

# Stainless Steel Cylinder

## Series CJ5-S Series CG5-S

ø10, ø16

ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

Applicable for use in an environment with water splashing such as food processing, etc.

CJ5  
CG5

HY

Water  
Resistant

For use with grease for food processing machines (Approved by NSF-H1)

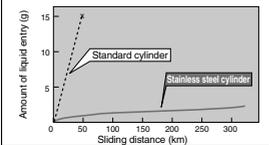
All stainless steel specifications (External parts)

Stainless steel 304 is used for external metal parts. Corrosion resistance is improved even in environments with exposure to water.

### Special scraper (Standard)

Prevents water from entering the cylinder.

Relation of Liquid Entry and Sliding Distance

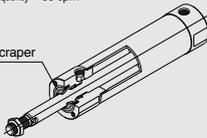


#### Conditions

Working fluid ..... Air  
Pressure ..... 0.5 MPa  
Liquid ..... Water-soluble coolant  
Piston speed ..... 200 mm/s  
Operating frequency ..... 60 cpm



Special scraper



### Exterior configuration reduces residual liquid

- Electropolishing of mounting bracket surfaces makes them smoother to prevent build-up of liquids and foreign matter.
- Plugs are provided for unused mounting threads (Series CG5-S) to prevent residue build-up in the threads.

### Two types of seal material

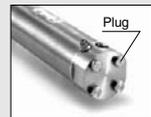
(Nitrile rubber) (Fluororubber)

NBR or FKM can be selected to accommodate the application.

### Can be disassembled (Series CG5-S ø20 to 40)

Since seals are replaceable, this extends the life of the cylinder.

(Before disassembly, be sure to refer to the section regarding maintenance under "Specific Product Precautions" on page 1072.)



This product cannot be used in the food zone. Refer to the Product Specific Precautions (page 1071) for details.

### Series Variations

Series	Seal material	Bore size (mm)									Applicable auto switch		
		10	16	20	25	32	40	50	63	80		100	
CJ5-S	NBR	●	●										Water resistant D-H7BAL
CG5-S	FKM			●	●	●	●	●	●	●	●	●	Water resistant D-G5BAL

D-

-X

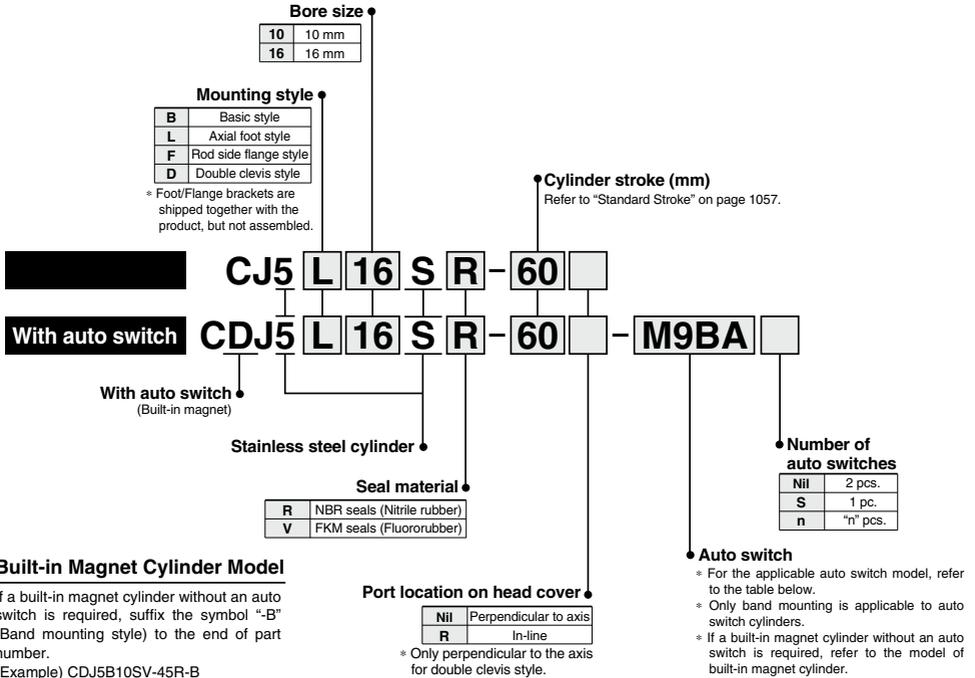
Technical data

# Stainless Steel Cylinder

## Series CJ5-S

ø10, ø16

### How to Order



### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, suffix the symbol "-B" (Band mounting style) to the end of part number.  
(Example) CDJ5B10SV-45R-B

### Applicable Auto Switches

Refer to pages 1559 to 1673 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-wired connector	Applicable load	
					DC	Band mounting(ø10, ø16)	0.5	1 (M)	3 (L)	5 (Z)	IC circuit	Relay, PLC				
													Perpendicular		In-line	0.5 (Nil)
Solid state auto switch	Water resistant (2-color indication)	Grommet	Yes	3-wire(NPN)	24 V	5 V, 12 V	M9NAV	M9NA	○	○	●	○	○	—	—	
				3-wire(PNP)			M9PAV	M9PA	○	○	●	○				
				2-wire			M9BAV	M9BA	○	○	●	○	○			

\* Lead wire length symbols: Nil .....0.5 m (Example) D-M9NA  
M .....1 m (Example) D-M9NAM  
L .....3 m (Example) D-M9NAL  
Z .....5 m (Example) D-M9NAZ

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

\* For details about auto switches with pre-wired connector, refer to pages 1626 and 1627.

### Mounting Bracket Part No.

Mounting bracket	Bore size (mm)		Description
	10	16	
Foot	CJ-L016 Stainless steel	CJK-L016 Stainless steel	Foot x 1
Flange	CJ-F016 Stainless steel	CJK-F016 Stainless steel	Flange x 1
T-bracket*	CJ-T010 Stainless steel	CJ-T016 Stainless steel	T-bracket x 1

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

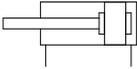
Grease pack for stainless steel cylinders/Part no.: GR-R-010 (10 g)

## Specifications



### Symbol

Double acting,  
Single rod, Rubber bumper



Bore size (mm)	10	16
<b>Action</b>	Double acting, Single rod	
<b>Fluid</b>	Air	
<b>Proof pressure</b>	1 MPa	
<b>Maximum operating pressure</b>	0.7 MPa	
<b>Minimum operating pressure</b>	0.1 MPa	
<b>Ambient and fluid temperature</b>	Without auto switch: -10 to 70°C With auto switch: -10 to 60°C	
<b>Cushion</b>	Rubber bumper	
<b>Lubrication</b>	Not required (Non-Lube)	
<b>Stroke length tolerance</b>	+1.0 0	
<b>Piston speed</b>	50 to 750 mm/s	
<b>Allowable kinetic energy</b>	0.035 J	0.090 J
<b>Mounting style</b>	Basic style, Axial foot style, Rod side flange style, Double clevis style	

CJ5  
CG5

HY□

Water  
Resistant

## Standard Stroke

(mm)

Bore size (mm)	Standard stroke	Maximum manufacturable stroke
<b>10</b>	15, 30, 45, 60, 75, 100, 125, 150	400
<b>16</b>	15, 30, 45, 60, 75, 100, 125, 150, 175, 200	

\* Manufacture of intermediate strokes at 1 mm intervals is possible. (Spacers are not used.)

\* For the one with auto switch, refer to the minimum stroke for auto switch mounting. (P. 1069)

## Mounting Style and Accessory

●: Supplied with the product. ○: Please order separately.

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 retaining 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 g (ø10)
- Additional weight ..... 4 g/15 stroke
- Cylinder stroke ..... 45 stroke
- Mounting bracket weight ..... 22 g (Axial foot type)  
52 + 4/15 × 45 + 22 = 86 g

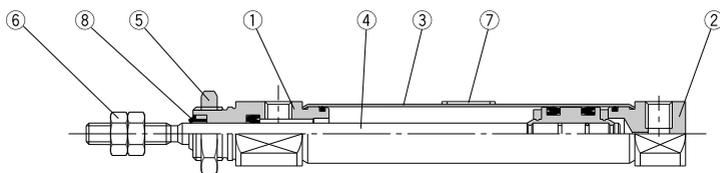
D-□

-X□

Technical  
data

# Series CJ5-S

## Construction (Not able to disassemble.)



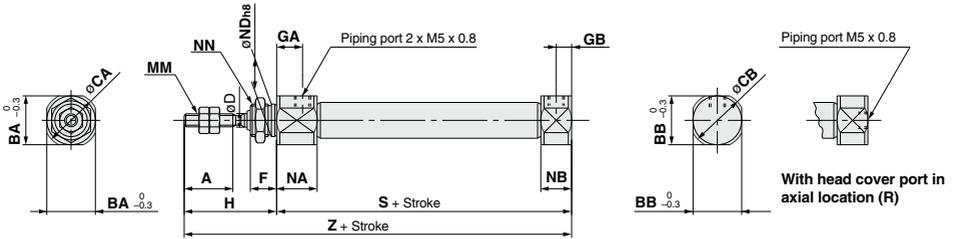
### Component Parts

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

Note) Component part material and surface treatment other than listed above are the same as the standard type of Series CJ2.

**Dimensions**

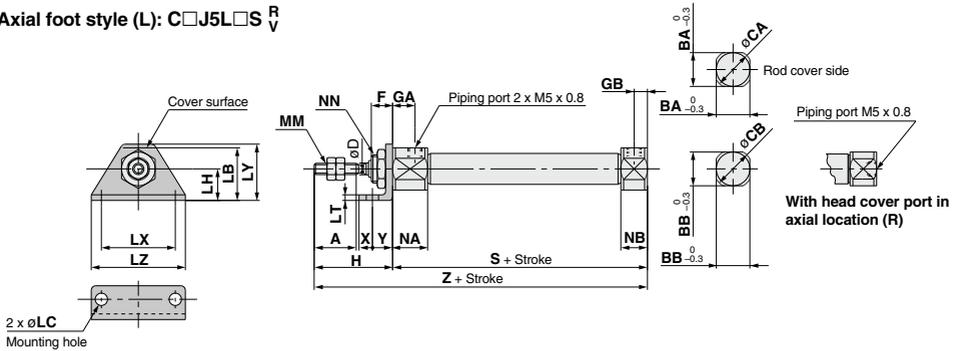
Basic style (B): C□J5B□S<sup>R</sup><sub>V</sub>



CJ5  
CG5  
HY□  
Water  
Resistant

																(mm)	
Bore size (mm)	A	BA	BB	CA	CB	D	F	GA	GB	H	MM	NN	NA	NB	NDh8	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>



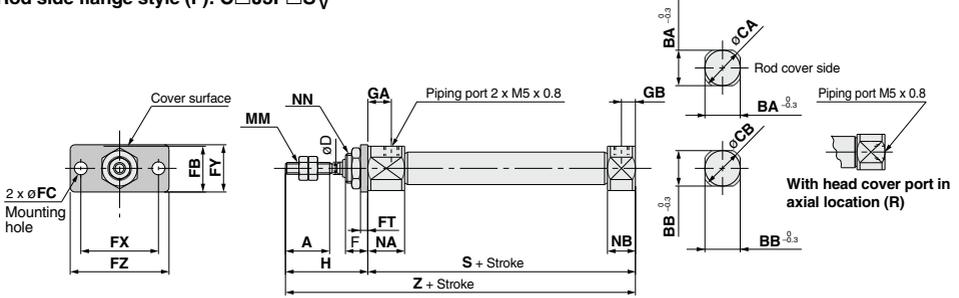
																			(mm)						
Bore size (mm)	A	BA	BB	CA	CB	D	F	GA	GB	H	LB	LC	LH	LT	LX	LY	LZ	MM	NN	NA	NB	S	X	Y	Z
10	15	15	12	17	14	4	8	8	5	28	21.5	5.5	14	2.5	33	25	42	M4 x 0.7	M10 x 1.0	12.5	9.5	46	6	9	74
16	15	18.3	18.3	20	20	5	8	8	5	28	23	5.5	14	2.5	33	25	42	M5 x 0.8	M12 x 1.0	12.5	9.5	47	6	9	75

D-□  
-X□  
Technical  
data

# Series CJ5-S

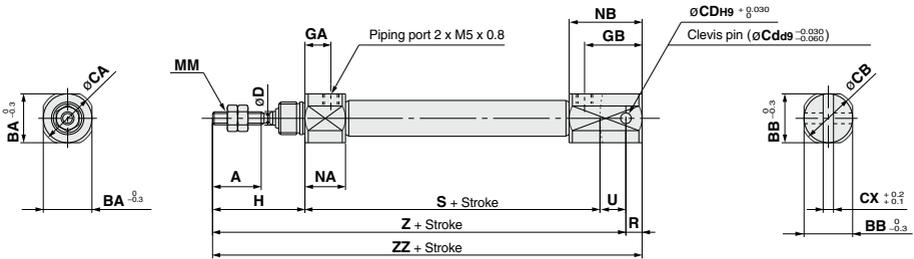
## Dimensions

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>

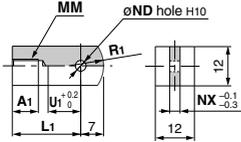


Bore size (mm)	A	BA	BB	CA	CB	CD (Cd)	CX	D	GA	GB	H	MM	NA	NB	R	S	U	Z	ZZ
10	15	15	12	17	14	3.3	3.2	4	8	18	28	M4 x 0.7	12.5	22.5	5	46	8	82	87
16	15	18.3	18.3	20	20	5	6.5	5	8	23	28	M5 x 0.8	12.5	27.5	8	47	10	85	93

\* Clevis pin and retaining ring are shipped together.

# Series CJ5-S Accessory Dimensions

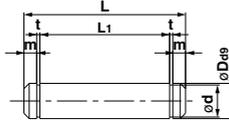
## Single Knuckle Joint



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

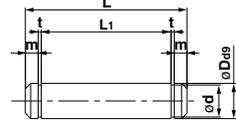


Material: Pin and retaining ring both stainless steel 304

Part no.	Applicable bore size (mm)	Dda9	d	L	L1	m	t	Applicable retaining ring
CD-J010	10	3.3 <sup>+0.020</sup> <sub>-0.060</sub>	3	15.2	12.2	1.2	0.3	Type C 3.2
CD-Z015SUS	16	5 <sup>+0.020</sup> <sub>-0.060</sub>	4.8	22.7	18.3	1.5	0.7	Type C 5

\* Retaining rings are included.

## Knuckle Pin



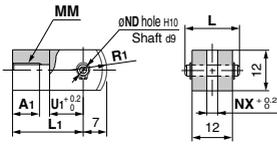
Material: Pin and retaining ring both stainless steel 304

Part no.	Applicable bore size (mm)	Dda9	d	L	L1	m	t	Applicable retaining ring
CD-J010	10	3.3 <sup>+0.020</sup> <sub>-0.060</sub>	3	15.2	12.2	1.2	0.3	Type C 3.2
IY-J015SUS	16	5 <sup>+0.020</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.

\* Retaining rings are included.

## Double Knuckle Joint



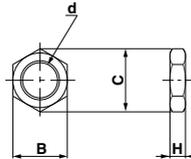
\* Knuckle pin and retaining ring are packaged together.

Material: Stainless steel 304

Part no.	Applicable bore size (mm)	A1	L	L1	MM	NDa9
Y-J010SUS	10	8	15.2	21	M4 x 0.7	3.3 <sup>+0.020</sup> <sub>-0.060</sub>
Y-J016SUS	16	11	16.6	21	M5 x 0.8	5 <sup>+0.020</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

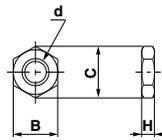
## Mounting Nut



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

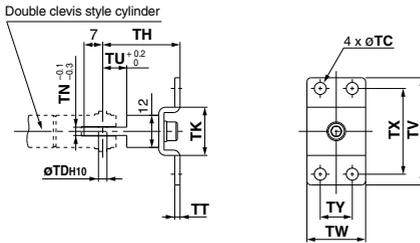
## Rod End Nut



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

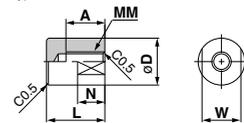


Material: Stainless steel 304

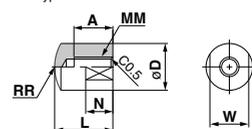
Part no.	Applicable bore size (mm)	TC	TDH10	TH	TK	TN	TT	TU	TV	TW	TX	TY
CJ-T010SUS	10	4.5	3.3 <sup>+0.048</sup> <sub>0</sub>	29	18	3.1	2	9	40	22	32	12
CJ-T016SUS	16	5.5	5 <sup>+0.048</sup> <sub>0</sub>	35	20	6.4	2.5	14	48	28	38	16

## Rod End Cap

Flat type/CJ-CF□□□



Round type/CJ-CR□□□



Material: Polycacetal

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

CJ5  
CG5

HY□

Water  
Resistant

D-□

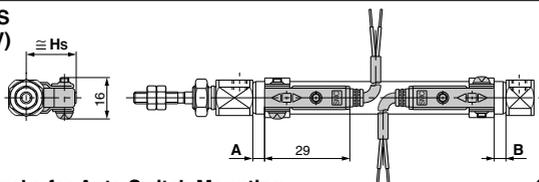
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Technical  
data

# Series CJ5-S/CG5-S Auto Switch Mounting

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

Series CJ5-S  
D-M9□A(V)  
D-H7BA



### Minimum Stroke for Auto Switch Mounting

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

### Auto Switch Mounting Bracket / Part No.

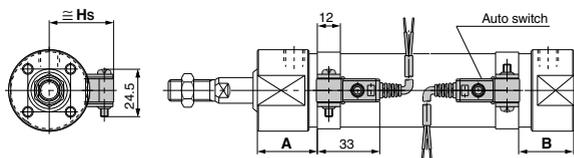
Auto switch model	Bore size (mm)	
	ø10	ø16
D-M9□A D-M9□AV	BJ6-010S (Note 1)	BJ6-016S (Note 1)
D-H7BA	BJ2-010S	BJ2-016S

\* With stainless steel mounting screws.

Note 1) Set part number which includes the auto switch mounting band (BJ2-□□□S) and the holder kit (BJ4-1/Switch bracket; White).

Note 2) For D-M9□A(V), avoid the indicator LED for mounting the switch bracket.

Series CG5-S  
D-G5BA



### Minimum Stroke for Auto Switch Mounting

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

### Auto Switch Mounting Bracket / Part No.

Auto switch model	Bore size (mm)									
	20	25	32	40	50	63	80	100		
D-G5BA	NBA-088S	NBA-106S	BGS1-032S	BAF-04S	BAF-05S	BAF-06S	BAF-08S	BAF-10S		

\* With stainless steel mounting screws.

### Operating Range

Auto switch model	Bore size (mm)	
	10	16
D-H7BA	5	5

\* Since this is a guideline including hysteresis, not meant to be guaranteed. (Assuming approximately ±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-H7BA		
	A	B	Hs
10	0	0	17
16	0.5	0.5	20.5

Note) Adjust the auto switch after confirming the operating condition in the actual setting.

### Operating Range

Auto switch model	Bore size (mm)							
	20	25	32	40	50	63	80	100
D-G5BA	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 ±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-G5BA		
	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

Note) Adjust the auto switch after confirming the operating condition in the actual setting.

CJ5  
CG5

HY□

Water  
Resistant

D-□

-X□

Technical  
data

# Technical Data: Chemical Resistance Table

⊙ : No influence or almost no influence  
 ○ : Some influence, but operational depending on conditions  
 △ : Avoid use if possible  
 × : Substantial influence, not suitable for use  
 — : Not tested

## Chemical Resistance Table

Parts		Body		Seal		Water resistant auto switch	
Material		Stainless steel	Aluminum*	Nitrile rubber	Fluororubber	Resin casing	Lead wire
Chemical (Concentration weight %, Temperature °C)	Symbol	Stainless steel 304	Al	NBR (-10 to 60°C)	FKM (-40 to 150°C)	PBT (-10 to 60°C)	PVC (-10 to 60°C)
		Inorganic salt	1 Hydrochloric acid (20%, Room temperature)	×	×	○	⊙
	2 Chromic acid (25%, 70°C)	○	×	×	⊙	⊙	○
	3 Boric acid	○	×	⊙	⊙	⊙	○
	4 Sulfuric acid (30%, Room temperature)	×	×	⊙	⊙	⊙	○
	5 Phosphoric acid (50%, Room temperature)	○	×	⊙	⊙	⊙	○
	6 Ammonium hydroxide (28%)	○	○	○	×	⊙	○
Inorganic alkali	7 Sodium hydroxide (30%, Room temperature)	⊙	×	⊙	△	⊙	×
	8 Calcium hydroxide	△	×	⊙	⊙	⊙	⊙
	9 Magnesium hydroxide	○	○	⊙	⊙	⊙	⊙
Organic solvent	10 Acetylene	⊙	△	⊙	⊙	⊙	⊙
	11 Formic acid (25%, Room temperature)	○	△	×	△	△	△
	12 Citric acid	△	×	⊙	⊙	△	○
	13 Acetic acid (10%, Room temperature)	⊙	△	△	○	⊙	○
	14 Lactic acid (5%, 20°C)	○	×	⊙	⊙	⊙	○
Others (oil, gas, etc.)	15 Linseed oil	⊙	○	⊙	⊙	△	△
	16 Potassium chloride	○	△	⊙	⊙	⊙	⊙
	17 Calcium chloride	○	⊙	⊙	⊙	⊙	⊙
	18 Mineral oil	⊙	⊙	⊙	⊙	⊙	△
	19 Sodium hypochlorite (2%, Room temperature)	○	×	×	⊙	⊙	△
	20 Sodium chloride	○	—	⊙	⊙	⊙	⊙
	21 Carbon dioxide	⊙	⊙	⊙	⊙	⊙	⊙
	22 Natural gas	⊙	⊙	⊙	⊙	⊙	⊙
	23 Boric acid	○	×	⊙	⊙	⊙	○

\* Unless noted otherwise, the solution concentration is in a saturated state.

\* Chemical resistance is a guide that applies only to the stainless steel cylinder parts, and does not guarantee the performance of air cylinders (auto switches).  
 Be sure to perform a verification test before operating.

\* ) Reference data



# Series CJ5-S/CG5-S Stainless Steel Cylinder Specific Product Precautions 1

Be sure to read before handling. Refer to front matter 57 for Safety Instructions and pages 3 to 12 for Actuator and Auto Switch Precautions.

## Caution on Design

### Warning

- Note the weight of the stainless steel products.**  
Since the weight of stainless steel cylinders is approximately 1.5 to 3 times heavier than the standard products (with aluminum body), be careful when calculating weight estimates. Also, when mounting the cylinder on equipment where vibration is expected, avoid using single side brackets such as the flange style, and use double side brackets such as the foot style instead.

### Caution

- Adjust the speed control for the environment in which it will be used.**  
Speed adjustment may be changed depending on the environment.
- Dust may accumulate on this product's mounting screws and brackets in some operating conditions.**  
Measures must be applied depending on the operating conditions when mounting.

## Selection

### Warning

- Generally, use nitrile rubber (NBR) seals with liquids that do not contain chlorine and sulfur, and use fluoro rubber (FKM) seals with liquids that contain chlorine and sulfur.**  
However, depending on the type and the brand of liquid (such as cleaning solvent) that splashes on the cylinder, the operating life of seals may be reduced dramatically. In cases where special additives are used, or where liquid caused trouble with the conventional nitrile or fluoro rubber seals in the past, request an investigation or set up a test period for the use of the seals.
- Even the fluoro rubber specification may not be applicable depending on the type of chemicals and the operating temperature. Therefore, be sure to verify the seal's applicability before use.**

## Mounting

### Warning

- Do not rotate the cover.**  
If a cover is rotated when installing a cylinder or screwing a fitting into the port, it is likely to damage the junction part with cover.
- When using pins, apply grease, etc., in order to prevent them from degrading of shape and rusting.**

## Operating Precautions

### Warning

- For details about operating precautions, refer to page 174 for Series CM2 and page 310 for Series CG1.**

### Caution

- If cleaning the rotating part, grease may leak out, which shortens product service life. Thus, cleaning must be as infrequent as possible.**
- If excess water gets into mounting holes, unwanted bacteria may reproduce. Plug them with plug bolts or external covers to avoid this.**

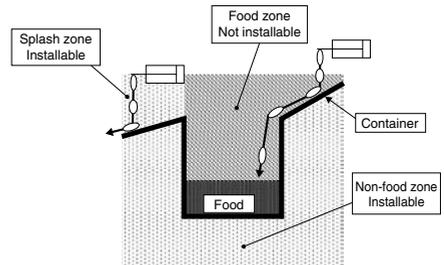
## Operating Environment

### Warning

- Fully consider the compatibility of stainless steel.**  
The corrosion resistance of stainless steel is not effective against all media and corrosive environments. Corrosion proceeds rapidly with strong hydrochloric acid, hydrofluoric acid, and high temperature ammonium gas, etc. Therefore its compatibility to the environment must be considered carefully.
- Do not operate cylinders with auto switches in environments where oil and chemicals are used.**  
Please contact SMC when operating in environments with coolants, cleaning solvents, various oils or chemicals, as it may cause adverse effects (faulty insulation, malfunction due to swelling of the potting resin, and hardening of lead wires, etc) to auto switches even in a short period of time. Even with the fluoro rubber seal specification, the auto switch related parts (switch body, mounting bracket, and built-in magnet) are identical to the standard specifications. Therefore, consult with SMC regarding the cylinder's compatibility (such as chemical resistance) with an environment (chemicals, etc.) before operating.
- Do not immerse the cylinder in water or chemicals.**  
When the cylinder is operated in a condition with water pressure, the fluid leaks into the cylinder in the early stages. In the worst case, the fluid may back flow inside the piping and damage the solenoid valve.

### Caution

- Avoid installing and using a cylinder inside a food zone.**  
<Not installable>  
Food zone ..... An environment where food which will be sold as merchandize, directly touches the cylinder's components.  
  
<Installable>  
Splash zone ..... An environment where food which will not be sold as merchandize, directly touches the cylinder's components.  
  
Non-food zone ..... An environment where there is no contact with food.



- When cleaning solvent or chemicals splashes on a cylinder, the service life may be extremely shortened. Please contact SMC for details.**
- When cleaning cylinders with steam, do it as quickly as possible, keeping the cylinder's temperature range in mind.**
- When cleaning cylinders with a brush, etc., do not apply excessive force to the weaker parts, such as auto switch lead wire, etc.**

CJ5  
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# Series CJ5-S/CG5-S Stainless Steel Cylinder Specific Product Precautions 2

Be sure to read before handling. Refer to front matter 57 for Safety Instructions and pages 3 to 12 for Actuator and Auto Switch Precautions.

## Maintenance

### Warning

**1. If this cylinder is lubricated, it may cause malfunctions.**

If grease other than designated is used, it may also cause malfunctions.

- Order with the following part number when only the grease for maintenance is needed.  
Grease pack part number for stainless steel cylinders  
Grease for food processing machines: GR-R-010 (10 g)

**2. Do not wipe grease attached to the rotating part of the air cylinder.**

If grease attached to the rotating part is forcibly wiped off, it may cause malfunctions.

If the cylinder is operated for a long period of time, the rotating part may become black. In such cases, wipe the grease attached to the rotating part and reapply fresh grease to enable the cylinder to operate for a long period of time.

(Wipe the grease with water. Using alcohol or solvents may damage seals.)

### Precautions for Series CG5-S

**1. Sealant\* is used on the threads of the connecting sections of the cover and the cylinder tube for air-tight construction. When disassembling the cylinder, the old sealant must be completely removed, and new sealant must be applied before re-assembling.**

\* Loctite® 542 (medium strength) or equivalent

**2. ø50 or larger bore size cylinders cannot be disassembled.**

When disassembling cylinders with bore sizes of ø20 through ø40, grip the double flat part of either the head cover or the rod cover with a vise and loosen the other side with a wrench or a monkey wrench, etc., and then remove the cover. When re-tightening, tighten approximately 2 degrees more than the original position. (Cylinders with ø50 or larger bore sizes are tightened with a large tightening torque and cannot be disassembled. Please contact SMC when disassembly is required.)