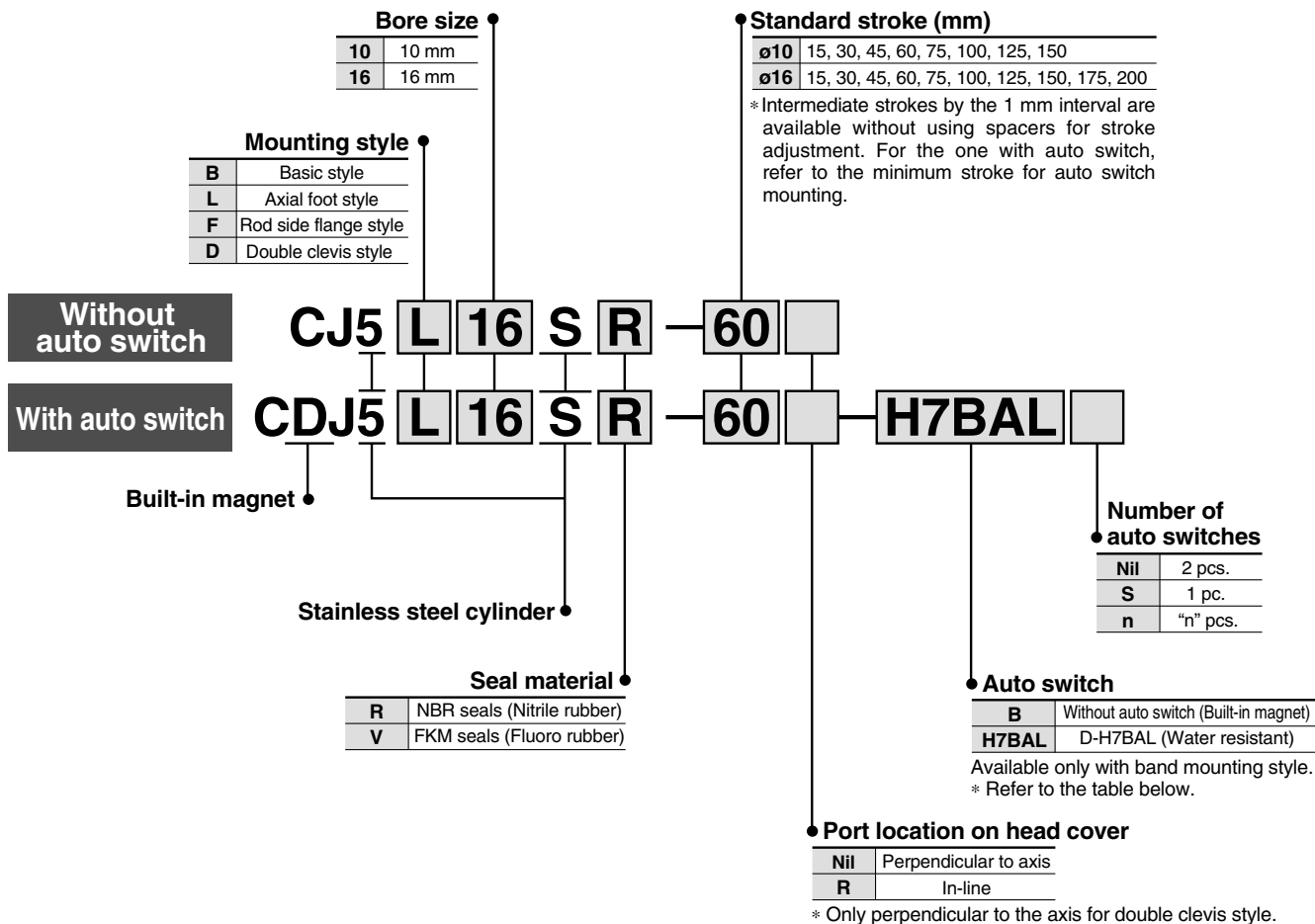


# Stainless Steel Cylinder

## Series CJ5-S

ø10, ø16

### How to Order



**Applicable Auto Switch**/Refer to page 10-20-1 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model	Lead wire length (m)*		Pre-wire connector	Applicable load
					DC	DC		3 (L)	5 (Z)		
Solid state switch	Water resistant (2-color indication)	Grommet	Yes	2-wire	24 V	12 V	H7BA	●	○	○	Relay, PLC

\* Lead wire length symbols: 3 m.....L (Example) H7BAL  
5 m.....Z (Example) H7BAZ

\* Solid state switches marked with "○" are produced upon receipt of order.

• For details about auto switches with pre-wire connector, refer to page 10-20-66.

### Auto Switch Mounting Bracket Part No.

Bore size (mm)	Auto switch mounting bracket no.	Note
10	BJ2-010S	With mounting screws made of stainless steel
16	BJ2-016S	

### Mounting Bracket Part No.

Mounting bracket	Bore size (mm)	
	10	16
Foot	CJ-L016SUS	CJK-L016SUS
Flange	CJ-F016SUS	CJK-F016SUS
T-bracket *	CJ-T010SUS	CJ-T016SUS

\* T-bracket is applicable to the double clevis style (D).

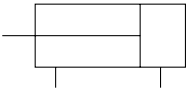
Grease pack for stainless steel cylinders/Part no.: GR-R-010 (10 g)

# Stainless Steel Cylinder Series CJ5-S

## Specifications



**JIS Symbol**  
Double acting,  
Single rod



Action	Double acting, Single rod	
Fluid	Air	
Proof pressure	1.05 MPa	
Maximum operating pressure	0.7 MPa	
Minimum operating pressure	0.1 MPa	
Ambient and fluid temperature	Without auto switch: -10 to 70°C (No freezing) With auto switch: -10 to 60°C (No freezing)	
Cushion	Rubber bumper	
Lubrication	Not required (Non-lube)	
Thread tolerance	JIS Class 2	
Stroke length tolerance	+1.0 0	
Piston speed	50 to 750 mm/s	
Allowable kinetic energy	ø10	0.035 J
	ø16	0.090 J
Mounting	Basic style, Axial foot style, Rod side flange style, Double clevis style	

## Standard Stroke

Bore size (mm)	Standard stroke
10	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

\* Intermediate strokes by the 1 mm interval are available without using spacers for stroke adjustment.  
For the one with auto switch, refer to the minimum stroke for auto switch mounting. (P. 10-14-17)

## Mounting Style and Accessory

Mounting		Basic style	Axial foot style	Rod side flange style	Double clevis style *	
Standard equipment	Mounting nut	●	●	●	—	
	Rod end nut	●	●	●	●	
	Clevis pin	—	—	—	●	
Option	Single knuckle joint	●	●	●	●	
	Double knuckle joint (With pin) *	●	●	●	●	
	T-bracket	—	—	—	●	
	Rod end cap	Flat type	●	●	●	●
		Round type	●	●	●	●

\* Pin and snap ring are shipped together with double clevis and double knuckle joint.

## Weight

(g)

Bore size (mm)		10	16
Basic weight *		52	96
Additional weight per each 15 mm of stroke		4	6.5
Mounting bracket weight	Axial foot style	22	22
	Rod side flange style	16	16
	Double clevis style (With pin) **	6	16

\* Mounting nut and rod end nut are included in the basic weight.

\*\* Mounting nut is not included in double clevis style.

Calculation: (Example) CJ5L10SR-45  
 • Basic weight ..... 52 (ø10)  
 • Additional weight ..... 4/15 stroke  
 • Cylinder stroke ..... 45 stroke  
 • Mounting bracket weight ..... 22 (Axial foot type)  
 52 + 4/15 x 45 + 22 = 86 g

RE<sub>B</sub><sup>A</sup>

REC

C□X

C□Y

MQ<sub>M</sub><sup>Q</sup>

RHC

MK(2)

RS<sub>G</sub><sup>Q</sup>

RS<sub>A</sub><sup>H</sup>

RZQ

MI<sub>S</sub><sup>W</sup>

CEP1

CE1

CE2

ML2B

C<sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

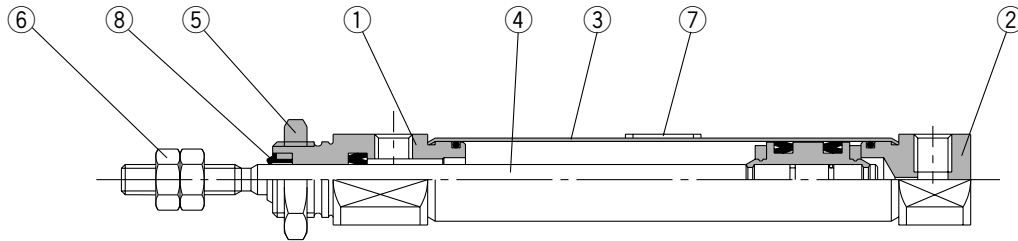
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20-

Data

# Series CJ5-S

**Construction** (Not able to disassemble.)

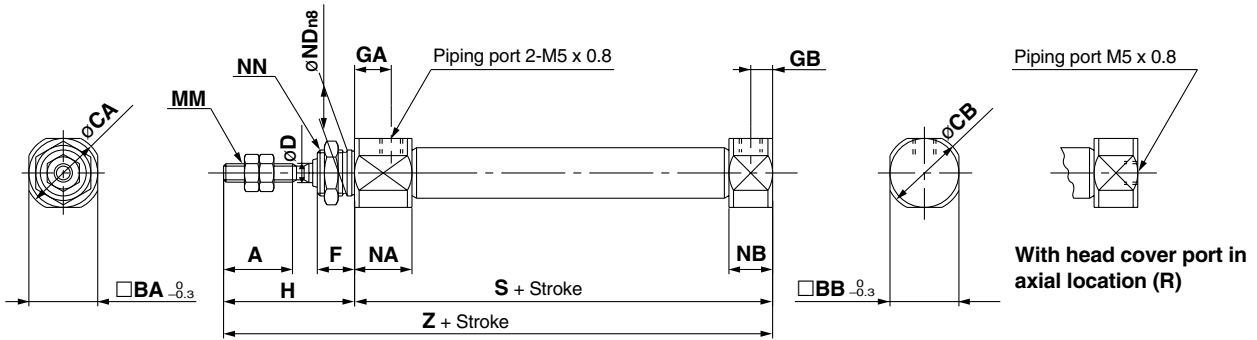


## Component Parts

No.	Description	Material	
①	Rod cover	Stainless steel 304	
②	Head cover	Stainless steel 304	
③	Cylinder tube	Stainless steel 304	
④	Piston rod	Stainless steel 304	
⑤	Mounting nut	Stainless steel 304	
⑥	Rod end nut	Stainless steel 304	
⑦	Label protector	PET	
⑧	Water resistant scraper	CJ5□□SR	NBR
		CJ5□□SV	FKM

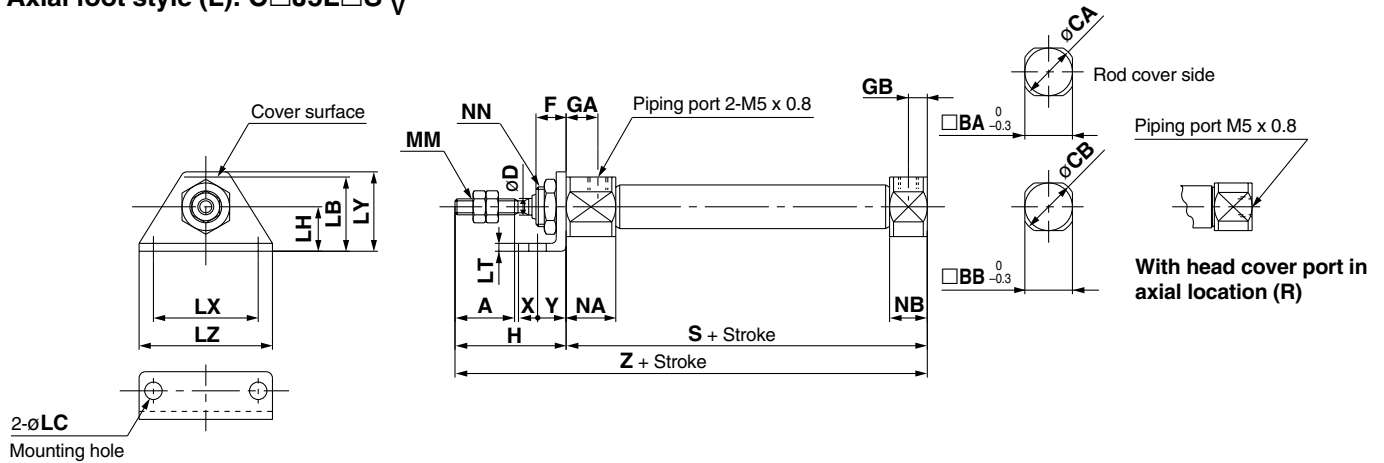
## Dimensions

Basic style (B): C□J5B□S<sup>R</sup><sub>V</sub>



Bore size (mm)	A	BA	BB	CA	CB	D	F	GA	GB	H	MM	NN	NA	NB	NDn8	S	Z
10	15	15	12	17	14	4	8	8	5	28	M4 x 0.7	M10 x 1.0	12.5	9.5	10 <sup>0</sup> <sub>-0.022</sub>	46	74
16	15	18.3	18.3	20	20	5	8	8	5	28	M5 x 0.8	M12 x 1.0	12.5	9.5	12 <sup>0</sup> <sub>-0.027</sub>	47	75

Axial foot style (L): C□J5L□S<sup>R</sup><sub>V</sub>



Bore size (mm)	A	BA	BB	CA	CB	D	F	GA	GB	H	LB	LC	LH	LT	LX	LY	LZ	MM	NN	NA	NB	S	X	Y	Z
10	15	15	12	17	14	4	8	8	5	28	21.5	5.5	14	2.5	33	25	42	M4 x 0.7	M10 x 1.0	12.5	9.5	46	6	9	74
16	15	18.3	18.3	20	20	5	8	8	5	28	23	5.5	14	2.5	33	25	42	M5 x 0.8	M12 x 1.0	12.5	9.5	47	6	9	75

RE<sup>A</sup><sub>B</sub>

REC

C□X

C□Y

MQ<sup>Q</sup><sub>M</sub>

RHC

MK(2)

RS<sup>Q</sup><sub>G</sub>

RS<sup>H</sup><sub>A</sub>

RZQ

MI<sup>W</sup><sub>S</sub>

CEP1

CE1

CE2

ML2B

C<sup>5</sup><sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

-X

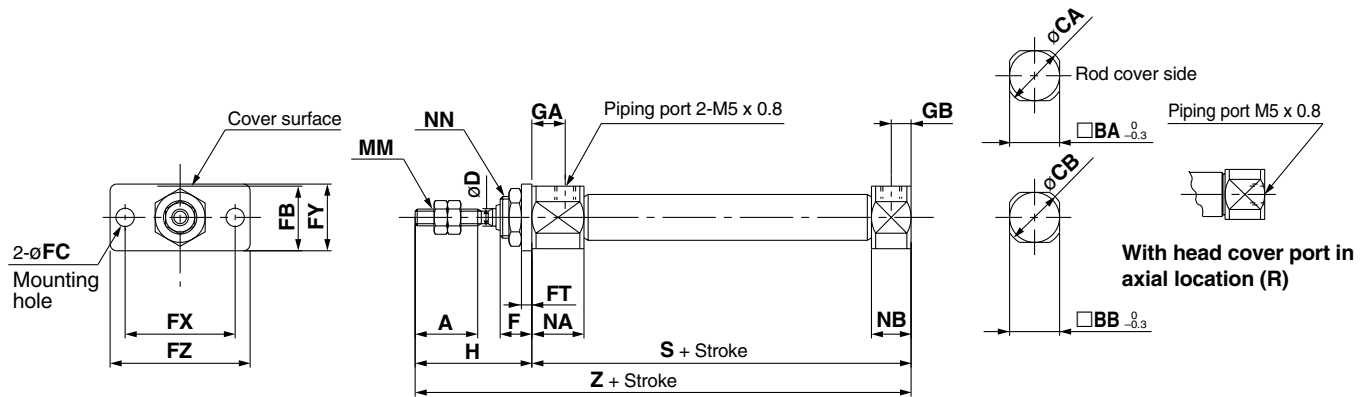
20-

Data

# Series CJ5-S

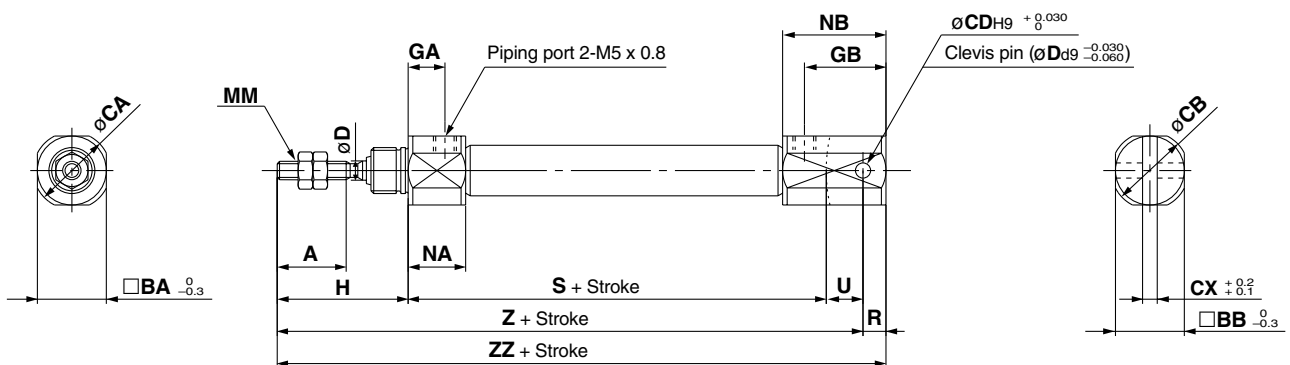
## Dimensions

Rod side flange style (F): C□J5F□S<sup>R</sup><sub>V</sub>



Bore size (mm)	A	BA	BB	CA	CB	D	F	FB	FC	FT	FX	FY	FZ	GA	GB	H	MM	NN	NA	NB	S	Z
10	15	15	12	17	14	4	8	17.5	5.5	2.5	33	20	42	8	5	28	M4 x 0.7	M10 x 1.0	12.5	9.5	46	74
16	15	18.3	18.3	20	20	5	8	19	5.5	2.5	33	20	42	8	5	28	M5 x 0.8	M12 x 1.0	12.5	9.5	47	75

Double clevis style (D): C□J5D□S<sup>R</sup><sub>V</sub>

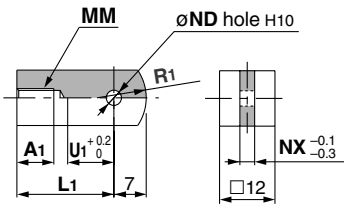


Bore size (mm)	A	BA	BB	CA	CB	CD (Cd)	CX	D	GA	GB	H	MM	NA	NB	R	S	U	Z	ZZ
10	15	15	12	17	14	3.3	3.2	4	8	18	28	M4 x 0.7	12.5	22.5	5	46	8	82	87
16	15	18.3	18.3	20	20	5	6.5	5	8	23	28	M5 x 0.8	12.5	27.5	8	47	10	85	93

\* Clevis pin and snap ring are shipped together.

## Accessory Dimensions

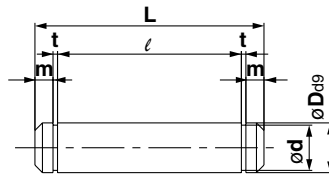
### Single Knuckle Joint



Material: Stainless steel 304

Part no.	Applicable bore size (mm)	A1	L1	MM	NDH10	NX	R1	U1
I-J010SUS	10	8	21	M4 x 0.7	3.3 <sup>+0.048</sup> <sub>0</sub>	3.1	8	9
I-J016SUS	16	8	25	M5 x 0.8	5 <sup>+0.048</sup> <sub>0</sub>	6.4	12	14

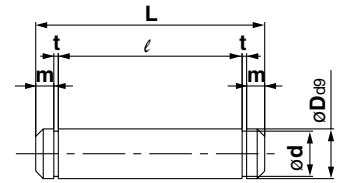
### Clevis Pin



Material: Pin and snap ring both stainless steel 304

Part no.	Applicable bore size (mm)	Dd9	d	L	l	m	t	Applicable snap ring
CD-J010	10	3.3 <sup>-0.030</sup> <sub>-0.060</sub>	3	15.2	12.2	1.2	0.3	Type C 3.2
CD-Z015SUS	16	5 <sup>-0.030</sup> <sub>-0.060</sub>	4.8	22.7	18.3	1.5	0.7	Type C 5

### Knuckle Pin



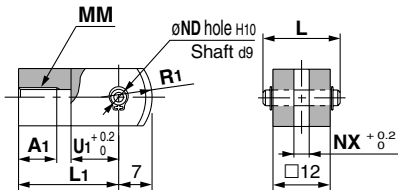
Material: Pin and snap ring both stainless steel 304

Part no.	Applicable bore size (mm)	Dd9	d	L	l	m	t	Applicable snap ring
CD-J010	10	3.3 <sup>-0.030</sup> <sub>-0.060</sub>	3	15.2	12.2	1.2	0.3	Type C 3.2
IY-J015SUS	16	5 <sup>-0.030</sup> <sub>-0.060</sub>	4.8	16.6	12.2	1.5	0.7	Type C 5

\* Clevis pin is used instead for ø10.

### Double Knuckle Joint

\* Knuckle pin and snap ring are packaged together.

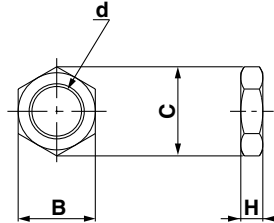


Material: Stainless steel 304

Part no.	Applicable bore size (mm)	A1	L	L1	MM	NDd9
Y-J010SUS	10	8	15.2	21	M4 x 0.7	3.3 <sup>-0.030</sup> <sub>-0.060</sub>
Y-J016SUS	16	11	16.6	21	M5 x 0.8	5 <sup>-0.030</sup> <sub>-0.060</sub>

Part no.	NDH10	NX	R1	U1
Y-J010SUS	3.3 <sup>+0.048</sup> <sub>0</sub>	3.2	8	10
Y-J016SUS	5 <sup>+0.048</sup> <sub>0</sub>	6.5	12	10

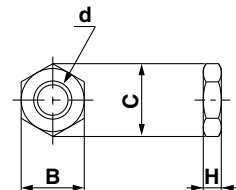
### Mounting Nut



Material: Stainless steel 304

Part no.	Applicable bore size (mm)	B	C	d	H
SNJ-016SUS	10	14	16.2	M10 x 1.0	4
SNKJ-016SUS	16	17	19.6	M12 x 1.0	4

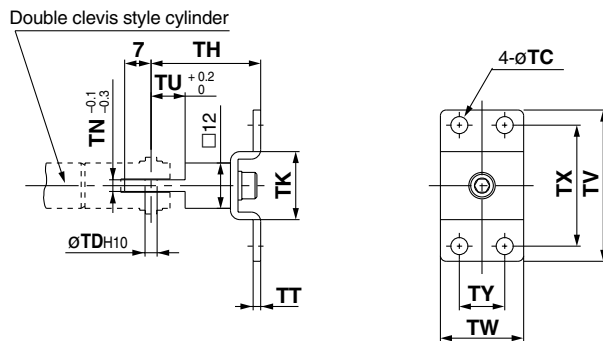
### Rod End Nut



Material: Stainless steel 304

Part no.	Applicable bore size (mm)	B	C	d	H
NTJ-010SUS	10	7	8.1	M4 x 0.7	3.2
NTJ-015SUS	16	8	9.2	M5 x 0.8	4

### T-bracket

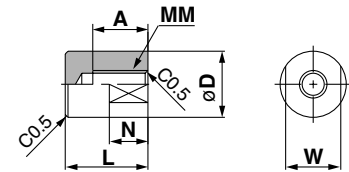


Material: Stainless steel 304

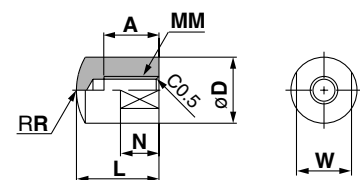
Part no.	Applicable bore size (mm)	TC	TDH10	TH	TK	TN	TT	TU	TV	TW	TX	TY
CJ-T010SUS	10	4.5	3.3 <sup>+0.048</sup> <sub>0</sub>	29	18	3.1	2	9	40	22	32	12
CJ-T016SUS	16	5.5	5 <sup>+0.048</sup> <sub>0</sub>	35	20	6.4	2.5	14	48	28	38	16

### Rod End Cap

Flat type/CJ-CF□□□



Round type/CJ-CR□□□



Material: Polyacetal

Part no.	Applicable bore size (mm)	A	D	L	MM	N	R	W	
Flat type	Round type								
CJ-CF010	CJ-CR010	10	8	10	13	M4 x 0.7	6	10	8
CJ-CF016	CJ-CR016	16	10	12	15	M5 x 0.8	7	12	10

RE<sup>A</sup><sub>B</sub>

REC

C□X

C□Y

MQ<sup>Q</sup><sub>M</sub>

RHC

MK(2)

RS<sup>Q</sup><sub>G</sub>

RS<sup>H</sup><sub>A</sub>

RZQ

MI<sup>W</sup><sub>S</sub>

CEP1

CE1

CE2

ML2B

C<sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

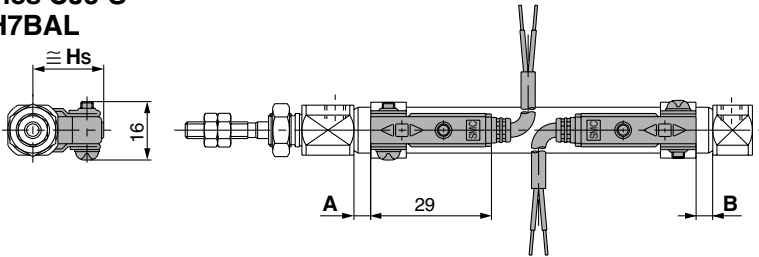
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20-

Data

# Proper Auto Switch Mounting Position (Detection at stroke end) and Its Mounting Height

## Series CJ5-S D-H7BAL



### Minimum Stroke for Auto Switch Mounting

Mounting bracket	Basic style, Foot style, Flange style, Clevis style		
Number of auto switches	1 (Rod cover side)	2 (Different sides)	2 (Same side)
Switch mounting side	Port side	Port side	Port side
Switch type			
Minimum stroke (mm)	10	15	60

### Operating Range

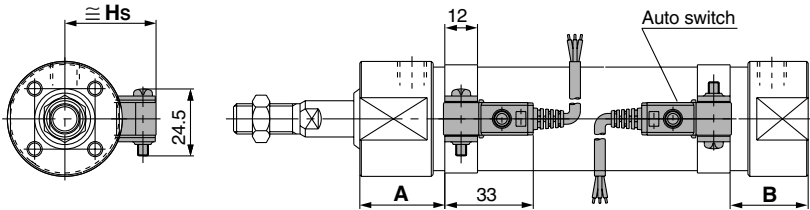
Auto switch model	Bore size (mm)	
	10	16
<b>D-H7BAL</b>	5	5

\* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately  $\pm 30\%$  dispersion) There may be the case to change substantially depending on an ambient environment.

### Proper Auto Switch Mounting Position and Its Mounting Height

Applicable bore size (mm)	Auto switch model	D-H7BAL		
		A	B	Hs
10		0	0	17
16		0.5	0.5	20.5

## Series CG5-S D-G5BAL



### Minimum Stroke for Auto Switch Mounting

Mounting bracket	Basic style, Foot style, Flange style, Clevis style		
Number of auto switches	1 (Rod cover side)	2 (Different sides)	2 (Same side)
Switch mounting side	Port side	Port side	Port side
Switch type			
Minimum stroke (mm)	10	15	75

### Operating Range

Auto switch model	Bore size (mm)							
	20	25	32	40	50	63	80	100
<b>D-G5BAL</b>	5	5	5.5	6	7	7.5	7.5	8

\* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately  $\pm 30\%$  dispersion) There may be the case to change substantially depending on an ambient environment.

### Proper Auto Switch Mounting Position and Its Mounting Height

Applicable bore size (mm)	Auto switch model	D-G5BAL		
		A	B	Hs
20		31.5	24	26
25		31.5	24	28.5
32		32.5	25	33
40		37	28	36.5
50		45.5	36	42
63		45.5	36	48.5
80		56	46	57.5
100		57	46	68

RE<sub>B</sub><sup>A</sup>

REC

C□X

C□Y

MQ<sub>M</sub><sup>Q</sup>

RHC

MK(2)

RS<sub>G</sub><sup>Q</sup>

RS<sub>A</sub><sup>H</sup>

RZQ

MI<sub>S</sub><sup>W</sup>

CEP1

CE1

CE2

ML2B

C<sub>5</sub>-S

CV

MVGQ

CC

RB

J

D-

-X

20-

Data