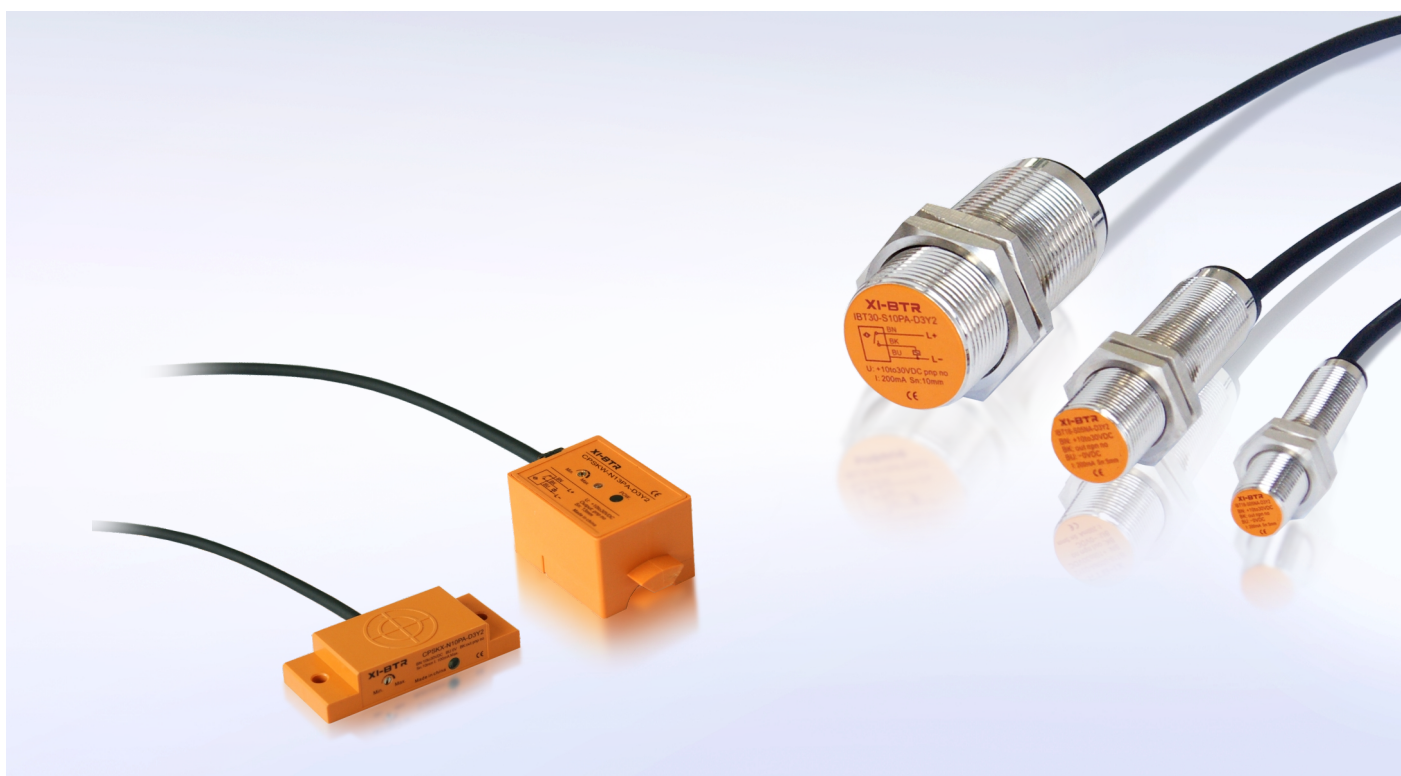
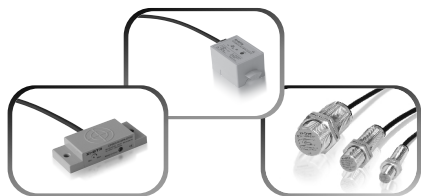


Capacitive Proximity Sensor

Features

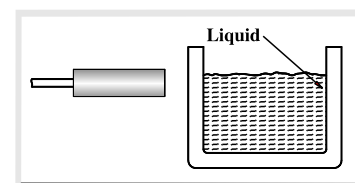
- Objects : metal , plastic ,liquid , stone ,wood etc
- Long life-span and high reliability
- Adjustable sensing range by users
- Applied for liquid level detection and control



M8 –Cable(DC)	/H-01
M12 –Cable(DC)	/H-02
M12 –Connector(DC)	/H-03
M18 –Cable(DC)	/H-04
M18 –Connector(DC)	/H-05
M18 –Cable(AC)	/H-06
M30 –Cable(DC)	/H-07
M30 –Connector(DC)	/H-08

M30 –Cable(AC)	/H-09
φ 34 –Cable(DC/AC)	/H-10
KW,KX–Cable(DC)	/H-11

■ Capacitive



PICTURE

M8x1, L40



CE

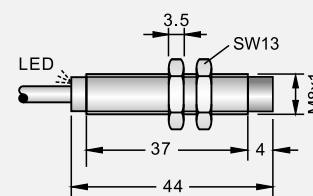
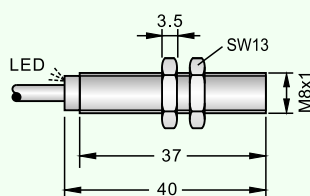
M8x1, L44



CE

DC-3 wires NPN N.O.	CBT8-S01NA-D3Y2	* 01	CBT8-N02NA-D3Y2	* 01
DC-3 wires NPN N.C.	CBT8-S01NB-D3Y2	* 02	CBT8-N02NB-D3Y2	* 02
DC-3 wires PNP N.O.	CBT8-S01PA-D3Y2	* 03	CBT8-N02PA-D3Y2	* 03
DC-3 wires PNP N.C.	CBT8-S01PB-D3Y2	* 04	CBT8-N02PB-D3Y2	* 04
Rated sensing distance	1mm		2mm	
Mounting	shield		non-shield	
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.			
Leakage current	≤0.01mA			
Setting distance	0...0.7mm		0...1.4mm	
Standard target	Grounded metal plate (8x8x1mm)			
Frequency	50Hz			
Consumption	≤10mA			
Load current	200mA			
Voltage drop(V _p)	≤1.8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection			
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	Cable: Φ3.2mm 2M			
Housing material	nickel-plated brass			
Sensing face material	PBT			

Dimensional drawing



Remark

01 . 02 . 03 . 04—NO of wiring diagram(refers to page 12...15)

PICTURE

M12x1, L60



CE

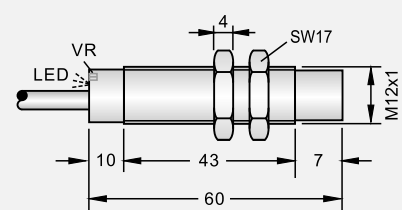
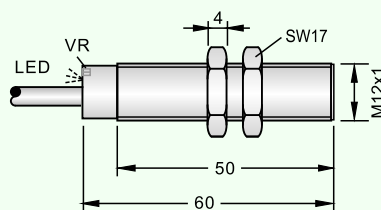
M12x1, L60



CE

DC-3 wires NPN N.O.	CBT12-S02NA-D3Y2	* 01	CBT12-N04NA-D3Y2	* 01
DC-3 wires NPN N.C.	CBT12-S02NB-D3Y2	* 02	CBT12-N04NB-D3Y2	* 02
DC-3 wires PNP N.O.	CBT12-S02PA-D3Y2	* 03	CBT12-N04PA-D3Y2	* 03
DC-3 wires PNP N.C.	CBT12-S02PB-D3Y2	* 04	CBT12-N04PB-D3Y2	* 04
Rated sensing distance	2mm		4mm	
Mounting	shield		non-shield	
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.			
Leakage current	≤0.01mA			
Setting distance	0...1.4mm adjustable		0...2.8mm adjustable	
Standard target	Grounded metal plate (12x12x1mm)			
Frequency	50Hz			
Consumption	≤10mA			
Load current	200mA			
Voltage drop(V _p)	≤1.8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection			
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	Cable: φ4mm 2M			
Housing material	nickel-plated brass			
Sensing face material	PBT			

Dimensional drawing



Remark

01 . 02 . 03 . 04—NO of wiring diagram(refers to page 12...15)

PICTURE

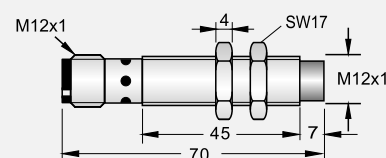
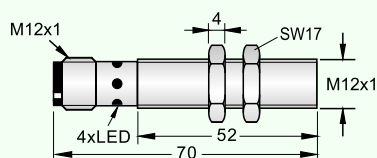
M12x1, L70

CE
M12x1, L70

CE

DC-3 wires NPN N.O.	CBT12-S02NA-D4YV1	* 29	CBT12-N04NA-D4YV1	* 29
DC-3 wires NPN N.C.	CBT12-S02NB-D4YV1	* 30	CBT12-N04NB-D4YV1	* 30
DC-3 wires PNP N.O.	CBT12-S02PA-D4YV1	* 31	CBT12-N04PA-D4YV1	* 31
DC-3 wires PNP N.C.	CBT12-S02PB-D4YV1	* 32	CBT12-N04PB-D4YV1	* 32
Rated sensing distance	2mm		4mm	
Mounting	shield		non-shield	
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.			
Leakage current	≤0.01mA			
Setting distance	0...1.4mm		0...2.8mm	
Standard target	Grounded metal plate (12x12x1mm)			
Frequency	50Hz			
Consumption	≤10mA			
Load current	200mA			
Voltage drop(V _p)	≤1.8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection			
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	M12 connector, LEDx4			
Housing material	nickel-plated brass			
Sensing face material	PBT			

Dimensional drawing



Remark

29 . 30 . 31 . 32—NO of wiring diagram(refers to page 12...15)

PICTURE

M18x1, L60(nickel-plated brass)
M18x1, L65(PBT)



CE

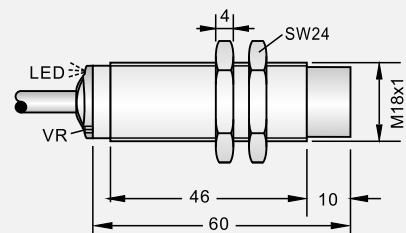
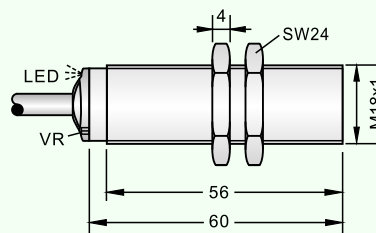
M18x1, L60(nickel-plated brass)
M18x1, L65(PBT)



CE

DC-3 wires NPN N.O.	CBT18-S05NA-D3Y2	CPT18-S05NA-D3Y2	* 01	CBT18-N08NA-D3Y2	CPT18-N08NA-D3Y2	* 01
DC-3 wires NPN N.C.	CBT18-S05NB-D3Y2	CPT18-S05NB-D3Y2	* 02	CBT18-N08NB-D3Y2	CPT18-N08NB-D3Y2	* 02
DC-3 wires PNP N.O.	CBT18-S05PA-D3Y2	CPT18-S05PA-D3Y2	* 03	CBT18-N08PA-D3Y2	CPT18-N08PA-D3Y2	* 03
DC-3 wires PNP N.C.	CBT18-S05PB-D3Y2	CPT18-S05PB-D3Y2	* 04	CBT18-N08PB-D3Y2	CPT18-N08PB-D3Y2	* 04
Rated sensing distance	5mm			8mm		
Mounting	shield			non-shield		
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.					
Leakage current	≤0.01mA					
Setting distance	0...3.5mm adjustable			0...5.6mm adjustable		
Standard target	Grounded metal plate (18x18x1mm)			Grounded metal plate (25x25x1mm)		
Frequency	50Hz					
Consumption	≤10mA					
Load current	200mA					
Voltage drop(V _p)	≤1.8V					
Hysteresis	4...20%					
Repeatability	≤5%					
Display	Red LED					
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection					
Operating temperature	-20...+60°C(no condensation)					
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times					
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
Protection	IP67					
Connection	Cable: φ4.8mm 2M					
Housing material	nickel-plated brass	PBT		nickel-plated brass	PBT	
Sensing face material	PBT					

Dimensional drawing



Remark

01 . 02 . 03 . 04—NO of wiring diagram(refers to page 12...15)

PICTURE

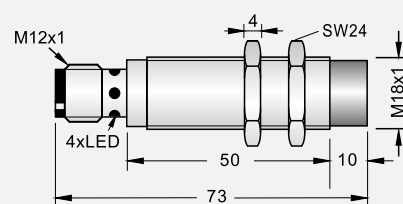
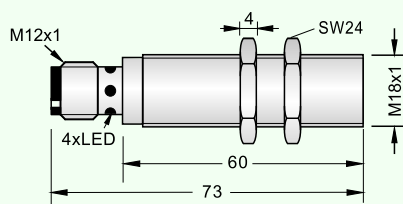
M18x1, L73

CE
M18x1, L73

CE

DC-3 wires NPN N.O.	CBT18-S05NA-D4YV1	* 29	DC-3 wires NPN N.O.	CBT18-N08NA-D4YV1	* 29
DC-3 wires NPN N.C.	CBT18-S05NB-D4YV1	* 30	DC-3 wires NPN N.C.	CBT18-N08NB-D4YV1	* 30
DC-3 wires PNP N.O.	CBT18-S05PA-D4YV1	* 31	DC-3 wires PNP N.O.	CBT18-N08PA-D4YV1	* 31
DC-3 wires PNP N.C.	CBT18-S05PB-D4YV1	* 32	DC-3 wires PNP N.C.	CBT18-N08PB-D4YV1	* 32
Rated sensing distance	5mm		Rated sensing distance	8mm	
Mounting	shield		Mounting	non-shield	
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.				
Leakage current	≤0.01mA				
Setting distance	0...3.5mm		Setting distance	0...5.6mm	
Standard target	Grounded metal plate (18x18x1mm)		Standard target	Grounded metal plate (25x25x1mm)	
Frequency	50Hz				
Consumption	≤10mA				
Load current	200mA				
Voltage drop(V_p)	≤1.8V				
Hysteresis	4...20%				
Repeatability	≤5%				
Display	Red LED				
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection				
Operating temperature	-20...+60°C(no condensation)				
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times				
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours				
Protection	IP67				
Connection	M12 connector, LEDx4				
Housing material	nickel-plated brass				
Sensing face material	PBT				

Dimensional drawing



Remark

29 . 30 . 31 . 32—NO of wiring diagram(refers to page 12...15)

PICTURE

M18x1, L65



CE

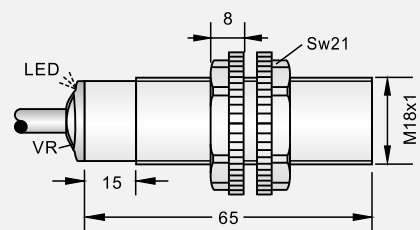
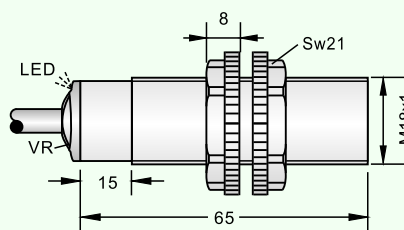
M18x1, L65



CE

AC-2 wires N.O.	CPT18-S05AA-A2N2	* 20	CPT18-N08AA-A2N2	* 20
AC-2 wires N.C.	CPT18-S05AB-A2N2	* 21	CPT18-N08AB-A2N2	* 21
Rated sensing distance	5mm		8mm	
Mounting	shield		non-shield	
Supply voltage	20...250V AC(50/60Hz)			
Leakage current	≤1.7mA			
Setting distance	0...3.5mm adjustable		0...5.6mm adjustable	
Standard target	Grounded metal plate (18x18x1mm)		Grounded metal plate (25x25x1mm)	
Frequency	10Hz			
Consumption				
Load current	200mA			
Voltage drop(V _p)	≤8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit				
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	Cable: φ4.8mm 2M			
Housing material	PBT		PBT	
Sensing face material	PBT			

Dimensional drawing



Remark

20 . 21—NO of wiring diagram(refers to page 12...15)

PICTURE

M30x1.5, L60(nickel-plated brass)
M30x1.5, L72(PBT)



CE

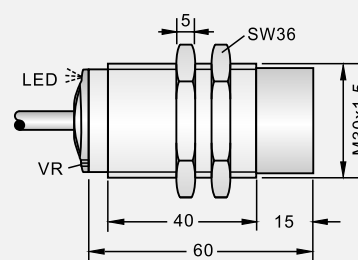
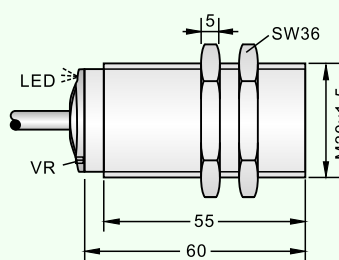
M30x1.5, L60(nickel-plated brass)
M30x1.5, L72(PBT)



CE

DC-3 wires NPN N.O.	CBT30-S10NA-D3Y2	CPT30-S10NA-D3Y2	* 01	CBT30-N15NA-D3Y2	CPT30-N15NA-D3Y2	* 01
DC-3 wires NPN N.C.	CBT30-S10NB-D3Y2	CPT30-S10NB-D3Y2	* 02	CBT30-N15NB-D3Y2	CPT30-N15NB-D3Y2	* 02
DC-3 wires PNP N.O.	CBT30-S10PA-D3Y2	CPT30-S10PA-D3Y2	* 03	CBT30-N15PA-D3Y2	CPT30-N15PA-D3Y2	* 03
DC-3 wires PNP N.C.	CBT30-S10PB-D3Y2	CPT30-S10PB-D3Y2	* 04	CBT30-N15PB-D3Y2	CPT30-N15PB-D3Y2	* 04
Rated sensing distance	10mm			15mm		
Mounting	shield			non-shield		
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.					
Leakage current	≤0.01mA					
Setting distance	0...7mm adjustable			0...10.5mm adjustable		
Standard target	Grounded metal plate (30x30x1mm)			Grounded metal plate (45x45x1mm)		
Frequency	50Hz					
Consumption	≤10mA					
Load current	200mA					
Voltage drop(V _p)	≤1.8V					
Hysteresis	4...20%					
Repeatability	≤5%					
Display	Red LED					
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection					
Operating temperature	-20...+60°C(no condensation)					
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times					
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
Protection	IP67					
Connection	Cable: ϕ4.8mm 2M					
Housing material	nickel-plated brass	PBT		nickel-plated brass	PBT	
Sensing face material	PBT					

Dimensional drawing



Remark

01 . 02 . 03 . 04—NO of wiring diagram(refers to page 12...15)

PICTURE

M30x1.5, L73



CE

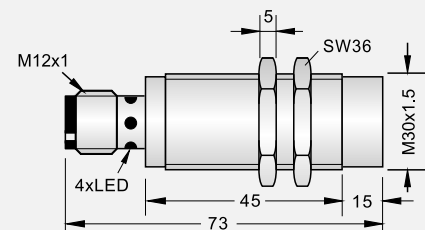
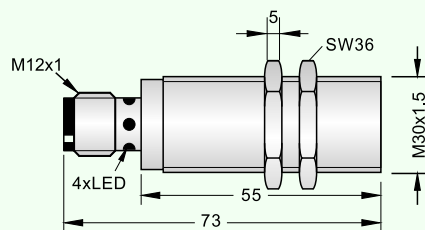
M30x1.5, L73



CE

DC-3 wires NPN N.O.	CBT30-S10NA-D4YV1	* 29	CBT30-N15NA-D4YV1	* 29
DC-3 wires NPN N.C.	CBT30-S10NB-D4YV1	* 30	CBT30-N15NB-D4YV1	* 30
DC-3 wires PNP N.O.	CBT30-S10PA-D4YV1	* 31	CBT30-N15PA-D4YV1	* 31
DC-3 wires PNP N.C.	CBT30-S10PB-D4YV1	* 32	CBT30-N15PB-D4YV1	* 32
Rated sensing distance	10mm		15mm	
Mounting	shield		non-shield	
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.			
Leakage current	≤0.01mA			
Setting distance	0...7mm		0...10.5mm	
Standard target	Grounded metal plate (30x30x1mm)		Grounded metal plate (45x45x1mm)	
Frequency	50Hz			
Consumption	≤10mA			
Load current	200mA			
Voltage drop(V _p)	≤1.8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection			
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	M12 connector, LEDx4			
Housing material	nickel-plated brass			
Sensing face material	PBT			

Dimensional drawing



Remark 29 . 30 . 31 . 32—NO of wiring diagram(refers to page 12...15)

PICTURE

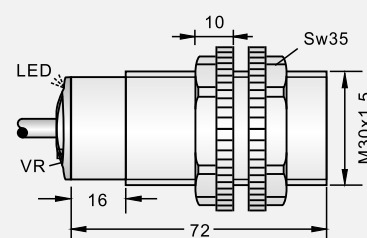
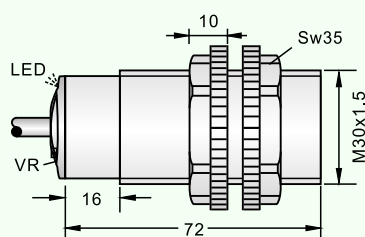


CE



CE

AC-2 wires N.O.	CPT30-S10AA-A2N2	* 20	CPT30-N15AA-A2N2	* 20
AC-2 wires N.C.	CPT30-S10AB-A2N2	* 21	CPT30-N15AB-A2N2	* 21
Rated sensing distance	10mm		15mm	
Mounting	shield		non-shield	
Supply voltage	20...250V AC(50/60Hz)			
Leakage current	≤1.7mA			
Setting distance	0...7mm adjustable		0...10.5mm adjustable	
Standard target	Grounded metal plate (30x30x1mm)		Grounded metal plate (45x45x1mm)	
Frequency	10Hz			
Consumption				
Load current	200mA			
Voltage drop(V _p)	≤8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit				
Operating temperature	-20...+60°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	Cable: φ4.8mm 2M			
Housing material	PBT		PBT	
Sensing face material	PBT			



Dimensional drawing

Remark 20 . 21—NO of wiring diagram(refers to page 12...15)

PICTURE

φ 34, L80



CE

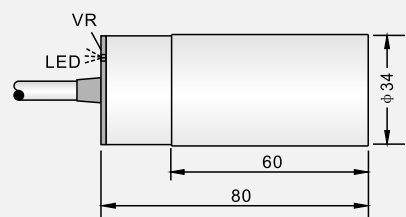
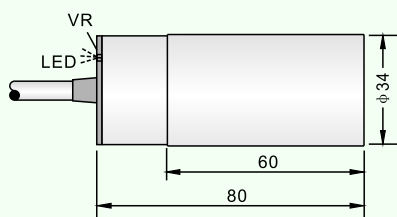
φ 34, L80



CE

DC-3 wires NPN N.O.	CPD34-N15NA-D3Y2	* 01	
DC-3 wires NPN N.C.	CPD34-N15NB-D3Y2	* 02	
DC-3 wires PNP N.O.	CPD34-N15PA-D3Y2	* 03	
DC-3 wires PNP N.C.	CPD34-N15PB-D3Y2	* 04	
AC-2 wires N.O.			CPD34-N15AA-A2N2 * 20
AC-2 wires N.C.			CPD34-N15AB-A2N2 * 21
Rated sensing distance	15mm		
Mounting	non-shield		
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.	20...250VAC(50/60Hz)	
Leakage current	≤0.01mA	≤1.7mA	
Setting distance	0...10.5mm Adjustable		
Standard target	Grounded metal plate (45x45x1mm)		
Frequency	50Hz	10Hz	
Consumption	≤10mA		
Load current	200mA		
Voltage drop(V _p)	≤1.8V	≤8V	
Hysteresis	4...20%		
Repeatability	≤5%		
Display	Red LED		
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection		
Operating temperature	-20...+60°C(no condensation)		
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times		
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours		
Protection	IP67		
Connection	Cable: φ4.8mm 2M		
Housing material	PBT		
Sensing face material	PBT		

Dimensional drawing



Remark

01 . 02 . 03 . 04 . 20 . 21—NO of wiring diagram(refers to page 12...15)

PICTURE

W24xH20xL43



CE

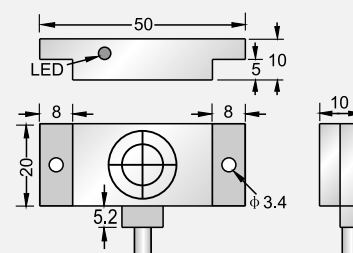
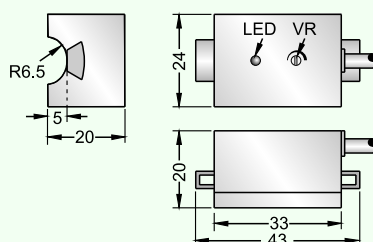
W20xH5xL50



CE

DC-3 wires NPN N.O.	CPSKW-N13NA-D3Y2	* 01	CPSKX-N10NA-D3Y2	* 01
DC-3 wires NPN N.C.	CPSKW-N13NB-D3Y2	* 02	CPSKX-N10NB-D3Y2	* 02
DC-3 wires PNP N.O.	CPSKW-N13PA-D3Y2	* 03	CPSKX-N10PA-D3Y2	* 03
DC-3 wires PNP N.C.	CPSKW-N13PB-D3Y2	* 04	CPSKX-N10PB-D3Y2	* 04
Rated sensing distance	φ 8-13(level detection,thickness≤1mm)		10mm	
Mounting	non-shield			
Supply voltage	12...24V DC (10...30V DC), ripple(p-p):10% max.			
Leakage current	≤0.01mA			
Setting distance	adjustable		0...7mm	
Standard target			Grounded metal plate (45x45x1mm)	
Frequency	50Hz		100Hz	
Consumption	≤10mA			
Load current	100mA			
Voltage drop(V _p)	≤1.8V			
Hysteresis	4...20%			
Repeatability	≤5%			
Display	Red LED			
Protection Circuit	Short circuit protection, reversed polarity protection and overload protection			
Operating temperature	-10...+55°C(no condensation)			
Anti-impact	500m/s ² (50G) X、Y、Z direction, each 10 times			
Anti-vibration	10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
Protection	IP67			
Connection	Cable: φ3.2mm 2M			
Housing material	PBT			
Sensing face material	PBT			

Dimensional drawing



Remark

01 . 02 . 03 . 04—NO of wiring diagram(refers to page 12...15)