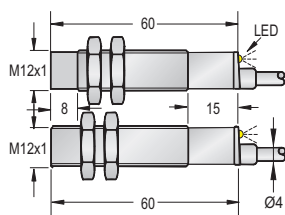


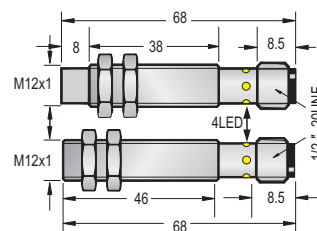


Features

- 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

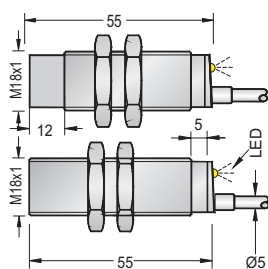
General Data					
Housing size		M12mm		M12mm	
Installation type		Shielded	Non-shielded	Shielded	Non-shielded
Sensing distance(Sn: mm)		2mm	4mm	2mm	4mm
Standard sensing object		Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm	Steel 12x12x1mm
Effective sensing distance (Sr: mm)		90 ... 110% of Sn		90 ... 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		
Rated operating voltage	110VAC	
Repeated accuracy	±10%	
Surge current	5A(20ms)	
No load current	<1.8mA	
Max. Load current	400mA	
Leakage current	<1.8mA	
Voltage drop	<8VAC at 400mA	
Switching frequency	25Hz	
Response time	10ms/10ms	
Rated insulation voltage	250VAC	
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	No	
Short-circuit protection	No	
Min. load current	5mA	
Correction factors	Fe37 steel=1/stainless steel approx. 0.85/brass approx. 0.5/ Al. Approx. 0.45/ copper approx. 0.4	

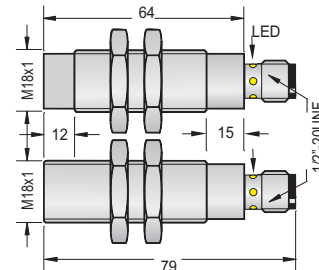
Mechanical Data		
Sensing surface material	Stainless steel	
Protection	IP67	
Shock rating	Shock, half-sinus, 30gn, 11ms	
Vibration rating	55Hz, 1mm ampl., 3x30min.	
EMC	IEC 60947-5-2	
Accessory	2 nuts	
Connection	2m PVC cable (Ø4 3x0.34mm ²)	
Weight	Approx. 77g	

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					
Housing size	M18mm		M18mm		
Installation type	Shielded	Non-shielded	Shielded	Non-shielded	
Sensing distance(Sn: mm)	5mm	8mm	5mm	8mm	
Standard sensing object	Steel 18x18x1mm	Steel 18x18x1mm	Steel 18x18x1mm	Steel 18x18x1mm	
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		

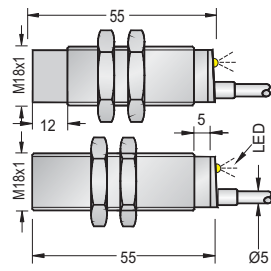
Electrical Data		
Rated operating voltage	110VAC	110VAC
Repeated accuracy	±10%	±10%
Surge current	5A(20ms)	5A(20ms)
No load current	<1.8mA	<1.8mA
Max. Load current	400mA	400mA
Leakage current	<1.8mA	<1.8mA
Voltage drop	<8VAC at 400mA	<8VAC at 400mA
Switching frequency	25Hz	25Hz
Response time	10ms/10ms	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 3x0.34mm ²)	3 Pin M12 ½"-20UNF connector
Weight	Approx. 162g	Approx. 70g

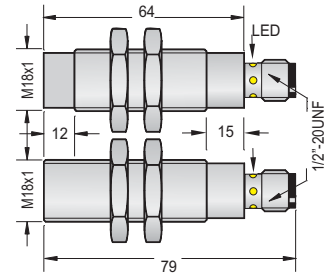


Features

- 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					
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	
Repeated accuracy	±10%	
Surge current	5A(20ms)	
No load current	<1.8mA	
Max. Load current	400mA	
Leakage current	<1.8mA	
Voltage drop	<8VAC at 400mA	
Switching frequency	25Hz	
Response time	10ms/10ms	
Rated insulation voltage	250VAC	
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	No	
Short-circuit protection	No	
Min. load current	5mA	
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 (Ø5.8 3x0.5mm ²)	
Weight	Approx. 248g	