



Sensing the dream



Capacitive sensors

Metal type

Plastic type

Rectangular type

Pipes type

Anti-high temperature type



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 supplier of electronic products in China. The company has been always dedicated in providing customers with individualized sensor products which are widely applied in industry and life area, engineering system, technical services and solutions.

Lanbao has successfully developed and produced over 3000 types of sensors: inductive sensors, capacitive sensors, photoelectric sensors, light curtains, magnetic sensors and solid state relays etc. All products have been certified according to CE, UL, CCC standards and meet the requirement of EU RoHS.

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

Content

1 Overview

5 Metal type

- 5 Metal DC 3/4 Wires
- 9 Metal AC 2 Wires
- 12 Stainless steel DC 3/4 Wires
- 14 Stainless steel AC 2 Wires

16 Plastic type

- 16 Plastic DC 3/4 Wires
- 21 Plastic AC 2 Wires
- 25 Plastic AC/DC 2 Wires

27 Rectangular type

29 Pipes type

29 Anti-high temperature type

30 Naming rules

31 Wiring diagram

32 Mounting Rack

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.



Capacitive sensors

Metal type main parameters

Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
DC 3/4 Wires							
CR12	DC 3 Wires	DC10-30V	f/nf	2mm,4mm	M12*1*50	Nickel-copper Alloy	Cable
CR12	DC 3 Wires	DC10-30V	f/nf	2mm,4mm	M12*1*50	Nickel-copper Alloy	M12 Connector
CR18	DC 3/4 Wires	DC10-30V	f/nf	5mm,8mm	M18*1*46	Nickel-copper Alloy	Cable
CR18	DC 3/4 Wires	DC10-30V	f/nf	5mm,8mm	M18*1*46	Nickel-copper Alloy	M12 Connector
CR30	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*50	Nickel-copper Alloy	Cable
CR30	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*50	Nickel-copper Alloy	M12 Connector
CQ20	DC 3/4 Wires	DC10-30V	f	10mm	Φ20*80	Nickel-copper Alloy	Cable
CQ32	DC 3/4 Wires	DC10-30V	f	15mm	Φ32*80	Nickel-copper Alloy	Cable
AC 2 Wires							
CR18	AC 2 Wires	AC20-250V	f/nf	5mm,8mm	M18*1*46	Nickel-copper Alloy	Cable
CR18	AC 2 Wires	AC20-250V	f/nf	5mm,8mm	M18*1*46	Nickel-copper Alloy	M12 Connector
CR30	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*50	Nickel-copper Alloy	Cable
CR30	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*50	Nickel-copper Alloy	M12 Connector
CQ20	AC 2 Wires	AC20-250V	f	10mm	Φ20*80	Nickel-copper Alloy	Cable
CQ32	AC 2 Wires	AC20-250V	f	15mm	Φ32*80	Nickel-copper Alloy	Cable
DC 3/4 Wires (Stainless steel)							
CR18G	DC 3/4 Wires	DC10-30V	f/nf	5mm,8mm	M18*1*46	Stainless steel	Cable
CR30G	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*50	Stainless steel	Cable
CQ20G	DC 3/4 Wires	DC10-30V	f	10mm	Φ20*80	Stainless steel	Cable
CQ32G	DC 3/4 Wires	DC10-30V	f	15mm	Φ32*80	Stainless steel	Cable
AC 2 Wires (Stainless steel)							
CR18G	AC 2 Wires	AC20-250V	f/nf	5mm,8mm	M18*1*46	Stainless steel	Cable
CR30G	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*50	Stainless steel	Cable
CQ20G	AC 2 Wires	AC20-250V	f	10mm	Φ20*80	Stainless steel	Cable
CQ32G	AC 2 Wires	AC20-250V	f	15mm	Φ32*80	Stainless steel	Cable

Capacitive sensors

Plastic type main parameters

Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
DC 3/4 Wires							
CR12S	DC 3/4 Wires	DC10-30V	f/nf	2mm,4mm	M12*1*50	PBT	Cable
CR12S	DC 3/4 Wires	DC10-30V	f/nf	2mm,4mm	M12*1*50	PBT	M12 Connector
CR18S	DC 3/4 Wires	DC10-30V	f/nf	5mm,8mm	M18*1*46.5	PBT	Cable
CR18S	DC 3/4 Wires	DC10-30V	f/nf	5mm,8mm	M18*1*46.5	PBT	M12 Connector
CR30S	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*50	PBT	Cable
CR30S	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	M30*1.5*50	PBT	M12 Connector
CQ20S	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	Φ20*80	PBT	Cable
CQ32S	DC 3/4 Wires	DC10-30V	f/nf	15mm,20mm	Φ32*80	PBT	Cable
CQ34S	DC 3/4 Wires	DC10-30V	f/nf	15mm,20mm	Φ34*80	PBT	Cable
AC 2 Wires							
CR18S	AC 2 Wires	AC20-250V	f/nf	5mm,8mm	M18*1*46.5	PBT	Cable
CR18S	AC 2 Wires	AC20-250V	f/nf	5mm,8mm	M18*1*46.5	PBT	M12 Connector
CR30S	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*50	PBT	Cable
CR30S	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	M30*1.5*50	PBT	M12 Connector
CQ20S	AC 2 Wires	AC20-250V	f/nf	10mm,15mm	Φ20*80	PBT	Cable
CQ32S	AC 2 Wires	AC20-250V	f/nf	15mm,20mm	Φ32*80	PBT	Cable
CQ34S	AC 2 Wires	AC20-250V	f/nf	15mm,20mm	Φ34*80	PBT	Cable
AC/DC 2 Wires							
CR30S	AC/DC 2 Wires	AC/DC20-250V	nf	15mm	M30*1*50	PBT	Cable
CR30S	AC/DC 2 Wires	AC/DC20-250V	nf	15mm	M30*1*50	PBT	M12 Connector
CQ32S	AC/DC 2 Wires	AC/DC20-250V	nf	20mm	Φ32*80	PBT	Cable
CQ34S	AC/DC 2 Wires	AC/DC20-250V	nf	20mm	Φ34*80	PBT	Cable

Capacitive sensors

Rectangular type

main parameters

Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CE07	DC 3 Wires	DC10-30V	f/nf	5mm,8mm	30*7*50	PBT	Cable
CE34	DC 3 Wires	DC10-30V	f/nf	10mm	50*7*20	PBT	Cable
CE35	DC 3/4 Wires	DC10-30V	f/nf	10mm,15mm	35*15*50	PBT	Cable

Capacitive liquid level sensor (Pipes type)

main parameters

Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CE10	DC 3 Wires	DC10-30V	nf	13mm	43*24*20	PBT	Cable
CE15	DC 3 Wires	DC10-30V	nf	26mm	34*33*20	PBT	Cable

Capacitive material level sensor (Anti-high temperature type)

main parameters

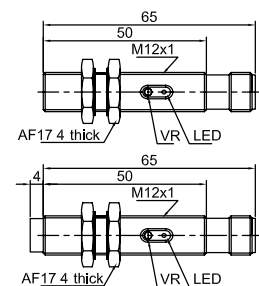
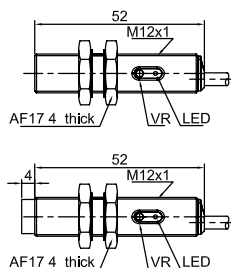
Model	Output	Supply Voltage	Mounting	Sensing Distance	Dimension	Housing Material	Connection
CE53	DC 3 Wires	DC18-36V	nf	8mm	55*22*96	PBT	Cable

Item Code	CR12		CR12	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
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	10...30 VDC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<200mA	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<15mA	<15mA	<15mA	<15mA	<15mA
Hysteresis	3...20%	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%	<3%
Frequency	50Hz	50Hz	50Hz	50Hz	50Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes	yes
Short-circuit protection	yes	yes	yes	yes	yes
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67	IP67
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector	M12 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L	CE U _L

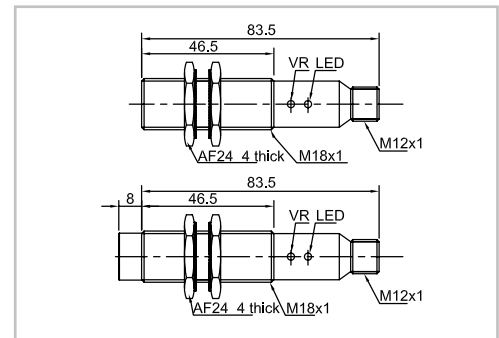
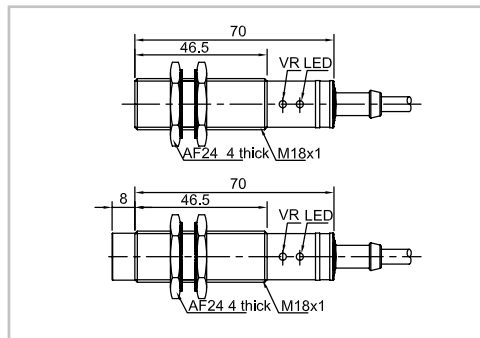


Item Code	CR18		CR18	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	5mm	8mm



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

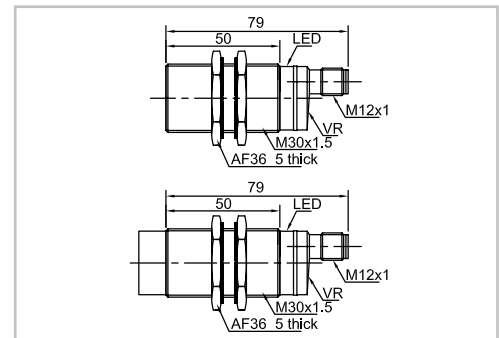
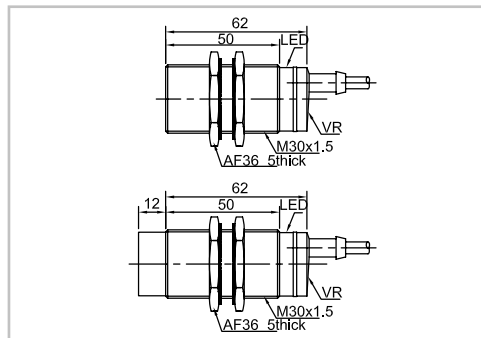


Item Code	CR30		CR30	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10mm	15mm	10mm	15mm



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

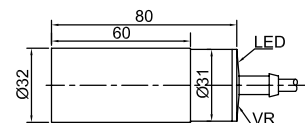
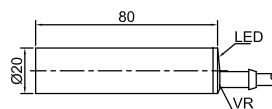


Item Code	CQ20	CQ32
Mounting	● Flushed	● Flushed
Sensing distance	10mm	15mm



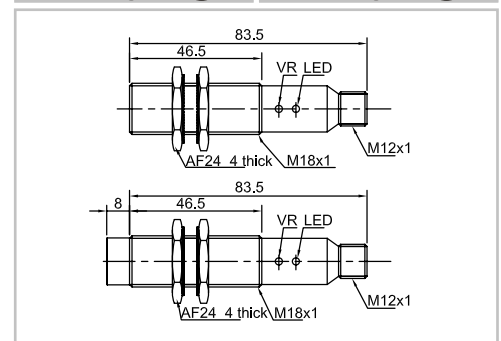
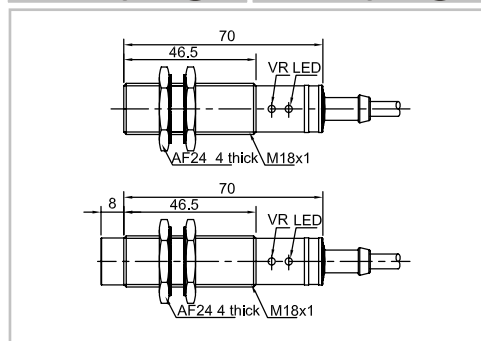
Output	NPN NO	CQ20CF10DNO	CQ32CF15DNO
	NPN NC	CQ20CF10DNC	CQ32CF15DNC
	NPN NO+NC	CQ20CF10DNR	CQ32CF15DNR
Output	PNP NO	CQ20CF10DPO	CQ32CF15DPO
	PNP NC	CQ20CF10DPC	CQ32CF15DPC
	PNP NO+NC	CQ20CF10DPR	CQ32CF15DPR

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	
Surge protection	yes	yes	
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 _I	CE U _I	



Item Code		CR18		CR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5mm	8mm	5mm	8mm
					
Output	AC 2 Wires NO	CR18CF05ATO	CR18CN08ATO	CR18CF05ATO-E2	CR18CN08ATO-E2
	AC 2 Wires NC	CR18CF05ATC	CR18CN08ATC	CR18CF05ATC-E2	CR18CN08ATC-E2

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

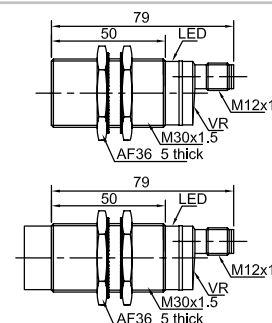
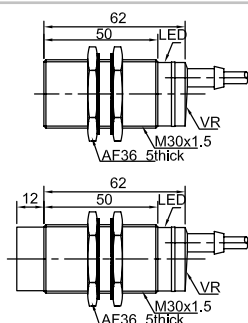


Item Code	CR30		CR30	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10mm	15mm	10mm	15mm



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

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

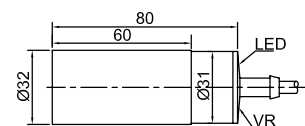
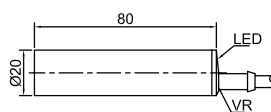


Item Code	CQ20	CQ32
Mounting	● Flushed	● Flushed
Sensing distance	10mm	15mm



Output	AC 2 Wires NO	CQ20CF10ATO	CQ32CF15ATO
	AC 2 Wires 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	
Leakage current	<3mA	<3mA	
Hysteresis	3...20%	3...20%	
Repeat accuracy	<3%	<3%	
Frequency	15Hz	15Hz	
Output indicator	Yellow LED	Yellow LED	
Polarity protection	...	...	
Surge protection	yes	yes	
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 CCC	CE U _L CCC	

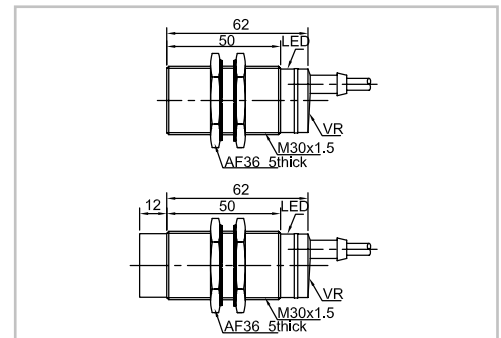
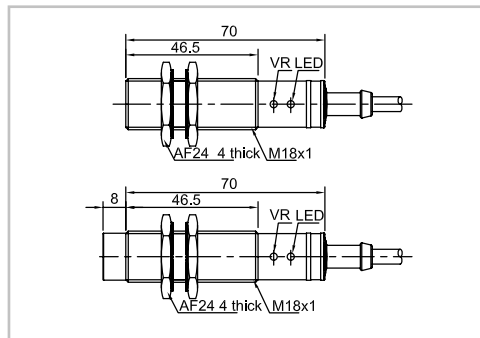


Item Code	CR18G		CR30G	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	10mm	15mm



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

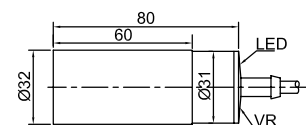
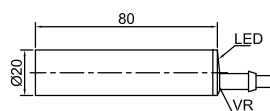


Item Code	CQ20G	CQ32G
Mounting	● Flushed	● Flushed
Sensing distance	10mm	15mm



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	
Surge protection	yes	yes	
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 _I	CE U _I	

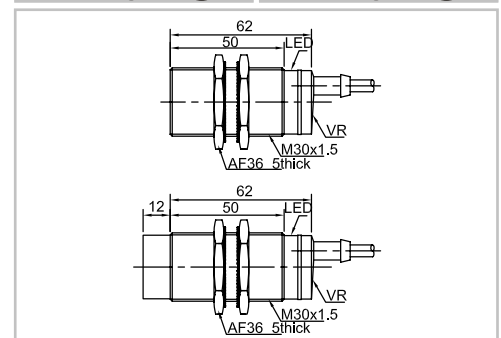
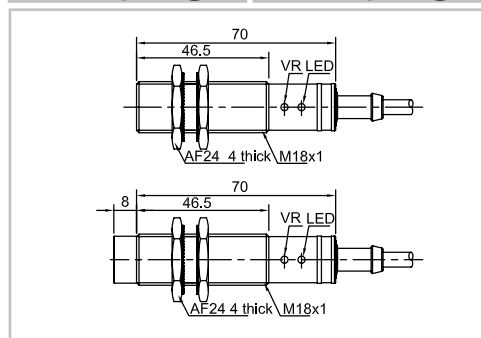
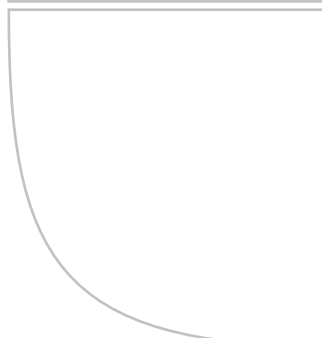


Item Code	CR18G		CR30G	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	10mm	15mm



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

Technical Parameter					
Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V	<10V
Leakage current	<3mA	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...	...
Surge protection	yes	yes	yes	yes	yes
Short-circuit protection	...	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67	IP67
Housing material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PVC Cable	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	CE U L

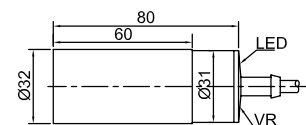
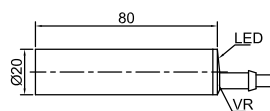


Item Code	CQ20G	CQ32G
Mounting	● Flushed	● Flushed
Sensing distance	10mm	15mm



Output	AC 2 Wires NO	CQ20GCF10ATO	CQ32GCF15ATO
	AC 2 Wires 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	
Leakage current	<3mA	<3mA	
Hysteresis	3...20%	3...20%	
Repeat accuracy	<3%	<3%	
Frequency	15Hz	15Hz	
Output indicator	Yellow LED	Yellow LED	
Polarity protection	...	...	
Surge protection	yes	yes	
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	

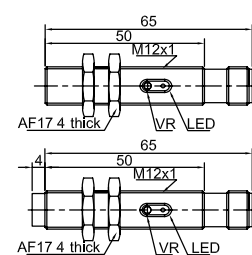
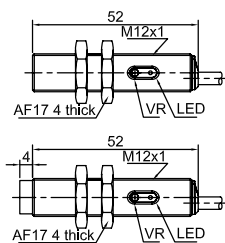


Item Code	CR12S		CR12S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	2mm	4mm	2mm	4mm



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

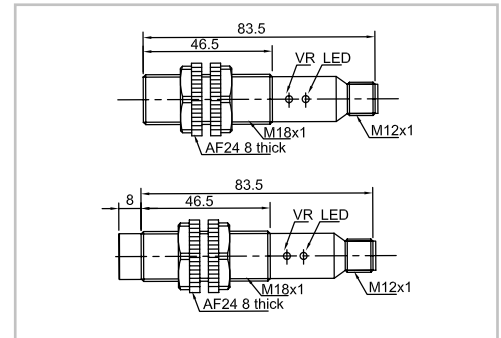
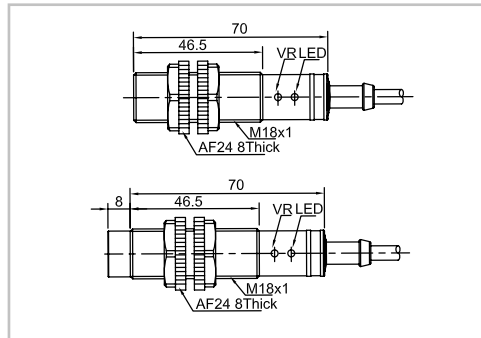
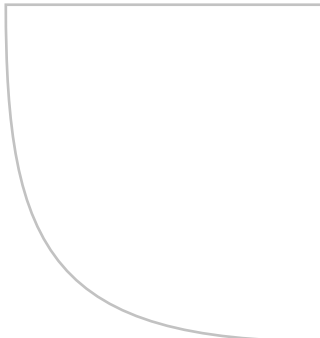


Item Code	CR18S		CR18S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	5mm	8mm



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

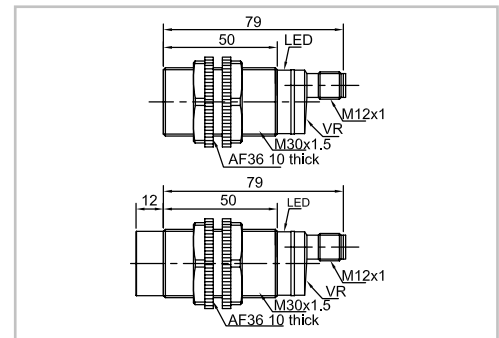
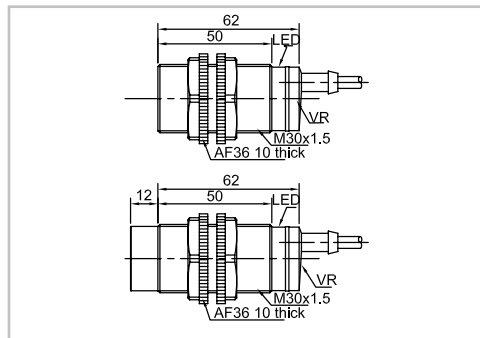


Item Code	CR30S		CR30S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10mm	15mm	10mm	15mm



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

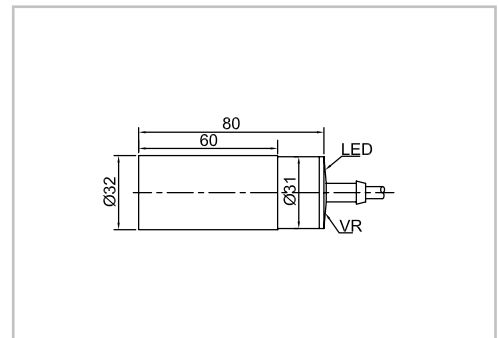
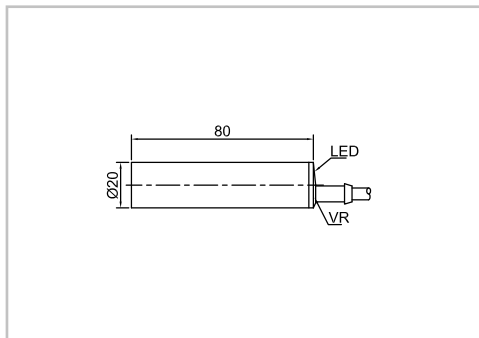


Item Code	CQ20S		CQ32S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10mm	15mm	15mm	20mm



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

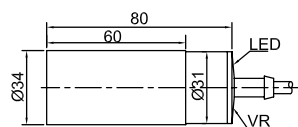


Item Code	CQ34S		
Mounting	● Flushed	● Non-flushed	
Sensing distance	15mm	20mm	



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		
Surge protection	yes	yes		
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		

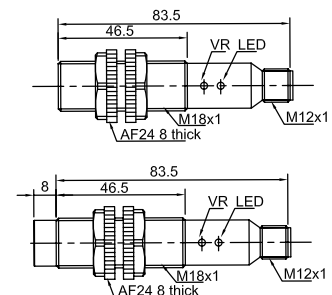
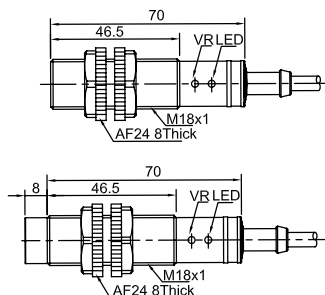


Item Code	CR18S		CR18S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	5mm	8mm



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

Technical Parameter					
Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V	<10V
Leakage current	<3mA	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...	...
Surge protection	yes	yes	yes	yes	yes
Short-circuit protection	...	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector	M12 Connector
Certification	CE U L	CE U L	CE U L	CE U L	CE U L

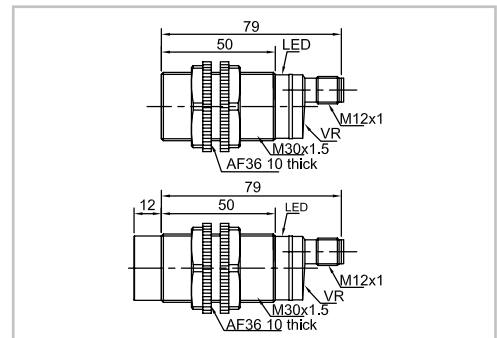
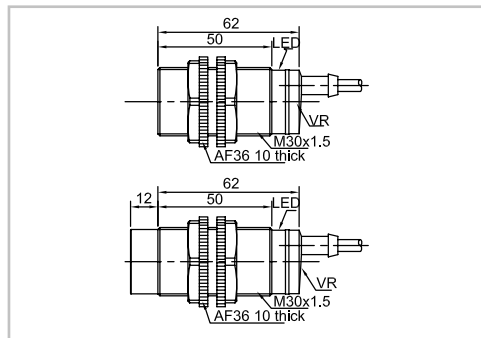
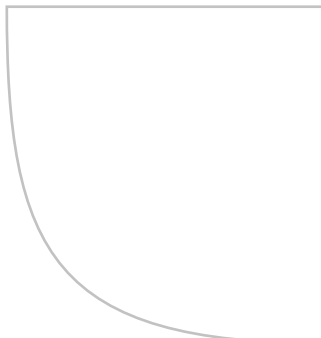


Item Code	CR30S		CR30S	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10mm	15mm	10mm	15mm



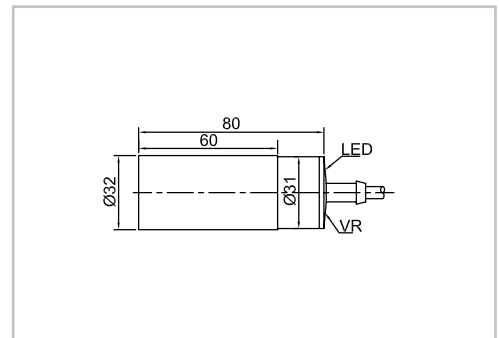
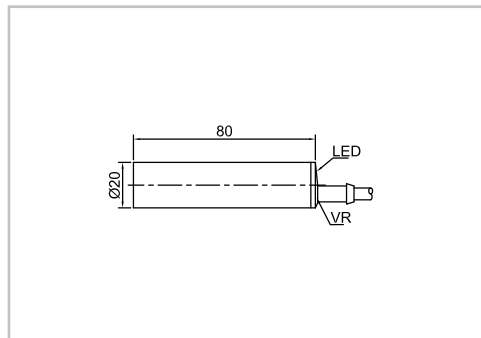
Output	AC 2 Wires NO	CR30SCF10ATO	CR30SCN15ATO	CR30SCF10ATO-E2	CR30SCN15ATO-E2
	AC 2 Wires NC	CR30SCF10ATC	CR30SCN15ATC	CR30SCF10ATC-E2	CR30SCN15ATC-E2

Technical Parameter					
Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Switch point drift	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr	< ±20% Sr
Load current	<300mA	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V	<10V
Leakage current	<3mA	<3mA	<3mA	<3mA	<3mA
Hysteresis	3...20%	3...20%	3...20%	3...20%	3...20%
Repeat accuracy	<3%	<3%	<3%	<3%	<3%
Frequency	15Hz	15Hz	15Hz	15Hz	15Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	...	...	...	...	...
Surge protection	yes	yes	yes	yes	yes
Short-circuit protection	...	...	...	...	...
Ambient temperature	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C	-25...+70°C
Ambient moisture	35...95%	35...95%	35...95%	35...95%	35...95%
Protection degree	IP67	IP67	IP67	IP67	IP67
Housing material	PBT	PBT	PBT	PBT	PBT
Connection	2m PVC Cable	2m PVC Cable	M12 Connector	M12 Connector	M12 Connector
Certification	CE U L	CE U L	CE U L	CE U L	CE U L



Item Code		CQ20S		CQ32S	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	15mm	20mm
					
Output	AC 2 Wires NO	CQ20SCF10ATO	CQ20SCN15ATO	CQ32SCF15ATO	CQ32SCN20ATO
	AC 2 Wires 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
Leakage 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		...	...	...	...
Surge protection		yes	yes	yes	yes
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	CE U L

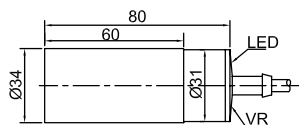


Item Code	CQ34S			
Mounting	● Flushed	● Non-flushed		
Sensing distance	15mm	20mm		



Output	AC 2 Wires NO	CQ34SCF15ATO	CQ34SCN20ATO		
	AC 2 Wires 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			
Leakage current	<3mA	<3mA			
Hysteresis	3...20%	3...20%			
Repeat accuracy	<3%	<3%			
Frequency	15Hz	15Hz			
Output indicator	Yellow LED	Yellow LED			
Polarity protection	...	...			
Surge protection	yes	yes			
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 CCC	CE CCC			

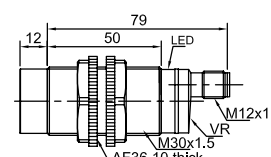
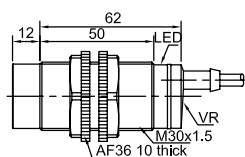


Item Code	CR30S	CR30S
Mounting	● Non-flushed	● Non-flushed
Sensing distance	15mm	15mm



Output	AC 2 Wires NO	CR30SCN15SBO	CR30SCN15SBO-E2
	AC 2 Wires 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
Leakage 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	...		...
Surge protection	yes		yes
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 U _L CCC		CE U _L CCC

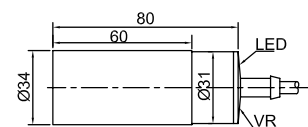
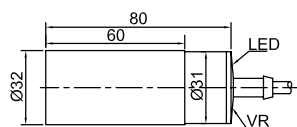


Item Code	CQ32S	CQ34S
Mounting	● Non-flushed	● Non-flushed
Sensing distance	20mm	20mm



Output	AC 2 Wires NO	CQ32SCN20SBO	CQ34SCN20SBO
	AC 2 Wires 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
Leakage 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	...		...
Surge protection	yes		yes
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 U _I CCC		CE CCC

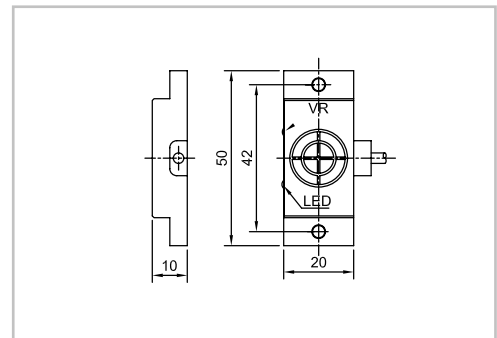
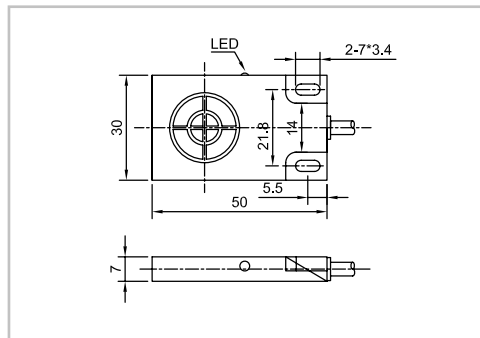


Item Code	CE07		CE34
Mounting	● Flushed	● Non-flushed	● Non-flushed
Sensing distance	5mm	8mm	10mm



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	30Hz	30Hz		30Hz	
Output indicator	Yellow LED	Yellow LED		Yellow LED	
Polarity protection	yes	yes		yes	
Surge protection	yes	yes		yes	
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 U _L	CE U _L		CE U _L	

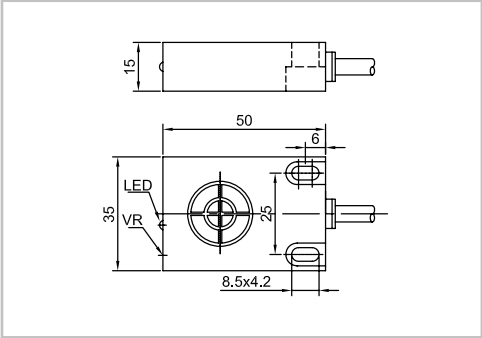
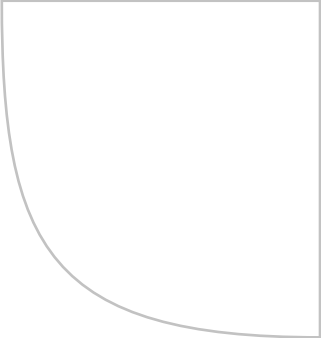


Item Code	CE35			
Mounting	● Flushed	● Non-flushed		
Sensing distance	10mm	15mm		



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	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	30Hz	30Hz			
Output indicator	Yellow LED	Yellow LED			
Polarity protection	yes	yes			
Surge protection	yes	yes			
Short-circuit protection	...	...			
Ambient temperature	-10...+55°C	-10...+55°C			
Ambient moisture	35...95%	35...95%			
Protection degree	IP67	IP67			
Housing material	PBT	PBT			
Connection	2m PVC Cable	2m PVC Cable			
Certification	CE U _L	CE U _L			



Capacitive sensors /Rectangular type

-Capacitive liquid level
-Capacitive material level

CE10/CE15/CE53

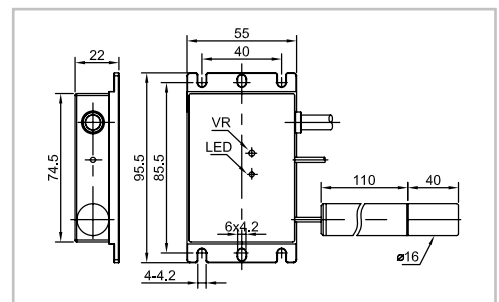
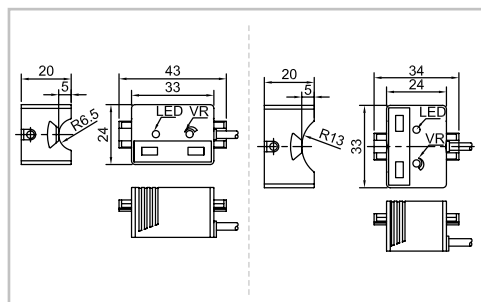
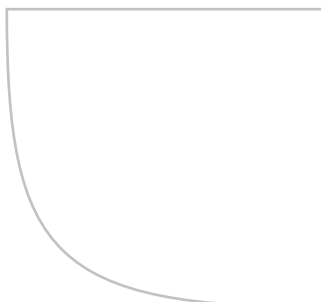
10-30VDC 3 Wires

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

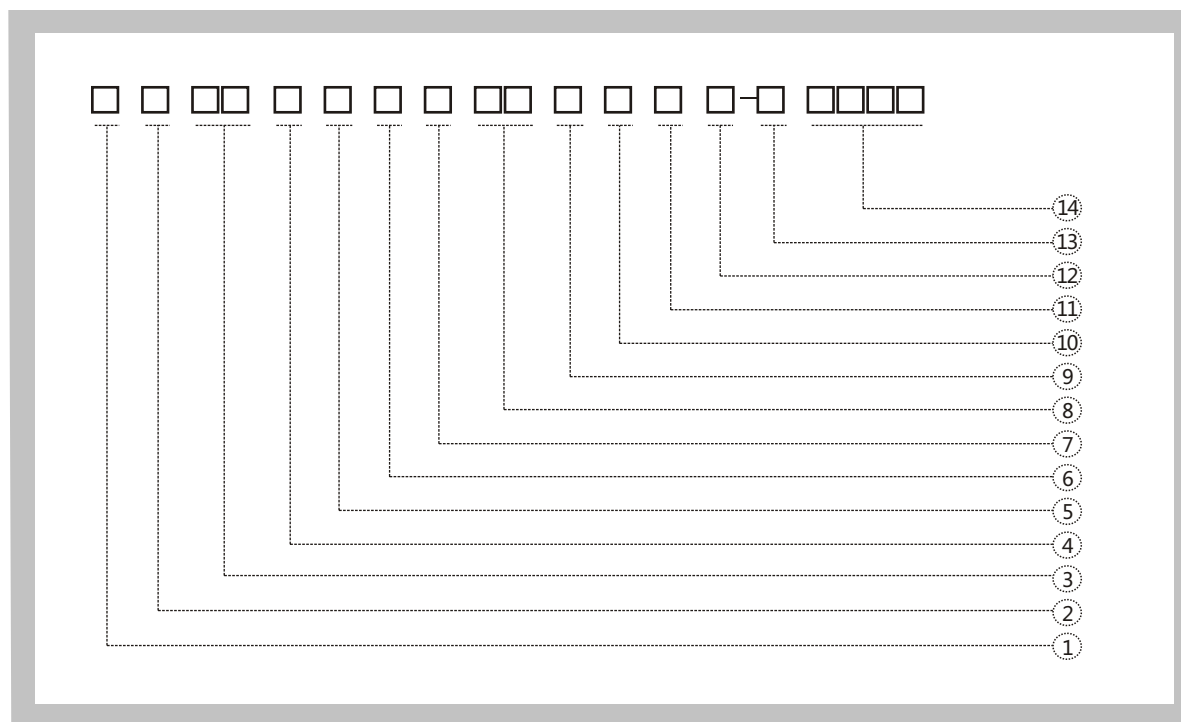


Output	NPN NO	CE10SN13DNO	CE15SN26DNO	CE53SN08MNO
	NPN NC	CE10SN13DNC	CE15SN26DNC	CE53SN08MNC
Output	PNP NO	CE10SN13DPO	CE15SN26DPO	CE53SN08MPO
	PNP NC	CE10SN13DPC	CE15SN26DPC	CE53SN08MPC

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		20Hz	20Hz	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 UL	CE UL	CE UL



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
V:Aluminium

5. Housing Length

A:Short
B:Standard
C:Long

6. Mounting

N:Non-flushed(nf)
F:Flushed(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

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

Capacitive sensors

Wiring diagram

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

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

AC 2 Wires	SCR NO	SCR NC		
Lead wire				
M12 Connector				

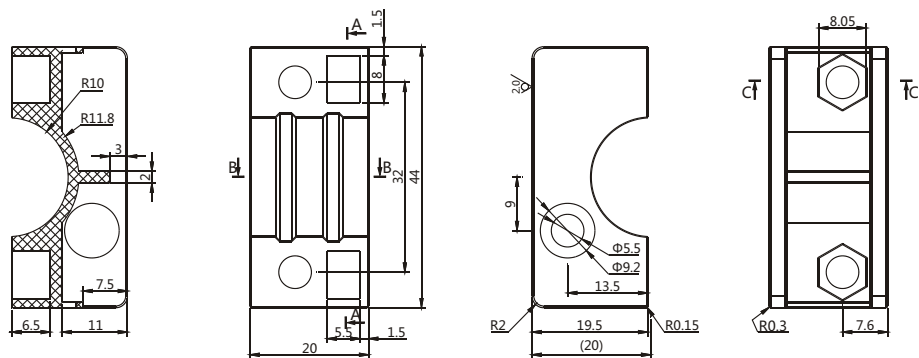
AC/DC 2Wires	NO	NC	NO/NC	
Lead wire				
M12 Connector				

Remarks

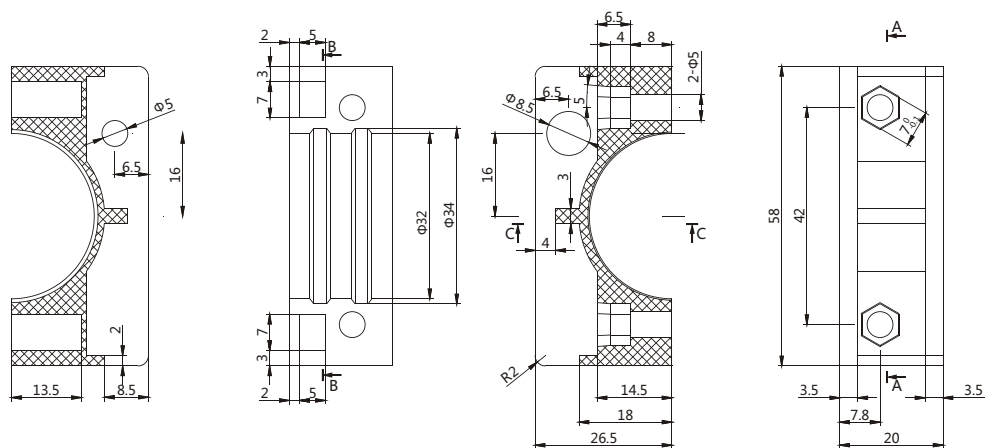
Connector	M8 Connector	M12 Connector		

Mounting rack

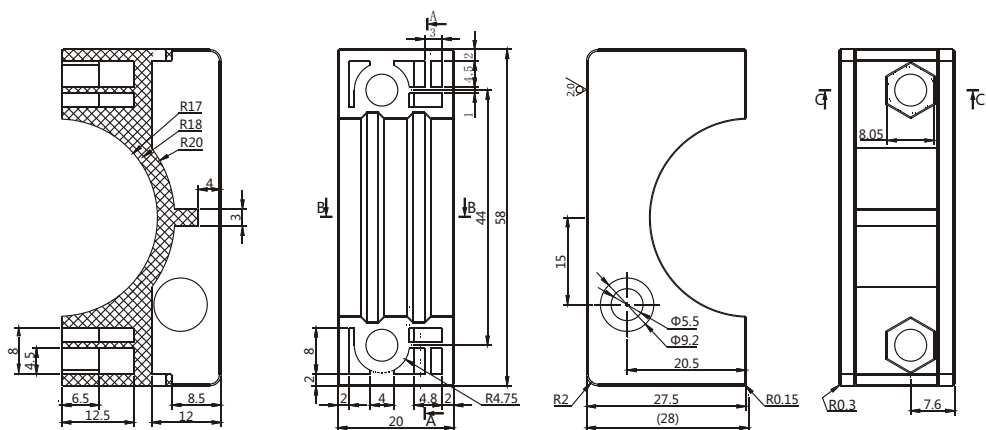
ZJC-1 (CQ20/CQ20S Mounting rack)

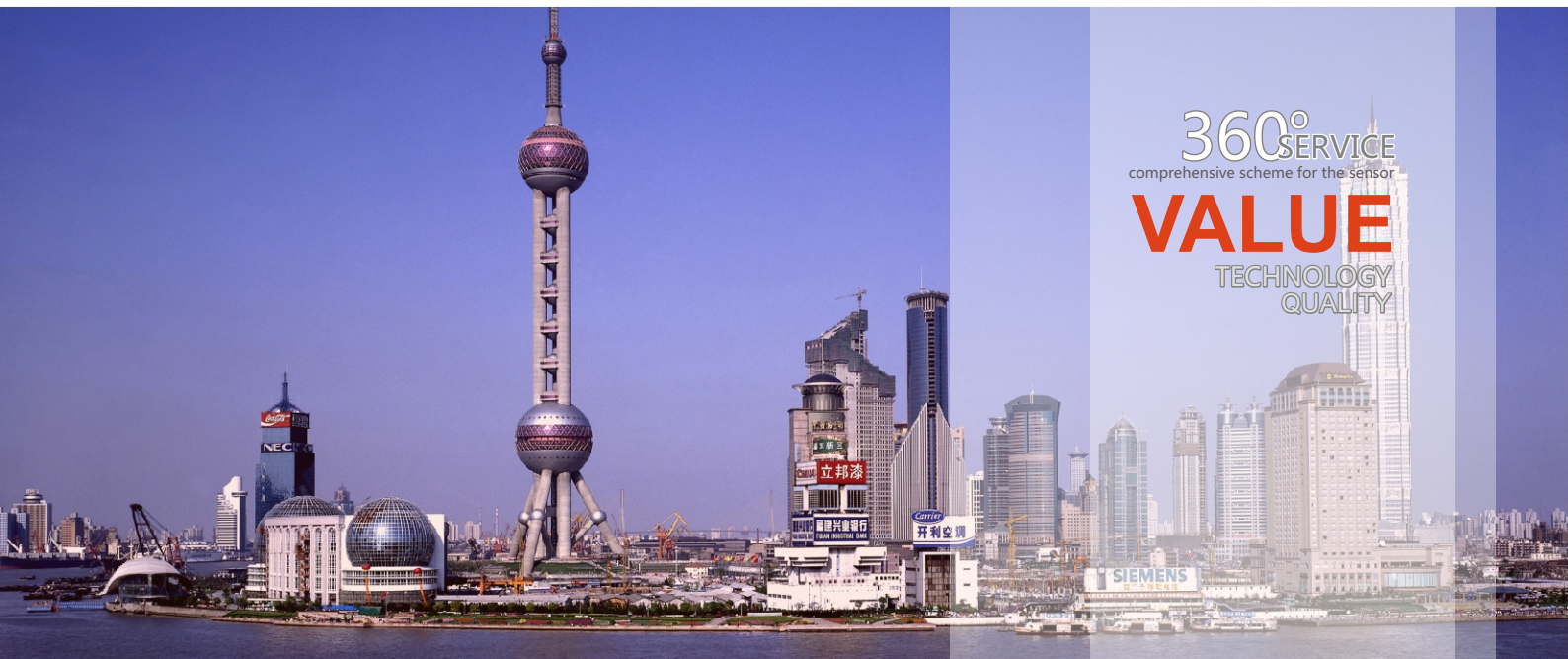


ZJC-2 (CQ32/CQ32S Mounting rack)



ZJC-3 (CQ34S Mounting rack)





360°SERVICE
comprehensive scheme for the sensor
VALUE
TECHNOLOGY
QUALITY

Focus on global market, high-tech products

Try to build Lanbao to be a leading sensor and industrial automation group.

Lanbao seeks survival with quality,
development with technology and deems its duty to create value for customers.

