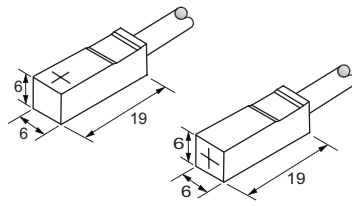
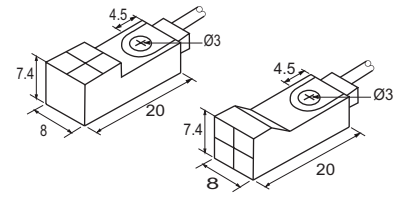


Features

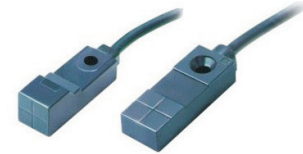
- Q6x6x19mm dimension
Sn=1.2mm, non-shielded
- Q8x8x20mm dimension
Sn=1.5mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection



(Unit: mm)



(Unit: mm)



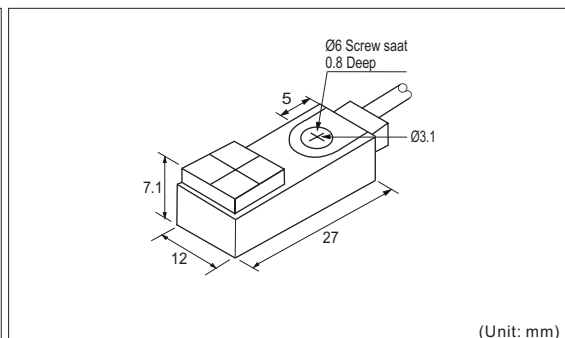
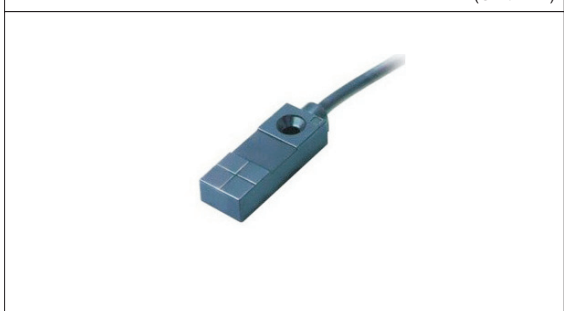
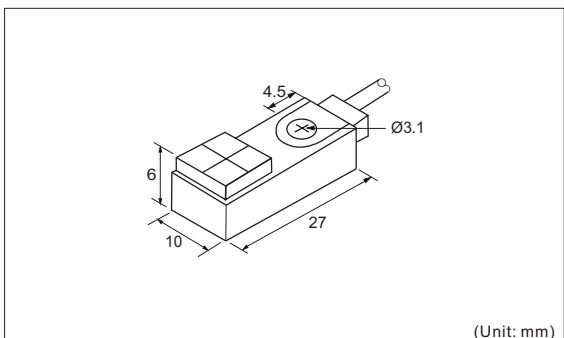
Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
NPN-NO	Q1EY06C1.2A	Q1EX06C1.2A	Q1EY08C1.5A	Q1EX08C1.5A
NPN-NC	Q1EY06D1.2A	Q1EX06D1.2A	Q1EY08D1.5A	Q1EX08D1.5A
PNP-NO	Q1EY06A1.2A	Q1EX06A1.2A	Q1EY08A1.5A	Q1EX08A1.5A
PNP-NC	Q1EY06B1.2A	Q1EX06B1.2A	Q1EY08B1.5A	Q1EX08B1.5A
General Data				
Housing size	Q6mm		Q8mm	
Installation type	Non-shielded		Non-shielded	
Sensing distance(Sn: mm)	1.2mm		1.5mm	
Standard sensing object	Steel 6x6x1mm		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	Polycarbonate		Polycarbonate	
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	100mA		100mA	
Leakage current	<0.01mA		<0.01mA	
Voltage drop	<1.5V		<1.5V	
Switching frequency	400Hz		400Hz	
Response time	0.5ms/0.5ms		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	120mA		120mA	
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	Polycarbonate		Polycarbonate	
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	/		/	
Connection	2m PVC cable (Ø2.7 3x0.15mm ²)		2m PVC cable (Ø2.7 3x0.15mm ²)	
Weight	Approx. 10g		Approx. 12g	



Features

- Q10x6x27mm dimension
Sn=2mm, non-shielded
- Q12x7x27mm dimension
Sn=3mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection

CE



Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
NPN-NO	Q1EY10C02A		Q1EY12C03A	
NPN-NC	Q1EY10D02A		Q1EY12D03A	
PNP-NO	Q1EY10A02A		Q1EY12A03A	
PNP-NC	Q1EY10B02A		Q1EY12B03A	

General Data		
Housing size	Q10mm	Q12mm
Installation type	Non-shielded	Non-shielded
Sensing distance(Sn: mm)	2mm	3mm
Standard sensing object	Steel 10x10x1mm	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	Polycarbonate	Polycarbonate
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
Switching frequency	400Hz	400Hz
Response time	0.5ms/0.5ms	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

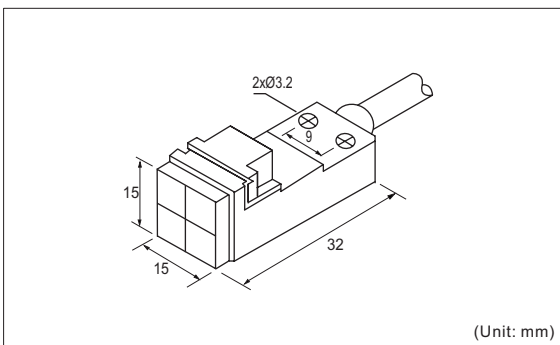
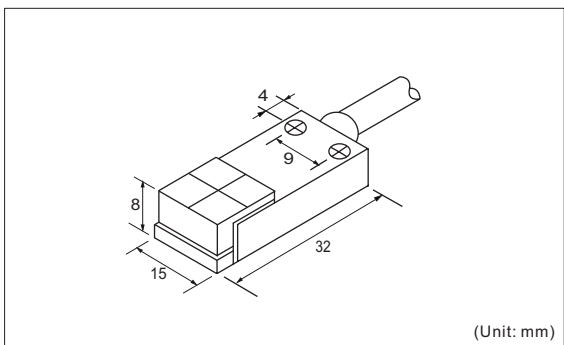
Mechanical Data		
Sensing surface material	Polycarbonate	Polycarbonate
Protection	IP67	IP67
Shock rating	Shock, half-sinus, 30gn, 11ms	Shock, half-sinus, 30gn, 11ms
Vibration rating	55Hz, 1mm ampl., 3x30min.	55Hz, 1mm ampl., 3x30min.
EMC	IEC 60947-5-2	IEC 60947-5-2
Accessory	/	/
Connection	2m PVC cable (Ø2.7 3x0.15mm ²)	2m PVC cable (Ø2.7 3x0.15mm ²)
Weight	Approx. 20g	Approx. 22g



Features

- Q15x8x32mm dimension
Sn=4mm, non-shielded
- Q15x15x32mm dimension
Sn=6.4mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- NPN, PNP Output
- NO, NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection

CE



Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
NPN-NO	Q1EY15C04A			Q1EX15C6.4A
NPN-NC	Q1EY15D04A			Q1EX15D6.4A
PNP-NO	Q1EY15A04A			Q1EX15A6.4A
PNP-NC	Q1EY15B04A			Q1EX15B6.4A

General Data		
Housing size	Q15mm	Q15mm
Installation type	Non-shielded	Non-shielded
Sensing distance(Sn: mm)	4mm	6.4mm
Standard sensing object	Steel 15x15x1mm	Steel 15x15x1mm
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	Polycarbonate	Polycarbonate
Operating voltage	10 ... 30VDC	10 ... 30VDC

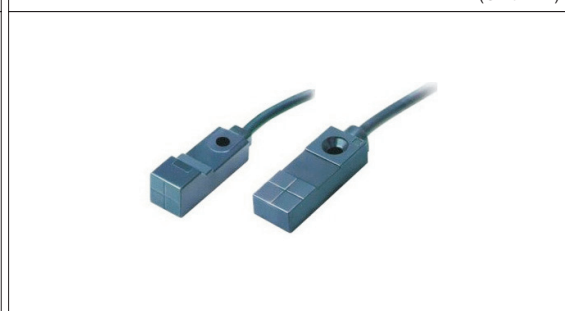
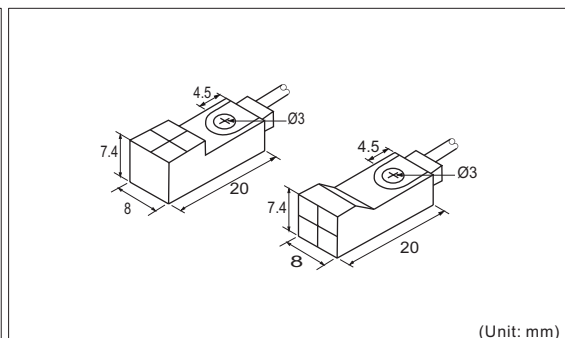
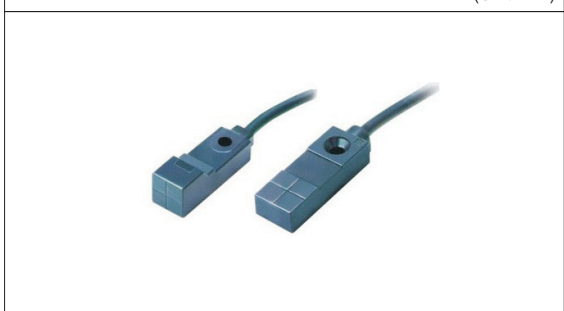
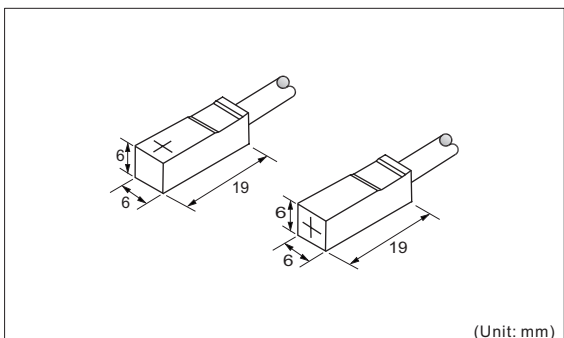
Electrical Data		
Rated operating voltage	24VDC	24VDC
Repeated accuracy	±10%	±10%
Ripple	<10%	<10%
No load current	<10mA	<10mA
Max. Load current	200mA	200mA
Leakage current	<0.01mA	<0.01mA
Voltage drop	<1.5V	<1.5V
Switching frequency	400Hz	400Hz
Response time	0.5ms/0.5ms	0.5ms/0.5ms
Rated insulation 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	Polycarbonate	Polycarbonate
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	/	/
Connection	2m PVC cable (Ø2.7 3x0.15mm ²)	2m PVC cable (Ø2.7 3x0.15mm ²)
Weight	Approx. 20g	Approx. 22g

Features

- Q6x6x19mm dimension
Sn=1.2mm, non-shielded
- Q8x8x20mm dimension
Sn=1.5mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- 2 Wire Output
- NO,NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection

CE



Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
2 Wire-NO	Q1EY06X1.2A	Q1EX06X1.2A	Q1EY08X1.5A	Q1EX08X1.5A
2 Wire-NC	Q1EY06Y1.2A	Q1EX06Y1.2A	Q1EY08Y1.5A	Q1EX08Y1.5A

General Data		
Housing size	Q6mm	Q8mm
Installation type	Non-shielded	Non-shielded
Sensing distance(Sn: mm)	1.2mm	1.5mm
Standard sensing object	Steel 6x6x1mm	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	Polycarbonate	Polycarbonate
Operating voltage	10 ... 30VDC	10 ... 30VDC

Electrical Data		
Rated operating voltage	24VDC	24VDC
Repeated accuracy	±10%	±10%
Ripple	<10%	<10%
No load current	<0.8mA	<0.8mA
Max. Load current	100mA	100mA
Leakage current	<0.8mA	<0.8mA
Voltage drop	<6V	<6V
Switching frequency	1000Hz	1000Hz
Response time	0.2ms/0.2ms	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	120mA	120mA
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

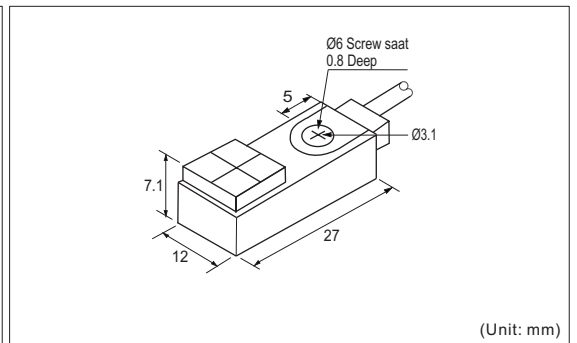
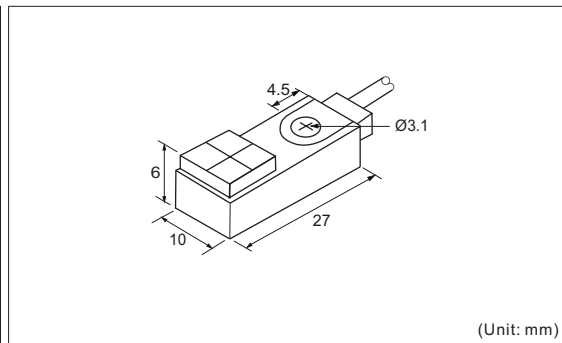
Mechanical Data		
Sensing surface material	Polycarbonate	Polycarbonate
Protection	IP67	IP67
Shock rating	Shock, half-sinus, 30gn, 11ms	Shock, half-sinus, 30gn, 11ms
Vibration rating	55Hz, 1mm ampl., 3x30min.	55Hz, 1mm ampl., 3x30min.
EMC	IEC 60947-5-2	IEC 60947-5-2
Accessory	/	/
Connection	2m PVC cable (Ø2.7 2x0.15mm ²)	2m PVC cable (Ø2.7 2x0.15mm ²)
Weight	Approx.約 10g	Approx. 12g



Features

- Q10x6x27mm dimension
Sn=2mm, non-shielded
- Q12x7x27mm dimension
Sn=3mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- 2 Wire Output
- NO,NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection

CE



Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
2 Wire-NO	Q1EY10X02A		Q1EY12X03A	
2 Wire-NC	Q1EY10Y02A		Q1EY12Y03A	

General Data		
Housing size	Q10mm	Q12mm
Installation type	Non-shielded	Non-shielded
Sensing distance(Sn: mm)	2mm	3mm
Standard sensing object	Steel 10x10x1mm	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	Polycarbonate	Polycarbonate
Operating voltage	10 ... 30VDC	10 ... 30VDC

Electrical Data		
Rated operating voltage	24VDC	24VDC
Repeated accuracy	±10%	±10%
Ripple	<10%	<10%
No load current	<0.8mA	<0.8mA
Max. Load current	1000mA	100mA
Leakage current	<0.8mA	<0.8mA
Voltage drop	<6V	<6V
Switching frequency	1000Hz	500Hz
Response time	0.5ms/0.5ms	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

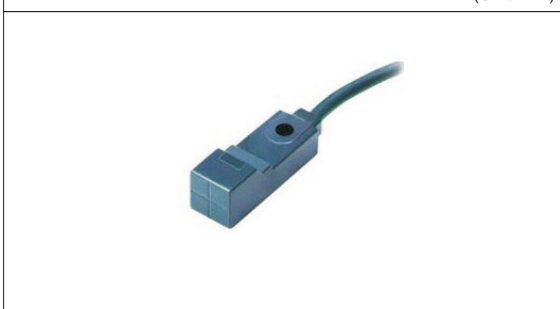
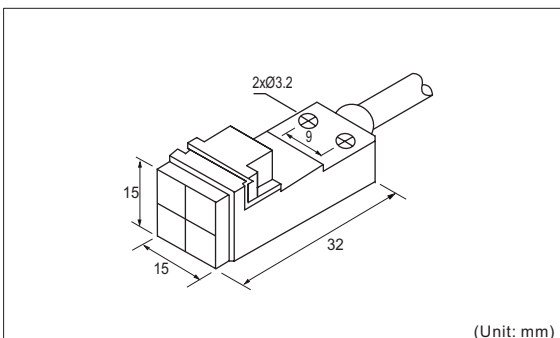
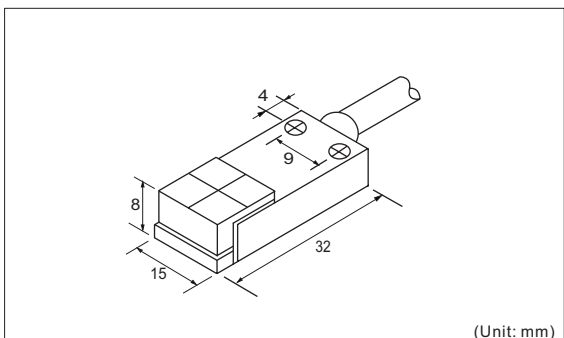
Mechanical Data		
Sensing surface material	Polycarbonate	Polycarbonate
Protection	IP67	IP67
Shock rating	Shock, half-sinus, 30gn, 11ms	Shock, half-sinus, 30gn, 11ms
Vibration rating	55Hz, 1mm ampl., 3x30min.	55Hz, 1mm ampl., 3x30min.
EMC	IEC 60947-5-2	IEC 60947-5-2
Accessory	/	/
Connection	2m PVC cable (Ø2.7 2x0.15mm ²)	2m PVC cable (Ø2.7 2x0.15mm ²)
Weight	Approx. 20g	Approx. 22g



Features

- Q15x8x32mm dimension
Sn=4mm, non-shielded
- Q15x15x32mm dimension
Sn=6.4mm, non-shielded
- 10-30VDC operating voltage
- Polycarbonate housing case
- 2 Wire Output
- NO,NC Function
- Short circuit protection
Overload protection
Reverse polarity protection
- Cable version
- IP67 Protection

CE



Connection	2m Cable		2m Cable	
	Vertical Active Face	Horizontal Active Face	Vertical Active Face	Horizontal Active Face
2 Wire-NO	Q1EY15X04A			Q1EX15X6.4A
2 Wire-NC	Q1EY15Y04A			Q1EX15Y6.4A

General Data		
Housing size	Q15mm	Q15mm
Installation type	Non-shielded	Non-shielded
Sensing distance(Sn: mm)	4mm	6.4mm
Standard sensing object	Steel 15x15x1mm	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	Polycarbonate	Polycarbonate
Operating voltage	10 ... 30VDC	10 ... 30VDC

Electrical Data		
Rated operating voltage	24VDC	24VDC
Repeated accuracy	±10%	±10%
Ripple	<10%	<10%
No load current	<0.8mA	<0.8mA
Max. Load current	1000mA	100mA
Leakage current	<0.8mA	<0.8mA
Voltage drop	<6V	<6V
Switching frequency	1000Hz	500Hz
Response time	0.5ms/0.5ms	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	Polycarbonate	Polycarbonate
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	/	/
Connection	2m PVC cable (Ø2.7 2x0.15mm ²)	2m PVC cable (Ø2.7 2x0.15mm ²)
Weight	Approx. 20g	Approx. 22g