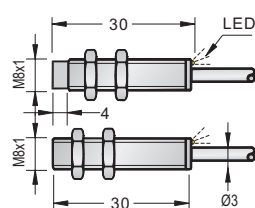
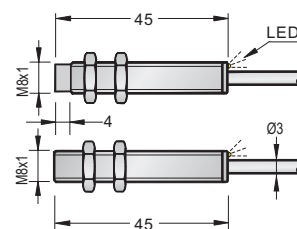


Features

- M8mm dimension
- Sn=1mm, shielded
2mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- 2m Cable version
- IP67 Protection



(Unit: mm)



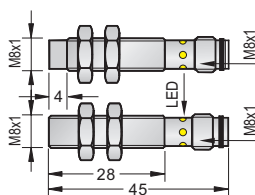
(Unit: mm)



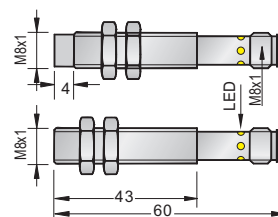
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC08C01A	W1CD08C02A	W1CE08C01A	W1CF08C02A
NPN-NC	W1CC08D01A	W1CD08D02A	W1CE08D01A	W1CF08D02A
PNP-NO	W1CC08A01A	W1CD08A02A	W1CE08A01A	W1CF08A02A
PNP-NC	W1CC08B01A	W1CD08B02A	W1CE08B01A	W1CF08B02A
General Data				
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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 3x0.15mm²)		2m PVC cable (Ø3 3x0.15mm²)	
Weight	Approx. 40g		Approx. 47g	

Features

- M8mm dimension
- Sn=1mm, shielded
2mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- M8 connector version
- IP67 Protection



(Unit: mm)



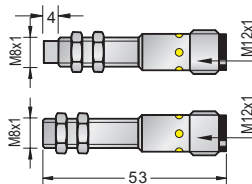
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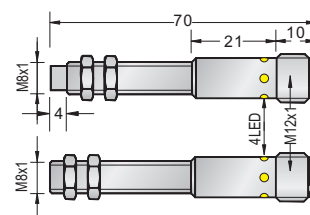
Connection	3 Pin M8 Connector		3 Pin M8 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC08C01F	W1CD08C02F	W1CE08C01F	W1CF08C02F
NPN-NC	W1CC08D01F	W1CD08D02F	W1CE08D01F	W1CF08D02F
PNP-NO	W1CC08A01F	W1CD08A02F	W1CE08A01F	W1CF08A02F
PNP-NC	W1CC08B01F	W1CD08B02F	W1CE08B01F	W1CF08B02F
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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. 12g		Approx. 15g	

Features

- M8mm dimension
- Sn=1mm, shielded
2mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- M12 connector version
- IP67 Protection



(Unit: mm)



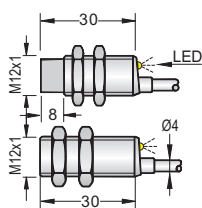
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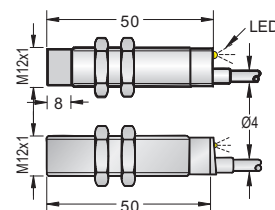
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC08C01H	W1CD08C02H	W1CE08C01H	W1CF08C02H
NPN-NC	W1CC08D01H	W1CD08D02H	W1CE08D01H	W1CF08D02H
PNP-NO	W1CC08A01H	W1CD08A02H	W1CE08A01H	W1CF08A02H
PNP-NC	W1CC08B01H	W1CD08B02H	W1CE08B01H	W1CF08B02H
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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. 25g	

Features

- M12mm dimension
- Sn=2mm, shielded
4mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- 2m Cable version
- IP67 Protection



(Unit: mm)



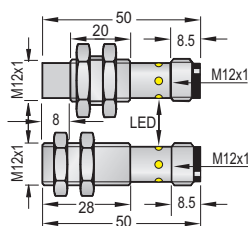
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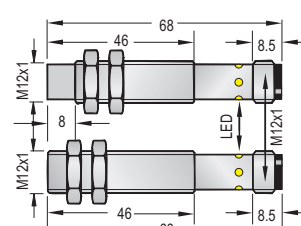
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC12C02A	W1CD12C04A	W1CE12C02A	W1CF12C04A
NPN-NC	W1CC12D02A	W1CD12D04A	W1CE12D02A	W1CF12D04A
PNP-NO	W1CC12A02A	W1CD12A04A	W1CE12A02A	W1CF12A04A
PNP-NC	W1CC12B02A	W1CD12B04A	W1CE12B02A	W1CF12B04A
General Data				
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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 3x0.34mm²)		2m PVC cable (Ø4 3x0.34mm²)	
Weight	Approx. 60g		Approx. 67g	

Features

- M12mm dimension
- Sn=2mm, shielded
4mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- M12 Connector version
- IP67 Protection



(Unit: mm)



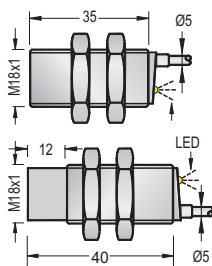
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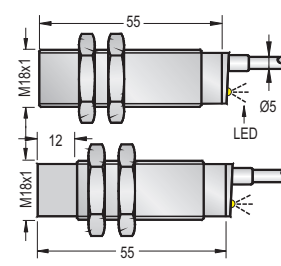
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC12C02H	W1CD12C04H	W1CE12C02H	W1CF12C04H
NPN-NC	W1CC12D02H	W1CD12D04H	W1CE12D02H	W1CF12D04H
PNP-NO	W1CC12A02H	W1CD12A04H	W1CE12A02H	W1CF12A04H
PNP-NC	W1CC12B02H	W1CD12B04H	W1CE12B02H	W1CF12B04H
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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. 25g		Approx. 30g	

Features

- M18mm dimension
- Sn=5mm, shielded
8mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- 2m Cable version
- IP67 Protection



(Unit: mm)



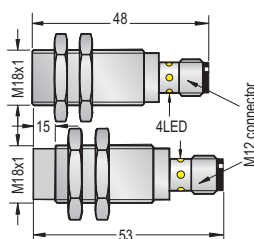
(Unit: mm)



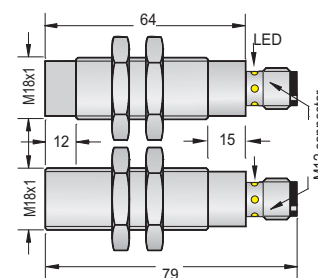
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC18C05A	W1CD18C08A	W1CE18C05A	W1CF18C08A
NPN-NC	W1CC18D05A	W1CD18D08A	W1CE18D05A	W1CF18D08A
PNP-NO	W1CC18A05A	W1CD18A08A	W1CE18A05A	W1CF18A08A
PNP-NC	W1CC18B05A	W1CD18B08A	W1CE18B05A	W1CF18B08A
General Data				
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 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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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 3x0.5mm ²)		2m PVC cable (Ø5 3x0.5mm ²)	
Weight	Approx. 134g		Approx. 153g	

Features

- M18mm dimension
- Sn=5mm, shielded
8mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- M12 Connector version
- IP67 Protection



(Unit: mm)



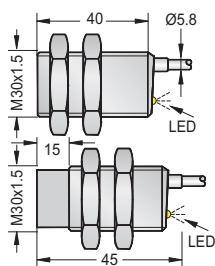
(Unit: mm)



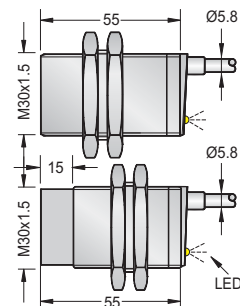
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC18C05H	W1CD18C08H	W1CE18C05H	W1CF18C08H
NPN-NC	W1CC18D05H	W1CD18D08H	W1CE18D05H	W1CF18D08H
PNP-NO	W1CC18A05H	W1CD18A08H	W1CE18A05H	W1CF18A08H
PNP-NC	W1CC18B05H	W1CD18B08H	W1CE18B05H	W1CF18B08H
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 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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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. 48g		Approx. 94g	

Features

- M30mm dimension
- Sn=10mm, shielded
15mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- 2m Cable version
- IP67 Protection



(Unit: mm)



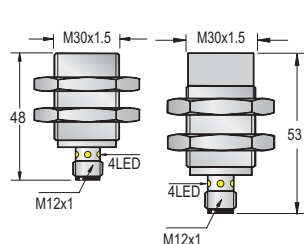
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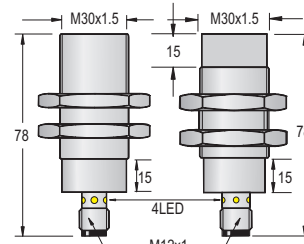
Connection	2m Cable		2m Cable	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC30C10A	W1CD30C15A	W1CE30C10A	W1CF30C15A
NPN-NC	W1CC30D10A	W1CD30D15A	W1CE30D10A	W1CF30D15A
PNP-NO	W1CC30A10A	W1CD30A15A	W1CE30A10A	W1CF30A15A
PNP-NC	W1CC30B10A	W1CD30B15A	W1CE30B10A	W1CF30B15A
General Data				
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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 3x0.5mm²)		2m PVC cable (Ø5.8 3x0.5mm²)	
Weight	Approx. 182g		Approx. 217g	

Features

- M30mm dimension
- Sn=10mm, shielded
15mm, non-shielded
- 10-30VDC operating voltage
- PTFE coated steel housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- M12 connector version
- IP67 Protection



(Unit: mm)



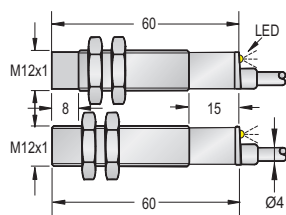
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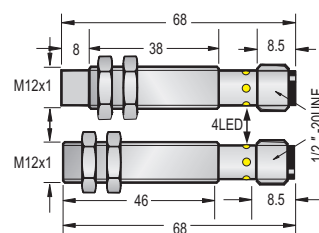
Connection	4 Pin M12 Connector		4 Pin M12 Connector	
Mounting	Shielded	Non-shielded	Shielded	Non-shielded
NPN-NO	W1CC30C10H	W1CD30C15H	W1CE30C10H	W1CF30C15H
NPN-NC	W1CC30D10H	W1CD30D15H	W1CE30D10H	W1CF30D15H
PNP-NO	W1CC30A10H	W1CD30A15H	W1CE30A10H	W1CF30A15H
PNP-NC	W1CC30B10H	W1CD30B15H	W1CE30B10H	W1CF30B15H
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	PTFE coated steel housing case		PTFE coated steel housing case	
Operating voltage	10 ... 30VDC		10 ... 30VDC	
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	<1.5V	<1.5V	<1.5V	<1.5V
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	PTFE		PTFE	
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. 121g		Approx. 187g	

Features

- M12mm dimension
- Sn=2mm, shielded
4mm, non-shielded
- 20-250VAC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC Output
- NO,NC Function
- 2m Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



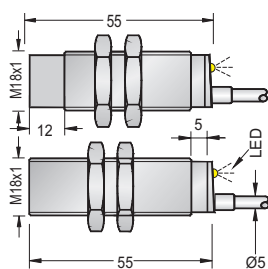
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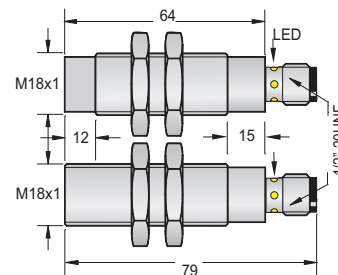
Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
PTFE Coating Steel Case	AC-NO	W8CE12P02A	W8CF12P04A	W8CE12P02L	W8CF12P04L
	AC-NC	W8CE12Q02A	W8CF12Q04A	W8CE12Q02L	W8CF12Q04L
PTFE Case	AC-NO	W8PE12P02A	W8PF12P04A	W8PE12P02L	W8PF12P04L
	AC-NC	W8PE12Q02A	W8PF12Q04A	W8PE12Q02L	W8PF12Q04L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
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	<8VAC at 400mA	<8VAC at 400mA
Switching frequency		<25Hz	<25Hz	<25Hz	<25Hz
Response time		10ms/10ms	10ms/10ms	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		2.5mA		2.5mA	
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		PTFE		PTFE	
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兼容		IEC 60947-5-2		IEC 60947-5-2	
Accessory		2 nuts		2 nuts	
Connection		2m PVC cable (Ø4 2x0.34mm ² /3x0.34mm ²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 67g		Approx. 14g	

Features

- M18mm dimension
- Sn=5mm, shielded
8mm, non-shielded
- 20-250VAC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC Output
- NO,NC Function
- 2m Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



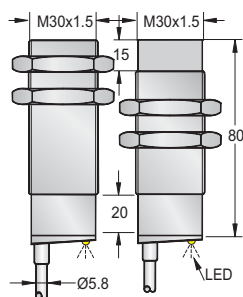
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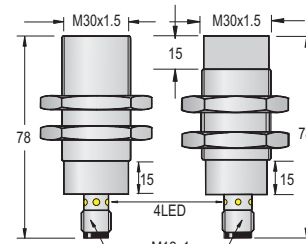
Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
PTFE Coating Steel Case	AC-NO	W8CE18P05A	W8CF18P08A	W8CE18P05L	W8CF18P08L
	AC-NC	W8CE18Q05A	W8CF18Q08A	W8CE18Q05L	W8CF18Q08L
PTFE Case	AC-NO	W8PE18P05A	W8PF18P08A	W8PE18P05L	W8PF18P08L
	AC-NC	W8PE18Q05A	W8PF18Q08A	W8PE18Q05L	W8PF18Q08L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
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	<8VAC at 400mA	<8VAC at 400mA
Switching frequency		<25Hz	<25Hz	<25Hz	<25Hz
Response time		10ms/10ms	10ms/10ms	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		2.5mA		2.5mA	
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		PTFE		PTFE	
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兼容		IEC 60947-5-2		IEC 60947-5-2	
Accessory		2 nuts		2 nuts	
Connection		2m PVC cable (Ø5 2x0.5mm²/3x0.5mm²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 160g		Approx. 70g	

Features

- M30mm dimension
- Sn=10mm, shielded
15mm, non-shielded
- 20-250VAC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC Output
- NO,NC Function
- 2m Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



(Unit: mm)

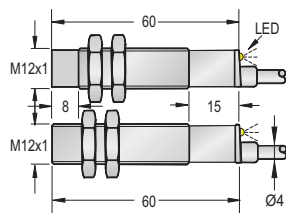


Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
PTFE Coating Steel Case	AC-NO	W8CE30P10A	W8CF30P15A	W8CE30P10L	W8CF30P15L
	AC-NC	W8CE30Q10A	W8CF30Q15A	W8CE30Q10L	W8CF30Q15L
PTFE Case	AC-NO	W8PE30P10A	W8PF30P15A	W8PE30P10L	W8PF30P15L
	AC-NC	W8PE30Q10A	W8PF30Q15A	W8PE30Q10L	W8PF30Q15L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
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	<8VAC at 400mA	<8VAC at 400mA
Switching frequency		<25Hz	<25Hz	<25Hz	<25Hz
Response time		10ms/10ms	10ms/10ms	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		PTFE		PTFE	
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兼容		IEC 60947-5-2		IEC 60947-5-2	
Accessory		2 nuts		2 nuts	
Connection		2m PVC cable (Ø5.8 2x0.5mm²/3x0.5mm²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 217g		Approx. 178g	

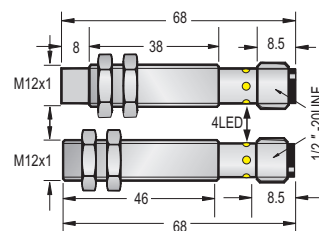


Features

- M12mm dimension
- Sn=2mm, shielded
4mm, non-shielded
- 20-250VAC/DC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC/DC Output
- NO,NC Function
- 2m Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



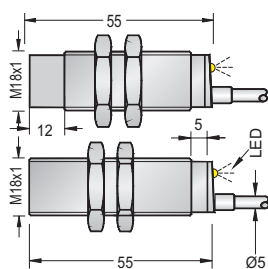
(Unit: mm)



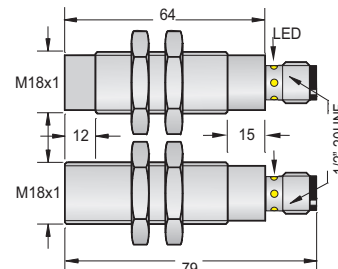
Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
PTFE Coating Steel Case	AC/DC-NO	W9CE12R02A	W9CF12R04A	W9CE12R02L	W9CF12R04L
	AC/DC-NC	W9CE12S02A	W9CF12S04A	W9CE12S02L	W9CF12S04L
PTFE Case	AC/DC-NO	W9PE12R02A	W9PF12R04A	W9PE12R02L	W9PF12R04L
	AC/DC-NC	W9PE12S02A	W9PF12S04A	W9PE12S02L	W9PF12S04L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
Operating voltage		20 ... 250VAC/DC		20 ... 250VAC/DC	
Electrical Data					
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		2.2A(20ms)		2.2A(20ms)	
No load current		<2.5mA		<2.5mA	
Max. Load current		100mA		100mA	
Leakage current		<2.5mA		<2.5mA	
Voltage drop		<10VAC,8VDC		<10VAC,8VDC	
Switching frequency		25Hz/AC,40Hz/DC		25Hz/AC,40Hz/DC	
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		2.5mA		2.5mA	
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		PTFE		PTFE	
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 2x0.34mm ² /3x0.34mm ²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 67g		Approx. 14g	

Features

- M18mm dimension
- Sn=5mm, shielded
8mm, non-shielded
- 20-250VAC/DC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC/DC Output
- NO,NC Function
- 2m Cable version
3 Pin M12 connector version
- IP67 Protection



(Unit: mm)



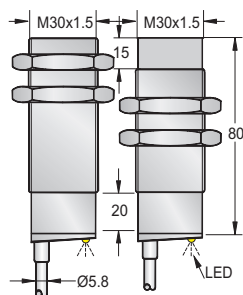
(Unit: mm)



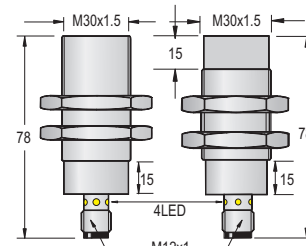
Connection		2m Cable		3 Pin M12 Connector	
Mounting		Shielded	Non-shielded	Shielded	Non-shielded
PTFE Coating Steel Case	AC/DC-NO	W9CE18R05A	W9CF18R08A	W9CE18R05L	W9CF18R08L
	AC/DC-NC	W9CE18S05A	W9CF18S08A	W9CE18S05L	W9CF18S08L
PTFE Case	AC/DC-NO	W9PE18R05A	W9PF18R08A	W9PE18R05L	W9PF18R08L
	AC/DC-NC	W9PE18S05A	W9PF18S08A	W9PE18S05L	W9PF18S08L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
Operating voltage		20 ... 250VAC/DC		20 ... 250VAC/DC	
Electrical Data					
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		2.2A(20ms)		2.2A(20ms)	
No load current		<2.5mA		<2.5mA	
Max. Load current		200mA		200mA	
Leakage current		<2.5mA		<2.5mA	
Voltage drop		<10VAC,8VDC		<10VAC,8VDC	
Switching frequency		25Hz/AC,40Hz/DC		25Hz/AC,40Hz/DC	
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		2.5mA		2.5mA	
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		PTFE		PTFE	
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 2x0.5mm²/3x0.5mm²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 160g		Approx. 70g	

Features

- M30mm dimension
- Sn=10mm, shielded
15mm, non-shielded
- 20-250VAC/DC operating voltage
- PTFE coated steel housing case
PTFE housing case
- AC/DC Output
- NO,NC Function
- 2m 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
PTFE Coating Steel Case	AC/DC-NO	W9CE30R10A	W9CF30R15A	W9CE30R10L	W9CF30R15L
	AC/DC-NC	W9CE30S10A	W9CF30S15A	W9CE30S10L	W9CF30S15L
PTFE Case	AC/DC-NO	W9PE30R10A	W9PF30R15A	W9PE30R10L	W9PF30R15L
	AC/DC-NC	W9PE30S10A	W9PF30S15A	W9PE30S10L	W9PF30S15L
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		PTFE coated steel housing case/PTFE housing case		PTFE coated steel housing case/PTFE housing case	
Operating voltage		20 ... 250VAC/DC		20 ... 250VAC/DC	
Electrical Data					
Rated operating voltage		110VAC		110VAC	
Repeated accuracy		±10%		±10%	
Surge current		2.2A(20ms)		2.2A(20ms)	
No load current		<2.5mA		<2.5mA	
Max. Load current		200mA		200mA	
Leakage current		<2.5mA		<2.5mA	
Voltage drop		<10VAC,8VDC		<10VAC,8VDC	
Switching frequency		25Hz/AC,40Hz/DC		25Hz/AC,40Hz/DC	
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		PTFE		PTFE	
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 2x0.5mm²/3x0.5mm²)		3 Pin M12 ½"-20UNF connector	
Weight		Approx. 217g		Approx. 178g	