4	1*
IVS-M1204N-B1ES4	2
IVS-M1204P-A1ES4	3
IVS-M1204P-B1ES4	4

IVS-M1204N-A1EN4	1*	IVN-M1208N-A1EN4
IVS-M1204N-B1EN4	2	IVN-M1208N-B1EN4
IVS-M1204P-A1EN4	3	IVN-M1208P-A1EN4
IVS-M1204P-B1EN4	4	IVN-M1208P-B1EN4

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

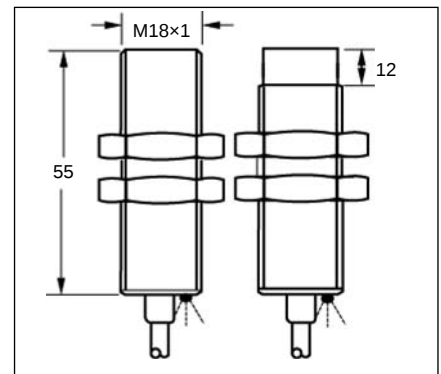
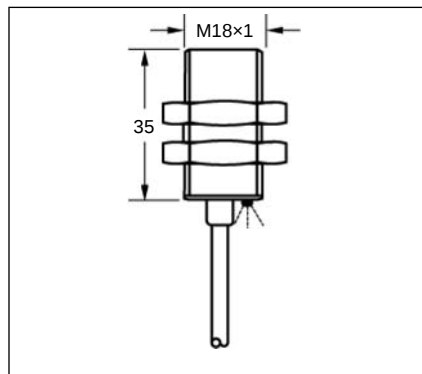
M18
●
8 mm
Stainless steel
●

M18
● ○
8 mm 16 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
500Hz
0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

<10%
<10mA
200mA
<0.01mA
<1.5V <2.0V
500Hz 150Hz
0.5ms/0.5ms 1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

Connecting type
Weight

2M Cable (5.0 φ 3x0.34)
approx.135 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.

IVS-M1808N-A1VS2	1*
IVS-M1808N-B1VS2	2
IVS-M1808P-A1VS2	3
IVS-M1808P-B1VS2	4

IVS-M1808N-A1VN2	1*	IVN-M1816N-A1VN2
IVS-M1808N-B1VN2	2	IVN-M1816N-B1VN2
IVS-M1808P-A1VN2	3	IVN-M1816P-A1VN2
IVS-M1808P-B1VN2	4	IVN-M1816P-B1VN2

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

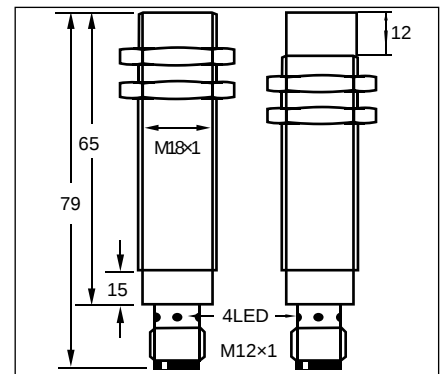
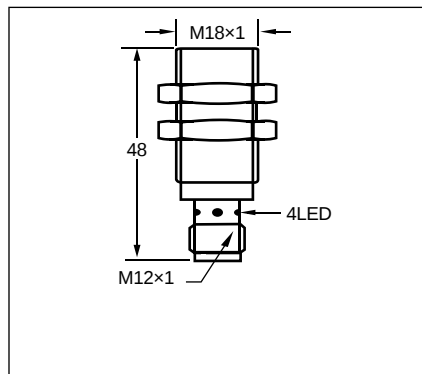
M18
●
8 mm
Stainless steel
●

M18
● ○
8 mm 16 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
500Hz
0.5ms/0.5ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

<10%
<10mA
200mA
<0.01mA
<1.5V <2.0V
500Hz 150Hz
0.5ms/0.5ms 1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

Connecting type
Weight

M12 connector
approx.65 g

M12 connector
approx.100 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.

IVS-M1808N-A1ES4	1*
IVS-M1808N-B1ES4	2
IVS-M1808P-A1ES4	3
IVS-M1808P-B1ES4	4

IVS-M1808N-A1EN4	1*	IVN-M1816N-A1EN4
IVS-M1808N-B1EN4	2	IVN-M1816N-B1EN4
IVS-M1808P-A1EN4	3	IVN-M1816P-A1EN4
IVS-M1808P-B1EN4	4	IVN-M1816P-B1EN4

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

METALFACE INDUCTIVE PROXIMITY SENSOR (EXTENDED RANGE)

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

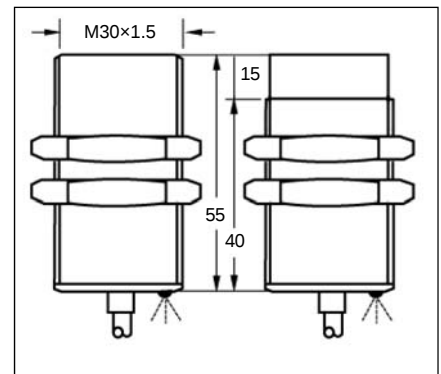
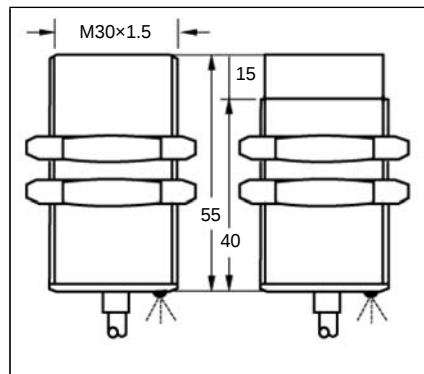
M30	
●	○
16 mm	25 mm
Stainless steel	
●	

M30	
●	○
16 mm	25 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
150Hz
100Hz
1ms/1ms
1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

<10%
<10mA
200mA
<0.01mA
<2.0V
150Hz
100Hz
1ms/1ms
1ms/1ms
<15%(Sr)
<1.0%(Sr)
IP67
-25°C - +70°C
<10%(Sr)
Yes
220mA
Stainless steel

Connecting type
Weight

2M Cable (5.0 ∅ 3x0.34)
approx.185 g

M12 connector
approx.190 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.

IVS-M3016N-A1VN2	1*	IVN-M3025N-A1VN2
IVS-M3016N-B1VN2	2	IVN-M3025N-B1VN2
IVS-M3016P-A1VN2	3	IVN-M3025P-A1VN2
IVS-M3016P-B1VN2	4	IVN-M3025P-B1VN2

IVS-M3016N-A1EN4	1*	IVN-M3025N-A1EN4
IVS-M3016N-B1EN4	2	IVN-M3025N-B1EN4
IVS-M3016P-A1EN4	3	IVN-M3025P-A1EN4
IVS-M3016P-B1EN4	4	IVN-M3025P-B1EN4

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