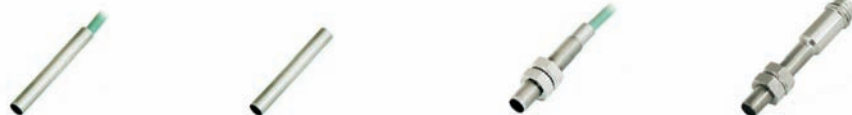


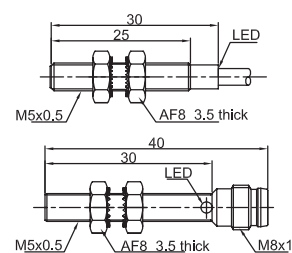
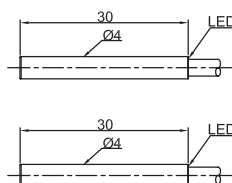
Item Code	LR04Q		LR05	
Mounting	● Flushed	● Flushed	● Flushed	● Flushed
Sensing distance	0.8 mm	0.8 mm	0.8 mm	0.8 mm



Output	NPN NO	LR04QAF08DNO	LR04QAF08DNO-E1	LR05AF08DNO	LR05AF08DNO-E1
	NPN NC	LR04QAF08DNC	LR04QAF08DNC-E1	LR05AF08DNC	LR05AF08DNC-E1
	NPN NO+NC				
Output	PNP NO	LR04QAF08DPO	LR04QAF08DPO-E1	LR05AF08DPO	LR05AF08DPO-E1
	PNP NC	LR04QAF08DPC	LR04QAF08DPC-E1	LR05AF08DPC	LR05AF08DPC-E1
	PNP NO+NC				

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	2500Hz	2500Hz	2500Hz	2500Hz
Output indicator	Red LED	Red LED	Red LED	Red LED
Polarity protection	yes	yes	yes	yes
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	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PUR Cable	M8 Connector	2m PUR Cable	M8 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

* Cable material and length can be customized



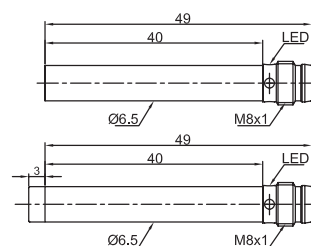
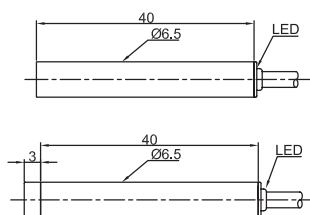
Item Code	LR6.5Q		LR6.5Q	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	1.5 mm	2mm	1.5 mm	2mm



Output	NPN NO	LR6.5QBF15DNO	LR6.5QBN02DNO	LR6.5QBF15DNO-E1	LR6.5QBN02DNO-E1
	NPN NC	LR6.5QBF15DNC	LR6.5QBN02DNC	LR6.5QBF15DNC-E1	LR6.5QBN02DNC-E1
	NPN NO+NC				
Output	PNP NO	LR6.5QBF15DPO	LR6.5QBN02DPO	LR6.5QBF15DPO-E1	LR6.5QBN02DPO-E1
	PNP NC	LR6.5QBF15DPC	LR6.5QBN02DPC	LR6.5QBF15DPC-E1	LR6.5QBN02DPC-E1
	PNP NO+NC				

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<150mA	<150mA	<150mA	<150mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	2000Hz	1500Hz	2000Hz	1500Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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	M8 Connector	M8 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

* Cable material and length can be customized



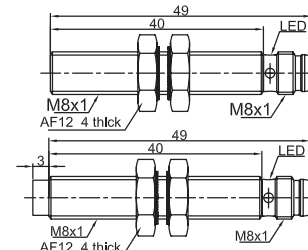
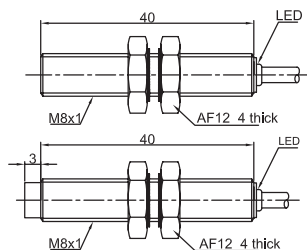
Item Code	LR08		LR08	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	1.5 mm	2mm	1.5 mm	2mm



Output	NPN NO	LR08BF15DNO	LR08BN02DNO	LR08BF15DNO-E1	LR08BN02DNO-E1
	NPN NC	LR08BF15DNC	LR08BN02DNC	LR08BF15DNC-E1	LR08BN02DNC-E1
	NPN NO+NC				
Output	PNP NO	LR08BF15DPO	LR08BN02DPO	LR08BF15DPO-E1	LR08BN02DPO-E1
	PNP NC	LR08BF15DPC	LR08BN02DPC	LR08BF15DPC-E1	LR08BN02DPC-E1
	PNP NO+NC				

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<150mA	<150mA	<150mA	<150mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	2000Hz	1500Hz	2000Hz	1500Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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	M8 Connector	M8 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

* Cable material and length can be customized



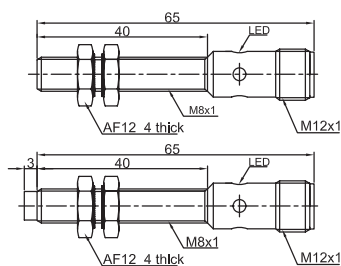
Item Code	LR08	
Mounting	● Flushed	⦿ Non-flushed
Sensing distance	1.5 mm	2mm



Output	NPN NO	LR08BF15DNO-E2	LR08BN02DNO-E2
	NPN NC	LR08BF15DNC-E2	LR08BN02DNC-E2
	NPN NO+NC		
Output	PNP NO	LR08BF15DPO-E2	LR08BN02DPO-E2
	PNP NC	LR08BF15DPC-E2	LR08BN02DPC-E2
	PNP NO+NC		

Technical Parameter			
Supply voltage	10...30 VDC	10...30 VDC	
Temperature drift	< ±10%	< ±10%	
Load current	<150mA	<150mA	
Voltage drop	<2.5V	<2.5V	
Consumption current	<10mA	<10mA	
Hysteresis	1...20%	1...20%	
Repeat accuracy	<3%	<3%	
Frequency	2000Hz	1500Hz	
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	M12 Connector	M12 Connector	
Certification	CE U _L	CE U _L	

* Cable material and length can be customized



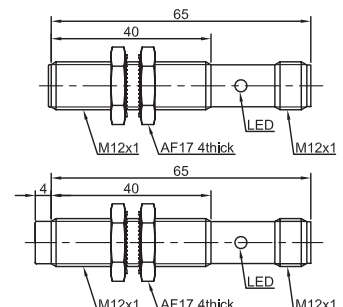
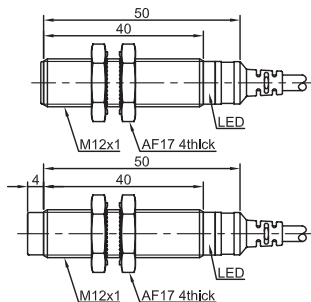
Item Code	LR12		LR12	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	2mm	4mm	2mm	4mm



Output	NPN NO	LR12BF02DNO	LR12BN04DNO	LR12BF02DNO-E2	LR12BN04DNO-E2
	NPN NC	LR12BF02DNC	LR12BN04DNC	LR12BF02DNC-E2	LR12BN04DNC-E2
	NPN NO+NC	LR12BF02DNR	LR12BN04DNR	LR12BF02DNR-E2	LR12BN04DNR-E2
Output	PNP NO	LR12BF02DPO	LR12BN04DPO	LR12BF02DPO-E2	LR12BN04DPO-E2
	PNP NC	LR12BF02DPC	LR12BN04DPC	LR12BF02DPC-E2	LR12BN04DPC-E2
	PNP NO+NC	LR12BF02DPR	LR12BN04DPR	LR12BF02DPR-E2	LR12BN04DPR-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1500Hz	1000Hz	1500Hz	1000Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized



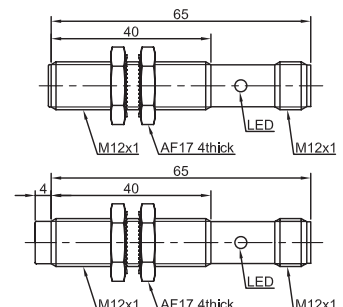
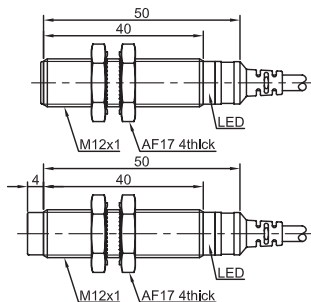
Item Code	LR12		LR12	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	2mm	4mm	2mm	4mm



Output	NPN NO	LR12BF02ENO	LR12BN04ENO	LR12BF02ENO-E2	LR12BN04ENO-E2
	NPN NC	LR12BF02ENC	LR12BN04ENC	LR12BF02ENC-E2	LR12BN04ENC-E2
	NPN NO+NC	LR12BF02ENR	LR12BN04ENR	LR12BF02ENR-E2	LR12BN04ENR-E2
Output	PNP NO	LR12BF02EPO	LR12BN04EPO	LR12BF02EPO-E2	LR12BN04EPO-E2
	PNP NC	LR12BF02EPC	LR12BN04EPC	LR12BF02EPC-E2	LR12BN04EPC-E2
	PNP NO+NC	LR12BF02EPR	LR12BN04EPR	LR12BF02EPR-E2	LR12BN04EPR-E2

Technical Parameter				
Supply voltage	10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1500Hz	1000Hz	1500Hz	1000Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized

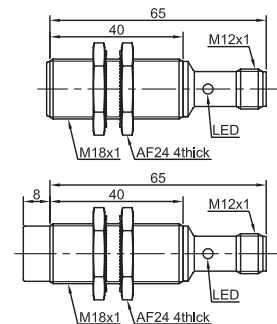
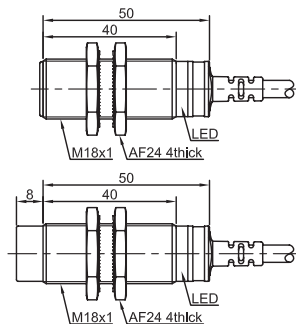


Item Code		LR18		LR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5mm	8mm	5mm	8mm
Output	NPN NO	LR18BF05DNO	LR18BN08DNO	LR18BF05DNO-E2	LR18BN08DNO-E2
	NPN NC	LR18BF05DNC	LR18BN08DNC	LR18BF05DNC-E2	LR18BN08DNC-E2
	NPN NO+NC	LR18BF05DNR	LR18BN08DNR	LR18BF05DNR-E2	LR18BN08DNR-E2
Output	PNP NO	LR18BF05DPO	LR18BN08DPO	LR18BF05DPO-E2	LR18BN08DPO-E2
	PNP NC	LR18BF05DPC	LR18BN08DPC	LR18BF05DPC-E2	LR18BN08DPC-E2
	PNP NO+NC	LR18BF05DPR	LR18BN08DPR	LR18BF05DPR-E2	LR18BN08DPR-E2



Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1000Hz	800Hz	1000Hz	800Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized



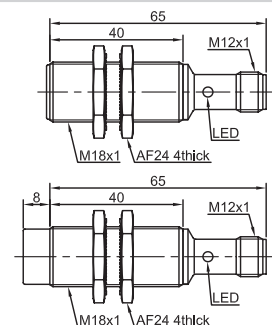
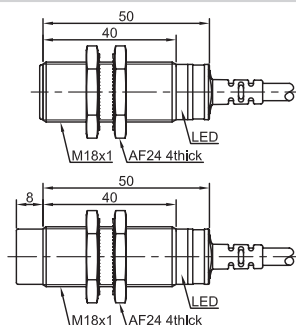
Item Code	LR18		LR18	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	5mm	8mm	5mm	8mm



Output	NPN NO	LR18BF05ENO	LR18BN08ENO	LR18BF05ENO-E2	LR18BN08ENO-E2
	NPN NC	LR18BF05ENC	LR18BN08ENC	LR18BF05ENC-E2	LR18BN08ENC-E2
	NPN NO+NC	LR18BF05ENR	LR18BN08ENR	LR18BF05ENR-E2	LR18BN08ENR-E2
Output	PNP NO	LR18BF05EPO	LR18BN08EPO	LR18BF05EPO-E2	LR18BN08EPO-E2
	PNP NC	LR18BF05EPC	LR18BN08EPC	LR18BF05EPC-E2	LR18BN08EPC-E2
	PNP NO+NC	LR18BF05EPR	LR18BN08EPR	LR18BF05EPR-E2	LR18BN08EPR-E2

Technical Parameter				
Supply voltage	10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1000Hz	800Hz	1000Hz	800Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized

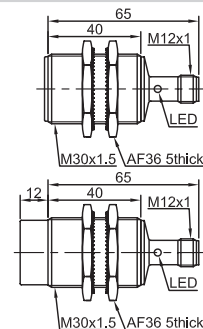
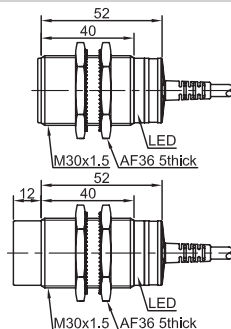


Item Code		LR30		LR30	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	10mm	15mm
Output	NPN NO	LR30BF10DNO	LR30BN15DNO	LR30BF10DNO-E2	LR30BN15DNO-E2
	NPN NC	LR30BF10DNC	LR30BN15DNC	LR30BF10DNC-E2	LR30BN15DNC-E2
	NPN NO+NC	LR30BF10DNR	LR30BN15DNR	LR30BF10DNR-E2	LR30BN15DNR-E2
Output	PNP NO	LR30BF10DPO	LR30BN15DPO	LR30BF10DPO-E2	LR30BN15DPO-E2
	PNP NC	LR30BF10DPC	LR30BN15DPC	LR30BF10DPC-E2	LR30BN15DPC-E2
	PNP NO+NC	LR30BF10DPR	LR30BN15DPR	LR30BF10DPR-E2	LR30BN15DPR-E2



Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	500Hz	300Hz	500Hz	300Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized



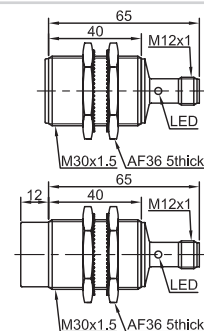
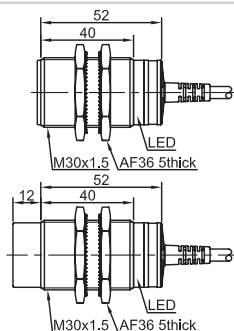
Item Code	LR30		LR30	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	10 mm	15mm	10 mm	15mm



Output	NPN NO	LR30BF10ENO	LR30BN15ENO	LR30BF10ENO-E2	LR30BN15ENO-E2
	NPN NC	LR30BF10ENC	LR30BN15ENC	LR30BF10ENC-E2	LR30BN15ENC-E2
	NPN NO+NC	LR30BF10ENR	LR30BN15ENR	LR30BF10ENR-E2	LR30BN15ENR-E2
Output	PNP NO	LR30BF10EPO	LR30BN15EPO	LR30BF10EPO-E2	LR30BN15EPO-E2
	PNP NC	LR30BF10EPC	LR30BN15EPC	LR30BF10EPC-E2	LR30BN15EPC-E2
	PNP NO+NC	LR30BF10EPR	LR30BN15EPR	LR30BF10EPR-E2	LR30BN15EPR-E2

Technical Parameter				
Supply voltage	10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<200mA	<200mA	<200mA	<200mA
Voltage drop	<2.5V	<2.5V	<2.5V	<2.5V
Consumption current	<10mA	<10mA	<10mA	<10mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	500Hz	300Hz	500Hz	300Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
Surge protection	yes	yes	yes	yes
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

* Cable material and length can be customized



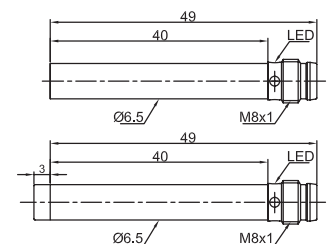
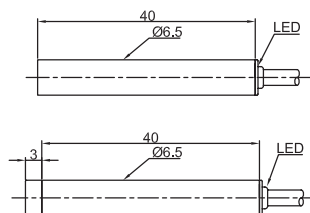
Item Code	LR6.5Q		LR6.5Q	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	1.5 mm	2mm	1.5 mm	2mm



Output	DC 2 Wires NO	LR6.5QBF15DLO	LR6.5QBN02DLO	LR6.5QBF15DLO-E1	LR6.5QBN02DLO-E1
	DC 2 Wires NC	LR6.5QBF15DLC	LR6.5QBN02DLC	LR6.5QBF15DLC-E1	LR6.5QBN02DLC-E1

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<8V	<8V	<8V	<8V
Leakage current	<1mA	<1mA	<1mA	<1mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1000Hz	800Hz	1000Hz	800Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
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	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable	M8 Connector	M8 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

* Cable material and length can be customized



Item Code	LR08		LR08	
Mounting	● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance	1.5 mm	2mm	1.5 mm	2mm

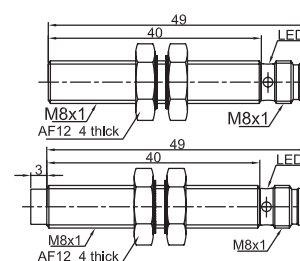
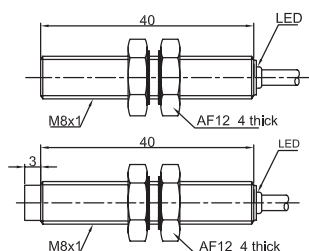


Output	DC 2 Wires NO	LR08BF15DLO	LR08BN02DLO	LR08BF15DLO-E1	LR08BN02DLO-E1
	DC 2 Wires NC	LR08BF15DLC	LR08BN02DLC	LR08BF15DLC-E1	LR08BN02DLC-E1

Technical Parameter

Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<8V	<8V	<8V	<8V
Leakage current	<1mA	<1mA	<1mA	<1mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	1000Hz	800Hz	1000Hz	800Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
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	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connection	2m PVC Cable	2m PVC Cable	M8 Connector	M8 Connector
Certification	CE U _L	CE U _L	CE U _L	CE U _L

* Cable material and length can be customized



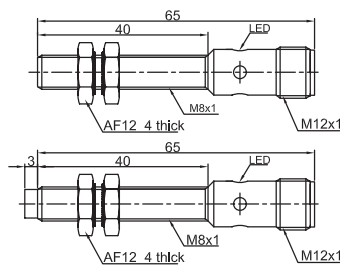
Item Code	LR08	
Mounting	● Flushed	● Non-flushed
Sensing distance	1.5 mm	2mm



Output	DC 2 Wires NO	LR08BF15DLO-E2	LR08BN02DLO-E2
	DC 2 Wires NC	LR08BF15DLC-E2	LR08BN02DLC-E2

Technical Parameter			
Supply voltage	10...30 VDC	10...30 VDC	
Temperature drift	< ±10%	< ±10%	
Load current	<100mA	<100mA	
Voltage drop	<8V	<8V	
Leakage current	<1mA	<1mA	
Hysteresis	1...20%	1...20%	
Repeat accuracy	<3%	<3%	
Frequency	1000Hz	800Hz	
Output indicator	Yellow LED	Yellow LED	
Polarity protection	yes	yes	
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	M12 Connector	M12 Connector	
Certification	CE U _L	CE U _L	

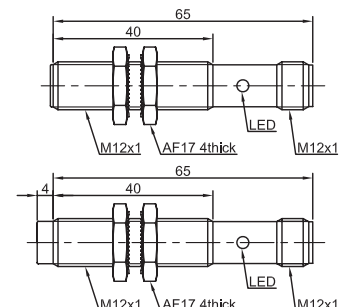
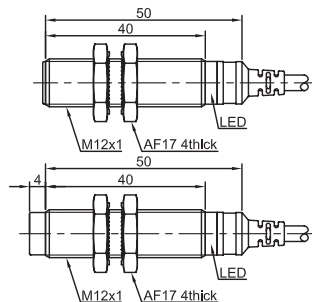
* Cable material and length can be customized



Item Code		LR12		LR12	
Mounting		● Flushed	⦿ Non-flushed	● Flushed	⦿ Non-flushed
Sensing distance		2 mm	4mm	2 mm	4mm
					
Output	DC 2 Wires NO	LR12BF02DLO	LR12BN04DLO	LR12BF02DLO-E2	LR12BN04DLO-E2
	DC 2 Wires NC	LR12BF02DLC	LR12BN04DLC	LR12BF02DLC-E2	LR12BN04DLC-E2

Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<6V	<6V	<6V	<6V
Leakage current	<1mA	<1mA	<1mA	<1mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	800Hz	500Hz	800Hz	500Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
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	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

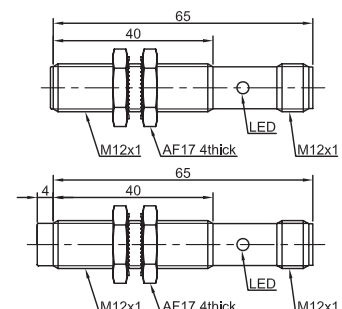
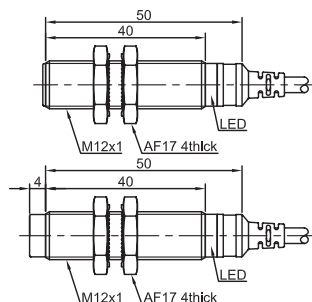
* Cable material and length can be customized



Item Code		LR12		LR12	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		2 mm	4mm	2 mm	4mm
					
Output	DC 2 Wires NO	LR12BF02ELO	LR12BN04ELO	LR12BF02ELO-E2	LR12BN04ELO-E2
	DC 2 Wires NC	LR12BF02ELC	LR12BN04ELC	LR12BF02ELC-E2	LR12BN04ELC-E2

Technical Parameter					
Supply voltage		10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift		< ±10%	< ±10%	< ±10%	< ±10%
Load current		<100mA	<100mA	<100mA	<100mA
Voltage drop		<6V	<6V	<6V	<6V
Leakage current		<1mA	<1mA	<1mA	<1mA
Hysteresis		1...20%	1...20%	1...20%	1...20%
Repeat accuracy		<3%	<3%	<3%	<3%
Frequency		800Hz	500Hz	800Hz	500Hz
Output indicator		Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection		yes	yes	yes	yes
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		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

* Cable material and length can be customized

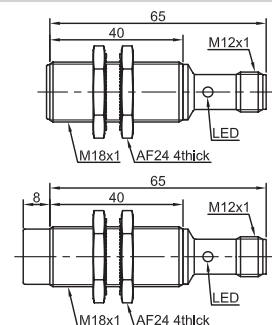
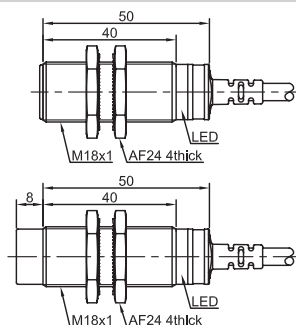


Item Code		LR18		LR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5 mm	8mm	5 mm	8mm
Output	DC 2 Wires NO	LR18BF05DLO	LR18BN08DLO	LR18BF05DLO-E2	LR18BN08DLO-E2
	DC 2 Wires NC	LR18BF05DLC	LR18BN08DLC	LR18BF05DLC-E2	LR18BN08DLC-E2



Technical Parameter				
Supply voltage	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<6V	<6V	<6V	<6V
Leakage current	<1mA	<1mA	<1mA	<1mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	500Hz	300Hz	500Hz	300Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
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	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

* Cable material and length can be customized

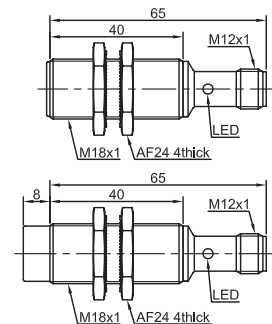
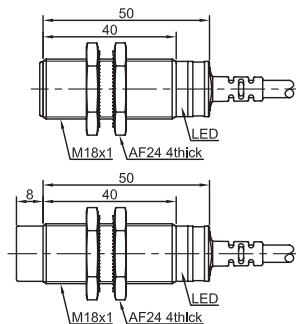


Item Code		LR18		LR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5 mm	8mm	5 mm	8mm
Output	DC 2 Wires NO	LR18BF05ELO	LR18BN08ELO	LR18BF05ELO-E2	LR18BN08ELO-E2
	DC 2 Wires NC	LR18BF05ELC	LR18BN08ELC	LR18BF05ELC-E2	LR18BN08ELC-E2



Technical Parameter				
Supply voltage	10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<100mA	<100mA	<100mA	<100mA
Voltage drop	<6V	<6V	<6V	<6V
Leakage current	<1mA	<1mA	<1mA	<1mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	500Hz	300Hz	500Hz	300Hz
Output indicator	Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection	yes	yes	yes	yes
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	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

* Cable material and length can be customized

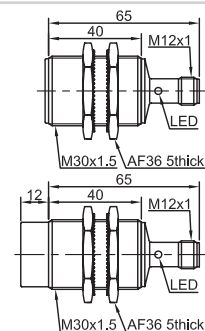
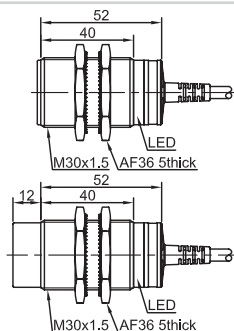


Item Code		LR30		LR30	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	10mm	15mm
Output	DC 2 Wires NO	LR30BF10DLO	LR30BN15DLO	LR30BF10DLO-E2	LR30BN15DLO-E2
	DC 2 Wires NC	LR30BF10DLC	LR30BN15DLC	LR30BF10DLC-E2	LR30BN15DLC-E2



Technical Parameter					
Supply voltage		10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
Temperature drift		< ±10%	< ±10%	< ±10%	< ±10%
Load current		<100mA	<100mA	<100mA	<100mA
Voltage drop		<6V	<6V	<6V	<6V
Leakage current		<1mA	<1mA	<1mA	<1mA
Hysteresis		1...20%	1...20%	1...20%	1...20%
Repeat accuracy		<3%	<3%	<3%	<3%
Frequency		300Hz	200Hz	300Hz	200Hz
Output indicator		Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection		yes	yes	yes	yes
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		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

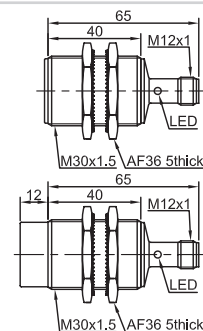
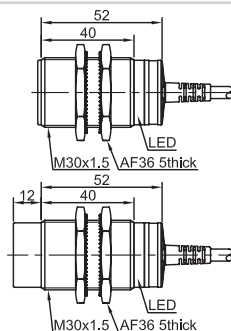
* Cable material and length can be customized



Item Code		LR30		LR30	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	10mm	15mm
					
Output	DC 2 Wires NO	LR30BF10ELO	LR30BN15ELO	LR30BF10ELO-E2	LR30BN15ELO-E2
	DC 2 Wires NC	LR30BF10ELC	LR30BN15ELC	LR30BF10ELC-E2	LR30BN15ELC-E2

Technical Parameter					
Supply voltage		10...60 VDC	10...60 VDC	10...60 VDC	10...60 VDC
Temperature drift		< ±10%	< ±10%	< ±10%	< ±10%
Load current		<100mA	<100mA	<100mA	<100mA
Voltage drop		<6V	<6V	<6V	<6V
Leakage current		<1mA	<1mA	<1mA	<1mA
Hysteresis		1...20%	1...20%	1...20%	1...20%
Repeat accuracy		<3%	<3%	<3%	<3%
Frequency		300Hz	200Hz	300Hz	200Hz
Output indicator		Yellow LED	Yellow LED	Yellow LED	Yellow LED
Polarity protection		yes	yes	yes	yes
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		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

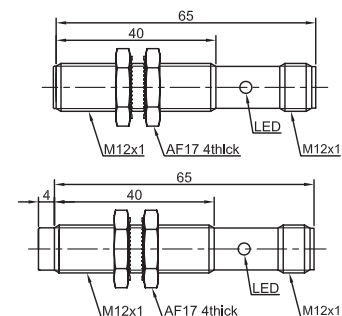
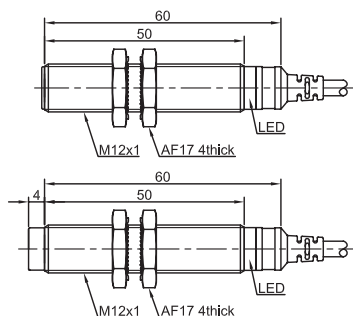
* Cable material and length can be customized



Item Code		LR12		LR12	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		2 mm	4mm	2 mm	4mm
					
Output	AC 2 Wires NO	LR12CF02ATO	LR12CN04ATO	LR12CF02ATO-E2	LR12CN04ATO-E2
	AC 2 Wires NC	LR12CF02ATC	LR12CN04ATC	LR12CF02ATC-E2	LR12CN04ATC-E2

Technical Parameter					
Supply voltage		20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Temperature drift		< ±10%	< ±10%	< ±10%	< ±10%
Load current		<200mA	<200mA	<200mA	<200mA
Voltage drop		<10V	<10V	<10V	<10V
Leakage current		<3mA	<3mA	<3mA	<3mA
Hysteresis		1...20%	1...20%	1...20%	1...20%
Repeat accuracy		<3%	<3%	<3%	<3%
Frequency		20Hz	20Hz	20Hz	20Hz
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		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 CCC	CE U _L CCC	CE U _L CCC	CE U _L CCC

* Cable material and length can be customized

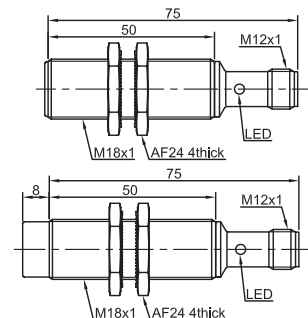
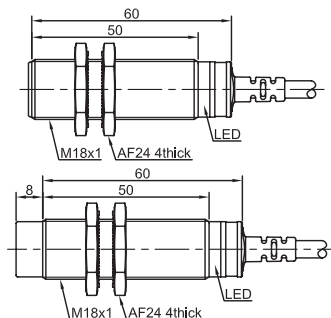


Item Code		LR18		LR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5mm	8mm	5mm	8mm
Output	AC 2 Wires NO	LR18CF05ATO	LR18CN08ATO	LR18CF05ATO-E2	LR18CN08ATO-E2
	AC 2 Wires NC	LR18CF05ATC	LR18CN08ATC	LR18CF05ATC-E2	LR18CN08ATC-E2



Technical Parameter					
Supply voltage		20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Temperature drift		< ±10%	< ±10%	< ±10%	< ±10%
Load current		<300mA	<300mA	<300mA	<300mA
Voltage drop		<10V	<10V	<10V	<10V
Leakage current		<3mA	<3mA	<3mA	<3mA
Hysteresis		1...20%	1...20%	1...20%	1...20%
Repeat accuracy		<3%	<3%	<3%	<3%
Frequency		20Hz	20Hz	20Hz	20Hz
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		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 CCC	CE U _L CCC	CE U _L CCC	CE U _L CCC

* Cable material and length can be customized

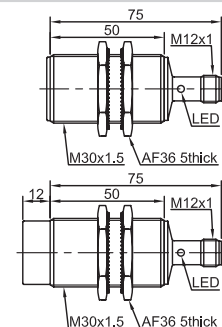
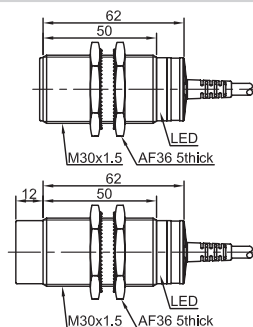





Item Code		LR30		LR30	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	10mm	15mm
Output	AC 2 Wires NO	LR30CF10ATO	LR30CN15ATO	LR30CF10ATO-E2	LR30CN15ATO-E2
	AC 2 Wires NC	LR30CF10ATC	LR30CN15ATC	LR30CF10ATC-E2	LR30CN15ATC-E2



Technical Parameter				
Supply voltage	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VAC
Temperature drift	< ±10%	< ±10%	< ±10%	< ±10%
Load current	<300mA	<300mA	<300mA	<300mA
Voltage drop	<10V	<10V	<10V	<10V
Leakage current	<3mA	<3mA	<3mA	<3mA
Hysteresis	1...20%	1...20%	1...20%	1...20%
Repeat accuracy	<3%	<3%	<3%	<3%
Frequency	20Hz	20Hz	20Hz	20Hz
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	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

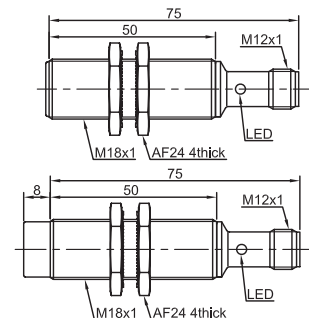
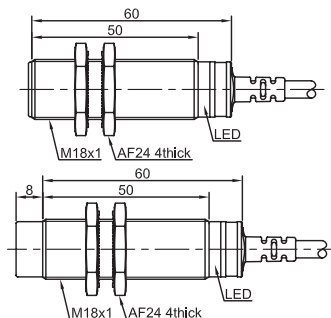
* Cable material and length can be customized



Item Code		LR18		LR18	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		5mm	8mm	5mm	8mm
					
Output	DC/AC 2 Wires NO	LR18XCF05SBO	LR18XCN08SBO	LR18XCF05SBO-E2	LR18XCN08SBO-E2
	DC/AC 2 Wires NC	LR18XCF05SBC	LR18XCN08SBC	LR18XCF05SBC-E2	LR18XCN08SBC-E2

Technical Parameter					
Supply voltage	20-250VAC/DC		20-250VAC/DC		
Temperature drift	< ±10%		< ±10%		
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	1...20%		1...20%		
Repeat accuracy	<3%		<3%		
Frequency	AC: 20Hz, DC: 500Hz		AC: 20Hz, DC: 500Hz		
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		
Ambient moisture	35...95%		35...95%		
Protection degree	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 CCC		CE U _L CCC		

* Cable material and length can be customized



Item Code		LR30		LR30	
Mounting		● Flushed	◐ Non-flushed	● Flushed	◐ Non-flushed
Sensing distance		10mm	15mm	10mm	15mm
Output	DC/AC 2 Wires NO	LR30XCF10SBO	LR30XCN15SBO	LR30XCF10SBO-E2	LR30XCN15SBO-E2
	DC/AC 2 Wires NC	LR30XCF10SBC	LR30XCN15SBC	LR30XCF10SBC-E2	LR30XCN15SBC-E2



Technical Parameter					
Supply voltage	20-250VAC/DC		20-250VAC/DC		
Temperature drift	< ±10%		< ±10%		
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	1...20%		1...20%		
Repeat accuracy	<3%		<3%		
Frequency	AC: 20Hz, DC: 500Hz		AC: 20Hz, DC: 500Hz		
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		
Ambient moisture	35...95%		35...95%		
Protection degree	IP67		IP67		
Housing material	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	Nickel-copper Alloy	
Connection	2m PVC Cable		M12 Connector		
Certification	CE U _L CCC		CE U _L CCC		

* Cable material and length can be customized

