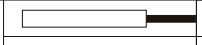
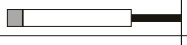
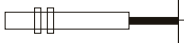
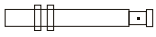
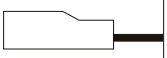
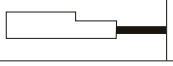
◆ INDUCTIVE STANDARD SPECIFICATION SHEET

series	type	Appearance	size	Detection distance	Model	
					NPN. NC	NPN. NO
Cable type	Burying		Φ6.5*45	1.5mm	LR6.5-1.5NC-ZAA	LR6.5-1.5NO-ZAA
			Φ6.5*44	2mm	LR6.5-02NC-ZAA	LR6.5-02NO-ZAA
	Non burying		M8*45	1.5mm	LR08-1.5NC-ZBA	LR08-1.5NO-ZBA
			M12*45	2mm	LR12-02NC-ZBA	LR12-02NO-ZBA
			M18*54	5mm	LR18-05NC-ZBA	LR18-05NO-ZBA
			M30*54	10mm	LR30-10NC-ZBA	LR30-10NO-ZBA
			M8*44	2mm	LR08-02NC-ZBA	LR08-02NO-ZBA
			M12*44	4mm	LR12-04NC-ZBA	LR12-04NO-ZBA
			M18*54	8mm	LR18-08NC-ZBA	LR18-08NO-ZBA
			M30*58	15mm	LR30-15NC-ZBA	LR30-15NO-ZBA
Electrical connection	Non burying		M8*60	1.5mm	LR08-1.5NC-YBA	LR08-1.5NO-YBA
			M12*68	2mm	LR12-02NC-YBA	LR12-02NO-YBA
			M18*82	5mm	LR18-05NC-YBA	LR18-05NO-YBA
			M30*78	10mm	LR30-10NC-YBA	LR30-10NO-YBA
			M8*60	2mm	LR08-02NC-YBA	LR08-02NO-YBA
			M12*67	4mm	LR12-04NC-YBA	LR12-04NO-YBA
			M18*78	8mm	LR18-08NC-YBA	LR18-08NO-YBA
			M30*78	15mm	LR30-15NC-YBA	LR30-15NO-YBA

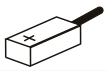
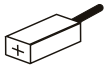
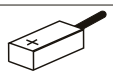
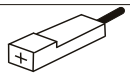
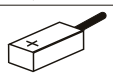
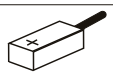
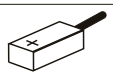
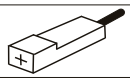
Note: NPN NC, NPN NO; PNP PC, PNP PO.

◆ INDUCTANCE STANDARD SQUARE GAUGE LIST

series	Appearance	type	size	Installation method	Detection distance	Model	
						NPN. NC	NPN. NO
Cable type		Q17	17*17*27	Burying	5mm	LQ17-05NC-ZAA	LQ17-05NO-ZAA
				Non burying	8mm	LQ17-08NC-ZBA	LQ17-08NO-ZBA
		Q18	18*18*34	Burying	5mm	LQ18-05NC-ZAA	LQ18-05NO-ZAA
				Non burying	8mm	LQ18-08NC-ZBA	LQ18-08NO-ZBA
		Q18M	18*10*30.5	Burying	5mm	LQ18M-05NC-ZAA	LQ18M-05NO-ZAA
				Non burying	8mm	LQ18M-08NC-ZBA	LQ18M-08NO-ZBA

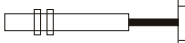
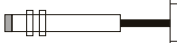
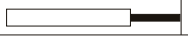
Note: NPN NC, NPN NO; PNP PC, PNP PO.

◆ INDUCTANCE TYPE SMILE SQUARE SPECIFICATION TABLE

series	Installation method	Appearance	type	size	Detection distance	Model	
						NPN. NC	NPN. NO
Cable type	Non burying		E06	6*6*20	1mm	LE06-01NC-ZBA	LE06-01NO-ZBA
			E07	6*6*20	1mm	LE07-01NC-ZBA	LE07-01NO-ZBA
			E08	8*8*23	2.5mm	LE08-2.5NC-ZBA	LE08-2.5NO-ZBA
					3mm	LE08-03NC-ZBA	LE08-03NO-ZBA
			E09	8*8*26	2.5mm	LE09-2.5NC-ZBA	LE09-2.5NO-ZBA
					3mm	LE09-03NC-ZBA	LE09-03NO-ZBA
			E10	10*6*30	2.5mm	LE10-2.5NC-ZBA	LE10-2.5NO-ZBA
					4mm	LE10-04NC-ZBA	LE10-04NO-ZBA
			E12	12*7.5*30	4mm	LE12-04NC-ZBA	LE12-04NO-ZBA
			E15	15*8*34.5	5mm	LE15-05NC-ZBA	LE15-05NO-ZBA
					8mm	LE15-08NC-ZBA	LE15-08NO-ZBA
			E16	15.5*15*34.5	5mm	LE16-05NC-ZBA	LE16-05NO-ZBA
					8mm	LE16-08NC-ZBA	LE16-08NO-ZBA

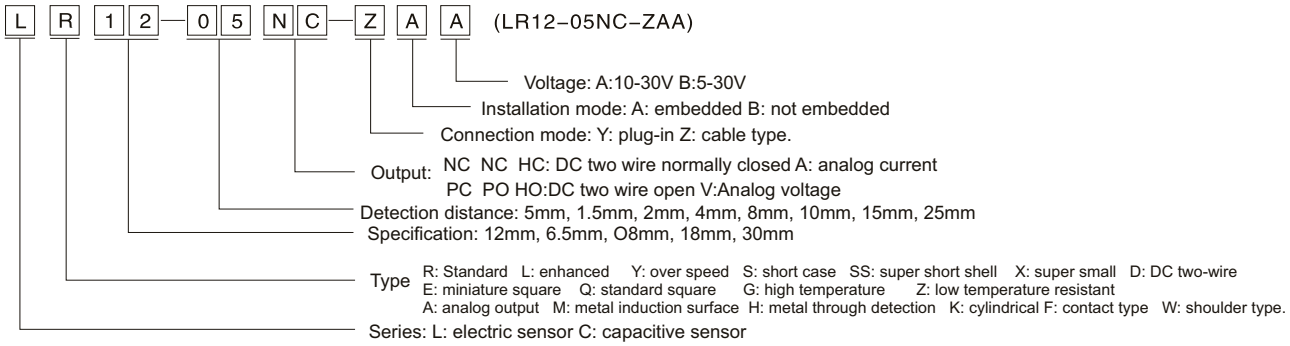
Note: NPN NC, NPN NO; PNP PC, PNP PO.

◆ CAPACITIVE CYLINDRICAL GAUGE

series	type	Appearance	size	Detection distance	Model	
					NPN. NC	NPN. NO
Resin shell	Non burying		M12*55	3mm	CR12-03NC-ZBA	CR12-03NO-ZBA
			M18*70	8mm	CR18-08NC-ZBA	CR18-08NO-ZBA
			M30*80	20mm	CR30-20NC-ZBA	CR30-20NO-ZBA
			M12*59	6mm	CR12-06NC-ZBA	CR12-06NO-ZBA
			M18*73	15mm	CR18-15NC-ZBA	CR18-15NO-ZBA
			M30*82	30mm	CR30-30NC-ZBA	CR30-30NO-ZBA
Teflon shell	Non burying		M18*66	10mm	CR18-10NC-ZBA	CR18-10NO-ZBA

Note: NPN NC, NPN NO; PNP PC, PNP PO.

◆ PROXIMITY SENSOR TYPE SPECIFICATION:



◆ INDUCTIVE STANDARD TYPE

APPEARANCE

Installation method	Embedding (A)		Non embedment (B)					Embedding (A)	Non embedment (B)			
Model	LR04-0.8	LR6.5-1.5	LR05-0.8	LR08-1.5	LR12-02	LR18-05	LR30-10	LR6.5-02	LR08-02	LR12-04	LR18-08	LR30-15
Specifications	Φ4	Φ6.5	M5	M8	M12	M18	M30	Φ6.5	M8	M12	M18	M30
Detection distance	0.8mm	1.5mm	0.8mm	1.5mm	2mm	5mm	10mm	2mm	2mm	4mm	8mm	15mm
Material	Stainless steel		Nickel copper alloy					Stainless steel	Nickel copper alloy			
Working voltage	10~30V DC(Ripple<10%)											
Residual voltage	<1.5V											
Maximum load current	180mA				150mA				180mA		150mA	
Repetition precision	<1.0%(Sr)									<5.0%(Sr)	<1.0%(Sr)	
Switching frequency	2KHz			1KHz		300Hz		2KHz	1KHz	800Hz	500Hz	150Hz
Consumption of current	<10mA										<20mA	
Leakage current	<0.01mA											
Lagging	<15%(Sr)											
Induction surface material	PBT											
Working temperature	-25℃~+75℃											
Protection circuit	Short circuit protection											
Protection grade	IP67											
NPN •NC (NO)	NC(NO)											
PNP•NC (NO)	PC(PO)											

◆ STANDARD INSERT TYPE

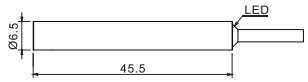
APPEARANCE

Installation method	Non embedment (B)							
Model	LR08-1.5	LR12-02	LR18-05	LR30-10	LR6.5-02	LR08-02	LR18-08	LR30-15
Specifications	M8	M12	M18	M30	M8	M12	M18	M30
Detection distance	1.5mm	2mm	5mm	10mm	2mm	4mm	8mm	15mm
Material	Stainless steel	Nickel copper alloy			Stainless steel	Nickel copper alloy		
Working voltage	10~30V DC(Ripple<10%)							
Residual voltage	<1.5V							
Maximum load current	150mA							
Repetition precision	<1.0%(Sr)							
Switching frequency	2KHz		1KHz	300Hz	2KHz	1KHz	500Hz	150Hz
Consumption of current	<10mA							
Leakage current	<0.01mA							
Lagging	<15%(Sr)							
Induction surface material	PBT							
Working temperature	-25℃~+75℃							
Protection circuit	Short circuit protection							
Protection grade	IP67							
NPN •NC (NO)	NC(NO)							
PNP•NC (NO)	PC(PO)							

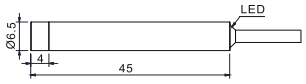
◆ STANDARD SIZE SPECIFICATION FOR CABLE TYPE

unit:mm

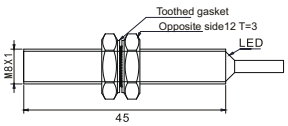
LR6.5-1.5□□-ZAA



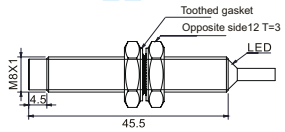
LR6.5-02□□-ZAA



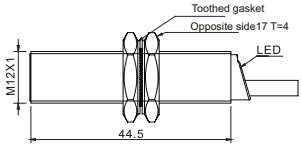
LR08-1.5□□-ZBA



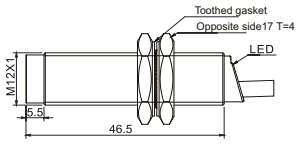
LR08-02□□-ZBA



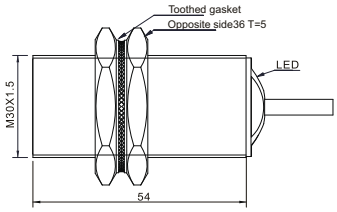
LR12-02□□-ZBA



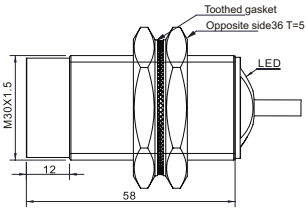
LR12-04□□-ZBA



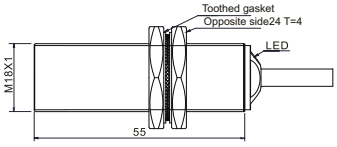
LR30-10□□-ZBA



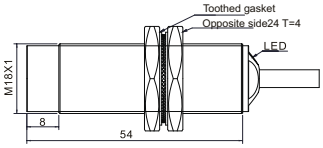
LR30-15□□-ZBA



LR18-05□□-ZBA



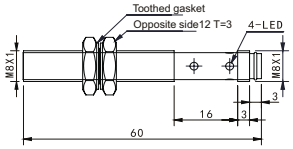
LR18-08□□-ZBA



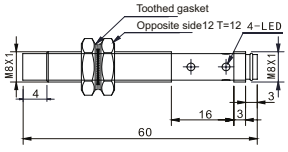
◆ STANDARD SIZE OF INSERT TYPE

Unit ： mm

LR08-1.5□□-YBA



LR08-02□□-YBA

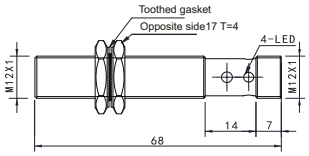


M8 3 core

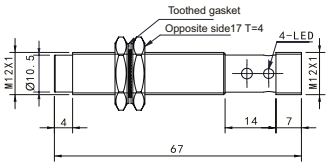
INDUCTIVE PROXIMITY SENSOR

◆ STANDARD SIZE OF INSERT TYPE

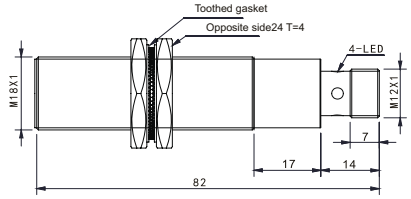
LR12-02□□-YBA



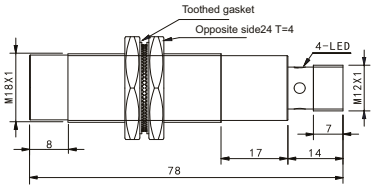
LR12-04□□-YBA



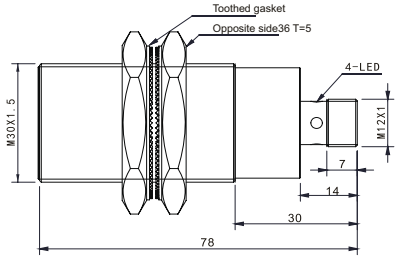
LR18-05□□-YBA



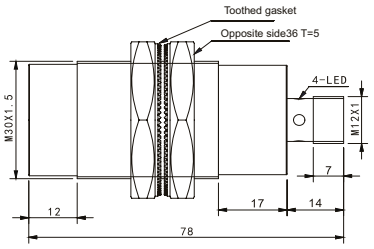
LR18-08□□-YBA



LR30-10□□-YBA



LR30-15□□-YBA



◆ INDUCTIVE STANDARD SQUARE

APPEARANCE

Installation method	Embedding (A)	Non embedment (B)	Embedding (A)	Non embedment (B)	Embedding (A)	Non embedment (B)
Model	LQ17-05	LR17-08	LQ18-05	LQ18-08	LQ18M-05	LQ18M-08
Specifications	Q17		Q18		Q18M	
Detection distance	5mm	8mm	5mm	8mm	5mm	8mm
Material	Plastic					
Working voltage	10~30V DC					
Residual voltage	<1.5V					
Maximum load current	150mA					
Repetition precision	<1.0%(Sr)					
Switching frequency	1KHz	300Hz	1KHz	300Hz	1KHz	300Hz
Consumption of current	<10mA					
Leakage current	<0.01mA					
Lagging	<15%(Sr)					
Induction surface material	ABS					
Working temperature	-25℃~+75℃					
Protection circuit	Short circuit protection					
Protection grade	IP67					
NPN •NC (NO)	NC(NO)					
PNP•NC (NO)	PC(PO)					

◆ INDUCTANCE TYPE SMALL SQUARE

APPEARANCE

Installation method	Non embedment (B)	Non embedment (B)	Non embedment (B)	Non embedment (B)
Model	LE06-01	LE07-01	LE08-2.5/LE08-03	LE09-2.5/LE09-03
Specifications	E06	E07	E08	E09
Detection distance	1mm	1mm	2.5mm/3mm	2.5mm/3mm
Material	Plastic			
Working voltage	10~30V DC(Ripple<10%)			
Residual voltage	<1.5V			
Maximum load current	100mA		150mA	
Repetition precision	<5.0%(Sr)		<1.0%(Sr)	
Switching frequency	500Hz		800Hz	
Consumption of current	<10mA			
Leakage current	<0.01mA			
Lagging	<15%(Sr)			
Induction surface material	PC			
Working temperature	-25℃~+75℃			
Protection circuit	Nothing		Short circuit protection	
Protection grade	IP67			
NPN •NC (NO)	NC(NO)			
PNP•NC (NO)	PC(PO)			

◆ INDUCTANCE TYPE SMALL SQUARE

APPEARANCE

Installation method	Non embedment (B)	Non embedment (B)	Non embedment (B)	Non embedment (B)
Model	LE10-2.5/LE10-04	LE12-04	LE15-05/LE15-08	LE16-05/LE16-08
Specifications	E10	E12	E15	E16
Detection distance	2.5mm/4mm	4mm	5mm/8mm	5mm/8mm
Material	Plastic			
Working voltage	10~30V DC(Ripple<10%)			
Residual voltage	<1.5V			
Maximum load current	150mA			
Repetition precision	<5.0%(Sr)		<1.0%(Sr)	
Switching frequency	800Hz/200Hz		1KHz/500Hz	
Consumption of current	<10mA			
Leakage current	<0.01mA			
Lagging	<15%(Sr)			
Induction surface material	PC			
Working temperature	-25℃~+75℃			
Protection circuit	Short circuit protection			
Protection grade	IP67			
NPN •NC (NO)	NC(NO)			
PNP•NC (NO)	PC(PO)			

◆ CAPACITANCE STANDARD CYLINDRICAL TYPE

APPEARANCE

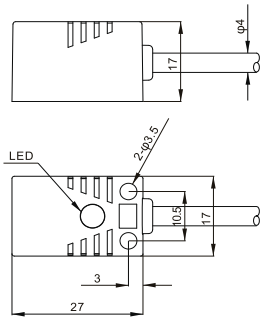


Installation method	Non embedment (B)			Non embedment (B)			Non embedment (B)
Model	CK12-03	CK18-08	CK30-20	CK12-06	CK18-15	CK30-30	CK18-10
Specifications	M12	M18	M30	M12	M18	M30	M18
Detection distance	1~3mm Adjustable	2~8mm Adjustable	2~20mm Adjustable	1~6mm Adjustable	2~15mm Adjustable	2~30mm Adjustable	1~10mm Adjustable
Material	PBT						
Working voltage	10~30V DC(Ripple<10%)						12~24V DC
Residual voltage	<2V						
Maximum load current	150mA	300mA		150mA	300mA		100mA
Repetition precision	<5.0%(Sr)						
Switching frequency	100Hz						
Consumption of current	<10mA						<22mA
Leakage current	<0.01mA						<1.1mA
Lagging	<15%(Sr)						<10%(Sr)
Induction surface material	PBT						
Working temperature	-25℃~+70℃						-25℃~+60℃
Protection circuit	≤14ms						
Protection grade	Short circuit protection						
NPN •NC (NO)	IP67						IP66
PNP•NC (NO)	NC(NO)						
	PC(PO)						

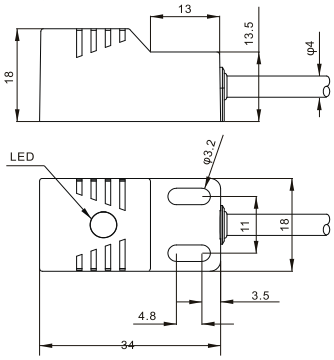
◆ INDUCTANCE STANDARD SQUARE SIZE SPECIFICATION

Unit ： mm

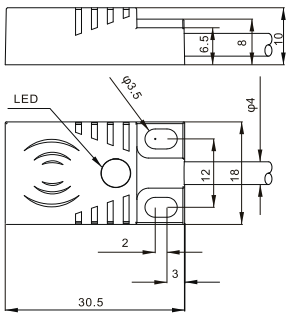
LQ17-05□□-ZAA
LQ17-08□□-ZBA



LQ18-05□□-ZAA
LQ18-08□□-ZBA



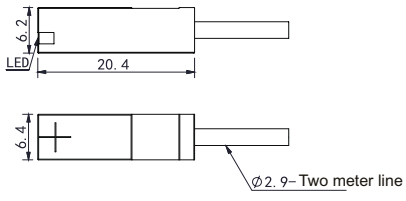
LQ18M-05□□-ZAA
LQ18M-08□□-ZBA



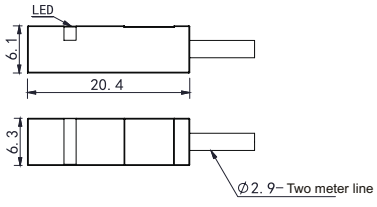
◆ INDUCTANCE TYPE MICRO SQUARE SIZE SPECIFICATION

Unit ： mm

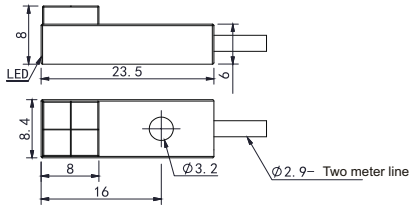
LE06-01□□-ZAA



LE07-01□□-ZAA



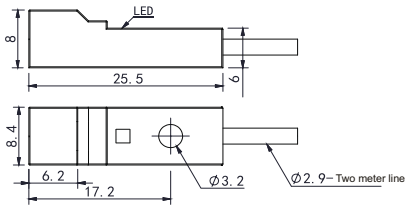
LE08-2.5/03□□-ZAA



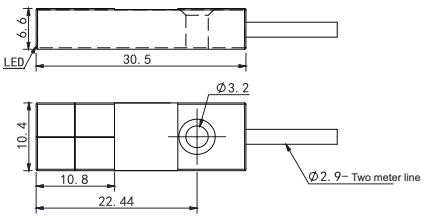
◆ INDUCTANCE TYPE MICRO SQUARE SIZE SPECIFICATION

Unit ： mm

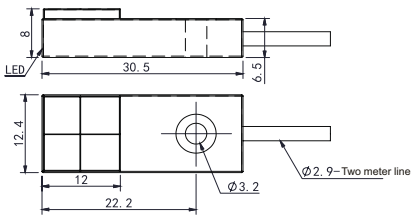
LE09-2.5/03□□-ZAA



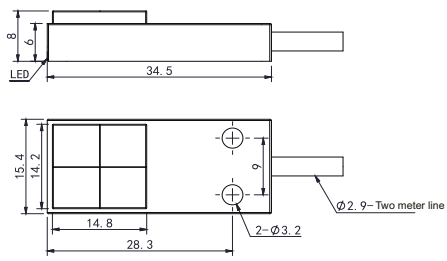
LE10-2.5/04□□-ZAA



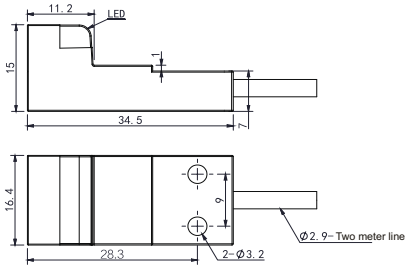
LE12-04□□-ZAA



LE15-05/08□□-ZAA

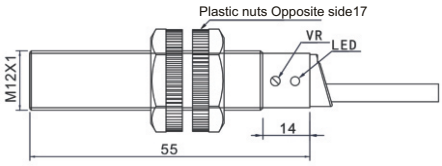


LE16-05/08□□-ZAA

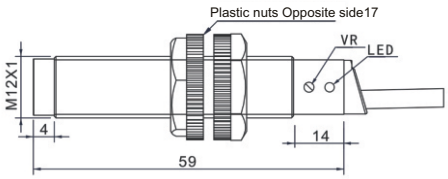


◆ CAPACITANCE STANDARD CYLINDRICAL SIZE SPECIFICATION

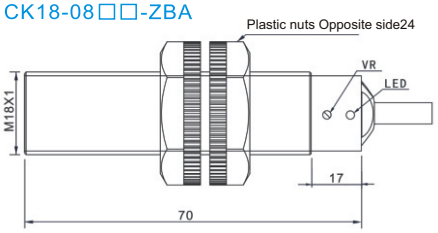
CK12-03□□-ZBA



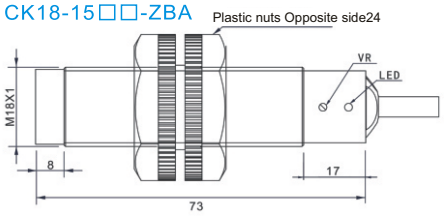
CK12-06□□-ZBA



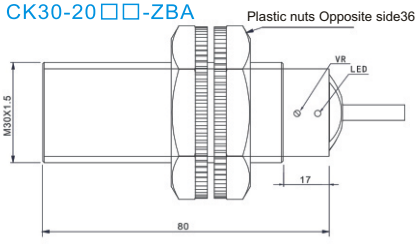
CK18-08□□-ZBA



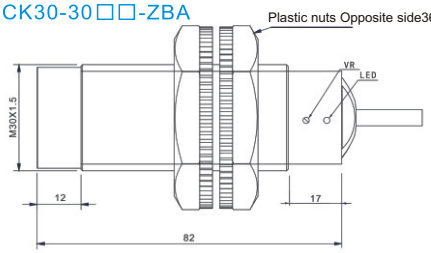
CK18-15□□-ZBA



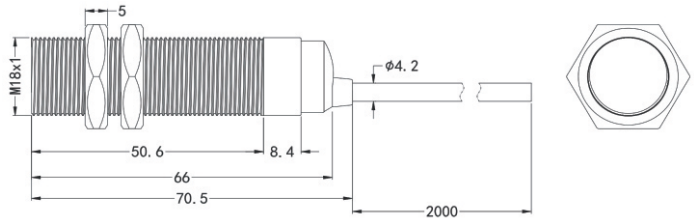
CK30-20□□-ZBA



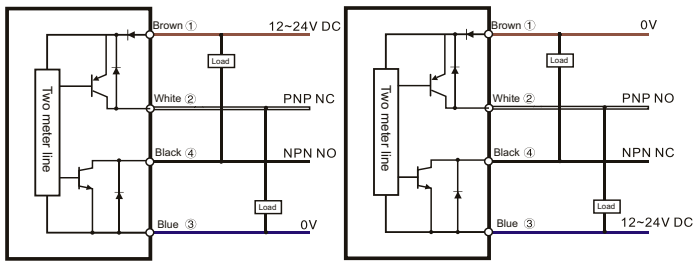
CK30-30□□-ZBA



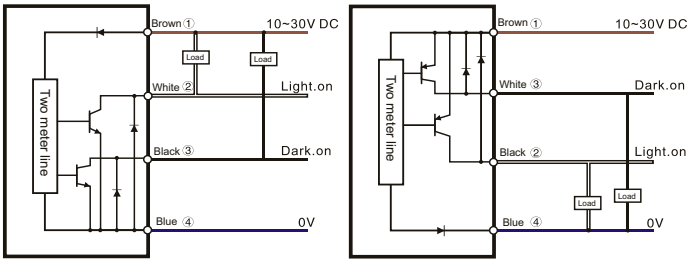
CF18-10□□-ZBA



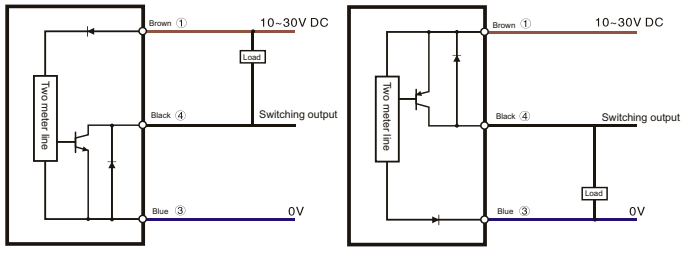
◆ CAPACITANCE SENSOR CIRCUIT DIAGRAM



◆ CIRCUIT DIAGRAM OF INDUCTIVE SENSOR



DC 4 line NPN　　DC 4 line PNP



DC 3 line NPN　　DC 3 line PNP