

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Guided cylinder, double acting/heavy duty guide rod

STG-K Series

● Bore size: $\varnothing 32$, $\varnothing 50$

JIS symbol



Specifications

Item	STG-K	
Bore size	mm	$\varnothing 32$ $\varnothing 50$
Actuation	Double acting	
Working fluid	Compressed air	
Max. working pressure	MPa	1.0 (≈ 150 psi, 10 bar)
Min. working pressure	MPa	0.1 (≈ 15 psi, 1 bar) *1
Proof pressure	MPa	1.6 (≈ 230 psi, 16 bar)
Ambient temperature	$^{\circ}\text{C}$	-10 (14 $^{\circ}\text{F}$) to 60 (140 $^{\circ}\text{F}$) (no freezing)
Port size		Rc1/8 Rc1/4
Stroke tolerance	mm	+2.0 0
Working piston speed	mm/s	50 to 400
Cushion	With rubber cushion	
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)	
Allowable absorbed energy	J	0.401 0.980

*1: For rubber-air cushion, this value will be 0.2 MPa.

Stroke length

Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)	Min. stroke with switch (mm)
25/50/75/100/125/150/175/200	200	5	5(10) *2

*1: The custom stroke length is available in 5 mm increments.

However, the total length is the same as that of the next longer standard stroke length.

*2: For types with one or two switches. The value in () is the min. stroke length for switches of the 2-color display and AC magnetic field proof.

Switch specifications

- 1-color/2-color display/for AC magnetic field proof

Item	Proximity 2-wire	Proximity 2-wire			Proximity 3-wire				Reed 2-wire				Proximity 2-wire			
	T1H/ T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T2WH/ T2WV	T3H/ T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V	T5H/T5V	T8H/T8V		T2YD(*4) T2YDT			
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay, IC circuit (no indicator lamp), serial connection		For programmable controller, relay		For programmable controller		
Output method	-			NPN output	PNP output	NPN output	NPN output	-								
Pwr. supp. V.	-			10 to 28 VDC				-								
Load voltage	85 to 265 VAC	10 to 30 VDC 24 VDC ±10%			30 VDC or less				12/24 VDC	100/110 VAC	5/12/24 VDC	100/110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 100 mA	5 to 20 mA (*3)			100 mA or less		50 mA or less		5 to 50 mA	7 to 20 mA	≤50 mA	≤20 mA	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Indicator lamp	LED (Lit when ON)	LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Without indicator lamp	LED (Lit when ON)		Red/green LED (Lit when ON)			
Leakage current	≤1 mA at 100 VAC, ≤2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA				1 mA or less			
Weight g	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80		1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80			1 m:33 3 m:87 5 m:142		1 m:61 3 m:166 5 m:272		

*1: Refer to Ending Page 1 for detailed switch specifications and dimensions.

*2: Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

*3: The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

*4: AC magnetic field proof switch (T2YD/T2YDT) cannot be used in DC magnetic fields.

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa										
		0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø32	Push	80.4	1.21 × 10 ²	1.61 × 10 ²	2.41 × 10 ²	3.22 × 10 ²	4.02 × 10 ²	4.83 × 10 ²	5.63 × 10 ²	6.43 × 10 ²	7.24 × 10 ²	8.04 × 10 ²
	Pull	60.3	90.5	1.21 × 10 ²	1.81 × 10 ²	2.41 × 10 ²	3.02 × 10 ²	3.62 × 10 ²	4.22 × 10 ²	4.83 × 10 ²	5.43 × 10 ²	6.03 × 10 ²
ø50	Push	1.96 × 10 ²	2.95 × 10 ²	3.93 × 10 ²	5.89 × 10 ²	7.85 × 10 ²	9.82 × 10 ²	1.18 × 10 ³	1.37 × 10 ³	1.57 × 10 ³	1.77 × 10 ³	1.96 × 10 ³
	Pull	1.65 × 10 ²	2.47 × 10 ²	3.30 × 10 ²	4.95 × 10 ²	6.60 × 10 ²	8.25 × 10 ²	9.90 × 10 ²	1.15 × 10 ³	1.32 × 10 ³	1.48 × 10 ³	1.65 × 10 ³

Cylinder weight

Unit: kg

Item	Stroke length								Switch weight
	25	50	75	100	125	150	175	200	
ø32	2.36	2.86	3.54	4.04	4.53	5.03	5.53	6.03	Refer to the weight in the switch specifications.
ø50	3.90	4.64	5.64	6.38	7.13	7.87	8.61	9.36	

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HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
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Ending

STG-K Series

How to order

Without switch (built-in magnet for switch)

STG - K - 50 - - - 25

With switch (built-in magnet for switch)

STG - K - 50 - - - 25 - T2H - R

Model No.

A Variation

B Bore size

C Port thread

D Cushion

E Stroke length

F Switch model No.

*1

*2

■ Custom stroke length
Available in 5 mm increments. However, the total length is the same as that of the next longer standard stroke length.

⚠ Precautions for model No. selection

*1 : Switches other than **F** Switch model No. are also available. (Made-to-order product)
Refer to Ending Page 1 for details.

*2 : Switches are shipped with the product. Contact CKD if assembling before shipment is necessary.

[Example of model No.]

STG-K-50-50-T0H-D

Model: Guided cylinder

Double acting/heavy duty guide rod

A Variation : Heavy duty guide rod (metal bush bearing)

B Bore size : $\phi 50$ mm

C Port thread : Rc thread

D Cushion : With rubber cushion

E Stroke length : 50 mm

F Switch model No. : Reed T0H switch, lead wire 1m

G Switch quantity : 2

G Switch quantity

Code	Description					
A Variation						
K	Heavy duty guide rod (metal bush bearing)					
B Bore size (mm)						
32	$\phi 32$					
50	$\phi 50$					
C Port thread						
Blank	Rc thread					
NN	NPT thread (made-to-order product)					
GN	G thread (made-to-order product)					
D Cushion						
Blank	With rubber cushion					
C	Rubber-air cushioned					
E Stroke length (mm)						
25, 50, 75, 100, 125, 150, 175, 200						
F Switch model No.						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color display	2-wire
T5H*	T5V*		●	●	Without indicator lamp	
T8H*	T8V*		●	●	1-color display	
T1H*	T1V*	Proximity	●		1-color display	2-wire
T2H*	T2V*			●		
T3H*	T3V*			●	1-color display (PNP output)	3-wire
T3PH*	T3PV*			●		
T2YH*	T2YV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T3YH*	T3YV*		●			
T3WH*	T3WV*		●	2-color display	3-wire	
T2JH*	T2JV*		●			
T2YD*	-		●	1-color display off-delay	2-wire	
T2YDT*	-		●	2-color display	2-wire	
			●	AC magnetic field		
* Lead wire length						
Blank	1 m (standard)					
3	3 m (option)					
5	5 m (option)					
G Switch quantity						
R	1 on rod side					
H	1 on head side					
D	2					
T	3					

How to order switch

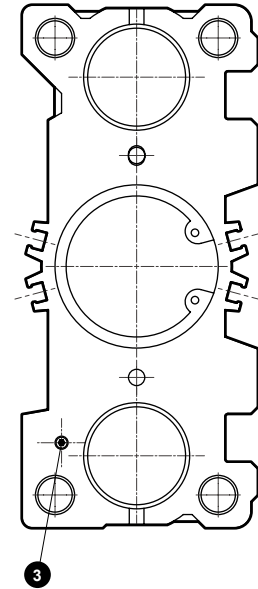
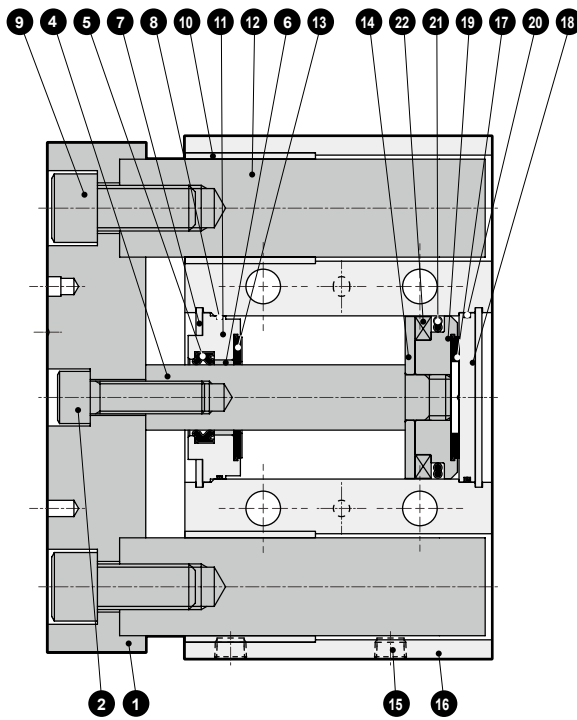
SW - T0H

Switch model No.
(Item **F** above)

CKD

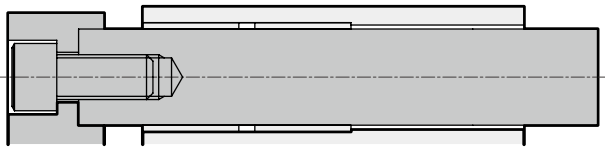
Internal structure and parts list

- $\phi 32, \phi 50$
- 50 or less stroke length



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HCA
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CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
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Ending

- Over 50 stroke length



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	End plate	Steel	Nickeling	12	Guide rod	Steel	Industrial chrome plating
2	Hexagon socket head cap screw	Steel	Black finish	13	Cushion rubber	Urethane rubber	
3	Hexagon socket set screw	Stainless steel		14	Spacer	Aluminum alloy	
4	Piston rod	Steel	Industrial chrome plating	15	Plug	Steel	
5	Rod packing	Nitrile rubber		16	Cylinder body	Aluminum alloy	Hard alumite
6	Bush	Oiles drymet	$\phi 50$ only	17	Cushion rubber	Urethane rubber	
7	C type snap ring for hole	Steel	Zinc phosphate	18	Cover	Aluminum alloy	Chromate
8	O-ring	Nitrile rubber		19	Piston	Aluminum alloy	
9	Hexagon socket head cap screw	Steel	Black finish	20	O-ring	Nitrile rubber	
10	Metal	Oil-impregnated copper alloy bearing		21	Piston packing	Nitrile rubber	
11	Rod metal	Aluminum alloy	$\phi 32$: Hard alumite $\phi 50$: Chromate	22	Magnet		

Repair parts list

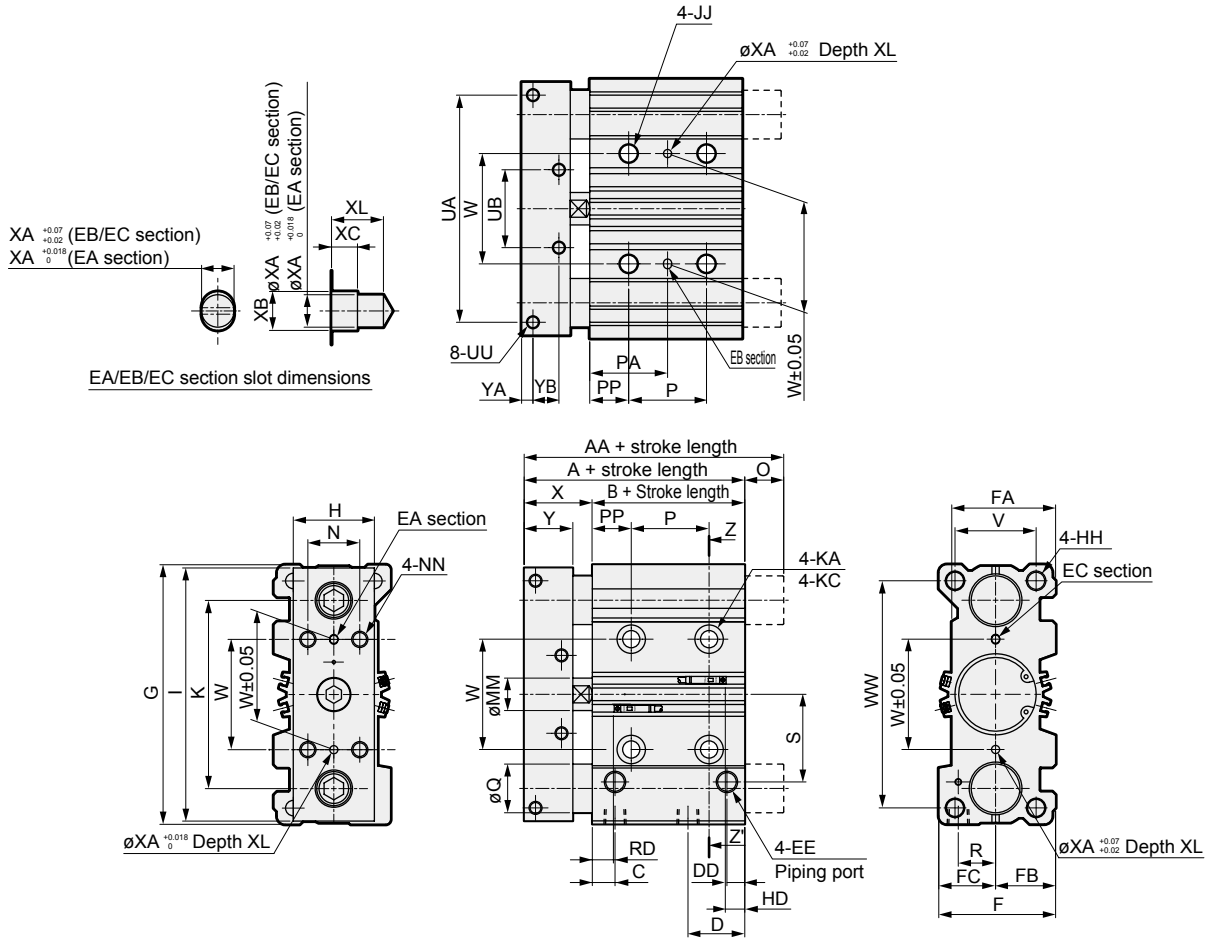
Bore size (mm)	Kit No.	Repair parts No.
$\phi 32$	STG-32K	5 8 13
$\phi 50$	STG-50K	17 20 21

STG-K Series

Dimensions

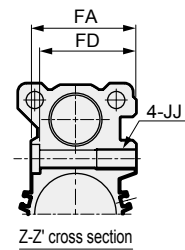
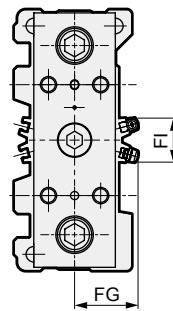
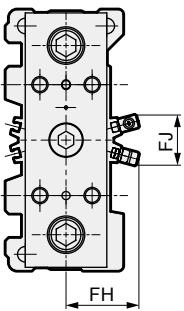


● STG-K- $\phi 32$, $\phi 50$



● T1H/V, T2YD, T2YDT

● T2YH/V, T3YH/V, T2JH/V, T8H/V



*1 : When using a custom stroke length, the total dimensions are the same as the longer standard stroke length.

Code	A	AA		B	C	D	DD	EE	F	FA	FB	FC	FD	G	H	HH
		25, 50st	Over 50 st													
$\phi 32$	72	72	90.5	37.5	12.5	30.5	9	Rc1/8	54	47	27	27	42	130	44	M10 depth 18
$\phi 50$	86	86	109	44	14	35	11	Rc1/4	72	64	37	35	59	160	50	M12 depth 20
Code	I	JJ	K	KA	KC	MM	N	NN	O		P			PA		
									25, 50st	Over 50 st	25st	50, 75, 100st	Over 100 st	25st	50, 75, 100st	
$\phi 32$	126	M10 depth 20	88	8.6 through	14 spot face depth 5	16	24	M8 depth 16	0	18.5	24	48	124	33	45	
$\phi 50$	156	M12 depth 24	116	10.6 through	17.5 spot face depth 5	20	32	M10 depth 20	0	23	24	48	124	36	48	
Code	PA	PP	Q	R	S	UA	UB	UU	V	W	WW	X	XA	XB	XC	XL
$\phi 32$	83	21	25	18	39.5	112	27	M6 depth 10	37	44	113	$34.5_{-0.2}^0$	4	4.5	3	6
$\phi 50$	86	24	30	23	54	140	48	M8 depth 14	50	68	140	$42_{-0.2}^0$	5	6	4	8
Code	Y	YA	YB	T0H/V, T2H/V, T3H/V, T5/V		T1H/V, T2YH/V, T3YH/V, T2JH/V, T2YD		T2WH/V, T3WH/V		T8H/V		FG	FH	FI	FJ	
				RD	HD	RD	HD	RD	HD	RD	HD					
$\phi 32$	25	6	13	10	8.5	9	7.5	12	10.5	4	2.5	30	36	22	26	
$\phi 50$	30	7	16	13.5	11.5	12.5	10.5	15.5	13.5	7.5	5.5	39	45	27	31	