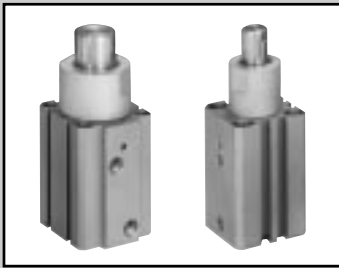


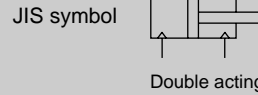
SCP*2
 CMK2
 CMA2
 SCM
 SCG
 SCA2
 SCS
 CKV2
 CA/OV2
 SSD
 CAT
 MDC2
 MVC
 SMD2
 MSD*
 FC*
STK
 ULK*
 JSK/M2
 JSG
 JSC3
 USSD
 USC
 JSB3
 LMB
 STG
 STS/L
 LCS
 LCG
 LCM
 LCT
 LCY
 STR2
 UCA2
 HCM
 HCA
 SRL2
 SRG
 SRM
 SRT
 MRL2
 MRG2
 SM-25
 CAC3
 UCAC
 RCC2
 MFC
 SHC
 GLC
 Ending



High rigid cylinder Double acting chamfered round rod end

STK Series

● Bore size: ϕ 20, ϕ 32, ϕ 40, ϕ 50



Specifications

Descriptions	STK			
Bore size mm	ϕ 20	ϕ 32	ϕ 40	ϕ 50
Actuation	Double acting			
Working fluid	Compressed air			
Max. working pressure MPa	1.0			
Min. working pressure MPa	0.15	0.1		
Guaranty durability pressure MPa	1.6			
Ambient temperature $^{\circ}$ C	-10 to 60 (no freezing)			
Port size	M5	Rc1/8	Rc1/4	
Stroke tolerance mm	+2.0 0			
Working piston speed mm/s	50 to 500			
Cushion	Rubber cushioned			
Lubrication	Not required (when lubricating, use turbine oil Class 1 ISOVG 32)			
Rod end form	Round bar type			
Allowable energy absorption J	Refer to page 1186.			

Stroke length

Bore size (mm)	Stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)	Min. stroke length with switch (mm)
ϕ 20	10, 15, 20	20	10	10
ϕ 32				
ϕ 40	20, 25, 30	30	20	20
ϕ 50				

Note: Other than standard stroke length is custom order.

Switch specifications

- 1 color/2 color indicator

*The T0/T5 switch can be used with 220 VAC.
Consult CKD for working conditions.

Descriptions	Proximity 2 wire			Proximity 3 wire			Reed 2 wire						
	T1H/T1 V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T3H/ T3V	T3PH/T3PV (Custom order)	T3YH/ T3YV	TOH/TOV	T5H/T5V		T8H/T8V			
Applications	Programmable controller relay, small solenoid valve	Programmable controller		Programmable controller, relay			Programmable controller, relay	Programmable controller, relay, IC circuit (w/o indicator light), serial connection		Programmable controller, relay			
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
Load current	5 to 100mA	5 to 20mA (Note 1)		100mA or less		50mA or less	5 to 50mA	7 to 20mA	50mA or less	20mA or less	5 to 50mA	7 to 20mA	7 to 10mA
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)			
Leakage current	1mA or less with 100 VAC 2mA or less with 200 VAC	1mA or less		10 μA or less			0mA						

- 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		Programmable controller, relay		Programmable controller		Programmable controller, relay		
Output method	NPN output								
Light	Red/green LED (ON lighting)								
	Installation position adjustment section	-		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 20mA		50mA or less		5 to 20mA		50mA or less	
	Leakage current	1mA or less		10 μA or less		1.2mA or less		10 μA or less	
Preventive maintenance Output	Load voltage	30 VDC or less							
	Load current	20mA or less		50mA or less		5 to 20mA or less		50mA or less	
	Leakage current	10 μA or less							

Note 1: Refer to an Ending 1 page for other switches.

Note 2: Max. load current: 20mA above is the value at 25°C. When ambient temperature around switch is higher than 25°C, the value is lower than 20mA. (5 to 10mA at 60°C)

Cylinder weight table

Stroke length	10	15	20	25	30	Weight per switch (grommet)
Bore size						
φ 20	214	229	243	-	-	18
φ 32	438	463	488	-	-	
φ 40	-	-	793	834	875	
φ 50	-	-	1285	1311	1337	

SCP*2
CMK2
CMA2
SCM
SCG
SCA2
SCS
CKV2
CA/OV2
SSD
CAT
MDC2
MVC
SMD2
MSD*
FC*
STK
ULK*
JSK/M2
JSG
JSC3
USSD
USC
JSB3
LMB
STG
STS/L
LCS
LCG
LCM
LCT
LCY
STR2
UCA2
HCM
HCA
SRL2
SRG
SRM
SRT
MRL2
MRG2
SM-25
CAC3
UCAC
RCC2
MFC
SHC
GLC
Ending

High rigid cylinder
Space saving structure

How to order

Without switch



With switch



A Bore size

B Port thread type

C Stroke length

D Switch model no.
Note 1

E Switch quantity

F Option

Note on model no. selection

Note 1: Switches other than (D) switch model no. are available. (Custom order)
Refer to Ending 1 for the details.

Symbol	Descriptions
A Bore size (mm)	
20	φ20
32	φ32
40	φ40
50	φ50

B Port thread type	
Blank	Rc thread
NN	NPT thread (φ 32 and over) (custom order)
GN	G thread (φ 32 and over) (custom order)

C Stroke length (mm)					
Bore size		φ20	φ32	φ40	φ50
10	10	●	●		
15	15	●	●		
20	20	●	●	●	●
25	25			●	●
30	30			●	●

D Switch model no.				
Axial lead wire	Radial lead wire	Contact	Indicator	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*		1 color indicator type (custom order)	3-wire
T3H*	T3V*			
T3PH*	T3PV*		2 color indicator type	2-wire
T2YH*	T2YV*			
T3YH*	T3YV*		2 color indicator type (with indicator light for preventive maintenance output (1 color))	3-wire
T2YFH*	T2YFV*			
T3YFH*	T3YFV*			
T2YMH*	T2YMV*			
T3YMH*	T3YMV*		Off-delay type	4-wire
T2JH*	T2JV*			

*Lead wire length (m)	
Blank	1m (standard)
3	3m (option)
5	5m (option)

E Switch quantity	
R	One on rod end
H	One on head end
D	2

F Option	
Blank	Without rod end thread
N11	Rod end female thread

<Example of model number>

STK-20-10-T0H-R-N11

Model: High rigid cylinder double acting chamfered round rod end

- A** Bore size : φ 20mm
- B** Port thread type : Rc thread
- C** Stroke length : 10mm
- D** Switch model no. : Reed T0H switch, lead wire 1m
- E** Switch quantity : One on rod end
- F** Option : With rod end female thread

How to order switch



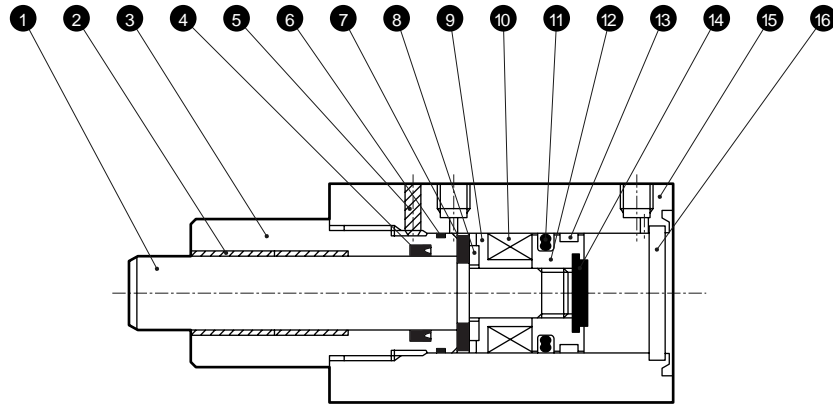
Switch model no.
(Item **D**) above)

Internal structure and parts list

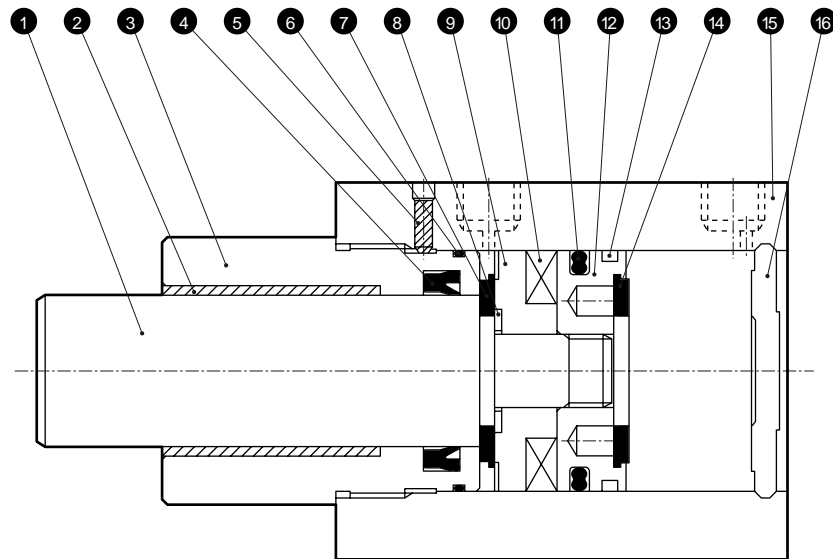
SCP*2
CMK2
CMA2
SCM
SCG
SCA2
SCS
CKV2
CA/OV2
SSD
CAT
MDC2
MVC
SMD2
MSD*
FC*
STK
ULK*
JSK/M2
JSG
JSC3
USSD
USC
JSB3
LMB
STG
STS/L
LCS
LCG
LCM
LCT
LCY
STR2
UCA2
HCM
HCA
SRL2
SRG
SRM
SRT
MRL2
MRG2
SM-25
CAC3
UCAC
RCC2
MFC
SHC
GLC
Ending

High rigid cylinder
Space saving structure

● STK-20



● STK-32/40/50



N0.	Parts name	Material	Remarks	N0.	Parts name	Material	Remarks
1	Piston rod	ϕ 20: Stainless steel ϕ 32 to 50: Steel	Industrial chrome plating	9	Spacer	Polyamide	
2	Bush	Oilless dry met		10	Magnet	Plastic	
3	Rod cover	Aluminum alloy	Alumite	11	Piston packing seal	Nitrile rubber	
4	Rod packing seal	Nitrile rubber		12	Piston	Aluminum alloy	Chromate
5	Hexagon socket head set screw	Steel	Blackening	13	Wear ring	Acetar resin	
6	Metal gasket	Nitrile rubber		14	Cushion rubber (H)	Urethane rubber	
7	Cushion rubber (R)	Urethane rubber		15	Body	Aluminum alloy	Hard alumite
8	Spacer washer	Stainless steel		16	Guard	ϕ 20: Stainless steel ϕ 32 to 50: Aluminum alloy	ϕ 32 to 50: Chromate

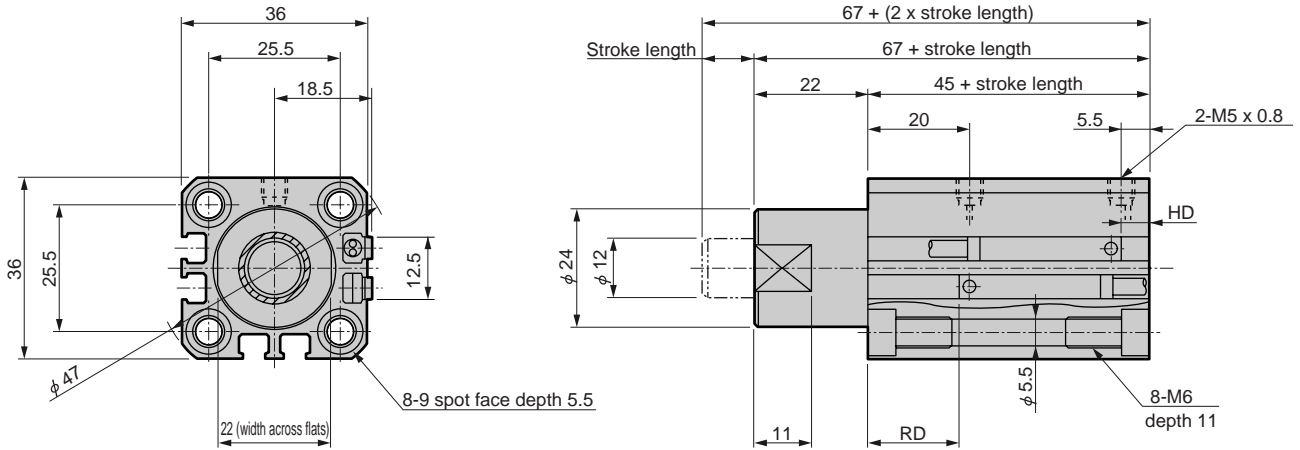
Repair parts list

Bore size (mm)	Kit No.	Repair parts number
ϕ 20	STK-20K	4 6 11
ϕ 32	STK-32K	
ϕ 40	STK-40K	13 14
ϕ 50	STK-50K	

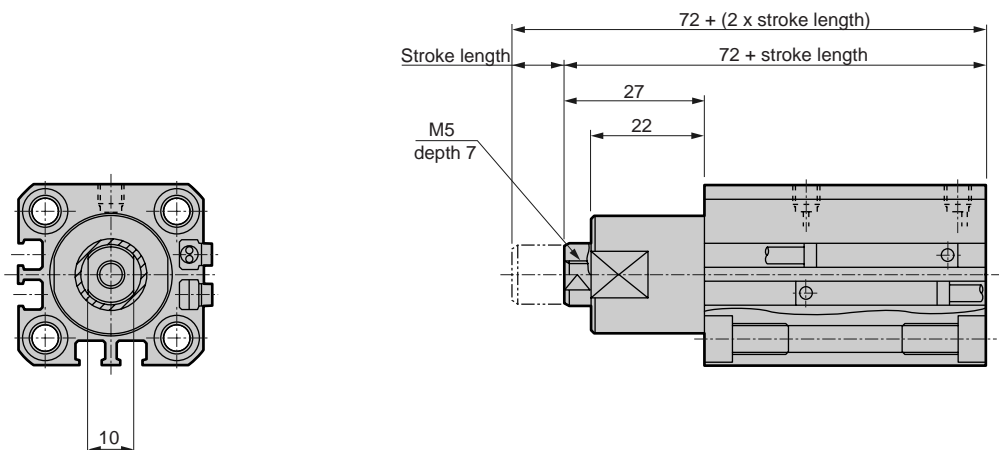
Dimensions



● STK-20



● STK-20-N11 (Dimensions other than listed are same as above (STK-20) dimensions.)



Dimensions with switch

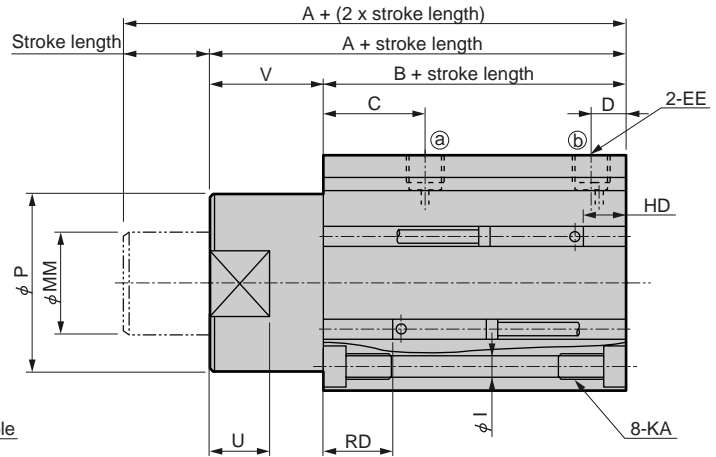
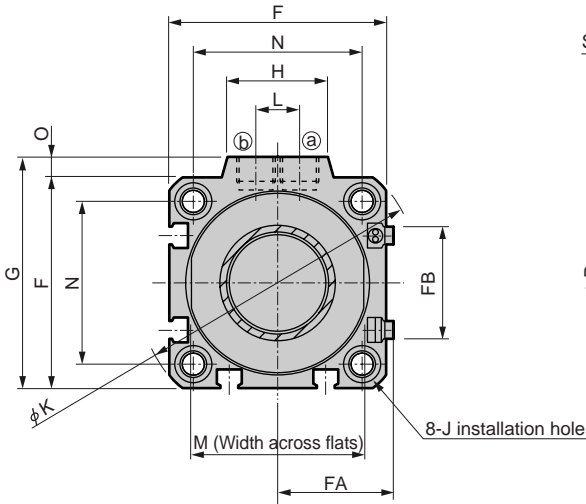
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V	
	HD	RD	HD	RD
$\phi 20$	5.5	21	5.5	21

Note : Refer to page 1183 for the HD, RD, and projecting dimensions of the 2 color indication type, off delay type, T1*, T8* switch.

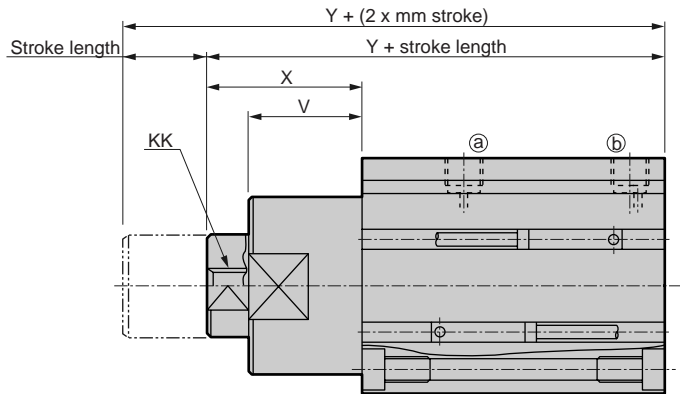
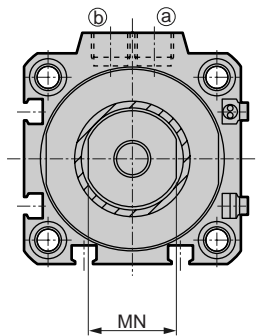
Dimensions



- STK-32/40/50



- STK-32/40/50-N11 (Dimensions other than listed are same as above (STK-32/40/50) dimensions.)



Symbol Bore size	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	KK	L	M	MM	MN	N	O	P	U	V	X	Y
φ 32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	9 spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	13	20	30	78
φ 40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	9 spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	15	28	38	90.5
φ 50	82	54	24.5	10.5	Rc1/4	64	32.5	28.5	71	33	6.9	11 spot face depth 6.5	86	M8 depth 13	M10 depth 15	15	50	30	27	50	7	56	15	28	43	97

Dimensions with switch				
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V	
	HD	RD	HD	RD
φ 32	9.5	21	9	21
φ 40	10.5	24	10.5	24
φ 50	11.5	24	11.5	24

Note : Refer to page 1183 for the HD, RD, and projecting dimensions of the 2 color indication type, off delay type, T1*, T8* switch.

- SCP*2
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS
- CKV2
- CA/OV2
- SSD
- CAT
- MDC2
- MVC
- SMD2
- MSD*
- FC*
- STK**
- ULK*
- JSK/M2
- JSG
- JSC3
- USSD
- USC
- JSB3
- LMB
- STG
- STS/L
- LCS
- LCG
- LCM
- LCT
- LCY
- STR2
- UCA2
- HCM
- HCA
- SRL2
- SRG
- SRM
- SRT
- MRL2
- MRG2
- SM-25
- CAC3
- UCAC
- RCC2
- MFC
- SHC
- GLC
- Ending

High rigid cylinder
Space saving structure