

Environment Resistant Scraper Type Cylinder SSD/STG-G5 Series

New Product



Features

- A fiber aggregate (lube keeping structure) has been mounted on the scraper cylinder. Fine dust not captured by the scraper is caught in the fiber aggregate to prevent entry into the cylinder.
- Maintenance is simplified with the separable scraper section adapter.
(The Lube keeping structure can be replaced) (*STG only)
- Suitable for use in dusty environments containing fine ceramic and metal particles.
(* Effectiveness is not guaranteed in all dusty environments.)

Features of lube keeping structure

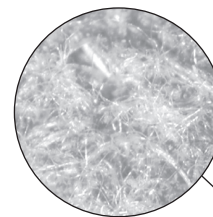
■ Lubricant (grease, etc.) supply/absorption

Capillary tube applies lubricant, such as grease, evenly and regularly onto the sliding surface and absorbs any excess.

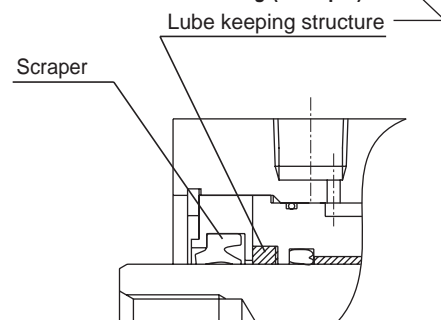
■ Dust wiper

Fiber aggregate collects fine dust to reduce contamination on the sliding section and prevent entry into the cylinder.

● Lube keeping structure cross-section (x180)



● Internal structure drawing (example)



⚠ Refer to safety precautions on next page and safety precautions on "Pneumatic Cylinders I" catalog (No. CB-029SA).



Safety precautions

Always read this section before starting use.

When designing and manufacturing a device using CKD products, the manufacturer is obligated to check that device safety mechanism, pneumatic control circuit, or water control circuit and the system operated by electrical control that controls the devices is secured.

It is important to select, use, handle, and maintain the product appropriately to ensure that the CKD product is used safely.

Observe warnings and precautions to ensure device safety.

Check that device safety is ensured, and manufacture a safe device.

WARNING

- 1 This product is designed and manufactured as a general industrial machine part. It must be handled by an operator having sufficient knowledge and experience in handling.**
- 2 Use this product in accordance of specifications.**

This product must be used within its stated specifications. It must not be modified or machined.

This product is intended for use as a general-purpose industrial device or part. It is not intended for use outdoors or for use under the following conditions or environment.

(Note that this product can be used when CKD is consulted prior to use and the customer consents to CKD product specifications. The customer must provide safety measures to avoid risks in the event of problems.)

- ① Use for special applications requiring safety including nuclear energy, railroad, aviation, ship, vehicle, medical equipment, equipment or applications coming into contact with beverage or food, amusement equipment, emergency shutoff circuits, press machine, brake circuits, or for safeguard.
- ② Use for applications where life or assets could be adversely affected, and special safety measures are required.

- 3 Observe corporate standards and regulations, etc., related to the safety of device design and control, etc.**

ISO4414, JIS B8370 (pneumatic system rules)

JFPS2008 (principles for pneumatic cylinder selection and use)


Including High Pressure Gas Maintenance Law, Occupational Safety and Sanitation Laws, other safety rules, body standards and regulations, etc.


- 4 Do not handle, pipe, or remove devices before confirming safety.**


- ① Inspect and service the machine and devices after confirming safety of the entire system related to this product.
- ② Note that there may be hot or charged sections even after operation is stopped.
- ③ When inspecting or servicing the device, turn off the energy source (air supply or water supply), and turn off power to the facility. Discharge any compressed air from the system, and pay enough attention to possible water leakage and leakage of electricity.
- ④ When starting or restarting a machine or device that incorporates pneumatic components, make sure that the system safety, such as pop-out prevention measures, is secured.
- ⑤ Provide a fail-safe mechanism in applications where product faults could lead to accidents.

- 5 Observe warnings and cautions on the pages below to prevent accidents.**

■ The precautions are ranked as "DANGER", "WARNING" and "CAUTION" in this section.

 **DANGER:** When a dangerous situation may occur if handling is mistaken leading to fatal or serious injuries, or when there is a high degree of emergency to a warning.

 **WARNING:** When a dangerous situation may occur if handling is mistaken leading to fatal or serious injuries.

 **CAUTION:** When a dangerous situation may occur if handling is mistaken leading to minor injuries or physical damage.

Note that some items described as "CAUTION" may lead to serious results depending on the situation. In any case, important information that must be observed is explained.

Disclaimer

1. CKD cannot be held liable for any business interruption, loss of profit, personal injury, delay cost, or any other ancillary or indirect loss, cost, or damage resulting from the use of or faults in the use of CKD products.
2. CKD cannot be held responsible for the following damage.
 - (1) Damage resulting from disaster or failure of CKD parts due to fire from reasons not attributable to CKD, or by intentional or negligence of a third party or customer.
 - (2) When a CKD product is assembled into customer equipment, damage that could have been avoided if customer equipment were provided with functions and structure, etc., generally accepted in the industry.
 - (3) Damage resulting from use exceeding the scope of specifications provided in CKD catalogs or instruction manuals, etc., or from actions not following precautions for installation, adjustment, or maintenance, etc.
 - (4) Damage resulting from product modifications not approved by CKD, or from faults due to combination with other software or other connected devices.



Pneumatic components Safety precautions

Always read this section before starting use.

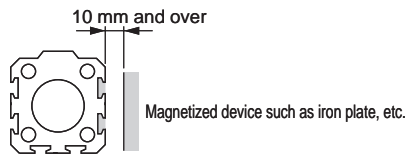
Refer to "Pneumatic cylinders I" catalog No. CB-029SA for the general cylinder or cylinder switch.

Compact cylinder SSD Series

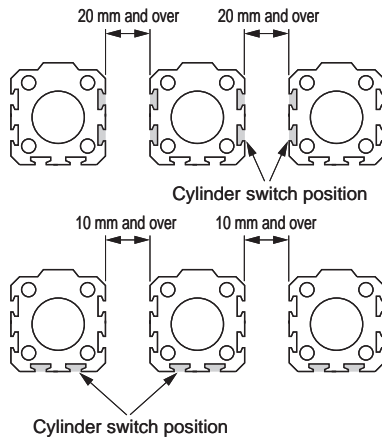
Installation & Adjustment

CAUTION

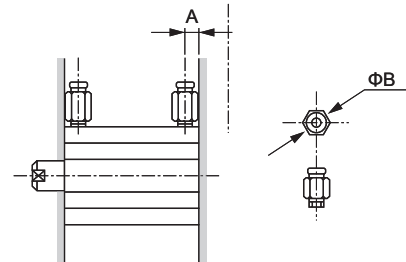
- The cylinder switch may malfunction if a magnetized device, such as a steel plate, is near the cylinder switch. Separate from the magnetized device by at least 10 mm from the cylinder surface.
(Same for all bore size)



- The cylinder switch could malfunction if cylinders are installed next to each other. Check that the following distances are provided between cylinder surfaces.
(Same for all bore size)



- Usable pipe joints are limited, so see the following table to select the joint.



Descriptions Bore size (mm)	Port size	Port dimension A	Applicable joints	Joint O.D.	Inapplicable joints
				ΦB	
Φ12	M5	5.5	SC3W-M5-4	Φ11 or less	GWS6-M5
Φ16			SC3W-M5-6		
Φ20			GWS4-M5-S		
Φ25			GWS4-M5 GWL4-M5 GWL6-M5		
Φ32	Rc1/8	8	SC3W-6-4,6,8 GWS4-6 GWS6-6 GWS8-6 GWL4-6 GWL6-6	Φ15 or less	GWS10-6 GWL8-6 GWL10-6
Φ40		8.5			
Φ50	Rc1/4	10.5	SC3W-8-6,8,10 GWS4-8 GWS6-8 GWS10-8 GWL4 to 12-8	Φ21 or less	GWS12-8
Φ63		11			
Φ80	Rc3/8	13	SC3W-10-6,8,10 GWS6-10 GWS8-10 GWS10-10 GWL6 to 12-10	Φ21 or less	-
Φ100		15			

During Use & Maintenance

WARNING

- Use suitable pliers (snap ring installation pliers) to install and remove rod metal.
- Even if suitable pliers are used, the snap ring could be dislocated and cause injury to personnel or damage peripheral devices.

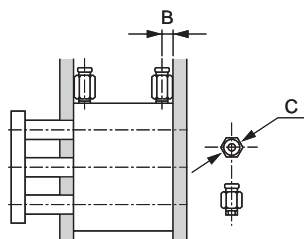
When installing the snap ring, make sure that it fits securely into the snap ring groove before supplying air.

Guided cylinder STG Series

Installation & Adjustment

⚠ CAUTION

- Install a flow control valve when piping. The applicable joints are shown as below.



Descriptions Bore size (mm)	Port size	Port dimension B	Applicable joints	Joint O.D. ΦC
Φ20	Rc1/8	8.5	SC3W-6-4/6/8	Φ15 or less
Φ25		9	GWS4-6 GWS6-6	
Φ32		9	GWS8-6	
Φ40		10	GWL4-6 GWL6-6	
Φ50	Rc1/4	11	SC3W-8-6/8/10 GWS4-8 GWS6-8	Φ21 or less
Φ63		15	GWS10-8 GWS12-8 GWL4 to 12-8	
Φ80	Rc3/8	15	SC3W-10-8/10/12 GWS6-10 GWS8-10 GWS10-10 GWL6 to 12-10	Φ28 or less
Φ100	Rc3/8	19	SC3W-10-8/10/12 GWS6-10 GWS8-10 GWS10-10 GWL6 to 12-10	Φ28 or less

- Check that no dents or scratches are made on main tubing installation or end plates that may adversely affect flatness.

The flatness of the counterpart onto which the end plate is fitted must be 0.03 mm or less.

- When passing the bolt through the main body and installing, tighten with the following tightening torque.

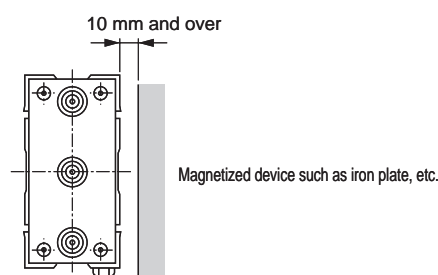
Φ20, Φ25	3 to 5.4 N·m
Φ32, Φ40	5.2 to 9.2 N·m
Φ50, Φ63	12.5 to 22 N·m
Φ80	24.5 to 44 N·m
Φ100	42 to 76 N·m

- Allowable energy absorption

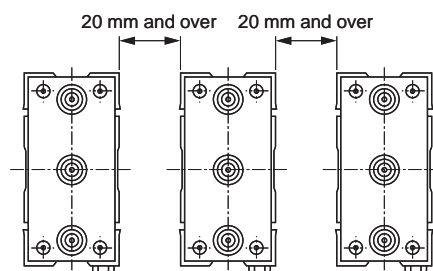
Use within the allowable energy absorption range. Provide the other cushioning outside if exceeding allowable energy absorption range.

Refer to the Specifications or Selection guide for allowable energy absorption values.

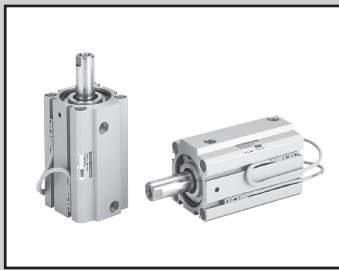
- The cylinder may malfunction if a magnetic substance, such as a steel plate, is nearby. Move the magnetic substance to at least 10 mm from the cylinder. (same for all bore size)



- The cylinder switch may malfunction if cylinders are installed adjacently. Separate cylinders by the following distances. (same for all bore size)



MEMO



Compact cylinder double acting single rod, environment resistant scraper type

SSD-G5 Series

● Bore size: $\Phi 20$, 25, 32, 40, 50, 63, 80, 100

JIS symbol



Specifications

Descriptions		SSD-G5 SSD-G5L (with switch)								
		$\Phi 20$	$\Phi 25$	$\Phi 32$	$\Phi 40$	$\Phi 50$	$\Phi 63$	$\Phi 80$	$\Phi 100$	
Bore size	mm	$\Phi 20$	$\Phi 25$	$\Phi 32$	$\Phi 40$	$\Phi 50$	$\Phi 63$	$\Phi 80$	$\Phi 100$	
Actuation		Double acting								
Working fluid		Compressed air								
Max. working pressure	MPa	1.0								
Min. working pressure	MPa	0.2					0.15			
Withstanding pressure	MPa	1.6								
Ambient temperature	$^{\circ}\text{C}$	-10 to 60 (no freezing)								
Port size		M5		Rc1/8		Rc1/4		Rc3/8		
Stroke tolerance	mm	+1.0 0								
Working piston speed	mm/s	50 to 500					50 to 300			
Cushion		No								
Lubrication		Not required (when lubricating, use turbine oil Class 1 ISO VG32.)								
Allowable energy absorption	J	0.016	0.021	0.025	0.092	0.1	0.12	0.27	0.56	

Stroke length

Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)
$\Phi 20$	5, 10, 15, 20, 25, 30, 40, 50	50	1
$\Phi 25$			
$\Phi 32$			
$\Phi 40$			
$\Phi 50$			
$\Phi 63$	5, 10, 20, 30, 40, 50	50	1
$\Phi 80$			
$\Phi 100$			

Note 1: For $\phi 12$ to $\phi 100$, if the standard stroke is exceeded, the high load is used.
Refer to page 9 for the specifications.

Note 2: When using the type with a switch, refer to the switch installation number and min. stroke length (mm) below.

Note 3: The custom stroke can be manufactured in 1 mm increments. Total length of the custom stroke is the same as the longer standard stroke.

Switch installation number and min. stroke length (mm)

Switch quantity	1	2	3	4
Switch model no.	T*	T*	T*	T*
Bore size (mm)	T*	T*	T*	T*
$\Phi 20$	5	5	-	-
$\Phi 25$	5	5	35	50
$\Phi 32$	5	5	35	50
$\Phi 40$	5	5	35	50
$\Phi 50$	5	5	35	50
$\Phi 63$	5	5	35	50
$\Phi 80$	5	5	35	50
$\Phi 100$	5	5	35	50

Note: The 2-color indication, off delay, strong magnetic field proof, or 10 mm or shorter type with a T1* or T8* switch is not used.

Switch specifications

● 1 color/2 color indicator, strong magnetic field proof

* The TO/T5 switch is used with 220 VAC. Contact CKD for conditions.

Descriptions	Proximity 2 wire			Proximity 3 wire			Reed 2 wire						Proximity 2 wire	
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T3H/ T3V	T3PH/T3PV (Custom order)	T3YH/ T3YV	TOH/TOV	T5H/T5V		T8H/T8V			T2YD	
Applications	Programmable controller relay, small solenoid valve	Programmable controller dedicated		Programmable controller, relay			Programmable controller, relay	Programmable controller, relay, IC circuit (w/o light), serial connection		Programmable controller, relay			Programmable controller dedicated	
Output method	-			NPN output	PNP output	NPN output	-							
Power voltage	-			10 to 28 VDC			-							
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less			12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 100 mA	5 to 20 mA (Note 1)		100 mA or less		50 mA or less	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Light	LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Green LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Without indicator light		LED (ON lighting)			Red/green LED (ON lighting)	
Leakage current	1 mA or less with 100 VAC 2 mA or less with 200 VAC	1 mA or less		10 µA or less			0mA						1 mA or less	

● With preventive maintenance output

Descriptions	Proximity 3 wire	Proximity 4 wire	Proximity 3 wire	Proximity 4 wire
	T2YFH/V	T3YFH/V	T2YMH/V	T3YMH/V
Applications	Programmable controller dedicated	Programmable controller, relay	Programmable controller dedicated	Programmable controller, relay
Output method	NPN output			
Light	Installation position adjustment section	Red/green LED (ON lighting)		
	Preventive maintenance output	-	Yellow LED (ON lighting)	
Regular Output	Power voltage	-	10 to 28 VDC	-
	Load voltage	10 to 30 VDC	30 VDC or less	10 to 30 VDC
	Load current	5 to 20 mA	50 mA or less	5 to 20 mA
	Leakage current	1 mA or less	10 µA or less	1.2 mA or less
Preventive maintenance Output	Load voltage	30 VDC or less		
	Load current	20 mA or less	50 mA or less	5 to 20 mA or less
	Leakage current	10 µA or less		

Note 1: The maximum load current 20 mA above applies at 25°C. If the ambient switch operation temperature exceeds 25°C, the current value will be less than 20 mA. (5 to 10 mA at 60°C)

Cylinder weight table (The weight with switch is for two-cylinder switches.)

(Unit: g)

Stroke length (mm)	5		10		15		20		25		30		40		50	
	No switch	With switch	No switch	With switch	No switch	With switch	No switch	With switch	No switch	With switch	No switch	With switch	No switch	With switch	No switch	With switch
Φ20	95	150	107	182	120	195	133	208	145	220	158	233	183	258	208	283
Φ25	131	222	146	237	162	253	178	269	194	285	209	300	241	332	272	363
Φ32	185	299	207	321	229	343	251	365	272	386	294	408	338	452	381	495
Φ40	269	412	296	439	322	465	349	492	376	519	402	545	455	598	508	651
Φ50	434	628	476	670	518	712	560	754	602	796	645	839	729	923	813	1007
Φ63	648	927	703	982	-	-	813	1092	-	-	923	1202	1074	1313	1144	1423
Φ80	1153	1566	1240	1653	-	-	1413	1826	-	-	1586	1990	1760	2173	1933	2346
Φ100	1765	2332	1879	2446	-	-	2106	2673	-	-	2334	2901	2561	3128	2789	3356

How to order

Without switch

SSD-G5 - 20 - 5 - N - LB - I

With switch

SSD-G5L - 20 - 5 - T0H - R - N - LB - I

Ⓐ Model no.

Ⓑ Bore size

Ⓒ Piping thread type

Ⓓ Stroke length

Ⓔ Switch model no.
Note 1

Ⓕ Switch quantity

Ⓖ Option

Ⓗ Mounting bracket
Note 2

Ⓙ Accessory
Note 3

⚠ Note on model no. selection

Note 1: T8* switch can not be installed for $\Phi 20$ to $\Phi 32$.

Note 2: Mounting bracket is included with shipment.

Note 3: "I" and "Y" can not be selected at the same time.

<Example of model number> SSD-G5L-32-5-T0H-R-N-LB-I

Model: Compact cylinder double acting single rod, environment resistant scraper type

Ⓑ Bore size : $\Phi 32$ mm

Ⓒ Piping thread type : Rc thread

Ⓓ Stroke length : 5 mm

Ⓔ Switch model : Reed switch T0H
no. Lead wire length 1 m

Ⓕ Switch quantity : One on rod end

Ⓖ Option : Rod end male thread

Ⓗ Mounting bracket : Axial foot

Ⓙ Accessory : Rod eye

Symbol	Descriptions			
Ⓐ Model no.				
SSD-G5	Double acting single rod, environment resistant scraper type			
SSD-G5L	Double acting single rod, environment resistant scraper type with switch			
Ⓑ Bore size (mm)				
20	$\Phi 20$			
25	$\Phi 25$			
32	$\Phi 32$			
40	$\Phi 40$			
50	$\Phi 50$			
63	$\Phi 63$			
80	$\Phi 80$			
100	$\Phi 100$			
Ⓒ Piping thread type				
Blank	Rc/M5 thread			
NN	NPT thread ($\Phi 32$ and over) (custom order)			
GN	G thread ($\Phi 32$ and over) (custom order)			
Ⓓ Stroke length (mm)				
Refer to the stroke length table on following page.				
Ⓔ Switch model no.				
Axial lead wire	Radial lead wire	Contact	Indication	Lead wire
T0H*	T0V*	Reed	1 color indicator type	2-wire
T5H*	T5V*		Without indicator light	
T8H*	T8V*		1 color indicator type	
T1H*	T1V*	Proximity	1 color indicator type	2-wire
T2H*	T2V*			
T3H*	T3V*		1 color indicator type (custom order)	3-wire
T3PH*	T3PV*			
T2YH*	T2YV*		2 color indicator type	2-wire
T3YH*	T3YV*			
T2YFH*	T2YFV*		2 color indicator type (Without indicator light for preventive maintenance output)	3-wire
T3YFH*	T3YFV*			
T2YMH*	T2YMV*		2 color indicator type (With indicator light for preventive maintenance output (1 color))	3-wire
T3YMH*	T3YMV*			
T2JH*	T2JV*	Off-delay type	2-wire	
T2YD*	-	Strong magnetic field proof switch		2-wire
T2YDT*	-			
* Lead wire length				
Blank	1 m (standard)			
3	3 m (option)			
5	5 m (option)			
Ⓕ Switch quantity				
R	One on rod end			
H	One on head end			
D	Two			
Ⓖ Option				
Blank	Rod end female thread			
N	Rod end male thread			
Ⓗ Mounting bracket				
LB	Axial foot			
LB2	Axial foot (compact type)			
CB	Clevis (pin and snap ring attached)			
CB2	Clevis (compact type) (pin and snap ring attached)			
FA	Rod end flange type			
FB	Head end flange type			
Ⓙ Accessory (permissible if rod end male thread "N" was selected.)				
I	Rod eye			
I2	Rod eye (compact type)			
Y	Rod clevis (pin and snap ring attached)			
Y2	Rod clevis (compact type) (pin and snap ring attached)			

(Stroke length table)

Stroke length (mm)		Applicable bore size							
		Φ20	Φ25	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Standard stroke length	5	●	●	●	●	●	●	●	●
	10	●	●	●	●	●	●	●	●
	15	●	●	●	●	●			
	20	●	●	●	●	●	●	●	●
	25	●	●	●	●	●			
	30	●	●	●	●	●	●	●	●
	40	●	●	●	●	●	●	●	●
	50	●	●	●	●	●	●	●	●
	60								
	70								
	80								
	90								
100									
Min. stroke length (mm) Note 1		1							
Max. stroke length (mm)		50							
Custom stroke length Note 2		1 mm increment							

Note 1: 5 mm or shorter type with one-color indication switch, 2 color indication, off-delay, strong magnetic field proof, or 10 mm or shorter type with T1* or T8* switch is not available.

Refer to page 1 for the switch installation number and minimum stroke.

Note 2: Total length of the custom stroke is the same as the next larger standard stroke.

How to order switch

SW - T0H

Switch model no.
(Item **E** on previous page)

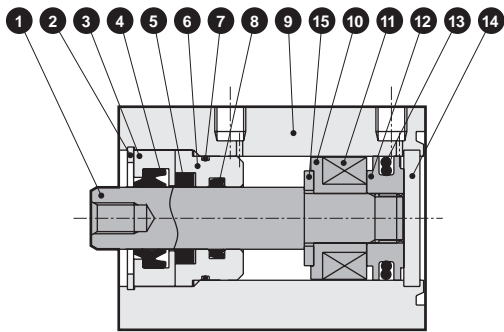
How to order mounting bracket

Bore size (mm)	Φ20	Φ25	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Foot (LB)	SSD-LB-20	SSD-LB-25	SSD-LB-32	SSD-LB-40	SSD-LB-50	SSD-LB-63	SSD-LB-80	SSD-LB-100
Foot (LB2)	SSD-LB2-20	SSD-LB2-25	SSD-LB2-32	SSD-LB2-40	SSD-LB2-50	SSD-LB2-63	SSD-LB2-80	SSD-LB2-100
Flange (FA/FB)	SSD-FA-20	SSD-FA-25	SSD-FA-32	SSD-FA-40	SSD-FA-50	SSD-FA-63	SSD-FA-80	SSD-FA-100
Clevis (CB)	SSD-CB-20	SSD-CB-25	SSD-CB-32	SSD-CB-40	SSD-CB-50	SSD-CB-63	SSD-CB-80	SSD-CB-100
Clevis (CB2)	SSD-CB2-20	SSD-CB2-25	SSD-CB2-32	SSD-CB2-40	SSD-CB2-50	SSD-CB2-63	SSD-CB2-80	SSD-CB2-100

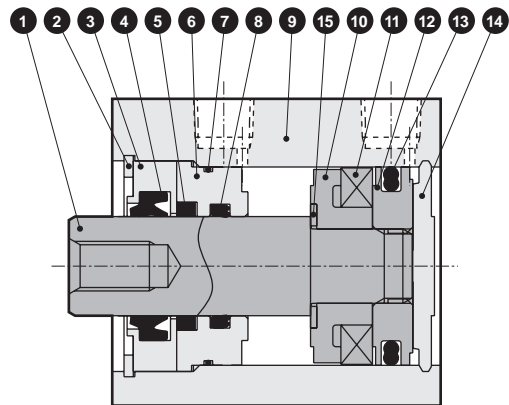
Note 1: The foot mounting bracket is supplied as a two-piece set.

Internal structure and parts list (Φ20 to Φ50)

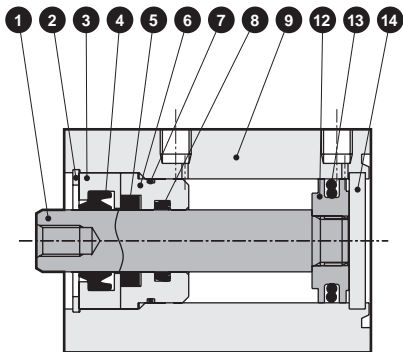
- SSD-G5L-20/25 (double acting/environment resistant scraper type with switch)



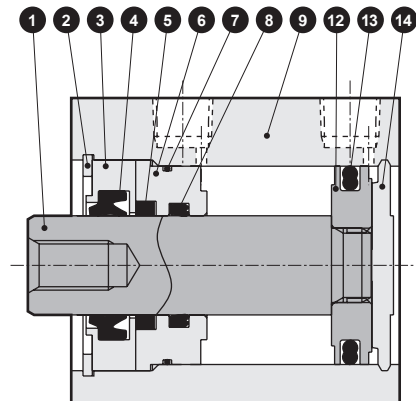
- SSD-G5L-32 to 50 (double acting/environment resistant scraper type with switch)



- SSD-G5-20/25 (double acting/environment resistant scraper type)



- SSD-G5-32 to 50 (double acting/environment resistant scraper type)



Main parts list

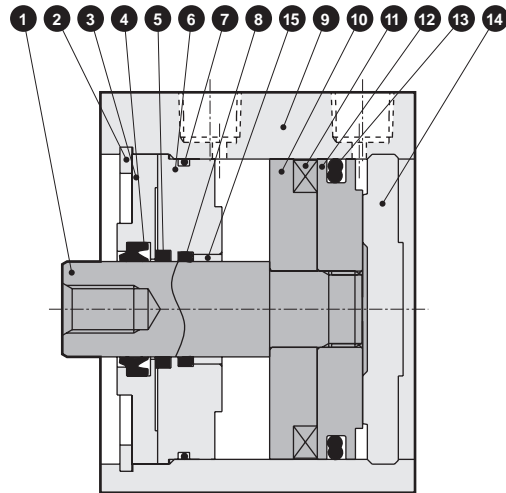
No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Piston rod	Φ20, Φ25: stainless steel	Industrial chrome plating	9	Body	Aluminum alloy	Hard alumite
		Φ32 to Φ50: steel		10	Spacer	Special plastic	
2	C type snap ring	Steel	Phosphoric acid zinc	11	Magnet	Plastic	
3	Rod bushing 1	Special aluminum	Chromate	12	Piston	Aluminum alloy	Chromate
4	Scraper	Nitrile rubber		13	Piston packing seal	Nitrile rubber	
5	Lube keeping structure	Special rubber		14	Guard	Φ20, Φ25: stainless steel	Φ32 to Φ50: alumite
6	Rod bushing 2	Special aluminum	Alumite			Φ32 to Φ50: aluminum alloy	
7	Rod metal gasket	Nitrile rubber		15	Spacer washer	Stainless steel	
8	Rod packing seal	Nitrile rubber					

Repair parts list

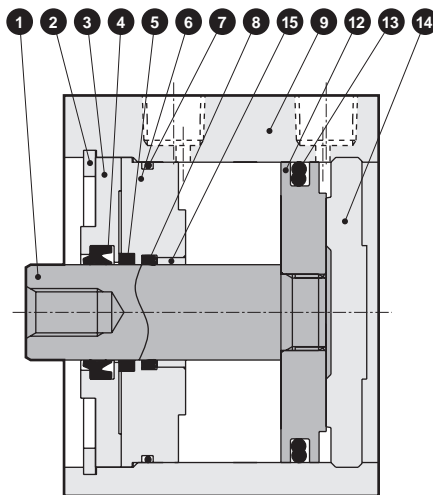
Parts name	Kit No.	Repair parts number
Bore size (mm)		
Φ20	SSD-G5-20K	4 5 7 8 13
Φ25	SSD-G5-25K	
Φ32	SSD-G5-32K	
Φ40	SSD-G5-40K	
Φ50	SSD-G5-50K	

Internal structure and parts list (Φ63 to Φ100)

● SSD-G5L-63 to 100 (double acting/environment resistant scraper type with switch)



● SSD-G5-63 to 100 (double acting/environment resistant scraper type)



Main parts list

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Piston rod	Steel	Industrial chrome plating	9	Body	Aluminum alloy	Hard alumite
2	C type snap ring	Steel	Phosphoric acid zinc	10	Spacer	Aluminum alloy	Chromate
3	Rod bushing 1	Aluminum alloy	Chromate	11	Magnet	Plastic	
4	Scraper	Nitrile rubber		12	Piston	Aluminum alloy	Chromate
5	Lube keeping structure	Special rubber		13	Piston packing seal	Nitrile rubber	
6	Rod bushing 2	Aluminum alloy	Chromate	14	Guard	Aluminum alloy	Alumite
7	Rod metal gasket	Nitrile rubber		15	Bush	Oilless dry met	
8	Rod packing seal	Nitrile rubber					

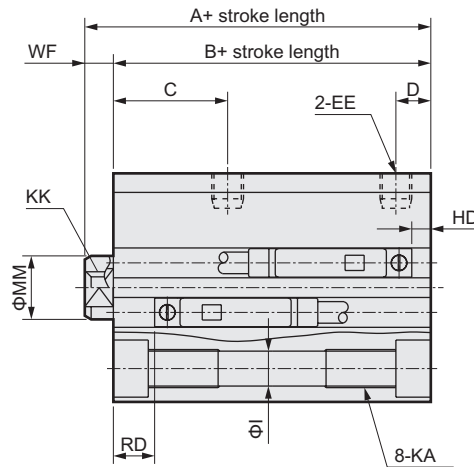
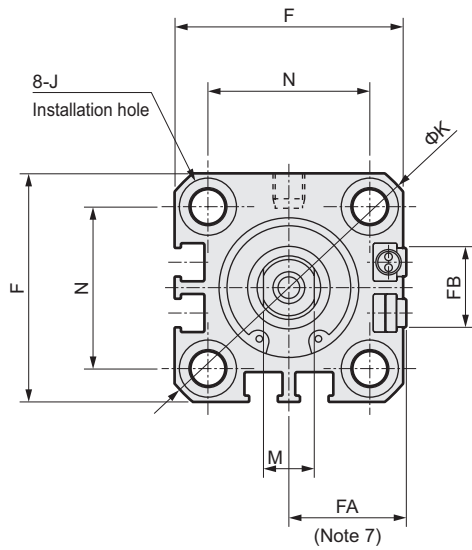
Repair parts list

Parts name	Kit No.	Repair parts number
Bore size (mm)		
Φ63	SSD-G5-63K	4 5 7 8 13
Φ80	SSD-G5-80K	
Φ100	SSD-G5-100K	

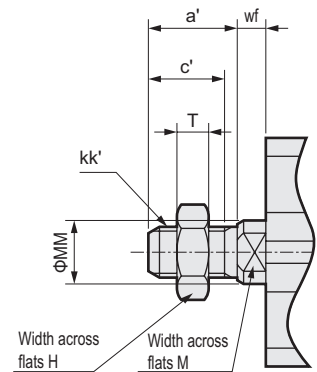
SSD-G5 Series

Dimensions (Φ20, Φ25)

● SSD-G5L-20/25 (with switch)



● Rod end male thread



Symbol	Without switch		Dimension with switch and common dimension							
	A ^{Note 1}	B ^{Note 1}	A ^{Note 1}	B ^{Note 1}	C	D	EE	F	FA ^{Note 4}	FB
Φ20	34	29.5	44	39.5	18	5.5	M5	36	18.5(22)	12.5
Φ25	37.5	32.5	47.5	42.5	21	6	M5	40	20.5(24)	13.5

Symbol	Dimension with switch and common dimension									
	I	J	K	KA	KK	M	MM	N	WF	
Φ20	5.5	9 spot face depth 5.5	47	M6 depth 11	M5 depth 7	8	10	25.5	4.5	
Φ25	5.5	9 spot face depth 5.5	51	M6 depth 11	M6 depth 11	10	12	28	5	

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
	HD	RD	HD	RD	HD	RD
Φ20	3	16.5	1.5	15	1.5	15
Φ25	3	19.5	1.5	18	1.5	18

Note 1: When calculating A+ and B+ stroke dimensions for the custom stroke, do not set the custom stroke in the stroke. Instead, set the next larger standard stroke. Example: If the custom stroke is 7 mm, calculate including standard stroke 10 mm.

Note 2: HD and RD dimensions for the 5 stroke will differ from these due to manufacturing.

Note 3: Dimensions in () of FA column are values when radial lead wire is installed.

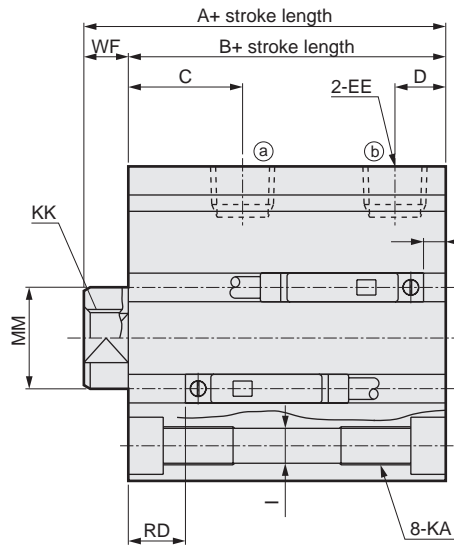
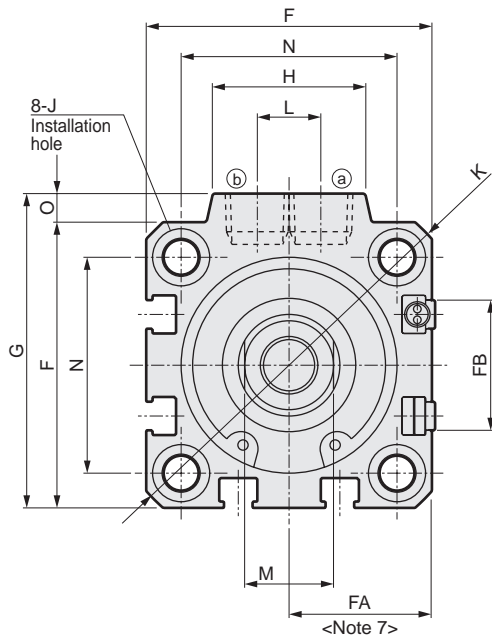
Note 4: Refer to Pneumatic Cylinders I (CB-029SA) for dimension drawings with accessories and dimension drawings for discrete accessories.

Rod end male thread

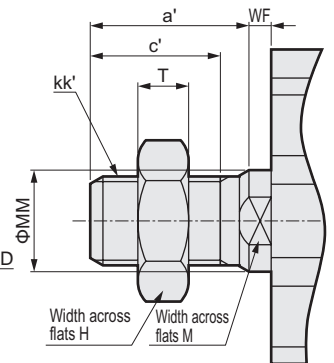
Symbol	a'	c'	H	kk'	M	MM	T	wf
	Φ20	14	12	13	M8	8	10	5
Φ25	17.5	15	17	M10×1.25	10	12	6	5

Dimensions (Φ32 to Φ100)

● SSD-G5L-32 to 100 (with switch)



● Rod end male thread



Symbol	Without switch		Dimension with switch and common dimension									
	A ^{Note 1}	B ^{Note 1}	A ^{Note 1}	B ^{Note 1}	C	D	EE	F	FA ^{Note 4}	FB	G	H
Φ32	40	33	50	43	18	8	Rc1/8	45	23(26.5)	20.5	49.5	24
Φ40	46.5	39.5	56.5	49.5	22	8.5	Rc1/8	52	26.5(30)	27.5	57	24
Φ50	48.5	40.5	58.5	50.5	20.5	10.5	Rc1/4	64	32.5(36)	28.5	71	33
Φ63	54	46	64	56	23	11	Rc1/4	77	39(42.5)	28.5	84	33
Φ80	63.5	53.5	73.5	63.5	26	13	Rc3/8	98	49.5(53)	28.5	104	38
Φ100	75	63	85	73	33	15	Rc3/8	117	59(62.5)	28.5	123.5	38

Symbol	Dimension with switch and common dimension											
	I	J	K	KA	KK	L	M	MM	N	O	WF	
Φ32	5.5	9 spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	14	16	34	4.5	7	
Φ40	5.5	9 spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	14	16	40	5	7	
Φ50	6.9	11 spot face depth 6.5	86	M8 depth 13	M10 depth 15	15	17	20	50	7	8	
Φ63	8.7	14 spot face depth 9	103	M10 depth 25	M10 depth 15	15	17	20	60	7	8	
Φ80	10.5	17.5 spot face depth 11	132	M12 depth 28	M16 depth 21	15	22	25	77	6	10	
Φ100	10.5	17.5 spot face depth 11	156	M12 depth 29	M20 depth 27	15	27	30	94	6.5	12	

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
	HD	RD	HD	RD	HD	RD
Φ32	3.5	19	2	17.5	0	13
Φ40	7	22	5.5	20.5	1	16
Φ50	7.5	22.5	6	21	1.5	16.5
Φ63	12.5	23	11	21.5	6.5	17
Φ80	17.5	25.5	16	24	11.5	19.5
Φ100	22	30.5	21.5	28	7	23.5

Note 1: When calculating A+ and B+ stroke dimensions for the custom stroke, do not set the custom stroke in the stroke. Instead, set the next larger standard stroke. Example: If the custom stroke is 7 mm, calculate including standard stroke 10 mm.

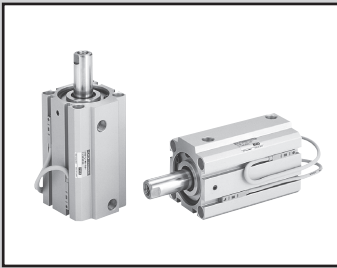
Note 2: HD and RD dimensions for the 5 stroke will differ from these due to manufacturing.

Note 3: Dimensions in () of FA column are values when radial lead wire is installed.

Note 4: Refer to Pneumatic Cylinders I (CB-029SA) for dimension drawings with accessories and dimension drawings for discrete accessories.

Rod end male thread

Symbol	a'	c'	H	kk'	M	MM	T	wf
Φ32	23.5	20.5	22	M14×1.5	14	16	8	5
Φ40	23.5	20.5	22	M14×1.5	14	16	8	5
Φ50	28.5	26	27	M18×1.5	17	20	11	5
Φ63	28.5	26	27	M18×1.5	17	20	11	5
Φ80	35.5	32.5	32	M22×1.5	22	25	13	8
Φ100	35.5	32.5	41	M26×1.5	27	30	16	8



Compact cylinder double acting single rod, high load, environment resistant scraper type

SSD-KG5 Series

● Bore size: $\Phi 20, 25, 32, 40, 50, 63, 80, 100$



Specifications

Descriptions	SSD-KG5 SSD-KG5L (with switch)								
	$\Phi 20$	$\Phi 25$	$\Phi 32$	$\Phi 40$	$\Phi 50$	$\Phi 63$	$\Phi 80$	$\Phi 100$	
Bore size mm	$\Phi 20$	$\Phi 25$	$\Phi 32$	$\Phi 40$	$\Phi 50$	$\Phi 63$	$\Phi 80$	$\Phi 100$	
Actuation	Double acting								
Working fluid	Compressed air								
Max. working pressure MPa	1.0								
Min. working pressure MPa	0.1					0.05			
Withstanding pressure MPa	1.6								
Ambient temperature $^{\circ}\text{C}$	-10 to 60 (no freezing)								
Port size	M5		Rc1/8		Rc1/4		Rc3/8		
Stroke tolerance mm	+2.0 0								
Working piston speed mm/s	50 to 500					50 to 300			
Cushion	Rubber cushion								
Lubrication	Not required (when lubricating, use turbine oil Class 1 ISO VG32.)								
Allowable energy absorption J	0.16	0.16	0.40	0.63	0.98	1.56	2.51	3.92	

Stroke length

Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)
$\Phi 20$	5, 10, 15, 20, 25, 30, 40, 50	200 Note 2	1
$\Phi 25$	10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	300	
$\Phi 32$			
$\Phi 40$			
$\Phi 50$			
$\Phi 63$	10, 20, 30, 40, 50, 60, 70, 80, 90, 100	Note 2	
$\Phi 80$			
$\Phi 100$			

Note 1: The custom stroke can be manufactured in 1 mm increments. Total length of the custom stroke is the same as the longer standard stroke.

Note 2: Lengths exceeding the standard stroke are available in increments of 10 to the maximum stroke.

Note 3: The internal structure and total length may differ for $\phi 20$: 100 or more, 200 or less; $\phi 25$ to $\phi 50$: 150 or more, 300 or less; and $\phi 63$ to $\phi 100$: 200 or more, 300 or less.

Note 4: When using the type with switch, refer to the switch installation number and min. stroke length below.

Switch installation number and min. stroke length (mm)

Switch quantity	1	2	3	4	5
Switch model no.	T*	T*	T*	T*	T*
Bore size (mm)	T*	T*	T*	T*	T*
$\Phi 20$	5	5	35	50	65
$\Phi 25$	5	5	35	50	65
$\Phi 32$	5	5	35	50	65
$\Phi 40$	5	5	35	50	65
$\Phi 50$	5	5	35	50	65
$\Phi 63$	5	5	35	50	65
$\Phi 80$	5	5	35	50	65
$\Phi 100$	5	5	35	50	65

Note: The 2-color indication, off delay, strong magnetic field proof, or 10 mm or shorter type with a T1* or T8* switch is not used.

Switch specifications

● 1 color/2 color indicator, strong magnetic field proof

* The TO/T5 switch is used with 220 VAC. Contact CKD for conditions.

Descriptions	Proximity 2 wire			Proximity 3 wire			Reed 2 wire						Proximity 2 wire	
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T3H/ T3V	T3PH/T3PV (Custom order)	T3YH/ T3YV	TOH/TOV	T5H/T5V		T8H/T8V			T2YD	
Applications	Programmable controller relay, small solenoid valve	Programmable controller dedicated		Programmable controller, relay			Programmable controller, relay	Programmable controller, relay, IC circuit (w/o light), serial connection		Programmable controller, relay			Programmable controller dedicated	
Output method	-			NPN output	PNP output	NPN output	-							
Power voltage	-			10 to 28 VDC			-							
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less			12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 100 mA	5 to 20 mA (Note 1)		100 mA or less		50 mA or less	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Light	LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Green LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Without indicator light		LED (ON lighting)			Red/green LED (ON lighting)	
Leakage current	1 mA or less with 100 VAC 2 mA or less with 200 VAC	1 mA or less		10 µA or less			0 mA						1 mA or less	

● With preventive maintenance output

Descriptions	Proximity 3 wire	Proximity 4 wire	Proximity 3 wire	Proximity 4 wire	
	T2YFH/V	T3YFH/V	T2YMH/V	T3YMH/V	
Applications	Programmable controller dedicated	Programmable controller, relay	Programmable controller dedicated	Programmable controller, relay	
Output method	NPN output				
Light	Installation position adjustment section	Red/green LED (ON lighting)			
	Preventive maintenance output	-	Yellow LED (ON lighting)		
Regular Output	Power voltage	-	10 to 28 VDC	-	10 to 28 VDC
	Load voltage	10 to 30 VDC	30 VDC or less	10 to 30 VDC	30 VDC or less
	Load current	5 to 20 mA	50 mA or less	5 to 20 mA	50 mA or less
	Leakage current	1 mA or less	10 µA or less	1.2 mA or less	10 µA or less
Preventive maintenance Output	Load voltage	30 VDC or less			
	Load current	20 mA or less	50 mA or less	5 to 20 mA or less	50 mA or less
	Leakage current	10 µA or less			

Note 1: The maximum load current 20 mA above applies at 25°C. If the ambient switch operation temperature exceeds 25°C, the current value will be less than 20 mA. (5 to 10 mA at 60°C)

How to order

Without switch

SSD-KG5 - 20 - 5 - N - LB - I

With switch

SSD-KG5L - 20 - 5 - T0H - R - N - LB - I

Ⓐ Model no.

Ⓑ Bore size

Ⓒ Piping thread type

Ⓓ Stroke length

Ⓔ Switch model no.

Ⓕ Switch quantity

Ⓖ Option

Ⓗ Mounting bracket
Note 1

Ⓘ Accessory
Note 2

⚠ Note on model no. selection

Note 1: Mounting bracket is included with shipment.

Note 2: "I" "Y" can not be selected at the same time.

<Example of model number>

SSD-KG5L-32-5-T0H-R-N

Model: Compact cylinder double acting single rod, high load, environment resistant scraper type

Ⓑ Bore size : Φ32 mm

Ⓒ Piping thread type : Rc thread

Ⓓ Stroke length : 5 mm

Ⓔ Switch model no. : Reed switch T0H
Lead wire 1 m

Ⓕ Switch quantity : One on rod end

Ⓖ Option : Rod end male thread

Symbol	Descriptions			
Ⓐ Model no.				
SSD-KG5	Double acting single rod, high load, environment resistant scraper type			
SSD-KG5L	Double acting single rod, high load, environment resistant scraper type with switch			
Ⓑ Bore size (mm)				
20	Φ20			
25	Φ25			
32	Φ32			
40	Φ40			
50	Φ50			
63	Φ63			
80	Φ80			
100	Φ100			
Ⓒ Piping thread type				
Blank	Rc/M5 thread			
NN	NPT thread (Φ32 and over) (custom order)			
GN	G thread (Φ32 and over) (custom order)			
Ⓓ Stroke length (mm)				
Refer to the stroke length table on following page.				
Ⓔ Switch model no.				
Axial lead wire	Radial lead wire	Contact	Indication	Lead wire
T0H*	T0V*	Reed	1 color indicator type	2-wire
T5H*	T5V*		Without indicator light	
T8H*	T8V*		1 color indicator type	
T1H*	T1V*	Proximity	1 color indicator type	2-wire
T2H*	T2V*			
T3H*	T3V*		1 color indicator type (custom order)	3-wire
T3PH*	T3PV*			
T2YH*	T2YV*		2 color indicator type	2-wire
T3YH*	T3YV*			
T2YFH*	T2YFV*		2 color indicator type (Without indicator light for preventive maintenance output)	3-wire
T3YFH*	T3YFV*			
T2YMH*	T2YMV*		2 color indicator type (With indicator light for preventive maintenance output (1 color))	3-wire
T3YMH*	T3YMV*			
T2JH*	T2JV*	Off-delay type	2-wire	
T2YD*	-	Strong magnetic field proof switch		2-wire
T2YDT*	-			
* Lead wire length				
Blank	1 m (standard)			
3	3 m (option)			
5	5 m (option)			
Ⓕ Switch quantity				
R	One on rod end			
H	One on head end			
D	Two			
Ⓖ Option				
Blank	Rod end female thread			
N	Rod end male thread			
Ⓗ Mounting bracket				
LB	Axial foot			
LB2	Axial foot (compact type)			
CB	Clevis (pin and snap ring attached)			
CB2	Clevis (compact type) (pin and snap ring attached)			
FA	Rod end flange type			
FB	Head end flange type			
Ⓘ Accessory (permissible if rod end male thread "N" was selected.)				
I	Rod eye			
I2	Rod eye (compact type)			
Y	Rod clevis (pin and snap ring attached)			
Y2	Rod clevis (compact type) (pin and snap ring attached)			

(Stroke length table)

Stroke length (mm)	Applicable bore size							
	Φ20	Φ25	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Standard stroke length	5	●						
	10	●	●	●	●	●	●	●
	15	●	●	●	●	●		
	20	●	●	●	●	●	●	●
	25	●	●	●	●	●		
	30	●	●	●	●	●	●	●
	40	●	●	●	●	●	●	●
	50	●	●	●	●	●	●	●
	60		●	●	●	●	●	●
	70		●	●	●	●	●	●
	80		●	●	●	●	●	●
90		●	●	●	●	●	●	
100		●	●	●	●	●	●	
Min. stroke length (mm) Note 1	1							
Max. stroke length (mm)	200	300						
Custom stroke length Note 2	1 mm increment							

How to order switch

SW - T0H

Switch model no.
(Item E on previous page)

Note 1: 5 mm or shorter type with 1 color indicator switch, 2 color indicator, off-delay, strong magnetic field proof, or 10 mm or shorter type with a T1* or T8* switch is not available.

Refer to page 9 for the switch installation number and minimum stroke.

Note 2: The total length is the same as the next longer standard stroke length.

Cylinder weight table (The weight with switch is for two-cylinder switches.)

(Unit: g)

Stroke length (mm)	5		10		15		20		25		30		40		50		60		70		80		90		100	
	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW
Φ20	107	182	120	195	133	208	145	220	158	233	170	245	195	270	220	295	245	320	270	345	295	370	320	395	345	420
Φ25	-	-	162	253	178	269	194	285	209	300	226	317	258	349	290	381	322	413	354	445	386	477	418	509	450	541
Φ32	-	-	251	365	272	386	294	408	316	430	338	452	381	495	424	538	467	581	510	624	553	667	596	710	639	753
Φ40	-	-	349	492	376	519	402	545	428	571	455	598	508	651	561	704	614	757	667	810	720	863	773	916	826	969
Φ50	-	-	560	754	602	796	645	839	688	882	729	923	813	1007	897	1091	981	1175	1065	1259	1149	1343	1233	1427	1317	1481
Φ63	-	-	813	1092	-	-	923	1202	-	-	1034	1313	1144	1423	1254	1533	1364	1643	1474	1753	1584	1863	1694	1973	1804	2083
Φ80	-	-	1413	1826	-	-	1586	1999	-	-	1760	2173	1933	2346	2106	2519	2279	2692	2452	2865	2625	3038	2798	3211	2971	3384
Φ100	-	-	2106	2673	-	-	2334	2901	-	-	2561	3128	2789	3356	3017	3584	3245	3812	3473	4040	3701	4268	3929	4496	4157	4724

Stroke length (mm)	110		120		130		140		150		160		170		180		190		200	
	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW
Φ20	370	445	395	470	420	495	445	520	470	545	495	570	520	595	545	620	570	645	595	670
Φ25	482	573	514	605	546	637	581	669	610	701	642	733	674	765	706	797	738	829	770	861
Φ32	682	796	725	839	768	882	811	925	854	968	896	1010	939	1053	982	1096	1025	1139	1068	1182
Φ40	879	1022	932	1075	985	1128	1038	1181	1091	1234	1144	1287	1197	1340	1250	1393	1303	1446	1356	1499
Φ50	1401	1595	1485	1679	1569	1763	1653	1847	1737	1931	1835	2029	1920	2114	2005	2199	2090	2284	2175	2369
Φ63	1914	2193	2024	2303	2134	2413	2244	2523	2354	2633	2464	2743	2574	2853	2684	2963	2794	3073	2904	3183
Φ80	3144	3557	3317	3730	3490	3903	3663	4076	3836	4249	4009	4422	4182	4595	4355	4768	4528	4941	4701	5112
Φ100	4385	4952	4613	5180	4841	5408	5069	5636	5297	5864	5525	6092	5753	6320	5981	6548	6209	6776	6437	7004

Stroke length (mm)	210		220		230		240		250		260		270		280		290		300	
	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW	w/o SW	with SW
Φ20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Φ25	813	893	845	925	877	957	909	989	941	1021	973	1053	1005	1085	1037	1117	1069	1149	1101	1181
Φ32	1111	1225	1154	1268	1197	1311	1240	1354	1283	1397	1326	1440	1369	1483	1412	1526	1455	1569	1498	1612
Φ40	1409	1552	1462	1605	1515	1658	1568	1711	1621	1764	1674	1817	1727	1870	1780	1923	1833	1976	1886	2029
Φ50	2260	2454	2345	2539	2430	2624	2515	2709	2600	2794	2685	2879	2770	2964	2855	3049	2940	3134	3025	3219
Φ63	3013	3292	3123	3402	3233	3512	3343	3622	3453	3732	3563	3842	3673	3952	3783	4062	3893	4172	4003	4282
Φ80	4873	5286	5046	5459	5219	5632	5392	5805	5565	5978	5738	6151	5911	6324	6084	6497	6257	6670	6430	6843
Φ100	6666	7233	6894	7461	7122	7689	7350	7917	7578	8145	7806	8373	8034	8601	8262	8829	8490	9057	8718	9285

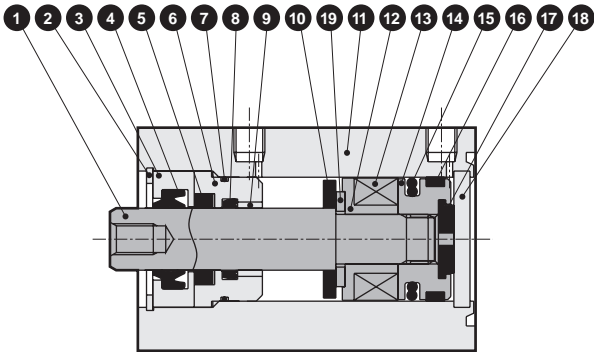
How to order mounting bracket

Bore size (mm)	Φ20	Φ25	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Mounting bracket								
Foot (LB)	SSD-LB-20	SSD-LB-25	SSD-LB-32	SSD-LB-40	SSD-LB-50	SSD-LB-63	SSD-LB-80	SSD-LB-100
Foot (LB2)	SSD-LB2-20	SSD-LB2-25	SSD-LB2-32	SSD-LB2-40	SSD-LB2-50	SSD-LB2-63	SSD-LB2-80	SSD-LB2-100
Flange (FA/FB)	SSD-FA-20	SSD-FA-25	SSD-FA-32	SSD-FA-40	SSD-FA-50	SSD-FA-63	SSD-FA-80	SSD-FA-100
Clevis (CB)	SSD-CB-20	SSD-CB-25	SSD-CB-32	SSD-CB-40	SSD-CB-50	SSD-CB-63	SSD-CB-80	SSD-CB-100
Clevis (CB2)	SSD-CB2-20	SSD-CB2-25	SSD-CB2-32	SSD-CB2-40	SSD-CB2-50	SSD-CB2-63	SSD-CB2-80	SSD-CB2-100

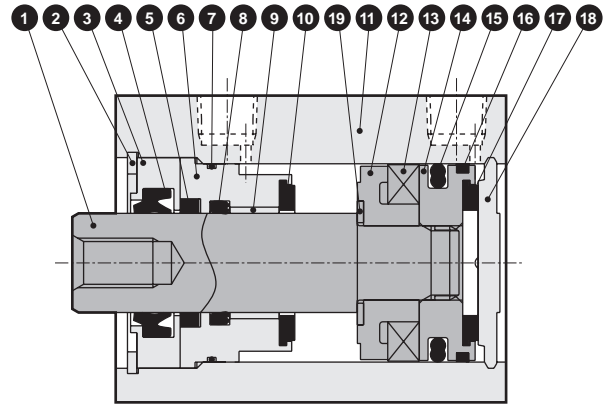
Note 1: The foot mounting bracket is supplied as a two-piece set.

Internal structure and parts list (Φ20 to Φ50)

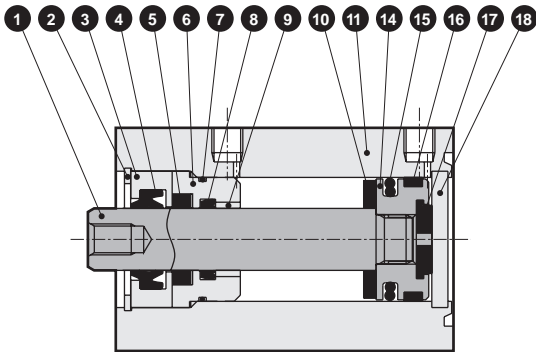
- SSD-KG5L-20/25 (double acting/high load/environment resistant scraper type with switch)



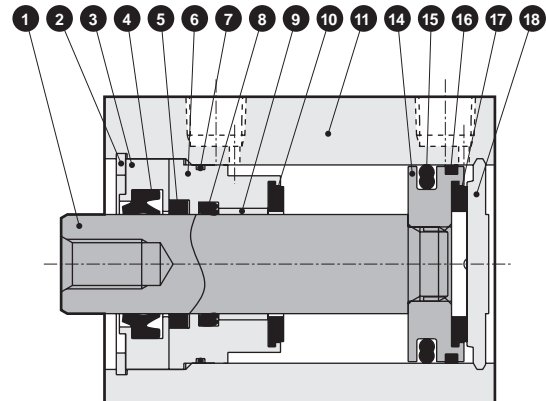
- SSD-KG5L-32 to 50 (double acting/high load/environment resistant scraper type with switch)



- SSD-KG5-20/25 (double acting/high load/environment resistant scraper type)



- SSD-KG5-32 to 50 (double acting/high load/environment resistant scraper type)



Main parts list

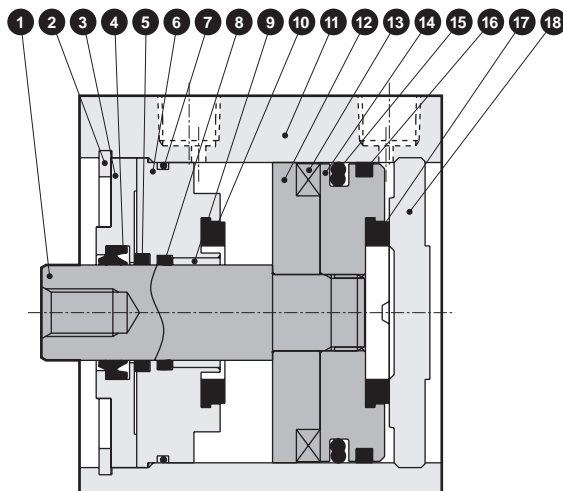
No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Piston rod	Φ20, Φ25: stainless steel	Industrial chrome plating	11	Body	Aluminum alloy	Hard alumite
		Φ32 to Φ50: steel		12	Spacer	Special plastic	
2	C type snap ring	Steel	Phosphoric acid zinc Chromate	13	Magnet	Plastic	
3	Rod bushing 1	Special aluminum		14	Piston	Aluminum alloy	Chromate
4	Scraper	Nitrile rubber		15	Piston packing seal	Nitrile rubber	
5	Lube keeping structure	Special rubber		16	Wear ring	Polyacetal resin	
6	Rod bushing 2	Special aluminum	Alumite	17	Cushion rubber H	Urethane rubber	
7	Rod metal gasket	Nitrile rubber		18	Guard	Φ20, Φ25: stainless steel	Φ32 to Φ50: alumite
8	Rod packing seal	Nitrile rubber				Φ32 to Φ50: aluminum alloy	
9	Bush	Oilless dry met		19	Spacer washer	Stainless steel	
10	Cushion rubber R	Urethane rubber					

Repair parts list

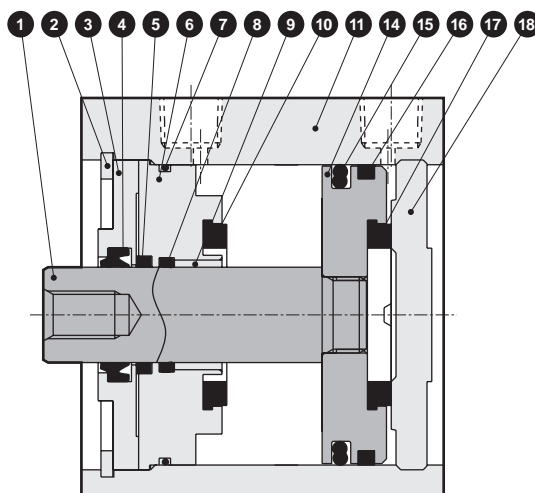
Parts name	Kit No.	Repair parts number
Bore size (mm)		
Φ20	SSD-KG5-20K	
Φ25	SSD-KG5-25K	
Φ32	SSD-KG5-32K	
Φ40	SSD-KG5-40K	
Φ50	SSD-KG5-50K	

Internal structure and parts list (Φ63 to Φ100)

- SSD-KG5L-63 to 100 (double acting/high load/environment resistant scraper type with switch)



- SSD-KG5-63 to 100 (double acting/high load/environment resistant scraper type)



Main parts list

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Piston rod	Steel	Industrial chrome plating	10	Cushion rubber R	Urethane rubber	
2	C type snap ring	Steel	Phosphoric acid zinc	11	Body	Aluminum alloy	Hard alumite
3	Rod bushing 1	Aluminum alloy	Chromate	12	Spacer	Aluminum alloy	Chromate
4	Scraper	Nitrile rubber		13	Magnet	Plastic	
5	Lube keeping structure	Special rubber		14	Piston	Aluminum alloy	Chromate
6	Rod bushing 2	Aluminum alloy	Chromate	15	Piston packing seal	Nitrile rubber	
7	Rod metal gasket	Nitrile rubber		16	Wear ring	Polyacetal resin	
8	Rod packing seal	Nitrile rubber		17	Cushion rubber H	Urethane rubber	
9	Bush	Oilless dry met		18	Guard	Aluminum alloy	Alumite

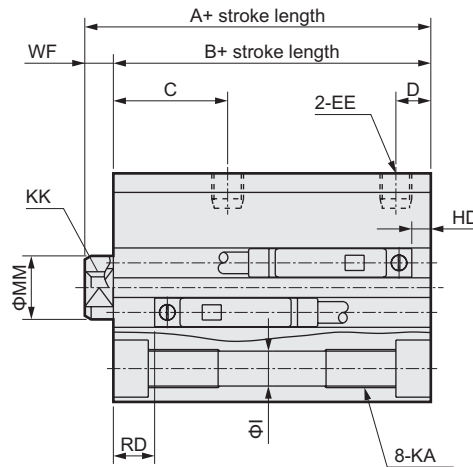
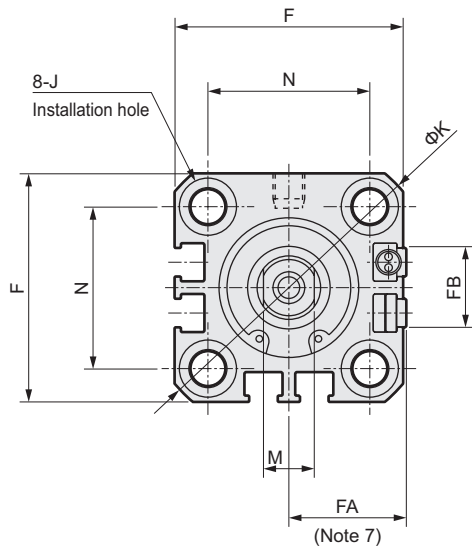
Repair parts list

Parts name	Kit No.	Repair parts number
Bore size (mm)		
Φ63	SSD-KG5-63K	<div style="display: flex; flex-wrap: wrap; justify-content: center; gap: 5px;"> 4 5 7 8 10 15 16 17 </div>
Φ80	SSD-KG5-80K	
Φ100	SSD-KG5-100K	

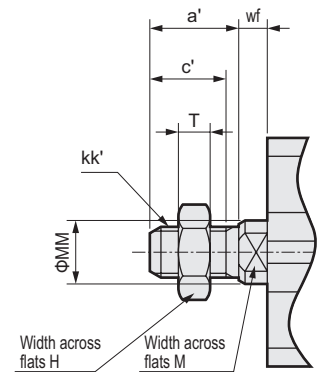
SSD-KG5 Series

Dimensions (Φ20, Φ25)

● SSD-KG5L-20/25 (with switch)



● Rod end male thread



Symbol	Without switch		Dimension with switch and common dimension							
	A ^{Note 1}	B ^{Note 1}	A ^{Note 1}	B ^{Note 1}	C	D	EE	F	FA ^{Note 4}	FB
Φ20	39	34.5	49	44.5	18	5.5	M5	36	18.5(22)	12.5
Φ25	42.5	37.5	52.5	47.5	21	6	M5	40	20.5(24)	13.5

Symbol	Dimension with switch and common dimension									
	I	J	K	KA	KK	M	MM	N	WF	
Φ20	5.5	9 spot face depth 5.5	47	M6 depth 11	M5 depth 7	8	10	25.5	4.5	
Φ25	5.5	9 spot face depth 5.5	51	M6 depth 11	M6 depth 11	10	12	28	5	

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
	HD ^{Note 5}	RD ^{Note 5}	HD ^{Note 5}	RD ^{Note 5}	HD ^{Note 5}	RD ^{Note 5}
Φ20	6 (12.5)	18.5 (23.5)	4.5 (11)	18.5 (23.5)	0 (6.5)	12.5 (17.5)
Φ25	5.5 (14)	22 (27)	4 (12.5)	22 (27)	0 (8)	16 (21)

Note 1: When calculating A+ and B+ stroke dimensions for the custom stroke, do not set the custom stroke in the stroke. Instead, set the next larger standard stroke. Example: If the custom stroke is 7 mm, calculate including standard stroke 10 mm.

Note 2: HD and RD dimensions for the 5 stroke will differ from these due to manufacturing.

Note 3: Dimensions in () of FA column are values when radial lead wire is installed.

Note 4: Refer to Pneumatic Cylinders I (CB-029SA) for dimension drawings with accessories and dimension drawings for discrete accessories.

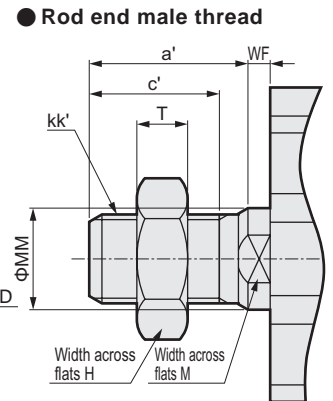
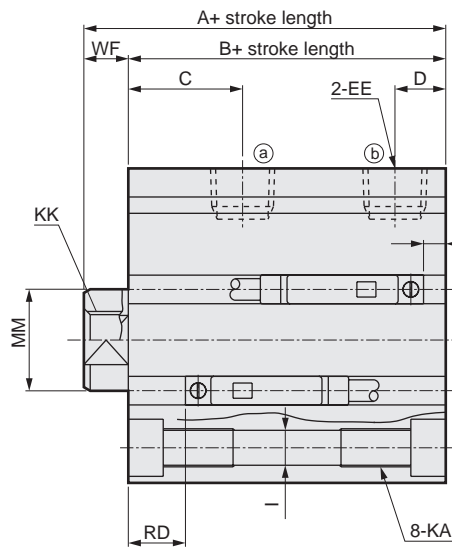
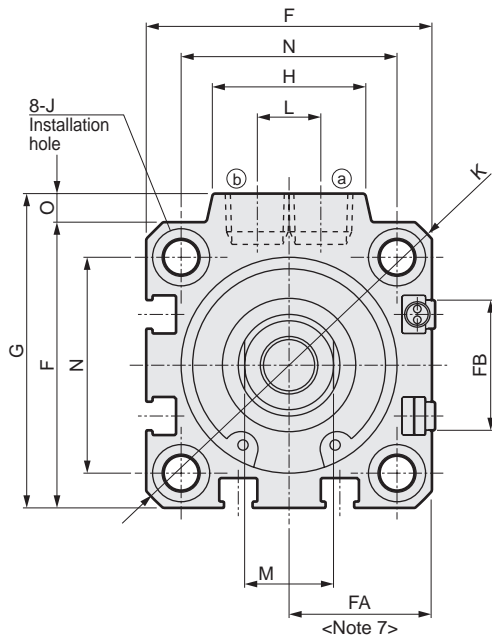
Note 5: HD and RD dimensions for ø20: 100 stroke and ø25: 150 stroke or more are shown in ().

Rod end male thread

Symbol	a'	c'	H	kk'	M	MM	T	wf
	Φ20	14	12	13	M8	8	10	5
Φ25	17.5	15	17	M10×1.25	10	12	6	5

Dimensions (Φ32 to Φ100)

● SSD-KG5L-32 to 100 (with switch)



Symbol	Without switch		Dimension with switch and common dimension									
	A ^{Note 1}	B ^{Note 1}	A ^{Note 1}	B ^{Note 1}	C	D	EE	F	FA ^{Note 4}	FB	G	H
Φ32	50	43	60	53	18	8	Rc1/8	45	23(26.5)	20.5	49.5	24
Φ40	56.5	49.5	66.5	59.5	22	8.5	Rc1/8	52	26.5(30)	27.5	57	24
Φ50	58.5	50.5	68.5	60.5	20.5	10.5	Rc1/4	64	32.5(36)	28.5	71	33
Φ63	64	56	74	66	23	11	Rc1/4	77	39(42.5)	28.5	84	33
Φ80	73.5	63.5	83.5	73.5	26	13	Rc3/8	98	49.5(53)	28.5	104	38
Φ100	85	73	95	83	33	15	Rc3/8	117	59(62.5)	28.5	123.5	38

Symbol	Dimension with switch and common dimension											
	I	J	K	KA	KK	L	M	MM	N	O	WF	
Φ32	5.5	9 spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	14	16	34	4.5	7	
Φ40	5.5	9 spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	14	16	40	5	7	
Φ50	6.9	11 spot face depth 6.5	86	M8 depth 13	M10 depth 15	15	17	20	50	7	8	
Φ63	8.7	14 spot face depth 9	103	M10 depth 25	M10 depth 15	15	17	20	60	7	8	
Φ80	10.5	17.5 spot face depth 11	132	M12 depth 28	M16 depth 21	15	22	25	77	6	10	
Φ100	10.5	17.5 spot face depth 11	156	M12 depth 29	M20 depth 27	15	27	30	94	6.5	12	

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
	HD ^{Note 5}	RD ^{Note 5}	HD ^{Note 5}	RD ^{Note 5}	HD ^{Note 5}	RD ^{Note 5}
Φ32	8.5 (16)	24 (24)	7 (14.5)	22.5 (22.5)	2.5 (10)	18 (18)
Φ40	9.5 (19)	29.5 (29.5)	8 (17.5)	28 (28)	3.5 (13)	23.5 (23.5)
Φ50	10 (19)	30 (35)	8.5 (17.5)	28.5 (33.5)	4 (13)	24 (29)
Φ63	17.5 (23)	28 (33)	16 (21.5)	26.5 (31.5)	11.5 (17)	22 (27)
Φ80	22 (28)	30.5 (35.5)	20.5 (26.5)	29 (34)	16 (22)	24.5 (29.5)
Φ100	28 (33.5)	34.5 (39.5)	26.5 (32)	33 (38)	22 (27.5)	28.5 (33.5)

Note 1: When calculating A+ and B+ stroke dimensions for the custom stroke, do not set the custom stroke in the stroke. Instead, set the next larger standard stroke. Example: If the custom stroke is 7 mm, calculate including standard stroke 10 mm.

Note 2: HD and RD dimensions for the 5 stroke will differ from these due to manufacturing.

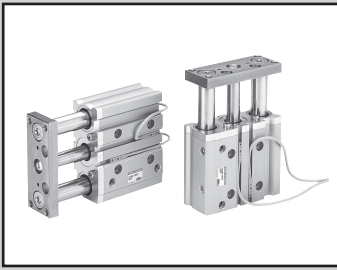
Note 3: Dimensions in () of FA column are values when radial lead wire is installed.

Note 4: Refer to Pneumatic Cylinders I (CB-029SA) for dimension drawings with accessories and dimension drawings for discrete accessories.

Note 5: HD and RD dimensions for ø32 to ø50: 150 stroke and ø63 to ø100: 200 stroke or more are shown in parentheses.

Rod end male thread

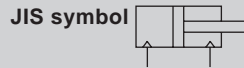
Symbol	a'	c'	H	kk'	M	MM	T	wf
Φ32	23.5	20.5	22	M14x1.5	14	16	8	5
Φ40	23.5	20.5	22	M14x1.5	14	16	8	5
Φ50	28.5	26	27	M18x1.5	17	20	11	5
Φ63	28.5	26	27	M18x1.5	17	20	11	5
Φ80	35.5	32.5	32	M22x1.5	22	25	13	8
Φ100	35.5	32.5	41	M26x1.5	27	30	16	8



Guided cylinder double acting single rod, environment resistant scraper type

STG-MG5 Series

● Bore size: $\Phi 20, 25, 32, 40, 50, 63, 80, 100$



Specifications

Descriptions		STG-MG5							
Bore size	mm	$\Phi 20$	$\Phi 25$	$\Phi 32$	$\Phi 40$	$\Phi 50$	$\Phi 63$	$\Phi 80$	$\Phi 100$
Actuation		Double acting							
Working fluid		Compressed air							
Max. working pressure	MPa	1.0							
Min. working pressure	MPa	0.25					0.2		
Withstanding pressure	MPa	1.6							
Ambient temperature	$^{\circ}\text{C}$	-10 to 60 (no freezing)							
Port size		Rc1/8			Rc1/4		Rc3/8		
Stroke tolerance	mm	+2.0 0							
Working piston speed	mm/s	50 to 500					50 to 300		
Cushion		Rubber cushioned							
Lubrication		Not required (when lubricating, use turbine oil Class 1 ISO VG32.)							
Allowable energy absorption	J	0.157	0.157	0.401	0.627	0.980	1.560	2.510	3.92

Stroke length

Bore size	Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)	Min. stroke length with switch (mm)
$\Phi 20$	20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400	400	5	5(10) Note 2
$\Phi 25$				
$\Phi 32$				
$\Phi 40$				
$\Phi 50$	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400			
$\Phi 63$				
$\Phi 80$				
$\Phi 100$				

Note 1: The custom stroke can be manufactured in 5 mm increments. Total length of the custom stroke is the same as the longer standard stroke.

Note 2: This value applies to one or two switches. Values in () are the min. stroke for 2 color indicator switch, strong magnetic field proof, and preventive maintenance output type.

Switch specifications

● 1 color/2 color indicator, strong magnetic field proof

* The TO/T5 switch is used with 220 VAC. Contact CKD for conditions.

Descriptions	Proximity 2 wire			Proximity 3 wire			Reed 2 wire						Proximity 2 wire	
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T3H/ T3V	T3PH/T3PV (Custom order)	T3YH/ T3YV	TOH/TOV	T5H/T5V		T8H/T8V			T2YD	
Applications	Programmable controller relay, small solenoid valve	Programmable controller dedicated		Programmable controller, relay			Programmable controller, relay	Programmable controller, relay, IC circuit (w/o light), serial connection		Programmable controller, relay			Programmable controller dedicated	
Output method	-			NPN output	PNP output	NPN output	-							
Power voltage	-			10 to 28 VDC			-							
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less			12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 100 mA	5 to 20 mA (Note 1)		100 mA or less		50 mA or less	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Light	LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Green LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Without indicator light		LED (ON lighting)			Red/green LED (ON lighting)	
Leakage current	1 mA or less with 100 VAC 2 mA or less with 200 VAC	1 mA or less		10 µA or less			0 mA						1 mA or less	

● With preventive maintenance output

Descriptions	Proximity 3 wire	Proximity 4 wire	Proximity 3 wire	Proximity 4 wire
	T2YFH/V	T3YFH/V	T2YMH/V	T3YMH/V
Applications	Programmable controller dedicated	Programmable controller, relay	Programmable controller dedicated	Programmable controller, relay
Output method	NPN output			
Light	Installation position adjustment section	Red/green LED (ON lighting)		
	Preventive maintenance output	-	Yellow LED (ON lighting)	
Regular Output	Power voltage	-	10 to 28 VDC	-
	Load voltage	10 to 30 VDC	30 VDC or less	10 to 30 VDC
	Load current	5 to 20 mA	50 mA or less	5 to 20 mA
	Leakage current	1 mA or less	10 µA or less	1.2 mA or less
Preventive maintenance Output	Load voltage	30 VDC or less		
	Load current	20 mA or less	50 mA or less	5 to 20 mA or less
	Leakage current	10 µA or less		

Note 1: The maximum load current 20 mA above applies at 25°C. If the ambient switch operation temperature exceeds 25°C, the current value will be less than 20 mA. (5 to 10 mA at 60°C)

Cylinder weight table

(Unit: kg)

Descriptions	Stroke length															Switch weight grommet
	20	25	30	40	50	75	100	125	150	175	200	250	300	350	400	
Φ20	0.68		0.75	0.83	0.91	1.16	1.35	1.55	1.73	1.93	2.12	2.58	2.96	3.34	3.73	0.018
Φ25	0.95		1.05	1.16	1.26	1.63	1.89	2.16	2.43	2.69	2.95	3.59	4.12	4.65	5.17	0.018
Φ32		1.73			2.10	2.63	3.02	3.43	3.82	4.21	4.60	5.58	6.36	7.15	7.94	0.018
Φ40		2.00			2.41	2.86	3.27	3.68	4.09	4.51	4.91	5.92	6.76	7.58	8.41	0.018
Φ50		3.44			4.06	4.77	5.39	6.01	6.63	7.25	7.87	9.44	10.66	11.92	13.18	0.018
Φ63		4.31			5.05	5.87	6.60	7.33	8.07	8.80	9.53	11.32	12.77	14.23	15.68	0.018
Φ80		7.65			8.75	10.14	11.23	12.33	13.43	14.53	15.63	18.43	20.55	22.73	24.93	0.018
Φ100		11.04			12.38	14.09	15.43	16.76	18.10	19.44	20.78	24.07	26.74	29.42	32.09	0.018

STG-MG5 Series

How to order

Without switch

STG - M G5 - 32 - 25

With switch

STG - M G5 - 32 - 25 - T2H - R

Model no.

Metal bush bearing

environment resistant scraper type

Ⓐ Bore size

Ⓑ Piping thread type

Ⓒ Stroke length

Ⓓ Switch model no.
Note 1

Ⓔ Switch quantity

Note on model no. selection

Note 1: Models with T1H/V or T8H/V mounted are available as custom orders.

<Example of model number>

STG-MG5-40-75-T0H-D

Model: Guided cylinder double acting single rod, environment resistant scraper type

Ⓐ Bore size : $\Phi 40$ mm

Ⓑ Piping thread type : Rc thread

Ⓒ Stroke length : 75 mm

Ⓓ Switch model : Reed T0H switch

no. Lead wire length 1 m

Ⓔ Switch quantity : Two

Symbol	Descriptions			
Ⓐ Bore size (mm)				
20	$\Phi 20$			
25	$\Phi 25$			
32	$\Phi 32$			
40	$\Phi 40$			
50	$\Phi 50$			
63	$\Phi 63$			
80	$\Phi 80$			
100	$\Phi 100$			
Ⓑ Piping thread type				
Blank	Rc thread			
NN	NPT thread (custom order)			
GN	G thread (custom order)			
Ⓒ Stroke length (mm)				
Refer to the stroke length table on following page.				
Ⓓ Switch model no.				
Axial lead wire	Radial lead wire	Contact	Indication	Lead wire
T0H*	T0V*	Reed	1 color indicator type	2-wire
T5H*	T5V*		Without indicator light	
T8H*	T8V*		1 color indicator type	
T1H*	T1V*	Proximity	1 color indicator type	2-wire
T2H*	T2V*			3-wire
T3H*	T3V*		1 color indicator type (custom order)	3-wire
T3PH*	T3PV*			2-wire
T2YH*	T2YV*		2 color indicator type	3-wire
T3YH*	T3YV*			3-wire
T2YFH*	T2YFV*		2 color indicator type (Without indicator light for preventive maintenance output)	3-wire
T3YFH*	T3YFV*			4 wire
T2YMH*	T2YMV*		2 color indicator type (With indicator light for preventive maintenance output (1 color))	3-wire
T3YMH*	T3YMV*			4 wire
T2JH*	T2JV*	Off-delay type	2-wire	
T2YD*	-	Strong magnetic field proof switch		2-wire
T2YDT*	-			
* Lead wire length				
Blank	1 m (standard)			
3	3 m (option)			
5	5 m (option)			
Ⓔ Switch quantity				
R	One on rod end			
H	One on head end			
D	Two			
T	Three			

(Stroke length table)

Stroke length (mm)		Applicable bore size							
		Φ20	Φ25	Φ32	Φ40	Φ50	Φ63	Φ80	Φ100
Standard stroke length	10								
	20	●	●						
	25			●	●	●	●	●	●
	30	●	●						
	40	●	●						
	50	●	●	●	●	●	●	●	●
	75	●	●	●	●	●	●	●	●
	100	●	●	●	●	●	●	●	●
	125	●	●	●	●	●	●	●	●
	150	●	●	●	●	●	●	●	●
	175	●	●	●	●	●	●	●	●
	200	●	●	●	●	●	●	●	●
	250	●	●	●	●	●	●	●	●
	300	●	●	●	●	●	●	●	●
	350	●	●	●	●	●	●	●	●
400	●	●	●	●	●	●	●	●	
Min. stroke length (mm) Note 2		5 (10)							
Custom stroke length Note 1		5 mm increment							

Note 1: The total length is the same as the next longer standard stroke length.

Note 2: Values in () are the min. stroke for 2 color indicator switch, strong magnetic field proof, and preventive maintenance output type.

How to order switch

SW - T0V

Switch model no.
(Item **D** on previous page)

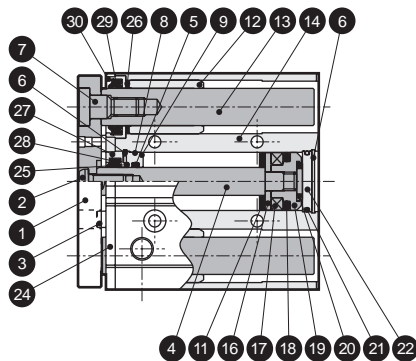
Note: Consult with CKD when using the environment compatible T-type switch.

STG-MG5 Series

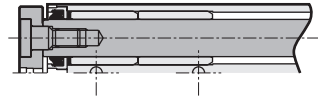
Internal structure and parts list (STG-MG5-20 to 63)

● $\Phi 20, \Phi 25$

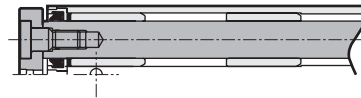
50 mm stroke or less



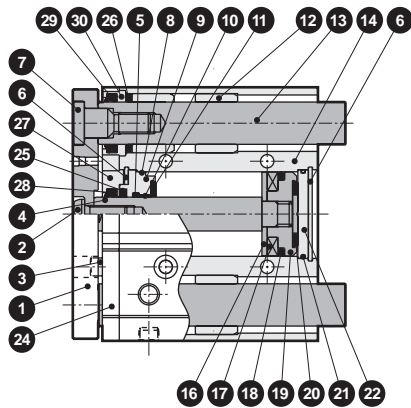
50 mm stroke or more and 200 mm stroke or less



200 mm stroke or more



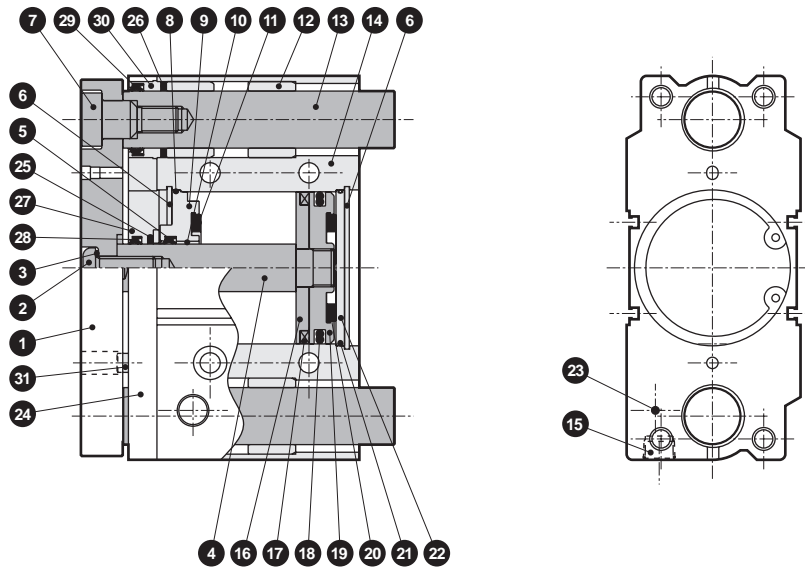
● $\Phi 32$ to $\Phi 63$



Main parts list

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	End plate	Steel	Nickeling	15	Plug	Brass or steel	
2	Hexagon socket head button bolt	Alloy steel	Zinc chromate	16	Spacer	Aluminum alloy	
3	Hexagon socket head cap bolt	Steel	Zinc chromate	17	Magnet	Plastic	
4	Piston rod	Stainless steel ($\Phi 20$ to $\Phi 25$)	Industrial chrome plating	18	Piston packing seal	Nitrile rubber	
		Steel ($\Phi 32$ to $\Phi 63$)	Industrial chrome plating	19	Piston	Aluminum alloy	
5	Rod packing seal	Nitrile rubber		20	Cushion rubber	Urethane rubber	
6	C type snap ring	Steel	Phosphate coating	21	O ring	Nitrile rubber	
7	Bolt	Alloy steel	Zinc chromate	22	Base plate	Aluminum alloy	Chromate
8	Metal gasket	Nitrile rubber		23	Hexagon socket head set screw	Stainless steel	
9	Rod bushing	Special aluminum alloy ($\Phi 20$ to $\Phi 32$)	Alumite	24	Adaptor plate	Aluminum alloy	Alumite
		Aluminum alloy ($\Phi 40$ to $\Phi 63$)	Chromate	25	Lube keeping structure	Special rubber	
10	Bush	Oilless dry met ($\Phi 40$ to $\Phi 63$)		26	Lube keeping structure	Special rubber	
11	Cushion rubber	Urethane rubber		27	Holder R	Aluminum alloy	Chromate
12	Metal	Oil impregnated copper alloy bearing		28	Scraper	Nitrile rubber	
13	Guide rod	Steel	Industrial chrome plating	29	Scraper	Nitrile rubber	
14	Tube body	Aluminum alloy	Hard alumite	30	Holder G	Aluminum alloy	Chromate

Internal structure and parts list (STG-MG5-80 to 100)



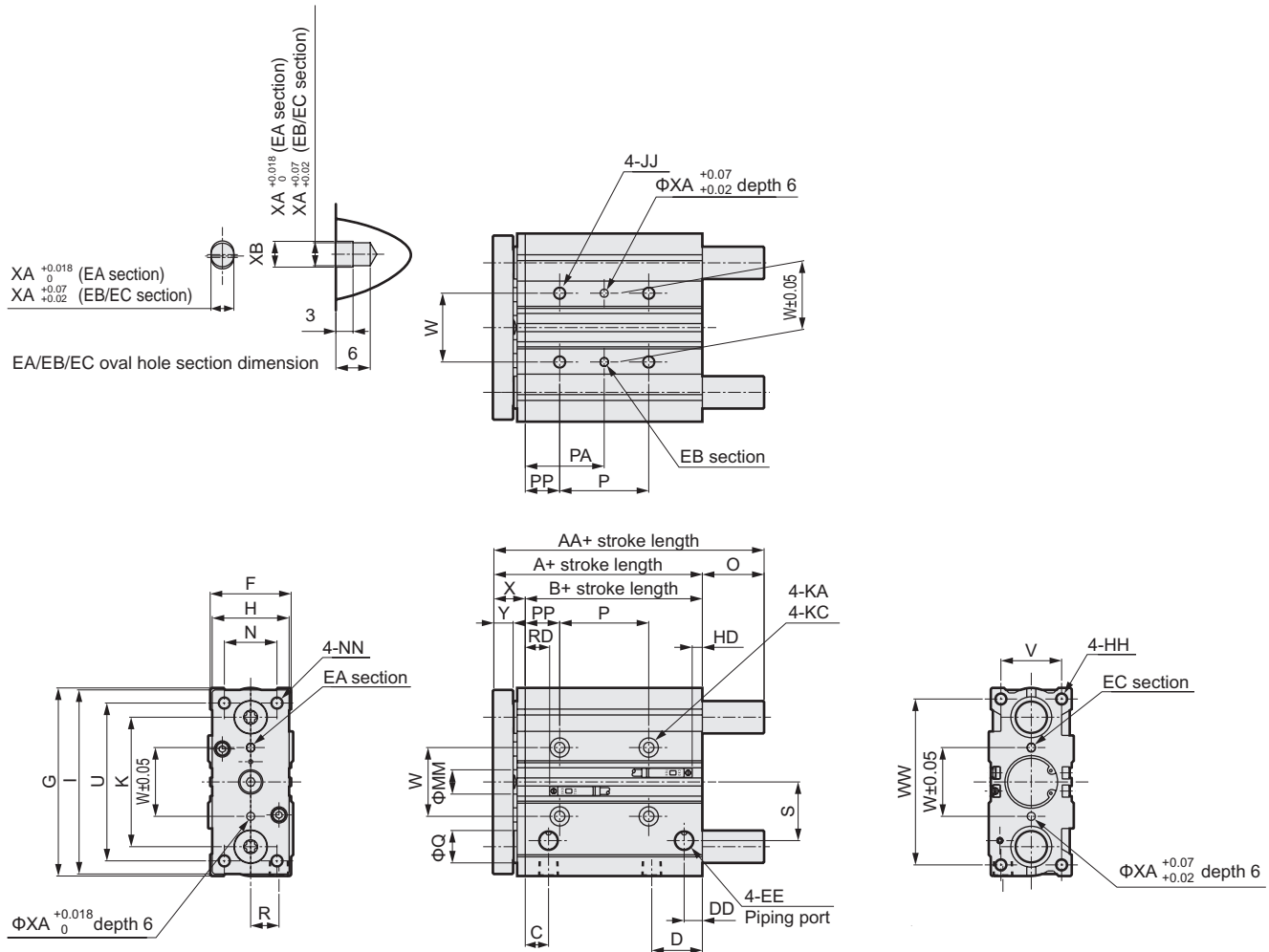
Main parts list

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	End plate	Steel	Nickeling	18	Piston packing seal	Nitrile rubber	
2	Hexagon socket head button bolt	Alloy steel	Zinc chromate	19	Piston	Aluminum alloy	
3	Conical spring washer	Steel	Blackening	20	Cushion rubber	Urethane rubber	
4	Piston rod	Steel	Industrial chrome plating	21	O ring	Nitrile rubber	
5	Rod packing seal	Nitrile rubber		22	Base plate	Aluminum alloy (Φ80) Steel (Φ100)	Chromate Zinc chromate
6	C type snap ring	Steel	Phosphate coating	23	Hexagon socket head set screw (Φ80) Plug (Φ100)	Stainless steel Steel	
7	Bolt	Alloy steel	Zinc chromate	24	Adaptor plate	Aluminum alloy	Alumite
8	Metal gasket	Nitrile rubber		25	Lube keeping structure	Special rubber	
9	Rod bushing	Aluminum alloy	Chromate	26	Lube keeping structure	Special rubber	
10	Bush	Oilless dry met		27	Holder R	Aluminum alloy	Chromate
11	Cushion rubber	Urethane rubber		28	Scraper	Nitrile rubber	
12	Metal	Oil impregnated copper alloy bearing		29	Scraper	Nitrile rubber	
13	Guide rod	Alloy or steel	Industrial chrome plating	30	Holder G	Aluminum alloy	Chromate
14	Tube body	Aluminum alloy	Hard alumite	31	Hexagon socket head cap bolt	Steel	Zinc chromate
15	Plug	Steel					
16	Spacer	Aluminum alloy					
17	Magnet	Plastic					

STG-MG5 Series

Dimensions (Φ20, Φ25)

● STG-MG5-20/25



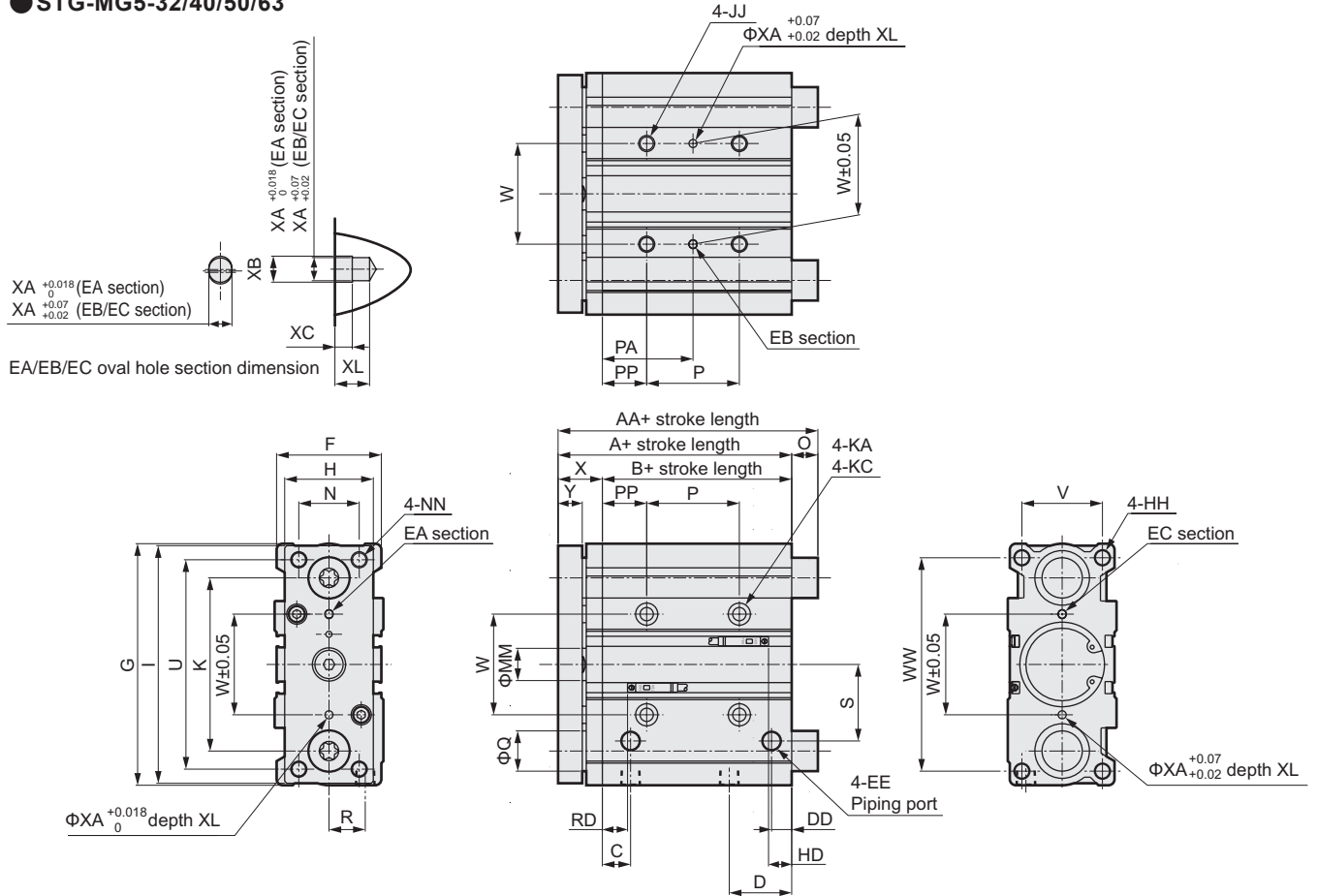
Note 1: Total length of the custom stroke is the same as the larger standard stroke.

Symbol	Standard stroke length (mm)											A	B	C	D	DD	EE	F	G	H	HH	I	JJ	
Bore size																								
Φ20	20,30,40,50,75,100,125,150,175,200,250,											53	37	10.5	24.5	8.5	Rc1/8	36	83	30	M5 depth 13	81	M6 depth 12	
Φ25	300,350,400											53.5	37.5	11.5	25	9	Rc1/8	42	93	38	M6 depth 15	91	M6 depth 12	
Symbol	K	KA	MM	N	NN	KG		P																
Bore size								30 or less	30 to 100	100 to 200	200 to 300	300 or more												
Φ20	54	5.2 penetrating	10	18	M5 penetrating	9.5 spot face depth 5.5		24	44	120	200	300												
Φ25	64	5.2 penetrating	12	26	M6 penetrating	9.5 spot face depth 5.5		24	44	120	200	300												
Symbol	PA					PP	R	S	U	V	W	WW	X	Y	XA	XB								
Bore size	30 or less	30 to 100	100 to 200	200 to 300	300 or more																			
Φ20	29	39	77	117	167	17	11	25	70	24	28	72	16	10	3	3.5								
Φ25	29	39	77	117	167	17	14	29	78	30	34	82	16	10	4	4.5								
Symbol	AA			Q	O																			
Bore size	50 or less	50 to 200	200 or more		50 or less	50 to 200	200 or more																	
Φ20	53	78	122	12	0	25	69																	
Φ25	53.5	84	122	16	0	30.5	68.5																	

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
Bore size	HD	RD	HD	RD	HD	RD
Φ20	8.5	9.5	7.5	8.5	2.5	3.5
Φ25	8.5	10	7.5	9	2.5	4

Dimensions (Φ32, Φ40, Φ50, Φ63)

● STG-MG5-32/40/50/63



Note 1: Total length of the custom stroke is the same as the larger standard stroke.

Symbol	Standard stroke length (mm)	A	B	C	D	DD	EE	F	G	H	HH	I	JJ	K	KA
Bore size															
Φ32	25,50,75,100,125,150,175,200,250,300,350,400	59.5	37.5	12.5	30.5	9	Rc1/8	48	112	44	M8 depth 20	110	M8 depth 16	78	6.3 penetrating
Φ40		66	44	14	31	10	Rc1/8	54	120	44	M8 depth 20	118	M8 depth 16	86	6.3 penetrating
Φ50		72	44	14	35	11	Rc1/4	64	148	60	M10 depth 22	146	M10 depth 20	110	8.6 penetrating
Φ63		77	49	16.5	35	15	Rc1/4	78	162	70	M10 depth 22	158	M10 depth 20	124	8.6 penetrating

Symbol	KC	MM	N	NN	P					PA	
					25 or less	25 to 100	100 to 200	200 to 300	300 or more	25 or less	25 to 100
Φ32	11 spot face depth 7.5	16	30	M8 penetrating	24	48	124	200	300	33	45
Φ40	11 spot face depth 7.5	16	30	M8 penetrating	24	48	124	200	300	34	46
Φ50	14 spot face depth 9	20	40	M10 penetrating	24	48	124	200	300	36	48
Φ63	14 spot face depth 9	20	50	M10 penetrating	28	52	128	200	300	38	50

Symbol	PA			PP	R	S	U	V	W	WW	X	Y	XA	XB	XC	XL
	100 to 200	200 to 300	300 or more													
Φ32	83	121	171	21	15	34	96	34	42	98	22	12	4	4.5	3	6
Φ40	84	122	172	22	18	38	104	40	50	106	22	12	4	4.5	3	6
Φ50	86	124	174	24	21.5	47	130	46	66	130	28	16	5	6	4	8
Φ63	88	124	174	24	28	55	130	58	80	142	28	16	5	6	4	8

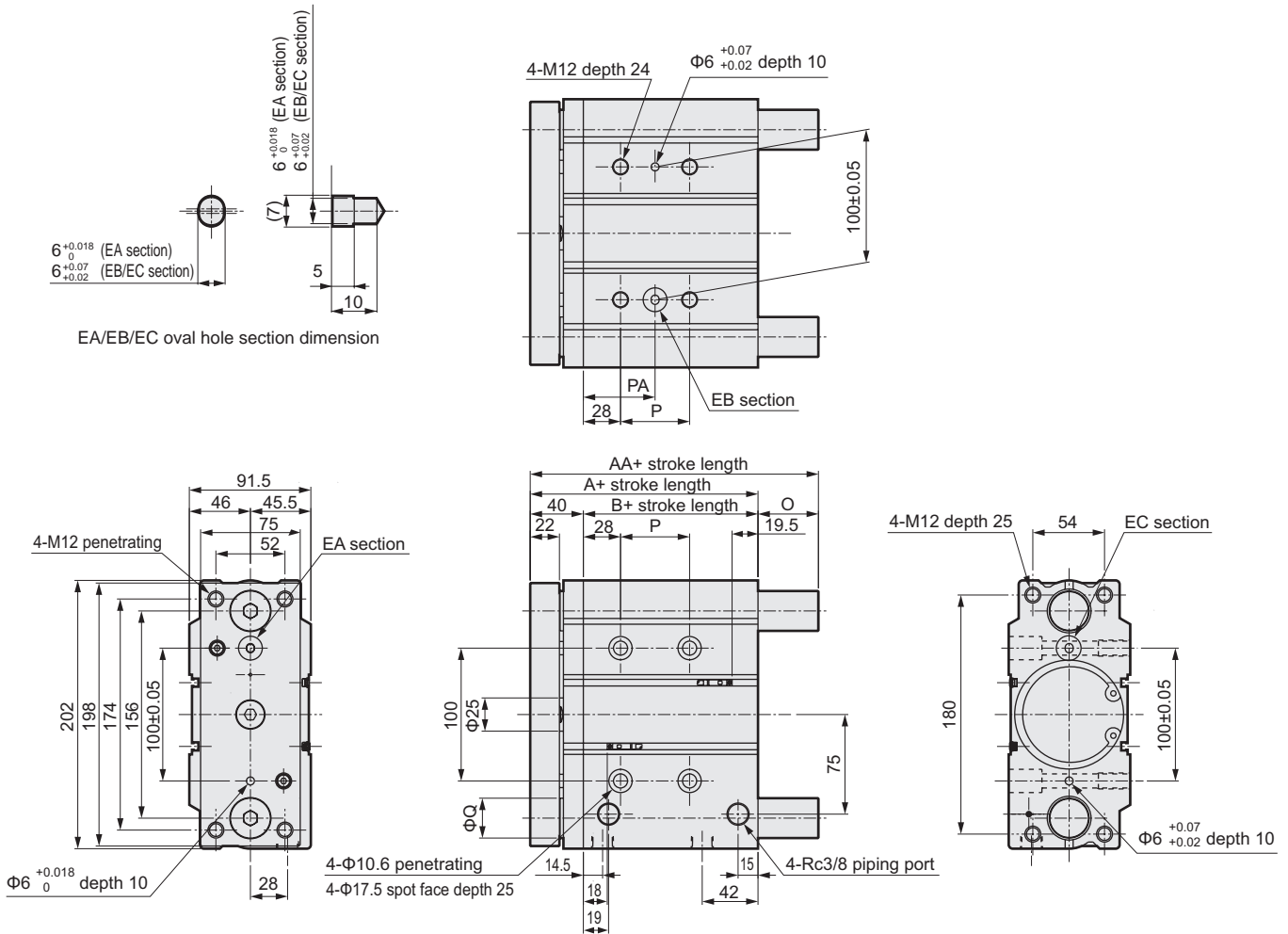
Symbol	AA			Q	O		
	50 or less	50 to 200	200 or more		50 or less	50 to 200	200 or more
Φ32	79	100	140	20	19.5	40.5	80.5
Φ40	79	100	140	20	13	34	74
Φ50	91	116	161	25	19	44	89
Φ63	91	116	161	25	14	39	84

Switch dimension	Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
	HD	RD	HD	RD	HD	RD
Φ32	8.5	10	8	9	2.5	4
Φ40	12	13	11	12	6	7
Φ50	11.5	13.5	10.5	12.5	5.5	7.5
Φ63	16	14	15	13	10	8

STG-MG5 Series

Dimensions (Φ80)

● STG-MG5-80



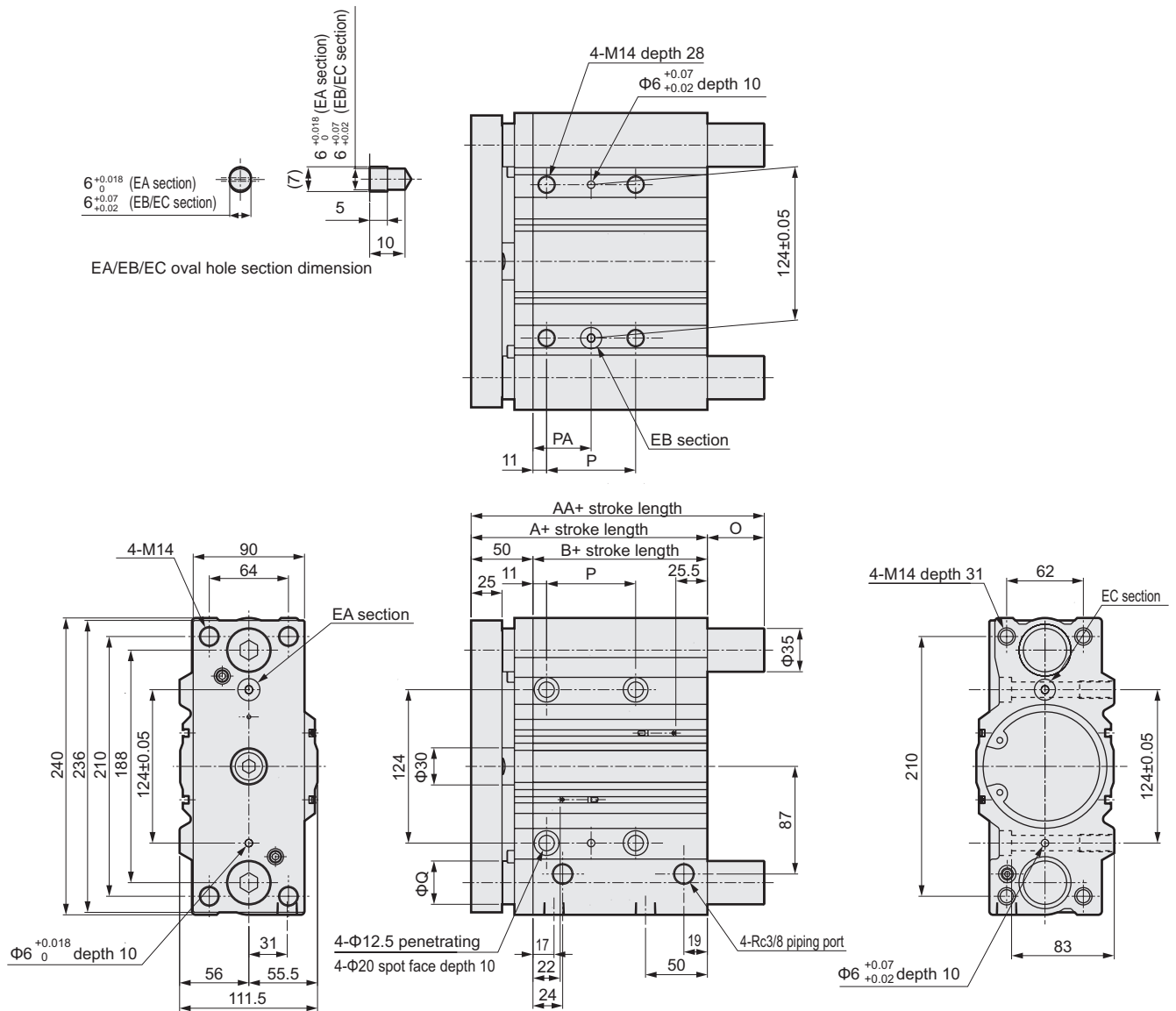
Standard stroke length (mm)	A	B	P					PA				
			25st or less	25st to 100st	100st to 200st	200st to 300st	300st or more	25st or less	25st to 100st	100st to 200st	200st to 300st	300st or more
25,50,75,100,125,150,175, 200,250,300,350,400	96.5	56.5	28	52	128	200	300	42	54	92	128	178
AA			O									
50st or less	50st to 200st	200st or more	Q	50st or less	50st to 200st	200st or more						
115	142	193	30	18.5	45.5	96.5						

● Switch dimension

Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
HD	RD	HD	RD	HD	RD
19.5	18	18.5	17	13.5	12

Dimensions (Φ100)

● STG-MG5-100



Standard stroke length (mm)	A	B	P					PA				
			25st or less	25st to 100st	100st to 200st	200st to 300st	300st or more	25st or less	25st to 100st	100st to 200st	200st to 300st	300st or more
25,50,75,100,125,150,175,200,250,300,350,400	116	66	48	72	148	220	320	35	47	85	121	171
AA			O									
50st or less	50st to 200st	200st or more	Q	50st or less	50st to 200st	200st or more						
137	162	203	35	21	46	87						

● Switch dimension

Reed / proximity 1 color		Proximity 2 color		T8H/V switch	
HD	RD	HD	RD	HD	RD
25.5	22	24.5	21	19.5	16

MEMO

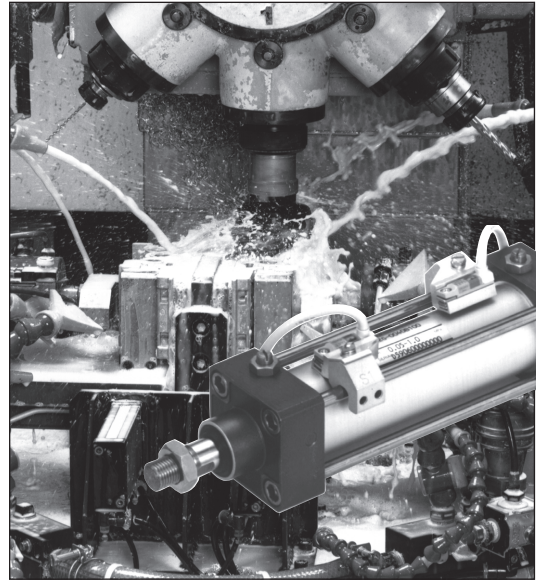
MEMO

Related products

Coolant proof pneumatic components guide

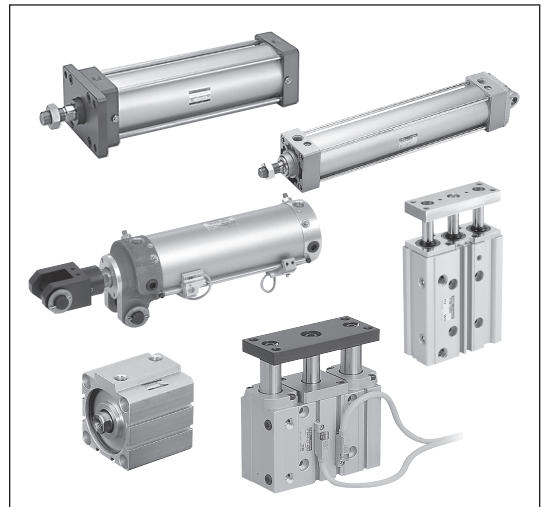
Special hydraulic/water-resistant structure

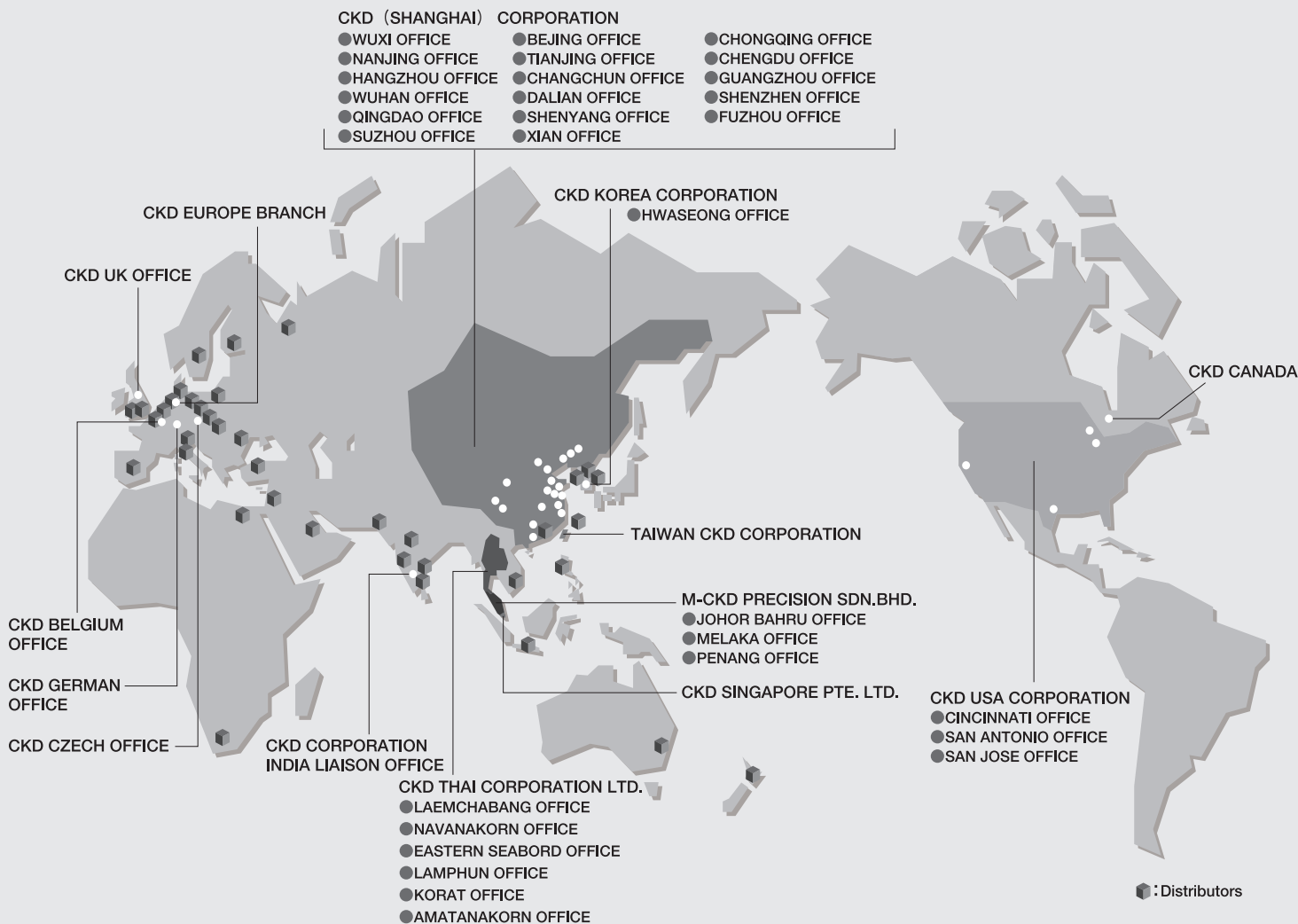
- The powerful scraper prevents working oil from entry.
- Compatible with a variety of working oils



Spatter adherence prevention cylinder

- Fiber aggregate (Lube keeping structure) impregnated with a spatter adherence prevention agent prevents spatter from sticking to the piston rod.
- A metal scraper (coil scraper) helps to remove spatter adhering to the piston rod.
- The spatter adherence prevention agent is supplied steadily for a long time, improving durability over general cylinders used in spatter environments.





CKD Corporation

Website <http://www.ckd.co.jp/>

□ OVERSEAS DPT. SALES DIV. 2-250 Uji Komaki, Aichi 485-8551, Japan
 □ PHONE +81-(0)568-74-1338 FAX +81-(0)568-77-3461

U.S.A

CKD USA CORPORATION

● HEADQUARTERS

4080 Winnetka Avenue, Rolling Meadows, IL 60008 USA
 PHONE +1-847-368-0539 FAX +1-847-788-0575

EUROPE

CKD EUROPE BRANCH

De Fruittuinen 28 Hoofddorp 2132NZ The Netherlands
 PHONE +31-(0)23-5541490 FAX +31-(0)23-5541491

Malaysia

M-CKD PRECISION SDN.BHD.

● HEADQUARTERS

Lot No.6, Jalan Modal 23/2, Seksyen 23, Kawasan, MIEL,
 Fasa 8, 40300 Shah Alam, Selangor Darul Ehsan, Malaysia
 PHONE +60-(0)3-5541-1468 FAX +60-(0)3-5541-1533

Thailand

CKD THAI CORPORATION LTD.

● SALES HEADQUARTERS-BANGKOK OFFICE

Suwan Tower, 14/1 Soi Saladaeng 1, North Sathorn Rd., Bangrak,
 Bangkok 10500 Thailand
 PHONE +66-(0)2-267-6300 FAX +66-(0)2-267-6305

Singapore

CKD SINGAPORE PTE LTD.

705 Sims Drive #03-01/02, Shun Li Industrial Complex,
 387384 Singapore
 PHONE +65-6744-2623 FAX +65-6744-2486

Taiwan

TAIWAN CKD CORPORATION

1F., No.16, Wucyuan 5th Rd., Wugu Township, Taipei Country 248,
 Taiwan (R.O.C)
 PHONE +886-(0)2-2298-2866 FAX +886-(0)2-2298-0322

China

CKD (SHANGHAI) CORPORATION

● SALES HEADQUARTERS / SHANGHAI OFFICE

Room 1903, 333 Jiujiang Road, Shanghai, 200001, China
 PHONE +86-(0)21-63602277 FAX +86-(0)21-63511661

Korea

CKD KOREA CORPORATION

Room No.1105, 11th FL, The Korea Teachers Pension B/L. 27-2,
 Yoido-Dong, Youngdeungpo-Gu, Seoul, 150-742, Korea
 PHONE +82-(0)2-783-5201~5203 FAX +82-(0)2-783-5204

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