CNTD®

Sensor Division

CJY Proximity Sensor Cylindrical Type	E01-09
CJY-T Proximity Sensor Cylindrical Connector Type	E10-16
CJY-R Proximity Sensor Cylindrical Cable Connector Type	E17-23
CJY □ S Long Distance Proximity Sensor Cylindrical Type	E24-27
CJY □ S-T Long Distance Proximity Sensor Cylindrical Connector Type	E28-31
CJY □ S-R Long Distance Proximity Sensor Cylindrical Cable Connector Type	E32-35
CJF Proximity Sensor Square Type	E36-42
CJF Proximity Sensor Flat Type	E43-45
CJF Proximity Sensor Cylindrical Type	E46-50
CJF Long Distance Proximity Sensor Flat Type	E51-53
CRY Capacitive Proximity Sensor	E54-56
CMY Analog Proximity Sensor	E57-58
CHY Hall Sensor	E59-60
CXY Magnetic Sensor	E61-62
CGY Photoelectric Sensor Cylindrical Type	E63-68
CGF Photoelectric Sensor Square Type	E69-78
CGU Photoelectric Sensor U Type	E79-82
Sensor Accessories	E83

CJY Proximity Sensor Cylindrical Type

Features

- Orange mark for standard type
- Light green mark for high-end type

- Inside surge protection, reverse polarity protection
- Long use-life cycle and high reliability, easy install, enconomic price
- Red LED status indication, easy to confirm work situation
- Protection structure IP67(IEC standard)
- Replaceable for limit switches
- Exclusively designed IC for improving anti-jamming capability

■ Orange

■ Light green

Model Number Structure

C	J	Y	18	□	–	08	N	A	□
①	②	③	④	⑤		⑥	⑦	⑧	⑨

Item	Code	Description
① Company code	c	Company code
② Product name	J	Inductive proximity sensor
③ Shape of shell	Y	Cylinder-shaped
④ Dimension code	18	18=M18
⑤ Product type	Without	Without =High-end type（Light green head）
	E	E =Standard type（Orange head）
⑥ Detection distance	08	08=8mm
⑦ Output mode	K	AC 2wires
	L	DC 2wires
	P	PNP 3wires
	N	NPN 3wires
⑧ Output state	A	NO
	B	NC
	C	NO+NC
⑨ Connection	Without	Without: Lead wire
	T	Plug-in
	R	Wiring leads Plug-in

CJY Proximity Sensor Cylindrical Type

CNTD

Specifications

DC 3-wire type

Model		CJY04-01NA CJY04-01NB CJY04-01PA CJY04-01PB	CJY05-01NA CJY05-01NB CJY05-01PA CJY05-01PB	CJY06-01NA CJY06-01NB CJY06-01PA CJY06-01PB	CJY6.5-1.5NA CJY6.5-1.5NB CJY6.5-1.5PA CJY6.5-1.5PB
	High-end type				
	Standard type	/	/	/	/
Sensing distance		1mm	1mm	1mm	1.5mm
Hysteresis		Max. 10% of sensing distance			
Standard sensing target		6×6×1mm (Iron)	7×7×1mm (Iron)	8×8×1mm (Iron)	8×8×1.5mm (Iron)
Setting distance		0~0.8mm	0~0.8mm	0~1.0mm	0~6.5mm
Power supply (Operating voltage)		12-24VDC (10-30VDC)			
Leakage current		Max.10mA			
Response frequency (※1)		1500Hz	1500Hz	1000Hz	1000Hz
Residual voltage (※2)		Max. 1.0V			
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃			
Control output		Max. 200mA			
Insulation resistance		Min. 50MΩ(at 500VDC megger)			
Dielectric strength		1500VAC 50/60Hz for 1minute			
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours			
Shock		500m/s²(approx. 50G) X, Y, Z directions for 3 times			
Indicator		Operation indicator(red LED)			
Ambient temperature		-25~+70℃ (No icing)			
Storage temperature		-30~+80℃ (No icing)			
Ambient humidity		35~95%RH (No condensation)			
Protection circuit		Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit			
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT,Standard cable(Grey): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)			
Cable		ϕ2.8, 3P, 2m			
		AWG22, Core diameter: 0.1mm, Number of cores: 22, Insulator diameter: ϕ1.25			
Protection		IP67			

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY Proximity Sensor Cylindrical Type

Specifications

DC 3-wire type

Model									
	High-end type	CJY08-01NA CJY08-01NB CJY08-01PA CJY08-01PB	CJY08-02NA CJY08-02NB CJY08-02PA CJY08-02PB	CJY12-02NA CJY12-02NB CJY12-02NC CJY12-02PA CJY12-02PB CJY12-02PC	CJY12-04NA CJY12-04NB CJY12-04NC CJY12-04PA CJY12-04PB CJY12-04PC	CJY18-05NA CJY18-05NB CJY18-05NC CJY18-05PA CJY18-05PB CJY18-05PC	CJY18-08NA CJY18-08NB CJY18-08NC CJY18-08PA CJY18-08PB CJY18-08PC	CJY30-10NA CJY30-10NB CJY30-10NC CJY30-10PA CJY30-10PB CJY30-10PC	CJY30-15NA CJY30-15NB CJY30-15NC CJY30-15PA CJY30-15PB CJY30-15PC
	Standard type	CJY08E-01NA CJY08E-01NB CJY08E-01PA CJY08E-01PB	CJY08E-02NA CJY08E-02NB CJY08E-02PA CJY08E-02PB	CJY12E-02NA CJY12E-02NB CJY12E-02NC CJY12E-02PA CJY12E-02PB CJY12E-02PC	CJY12E-04NA CJY12E-04NB CJY12E-04NC CJY12E-04PA CJY12E-04PB CJY12E-04PC	CJY18E-05NA CJY18E-05NB CJY18E-05NC CJY18E-05PA CJY18E-05PB CJY18E-05PC	CJY18E-08NA CJY18E-08NB CJY18E-08NC CJY18E-08PA CJY18E-08PB CJY18E-08PC	CJY30E-10NA CJY30E-10NB CJY30E-10NC CJY30E-10PA CJY30E-10PB CJY30E-10PC	CJY30E-15NA CJY30E-15NB CJY30E-15NC CJY30E-15PA CJY30E-15PB CJY30E-15PC
Sensing distance		1mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance							
Standard sensing target		8 × 8 × 1mm (Iron)		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~0.8mm	0~1.4mm	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		12-24VDC (10-30VDC)							
Leakage current		Max.10mA							
Response frequency (※1)		1000Hz	1000Hz	1000Hz	500Hz	350Hz	400Hz(High-end) 350Hz(standard)		200Hz
Residual voltage		Max. 1.0V							
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃							
Control output		Max. 200mA							
Insulation resistance		Min. 50MΩ (at 500VDC megger)							
Dielectric strength		1500VAC 50/60Hz for 1minute							
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock		500m/s²(approx. 50G) X, Y, Z directions for 3 times							
Indicator		Operation indicator(red LED)							
Ambient temperature		-25~+70℃ (No icing)							
Storage temperature		-30~+80℃ (No icing)							
Ambient humidity		35~95%RH (No condensation)							
Protection circuit		Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit							
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT,Standard cable(Grey): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)							
Cable	High-end type	ϕ2.8, 3P, 2m		ϕ3.8, 3P,4P 2m		ϕ4.8, 3P,4P 2m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 22, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
	Standard type	ϕ2.8, 3P, 1.5m		ϕ3.8, 3P, 4P 1.5m		ϕ4.8, 3P, 4P 1.5m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 22, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
Protection		IP67							

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY Proximity Sensor Cylindrical Type

CNTD

Specifications

DC 2-wire type

Model									
	High-end type	CJY08-01LA CJY08-01LB	CJY08-02LA CJY08-02LB	CJY12-02LA CJY12-02LB	CJY12-04LA CJY12-04LB	CJY18-05LA CJY18-05LB	CJY18-08LA CJY18-08LB	CJY30-10LA CJY30-10LB	CJY30-15LA CJY30-15LB
	Standard type	CJY08E-01LA CJY08E-01LB	CJY08E-02LA CJY08E-02LB	CJY12E-02LA CJY12E-02LB	CJY12E-04LA CJY12E-04LB	CJY18E-05LA CJY18E-05LB	CJY18E-08LA CJY18E-08LB	CJY30E-10LA CJY30E-10LB	CJY30E-15LA CJY30E-15LB
Sensing distance		1mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance							
Standard sensing target		8 × 8 × 1mm (Iron)		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~0.8mm	0~1.4mm	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		12-24VDC (10-30VDC)							
Leakage current		Max.0.6mA							
Response frequency (※1)		1000Hz	1000Hz	1000Hz	500Hz	350Hz	350Hz	200Hz	
Residual voltage		Max. 3.5V							
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃							
Control output		Max. 200mA							
Insulation resistance		Min. 50MΩ (at 500VDC megger)							
Dielectric strength		1500VAC 50/60Hz for 1minute							
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours							
Shock		500m/s²(approx. 50G) X, Y, Z directions for 3 times							
Indicator		Operation indicator(red LED)							
Ambient temperature		-25~+70℃ (No icing)							
Storage temperature		-30~+80℃ (No icing)							
Ambient humidity		35~95%RH (No condensation)							
Protection circuit		Surge protection circuit							
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Gray): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)							
Cable	High-end type	ϕ2.8, 2P, 2m		ϕ3.8, 2P, 2m		ϕ4.8, 2P, 2m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 22, Insulator diameter: ϕ1.25)		(AWG22 Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
	Standard type	ϕ2.8, 2P, 1.5m		ϕ3.3, 2P, 1.5m		ϕ4.8, 2P, 1.5m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 22, Insulator diameter: ϕ1.25)		(AWG22 Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
Protection		IP67							

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY Proximity Sensor Cylindrical Type

Specifications

AC 2-wire type

Model							
	High-end type	/	CJY12-04KA CJY12-04KB	CJY18-05KA CJY18-05KB	CJY18-08KA CJY18-08KB	CJY30-10KA CJY30-10KB	CJY30-15KA CJY30-15KB
	Standard type	CJY12E-02KA CJY12E-02KB	CJY12E-04KA CJY12E-04KB	CJY18E-05KA CJY18E-05KB	CJY18E-08KA CJY18E-08KB	CJY30E-10KA CJY30E-10KB	CJY30E-15KA CJY30E-15KB
Sensing distance		2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance					
Standard sensing target		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		24-250VAC()					
		90-250VAC ()					
Leakage current		Max.10mA					
Response frequency (※1)		20Hz					
Residual voltage		Max. 10V					
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃					
Control output		Max. 200mA					
Insulation resistance		Min. 50MΩ (at 500VDC megger)					
Dielectric strength		1500VAC 50/60Hz for 1minute					
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock		500m/s^2(approx. 50G) X, Y, Z directions for 3 times					
Indicator		Operation indicator(red LED)					
Ambient temperature		-25~+70℃ (No icing)					
Storage temperature		-30~+80℃ (No icing)					
Ambient humidity		35~95%RH (No condensation)					
Protection circuit		Surge protection current					
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Gray): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)					
Cable	High-end type	ϕ3.8, 2P, 2m		ϕ4.8, 2P, 2m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
	Standard type	ϕ3.8, 2P, 1.5m		ϕ4.8, 2P, 1.5m			
		(AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: ϕ1.25)		(AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: ϕ1.25)			
Protection		IP67					

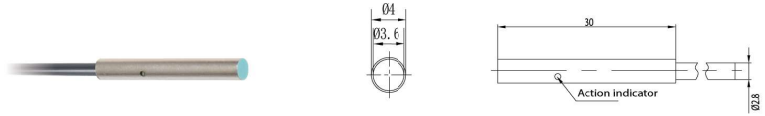
(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY Proximity Sensor Cylindrical Type (High-end type)

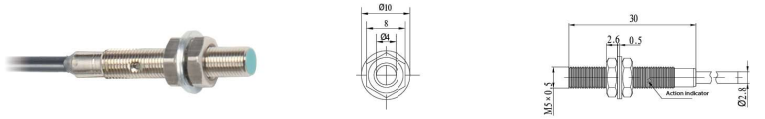
CNTD

Appearance and Dimension

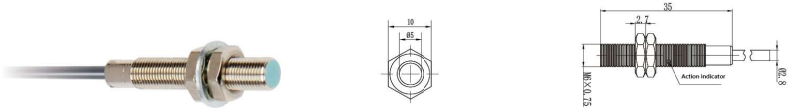
CJY04-01



CJY05-01

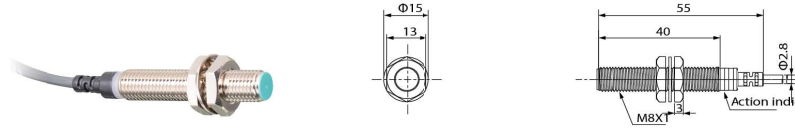


CJY06-01



CJY6.5-1.5

CJY08-01



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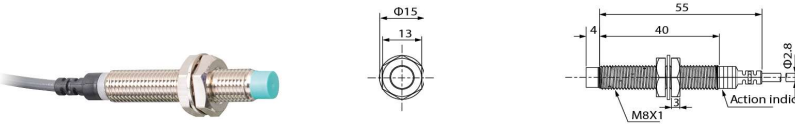
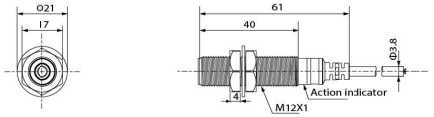


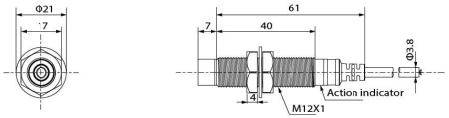
CJY Proximity Sensor Cylindrical Type (High-end type)

Appearance and Dimension

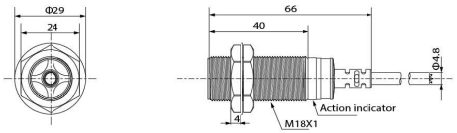
CJY12-02



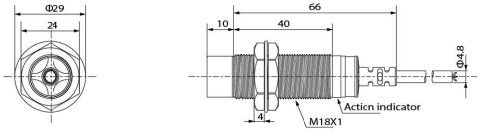
CJY12-04



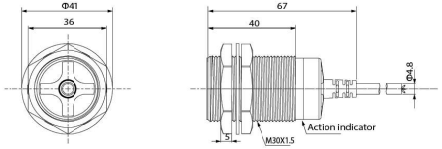
CJY18-05



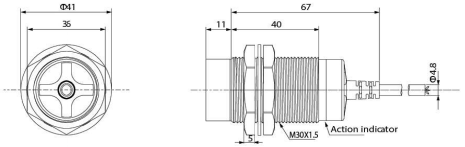
CJY18-08



CJY30-10



CJY30-15

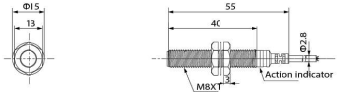


CJY Proximity Sensor Cylindrical Type (Standard type)

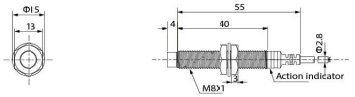
CNTD

Appearance and Dimension

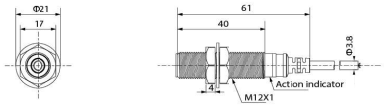
CJY08E-01



CJY08E-02



CJY12E-02



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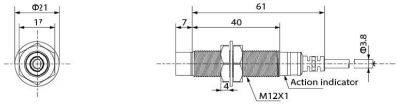

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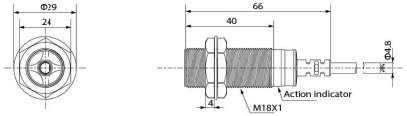
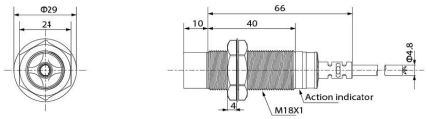
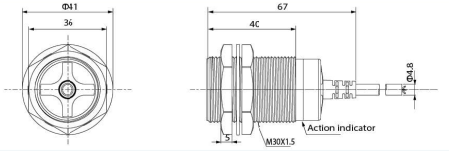


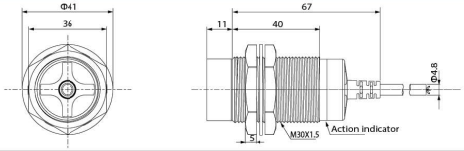
CJY18E-08



CJY30E-10



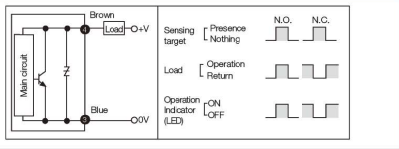
CJY30E-15



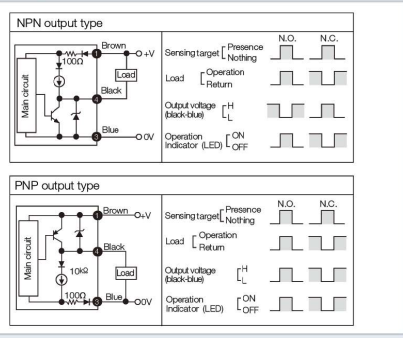
CJY Proximity Sensor Cylindrical Type

Control Output Diagram

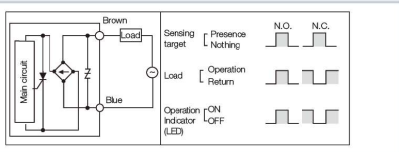
DC 2-wire type



DC 3-wire type

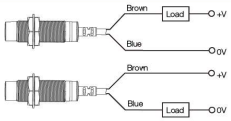


AC 2-wire type



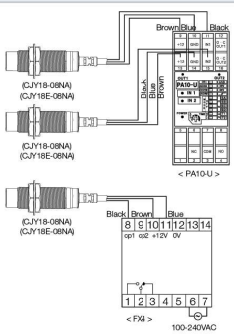
Connections

DC 2-wire type

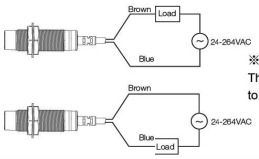


※ The load can be connected to another line

DC 3-wire type



AC 2-wire type



※ The load can be connected to either wire.

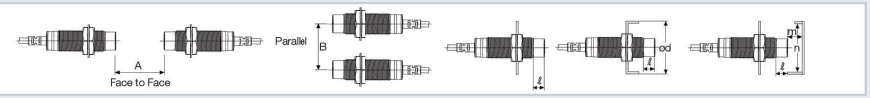
Proper Usage

Mutual-interference

When several proximity sensors are mounted close to one another a malfunction of the sensor may be caused due to mutual interference. Therefore, be sure to provide a minimum distance between the two sensors as below chart indicates.

Influence by surrounding metals

When sensors are mounted on metallic panel, you must prevent the sensors from being affected by any metallic object except target. Therefore, be sure to provide a minimum distance as below chart indicates.



Item \ Model	CJY08-01 CJY08E-01	CJY08-02 CJY08E-02	CJY12-02 CJY12E-02	CJY12-04 CJY12E-04	CJY18-05 CJY18E-05	CJY18-08 CJY18E-08	CJY30-10 CJY30E-10	CJY30-15 CJY30E-15
A	9	12	12	24	30	48	60	90
B	16	24	24	36	36	54	60	90
ℓ	0	8	0	11	0	14	0	15
ϕ d	8	24	12	36	18	54	30	90
m	4.5	6	6	12	15	24	30	45
n	12	24	18	36	27	54	45	90

CJY-T Proximity Sensor Cylindrical Connector Type

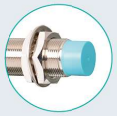
CNTD

Features

- Orange mark for standard type
- Light green mark for high-end type

- Exclusively designed IC for improving anti-jamming capability
- Inside surge protection, reverse polarity protection, overcurrent protection
- Long use-life cycle and high reliability, easy install, enconomic price
- Red LED status indication, easy to confirm work situation
- Protection structure IP65(IEC standard)
- Replaceable for limit switches

■ Orange



■ Light green

Model Number Structure

C	J	Y	18	☐	–	08	N	A	T
①	②	③	④	⑤		⑥	⑦	⑧	⑨

Item	Code	Description
① Company code	C	Company code
② Product name	J	Inductive proximity sensor
③ Shape of shell	Y	Cylinder-shaped
④ Dimension code	18	18=M18
⑤ Product type	Without	Without = High-end type（Light green head）
	E	E=Standard type（Orange head）
⑥ Detection distance	08	08=8mm
⑦ Output mode	K	AC 2wires
	L	DC 2wires
	P	PNP 3wires
	N	NPN 3wires
⑧ Output state	A	NO
	B	NC
	C	NO+NC
⑨ Connection	Without	Without: Lead wire
	T	Plug-in
	R	Wiring leads Plug-in

CJY-T Proximity Sensor Cylindrical Connector Type

Specifications

DC 3-wire type

Model							
	High-end type	CJY12-02NAT CJY12-02NBT CJY12-02NCT CJY12-02PAT CJY12-02PBT CJY12-02PCT	CJY12-04NAT CJY12-04NBT CJY12-04NCT CJY12-04PAT CJY12-04PBT CJY12-04PCT	CJY18-05NAT CJY18-05NBT CJY18-05NCT CJY18-05PAT CJY18-05PBT CJY18-05PCT	CJY18-08NAT CJY18-08NBT CJY18-08NCT CJY18-08PAT CJY18-08PBT CJY18-08PCT	CJY30-10NAT CJY30-10NBT CJY30-10NCT CJY30-10PAT CJY30-10PBT CJY30-10PCT	CJY30-15NAT CJY30-15NBT CJY30-15NCT CJY30-15PAT CJY30-15PBT CJY30-15PCT
	Standard type	CJY12E-02NAT CJY12E-02NBT CJY12E-02NCT CJY12E-02PAT CJY12E-02PBT CJY12E-02PCT	CJY12E-04NAT CJY12E-04NBT CJY12E-04NCT CJY12E-04PAT CJY12E-04PBT CJY12E-04PCT	CJY18E-05NAT CJY18E-05NBT CJY18E-05NCT CJY18E-05PAT CJY18E-05PBT CJY18E-05PCT	CJY18E-08NAT CJY18E-08NBT CJY18E-08NCT CJY18E-08PAT CJY18E-08PBT CJY18E-08PCT	CJY30E-10NAT CJY30E-10NBT CJY30E-10NCT CJY30E-10PAT CJY30E-10PBT CJY30E-10PCT	CJY30E-15NAT CJY30E-15NBT CJY30E-15NCT CJY30E-15PAT CJY30E-15PBT CJY30E-15PCT
Sensing distance		2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance					
Standard sensing target		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		12-24VDC (10-30VDC)					
Leakage current		Max.10mA					
Response frequency (※1)		1000Hz	500Hz	500Hz	350Hz	350Hz(High-end) 400Hz(standard)	200Hz
Residual voltage		Max. 1.0V					
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃					
Control output		Max. 200mA					
Insulation resistance		Min. 50MΩ (at 500VDC megger)					
Dielectric strength		1500VAC 50/60Hz for 1minute					
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock		500m/s²(approx. 50G) X, Y, Z directions for 3 times					
Indicator		Operation indicator(red LED)					
Ambient temperature		-25~+70℃ (No icing)					
Storage temperature		-30~+80℃ (No icing)					
Ambient humidity		35~95%RH (No condensation)					
Protection circuit		Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit					
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT					
Protection		IP65					

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY-T Proximity Sensor Cylindrical Connector Type

CNTD

Specifications

DC 2-wire type

Model							
	High-end type	CJY12-02LAT CJY12-02LBT	CJY12-04LAT CJY12-04LBT	CJY18-05LAT CJY18-05LBT	CJY18-08LAT CJY18-08LBT	CJY30-10LAT CJY30-10LBT	CJY30-15LAT CJY30-15LBT
	Standard type	CJY12E-02LAT	CJY12E-04LAT	CJY18E-05LAT	CJY18E-08LAT	CJY30E-10LAT	CJY30E-15LAT
Sensing distance		2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance					
Standard sensing target		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		12-24VDC (10-30VDC)					
Leakage current		Max.0.6mA					
Response frequency (※1)		1000Hz	500Hz	500Hz	350Hz	350Hz	200Hz
Residual voltage		Max. 3.5V					
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃					
Control output		Max. 200mA					
Insulation resistance		Min. 50MΩ (at 500VDC megger)					
Dielectric strength		1500VAC 50/60Hz for 1minute					
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock		500m/s²(approx. 50G) X, Y, Z directions for 3 times					
Indicator		Operation indicator(red LED)					
Ambient temperature		-25~+70℃ (No icing)					
Storage temperature		-30~+80℃ (No icing)					
Ambient humidity		35~95%RH (No condensation)					
Protection circuit		Surge protection circuit					
Material		Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT					
Protection		IP65					

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

CJY-T Proximity Sensor Cylindrical Connector Type

Specifications

AC 2-wire type

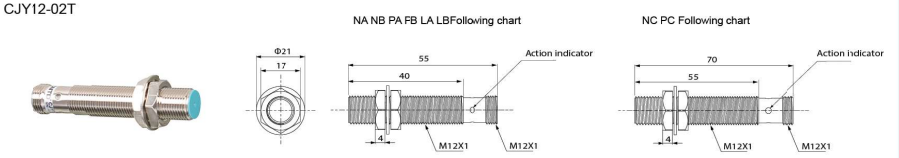
Model							
	High-end type	/	CJY12-04KAT CJY12-04KBT	CJY18-05KAT CJY18-05KBT	CJY18-08KAT CJY18-08KBT	CJY30-10KAT CJY30-10KBT	CJY30-15KAT CJY30-15KBT
	Standard type	CJY12E-02KAT CJY12E-02KBT	CJY12E-04KAT CJY12E-04KBT	CJY18E-05KAT CJY18E-05KBT	CJY18E-08KAT CJY18E-08KBT	CJY30E-10KAT CJY30E-10KBT	CJY30E-15KAT CJY30E-15KBT
Sensing distance		2mm	4mm	5mm	8mm	10mm	15mm
Hysteresis		Max. 10% of sensing distance					
Standard sensing target		12 × 12 × 1mm (Iron)		18 × 18 × 1mm (Iron)	25 × 25 × 1mm (Iron)	30 × 30 × 1mm (Iron)	45 × 45 × 1mm (Iron)
Setting distance		0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
Power supply (Operating voltage)		90-250VAC					
Leakage current		Max.10mA					
Response frequency (※1)		20Hz					
Residual voltage		Max. 10V					
Affection by Temp.		Max. ± 10% for sensing distance at ambient temperature 20℃					
Control output		Max. 200mA					
Insulation resistance		Min. 50MΩ (at 500VDC megger)					
Dielectric strength		1500VAC 50/60Hz for 1minute					
Vibration		1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
Shock		500m/s^2(approx. 50G) X, Y, Z directions for 3 times					
Indicator		Operation indicator(red LED)					
Ambient temperature		-25~+70℃ (No icing)					
Storage temperature		-30~+80℃ (No icing)					
Ambient humidity		35~95%RH (No condensation)					
Protection circuit		Surge protection current					
Material		Case/Nut: Nickel plated Brass. Washer: Nickel plated Iron, Sensing surface: PBT					
Protection		IP65					

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

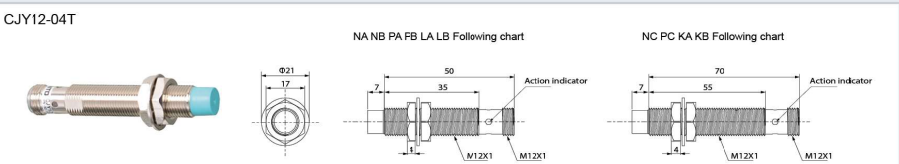
CJY-T Proximity Sensor Cylindrical Connector Type (High-end type) CNTD

Appearance and Dimension

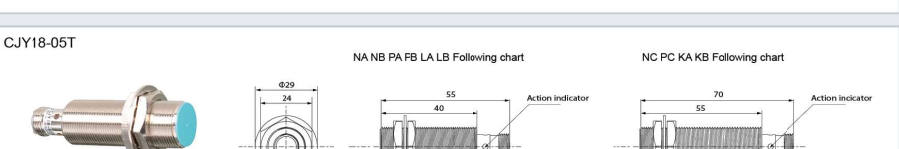
CJY12-02T



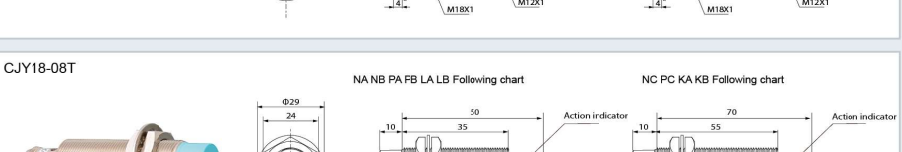
CJY12-04T



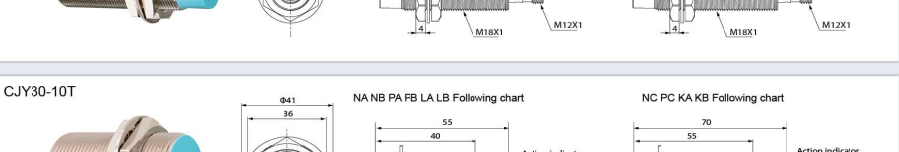
CJY18-05T



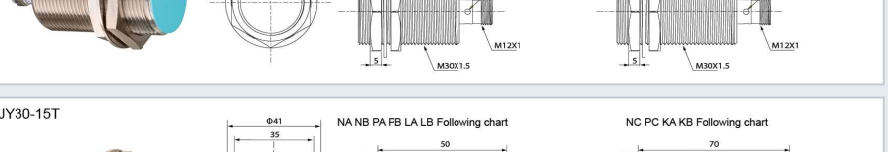
CJY18-08T



CJY30-10T



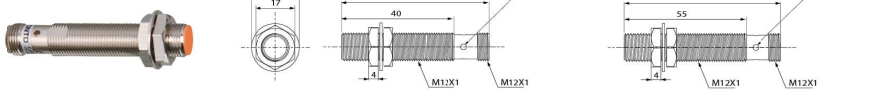
CJY30-15T



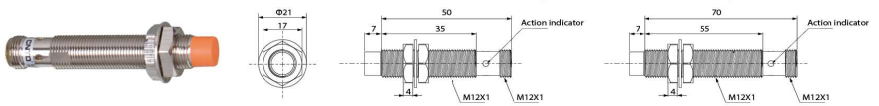
CJY-T Proximity Sensor Cylindrical Connector Type (Standard type)

Appearance and Dimension

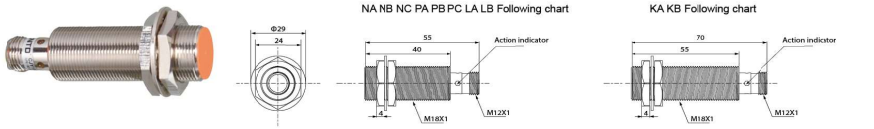
CJY12E-02T



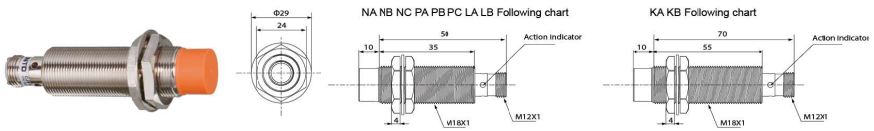
CJY12E-04T



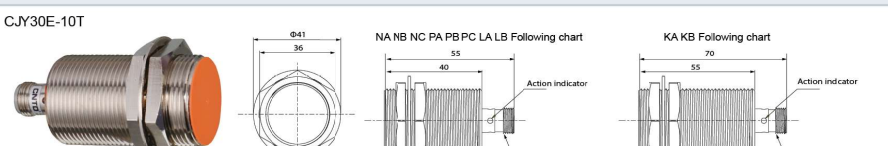
CJY18E-05T



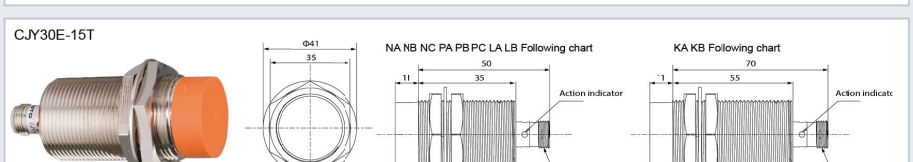
CJY18E-08T



CJY30E-10T



CJY30E-15T

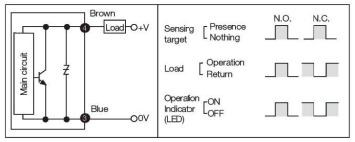


CJY-T Proximity Sensor Cylindrical Connector Type

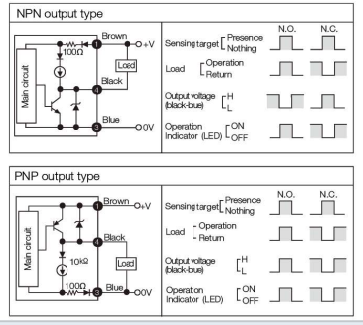
CNTD

Control Output Diagram

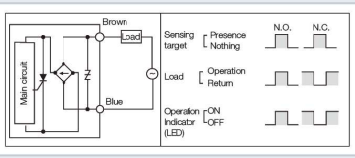
DC 2-wire type



DC 3-wire type

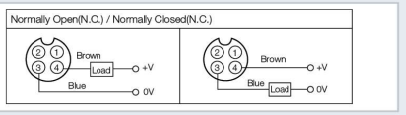


AC 2-wire type



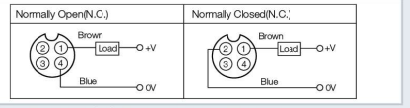
Wiring Diagram

DC 2-wire type (Standard type)



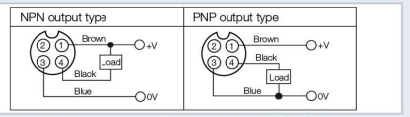
※ Pin ①, ② are not used teminals.
※ When using DC 3-wire type of connector cable, black (12-24VDC) and blue(0V) cables can be used.

DC 2-wire type (IEC standard type)



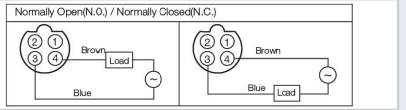
※ ②, ③ of N.C. type and ③, ④ of N.C. type are not used terminals.
※ Please use the IEC specifications of the plug.

DC 3-wire type



※ Please fasten the cleat of connector not to shown the thread. (0.39 to 0.49N.m)
※ Please fasten the vibration part with Teflon tape.

AC 2-wire type



※ In case of AC switching type, ② and ③, ① and ④ are connected to each other nside.

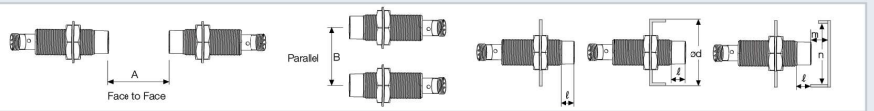
Proper Usage

utual-interference

When several proximity sensors are mounted close to one another a malfunction of the sensor may be caused due to mutual interference. Therefore, be sure to provide a minimum distance between the two sensors as below chart indicates.

Influence by surrounding metals

When sensors are mounted on metallic panel, you must prevent the sensors from being affected by any metallic object except target. Therefore, be sure to provide a minimum distance as below chart indicates.



Item \ Model	CJY12-02T CJY12E-02T	CJY12-04T CJY12E-04T	CJY18-05T CJY18E-05T	CJY18-08T CJY18E-08T	CJY30-10T CJY30E-10T	CJY30-15T CJY30E-15T
A	12	24	30	48	60	90
B	24	36	36	54	60	90
ℓ	0	11	0	14	0	15
ϕ d	12	36	18	54	30	90
m	6	12	15	24	30	45
n	18	36	27	54	45	90