

Instructions

- Do not use the proximity switch at voltages and currents that exceed its "Specifications" (see page J-71). If the voltage or current is too low, the operation indication light may not light up. Use within the range of "Specifications".
- Electrical Conduit Connection
 - When wiring to the proximity switch, be sure to turn off the power to the electrical circuit on the connection side before proceeding.
 - When wiring switches for DC, pay close attention to the polarity (color of lead wires and plus/minus terminal positions of connectors) and connect them correctly. If the wiring is reversed the operation indication light will not light.
 - When using a cable cord for wiring to the connector type, use a JIS C 3306 VCTF 0.3 to 0.75 mm² 2-core, outer diameter 4 to 6 mm or less. For lead wires type, use cable cords of 0.3 to 0.75 mm² or less.
- Cylinders with proximity switches use magnetic and electronic components, and should not be used at ambient temperatures above 70°C due to their temperature characteristics. Use hydraulic fluid within both viscosities of 20 to 400 mm²/s and temperatures of -10 to +60°C.
- The proximity switch may malfunction in locations where there is a strong magnetic field or high current in the surrounding area (e.g., spot welders). In such cases Use an iron plate or other magnetic material to block the magnetism.
- When using multiple cylinders with proximity switches in close proximity, provide a distance of at least 30 mm between the switch and the other cylinders to avoid the influence of the magnet built into the piston.
- Avoid use the proximity switch in locations where the cylinder body is buried in iron or magnetic chips, as this may cause the proximity switch to malfunction.
- Since a magnet is used in the cylinder piston section, it may be affected by iron powder in the hydraulic system. We recommend installing a micro-separator (Model No. MGB-260, etc.) in the hydraulic tank to remove such iron powder.

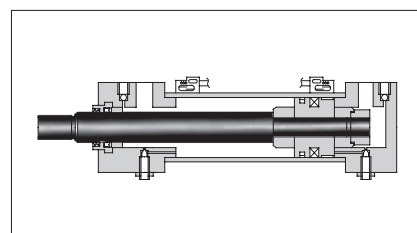
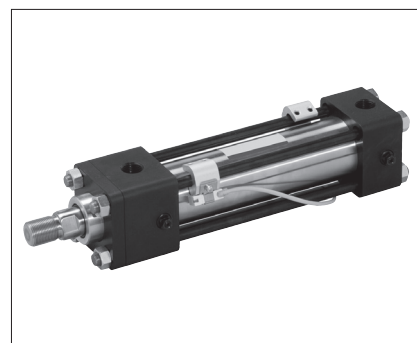
For other instructions, refer to "instructions" pages J-4 to J-7.

"CJT" Series Hydraulic Cylinders with Proximity Switch

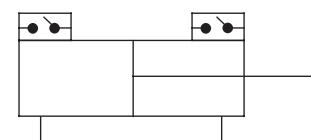
- The detection position of the cylinder can be set arbitrarily and easily by adjusting the position of the slide type proximity switch on the cylinder body.
- The position sensing device attached to the machine body is no longer necessary, which reduces the man-hours required for design and assembly and also makes the equipment more compact.
- Proximity switches are available in lead wire and plug-in connector types, which can be selected according to the application. The lead wire type is available in 1.5 m (standard) and 5 m lead lengths.

Specifications

Descriptions		CJT35L	CJT70L	CJT140L	CJT210CL
Cylinder Bore	mm	32, 40, 50 63, 80, 100	32, 40, 50 63, 80, 100 125	32, 40, 50 63, 80, 100 125	40, 50, 63 80
Nominal Pressure★	MPa	3.5	7	14	21
Maximum Allowable Pressure★ MPa	Cap Side		9	18	26.5
	Rod Side	Rod Size A	15	18	26.5
		Rod Size B	13.5	18	24.5
		Rod Size C	11	14	—
Operating Maximum Speed	mm/s	300 or less			
Ambient Temperature Range		-10 - +70°C			
Applicable Standard		Compliant with former JIS B8354			



Graphic Symbol



★ Refer to page J-7 for definitions of pressure terms.

Note. The basic specifications of cylinders with proximity switch are the same as those of 3.5, 7, 14 MPa series standard cylinder and 21 MPa series compact type cylinder. Please refer to page J-8 (C J T35), J-19 (CJT70/140) and J-41 (CJT210C).

Refer to the table below for the minimum stroke to which the proximity switch can be attached.

- Minimum stroke to which the proximity switch can be attached

Series Number	Cylinder Bore mm	Except TC		TC Trunnion Position:Standard	
		Number Of Switches			
		1	2 ★1.2	1	2 ★2
CJT35L	32	25		55	105
	40				
	50				
	63	20			
	80				
100	60	110			
CJT70L CJT140L	32	20	30	50	110
	40				115
	50				125
	63			130	
	80			135	
	100			150	
	125			70	150
CJT210CL	40	20		50	130
	50	15	20		
	63	20		60	150
	80			70	170

★1. When two proximity switches other than the TC type are mounted, the switch mounting surface is different.

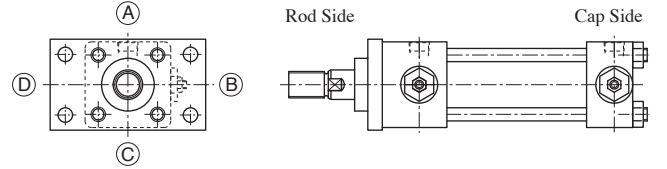
★2. For two or more switches, please consult us.

Model Number Designation

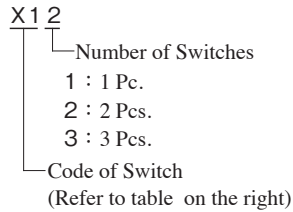
F	CJT140L	-LA	80	B	100	B	-A	B	D	-E	-20	
Packing Material	Series Number	Mounting Type	Cylinder Bore mm	Rod Size	Cylinder Stroke mm	Cushion Type	Port Position	Cushion Adj. Valve Position	Air Vent Valve Position	Options ^{★1}	Design Number	
None : Nitrile Rubber (Standard) F : Fluoro Rubber 6 : ^{★5} Hydrogenated Nitrile Rubber	CJT35L : 3.5 MPa Series Standard Cylinder with Proximity Switch	SD,LA LB,FA FB,CA CB,TA TC	32, 40 50, 63 80,100	S : Rod S (Special)			(Viewed from Rod End) A : Upper (Standard)	B : Right (Standard)	Two positions except for cushion and port	F : With Dust Cover (Material: Nylon Tarpaulin, Heat resistant up to 80°C) G : With Dust Cover (Material: Chloroprene, Heat resistant up to 130°C) H : With Dust Cover (Material: Conex, Heat resistant up to 200°C) K : With Lock Nut L : With T-End (Rod End Eye) M : With Y-End (Rod End Clevis) X * * } Code of proximity switch ^{★3} Y * * }	30	
	CJT70L : 7 MPa Series Standard Cylinder with Proximity Switch	SD,LA LB,FA FB,FC FD,FE FF,FY CA,CB TA,TC	32, 40 50, 63 80,100 125	A : Rod A (Super Strong)		B : ^{★4} With Cushion on Both ends R : ^{★4} With Cushion on the Rod side	B : Right	A : Upper	D : Left (Standard)	Please consult us separately for options for Rod A. E : With Long Rod End Thread F : With Dust Cover (Material: Nylon Tarpaulin, Heat resistant up to 80°C) G : With Dust Cover (Material: Chloroprene, Heat resistant up to 130°C) H : With Dust Cover (Material: Silicon Glass, Heat resistant up to 250°C) K : K:With Lock Nut (E : Used in combination with long rod end thread) L : With T-End (Rod End Eye) M : With Y-End (Rod End Clevis) N : Double Rod X * * } Code and number of proximity switch ^{★3} Y * * }	20	
	CJT140L : 14 MPa Series Standard Cylinder with Proximity Switch	SD,LA LB,FC FD,FE FF,FY CA,CB TA,TC	32, 40 50, 63 80,100 125	B : Rod B (Strong)	Cylinder Stroke	H : With Cushion on the Cap side N : Without Cushion	D : Left	D : Left	B : Right	C : Under		
	CJT210CL : 21 MPa Series Compact Type Cylinder with Proximity Switch	SD,LA FA,FB CA,TC	40, 50 63, 80	A : Rod A	B : Rod B					Two positions except for cushion and port	E : With Long Rod End Thread F : With Dust Cover (Material: Nylon Tarpaulin, Heat resistant up to 80°C) G : With Dust Cover (Material: Chloroprene, Heat resistant up to 130°C) H : With Dust Cover (Material: Conex, Heat resistant up to 200°C) K : With Lock Nut (E : Used in combination with long rod end thread) L : With T-End (Rod End Eye) M : With Y-End (Rod End Clevis) X * * } Code and number of proximity switch ^{★3} Y * * }	20

- ★1. Using the options in combination is available. Please specify the option code in the alphabet. ex. EGK LX52
However, in case of the double type, the options E,F,G,H and K are attached to the both ends. The options L and M are attached at one end only.
- ★3. Please refer to the next page for the code and quantity of proximity switches to be ordered. All switches are CE compliant.
- ★4. Cushion type "B" and "R" are not available for CJT70L and CJT140L rod A series with cylinder bore 40, 50, and 63.
- ★5. 6 : Hydrogenated Nitrile Rubber is not available for CJT70L/140L.

- ★2. As for each direction of port & cushion adj. valve, air vent valve, please select from (A)(B)(C)(D) viewed from rod end(see the figure on the below). For standard directions, please see the Model Number Designation.
Note : <CJT35L, CJT210CL>
The direction of port, cushion adj. valve, and air vent valve are not available to be the same direction.
In addition, the direction of air vent valve is two sides except for the port and cushion adj. valve.
<CJT70/140L>
The direction of port and cushion valve are not available to be the same direction. However, port and air vent valve, and cushion adj. valve and air vent valve can be the same direction.



● Proximity Switch Code and Number



Code	Switch Type	Details	
X1	AX111CE	Contact Switch	Lead Wire 1.5m
X5	AX115CE		Lead Wire 5m
XA	AX11ACE		Plug-in Connector(AC)
XB	AX11BCE		Plug-in Connector(DC)
Y1	AX201CE	Contactless Switch	Lead Wire 1.5m
Y5	AX205CE		Lead Wire 5m

* Please refer to "Switch Specifications" below to determine the proximity switch format.

■ Switch Specifications

		Contact Switch				Contactless Switch		
Type	Lead Wire 1.5m	AX111CE	—	—	—	AX201CE	—	
	Lead Wire 5m	—	AX115CE	—	—	—	AX205CE	
	Plug-in Connector (AC)	—	—	AX11ACE★ ³	—	—	—	
	Plug-in Connector (DC)	—	—	—	AX11BCE★ ³	—	—	
Load Voltage Range	5 to 120 V AC	5 to 30 V DC	5 to 120 V AC	5 to 30 V DC	5 to 30V DC			
Load Current Range	5 to 20 mA AC	5 to 40 mA DC	5 to 20 mA AC	5 to 40 mA DC	5 to 40mA DC			
Maximum Switching Capacity	2 VA : AC	1.5 W : DC	2 VA	1.5 W	—			
Voltage Drop	TYP ; 2V (at 10mA) 3V以下					4 V or less		
Current Leakage	10μ A or less					0.1 mA or less		
Operating Time	1 ms or less					10 ms or less		
Repeatability	1 ms or less					10 ms or less		
Insulation Resistance	100 MΩ or more (between case and cord) at 500 V DC mega							
Voltage Proof	1500 V AC for 1 minute (between case and cord)							
Shock Proof	294 m/s ² (Non-Repetitive)				490 m/s ² (Non-Repetitive)			
Vibration Proof	±0.75mm amplitude, 10 to 55Hz (1 sweep, 1 minute) 2 hours in each direction X, Y, Z ±0.3mm amplitude, 10 to 200Hz (Log sweep, 1 hour) X, Y, Z directions							
Ambient Temperature	-10 - +70°C (No freezing)							
Wiring Method	0.3 mm ² 2-core, outer diameter 4 mm oil-resistant cabtyre cord							
Protective Structure	IP67 (IEC standard), JIS C 0920 (dust and immersion proof)							
Contact Protection Circuit	Available							
Indicator Light	Light Emitting Diode(Red color lighting when switch is "ON".)							
Allowable Length of Wire★ ²	10 m : AC				100 m : DC		10 m	
Electrical Circuit								
Compatible Load	Compact Relay Programmable Controller							

★1. In the case of DC power supply, pay attention to the polarity (color of the lead wires or position of the plus/minus terminals of the connector) and make sure that the wiring is correct.

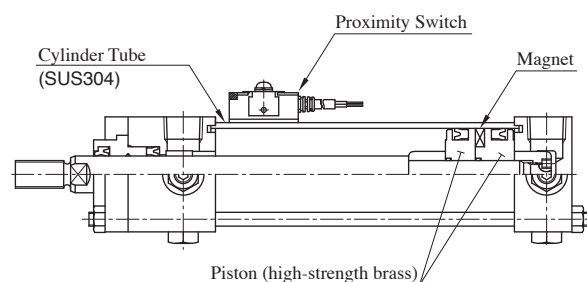
★2. If the wiring length exceeds the allowable wiring length, please consult us.

★3. The connector used for the type with connector is NECA (Nippon Electric Control Equipment Industries Association standard) 4202 connector for FA sensors (M12 × 1).

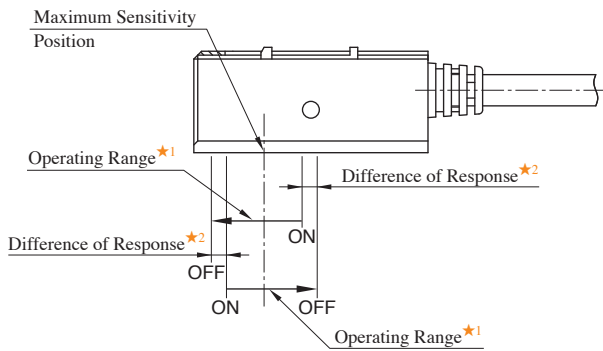
★4. When using an inductive load (relay, etc.) without a contact protection circuit, be sure to attach a protection circuit to the load.

■ Structure and Operation

When the cylinder piston moves and is positioned below the proximity switch, the magnetic field generated by the magnet built into the piston activates the switch to detect the cylinder stroke position.



Operating Characteristics of Proximity Switch



★1. Operating Range

The distance traveled by the piston in one direction from the time the switch turns ON to the time it turns OFF.

★2. Difference of Response

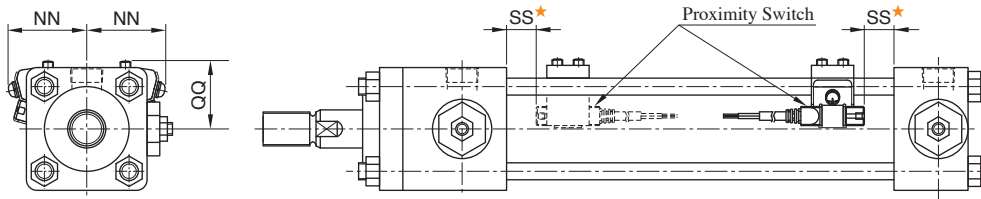
The distance traveled by the piston in one direction from the position where the switch turns ON to the position where the piston travels in the opposite direction to turn OFF. The switch characteristics are unstable in this region.

Series Number	Cylinder Bore mm	Contact Switch		Contactless Switch	
		Operating Range mm	Diff. of Response mm	Operating Range mm	Diff. of Response mm
CJT35L	32	5 - 10	1 or less	3 - 6	1 or less
	40				
	50	7 - 11		3 - 7	
	63			4 - 7	
	80				
100	8 - 12				
CJT70L	32	4 - 14	2 or less	3 - 8	1 or less
	40				
	50				
	63				
	80				
CJT140L	100	11 - 18	4 - 10		
	125	5 - 15	6 - 13		
CJT210CL	40	4 - 14	2 or less	3 - 8	2 or less
	50				
	63				
	80				

Dimensions

Installation dimensions for cylinders with proximity switch are the same as for the "CJT" series hydraulic cylinders, so please refer to the appropriate page.

The dimensions of the proximity switch and the optimum installation position for stroke end position detection are as follows.

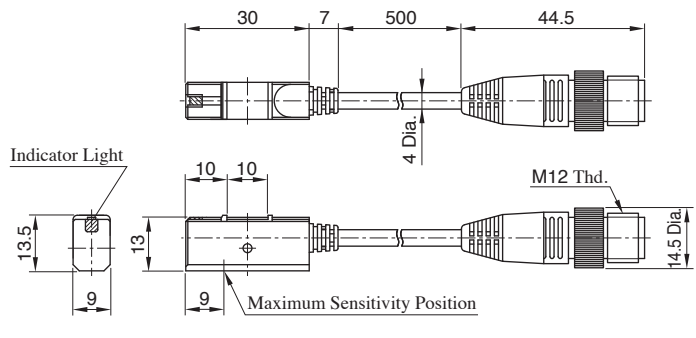
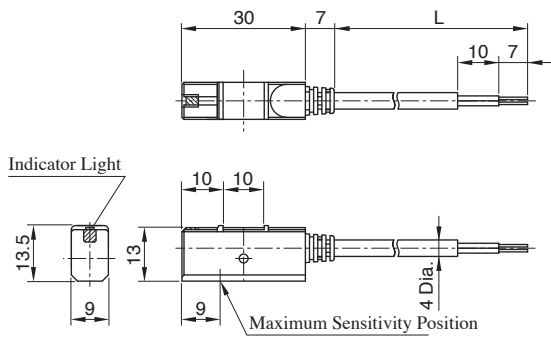


★The SS dimension is the optimum setting position for stroke end detection. The maximum sensitivity position of the switch is SS + 9 mm.

Series Number	Cylinder Bore mm	Piston Rod Size	NN	QQ	SS	
					Contact/Contactless Switch	
					Rod Side	Cap Side
CJT35L	32	S	34	34	5	
	40		36	30	5	
	50		41	35	5	
	63		47	40	6	
	80		54	54	4	
	100		65	60	4	
CJT70L CJT140L	32	A·B·C Common	38	33	14	
	40		41	36	14	
	50		47	45	14	
	63		52	50	26	
	80		62	60	30	
	100		72	73	28	
	125		85	85	30	
CJT210CL	40	A·B Common	40	40	16	14
	50		46	46	17	13
	63		53	53	17	
	80		61	61	18	

Dimensions of Proximity Switch

- Lead Wire Type : AX111CE, AX115CE, AX201CE-1, AX205CE-1
- Plug-in Type : AX11ACE, AX11BCE

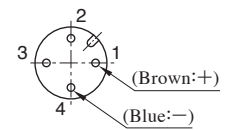
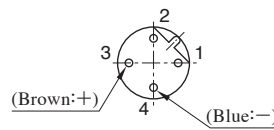


Switch Type	L
AX111CE AX201CE-1	1500
AX115CE AX205CE-1	5000

Connector Pin

AX11ACE (AC)

AX11BCE (DC)



Handling Proximity Switch

Method of setting and fixing the detection position

1. The switch can be mounted on any tie rod. Mounting the switch in the most suitable location according to the mounting space and wiring method of the cylinder.
2. Loosen the two set screws securing the bracket on which the switch is mounted with an Allen wrench, and move the switch along the tie rods.
Refer to the table below for set screw sizes.
3. For position detection at the stroke end, adjust the position referring to the SS dimensions in the outline dimension drawing on the previous page.
For position detection at the mid-stroke, adjust the position so that the switch indicator light starts to turn on at the desired position.
4. Press down lightly on the top surface of the switch with your finger and tighten the set screw while the cylinder tube is in contact with the detection surface of the switch. Refer to the table below for the proper tightening torque for the set screw.
Note: If the tightening torque is not appropriate, the switch may be misaligned.

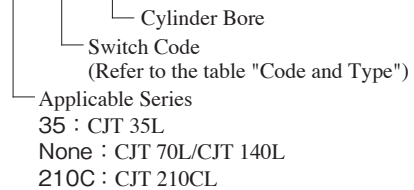
Set Screw Size and Correct Tightening Torque

Series Number	Cylinder Bore	Screw Size	Appropriate Tightening Torque Nm
CJT35L	32 - 80	M5 Thd.	1 - 2
CJT70L	32, 40	M5 Thd.	
CJT140L	50 - 125	M6 Thd.	2 - 3
CJT210CL	40	M5 Thd.	1 - 2
	50 - 80	M6 Thd.	2 - 3

How to Order Proximity Switch

1. When ordering a proximity switch ass'y including bracket, please specify according to the following.

Example : 35-X1-40



Code and Type

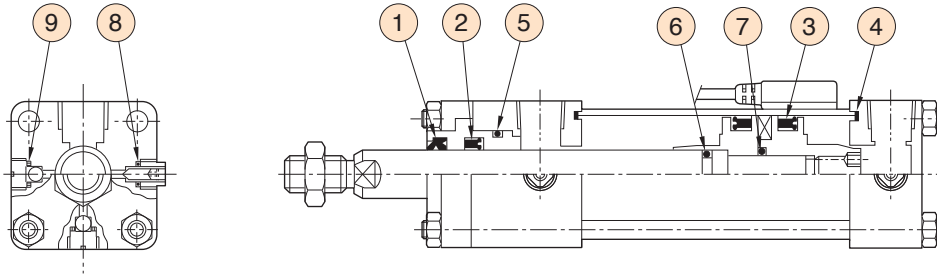
Switch Code	Switch Type	Details	
X1	AX111CE	Contact Type	Lead Wire 1.5 m
X5	AX115CE		Lead Wire 5 m
XA	AX11ACE		Plug-in Connector (AC)
XB	AX11BCE		Plug-in Connector (DC)
Y1	AX201CE	Contactless Type	Lead Wire 1.5 m
Y5	AX205CE		Lead Wire 5 m

2. When ordering a single proximity switch, use the switch code in the table above.

Ex) Proximity Switch: X1

List of Seals

CJT35L



Item		①	②	③	④	⑤	⑥	⑦	⑧	⑨
Cylinder Bore	Name	Dust Seal	Rod Packing	Piston Packing	Packing for Cover	O-Ring for Bush	O-Ring A for Piston	O-Ring B for Piston	Cushion Valve Seal	Check Valve Seal
	Model Numbers for Seal Kit ^{★1}	Q'ty	1	1	2	2	★2	★2	1	2
32	KS-CJT35- 32S-30	DHS-16	UHR-16	RHP-32	TX- 32	G25	S10	P12	TF- 8	CR- 8
40	KS-CJT35- 40S-30	DHS-16	UHR-16	RHP-40	TX- 40	G25	P12	P12	TF- 8	CR- 8
50	KS-CJT35- 50S-30	DHS-22	UHR-22	RHP-50	TX- 50	G35	P18	P18	TF- 8	CR- 8
63	KS-CJT35- 63S-30	DHS-22	UHR-22	RHP-63	TX- 63	G35	P18	P18	TF-12	CR-12
80	KS-CJT35- 80S-30	DHS-28	UHR-28A	RHP-80A	TX- 80	P36	P22A	P24	TF-12	CR-12
100	KS-CJT35-100S-30	DHS-36	UHR-36	RHP-100A	TX-100	P46	G30	G30	TF-14	CR-14

★1. Please specify the seal kit numbers above when ordering the seals.

★2. O-ring is OR NBR-70-1 P(G) * *-N. O-ring code "S" for item ⑥ and bore 32 is a special standard.

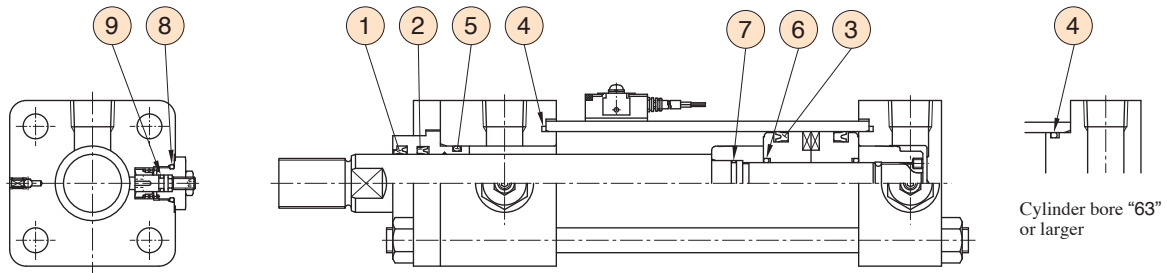
★3. Material of standard packings is Nitrile Rubber. For Fluorocarbon Rubber and Hydrogenated Nitrile Rubber materials, specify the following code after "KS-".

Fluoro rubber: F-, Hydrogenated nitrile rubber: 6-

Note : The packing code changes without notice.

List of Seals

CJT70L CJT140L



Cylinder Bore	Rod Size	Model Numbers for Seal Kit	Item	①	②	③	④★ ³	⑤	⑥	⑦★ ⁴	⑧	⑨	
				Name	Dust Seal	Rod Packing	Piston Packing	Packing for Cover	O-Ring for Bush	O-Ring for Piston	O-Ring for Cushion Ring	O-Ring for Plug	O-Ring for Slide Rod (OR NBR-70-1) P** -N
				Q'ty	1	1	2	2	1	2	1	★5	★5
32	B	KS-CJTL 32B-20	SDR-18	SKY-18	SKY- 24	GR-32	P21	P12	S12	P14	P5		
	C	KS-CJTL 32C-20	SDR-14	SKY-14									
40	A	KS-CJTL 40A-20	SDR-28	SKY-28	SKY- 30	GR-40	G30	P16	—	P14	P5		
	B	KS-CJTL 40B-20	SDR-22	SKY-22			G25		S16				
	C	KS-CJTL 40C-20	SDR-18	SKY-18									
50	A	KS-CJTL 50A-20	SDR-36	SKY-36	SKY- 40	GR-50	G40	P20	—	P14	P5		
	B	KS-CJTL 50B-20	SDR-28	SKY-28			G30		S20				
	C	KS-CJTL 50C-20	SDR-22	SKY-22									
63	A	KS-CJTL 63A-20	SDR-45	SKY-45A	SKY- 53	G 55	G50	G25	—	P14	P5		
	B	KS-CJTL 63B-20	SDR-36	SKY-36			G40		G25				
	C	KS-CJTL 63C-20	SDR-28	SKY-28									
80	A	KS-CJTL 80A-20	SDR-56	SKY-56	SKY- 71	G 75	G60	P31	P31	P14	P5		
	B	KS-CJTL 80B-20	SDR-45	SKY-45A			G50						
	C	KS-CJTL 80C-20	SDR-36	SKY-36									
100	A	KS-CJTL100A-20	SDR-70	SKY-70	SKY- 85	G 95	G75	G55	G40	P14	P5		
	B	KS-CJTL100B-20	SDR-56	SKY-56			G60						
	C	KS-CJTL100C-20	SDR-45	SKY-45A									
125	A	KS-CJTL125A-20	SDR-90	SKY-90	SKY-112A	G120	G95	G80	G50	P18, P14	P7, P5		
	B	KS-CJTL125B-20	SDR-70	SKY-70			G75			P18	P7		
	C	KS-CJTL125C-20	SDR-56	SKY-56									

★1. Please specify the seal kit numbers above when ordering the seals.

★2. Material of standard packings is Nitrile-Rubber. Please select Fluoro-Rubber packing material if Phosphate Esters oil is used. Please specify "F-" in addition to the model of seal kit after "KS-".

★3. Packing code "GR" of item No.4 is square O-ring.

★4. O-ring code "S" of item No.7 is special O-ring.

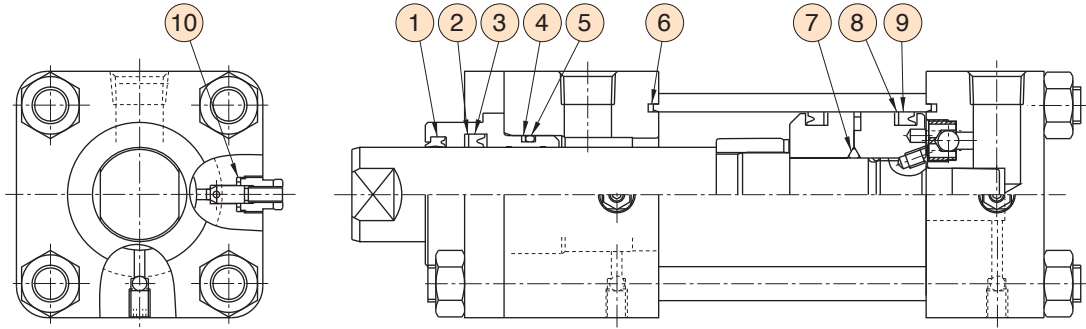
★5. There are 2 O-Rings.

The large O-Rings (1 each) / Cap Side, The small O-Rings (1 each) / Rod Side.

Note : The packing code changes without notice.

List of Seals

CJT210CL



Cylinder Bore	Model Numbers for Seal Kit ^{★1}	Rod B					Rod A				
		Dust Seal ①	Backup Ring for Rod Packing ②	Rod Packing ③	Backup Ring for Bush ④	O-Ring for Bush ⑤ ^{★2}	Dust Seal ①	Backup Ring for Rod Packing ②	Rod Packing ③	Backup Ring for Bush ④	O-Ring for Bush ⑤ ^{★2}
40	KS-CJT210CL-40*-20	LBH-22	22×30×1	IUH-22A	BUR-G25	G25	LBH-28	28×35.5×1	IUH-28	BUR-G31 ^{★3}	G30
50	KS-CJT210CL-50*-20	LBH-28	28×35.5×1	IUH-28	BUR-G31 ^{★3}	G30	LBH-36	36×46×1.5	IUH-36	BUR-G40	G40
63	KS-CJT210CL-63*-20	LBH-36	36×46×1.5	IUH-36	BUR-G40	G40	LBH-45	45×56×1.5	IUH-45A	BUR-G55	G55
80	KS-CJT210CL-80*-20	LBH-45	45×56×1.5	IUH-45A	BUR-G55	G55	LBH-56	56×66×1.5	IUH-56	BUR-G65	G65

Cylinder Bore	Model Numbers for Seal Kit ^{★1}	Cover Seal ⑥	O-Ring ^{★2} for Piston ⑦	Backup Ring for Piston Packing ⑧	Piston Packing ⑨	Cushion Valve Seal ⑩
40	KS-CJT210CL-40*-20	TT-40	S16	40×30×1.5	OUHR-40	CX-12H
50	KS-CJT210CL-50*-20	TT-50	P22	50×40×1.5	OUHR-50	CX-12H
63	KS-CJT210CL-63*-20	TT-63	P28	63×53×1.5	OUHR-63	CX-12H
80	KS-CJT210CL-80*-20	TT-80	P36	80×71×2	OUHR-80A	CX-14H

Item	Q'ty
①	1
②	1
③	1
④	1
⑤	1
⑥	2
⑦	1 ^{★4}
⑧	2
⑨	2
⑩	2

★1. Please indicate rod size A or B in * of the seal kit numbers.

★2. O-rings are the following standards.

Model Numbers	Standard
⑤O-Ring for Bush	OR NBR-70-1 P(G)**-N
⑦O-Ring for Piston Bore 50 - 80	OR NBR-90 P(G)**-N
⑦O-Ring for Piston Bore 40	Special Standard

★3. This is a backup ring of our standard.

★4. Only cylinder bore 40 will be 2 pcs.

★5. Material of standard packings is Nitrile Rubber. For Fluorocarbon Rubber and Hydrogenated Nitrile Rubber materials, specify the following code after "KS-".

Fluoro rubber: F-, Hydrogenated nitrile rubber: 6-

Note : The packing code changes without notice.

Interchangeability in Installation between Current and New Design

"CJT 21 MPa" series compact type hydraulic cylinders with proximity switch has undergone the following model change to make it more compact and lightweight, contributing to space saving.

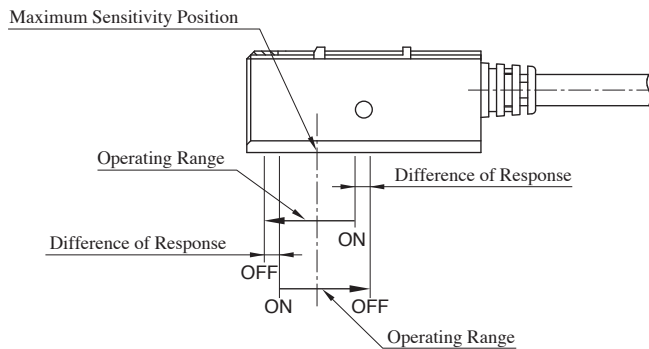
Design Number

Series Number	Change Detail
CJT210CL	10 Design to 20 Design

Proximity Switch

(1) Operating characteristics

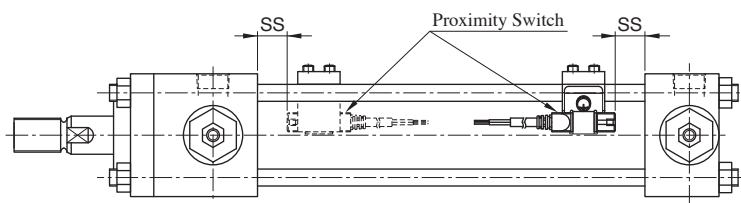
The same regardless of cylinder bore.



Cylinder Bore mm	Current Products				New Products			
	Contact Switch		Contactless Switch		Contact Switch		Contactless Switch	
	Operating Range mm	Diff. of Response mm	Operating Range mm	Diff. of Response mm	Operating Range mm	Diff. of Response mm	Operating Range mm	Diff. of Response mm
40	9	1 or less	4	1 or less	4 - 14	2 or less	3 - 8	2 or less
50	10		5					
63	11		5					
80	12		6					

(2) Dimensions

The stroke end detection setting position is the same regardless of the rod diameter and whether or not a contact switch is used.



Cylinder Bore mm	Piston Rod Size	Current				New	
		Contact Switch SS mm		Contactless Switch SS mm		Contact/Contactless Switch SS mm	
		Rod Side	Cap Side	Rod Side	Cap Side	Rod Side	Cap Side
40	A	21		23		16	14
	B			24	23		
50	A	23		25		17	13
	B			25			
63	A	26	27	28		17	
	B			29			
80	A	34	32	33		18	
	B			34	33		

Other Changes

Same as "CJT 21 MPa" series compact type hydraulic cylinder, refer to page J-50 to J-53.

Major Changes: Interchangeability in installation, air vent valve, cushion adjusting valve, cushion, specifications, mass table, options, list of seals, and dimensions.