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PROXIMITY SENSORS & CONNECTORS

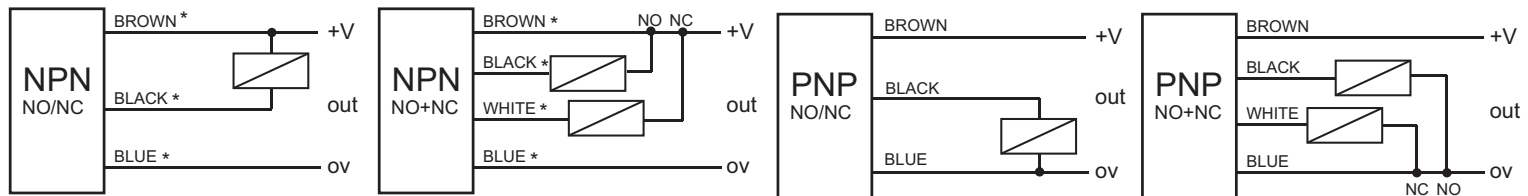


FEATURES

Inductive Proximity Sensor
 Style: Cylinder Shape (M12, M18, M30)
 Easily identifiable with LED Indicator
 Brass nickel plated, oil, water acid & alkaline proof
 Standard sensing object: inductive sensor: ferrous metals
 Overload and short circuit protection; polarity reversal protection

RPM Measuring in mechanism
 IP67 Moisture Rating
 Shielded
 Connection Mode: M12
 DC 3-Wire (10-30VDC)

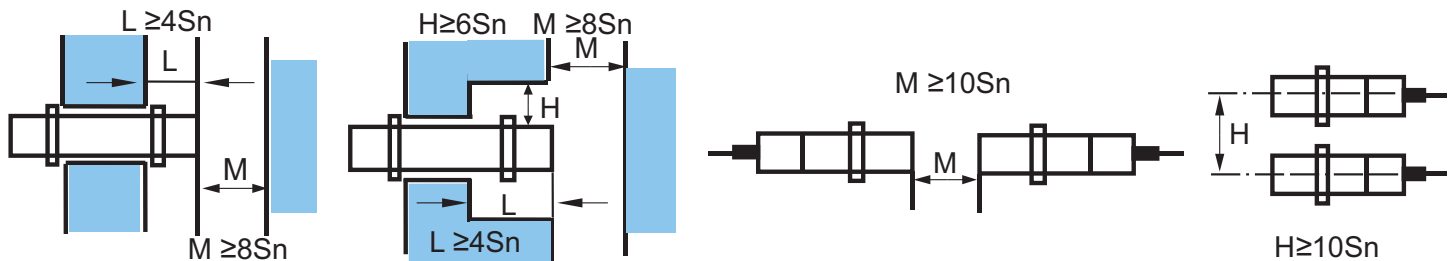
CONNECTIONS



*	Brown	Power Wire	White	Switching/Signal Wire (NC)
	Black	Switching/Signal Wire (NO)	Blue	Ground Wire

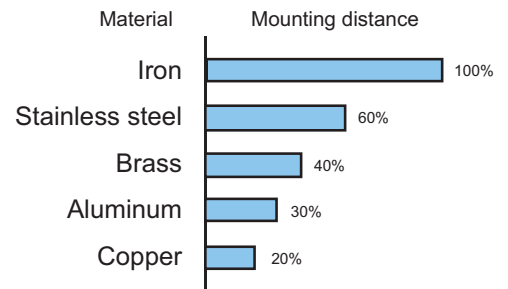
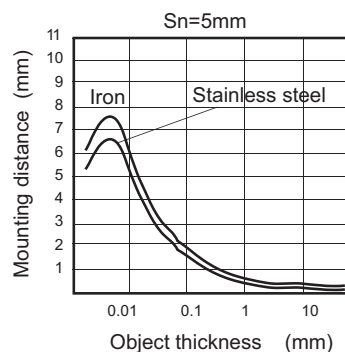
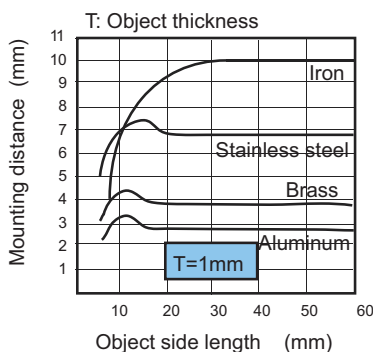
INSTALLATION

When used in an area surrounded by metal or juxtaposed, install the sensor as follows. (Sn Sensing distance)

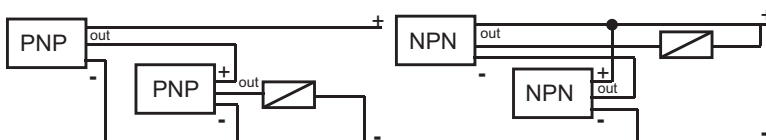


INDUCTIVE PROXIMITY APPLICATION DIRECTION

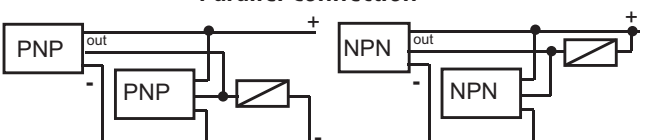
- Mounting distance should be set equal 80% Sn.
- Set mounting distance equals 50% Sn, when sensor applies in measuring mounting frequency or operating in high speed circumstances.
- Mounting distance varies with measuring object (iron, stainless steel, brass, copper and aluminum).



Series Connection

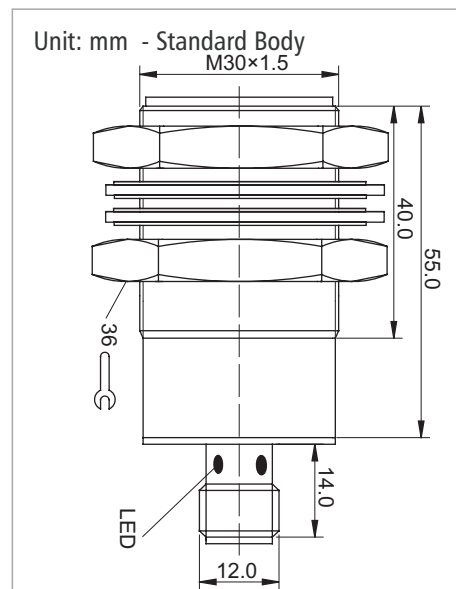
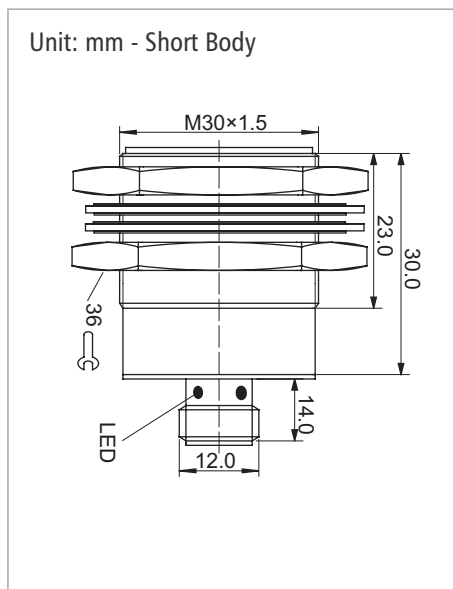


Parallel Connection



M30 Series

Dimension	M30 x1.5	M30 x1.5
Installation	Flush (shielded)	Flush (shielded)
Mounting distance Sn	10.0mm	10.0mm
Detect distance Sn	0...9.0mm	0...9.0mm



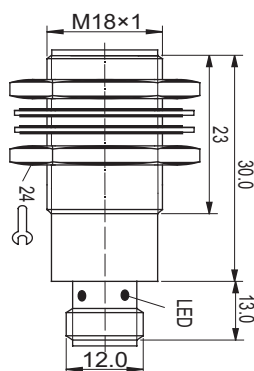
PNP	DC 3 wires	NO	DSS-CPS-POM30SB-10FM	DSS-CPS-POM30LB-10FM
		NC	DSS-CPS-PCM30SB-10FM	DSS-CPS-PCM30LB-10FM
NPN	DC 3 wires	NO	DSS-CPS-NOM30SB-10FM	DSS-CPS-NOM30LB-10FM
		NC	DSS-CPS-NCM30SB-10FM	DSS-CPS-NCM30LB-10FM
Rated operational voltage (DC/AC)			24V DC	24V DC
Supply voltage (DC/AC)			10-30V DC	10-30V DC
Voltage drop			≤ 2.0V	≤ 2.0V
Rated insulation voltage			≥ 20M Ω	≥ 20M Ω
Load current capacity (DC/AC)			200mA	200mA
Off-state current (NPN/PNP)			≤ 15mA	≤ 15mA
Leak current			≤ 20 μA	≤ 20 μA
Against polarity reversal			YES	YES
Short circuit protected			YES	YES
Load capacity			≤ 1μF	≤ 1μF
Repeated accuracy			≤ 5%	≤ 5%
Ambient temperature range			-25...+70°C	-25...+70°C
Frequency (DC 3/2wires / AC 2 wires)			500Hz/400Hz	500Hz/400Hz
Function indication			Red LED Indicator	Red LED Indicator
IP ratings			IP67	IP67
Housing material			Nickle plate brass	Nickle plate brass
Material of sensing face			ABS	ABS
Plug-in connector			M12 3/4 Wire	M12 3/4 Wire
Approvals			CE	CE

M18 Series

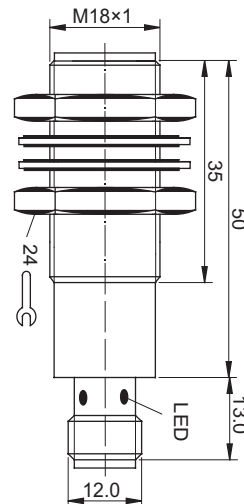
Dimension	M18 x1	M18 x1
Installation	Flush (shielded)	Flush (shielded)
Mounting distance Sn	5.0mm	5.0mm
Detect distance Sn	0...4.0mm	0...4.0mm



Unit: mm - Short Body



Unit: mm - Standard Body



PNP	DC 3 wires	NO	DSS-CPS-POM18SB-5FM	DSS-CPS-POM18LB-5FM
		NC	DSS-CPS-PCM18SB-5FM	DSS-CPS-PCM18LB-5FM
NPN	DC 3 wires	NO	DSS-CPS-NOM18SB-5FM	DSS-CPS-NOM18LB-5FM
		NC	DSS-CPS-NCM18SB-5FM	DSS-CPS-NCM18LB-5FM

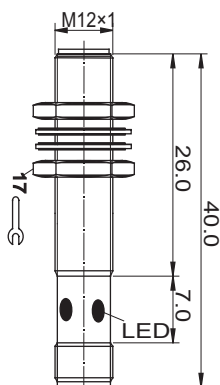
Rated operational voltage (DC/AC)	24V DC	24V DC
Supply voltage (DC/AC)	10-30V DC	10-30V DC
Voltage drop	≤ 2.0V	≤ 2.0V
Rated insulation voltage	≥ 20M Ω	≥ 20M Ω
Load current capacity (DC/AC)	200mA	200mA
Off-state current (NPN/PNP)	≤ 15mA	≤ 10mA
Leak current	≤ 20 μ A	≤ 20 μ A
Against polarity reversal	YES	YES
Short circuit protected	YES	YES
Load capacity	≤ 1 μ F	≤ 1 μ F
Repeated accuracy	≤ 5%	≤ 5%
Ambient temperature range	-25...+70°C	-25...+70°C
Frequency (DC 3/2wires / AC 2 wires)	700Hz/400Hz	700Hz/400Hz
Function indication	Red LED Indicator	Red LED Indicator
IP ratings	IP67	IP67
Housing material	Nickle plate brass	Nickle plate brass
Material of sensing face	ABS	ABS
Plug-in connector	M12 3/4 Wire	M12 3/4 Wire
Approvals	CE	CE

M12 Series

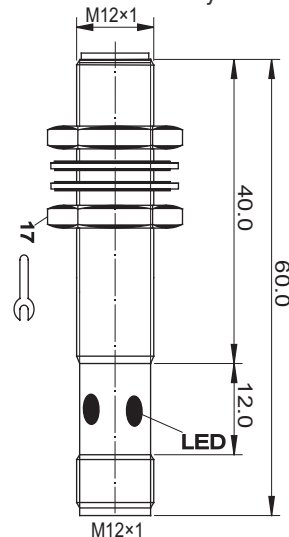
Dimension	M12 x1	M12 x1
Installation	Flush (shielded)	Flush (shielded)
Mounting distance Sn	4.0mm	4.0mm
Detect distance Sn	0...3.6mm	0...3.6mm



Unit: mm - Short Body



Unit: mm - Standard Body



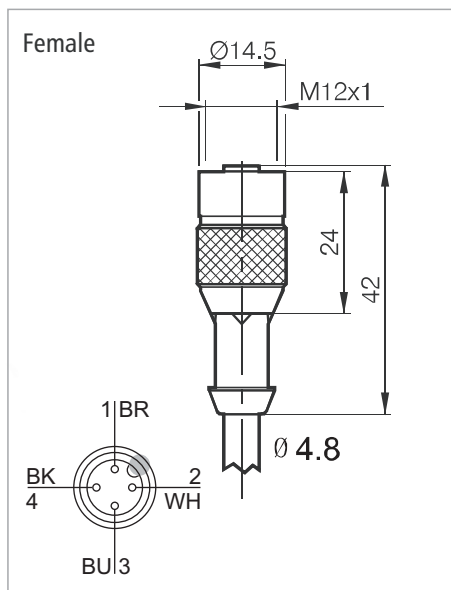
PNP	DC 3 wires	NO	DSS-CPS-POM12SB-4FM	DSS-CPS-POM12LB-4FM
		NC	DSS-CPS-PCM12SB-4FM	DSS-CPS-PCM12LB-4FM
NPN	DC 3 wires	NO	DSS-CPS-NOM12SB-4FM	DSS-CPS-NOM12LB-4FM
		NC	DSS-CPS-NCM12SB-4FM	DSS-CPS-NCM12LB-4FM
Rated operational voltage (DC/AC)			24V DC	24V DC
Supply voltage (DC/AC)			10-30V DC	10-30V DC
Voltage drop			≤ 2.0V	≤ 2.0V
Rated insulation voltage			≥ 20M Ω	≥ 20M Ω
Load current capacity (DC/AC)			100mA	200mA
Off-state current (NPN/PNP)			≤ 15mA	≤ 15mA
Leak current			≤ 20 μA	≤ 20 μA
Against polarity reversal			YES	YES
Short circuit protected			YES	YES
Load capacity			≤ 1μF	≤ 1μF
Repeated accuracy			≤ 5%	≤ 5%
Ambient temperature range			-25...+70℃	-25...+70℃
Frequency (DC 3/2wires / AC 2 wires)			800Hz/400Hz	800Hz/400Hz
Function indication			Red LED Indicator	Red LED Indicator
IP ratings			IP67	IP67
Housing material			Nickle plate brass	Nickle plate brass
Material of sensing face			ABS	ABS
Plug-in connector			M12 3/4 Wire	M12 3/4 Wire
Approvals			CE	CE

PLUG-IN Cables

Connector



M12 Straight 3/4 Pole (Pin)

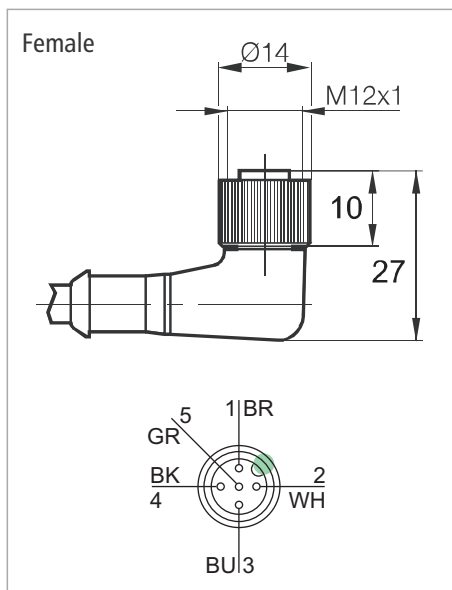


DSS-CCS-M12-F4A-3M

DSS-CCS-M12-F4A-5M

DSS-CCS-M12-F4A-10M

M12 90° Angled 3/4 Pole (Pin)



DSS-CCA-M12-F4A-3M

DSS-CCA-M12-F4A-5M

DSS-CCA-M12-F4A-10M

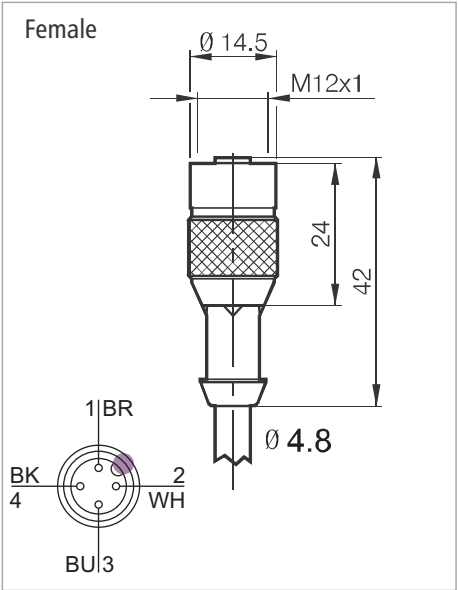
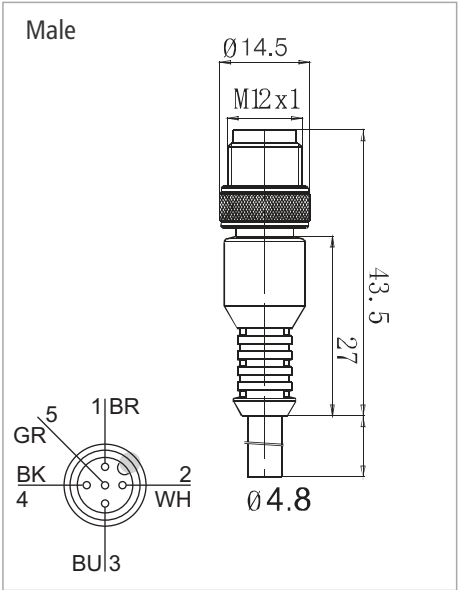
Cable Lengths Available	3 Meter, 5 Meter, 10 Meter	3 Meter, 5 Meter, 10 Meter
No. of Cores	16X0.15	16X0.15
Section of Each Core	3(4) X 0.3mm ²	3(4) X 0.3mm ²
Material (Cable/Injection)	PVC	PVC
Material (Pole/Pin)	Copper	Copper
LED Lamp	NO	NO
Rated Voltage	DC 12~220V	DC 12~220V
Resistance of Each Core	17.24 X 10 ⁻³ Ω	17.24 X 10 ⁻³ Ω
Installation Strength	>200 MΩ	>200 MΩ
IP Rating (Cable/Injection)	IP67/IP65	IP67/IP65

INTERCONNECTING Cables

Connector

M12 Male 3/4 Pole (Pin)

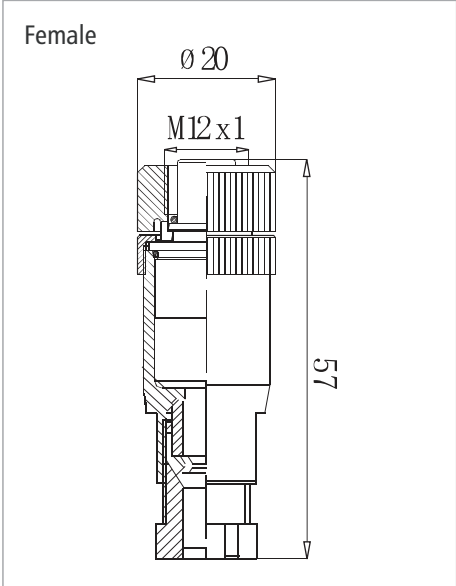
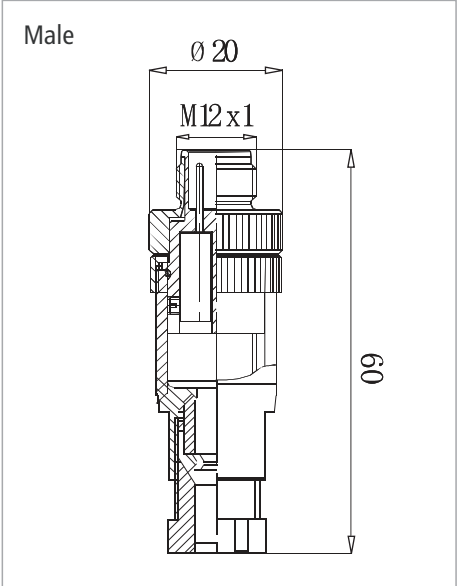
M12 Female 3/4 Pole (Pin)



DSS-CCS-FM12-F4A-3M
DSS-CCS-FM12-F4A-5M
DSS-CCS-FM12-F4A-10M

Cable Lengths Available	3 Meter, 5 Meter, 10 Meter
No. of Cores	16X0.15
Section of Each Core	3(4) X 0.3mm ²
Material (Cable/Injection)	PVC
Material (Pole/Pin)	Copper
LED Lamp	NO
Rated Voltage	DC 12~220V
Resistance of Each Core	17.24 X 10 ⁻³ Ω
Installation Strength	>200 MΩ
IP Rating (Cable/Injection)	IP67/IP65
Connection	Male - Female

JOINING Connectors

Connector	M12 Female 4 Poles (Pins)	M12 Male 4 Poles (Pins)
		
	DSS-CCS-F-4A	DSS-CCS-M-4A
Cable	User Connect	User Connect
No. of Poles/Pins	3 or 4	3 or 4
Material of Housing	ABS	ABS
Material (Pole/Pin)	Nickle Plated Brass	Nickle Plated Brass
LED Lamp	NO	NO
Rated Voltage	AC/DC 12~250V	AC/DC 12~250V
Rated Current	AC 3A	AC 3A
Connection Method	Terminals	Terminals
Installation Strength	>200 M Ω	>200 M Ω
IP Rating (Housing)	IP67	IP67