

Sensing the dream



Capacitive sensors

Standard function

Extended sensing distance

Delay function type

Pipe liquid level detecting

High temperature resistant material level detecting



Shanghai Lanbao Sensing Technology Co., Ltd.



LANBAO SENSOR complete solution for the sensors

Established in 1998, Shanghai Lanbao Sensing Technology Co., Ltd. is a leading industrial automation products supplier in China. Our main businesses are industrial sensors R&D, production, sales and application, providing customers with standard and individual products and systems. Lanbao industrial sensors cover over 30 series, 3000 specifications, main products are inductive sensors, photoelectric sensors, capacitive sensors and pressure sensors. Lanbao has been making continuous breakthrough in new technology and new material application, which laid the foundation of its leading position in sensing technology.

Lanbao is an ISO9001:2008 quality management system and EU RoHS environmental directives implemented enterprise. Our series products are with CE, UL and CCC certification. The strict tests in function, quality, reliability and production feasibility at the design stage of each product and the strict quality management in production ensure excellent quality products.

Focus on innovation, quality, service and global market, Lanbao insists on creating maximal value for customers.

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Capacitive sensors

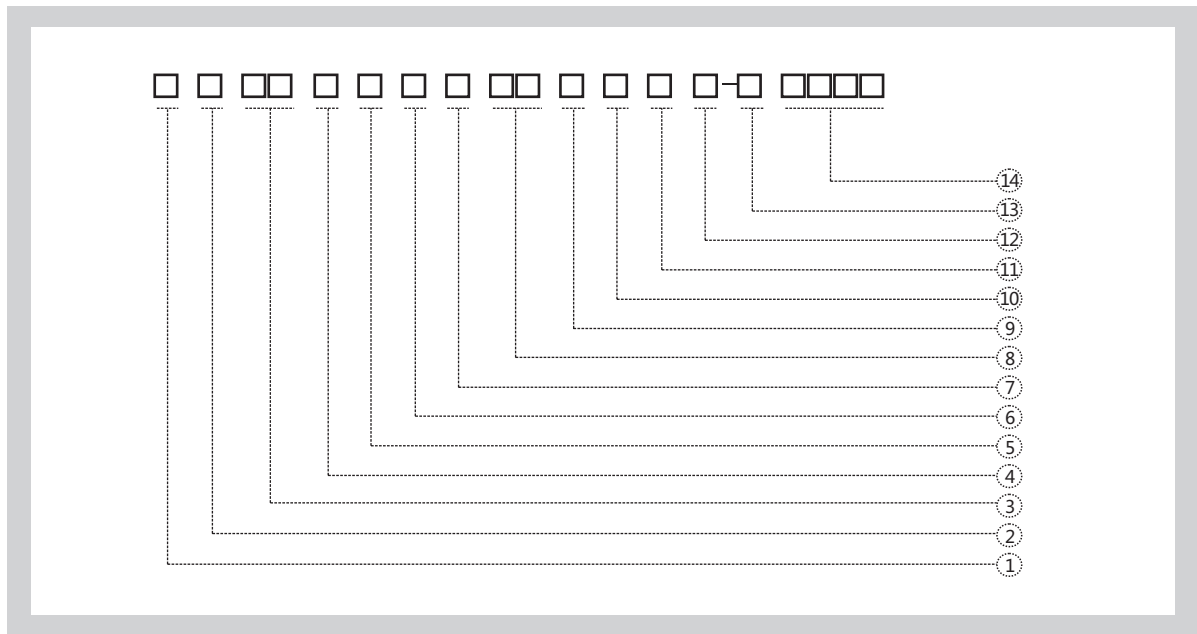
Widely object detect range: metal, plastic and fluid etc.

Be able to detect different objects in the container through non metal container wall.

Sensibility could be adjusted by potentiometer on the sensor.



Naming rules



1. Type Code

C:Capacitive

2. Shape Code

R:Threaded cylindrical
Q:Smooth cylindrical
E:Rectangular

3. Size Code

Number:Housing diameter
e.g: 08:M8

4. Housing Material

N/A:Copper
S:Plastic
G:Stainless steel

5. Housing Length

A:Short
B:Standard
C:Long

6. Mounting

N:Non-flush(nf)
F:Flush(f)

7. Sensing Distance

02:2mm
04:4mm
10:10mm

8. Supply Voltage

A:20...250VAC
D:10...30VDC
E:10...60VDC
M:18...36VDC
S:20...250VAC/DC

9. Output Way

B:AC/DC 2 wires
T:AC 2 wires
P:PNP
N:NPN

E:NPN/PNP

F:NPN+PNP

K:Relay

10. Output Status

A:NO/NC reversible
B:NO/NC optional
Cable optional;Potentiometer optional
O:NO
C:NC
R:NO+NC
Note:Relay output is optional

11. By Sensor Function

N/A:Standard function
Y:Extended sensing distance
T1:On-delay function
T160:60s
T1600:600s
T2:Off-delay function
T260:60s
T2600:600s

12. Cable Length

N/A:2m
3M:3m

13. Connection

N/A:2M cable
E1:M8 connector (3 pins)
E2:M12 connector (4 pins)
E3:M8 connector (4 pins)
E4:M12 trapezoid connector (4 pins)
E5:M12 connector (5 pins)
D:Terminal

14. Special Requirement

In 4 Digits

Wiring diagram

DC 3Wires	NPN NO	NPN NC	PNP NO	PNP NC
Lead cable				
M12 Connector				

DC 4Wires	NPN NO+NC	PNP NO+NC		
Lead cable				
M12 Connector				

AC 2Wires	SCR NO	SCR NC		
Lead cable				
M12 Connector				

AC/DC 2Wires	NO	NC	NO/NC	
Lead cable				
M12 Connector				

AC/DC 5Wires	Lead cable	Terminal connect		
Relay				

Remarks

Connector	M8 Connector	M12 Connector		

Capacitive sensors

Standard function

metal type

P.07

Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
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DC 3/4Wires

P.07

CR12	DC 3Wires	DC10-30V	f/nf	2mm,4mm	M12*1*52	Nickel-copper Alloy	Cable
CR12	DC 3Wires	DC10-30V	f/nf	2mm,4mm	M12*1*65	Nickel-copper Alloy	M12 Connector
CR18	DC 3/4Wires	DC10-30V	f/nf	5mm,8mm	M18*1*70	Nickel-copper Alloy	Cable
CR18	DC 3/4Wires	DC10-30V	f/nf	5mm,8mm	M18*1*83.5	Nickel-copper Alloy	M12 Connector
CR30	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*62	Nickel-copper Alloy	Cable
CR30	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*79	Nickel-copper Alloy	M12 Connector
CQ20	DC 3/4Wires	DC10-30V	f	10mm	Φ20*80	Nickel-copper Alloy	Cable
CQ32	DC 3/4Wires	DC10-30V	f	15mm	Φ32*80	Nickel-copper Alloy	Cable

AC 2Wires

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CR18	AC 2Wires	AC20-250V	f/nf	5mm,8mm	M18*1*70	Nickel-copper Alloy	Cable
CR18	AC 2Wires	AC20-250V	f/nf	5mm,8mm	M18*1*83.5	Nickel-copper Alloy	M12 Connector
CR30	AC 2Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*62	Nickel-copper Alloy	Cable
CR30	AC 2Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*79	Nickel-copper Alloy	M12 Connector
CQ20	AC 2Wires	AC20-250V	f	10mm	Φ20*80	Nickel-copper Alloy	Cable
CQ32	AC 2Wires	AC20-250V	f	15mm	Φ32*80	Nickel-copper Alloy	Cable

DC 3/4Wires (Stainless steel)

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CR18G	DC 3/4Wires	DC10-30V	f/nf	5mm,8mm	M18*1*70	Stainless steel	Cable
CR30G	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*62	Stainless steel	Cable
CQ20G	DC 3/4Wires	DC10-30V	f	10mm	Φ20*80	Stainless steel	Cable
CQ32G	DC 3/4Wires	DC10-30V	f	15mm	Φ32*80	Stainless steel	Cable

AC 2Wires (Stainless steel)

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CR18G	AC 2Wires	AC20-250V	f/nf	5mm,8mm	M18*1*70	Stainless steel	Cable
CR30G	AC 2Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*62	Stainless steel	Cable
CQ20G	AC 2Wires	AC20-250V	f	10mm	Φ20*80	Stainless steel	Cable
CQ32G	AC 2Wires	AC20-250V	f	15mm	Φ32*80	Stainless steel	Cable

Capacitive sensors

Standard function

plastic type

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Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
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DC 3/4Wires

P.18

CR12S	DC 3Wires	DC10-30V	f/nf	2mm,4mm	M12*1*52	PBT	Cable
CR12S	DC 3Wires	DC10-30V	f/nf	2mm,4mm	M12*1*65	PBT	M12 Connector
CR18S	DC 3/4Wires	DC10-30V	f/nf	5mm,8mm	M18*1*70	PBT	Cable
CR18S	DC 3/4Wires	DC10-30V	f/nf	5mm,8mm	M18*1*83.5	PBT	M12 Connector
CR30S	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*62	PBT	Cable
CR30S	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*79	PBT	M12 Connector
CQ20S	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	Φ20*80	PBT	Cable
CQ32S	DC 3/4Wires	DC10-30V	f/nf	15mm,20mm	Φ32*80	PBT	Cable
CQ34S	DC 3/4Wires	DC10-30V	f/nf	15mm,20mm	Φ34*80	PBT	Cable

AC 2Wires

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CR18S	AC 2Wires	AC20-250V	f/nf	5mm,8mm	M18*1*70	PBT	Cable
CR18S	AC 2Wires	AC20-250V	f/nf	5mm,8mm	M18*1*83.5	PBT	M12 Connector
CR30S	AC 2Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*62	PBT	Cable
CR30S	AC 2Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*79	PBT	M12 Connector
CQ20S	AC 2Wires	AC20-250V	f/nf	10mm,15mm	Φ20*80	PBT	Cable
CQ32S	AC 2Wires	AC20-250V	f/nf	15mm,20mm	Φ32*80	PBT	Cable
CQ34S	AC 2Wires	AC20-250V	f/nf	15mm,20mm	Φ34*80	PBT	Cable

AC/DC 2Wires

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CR30S	AC/DC 2Wires	AC/DC20-250V	nf	15mm	M30*1*62	PBT	Cable
CR30S	AC/DC 2Wires	AC/DC20-250V	nf	15mm	M30*1*79	PBT	M12 Connector
CQ32S	AC/DC 2Wires	AC/DC20-250V	nf	20mm	Φ32*80	PBT	Cable
CQ34S	AC/DC 2Wires	AC/DC20-250V	nf	20mm	Φ34*80	PBT	Cable

Rectangular type

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CE07	DC 3Wires	DC10-30V	f/nf	5mm,8mm	30*7*50	PBT	Cable
CE34	DC 3Wires	DC10-30V	nf	10mm	50*7*20	PBT	Cable
CE35	DC 3/4Wires	DC10-30V	f/nf	10mm,15mm	35*15*50	PBT	Cable

Capacitive sensors

Extended sensing distance

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Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CR12S	DC 3Wires	DC10-30V	f/nf	4mm,8mm	M12*1*52	PBT	Cable
CR12S	DC 3Wires	DC10-30V	f/nf	4mm,8mm	M12*1*65	PBT	M12 Connector
CR18S	DC 3/4Wires	DC10-30V	f/nf	8mm,12mm	M18*1*70	PBT	Cable
CR18S	DC 3/4Wires	DC10-30V	f/nf	8mm,12mm	M18*1*83.5	PBT	M12 Connector
CR30S	DC 3/4Wires	DC10-30V	f/nf	15mm,22mm	M30*1.5*62	PBT	Cable
CR30S	DC 3/4Wires	DC10-30V	f/nf	15mm,22mm	M30*1.5*79	PBT	M12 Connector

Delay function type

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Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CR30S	AC 2Wires	AC20-250V	nf	22mm	M30*1.5*62	PBT	Cable
CQ32S	AC 5Wires	AC20-250V	f	15mm	Φ32*80	PBT	Cable

Pipe liquid level detecting

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Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CE10	DC 3 Wires	DC10-30V	nf		43*24*20	PBT	Cable
CE15	DC 3 Wires	DC10-30V	nf		34*33*20	PBT	Cable

High temperature resistant material level detecting

P.35

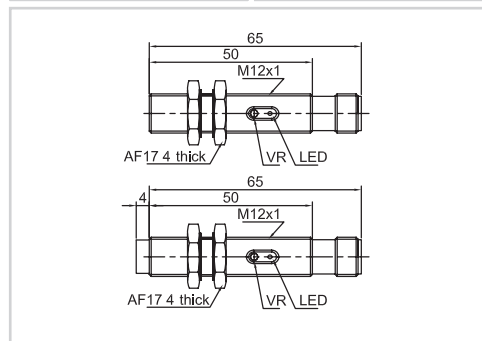
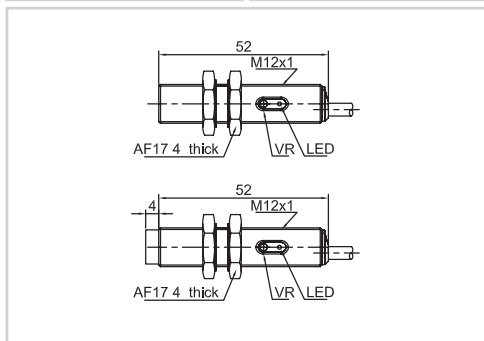
Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CE53	DC 3 Wires	DC18-36V	nf		55*22*96	PA66	Cable

Item Code	CR12		CR12	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	2mm	4mm	2mm	4mm



Output	NPN NO	CR12CF02DNO	CR12CN04DNO	CR12CF02DNO-E2	CR12CN04DNO-E2
	NPN NC	CR12CF02DNC	CR12CN04DNC	CR12CF02DNC-E2	CR12CN04DNC-E2
Output	PNP NO	CR12CF02DPO	CR12CN04DPO	CR12CF02DPO-E2	CR12CN04DPO-E2
	PNP NC	CR12CF02DPC	CR12CN04DPC	CR12CF02DPC-E2	CR12CN04DPC-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE	CE	CE	CE

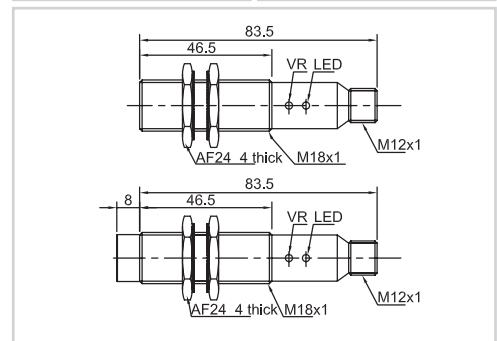
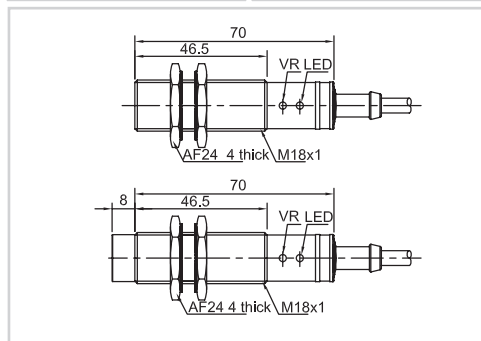


Item Code	CR18		CR18	
Mounting	● Flush	○ Non-flush	● Flush	○ Non-flush
Sensing distance	5mm	8mm	5mm	8mm



Output	NPN NO	CR18CF05DNO	CR18CN08DNO	CR18CF05DNO-E2	CR18CN08DNO-E2
	NPN NC	CR18CF05DNC	CR18CN08DNC	CR18CF05DNC-E2	CR18CN08DNC-E2
	NPN NO+NC	CR18CF05DNR	CR18CN08DNR	CR18CF05DNR-E2	CR18CN08DNR-E2
Output	PNP NO	CR18CF05DPO	CR18CN08DPO	CR18CF05DPO-E2	CR18CN08DPO-E2
	PNP NC	CR18CF05DPC	CR18CN08DPC	CR18CF05DPC-E2	CR18CN08DPC-E2
	PNP NO+NC	CR18CF05DPR	CR18CN08DPR	CR18CF05DPR-E2	CR18CN08DPR-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

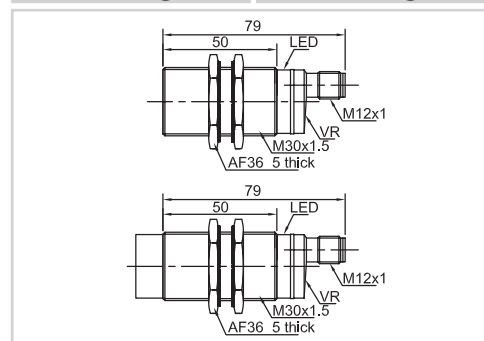
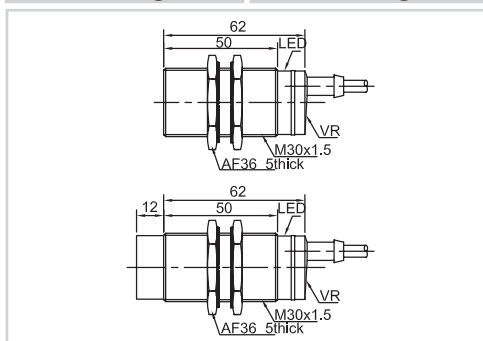


Item Code	CR30		CR30	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	10mm	15mm	10mm	15mm



Output	NPN NO	CR30CF10DNO	CR30CN15DNO	CR30CF10DNO-E2	CR30CN15DNO-E2
	NPN NC	CR30CF10DNC	CR30CN15DNC	CR30CF10DNC-E2	CR30CN15DNC-E2
	NPN NO+NC	CR30CF10DNR	CR30CN15DNR	CR30CF10DNR-E2	CR30CN15DNR-E2
Output	PNP NO	CR30CF10DPO	CR30CN15DPO	CR30CF10DPO-E2	CR30CN15DPO-E2
	PNP NC	CR30CF10DPC	CR30CN15DPC	CR30CF10DPC-E2	CR30CN15DPC-E2
	PNP NO+NC	CR30CF10DPR	CR30CN15DPR	CR30CF10DPR-E2	CR30CN15DPR-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L



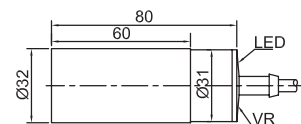
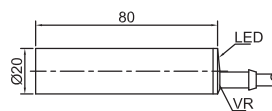
Item Code	CQ20	CQ32
Mounting	● Flush	● Flush
Sensing distance	10mm	15mm



Output	NPN NO	CQ20CF10DNO	CQ32CF15DNO
	NPN NC	CQ20CF10DNC	CQ32CF15DNC
	NPN NO+NC	CQ20CF10DNR	CQ32CF15DNR
Output	PNP NO	CQ20CF10DPO	CQ32CF15DPO
	PNP NC	CQ20CF10DPC	CQ32CF15DPC
	PNP NO+NC	CQ20CF10DPR	CQ32CF15DPR

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA
Voltage drop	<2.5V	<2.5V
Consumption current	<15mA	<15mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L



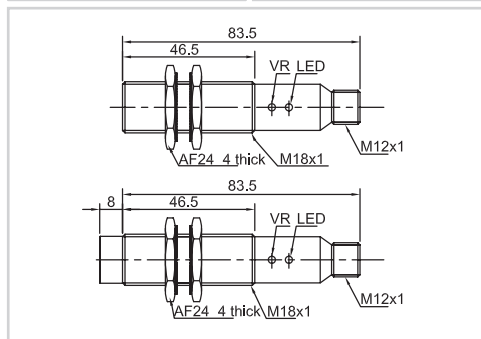
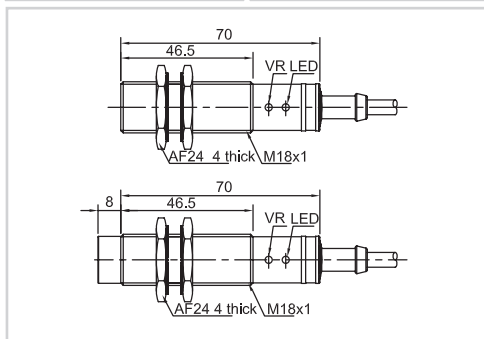
Item Code	CR18		CR18	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	5mm	8mm	5mm	8mm



Output	AC 2Wires NO	CR18CF05ATO	CR18CN08ATO	CR18CF05ATO-E2	CR18CN08ATO-E2
	AC 2Wires NC	CR18CF05ATC	CR18CN08ATC	CR18CF05ATC-E2	CR18CN08ATC-E2

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L



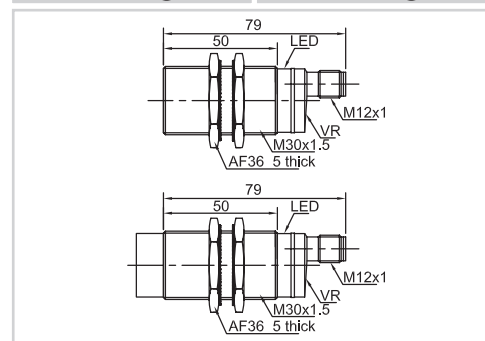
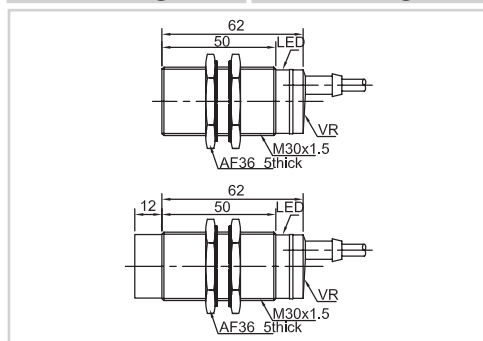
Item Code	CR30		CR30	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	10mm	15mm	10mm	15mm



Output	AC 2Wires NO	CR30CF10ATO	CR30CN15ATO	CR30CF10ATO-E2	CR30CN15ATO-E2
	AC 2Wires NC	CR30CF10ATC	CR30CN15ATC	CR30CF10ATC-E2	CR30CN15ATC-E2

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L



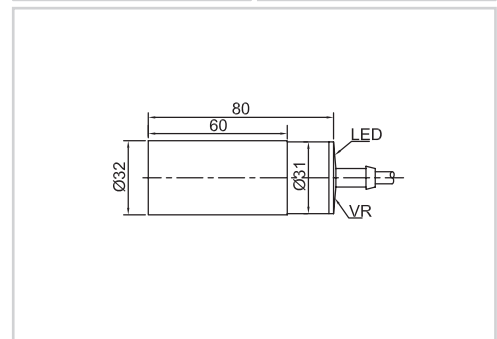
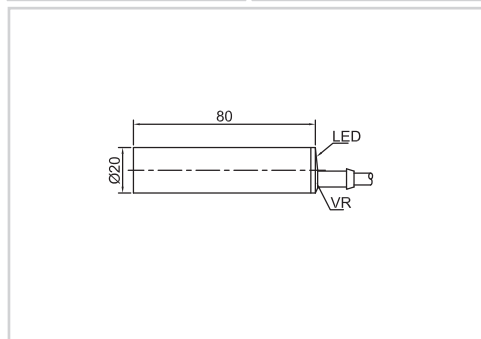
Item Code	CQ20		CQ32	
Mounting	● Flush		● Flush	
Sensing distance	10mm		15mm	



Output	AC 2Wires NO	CQ20CF10ATO	CQ32CF15ATO
	AC 2Wires NC	CQ20CF10ATC	CQ32CF15ATC

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA
Voltage drop	<10V	<10V
Consumption current	<3mA	<3mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L

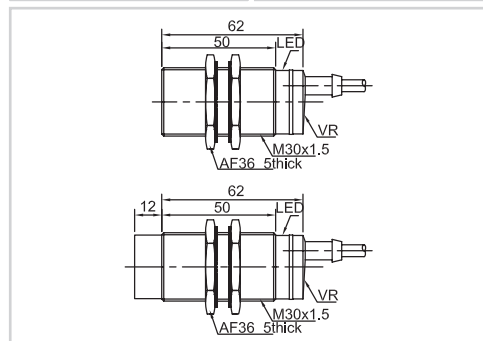
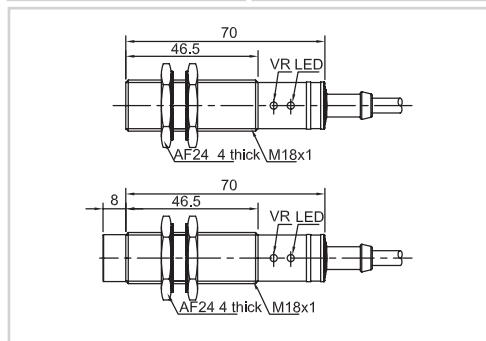


Item Code	CR18G		CR30G	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	5mm	8mm	10mm	15mm



Output	NPN NO	CR18GCF05DNO	CR18GCN08DNO	CR30GCF10DNO	CR30GCN15DNO
	NPN NC	CR18GCF05DNC	CR18GCN08DNC	CR30GCF10DNC	CR30GCN15DNC
	NPN NO+NC	CR18GCF05DNR	CR18GCN08DNR	CR30GCF10DNR	CR30GCN15DNR
Output	PNP NO	CR18GCF05DPO	CR18GCN08DPO	CR30GCF10DPO	CR30GCN15DPO
	PNP NC	CR18GCF05DPC	CR18GCN08DPC	CR30GCF10DPC	CR30GCN15DPC
	PNP NO+NC	CR18GCF05DPR	CR18GCN08DPR	CR30GCF10DPR	CR30GCN15DPR

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L	CE U _L	CE U _L



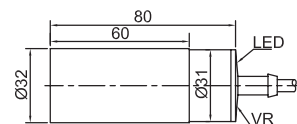
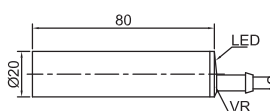
Item Code	CQ20G	CQ32G
Mounting	● Flush	● Flush
Sensing distance	10mm	15mm



Output	NPN NO	CQ20GCF10DNO	CQ32GCF15DNO
	NPN NC	CQ20GCF10DNC	CQ32GCF15DNC
	NPN NO+NC	CQ20GCF10DNR	CQ32GCF15DNR
Output	PNP NO	CQ20GCF10DPO	CQ32GCF15DPO
	PNP NC	CQ20GCF10DPC	CQ32GCF15DPC
	PNP NO+NC	CQ20GCF10DPR	CQ32GCF15DPR

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA
Voltage drop	<2.5V	<2.5V
Consumption current	<15mA	<15mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L



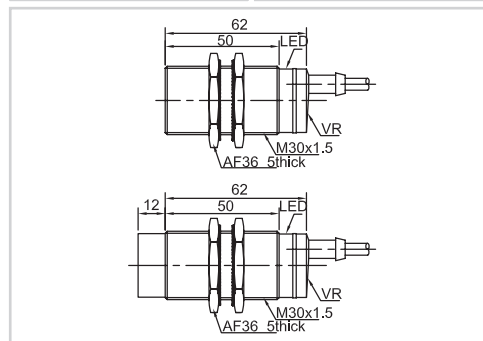
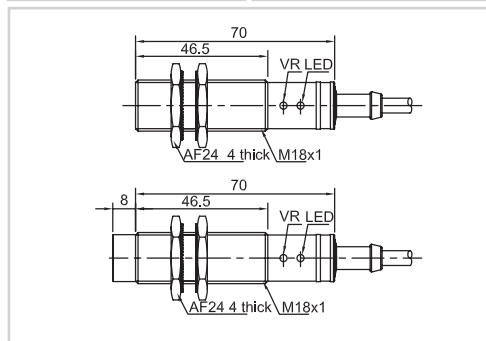
Item Code	CR18G		CR30G	
Mounting	● Flush	○ Non-flush	● Flush	○ Non-flush
Sensing distance	5mm	8mm	10mm	15mm



Output	AC 2Wires NO	CR18GCF05ATO	CR18GCN08ATO	CR30GCF10ATO	CR30GCN15ATO
	AC 2Wires NC	CR18GCF05ATC	CR18GCN08ATC	CR30GCF10ATC	CR30GCN15ATC

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L	CE U _L	CE U _L



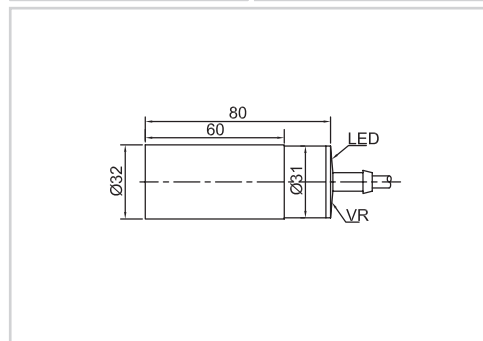
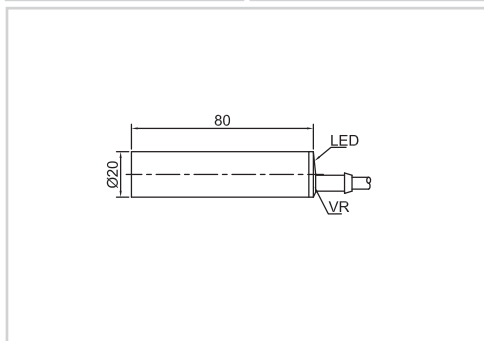
Item Code	CQ20G	CQ32G
Mounting	● Flush	● Flush
Sensing distance	10mm	15mm



Output	AC 2Wires NO	CQ20GCF10ATO	CQ32GCF15ATO
	AC 2Wires NC	CQ20GCF10ATC	CQ32GCF15ATC

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA
Voltage drop	<10V	<10V
Consumption current	<3mA	<3mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L

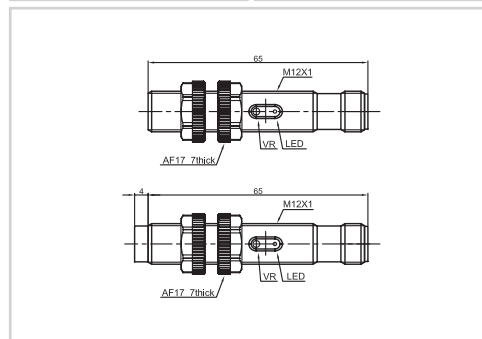
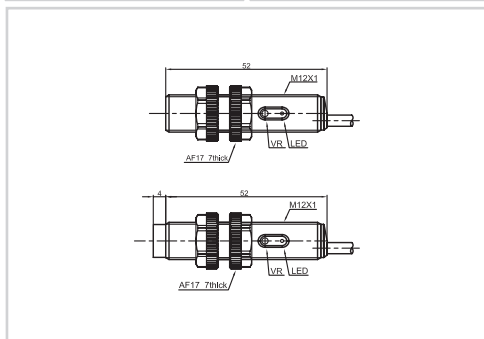


Item Code	CR12S		CR12S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	2mm	4mm	2mm	4mm



Output	NPN NO	CR12SCF02DNO	CR12SCN04DNO	CR12SCF02DNO-E2	CR12SCN04DNO-E2
	NPN NC	CR12SCF02DNC	CR12SCN04DNC	CR12SCF02DNC-E2	CR12SCN04DNC-E2
Output	PNP NO	CR12SCF02DPO	CR12SCN04DPO	CR12SCF02DPO-E2	CR12SCN04DPO-E2
	PNP NC	CR12SCF02DPC	CR12SCN04DPC	CR12SCF02DPC-E2	CR12SCN04DPC-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE	CE	CE	CE



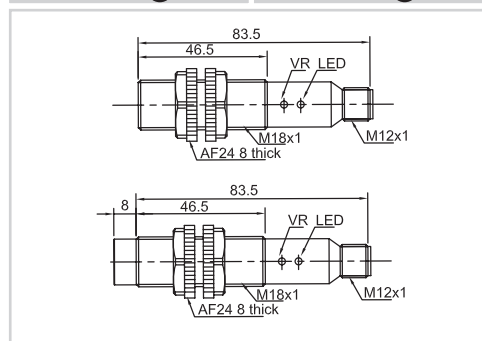
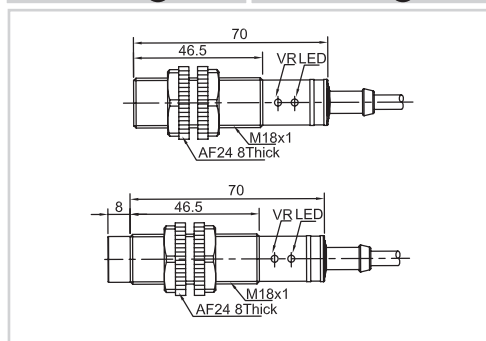
Item Code	CR18S		CR18S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	5mm	8mm	5mm	8mm



Output	NPN NO	CR18SCF05DNO	CR18SCN08DNO	CR18SCF05DNO-E2	CR18SCN08DNO-E2
	NPN NC	CR18SCF05DNC	CR18SCN08DNC	CR18SCF05DNC-E2	CR18SCN08DNC-E2
	NPN NO+NC	CR18SCF05DNR	CR18SCN08DNR	CR18SCF05DNR-E2	CR18SCN08DNR-E2
Output	PNP NO	CR18SCF05DPO	CR18SCN08DPO	CR18SCF05DPO-E2	CR18SCN08DPO-E2
	PNP NC	CR18SCF05DPC	CR18SCN08DPC	CR18SCF05DPC-E2	CR18SCN08DPC-E2
	PNP NO+NC	CR18SCF05DPR	CR18SCN08DPR	CR18SCF05DPR-E2	CR18SCN08DPR-E2

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

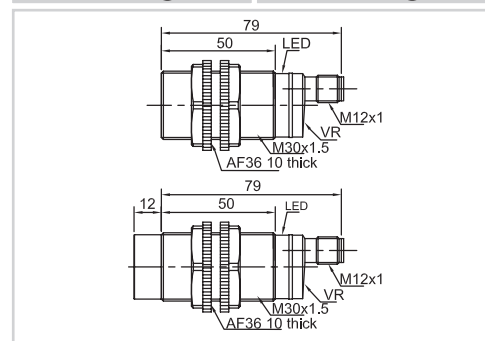
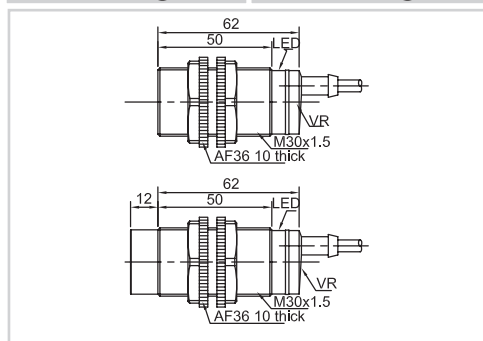


Item Code	CR30S		CR30S	
Mounting	● Flush	○ Non-flush	● Flush	○ Non-flush
Sensing distance	10mm	15mm	10mm	15mm



Output	NPN NO	CR30SCF10DNO	CR30SCN15DNO	CR30SCF10DNO-E2	CR30SCN15DNO-E2
	NPN NC	CR30SCF10DNC	CR30SCN15DNC	CR30SCF10DNC-E2	CR30SCN15DNC-E2
	NPN NO+NC	CR30SCF10DNR	CR30SCN15DNR	CR30SCF10DNR-E2	CR30SCN15DNR-E2
Output	PNP NO	CR30SCF10DPO	CR30SCN15DPO	CR30SCF10DPO-E2	CR30SCN15DPO-E2
	PNP NC	CR30SCF10DPC	CR30SCN15DPC	CR30SCF10DPC-E2	CR30SCN15DPC-E2
	PNP NO+NC	CR30SCF10DPR	CR30SCN15DPR	CR30SCF10DPR-E2	CR30SCN15DPR-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

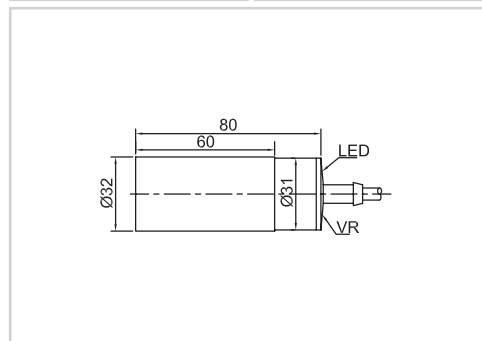
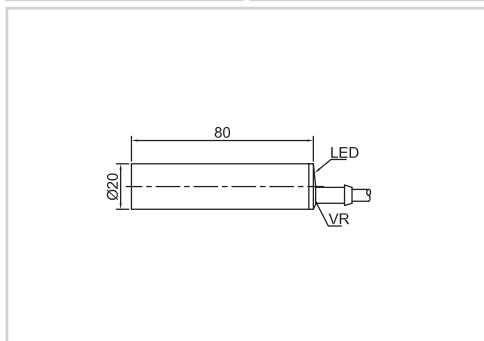


Item Code	CQ20S		CQ32S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	10mm	15mm	15mm	20mm



Output	NPN NO	CQ20SCF10DNO	CQ20SCN15DNO	CQ32SCF15DNO	CQ32SCN20DNO
	NPN NC	CQ20SCF10DNC	CQ20SCN15DNC	CQ32SCF15DNC	CQ32SCN20DNC
	NPN NO+NC	CQ20SCF10DNR	CQ20SCN15DNR	CQ32SCF15DNR	CQ32SCN20DNR
Output	PNP NO	CQ20SCF10DPO	CQ20SCN15DPO	CQ32SCF15DPO	CQ32SCN20DPO
	PNP NC	CQ20SCF10DPC	CQ20SCN15DPC	CQ32SCF15DPC	CQ32SCN20DPC
	PNP NO+NC	CQ20SCF10DPR	CQ20SCN15DPR	CQ32SCF15DPR	CQ32SCN20DPR

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L	CE U _L	CE U _L



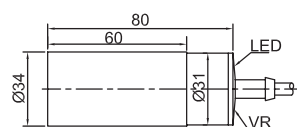
Item Code	CQ34S	
Mounting	● Flush	◐ Non-flush
Sensing distance	15mm	20mm



Output	NPN NO	CQ34SCF15DNO	CQ34SCN20DNO
	NPN NC	CQ34SCF15DNC	CQ34SCN20DNC
	NPN NO+NC	CQ34SCF15DNR	CQ34SCN20DNR
Output	PNP NO	CQ34SCF15DPO	CQ34SCN20DPO
	PNP NC	CQ34SCF15DPC	CQ34SCN20DPC
	PNP NO+NC	CQ34SCF15DPR	CQ34SCN20DPR

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA
Voltage drop	<2.5V	<2.5V
Consumption current	<15mA	<15mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable
Certification	CE	CE



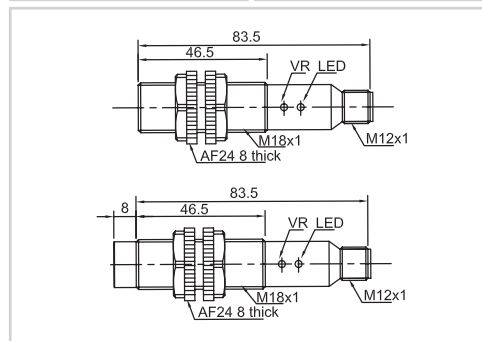
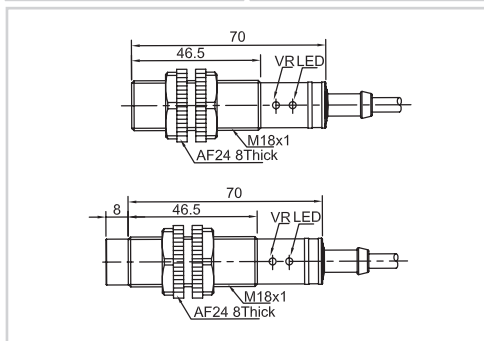
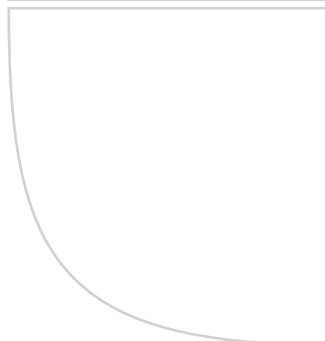
Item Code	CR18S		CR18S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	5mm	8mm	5mm	8mm



Output	AC 2Wires NO	CR18SCF05ATO	CR18SCN08ATO	CR18SCF05ATO-E2	CR18SCN08ATO-E2
	AC 2Wires NC	CR18SCF05ATC	CR18SCN08ATC	CR18SCF05ATC-E2	CR18SCN08ATC-E2

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L CCC	CE U _L CCC	CE U _L CCC	CE U _L CCC



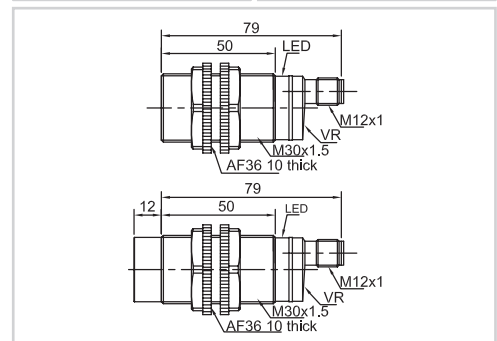
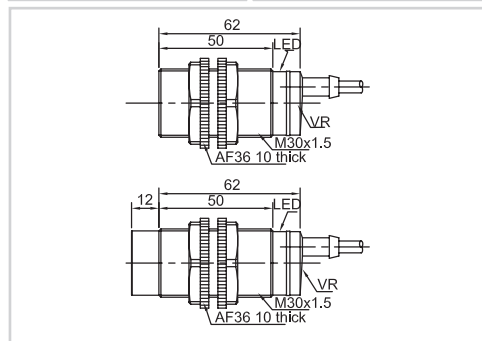
Item Code	CR30S		CR30S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	10mm	15mm	10mm	15mm



Output	AC 2Wires NO	CR30SCF10ATO	CR30SCN15ATO	CR30SCF10ATO-E2	CR30SCN15ATO-E2
	AC 2Wires NC	CR30SCF10ATC	CR30SCN15ATC	CR30SCF10ATC-E2	CR30SCN15ATC-E2

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE U _L CCC	CE U _L CCC	CE U _L CCC	CE U _L CCC



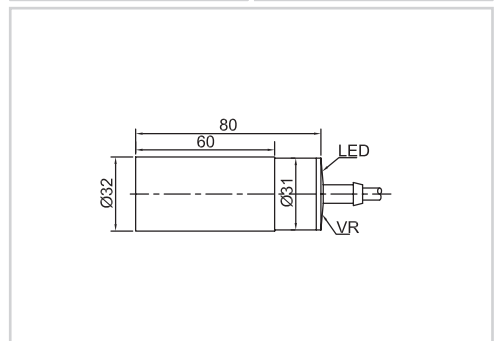
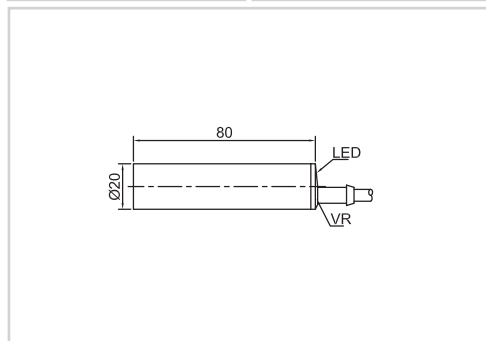
Item Code	CQ20S		CQ32S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	10mm	15mm	15mm	20mm



Output	AC 2Wires NO	CQ20SCF10ATO	CQ20SCN15ATO	CQ32SCF15ATO	CQ32SCN20ATO
	AC 2Wires NC	CQ20SCF10ATC	CQ20SCN15ATC	CQ32SCF15ATC	CQ32SCN20ATC

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Consumption current	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	2m PVC Cable
Certification	CE U _L	CE U _L	CE U _L CCC	CE U _L CCC



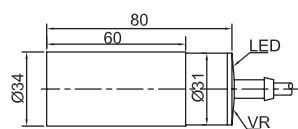
Item Code	CQ34S	
Mounting	● Flush	◐ Non-flush
Sensing distance	15mm	20mm



Output	AC 2Wires NO	CQ34SCF15ATO	CQ34SCN20ATO
	AC 2Wires NC	CQ34SCF15ATC	CQ34SCN20ATC

Technical Parameter

Supply voltage	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA
Voltage drop	<10V	<10V
Consumption current	<3mA	<3mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable
Certification	CE	CE



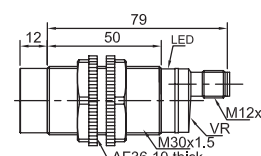
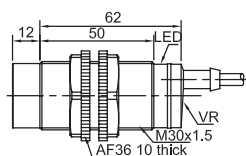
Item Code	CR30S	CR30S
Mounting	● Non-flush	● Non-flush
Sensing distance	15mm	15mm



Output	AC/DC 2Wires NO	CR30SCN15SBO	CR30SCN15SBO-E2
	AC/DC 2Wires NC	CR30SCN15SBC	CR30SCN15SBC-E2

Technical Parameter

Supply voltage	20...250 VAC/DC	20...250 VAC/DC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	AC: <300mA, DC: <100mA	AC: <300mA, DC: <100mA
Voltage drop	AC: <10V, DC: <8V	AC: <10V, DC: <8V
Consumption current	AC: <3mA, DC: <1mA	AC: <3mA, DC: <1mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	AC: 15Hz, DC: 40Hz	AC: 15Hz, DC: 40Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	PBT	PBT
Connection	2m PVC Cable	M12 Connector
Certification	CE	CE



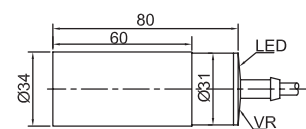
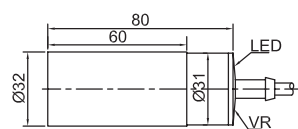
Item Code	CQ32S	CQ34S
Mounting	● Non-flush	● Non-flush
Sensing distance	20mm	20mm



Output	AC/DC 2Wires NO	CQ32SCN20SBO	CQ34SCN20SBO
	AC/DC 2Wires NC	CQ32SCN20SBC	CQ34SCN20SBC

Technical Parameter

Supply voltage	20...250 VAC/DC	20...250 VAC/DC
Switch point drift	< ±20% Sr	< ±20% Sr
Load current	AC: <300mA, DC: <100mA	AC: <300mA, DC: <100mA
Voltage drop	AC: <10V, DC: <8V	AC: <10V, DC: <8V
Consumption current	AC: <3mA, DC: <1mA	AC: <3mA, DC: <1mA
Hysteresis	3...20%	3...20%
Repeat accuracy	<3%	<3%
Frequency	AC: 15Hz, DC: 40Hz	AC: 15Hz, DC: 40Hz
Output indicator	Yellow LED	Yellow LED
Polarity protection	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s
Short-circuit protection	...	...
Ambient temperature	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%
Protection degree	IP67	IP67
Housing material	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable
Certification	CE	CE



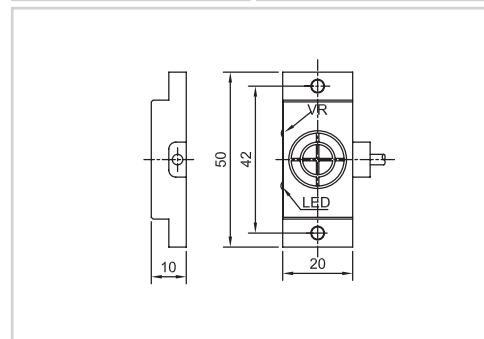
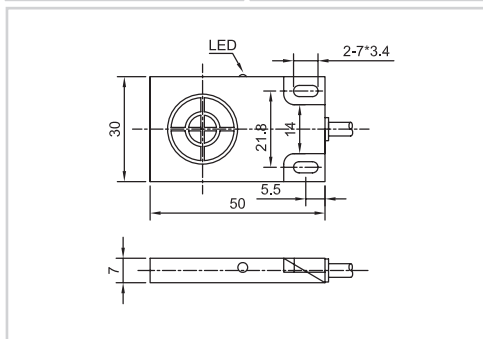
Item Code	CE07		CE34	
Mounting	● Flush	◐ Non-flush	◐ Non-flush	
Sensing distance	5mm	8mm	10mm	



Output	NPN NO	CE07SF05DNO	CE07SN08DNO	CE34SN10DNO	
	NPN NC	CE07SF05DNC	CE07SN08DNC	CE34SN10DNC	
Output	PNP NO	CE07SF05DPO	CE07SN08DPO	CE34SN10DPO	
	PNP NC	CE07SF05DPC	CE07SN08DPC	CE34SN10DPC	

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	
Load current	<200mA	<200mA	<200mA	
Voltage drop	<2.5V	<2.5V	<2.5V	
Consumption current	<15mA	<15mA	<15mA	
Hysteresis	3...20%	3...20%	3...20%	
Repeat accuracy	<3%	<3%	<3%	
Frequency	60Hz	60Hz	30Hz	
Output indicator	Yellow LED	Yellow LED	Yellow LED	
Polarity protection	yes	yes	yes	
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	
Short-circuit protection	...	...	...
Ambient temperature	-10...+55°C	-10...+55°C	-10...+55°C	
Ambient moisture	35...95%	35...95%	35...95%	
Protection degree	IP67	IP67	IP67	
Housing material	PBT	PBT	PBT	
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	
Certification	CE	CE	CE	

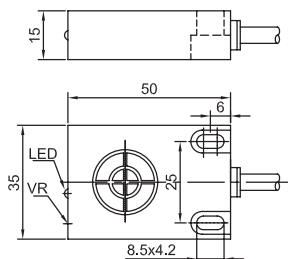


Item Code	CE35	
Mounting	● Flush	◐ Non-flush
Sensing distance	10mm	15mm



Output	NPN NO	CE35SF10DNO	CE35SN15DNO
	NPN NC	CE35SF10DNC	CE35SN15DNC
Output	PNP NO	CE35SF10DPO	CE35SN15DPO
	PNP NC	CE35SF10DPC	CE35SN15DPC

Technical Parameter	
Supply voltage	10...30 VDC
Switch point drift	< ±20% Sr
Load current	<200mA
Voltage drop	<2.5V
Consumption current	<15mA
Hysteresis	3...20%
Repeat accuracy	<3%
Frequency	50Hz
Output indicator	Yellow LED
Polarity protection	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s
Short-circuit protection	...
Ambient temperature	-10...+55°C
Ambient moisture	35...95%
Protection degree	IP67
Housing material	PBT
Connection	2m PVC Cable
Certification	CE



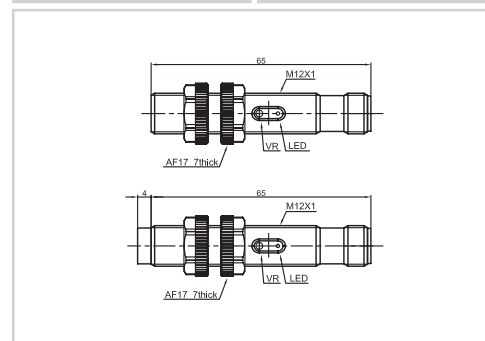
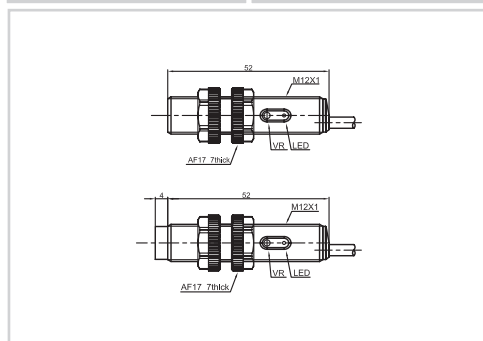
Item Code	CR12S		CR12S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	4mm	8mm	4mm	8mm



Output	NPN NO	CR12SCF04DNOY	CR12SCN08DNOY	CR12SCF04DNOY-E2	CR12SCN08DNOY-E2
	NPN NC	CR12SCF04DNCY	CR12SCN08DNCY	CR12SCF04DNCY-E2	CR12SCN08DNCY-E2
Output	PNP NO	CR12SCF04DPOY	CR12SCN08DPOY	CR12SCF04DPOY-E2	CR12SCN08DPOY-E2
	PNP NC	CR12SCF04DPCY	CR12SCN08DPCY	CR12SCF04DPCY-E2	CR12SCN08DPCY-E2

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<5%	<5%	<5%	<5%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE	CE	CE	CE



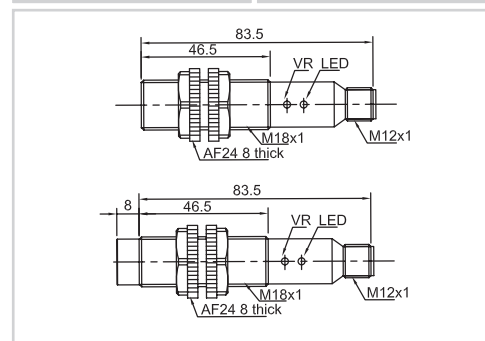
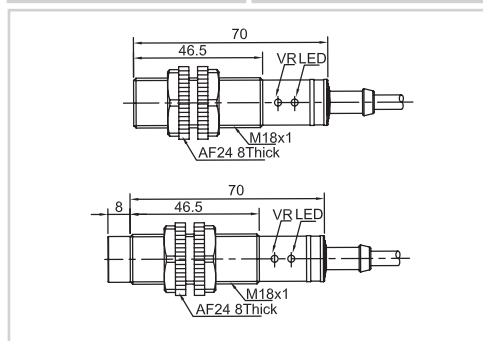
Item Code	CR18S		CR18S	
Mounting	● Flush	◐ Non-flush	● Flush	◐ Non-flush
Sensing distance	8mm	12mm	8mm	12mm



Output	NPN NO	CR18SCF08DNOY	CR18SCN12DNOY	CR18SCF08DNOY-E2	CR18SCN12DNOY-E2
	NPN NC	CR18SCF08DNKY	CR18SCN12DNKY	CR18SCF08DNKY-E2	CR18SCN12DNKY-E2
	NPN NO+NC	CR18SCF08DNRY	CR18SCN12DNRY	CR18SCF08DNRY-E2	CR18SCN12DNRY-E2
Output	PNP NO	CR18SCF08DPOY	CR18SCN12DPOY	CR18SCF08DPOY-E2	CR18SCN12DPOY-E2
	PNP NC	CR18SCF08DPCY	CR18SCN12DPCY	CR18SCF08DPCY-E2	CR18SCN12DPCY-E2
	PNP NO+NC	CR18SCF08DPY	CR18SCN12DPY	CR18SCF08DPY-E2	CR18SCN12DPY-E2

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<5%	<5%	<5%	<5%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE	CE	CE	CE

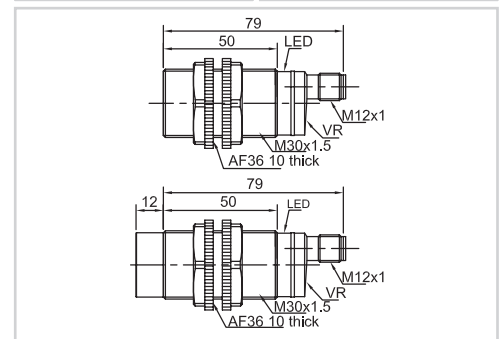
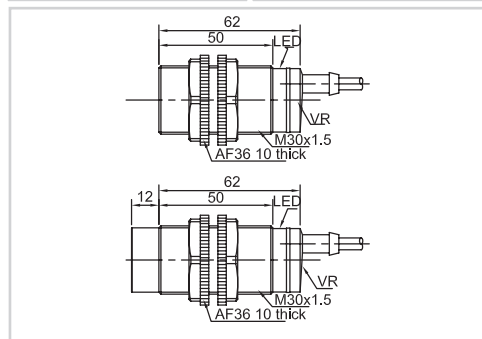


Item Code	CR30S		CR30S	
Mounting	● Flush	○ Non-flush	● Flush	○ Non-flush
Sensing distance	15mm	22mm	15mm	22mm



Output	NPN NO	CR30SCF15DNOY	CR30SCN22DNOY	CR30SCF15DNOY-E2	CR30SCN22DNOY-E2
	NPN NC	CR30SCF15DNKY	CR30SCN22DNKY	CR30SCF15DNKY-E2	CR30SCN22DNKY-E2
	NPN NO+NC	CR30SCF15DNRY	CR30SCN22DNRY	CR30SCF15DNRY-E2	CR30SCN22DNRY-E2
Output	PNP NO	CR30SCF15DPOY	CR30SCN22DPOY	CR30SCF15DPOY-E2	CR30SCN22DPOY-E2
	PNP NC	CR30SCF15DPCY	CR30SCN22DPCY	CR30SCF15DPCY-E2	CR30SCN22DPCY-E2
	PNP NO+NC	CR30SCF15DPRY	CR30SCN22DPRY	CR30SCF15DPRY-E2	CR30SCN22DPRY-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<5%	<5%	<5%	<5%
Frequency	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Impulse voltage withstand	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s	1000V/AC 50/60Hz 60s
Short-circuit protection	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector
Certification	CE	CE	CE	CE

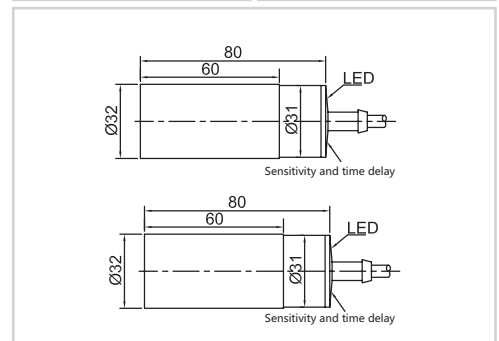
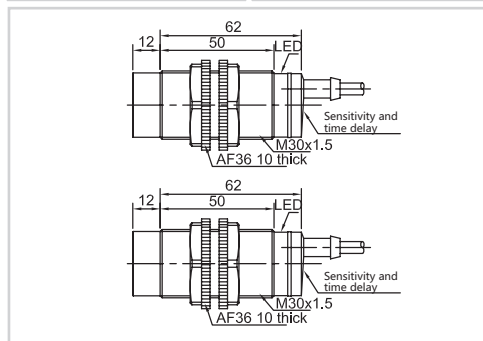


Item Code	CR30S		CQ32S	
Mounting	● Non-flush	● Non-flush	● Flush	● Flush
Sensing distance	22mm(Ajustable)	22mm(Ajustable)	15mm(Ajustable)	15mm(Ajustable)



Output	AC 2Wires NO	CR30SCN15ATO-T160	CR30SCN15ATO-T260		
	AC 2Wires NC	CR30SCN15ATC-T160	CR30SCN15ATC-T260		
	Relay output			CQ32SCF15AK-T1600	CQ32SCF15AK-T2600

Technical Parameter					
Supply voltage	20...250VAC	20...250VAC	20...250 VAC	20...250 VAC	
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr	
Load current	300	300	≤2A	≤2A	
Voltage drop	1s-60s	1s-60s	1s-10min	1s-10min	
Consumption current	<25mA	<25mA	<25mA	<25mA	
Hysteresis	3...20%	3...20%	3...20%	3...20%	
Repeat accuracy	<3%	<3%	<3%	<3%	
Frequency	10Hz	10Hz	1Hz	1Hz	
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED	
Polarity protection	...	...	...	...
Impulse voltage withstand	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	2000V/AC 50/60Hz 60s	
Short-circuit protection	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C	
Ambient moisture	35...95%	35...95%	35...95%	35...95%	
Protection degree	IP67	IP67	IP67	IP67	
Housing material	PBT	PBT	PBT	PBT	
Connection	2m PVC Cable	2m PVC Cable	2m PVC Cable	2m PVC Cable	
Certification	CE	CE	CE	CE	

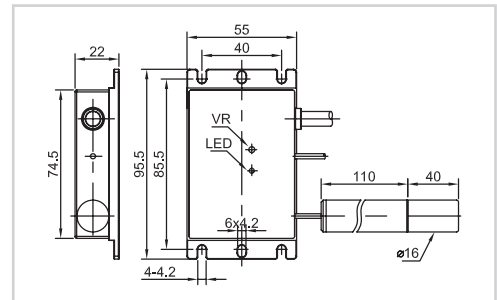
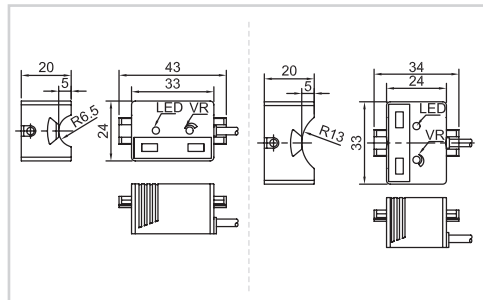


Item Code	CE10	CE15	CE53S
Mounting	● Non-flush	● Non-flush	● Non-flush



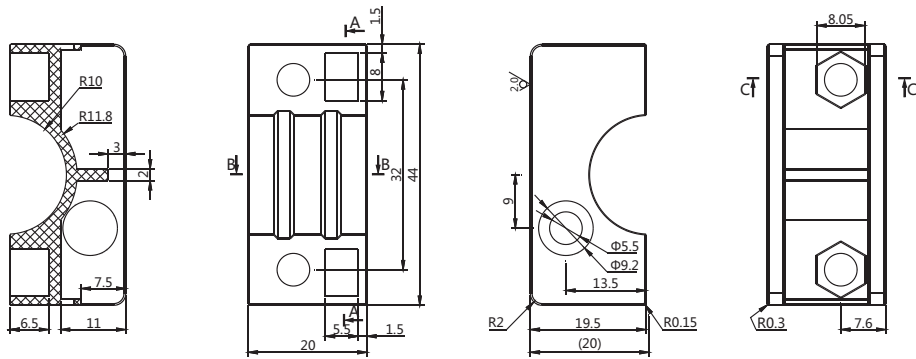
Output	NPN NO	CE10SN13DNO	CE15SN26DNO	CE53SN08MNO
	NPN NC	CE10SN13DNC	CE15SN26DNC	CE53SN08MNC
Output	PNP NO	CE10SN13DPO	CE15SN26DPO	CE53SN08MPO
	PNP NC	CE10SN13DPC	CE15SN26DPC	CE53SN08MPC

Technical Parameter				
Supply voltage		10...30 VDC	10...30 VDC	18...36 VDC
Load current		<200mA	<200mA	<250mA
Voltage drop		<2.5V	<2.5V	<2.5V
Consumption current		<15mA	<15mA	<100mA
Hysteresis		3...20%	3...20%	3...20%
Repeat accuracy		<3%	<3%	<3%
Frequency		60Hz	60Hz	60Hz
Output indicator		Yellow LED	Yellow LED	Red LED
Channels	Material	Nonmetal	Nonmetal	...
	OD	Φ8...Φ11	Φ12...Φ26	...
	Thickness	<1mm	<1mm	...
Short-circuit protection		yes	yes	yes
Surge protection		yes	yes	yes
Ambient temperature		-10...+55°C	-10...+55°C	0...+60°C
Ambient moisture		35...95%	35...95%	35...95%
Protection degree		IP67	IP67	IP54
Housing material		PBT	PBT	PA66/Teflon/Stainless steel
Connection		2m PVC Cable	2m PVC Cable	2m PVC Cable
Certification		CE	CE	CE

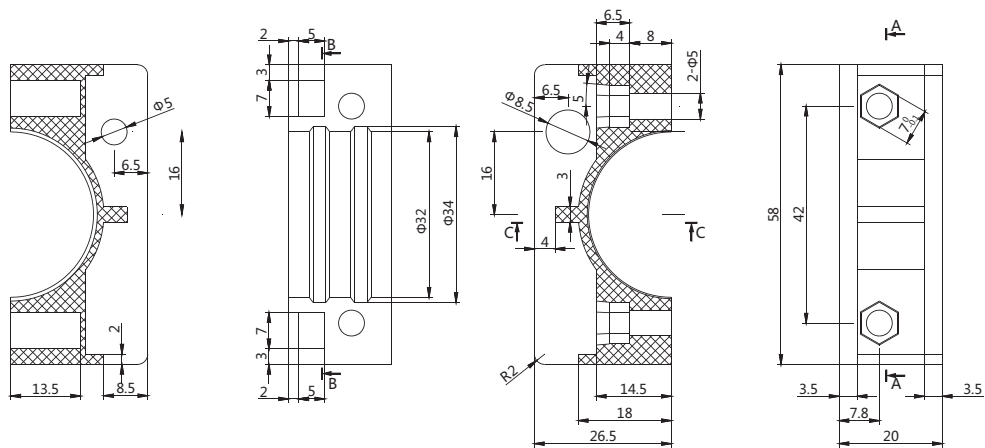


Mounting rack

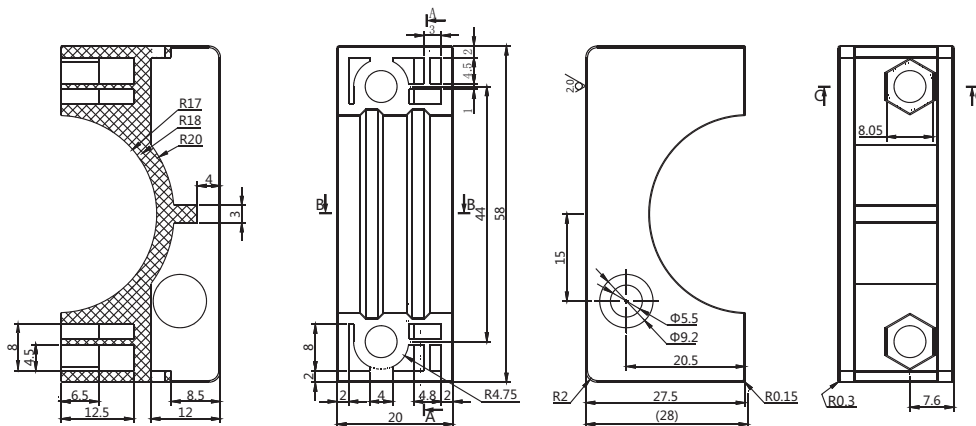
ZJC-1 (CQ20/CQ20S Mounting rack)



ZJC-2 (CQ32/CQ32S Mounting rack)



ZJC-3 (CQ34S Mounting rack)





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