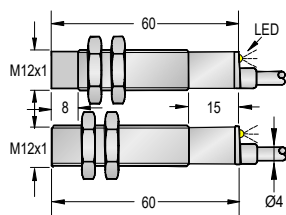
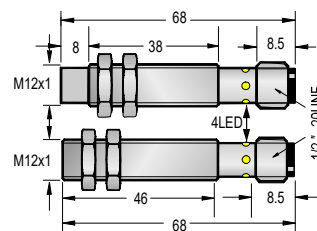


Features

- M12mm diameter
- Sn=2mm, shielded
4mm, non-shielded
- 20-250VAC operating voltage
- Stainless steel housing case
- Stainless steel active sensing face
- AC Output
- NO, NC Function
- Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



(Unit: mm)



Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
Steel Case	AC-NO	M8CE12P02A	M8CF12P04A	M8CE12P02L	M8CF12P04L
	AC-NC	M8CE12Q02A	M8CF12Q04A	M8CE12Q02L	M8CF12Q04L

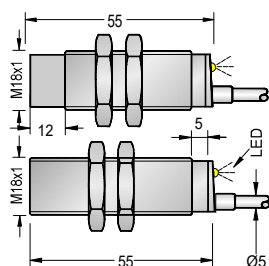
General Data		M12mm		M12mm	
Housing size		M12mm		M12mm	
Installation type		Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)		2mm	4mm	2mm	4mm
Standard sensing object		Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm
Effective sensing distance (Sr: mm)		90 ... 110% of 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		20 ... 250VAC		20 ... 250VAC	

Electrical Data		M12mm		M12mm	
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		5A(20ms)		5A(20ms)	
No load current		<1.8mA		<1.8mA	
Max. Load current		400mA		400mA	
Leakage current		<1.8mA		<1.8mA	
Voltage drop		<8VAC at 400mA		<8VAC at 400mA	
Switching frequency		25Hz		25Hz	
Response time		10ms/10ms		10ms/10ms	
Rated insulation voltage		250VAC		250VAC	
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		No		No	
Short-circuit protection		No		No	
Min. load current		5mA		5mA	
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	

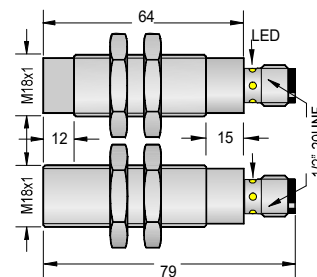
Mechanical Data		M12mm		M12mm	
Sensing surface material		Stainless steel		Stainless steel	
Protection		IP67		IP67	
Shock rating		Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Vibration rating		55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
EMC		IEC 60947-5-2		IEC 60947-5-2	
Accessory		2 nuts		2 nuts	
Connection		2m PVC cable (Ø4 3x0.34mm ²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 77g		Approx. 32g	

Features

- M18mm diameter
- Sn=5mm, shielded
8mm, non-shielded
- 20-250VAC operating voltage
- Stainless steel housing case
- Stainless steel active sensing face
- AC Output
- NO, NC Function
- Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



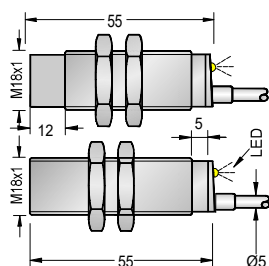
(Unit: mm)



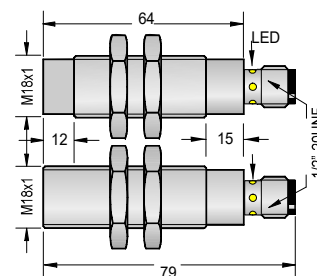
Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
Steel Case	AC-NO	M8CE18P05A	M8CF18P08A	M8CE18P05L	M8CF18P08L
	AC-NC	M8CE18Q05A	M8CF18Q08A	M8CE18Q05L	M8CF18Q08L
General Data		M18mm		M18mm	
Housing size		Shielded	Non-shielded	Shielded	Non-shielded
Installation type		5mm	8mm	5mm	8mm
Sensing distance(Sn: mm)		Steel 18x18x1mm	Steel 24x24x1mm	Steel 18x18x1mm	Steel 24x24x1mm
Standard sensing object		90 ... 110% of Sn		90 ... 110% of Sn	
Effective sensing distance (Sr: mm)		0 ... 80% of Sn		0 ... 80% of Sn	
Assured operating distance(Sa: mm)		<15%		<15%	
Hysteresis		Stainless steel		Stainless steel	
Housing material		20 ... 250VAC		20 ... 250VAC	
Operating voltage		Electrical Data		Electrical Data	
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		5A(20ms)		5A(20ms)	
No load current		<1.8mA		<1.8mA	
Max. Load current		400mA		400mA	
Leakage current		<1.8mA		<1.8mA	
Voltage drop		<8VAC at 400mA		<8VAC at 400mA	
Switching frequency		25Hz		25Hz	
Response time		10ms/10ms		10ms/10ms	
Rated insulation voltage		250VAC		250VAC	
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		No		No	
Short-circuit protection		No		No	
Min. load current		5mA		5mA	
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		Stainless steel		Stainless steel	
Sensing surface material		IP67		IP67	
Protection		Shock, half-sinus, 30gn, 11ms		Shock, half-sinus, 30gn, 11ms	
Shock rating		55Hz, 1mm ampl., 3x30min.		55Hz, 1mm ampl., 3x30min.	
Vibration rating		IEC 60947-5-2		IEC 60947-5-2	
EMC		2 nuts		2 nuts	
Accessory		2m PVC cable (Ø5 3x0.34mm ²)		3 Pin M12 1/2"-20UNF connector	
Connection		Approx. 162g		Approx. 70g	
Weight					

Features

- M30mm diameter
- Sn=10mm,shielded
15mm,non-shielded
- 20-250VAC operating voltage
- Stainless steel housing case
- Stainless steel active sensing face
- AC Output
- NO,NC Function
- Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



(Unit: mm)



Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
Steel Case	AC-NO	M8CE12P02A	M8CF12P04A	M8CE12P02L	M8CF12P04L
	AC-NC	M8CE12Q02A	M8CF12Q04A	M8CE12Q02L	M8CF12Q04L
General Data		M30mm		M30mm	
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		20 ... 250VAC		20 ... 250VAC	
Electrical Data					
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		5A(20ms)		5A(20ms)	
No load current		<1.8mA		<1.8mA	
Max. Load current		400mA		400mA	
Leakage current		<1.8mA		<1.8mA	
Voltage drop		<8VAC at 400mA		<8VAC at 400mA	
Switching frequency		25Hz		25Hz	
Response time		10ms/10ms		10ms/10ms	
Rated insulation voltage		250VAC		250VAC	
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		No		No	
Short-circuit protection		No		No	
Min. load current		5mA		5mA	
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 3x0.5mm ²)		3 Pin M12 1/2"-20UNF connector	
Weight		Approx. 248g		Approx. 147g	