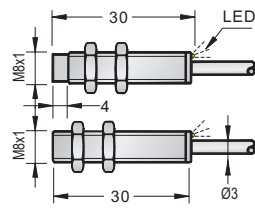


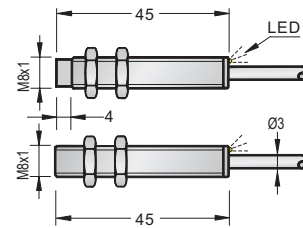


Features

- M8mm diameter
- 10-60VDC operating voltage
- Sn=1mm, shielded
2mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- Cable version
- IP67 Protection



(Unit: mm)



(Unit: mm)

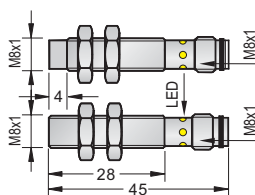


Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC08X01A	M6CD08X02A	M6CE08X01A	M6CF08X02A
2 Wire-NC	M6CC08Y01A	M6CD08Y02A	M6CE08Y01A	M6CF08Y02A
General Data				
Housing size	M8mm		M8mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	1mm	2mm	1mm	2mm
Standard sensing object	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	2000Hz	2000Hz	2000Hz	2000Hz
Response time	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	2m PVC cable (Ø3 2x0.15mm²)		2m PVC cable (Ø3 2x0.15mm²)	
Weight	Approx. 34g		Approx. 35g	

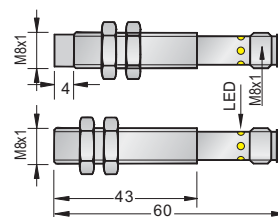


Features

- M8mm diameter
- 10-60VDC operating voltage
- Sn=1mm, shielded
2mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- M8 connector version
- IP67 Protection



(Unit: mm)



(Unit: mm)

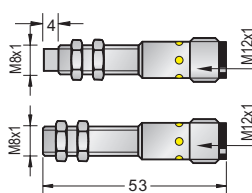


Connection	3 Pin M8 Connector		3 Pin M8 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC08X01F	M6CD08X02F	M6CE08X01F	M6CF08X02F
2 Wire-NC	M6CC08Y01F	M6CD08Y02F	M6CE08Y01F	M6CF08Y02F
General Data				
Housing size	M8mm		M8mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	1mm	2mm	1mm	2mm
Standard sensing object	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	2000Hz	2000Hz	2000Hz	2000Hz
Response time	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	3 Pin M8 connector		3 Pin M8 connector	
Weight	Approx. 15g		Approx. 16g	

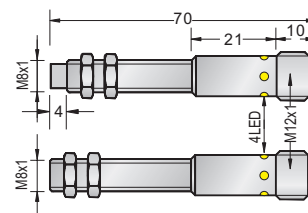


Features

- M8mm diameter
- 10-60VDC operating voltage
- Sn=1mm, shielded
2mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- M12 connector version
- IP67 Protection



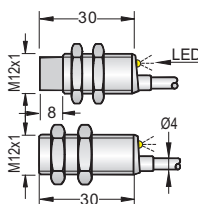
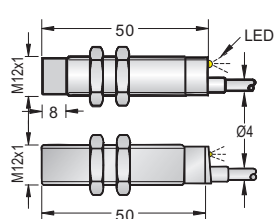
(Unit: mm)



(Unit: mm)

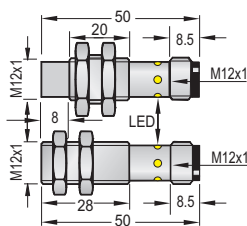


Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC08X01H	M6CD08X02H	M6CE08X01H	M6CF08X02H
2 Wire-NC	M6CC08Y01H	M6CD08Y02H	M6CE08Y01H	M6CF08Y02H
General Data				
Housing size	M8mm		M8mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	1mm	2mm	1mm	2mm
Standard sensing object	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm	Steel 8x8x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	2000Hz	2000Hz	2000Hz	2000Hz
Response time	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms	0.1ms/0.1ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	4 Pin M12 connector		4 Pin M12 connector	
Weight	Approx. 20g		Approx. 22g	

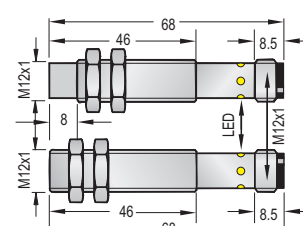
Features ■ M12mm diameter ■ 10-60VDC operating voltage ■ Sn=2mm, shielded 4mm, non-shielded ■ Stainless steel housing case ■ Stainless steel active sensing face ■ Short-circuit protection ■ Overload protection ■ Reverse polarity protection ■ 2 Wire Output ■ NO,NC Function ■ Cable version ■ IP67 Protection	 (Unit: mm)	 (Unit: mm)	
			
	CE		
	Connection	2m Cable	
Mounting	Shielded	Non-shielded	
2 Wire-NO	M6CC12X02A	M6CD12X04A	
2 Wire-NC	M6CC12Y02A	M6CD12Y04A	
General Data			
Housing size	M12mm		
Installation type	Shielded	Non-shielded	
Sensing distance(Sn: mm)	2mm	4mm	
Standard sensing object	Steel 12x12x1mm	Steel 12x12x1mm	
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		
Assured operating distance(Sa: mm)	0 ... 80% of Sn		
Hysteresis	<15%		
Housing material	Stainless steel		
Operating voltage	10 ... 60VDC		
Electrical Data			
Rated operating voltage	24VDC		
Repeated accuracy	±10%		
Ripple	<10%		
No load current	<10mA		
Max. Load current	200mA		
Leakage current	<0.01mA		
Voltage drop	<4.5V	<4.5V	
Switching frequency	2000Hz	1000Hz	
Response time	0.1ms/0.1ms	0.2ms/0.2ms	
Rated insulation voltage	75VDC		
Operating temperature	-25°C ... +70°C		
Storage temperature	-40°C ... +80°C		
Temperature drift	<10%		
Power indicator	No		
Function indicator	Yellow LED		
Reverse polarity protection	Yes		
Short-circuit protection	Yes		
Overload trip point	220mA		
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		
Mechanical Data			
Sensing surface material	Stainless steel		
Protection	IP67		
Shock rating	Shock, half-sinus, 30gn, 11ms		
Vibration rating	55Hz, 1mm ampl., 3x30min.		
EMC	IEC 60947-5-2		
Accessory	2 nuts		
Connection	2m PVC cable (Ø4 2x0.34mm²)		
Weight	Approx. 65g		

Features

- M12mm diameter
- 10-60VDC operating voltage
- Sn=2mm, shielded
4mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- M12 connector version
- IP67 Protection



(Unit: mm)



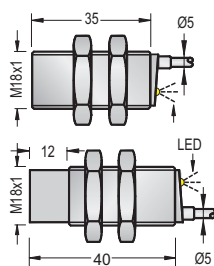
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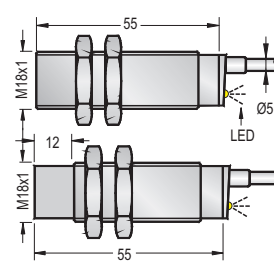
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC12X02A	M6CD12X04A	M6CE12X02A	M6CF12X04A
2 Wire-NC	M6CC12Y02A	M6CD12Y04A	M6CE12Y02A	M6CF12Y04A
General Data				
Housing size	M12mm		M12mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	2mm	4mm	2mm	4mm
Standard sensing object	Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	2000Hz	1000Hz	2000Hz	1000Hz
Response time	0.1ms/0.1ms	0.2ms/0.2ms	0.1ms/0.1ms	0.2ms/0.2ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	4 Pin M12 connector		4 Pin M12 connector	
Weight	Approx. 65g		Approx. 65g	

Features

- M18mm diameter
- 10-60VDC operating voltage
- Sn=5mm, shielded
8mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- Cable version
- IP67 Protection



(Unit: mm)



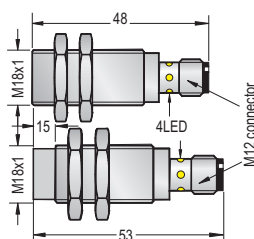
(Unit: mm)



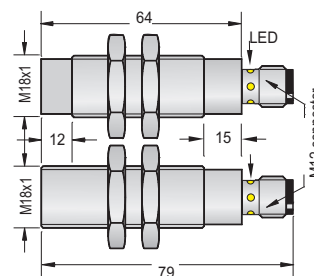
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC18X05A	M6CD18X08A	M6CE18X05A	M6CF18X08A
2 Wire-NC	M6CC18Y05A	M6CD18Y08A	M6CE18Y05A	M6CF18Y08A
General Data				
Housing size	M18		M18	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	5mm	8mm	5mm	8mm
Standard sensing object	Steel 18x18x1mm	Steel 24x24x1mm	Steel 18x18x1mm	Steel 24x24x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	1000Hz	500Hz	2000Hz	1000Hz
Response time	0.2ms/0.2ms	0.5ms/0.5ms	0.1ms/0.1ms	0.2ms/0.2ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	2m PVC cable (Ø5 2x0.5mm²)		2m PVC cable (Ø5 2x0.5mm²)	
Weight	Approx.約 132g		Approx. 153g	

Features

- M18mm diameter
- 10-60VDC operating voltage
- Sn=5mm, shielded
8mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- M12 connector version
- IP67 Protection



(Unit: mm)



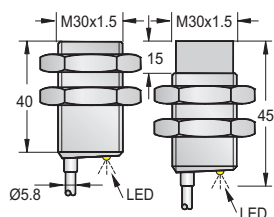
(Unit: mm)



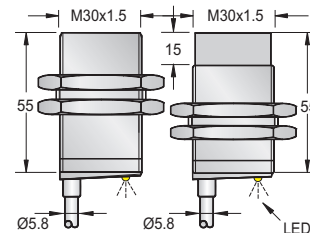
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC18X05A	M6CD18X08A	M6CE18X05A	M6CF18X08A
2 Wire-NC	M6CC18Y05A	M6CD18Y08A	M6CE18Y05A	M6CF18Y08A
General Data				
Housing size	M18		M18	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	5mm	8mm	5mm	8mm
Standard sensing object	Steel 18x18x1mm	Steel 24x24x1mm	Steel 18x18x1mm	Steel 24x24x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	1000Hz	500Hz	1000Hz	500Hz
Response time	0.2ms/0.2ms	0.5ms/0.5ms	0.2ms/0.2ms	0.5ms/0.5ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	4 Pin M12 connector		4 Pin M12 connector	
Weight	Approx. 50g		Approx. 94g	

Features

- M30mm diameter
- 10-60VDC operating voltage
- Sn=10mm, shielded
15mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- Cable version
- IP67 Protection



(Unit: mm)



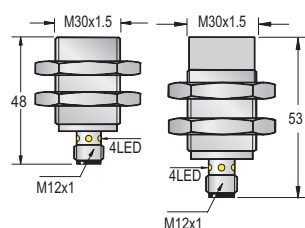
(Unit: mm)



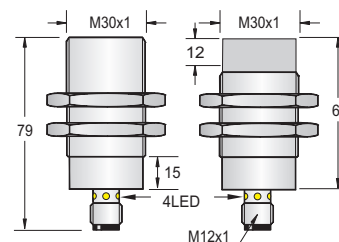
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC30X10A	M6CD30X15A	M6CE30X10A	M6CF30X15A
2 Wire-NC	M6CC30Y10A	M6CD30Y15A	M6CE30Y10A	M6CF30Y15A
General Data				
Housing size	M30mm		M30mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	10mm	15mm	10mm	15mm
Standard sensing object	Steel 30x30x1mm	Steel 45x45x1mm	Steel 30x30x1mm	Steel 45x45x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	300Hz	150Hz	300Hz	150Hz
Response time	0.5ms/0.5ms	1ms/1ms	0.5ms/0.5ms	1ms/1ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	2m PVC cable (Ø5.8 2x0.5mm²)		2m PVC cable (Ø5.8 2x0.5mm²)	
Weight	Approx. 180g		Approx. 217g	

Features

- M30mm diameter
- 10-60VDC operating voltage
- Sn=10mm, shielded
15mm, non-shielded
- Stainless steel housing case
- Stainless steel active sensing face
- Short-circuit protection
- Overload protection
- Reverse polarity protection
- 2 Wire Output
- NO,NC Function
- M12 connector version
- IP67 Protection



(Unit: mm)



(Unit: mm)



Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
2 Wire-NO	M6CC30X10H	M6CD30X15H	M6CE30X10H	M6CF30X15H
2 Wire-NC	M6CC30Y10H	M6CD30Y15H	M6CE30Y10H	M6CF30Y15H
General Data				
Housing size	M30mm		M30mm	
Installation type	Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)	10mm	15mm	10mm	15mm
Standard sensing object	Steel 30x30x1mm	Steel 45x45x1mm	Steel 30x30x1mm	Steel 45x45x1mm
Effective sensing distance (Sr: mm)	90 ... 110% of Sn		90 ... 110% of Sn	
Assured operating distance(Sa: mm)	0 ... 80% of Sn		0 ... 80% of Sn	
Hysteresis	<15%		<15%	
Housing material	Stainless steel		Stainless steel	
Operating voltage	10 ... 60VDC		10 ... 60VDC	
Electrical Data				
Rated operating voltage	24VDC		24VDC	
Repeated accuracy	±10%		±10%	
Ripple	<10%		<10%	
No load current	<10mA		<10mA	
Max. Load current	200mA		200mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<4.5V	<4.5V	<4.5V	<4.5V
Switching frequency	300Hz	150Hz	300Hz	150Hz
Response time	0.5ms/0.5ms	1ms/1ms	0.5ms/0.5ms	1ms/1ms
Rated insulation voltage	75VDC		75VDC	
Operating temperature	-25°C ... +70°C		-25°C ... +70°C	
Storage temperature	-40°C ... +80°C		-40°C ... +80°C	
Temperature drift	<10%		<10%	
Power indicator	No		No	
Function indicator	Yellow LED		Yellow LED	
Reverse polarity protection	Yes		Yes	
Short-circuit protection	Yes		Yes	
Overload trip point	220mA		220mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4		Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	
Mechanical Data				
Sensing surface material	Stainless steel		Stainless steel	
Protection	IP67		IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2		IEC 60947-5-2	
Accessory	2 nuts		2 nuts	
Connection	4 Pin M12 connector		4 Pin M12 connector	
Weight	Approx. 111g		Approx. 207g	