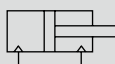


Stopper cylinder double acting/round rod end form

# STK Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$

JIS symbol



Double acting



## Specifications

1 MPa = 10 bar

Item	STK				
	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Bore size	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation		Double acting			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.15 ( $\approx 22$ psi)	0.1 ( $\approx 15$ psi, 1 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0			
		0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Round rod type			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
STK  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

### Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire	Proximity 2-wire			Proximity 3-wire				Reed 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		
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay (no lamp), serial		For programmable controller, relay			
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	24VDC±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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)		
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18			3 m:87		5 m:142	
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49	3 m:49			5 m:80		5 m:142	
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80	5 m:80			5 m:142			

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bore size						
ø20	214	229	243	-	-	
ø32	438	463	488	-	-	
ø40	-	-	793	834	875	
ø50	-	-	1285	1311	1337	

### 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
ø20	Push	-	-	62.8	94.2	1.26 × 10 <sup>2</sup>	1.57 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.20 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	2.83 × 10 <sup>2</sup>	3.14 × 10 <sup>2</sup>
	Pull	-	-	40.2	60.3	80.4	1.01 × 10 <sup>2</sup>	1.21 × 10 <sup>2</sup>	1.41 × 10 <sup>2</sup>	1.61 × 10 <sup>2</sup>	1.81 × 10 <sup>2</sup>	2.01 × 10 <sup>2</sup>
ø32	Push	80.4	1.21 × 10 <sup>2</sup>	1.61 × 10 <sup>2</sup>	2.41 × 10 <sup>2</sup>	3.22 × 10 <sup>2</sup>	4.02 × 10 <sup>2</sup>	4.83 × 10 <sup>2</sup>	5.63 × 10 <sup>2</sup>	6.43 × 10 <sup>2</sup>	7.24 × 10 <sup>2</sup>	8.04 × 10 <sup>2</sup>
	Pull	49.0	73.5	98.0	1.47 × 10 <sup>2</sup>	1.96 × 10 <sup>2</sup>	2.45 × 10 <sup>2</sup>	2.94 × 10 <sup>2</sup>	3.43 × 10 <sup>2</sup>	3.92 × 10 <sup>2</sup>	4.41 × 10 <sup>2</sup>	4.90 × 10 <sup>2</sup>
ø40	Push	1.26 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	3.77 × 10 <sup>2</sup>	5.03 × 10 <sup>2</sup>	6.28 × 10 <sup>2</sup>	7.54 × 10 <sup>2</sup>	8.80 × 10 <sup>2</sup>	1.01 × 10 <sup>3</sup>	1.13 × 10 <sup>3</sup>	1.26 × 10 <sup>3</sup>
	Pull	76.6	1.15 × 10 <sup>2</sup>	1.53 × 10 <sup>2</sup>	2.30 × 10 <sup>2</sup>	3.06 × 10 <sup>2</sup>	3.83 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>	5.36 × 10 <sup>2</sup>	6.13 × 10 <sup>2</sup>	6.89 × 10 <sup>2</sup>	7.66 × 10 <sup>2</sup>
ø50	Push	1.96 × 10 <sup>2</sup>	2.95 × 10 <sup>2</sup>	3.93 × 10 <sup>2</sup>	5.89 × 10 <sup>2</sup>	7.85 × 10 <sup>2</sup>	9.82 × 10 <sup>2</sup>	1.18 × 10 <sup>3</sup>	1.37 × 10 <sup>3</sup>	1.57 × 10 <sup>3</sup>	1.77 × 10 <sup>3</sup>	1.96 × 10 <sup>3</sup>
	Pull	1.26 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	3.77 × 10 <sup>2</sup>	5.03 × 10 <sup>2</sup>	6.28 × 10 <sup>2</sup>	7.54 × 10 <sup>2</sup>	8.80 × 10 <sup>2</sup>	1.01 × 10 <sup>3</sup>	1.13 × 10 <sup>3</sup>	1.26 × 10 <sup>3</sup>

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
STK  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

## How to order

Without switch (built-in magnet for switch)

**STK** - **20** - **10** - **N11**

With switch (built-in magnet for switch)

**STK** - **20** - **10** - **T0H** - **R** - **N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.

\*1

\*2

**E** Switch quantity

### ⚠ Precautions for model No. selection

\*1 : Switches other than **D** Switch model No. are also available. (Made to order)  
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.]

**STK-20-10-T0H-R-N11**

Model: Stopper cylinder double acting/round rod end form

**A** Bore size :  $\phi 20$  mm

**B** Port thread : Rc thread

**C** Stroke length : 10 mm

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

**E** Switch quantity : 1 on rod side

**F** Option : With rod end female thread

**F** Option

Code	Description
<b>A Bore size (mm)</b>	
20	$\phi 20$
32	$\phi 32$
40	$\phi 40$
50	$\phi 50$

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread ( $\phi 32$ and over) (made-to-order product)
GN	G thread ( $\phi 32$ and over) (made-to-order product)

<b>C Stroke length (mm)</b>				
Bore size	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
10	10	●	●	
15	15	●	●	
20	20	●	●	●
25	25			●
30	30			●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*			●		3-wire
T3YH*	T3YV*			●		
T2JH*	T2JV*			●	1-color display off-delay	2-wire

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>	
Blank	Rod end no thread
N11	With rod end female thread

## How to order switch

**SW** - **T0H**

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

## Specifications for rechargeable battery

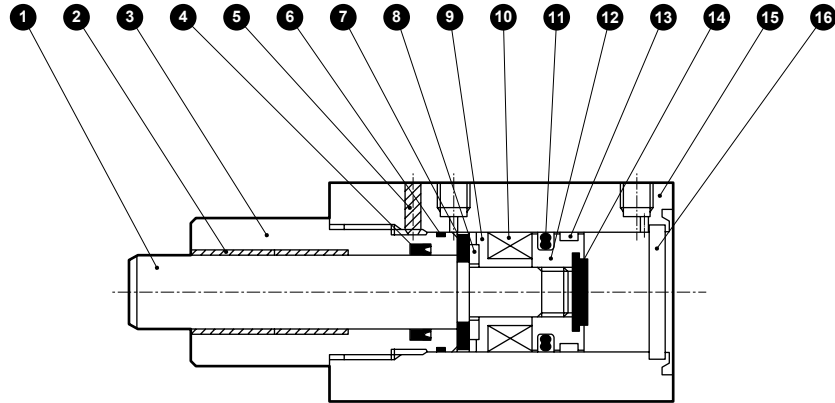
(Catalog No. CC-1226A)

● Design compatible with rechargeable battery manufacturing process

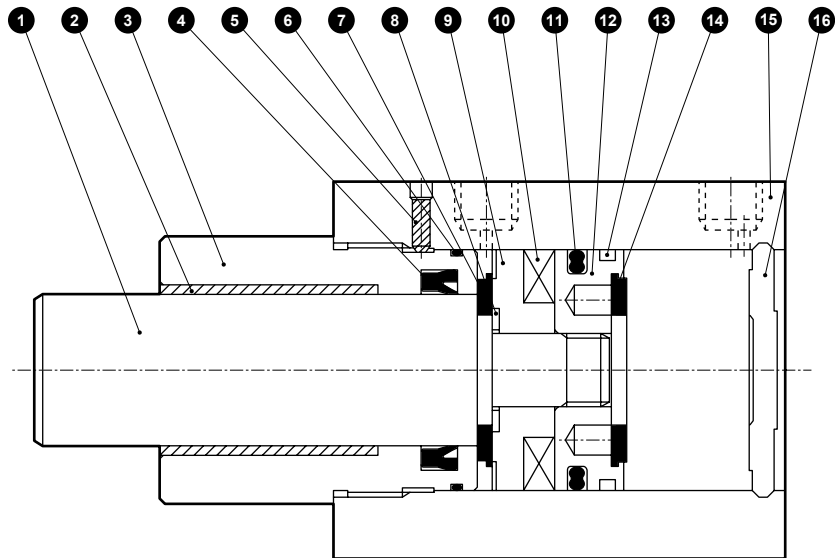
STK ..... **P4\***

### Internal structure and parts list

● STK-20



● STK-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	ø20: Stainless steel ø32 to ø50: Steel	Industrial chrome plating	9	Spacer	Polyamide	
2	Bush	Dry bearing		10	Magnet	Plastic	
3	Rod cover	Aluminum alloy	Alumite	11	Piston packing	Nitrile rubber	
4	Rod packing	Nitrile rubber		12	Piston	Aluminum alloy	Chromate
5	Hexagon socket set screw	Steel	Black finish	13	Wear ring	Acetal 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	Cover	ø20: Stainless steel ø32 to ø50: Aluminum alloy	ø32 to 50: Chromate

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-20K	
ø32	STK-32K	4 6 11
ø40	STK-40K	13 14
ø50	STK-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

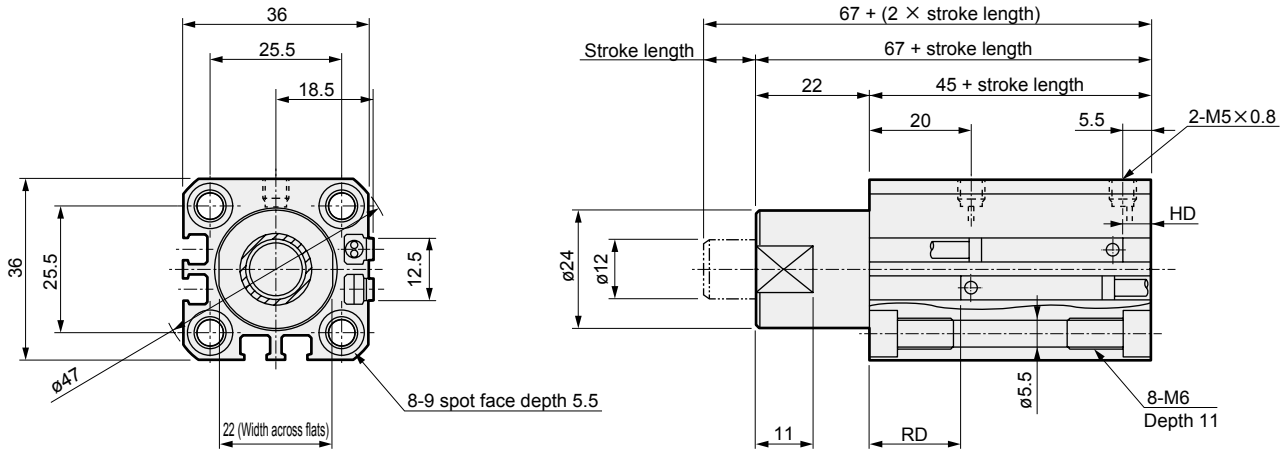
Spd  
Contr

Ending

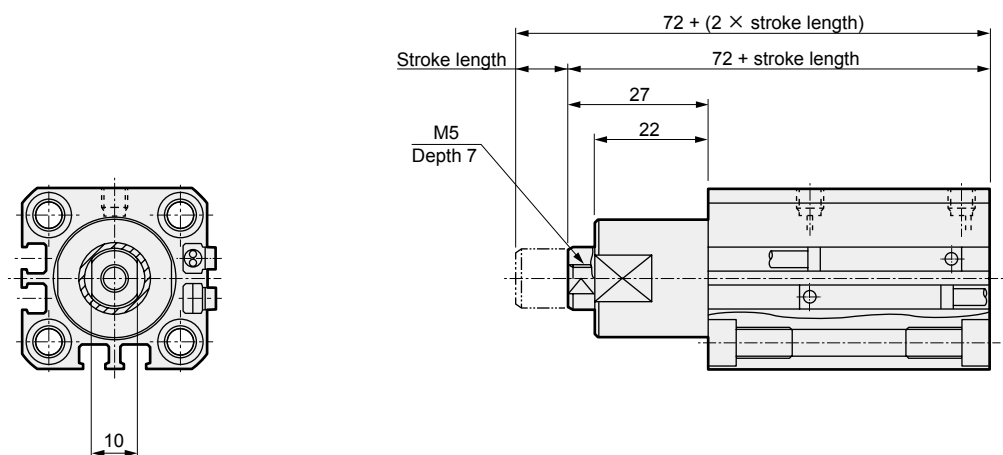


## Dimensions

### ● STK-20



### ● STK-20-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-20).)



### Dimensions with switch

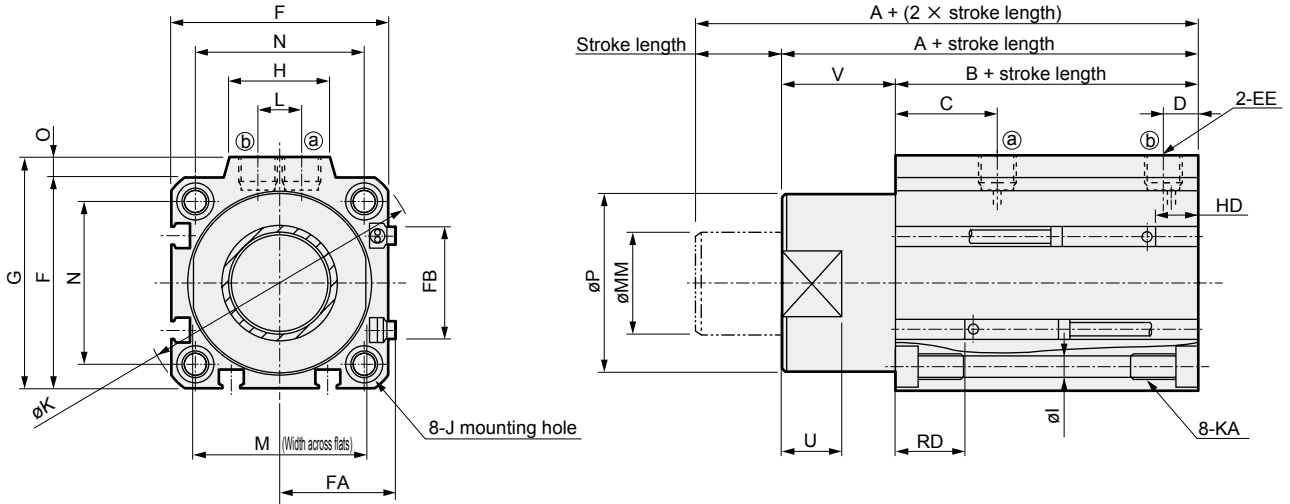
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
$\phi 20$	5.5	21	5.5	21	7.0	22.5

Note: Refer to page 1559 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

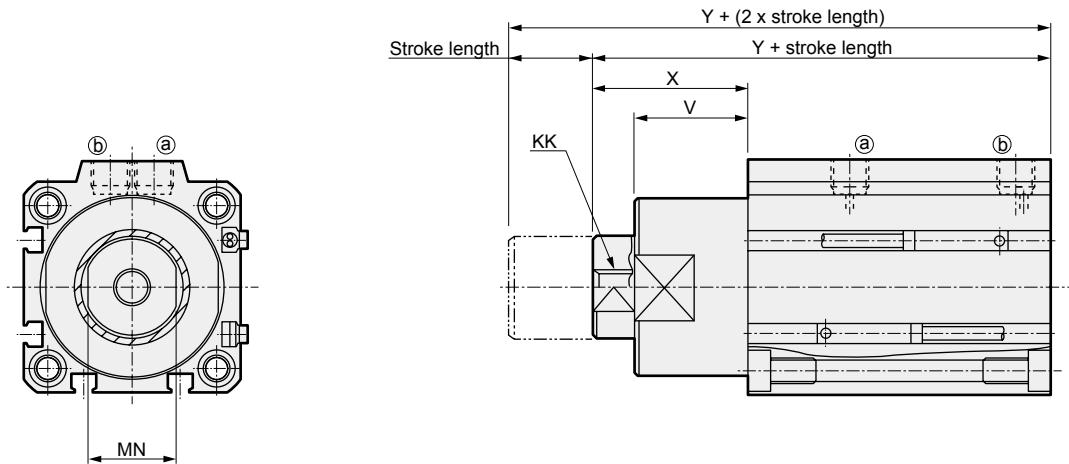
### Dimensions



● STK-32/40/50



● STK-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-32/40/50).)



Code	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
ø32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	ø spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	13	20	30	78
ø40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	ø spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	15	28	38	90.5
ø50	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		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	9.5	21	9	21	10.5	22.5
ø40	10.5	24	10.5	24	12	25.5
ø50	11.5	24	11.5	24	13	25.5

Note: Refer to page 1559 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

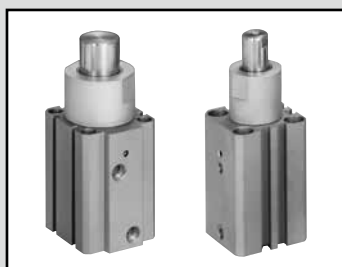
ShkAbs

FJ

FK

Spd Contr

Ending



Stopper cylinder single acting/pull, round rod end form

# STK-Y Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$



Single acting/pull



## Specifications

1 MPa = 10 bar

Item	STK-Y				
	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Bore size	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation		Single acting pull			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Round rod type			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\phi 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\phi 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
	20	29.0	
$\phi 40$	25	25.3	44.4
	30	21.5	
	20	55.4	
$\phi 50$	25	48.0	84.8
	30	40.7	

### Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire		Proximity 2-wire				Proximity 3-wire				Reed 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						
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller				For programmable controller, relay				For programmable controller, relay		For programmable controller, relay (no lamp), serial		For programmable controller, relay			
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	
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)				
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC		1 mA or less				10 µA or less				0 mA							
Weight g	1 m:33		1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80				1 m:33				
	3 m:87		3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49	3 m:49 5 m:80 7 m:142				3 m:87				
	5 m:142		5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80	5 m:80 7 m:142 9 m:200				5 m:142				

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bores size						
ø20	217	232	246	-	-	
ø32	454	479	504	-	-	
ø40	-	-	809	850	891	
ø50	-	-	1299	1325	1351	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Working pressure MPa								
	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	-	45.6	65.7	85.8	1.06 × 10 <sup>2</sup>	1.26 × 10 <sup>2</sup>	1.46 × 10 <sup>2</sup>	1.66 × 10 <sup>2</sup>	1.86 × 10 <sup>2</sup>
ø32	66.6	1.16 × 10 <sup>2</sup>	1.65 × 10 <sup>2</sup>	2.14 × 10 <sup>2</sup>	2.63 × 10 <sup>2</sup>	3.12 × 10 <sup>2</sup>	3.61 × 10 <sup>2</sup>	4.10 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>
ø40	1.09 × 10 <sup>2</sup>	1.85 × 10 <sup>2</sup>	2.62 × 10 <sup>2</sup>	3.38 × 10 <sup>2</sup>	4.15 × 10 <sup>2</sup>	4.92 × 10 <sup>2</sup>	5.68 × 10 <sup>2</sup>	6.45 × 10 <sup>2</sup>	7.21 × 10 <sup>2</sup>
ø50	1.67 × 10 <sup>2</sup>	2.92 × 10 <sup>2</sup>	4.18 × 10 <sup>2</sup>	5.44 × 10 <sup>2</sup>	6.69 × 10 <sup>2</sup>	7.95 × 10 <sup>2</sup>	9.21 × 10 <sup>2</sup>	1.05 × 10 <sup>3</sup>	1.17 × 10 <sup>3</sup>



# STK-Y Series

## How to order

Without switch (built-in magnet for switch)

**STK-Y** - **20** - **10** - **N11**

With switch (built-in magnet for switch)

**STK-Y** - **20** - **10** - **T0H** - **R** - **N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.

\*1

\*2

**E** Switch quantity

**F** Option

Code	Description
<b>A Bore size (mm)</b>	
20	ø20
32	ø32
40	ø40
50	ø50

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread (ø32 and over) (made-to-order product)
GN	G thread (ø32 and over) (made-to-order product)

<b>C Stroke length</b>					
Bore size		ø20	ø32	ø40	ø50
10	10	●	●		
15	15	●	●		
20	20	●	●	●	●
25	25			●	●
30	30			●	●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*			●		3-wire
T3YH*	T3YV*			●		
T2JH*	T2JV*			●	1-color display off-delay	2-wire

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>	
Blank	Rod end no thread
N11	With rod end female thread

## ⚠ Precautions for model No. selection

\*1: Switches other than **D** Switch model No. are also available. (Made to order)

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.]

**STK-Y-20-10-T0H-R-N11**

Model: Stopper cylinder single acting/pull, round rod end form

**A** Bore size : ø20 mm

**B** Port thread : Rc thread

**C** Stroke length : 10 mm

**D** Switch model No. : Reed T0H switch, Lead wire 1m

**E** Switch quantity : 1 on rod side

**F** Option : With rod end female thread

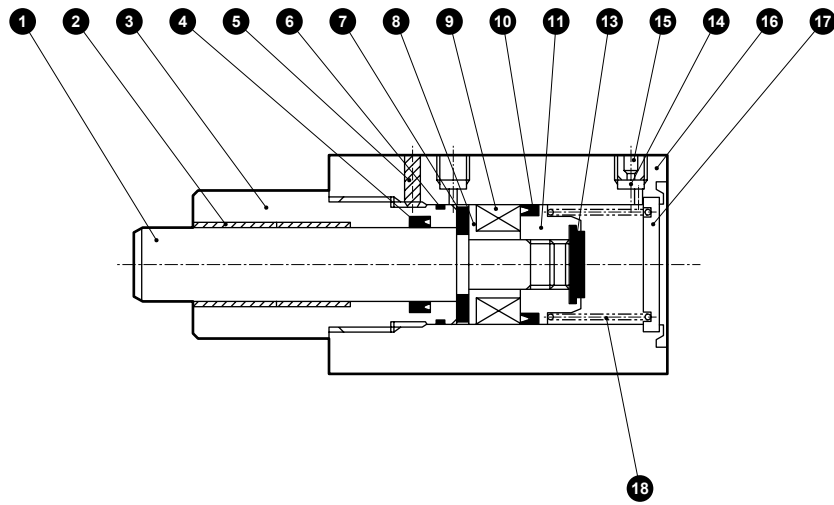
## How to order switch

**SW** - **T0H**

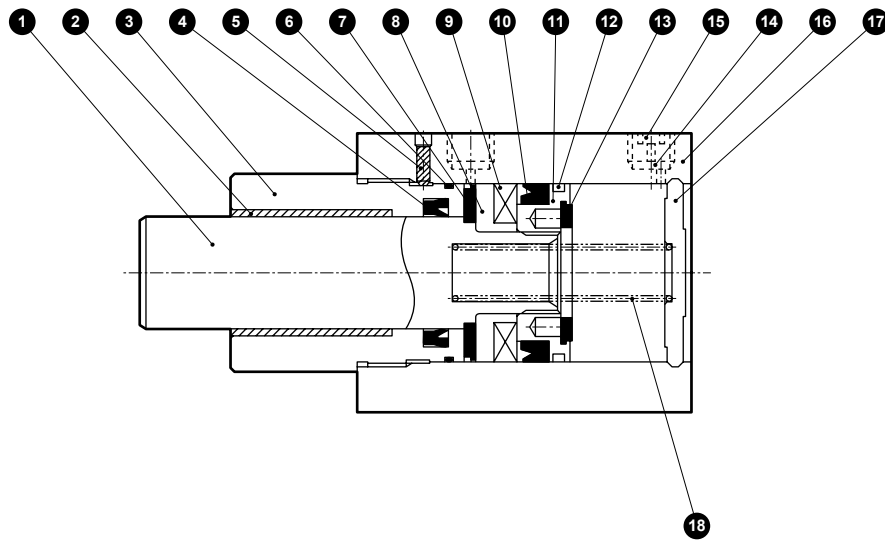
Switch model No.  
(Item **D** above)

### Internal structure and parts list

● STK-Y-20



● STK-Y-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	ø20: Stainless steel ø32 to ø50: Steel	Industrial chrome plating	10	Piston packing	Nitrile rubber	
2	Bush	Dry bearing		11	Piston	Aluminum alloy	Chromate
3	Rod cover	Aluminum alloy	Alumite	12	Wear ring	Acetal resin	
4	Rod packing	Nitrile rubber		13	Cushion rubber H	Urethane rubber	
5	Hexagon socket set screw	Steel	Black finish	14	Stainless steel wire mesh	Stainless steel	
6	Metal gasket	Nitrile rubber		15	Plug	Stainless steel	
7	Cushion rubber R	Urethane rubber		16	Body	Aluminum alloy	Hard alumite
8	Spacer	Aluminum alloy	Chromate	17	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
9	Magnet	Plastic		18	Coil spring	Steel	Electrodeposition

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y-20K	
ø32	STK-Y-32K	4 6 10
ø40	STK-Y-40K	12 13
ø50	STK-Y-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

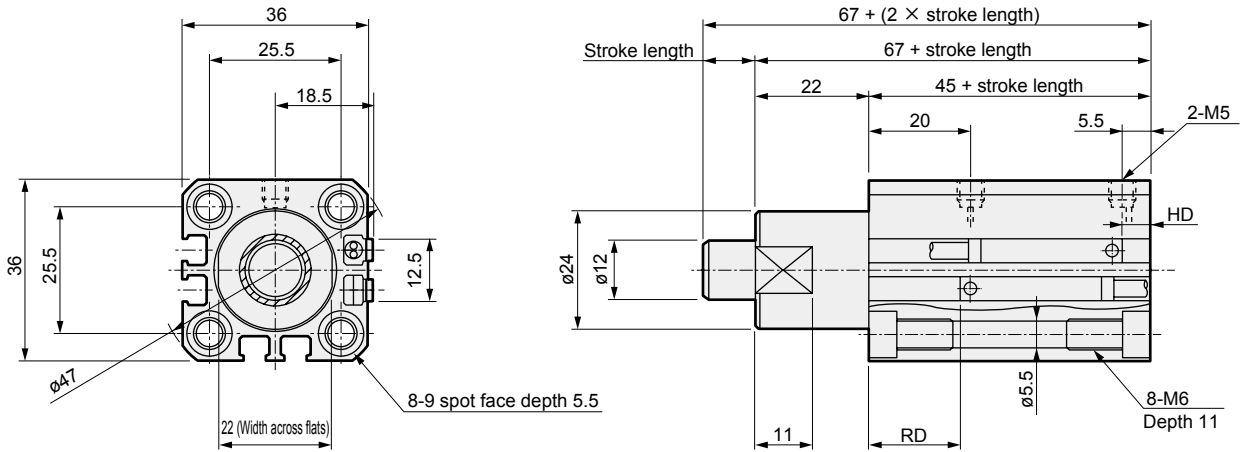
Spd  
Contr

Ending

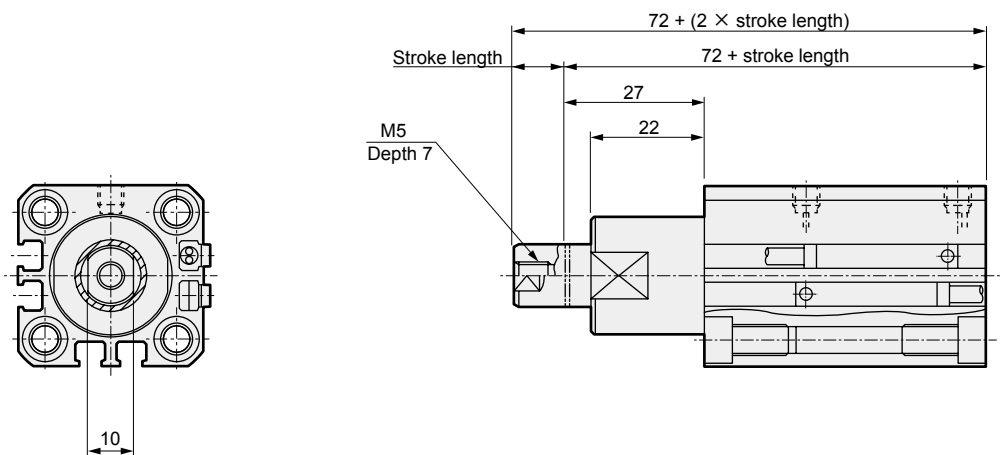
## Dimensions



### ● STK-Y-20



### ● STK-Y-20-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-Y-20).)



### Dimensions with switch

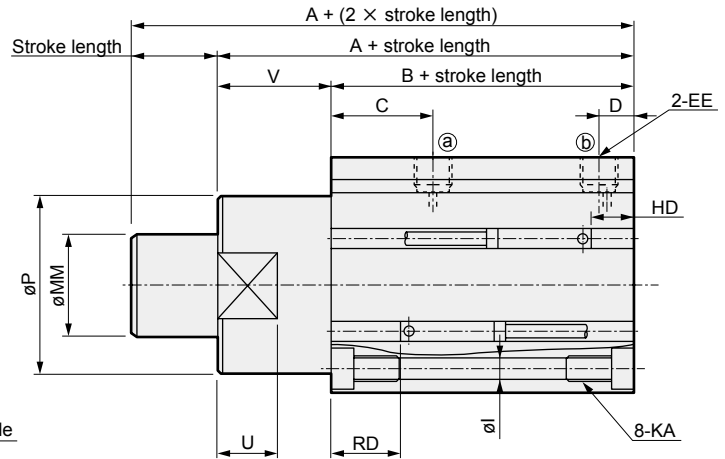
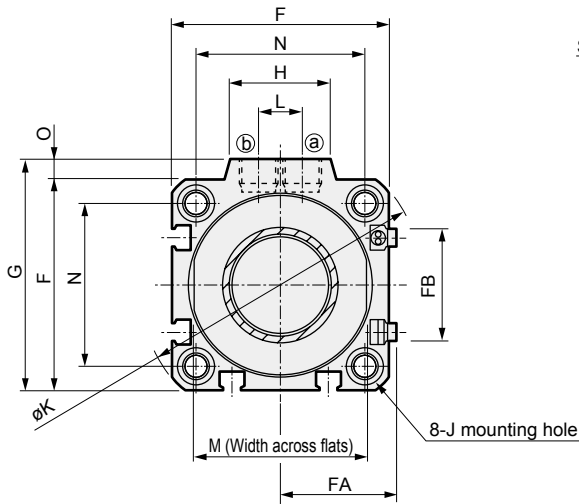
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
$\phi 20$	7	19.5	7	19.5	8.5	21

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

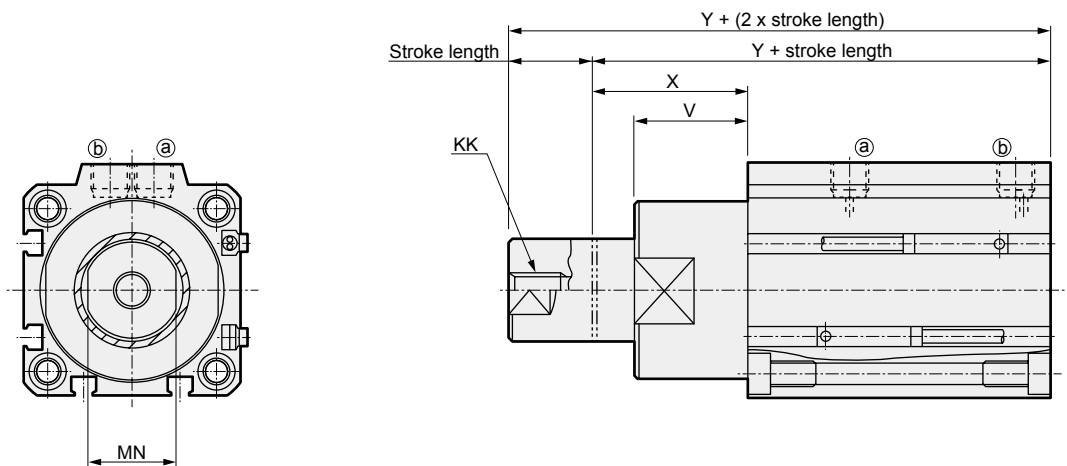
### Dimensions



● STK-Y-32/40/50



● STK-Y-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-Y-32/40/50).)



Code	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
ø32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	ø spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	13	20	30	78
ø40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	ø spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	15	28	38	90.5
ø50	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		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending



Stopper cylinder double acting/spring integrated/round rod end form

# STK-Y1 Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$



Double acting/spring integrated



## Specifications

1 MPa = 10 bar

Item	STK-Y1				
Bore size	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation	Double acting/spring integrated				
Working fluid	Compressed air				
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion	With rubber cushion				
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)				
Rod end form	Round rod type				
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\phi 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\phi 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
$\phi 40$	20	29.0	44.4
	25	25.3	
	30	21.5	
$\phi 50$	20	55.4	84.8
	25	48.0	
	30	40.7	

### Switch specifications

● 1-color/2-color display

Item	Proximity 2-wire		Proximity 2-wire		Proximity 3-wire				Reed 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				
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller		For programmable controller, relay				For programmable controller, relay	For programmable controller, relay (no lamp), serial	For programmable controller, relay				
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)			
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80			1 m:33			
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49				3 m:87			
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80				5 m:142			

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bore size						
ø20	217	232	246	-	-	
ø32	454	479	504	-	-	
ø40	-	-	809	850	891	
ø50	-	-	1299	1325	1351	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa									
		0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	-	-	94.2	1.26 × 10 <sup>2</sup>	1.57 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.20 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	2.83 × 10 <sup>2</sup>	3.14 × 10 <sup>2</sup>
	Pull	-	-	45.6	65.7	85.8	1.06 × 10 <sup>2</sup>	1.26 × 10 <sup>2</sup>	1.46 × 10 <sup>2</sup>	1.66 × 10 <sup>2</sup>	1.86 × 10 <sup>2</sup>
ø32	Push	1.21 × 10 <sup>2</sup>	1.61 × 10 <sup>2</sup>	2.41 × 10 <sup>2</sup>	3.22 × 10 <sup>2</sup>	4.02 × 10 <sup>2</sup>	4.83 × 10 <sup>2</sup>	5.63 × 10 <sup>2</sup>	6.43 × 10 <sup>2</sup>	7.24 × 10 <sup>2</sup>	8.04 × 10 <sup>2</sup>
	Pull	42.1	66.6	1.16 × 10 <sup>2</sup>	1.65 × 10 <sup>2</sup>	2.14 × 10 <sup>2</sup>	2.63 × 10 <sup>2</sup>	3.12 × 10 <sup>2</sup>	3.61 × 10 <sup>2</sup>	4.10 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>
ø40	Push	1.88 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	3.77 × 10 <sup>2</sup>	5.03 × 10 <sup>2</sup>	6.28 × 10 <sup>2</sup>	7.54 × 10 <sup>2</sup>	8.80 × 10 <sup>2</sup>	1.01 × 10 <sup>3</sup>	1.13 × 10 <sup>3</sup>	1.26 × 10 <sup>3</sup>
	Pull	70.5	1.09 × 10 <sup>2</sup>	1.85 × 10 <sup>2</sup>	2.62 × 10 <sup>2</sup>	3.38 × 10 <sup>2</sup>	4.15 × 10 <sup>2</sup>	4.92 × 10 <sup>2</sup>	5.68 × 10 <sup>2</sup>	6.45 × 10 <sup>2</sup>	7.21 × 10 <sup>2</sup>
ø50	Push	2.95 × 10 <sup>2</sup>	3.93 × 10 <sup>2</sup>	5.89 × 10 <sup>2</sup>	7.85 × 10 <sup>2</sup>	9.82 × 10 <sup>2</sup>	1.18 × 10 <sup>3</sup>	1.37 × 10 <sup>3</sup>	1.57 × 10 <sup>3</sup>	1.77 × 10 <sup>3</sup>	1.96 × 10 <sup>3</sup>
	Pull	1.04 × 10 <sup>2</sup>	1.67 × 10 <sup>2</sup>	2.92 × 10 <sup>2</sup>	4.18 × 10 <sup>2</sup>	5.44 × 10 <sup>2</sup>	6.69 × 10 <sup>2</sup>	7.95 × 10 <sup>2</sup>	9.21 × 10 <sup>2</sup>	1.05 × 10 <sup>3</sup>	1.17 × 10 <sup>3</sup>

# STK-Y1 Series

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
**STK**  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

## How to order

Without switch (built-in magnet for switch)

**STK-Y1 - 20 - 10 - N11**

With switch (built-in magnet for switch)

**STK-Y1 - 20 - 10 - T0H - R - N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.

\*1

\*2

**E** Switch quantity

**F** Option

### ⚠ Precautions for model No. selection

\*1: Switches other than **D** Switch model No. are also available. (Made to order)

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.]

**STK-Y1-20-10-T0H-R-N11**

Model: Stopper cylinder double acting/spring integrated, round rod end form type

- A** Bore size :  $\varnothing 20$  mm
- B** Port thread : Rc thread
- C** Stroke length : 10 mm
- D** Switch model No. : Reed T0H switch, Lead wire 1m
- E** Switch quantity : 1 on rod side
- F** Option : With rod end female thread

Code	Description
<b>A Bore size (mm)</b>	
20	$\varnothing 20$
32	$\varnothing 32$
40	$\varnothing 40$
50	$\varnothing 50$

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread ( $\varnothing 32$ and over) (made-to-order product)
GN	G thread ( $\varnothing 32$ and over) (made-to-order product)

<b>C Stroke length (mm)</b>				
Bore size	$\varnothing 20$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$
10	10	●	●	
15	15	●	●	
20	20	●	●	●
25	25			●
30	30			●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*			●		
T3YH*	T3YV*			●	1-color display off-delay	2-wire
T2JH*	T2JV*		●			

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>	
Blank	Rod end no thread
N11	With rod end female thread

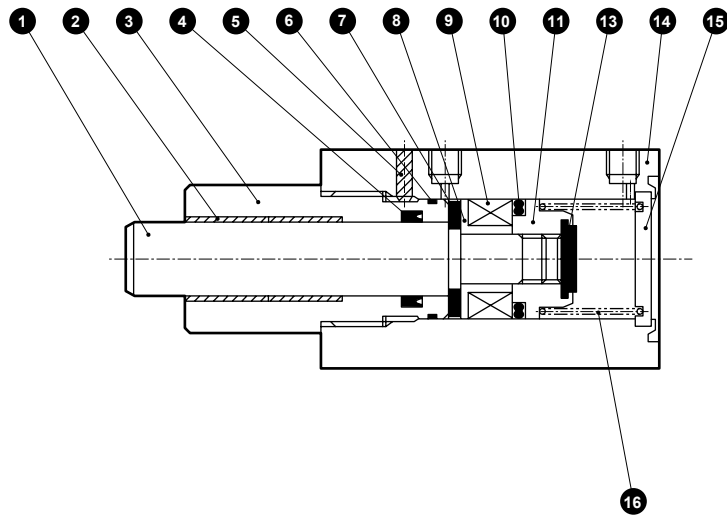
Discrete switch model No.

**SW - T0H**

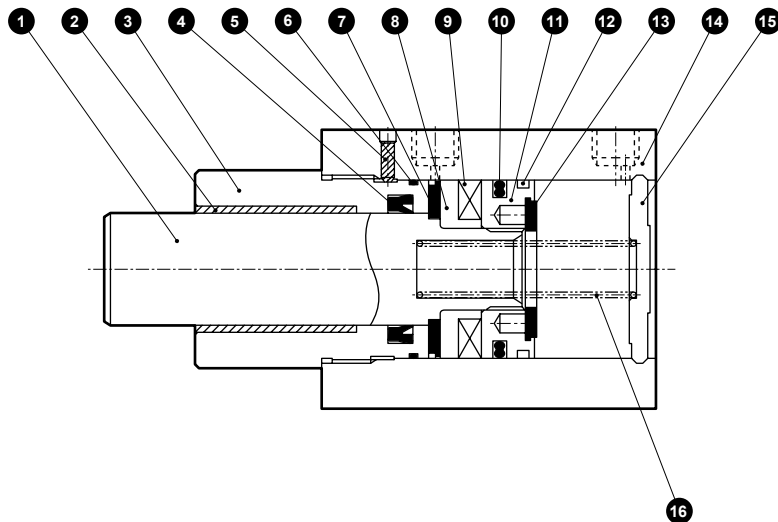
Switch model No.  
(Item **D** above)

### Internal structure and parts list

● STK-Y1-20



● STK-Y1-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	ø20: Stainless steel ø32 to ø50: Steel	Industrial chrome plating	9	Magnet	Plastic	
2	Bush	Dry bearing		10	Piston packing	Nitrile rubber	
3	Rod cover	Aluminum alloy	Alumite	11	Piston	Aluminum alloy	Chromate
4	Rod packing	Nitrile rubber		12	Wear ring	Acetal resin	
5	Hexagon socket set screw	Steel	Black finish	13	Cushion rubber H	Urethane rubber	
6	Metal gasket	Nitrile rubber		14	Body	Aluminum alloy	Hard alumite
7	Cushion rubber R	Urethane rubber		15	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
8	Spacer	Aluminum alloy	Chromate	16	Coil spring	Steel	Electrodeposition

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y1-20K	
ø32	STK-Y1-32K	4 6 10
ø40	STK-Y1-40K	12 13
ø50	STK-Y1-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

Ending



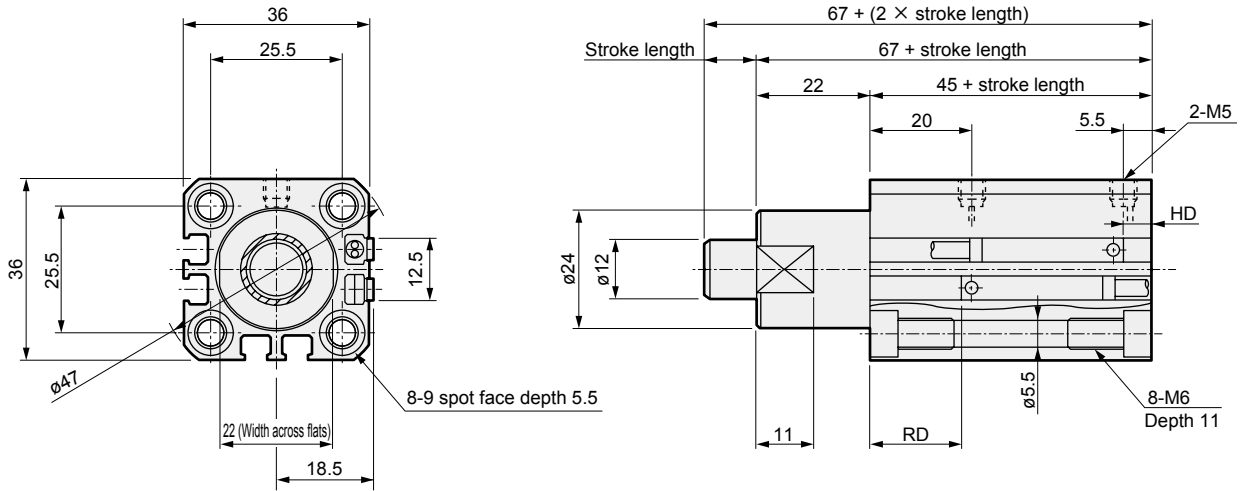
# STK-Y1 Series

## Dimensions

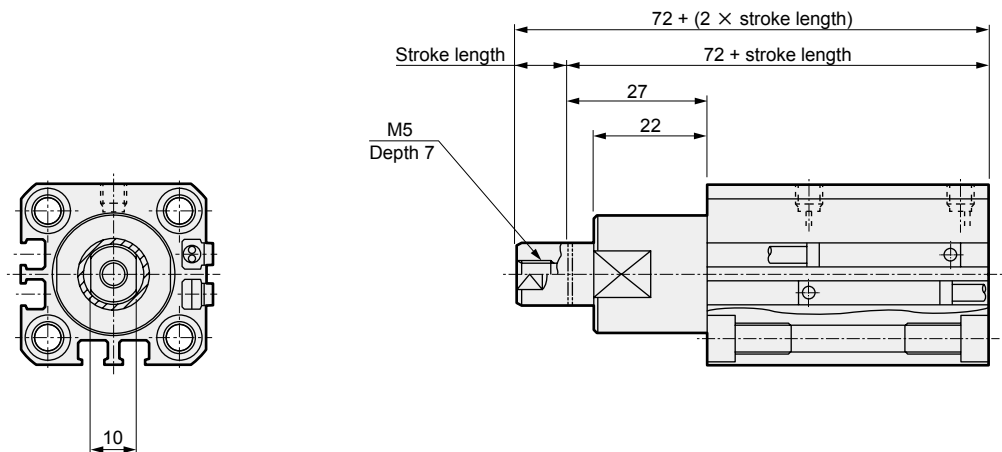


- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/  
COVPIN2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/  
MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd  
Contr
- Ending

### ● STK-Y1-20



### ● STK-Y1-20-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-Y1-20).)



### STK-Y1 Dimensions with switch

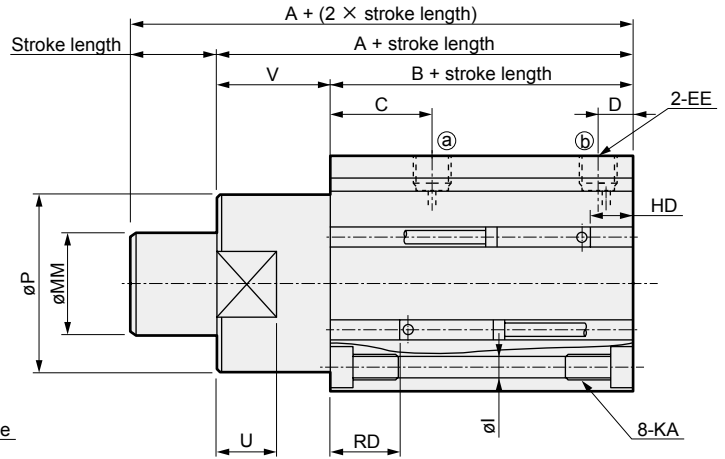
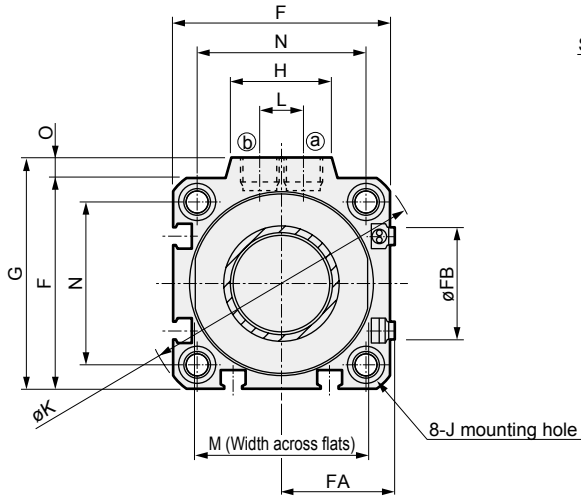
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
$\phi 20$	7	19.5	7	19.5	8.5	21

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

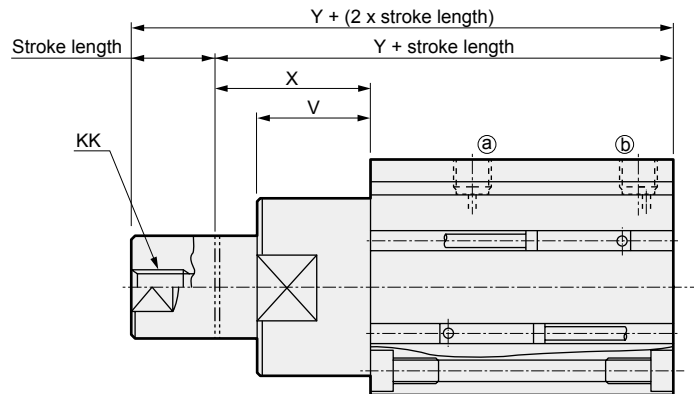
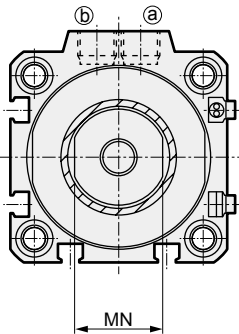
### Dimensions



● STK-Y1-32/40/50



● STK-Y1-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-Y1-32/40/50).)



Code	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
ø32	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
ø40	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
ø50	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		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

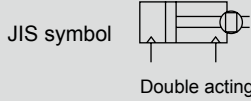
- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending



Stopper cylinder double acting/rod end form chamfered type

# STK-M Series

● Bore size:  $\varnothing 20/\varnothing 32/\varnothing 40/\varnothing 50$



## Specifications

1 MPa = 10 bar

Item	STK-M				
Bore size	mm	$\varnothing 20$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$
Actuation		Double acting			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.15 ( $\approx 22$ psi)	0.1 ( $\approx 15$ psi, 1 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Chamfered type			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/  
COVPIN2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/  
MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd  
Contr
- Ending

### Switch specifications

● 1-color/2-color display

Item	Proximity 2-wire		Proximity 2-wire		Proximity 3-wire				Reed 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				
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller		For programmable controller, relay				For programmable controller, relay	For programmable controller, relay (no lamp), serial	For programmable controller, relay				
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)			
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80			1 m:33			
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49				3 m:87			
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80				5 m:142			

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bore size						
ø20	215	230	244	-	-	
ø32	441	466	491	-	-	
ø40	-	-	796	837	878	
ø50	-	-	1288	1314	1340	

### 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
ø20	Push	-	-	62.8	94.2	1.26 × 10 <sup>2</sup>	1.57 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.20 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	2.83 × 10 <sup>2</sup>	3.14 × 10 <sup>2</sup>
	Pull	-	-	40.2	60.3	80.4	1.01 × 10 <sup>2</sup>	1.21 × 10 <sup>2</sup>	1.41 × 10 <sup>2</sup>	1.61 × 10 <sup>2</sup>	1.81 × 10 <sup>2</sup>	2.01 × 10 <sup>2</sup>
ø32	Push	80.4	1.21 × 10 <sup>2</sup>	1.61 × 10 <sup>2</sup>	2.41 × 10 <sup>2</sup>	3.22 × 10 <sup>2</sup>	4.02 × 10 <sup>2</sup>	4.83 × 10 <sup>2</sup>	5.63 × 10 <sup>2</sup>	6.43 × 10 <sup>2</sup>	7.24 × 10 <sup>2</sup>	8.04 × 10 <sup>2</sup>
	Pull	49.0	73.5	98.0	1.47 × 10 <sup>2</sup>	1.96 × 10 <sup>2</sup>	2.45 × 10 <sup>2</sup>	2.94 × 10 <sup>2</sup>	3.43 × 10 <sup>2</sup>	3.92 × 10 <sup>2</sup>	4.41 × 10 <sup>2</sup>	4.90 × 10 <sup>2</sup>
ø40	Push	1.26 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	3.77 × 10 <sup>2</sup>	5.03 × 10 <sup>2</sup>	6.28 × 10 <sup>2</sup>	7.54 × 10 <sup>2</sup>	8.80 × 10 <sup>2</sup>	1.01 × 10 <sup>3</sup>	1.13 × 10 <sup>3</sup>	1.26 × 10 <sup>3</sup>
	Pull	76.6	1.15 × 10 <sup>2</sup>	1.53 × 10 <sup>2</sup>	2.30 × 10 <sup>2</sup>	3.06 × 10 <sup>2</sup>	3.83 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>	5.36 × 10 <sup>2</sup>	6.13 × 10 <sup>2</sup>	6.89 × 10 <sup>2</sup>	7.66 × 10 <sup>2</sup>
ø50	Push	1.96 × 10 <sup>2</sup>	2.95 × 10 <sup>2</sup>	3.93 × 10 <sup>2</sup>	5.89 × 10 <sup>2</sup>	7.85 × 10 <sup>2</sup>	9.82 × 10 <sup>2</sup>	1.18 × 10 <sup>3</sup>	1.37 × 10 <sup>3</sup>	1.57 × 10 <sup>3</sup>	1.77 × 10 <sup>3</sup>	1.96 × 10 <sup>3</sup>
	Pull	1.26 × 10 <sup>2</sup>	1.88 × 10 <sup>2</sup>	2.51 × 10 <sup>2</sup>	3.77 × 10 <sup>2</sup>	5.03 × 10 <sup>2</sup>	6.28 × 10 <sup>2</sup>	7.54 × 10 <sup>2</sup>	8.80 × 10 <sup>2</sup>	1.01 × 10 <sup>3</sup>	1.13 × 10 <sup>3</sup>	1.26 × 10 <sup>3</sup>

# STK-M Series

## How to order

Without switch (built-in magnet for switch)

**STK-M** - **20** - **10** - **N11**

With switch (built-in magnet for switch)

**STK-M** - **20** - **10** - **T0H** - **R** - **N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.

\*1

\*2

**E** Switch quantity

**F** Option

### ⚠ Precautions for model No. selection

\*1: Switches other than **D** Switch model No. are also available. (Made to order)

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.]

**STK-M-20-10-T0H-R-N11**

Model: Stopper cylinder double acting/rod end form chamfered type

**A** Bore size :  $\varnothing 20$  mm

**B** Port thread : Rc thread

**C** Stroke length : 10 mm

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

**E** Switch quantity : 1 on rod side

**F** Option : With rod end female thread

Code	Description
<b>A Bore size (mm)</b>	
20	$\varnothing 20$
32	$\varnothing 32$
40	$\varnothing 40$
50	$\varnothing 50$

Code	Description
<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread ( $\varnothing 32$ and over) (made-to-order product)
GN	G thread ( $\varnothing 32$ and over) (made-to-order product)

<b>C Stroke length (mm)</b>					
Bore size		$\varnothing 20$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$
10	10	●	●		
15	15	●	●		
20	20	●	●	●	●
25	25			●	●
30	30			●	●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●		
T2YH*	T2YV*			●	2-color display	2-wire
T3WH*	T3WV*			●		
T3YH*	T3YV*			●		
T2JH*	T2JV*			●	1-color display off-delay	2-wire

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>	
Blank	Rod end no thread
N11	With rod end female thread

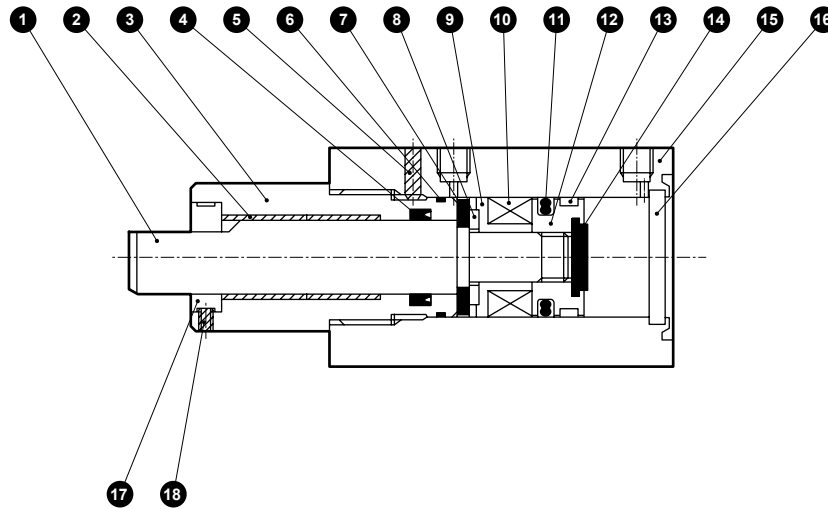
## How to order switch

**SW** - **T0H**

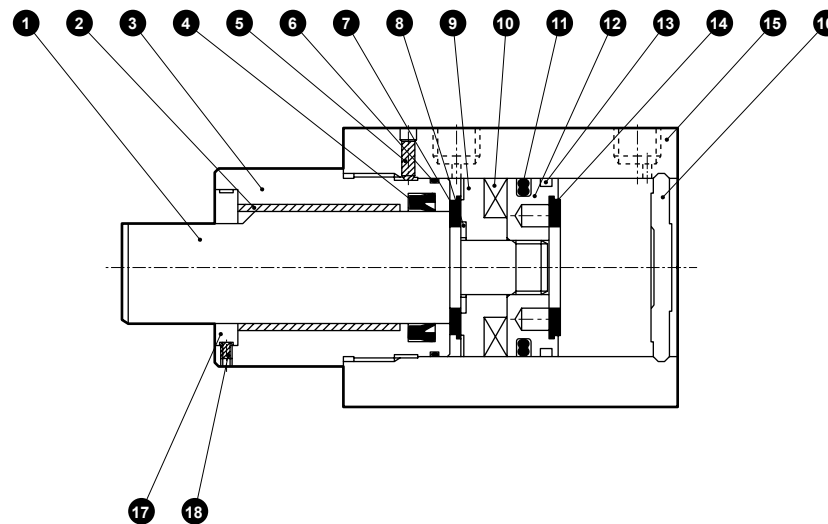
Switch model No.  
(Item **D** above)

### Internal structure and parts list

● STK-M-20



● STK-M-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Stainless steel	Industrial chrome plating	11	Piston packing	Nitrile rubber	
2	Bush	Dry bearing		12	Piston	Aluminum alloy	Chromate
3	Rod cover	Aluminum alloy	Alumite	13	Wear ring	Acetal resin	
4	Rod packing	Nitrile rubber		14	Cushion rubber H	Urethane rubber	
5	Hexagon socket set screw	Steel	Black finish	15	Body	Aluminum alloy	Hard alumite
6	Metal gasket	Nitrile rubber		16	Cover	ø20: Stainless steel ø32 to 50: Aluminum alloy	ø32 to 50: Chromate
7	Cushion rubber R	Urethane rubber		17	Rotation-stop spacer	Steel	Nickeling
8	Spacer washer	Stainless steel		18	Hexagon socket set screw	Steel	Black finish
9	Spacer	Polyamide					
10	Magnet	Plastic					

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-20K	
ø32	STK-32K	4 6 11
ø40	STK-40K	13 14
ø50	STK-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

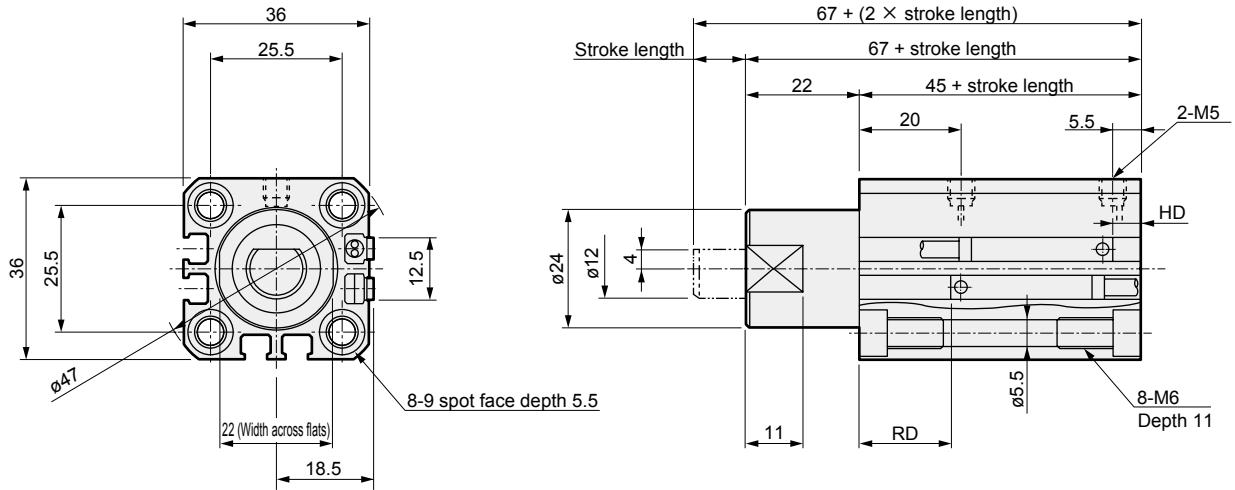
Spd  
Contr

Ending

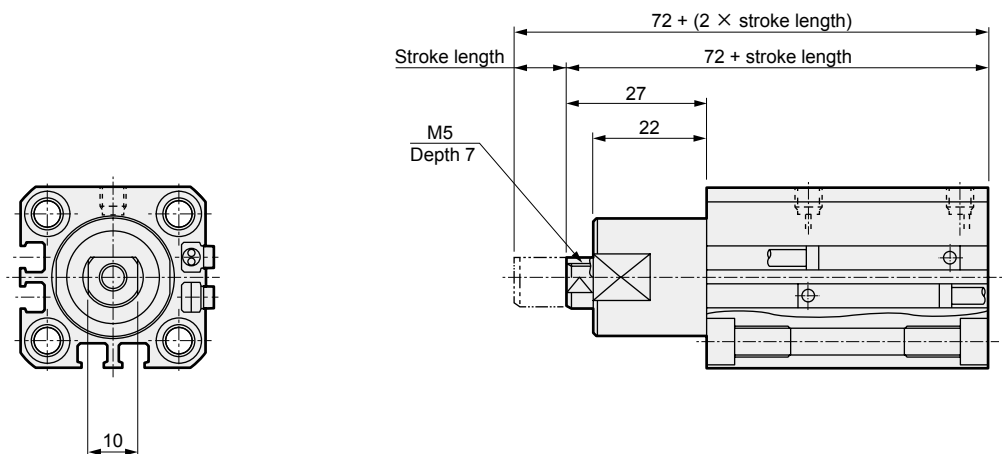
## Dimensions



### ● STK-M-20



### ● STK-M-20-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-M-20).)



### STK-M Dimensions with switch

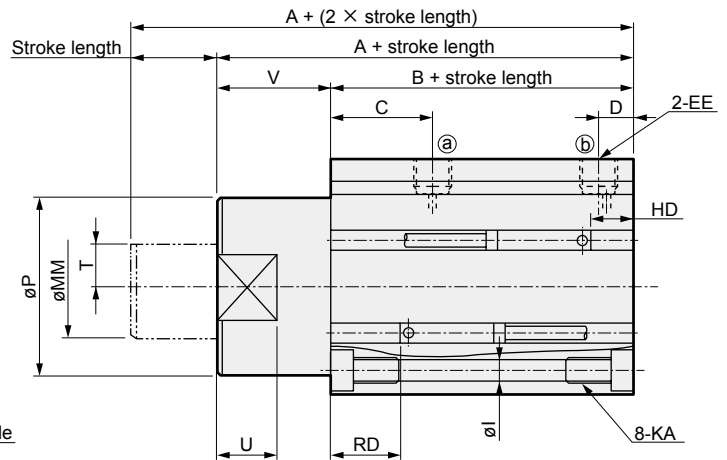
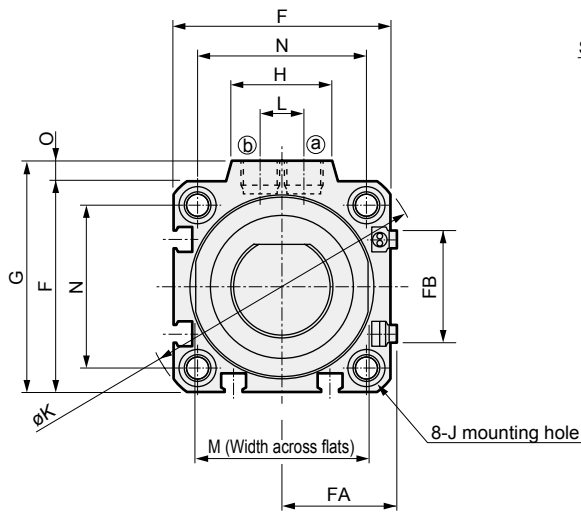
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
$\phi 20$	5.5	21	5.5	21	7	22.5

Note: Refer to page 1559 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

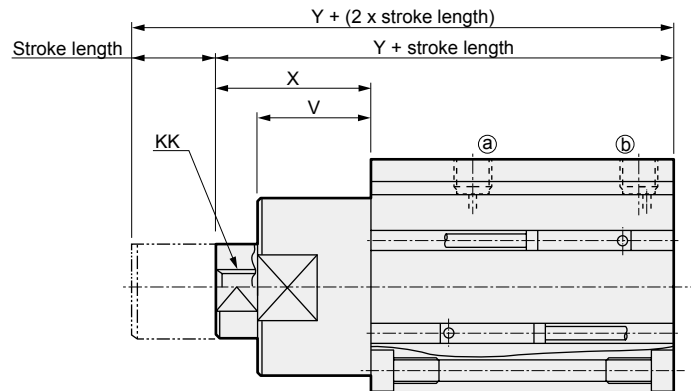
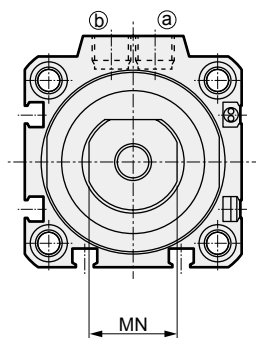
### Dimensions



● STK-M-32/40/50



● STK-M-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-M-32/40/50).)



Code	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	KK	L	M	MM	MN	N	O	P	T	U	V	X	Y
ø32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	ø spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	8	13	20	30	78
ø40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	ø spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	10	15	28	38	90.5
ø50	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	12	15	28	43	97

### Dimensions with switch

Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	9.5	21	9.5	21	11	22.5
ø40	10.5	24	10.5	24	12	25.5
ø50	11.5	24	11.5	24	13	25.5

Note: Refer to page 1559 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending





Stopper cylinder single acting/pull/rod end form chamfered type

# STK-MY Series

● Bore size:  $\varnothing 20/\varnothing 32/\varnothing 40/\varnothing 50$

JIS symbol



Single acting/pull



## Specifications

1 MPa = 10 bar

Item	STK-MY				
	mm	$\varnothing 20$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$
Bore size	mm	$\varnothing 20$	$\varnothing 32$	$\varnothing 40$	$\varnothing 50$
Actuation		Single acting pull			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Chamfered type			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\varnothing 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\varnothing 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
$\varnothing 40$	20	29.0	44.4
	25	25.3	
	30	21.5	
$\varnothing 50$	20	55.4	84.8
	25	48.0	
	30	40.7	

### Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire	Proximity 2-wire			Proximity 3-wire				Reed 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		
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay (no lamp), serial		For programmable controller, relay			
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)		
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18	1 m:33	1 m:18	1 m:18 3 m:49 5 m:80					1 m:33		
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49	3 m:87	3 m:49	3 m:49 5 m:80					3 m:87		
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80	5 m:142	5 m:80	5 m:80					5 m:142		

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bores size						
ø20	218	233	247	-	-	
ø32	457	482	507	-	-	
ø40	-	-	812	853	894	
ø50	-	-	1302	1328	1354	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Working pressure MPa								
	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	-	45.6	65.7	85.8	1.06 × 10 <sup>2</sup>	1.26 × 10 <sup>2</sup>	1.46 × 10 <sup>2</sup>	1.66 × 10 <sup>2</sup>	1.86 × 10 <sup>2</sup>
ø32	66.6	1.16 × 10 <sup>2</sup>	1.65 × 10 <sup>2</sup>	2.14 × 10 <sup>2</sup>	2.63 × 10 <sup>2</sup>	3.12 × 10 <sup>2</sup>	3.61 × 10 <sup>2</sup>	4.10 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>
ø40	1.09 × 10 <sup>2</sup>	1.85 × 10 <sup>2</sup>	2.62 × 10 <sup>2</sup>	3.38 × 10 <sup>2</sup>	4.15 × 10 <sup>2</sup>	4.92 × 10 <sup>2</sup>	5.68 × 10 <sup>2</sup>	6.45 × 10 <sup>2</sup>	7.21 × 10 <sup>2</sup>
ø50	1.67 × 10 <sup>2</sup>	2.92 × 10 <sup>2</sup>	4.18 × 10 <sup>2</sup>	5.44 × 10 <sup>2</sup>	6.69 × 10 <sup>2</sup>	7.95 × 10 <sup>2</sup>	9.21 × 10 <sup>2</sup>	1.05 × 10 <sup>3</sup>	1.17 × 10 <sup>3</sup>

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVP/N2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
STK  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

# STK-MY Series

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
**STK**  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

## How to order

Without switch (built-in magnet for switch)

**STK-MY - 20 - 10 - N11**

With switch (built-in magnet for switch)

**STK-MY - 20 - 10 - T0H - R - N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.

\*1

\*2

**E** Switch quantity

**F** Option

Code	Description
<b>A Bore size (mm)</b>	
20	ø20
32	ø32
40	ø40
50	ø50

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread (ø32 and over) (made-to-order product)
GN	G thread (ø32 and over) (made-to-order product)

<b>C Stroke length (mm)</b>					
Bore size	ø20	ø32	ø40	ø50	
10	10	●	●		
15	15	●	●		
20	20	●	●	●	●
25	25			●	●
30	30			●	●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*			●		3-wire
T3YH*	T3YV*			●		
T2JH*	T2JV*			●	1-color display off-delay	2-wire

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

<b>F Option</b>	
Blank	Rod end no thread
N11	With rod end female thread

## ⚠ Precautions for model No. selection

\*1 : Switches other than **D** Switch model No. are also available. (Made to order)  
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.]

**STK-MY-20-10-T0H-R-N11**

Model: Stopper cylinder single acting/pull, rod end form chamfered type

- A** Bore size : ø20 mm
- B** Port thread : Rc thread
- C** Stroke length : 10 mm
- D** Switch model No. : Reed T0H switch, Lead wire 1m
- E** Switch quantity : 1 on rod side
- F** Option : With rod end female thread

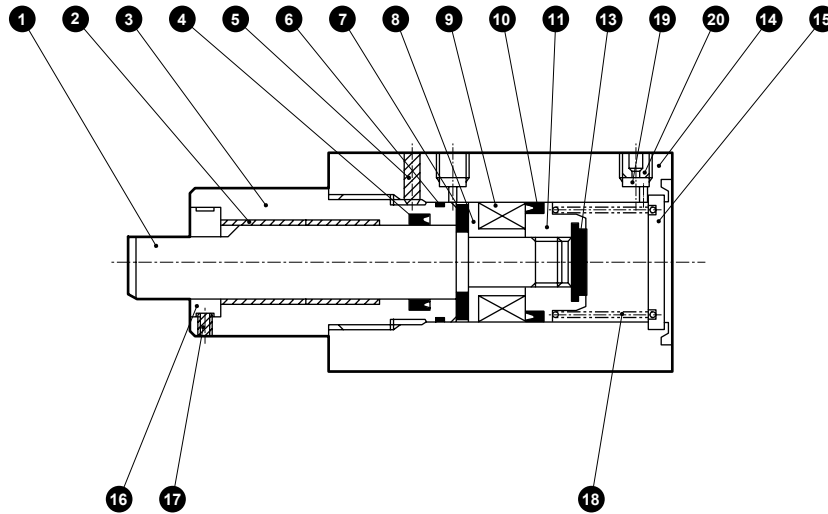
## How to order switch

**SW - T0H**

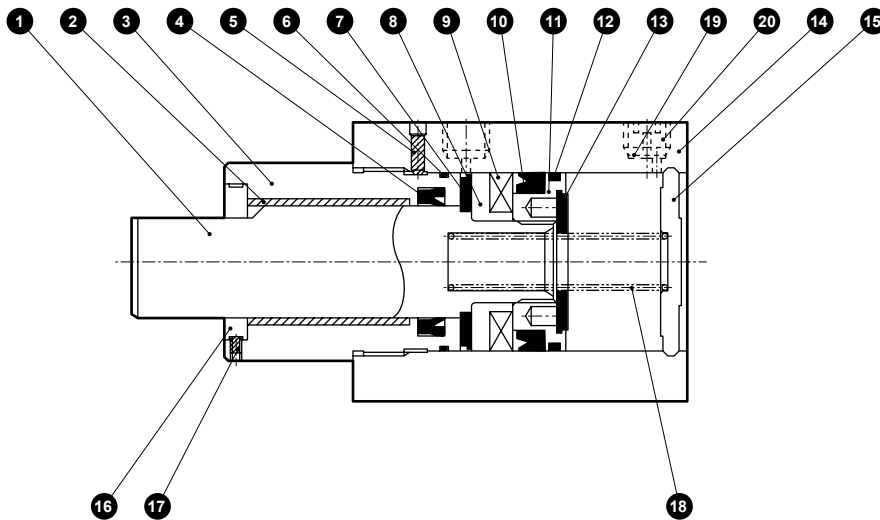
Switch model No.  
(Item **D** above)

### Internal structure and parts list

● STK-MY-20



● STK-MY-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Stainless steel	Industrial chrome plating	12	Wear ring	Acetal resin	
2	Bush	Dry bearing		13	Cushion rubber H	Urethane rubber	
3	Rod cover	Aluminum alloy	Alumite	14	Body	Aluminum alloy	Hard alumite
4	Rod packing	Nitrile rubber		15	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
5	Hexagon socket set screw	Steel	Black finish	16	Rotation-stop spacer	Steel	Nickeling
6	Metal gasket	Nitrile rubber		17	Hexagon socket set screw	Steel	Black finish
7	Cushion rubber R	Urethane rubber		18	Coil spring	Steel	Electrodeposition
8	Spacer	Aluminum alloy		19	Stainless steel wire mesh	Stainless steel	
9	Magnet	Plastic	Chromate	20	Plug	Stainless steel	
10	Piston packing	Nitrile rubber					
11	Piston	Aluminum alloy	Chromate				

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y-20K	
ø32	STK-Y-32K	4 6 10
ø40	STK-Y-40K	12 13
ø50	STK-Y-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/IN2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

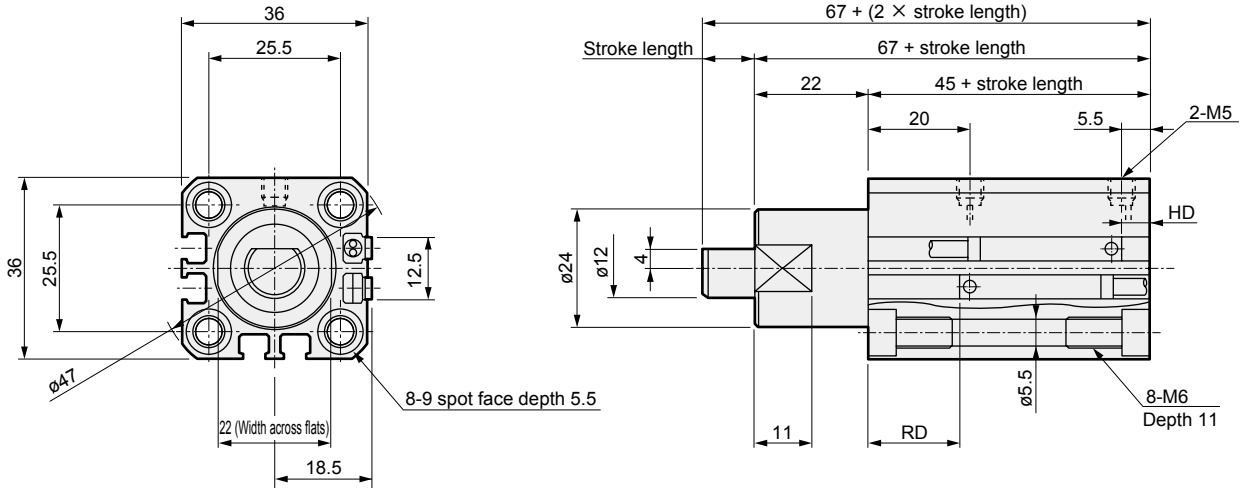
Ending

# STK-MY Series

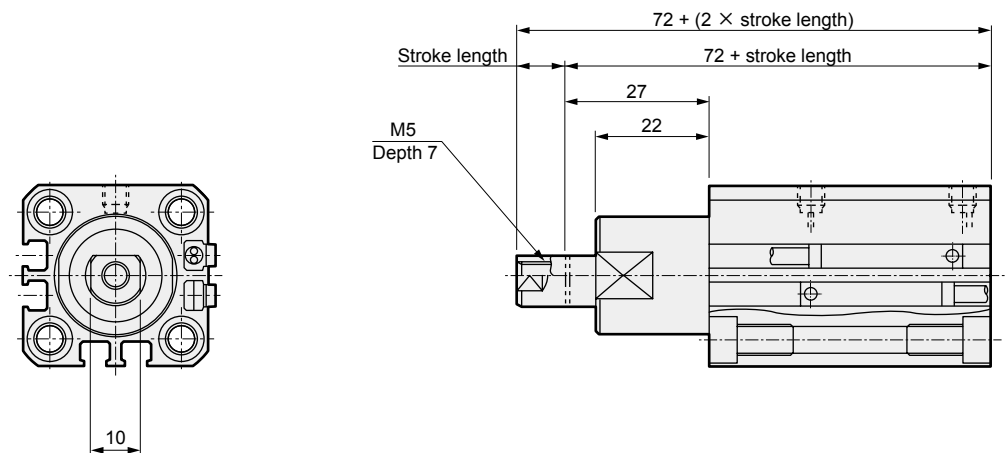
## Dimensions



### ● STK-MY-20



### ● STK-MY-20-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-MY-20).)



### Dimensions with switch

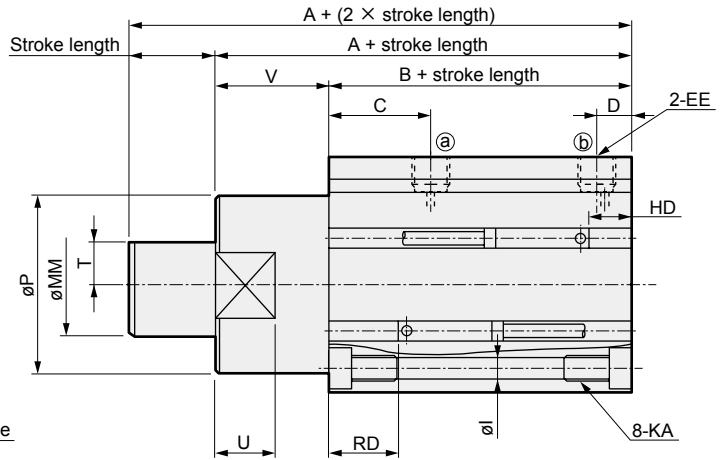
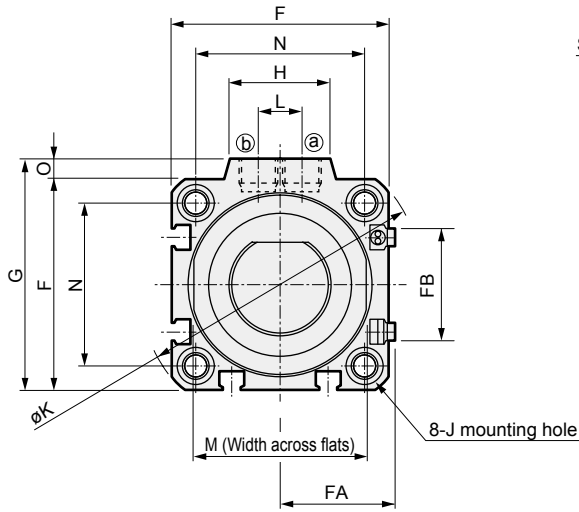
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø20	7	19.5	7	19.5	8.5	21

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

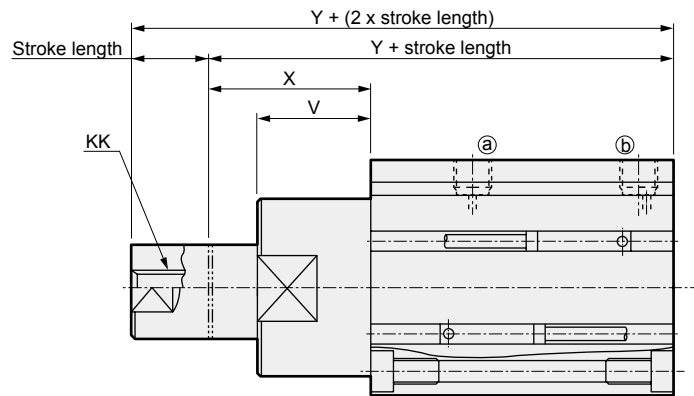
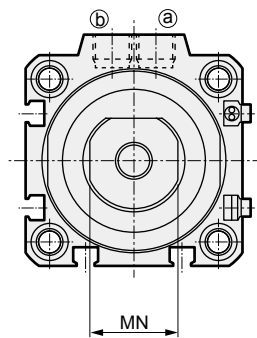
## Dimensions



● STK-MY-32/40/50



● STK-MY-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-MY-32/40/50).)



Code	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	KK	L	M	MM	MN	N	O	P	T	U	V	X	Y
ø32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	ø spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	8	13	20	30	78
ø40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	ø spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	10	15	28	38	90.5
ø50	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	12	15	28	43	97

Dimensions with switch

Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending



Stopper cylinder double acting/spring integrated  
rod end form chamfered type

# STK-MY1 Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$

JIS symbol



Double acting/spring integrated



## Specifications

1 MPa = 10 bar

Item	STK-MY1				
Bore size	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation		Double acting/spring integrated			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Chamfered type			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\phi 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\phi 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
$\phi 40$	20	29.0	44.4
	25	25.3	
	30	21.5	
$\phi 50$	20	55.4	84.8
	25	48.0	
	30	40.7	

### Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire		Proximity 3-wire				Reed 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				
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller				For programmable controller, relay				For programmable controller, relay	For programmable controller, relay (no lamp), serial		For programmable controller, relay	
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)		
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80			1 m:33			
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49				3 m:87			
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80				5 m:142			

\*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)

### Cylinder weight

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
ø20	218	233	247	-	-	
ø32	457	482	507	-	-	
ø40	-	-	812	853	894	
ø50	-	-	1302	1328	1354	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa									
		0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	-	-	94.2	1.26×10 <sup>2</sup>	1.57×10 <sup>2</sup>	1.88×10 <sup>2</sup>	2.20×10 <sup>2</sup>	2.51×10 <sup>2</sup>	2.83×10 <sup>2</sup>	3.14×10 <sup>2</sup>
	Pull	-	-	45.6	65.7	85.8	1.06×10 <sup>2</sup>	1.26×10 <sup>2</sup>	1.46×10 <sup>2</sup>	1.66×10 <sup>2</sup>	1.86×10 <sup>2</sup>
ø32	Push	1.21×10 <sup>2</sup>	1.61×10 <sup>2</sup>	2.41×10 <sup>2</sup>	3.22×10 <sup>2</sup>	4.02×10 <sup>2</sup>	4.83×10 <sup>2</sup>	5.63×10 <sup>2</sup>	6.43×10 <sup>2</sup>	7.24×10 <sup>2</sup>	8.04×10 <sup>2</sup>
	Pull	42.1	66.6	1.16×10 <sup>2</sup>	1.65×10 <sup>2</sup>	2.14×10 <sup>2</sup>	2.63×10 <sup>2</sup>	3.12×10 <sup>2</sup>	3.61×10 <sup>2</sup>	4.10×10 <sup>2</sup>	4.59×10 <sup>2</sup>
ø40	Push	1.88×10 <sup>2</sup>	2.51×10 <sup>2</sup>	3.77×10 <sup>2</sup>	5.03×10 <sup>2</sup>	6.28×10 <sup>2</sup>	7.54×10 <sup>2</sup>	8.80×10 <sup>2</sup>	1.01×10 <sup>3</sup>	1.13×10 <sup>3</sup>	1.26×10 <sup>3</sup>
	Pull	70.5	1.09×10 <sup>2</sup>	1.85×10 <sup>2</sup>	2.62×10 <sup>2</sup>	3.38×10 <sup>2</sup>	4.15×10 <sup>2</sup>	4.92×10 <sup>2</sup>	5.68×10 <sup>2</sup>	6.45×10 <sup>2</sup>	7.21×10 <sup>2</sup>
ø50	Push	2.95×10 <sup>2</sup>	3.93×10 <sup>2</sup>	5.89×10 <sup>2</sup>	7.85×10 <sup>2</sup>	9.82×10 <sup>2</sup>	1.18×10 <sup>3</sup>	1.37×10 <sup>3</sup>	1.57×10 <sup>3</sup>	1.77×10 <sup>3</sup>	1.96×10 <sup>3</sup>
	Pull	1.04×10 <sup>2</sup>	1.67×10 <sup>2</sup>	2.92×10 <sup>2</sup>	4.18×10 <sup>2</sup>	5.44×10 <sup>2</sup>	6.69×10 <sup>2</sup>	7.95×10 <sup>2</sup>	9.21×10 <sup>2</sup>	1.05×10 <sup>3</sup>	1.17×10 <sup>3</sup>



# STK-MY1 Series

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
**STK**  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

## How to order

Without switch (built-in magnet for switch)

**STK-MY1 - 20 - 10 - N11**

With switch (built-in magnet for switch)

**STK-MY1 - 20 - 10 - T0H - R - N11**

**A** Bore size

**B** Port thread

**C** Stroke length

**D** Switch model No.  
\*1  
\*2

**E** Switch quantity

**F** Option

### ⚠ Precautions for model No. selection

\*1: Switches other than **D** Switch model No. are also available. (Made to order)  
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.]

**STK-MY1-20-10-T0H-R-N11**

Model: Stopper cylinder

Double acting/spring integrated/rod end form chamfered type

- A** Bore size :  $\phi 20$  mm
- B** Port thread : Rc thread
- C** Stroke length : 10mm
- D** Switch model No. : Reed T0H switch,  
Lead wire 1m
- E** Switch quantity : 1 on rod side
- F** Option : Rod end female thread

Code	Description						
<b>A Bore size (mm)</b>							
20	$\phi 20$						
32	$\phi 32$						
40	$\phi 40$						
50	$\phi 50$						
<b>B Port thread</b>							
Blank	Rc thread						
NN	NPT thread ( $\phi 32$ and over) (made-to-order product)						
GN	G thread ( $\phi 32$ and over) (made-to-order product)						
<b>C Stroke length (mm)</b>							
Bore size		$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$		
10	10	●	●				
15	15	●	●				
20	20	●	●	●	●		
25	25			●	●		
30	30			●	●		
<b>D Switch model No.</b>							
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire	
			AC	DC			
T0H*	T0V*	Reed	●	●	1-color display	2-wire	
			●	●	Without indicator lamp		
			●	●	1-color display		
T1H*	T1V*	Proximity	●		1-color display	2-wire	
				●			2-color display
				●			
T2H*	T2V*	Proximity		●	1-color display	2-wire	
				●			2-color display
				●			
T3H*	T3V*	Proximity		●	1-color display	3-wire	
				●			2-color display
				●			
T3PH*	T3PV*	Proximity		●	1-color display	3-wire	
				●			2-color display
				●			
T2WH*	T2WV*	Proximity		●	2-color display	2-wire	
				●			2-color display
				●			
T2YH*	T2YV*	Proximity		●	2-color display	2-wire	
				●			2-color display
				●			
T3WH*	T3WV*	Proximity		●	1-color display	3-wire	
				●			2-color display
				●			
T3YH*	T3YV*	Proximity		●	1-color display	3-wire	
				●			2-color display
				●			
T2JH*	T2JV*	Proximity		●	1-color display off-delay	2-wire	
				●			
				●			
<b>* Lead wire length (m)</b>							
Blank	1 m (standard)						
3	3 m (option)						
5	5 m (option)						
<b>E Switch quantity</b>							
R	1 on rod side						
H	1 on head side						
D	2						
<b>F Option</b>							
Blank	Rod end no thread						
N11	With rod end female thread						

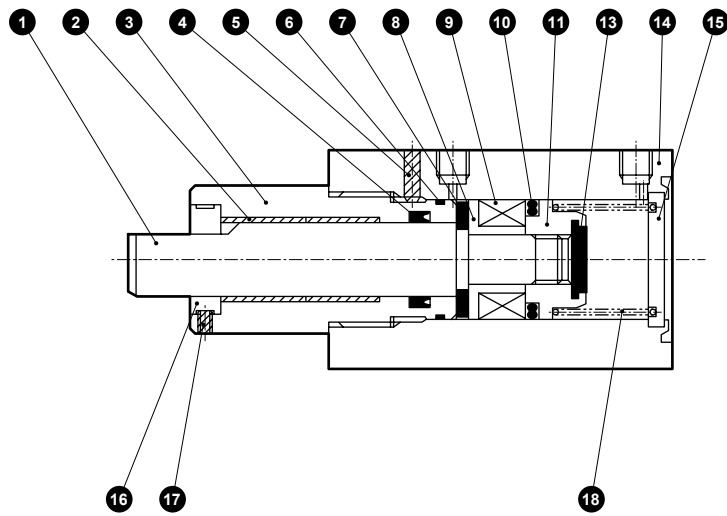
## How to order switch

**SW - T0H**

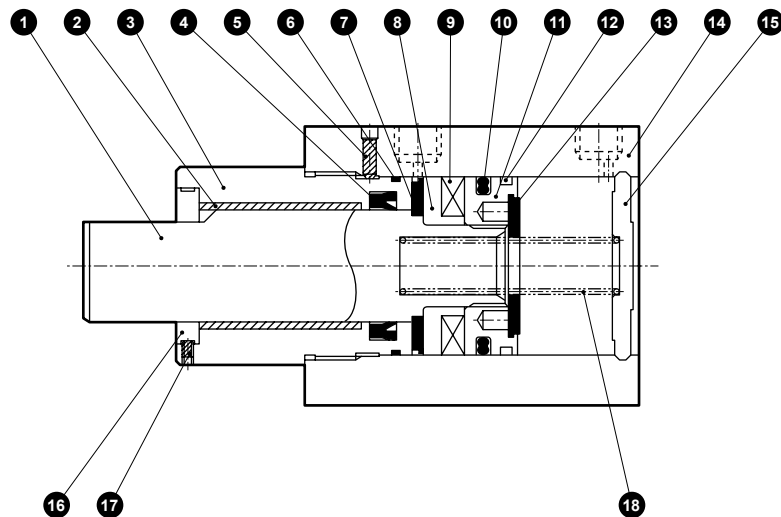
Switch model No.  
(Item **D** above)

## Internal structure and parts list

● STK-MY1-20



● STK-MY1-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Stainless steel	Industrial chrome plating	11	Piston	Aluminum alloy	Chromate
2	Bush	Dry bearing		12	Wear ring	Acetal resin	
3	Rod cover	Aluminum alloy	Alumite	13	Cushion rubber H	Urethane rubber	
4	Rod packing	Nitrile rubber		14	Body	Aluminum alloy	Hard alumite
5	Hexagon socket set screw	Steel	Black finish	15	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
6	Metal gasket	Nitrile rubber		16	Rotation-stop spacer	Steel	Nickeling
7	Cushion rubber R	Urethane rubber		17	Hexagon socket set screw	Steel	Black finish
8	Spacer	Aluminum alloy	Chromate	18	Coil spring	Steel	Electrodeposition
9	Magnet	Plastic					
10	Piston packing	Nitrile rubber					

## Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y1-20K	
ø32	STK-Y1-32K	4 6 10
ø40	STK-Y1-40K	12 13
ø50	STK-Y1-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

Ending

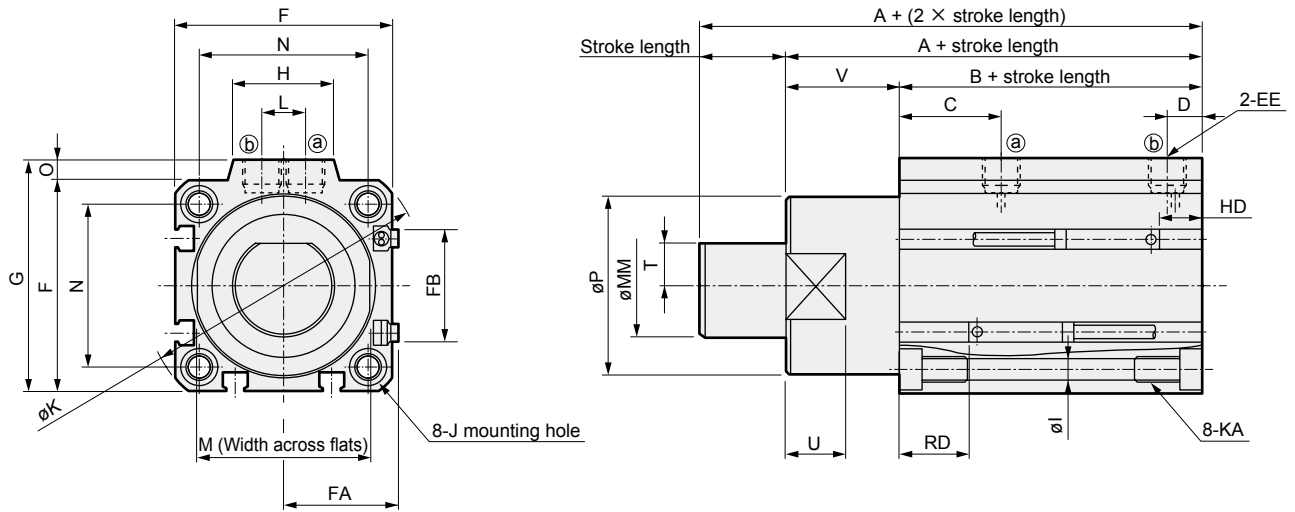


# STK-MY1 Series

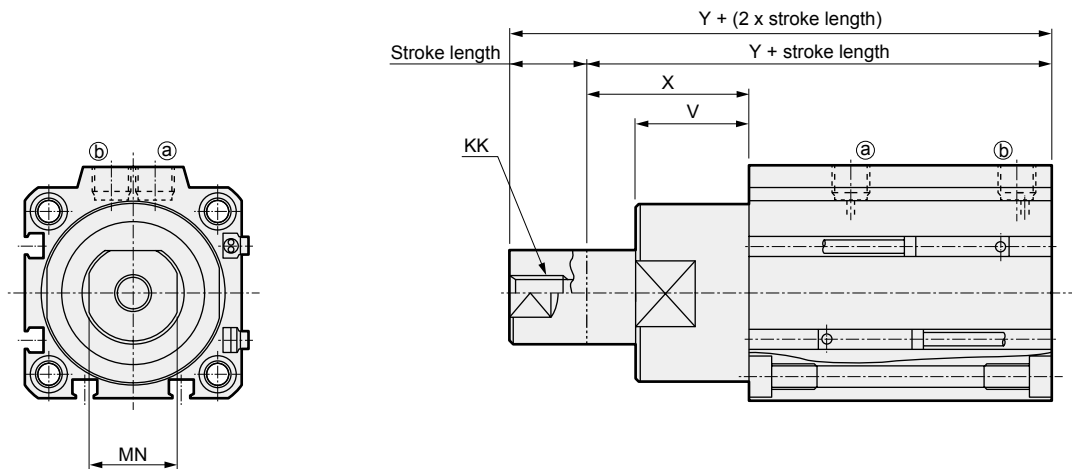
Double acting/spring integrated/rod end form chamfered type

## Dimensions

● STK-MY1-32/40/50



● STK-MY1-32/40/50-N11 (Dimensions other than displayed dimensions are the same as those of the above (STK-MY1-32/40/50).)

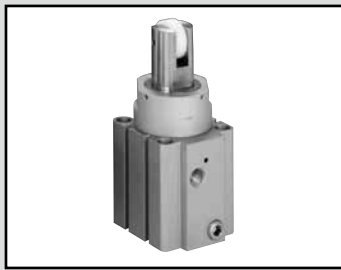


Code	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	KK	L	M	MM	MN	N	O	P	T	U	V	X	Y
ø32	68	48	20	8	Rc1/8	45	23	20.5	49.5	24	5.5	ø spot face depth 5.5	60	M6 depth 11	M8 depth 13	10	32	20	17	34	4.5	36	8	13	20	30	78
ø40	80.5	52.5	24.5	8.5	Rc1/8	52	26.5	27.5	57	24	5.5	ø spot face depth 5.5	69	M6 depth 11	M8 depth 13	10	41	25	22	40	5	44	10	15	28	38	90.5
ø50	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	12	15	28	43	97

Dimensions with switch						
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd Contr
- Ending



Stopper cylinder single acting/pull/rod end form roller

# STK-JY Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$



Single acting/pull



## Specifications

1 MPa = 10 bar

Item	STK-JY				
Bore size	mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation		Single acting pull			
Working fluid		Compressed air			
Max. working pressure	MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure	MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure	MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature	$^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size		M5	Rc1/8	Rc1/4	
Stroke tolerance	mm	+2.0 0			
Working piston speed	mm/s	50 to 500			
Cushion		With rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form		Roller			
Allowable absorbed energy	J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\phi 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\phi 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
$\phi 40$	20	29.0	44.4
	25	25.3	
	30	21.5	
$\phi 50$	20	55.4	84.8
	25	48.0	
	30	40.7	

### Switch specifications

● 1-color/2-color display

Item	Proximity 2-wire		Proximity 2-wire				Proximity 3-wire				Reed 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					
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller				For programmable controller, relay				For programmable controller, relay		For programmable controller, relay (no lamp), serial		For programmable controller, relay		
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)			
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC		1 mA or less				10 µA or less				0 mA						
Weight g	1 m:33		1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80			1 m:33				
	3 m:87		3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49				3 m:87				
	5 m:142		5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80				5 m:142				

\*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)

### Cylinder weight

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
<b>Bore size</b>						
ø20	225	240	254	-	-	
ø32	482	507	532	-	-	
ø40	-	-	862	903	944	
ø50	-	-	1362	1388	1414	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Working pressure MPa								
	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	-	45.6	65.7	85.8	1.06 × 10 <sup>2</sup>	1.26 × 10 <sup>2</sup>	1.46 × 10 <sup>2</sup>	1.66 × 10 <sup>2</sup>	1.86 × 10 <sup>2</sup>
ø32	66.6	1.16 × 10 <sup>2</sup>	1.65 × 10 <sup>2</sup>	2.14 × 10 <sup>2</sup>	2.63 × 10 <sup>2</sup>	3.12 × 10 <sup>2</sup>	3.61 × 10 <sup>2</sup>	4.10 × 10 <sup>2</sup>	4.59 × 10 <sup>2</sup>
ø40	1.09 × 10 <sup>2</sup>	1.85 × 10 <sup>2</sup>	2.62 × 10 <sup>2</sup>	3.38 × 10 <sup>2</sup>	4.15 × 10 <sup>2</sup>	4.92 × 10 <sup>2</sup>	5.68 × 10 <sup>2</sup>	6.45 × 10 <sup>2</sup>	7.21 × 10 <sup>2</sup>
ø50	1.67 × 10 <sup>2</sup>	2.92 × 10 <sup>2</sup>	4.18 × 10 <sup>2</sup>	5.44 × 10 <sup>2</sup>	6.69 × 10 <sup>2</sup>	7.95 × 10 <sup>2</sup>	9.21 × 10 <sup>2</sup>	1.05 × 10 <sup>3</sup>	1.17 × 10 <sup>3</sup>

# STK-JY Series

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
**STK**  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

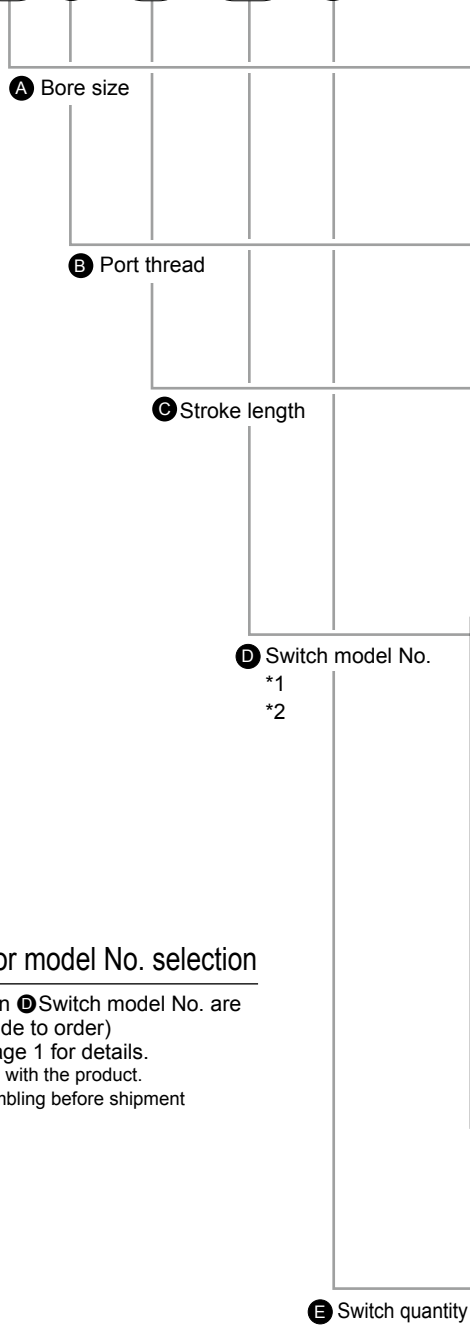
## How to order

Without switch (built-in magnet for switch)

**STK-JY - 20 - 10**

With switch (built-in magnet for switch)

**STK-JY - 20 - 10 - T0H - R**



### ⚠ Precautions for model No. selection

\*1 : Switches other than **D** Switch model No. are also available. (Made to order)  
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.]

**STK-JY-20-10-T0H-R**

Model: Stopper cylinder single acting/pull, rod end form roller

- A** Bore size :  $\phi 20$  mm
- B** Port thread : Rc thread
- C** Stroke length : 10mm
- D** Switch model No. : Reed T0H switch, Lead wire 1m
- E** Switch quantity : 1 on rod side

Code	Description					
<b>A Bore size (mm)</b>						
20	$\phi 20$					
32	$\phi 32$					
40	$\phi 40$					
50	$\phi 50$					
<b>B Port thread</b>						
Blank	Rc thread					
NN	NPT thread ( $\phi 32$ and over) (made-to-order product)					
GN	G thread ( $\phi 32$ and over) (made-to-order product)					
<b>C Stroke length (mm)</b>						
	Bore size	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$	
10	10	●	●			
15	15	●	●			
20	20	●	●	●	●	
25	25			●	●	
30	30			●	●	
<b>D Switch model No.</b>						
Axial lead wire	Radial lead wire	Contact	Voltage		Display	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color display	2-wire
			●	●	Without indicator lamp	
			●	●	1-color display	
		Proximity	●		1-color display	2-wire
				●		
				●		
T3PH*	T3PV*		●	1-color display	3-wire	
T2WH*	T2VW*		●	2-color display	2-wire	
T2YH*	T2YV*		●			
T3WH*	T3WV*		●			
T3YH*	T3YV*		●	1-color display off-delay	2-wire	
T2JH*	T2JV*		●			
<b>* Lead wire length (m)</b>						
Blank	1 m (standard)					
3	3 m (option)					
5	5 m (option)					
<b>E Switch quantity</b>						
R	1 on rod side					
H	1 on head side					
D	2					

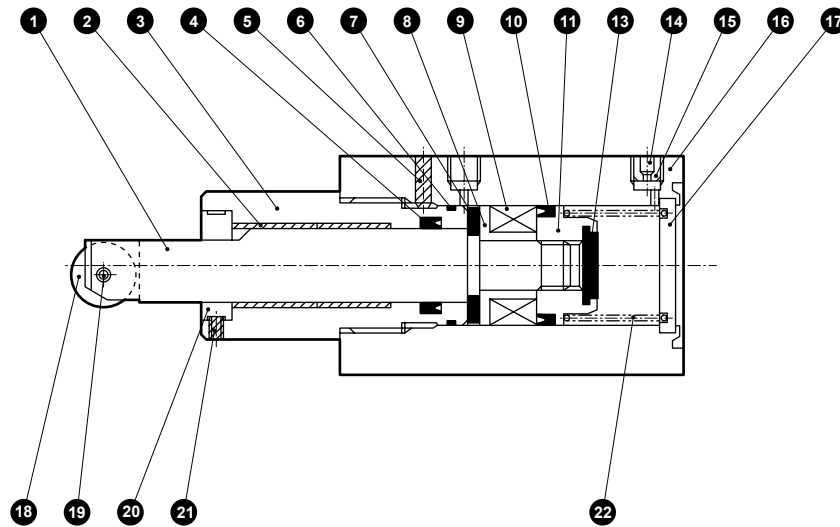
## How to order switch

**SW - T0H**

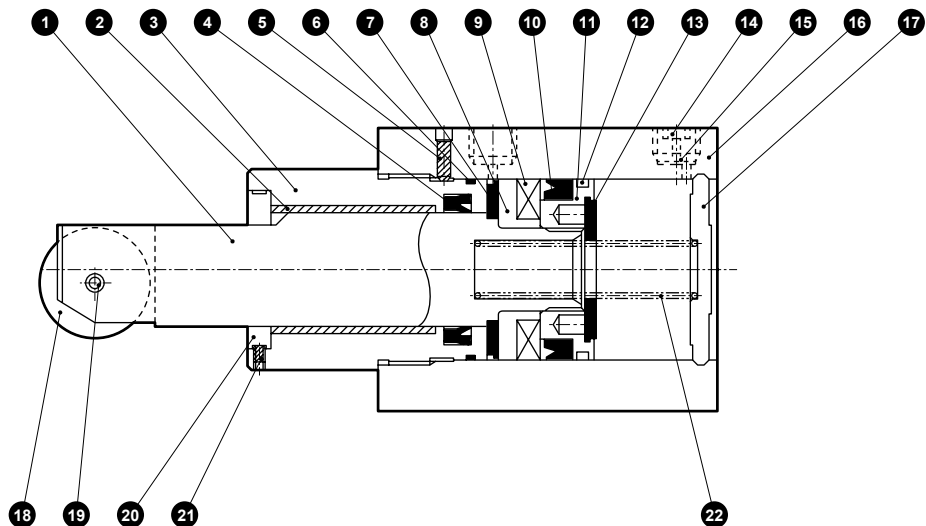
Switch model No.  
(Item **D** above)

## Internal structure and parts list

● STK-JY-20



● STK-JY-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Stainless steel	Industrial chrome plating	13	Cushion rubber H	Urethane rubber	
2	Bush	Dry bearing		14	Stainless steel wire mesh	Stainless steel	
3	Rod cover	Aluminum alloy	Alumite	15	Plug	Stainless steel	
4	Rod packing	Nitrile rubber		16	Body	Aluminum alloy	Hard alumite
5	Hexagon socket set screw	Steel	Black finish	17	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
6	Metal gasket	Nitrile rubber		18	Roller	Resin	
7	Cushion rubber R	Urethane rubber		19	Spring pin	Carbon tool steel	
8	Spacer	Aluminum alloy	Chromate	20	Rotation-stop spacer	Steel	Nickeling
9	Magnet	Plastic		21	Hexagon socket set screw	Steel	Black finish
10	Piston packing	Nitrile rubber		22	Coil spring	Steel	Electrodeposition
11	Piston	Aluminum alloy	Chromate				
12	Wear ring	Acetal resin					

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y-20K	
ø32	STK-Y-32K	4 6 10
ø40	STK-Y-40K	12 13
ø50	STK-Y-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

Ending

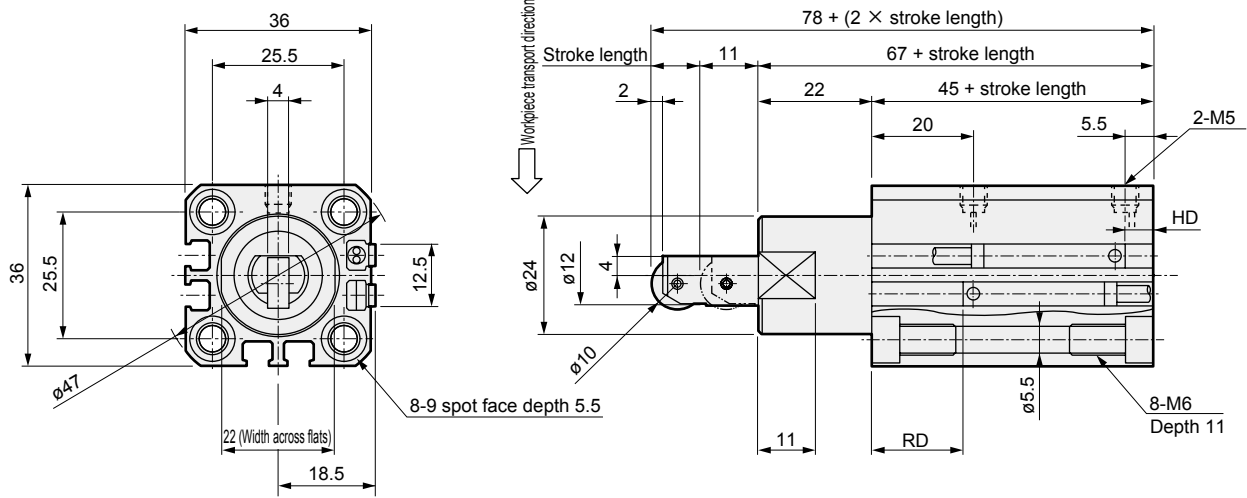


# STK-JY Series

## Dimensions



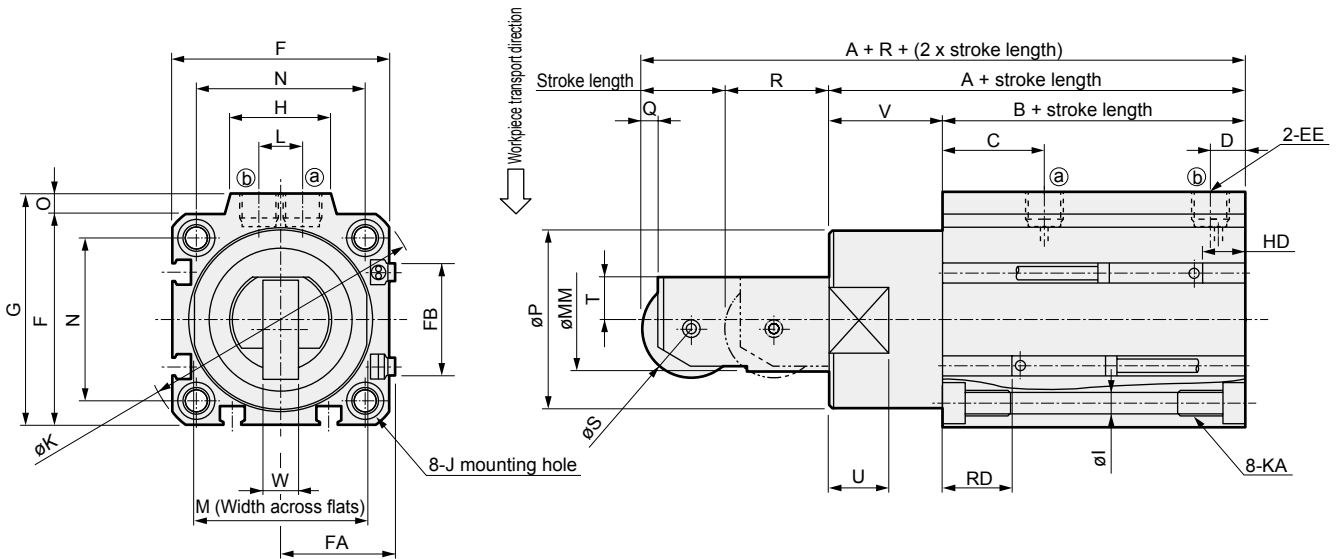
### ● STK-JY-20



### Dimensions with switch

Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø20	7	19.5	7	19.5	8.5	21

### ● STK-JY-32/40/50



Code	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	L	M	MM	N	O	P	Q	R	S	T	U	V	W
ø32	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	10	32	20	34	4.5	36	3	19	18	8	13	20	8
ø40	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	10	41	25	40	5	44	4	25	24	10	15	28	9
ø50	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	15	50	30	50	7	56	4	25	28	12	15	28	10

### Dimensions with switch

Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

---

# MEMO

---

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

**SSD2**

**SSG**

**SSD**

**CAT**

**MDC2**

**MVC**

**SMG**

MSD/  
MSDG

**FC\***

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

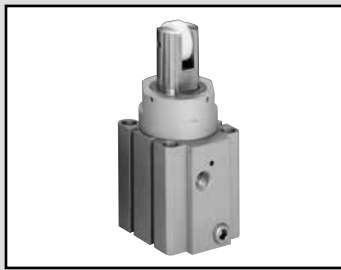
ShkAbs

FJ

FK

Spd  
Contr

Ending



Stopper cylinder double acting/spring integrated/rod end form roller

# STK-JY1 Series

● Bore size:  $\phi 20/\phi 32/\phi 40/\phi 50$



Double acting spring integrated pull type



## Specifications

1 MPa = 10 bar

Item	STK-JY1			
Bore size mm	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
Actuation	Double acting/spring integrated			
Working fluid	Compressed air			
Max. working pressure MPa	1.0 ( $\approx 150$ psi, 10 bar)			
Min. working pressure MPa	0.22 ( $\approx 32$ psi)	0.12 ( $\approx 17$ psi, 1.2 bar)		
Proof pressure MPa	1.6 ( $\approx 230$ psi, 16 bar)			
Ambient temperature $^{\circ}\text{C}$	-10 ( $14^{\circ}\text{F}$ ) to 60 ( $140^{\circ}\text{F}$ ) (no freezing)			
Port size	M5	Rc1/8	Rc1/4	
Stroke tolerance mm	+2.0 0			
Working piston speed mm/s	50 to 500			
Cushion	With rubber cushion			
Lubrication	Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)			
Rod end form	Roller			
Allowable absorbed energy J	Refer to page 1562.			

## Stroke length

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

Note: Products other than standard stroke length are made-to-order products.

## Spring load

(Unit: N)

Bore size (mm)	Stroke length (mm)	When stroke length = 0	At full stroke length operation
$\phi 20$	10	11.5	14.7
	15	9.9	
	20	8.2	
$\phi 32$	10	24.5	31.4
	15	21.1	
	20	17.6	
$\phi 40$	20	29.0	44.4
	25	25.3	
	30	21.5	
$\phi 50$	20	55.4	84.8
	25	48.0	
	30	40.7	

### Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire		Proximity 2-wire				Proximity 3-wire				Reed 2-wire						
	T1H/T1V	T2JH/T2JV	T2YH/T2YV	T2WH/T2WV	T3H/T3V	T3PH/T3PV	T3YH/T3YV	T3WH/T3WV	T0H/T0V	T5H/T5V		T8H/T8V					
Applications	For programmable controller, relay, compact solenoid valve		Dedicated for programmable controller				For programmable controller, relay				For programmable controller, relay		For programmable controller, relay (no lamp), serial		For programmable controller, relay		
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
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 or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 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)					
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC		1 mA or less				10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18 3 m:49 5 m:80			1 m:33					
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49	3 m:49 5 m:80 7 m:142			3 m:87					
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80	5 m:80 7 m:142 9 m:200			5 m:142					

\*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)

### Cylinder weight table

(Unit: g)

Stroke length	10	15	20	25	30	Switch weight (Grommet)
Bores size						
ø20	225	240	254	-	-	
ø32	482	507	532	-	-	
ø40	-	-	862	903	944	
ø50	-	-	1362	1388	1414	

### Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa									
		0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	-	-	94.2	1.26×10 <sup>2</sup>	1.57×10 <sup>2</sup>	1.88×10 <sup>2</sup>	2.20×10 <sup>2</sup>	2.51×10 <sup>2</sup>	2.83×10 <sup>2</sup>	3.14×10 <sup>2</sup>
	Pull	-	-	45.6	65.7	85.8	1.06×10 <sup>2</sup>	1.26×10 <sup>2</sup>	1.46×10 <sup>2</sup>	1.66×10 <sup>2</sup>	1.86×10 <sup>2</sup>
ø32	Push	1.21×10 <sup>2</sup>	1.61×10 <sup>2</sup>	2.41×10 <sup>2</sup>	3.22×10 <sup>2</sup>	4.02×10 <sup>2</sup>	4.83×10 <sup>2</sup>	5.63×10 <sup>2</sup>	6.43×10 <sup>2</sup>	7.24×10 <sup>2</sup>	8.04×10 <sup>2</sup>
	Pull	42.1	66.6	1.16×10 <sup>2</sup>	1.65×10 <sup>2</sup>	2.14×10 <sup>2</sup>	2.63×10 <sup>2</sup>	3.12×10 <sup>2</sup>	3.61×10 <sup>2</sup>	4.10×10 <sup>2</sup>	4.59×10 <sup>2</sup>
ø40	Push	1.88×10 <sup>2</sup>	2.51×10 <sup>2</sup>	3.77×10 <sup>2</sup>	5.03×10 <sup>2</sup>	6.28×10 <sup>2</sup>	7.54×10 <sup>2</sup>	8.80×10 <sup>2</sup>	1.01×10 <sup>3</sup>	1.13×10 <sup>3</sup>	1.26×10 <sup>3</sup>
	Pull	70.5	1.09×10 <sup>2</sup>	1.85×10 <sup>2</sup>	2.62×10 <sup>2</sup>	3.38×10 <sup>2</sup>	4.15×10 <sup>2</sup>	4.92×10 <sup>2</sup>	5.68×10 <sup>2</sup>	6.45×10 <sup>2</sup>	7.21×10 <sup>2</sup>
ø50	Push	2.95×10 <sup>2</sup>	3.93×10 <sup>2</sup>	5.89×10 <sup>2</sup>	7.85×10 <sup>2</sup>	9.82×10 <sup>2</sup>	1.18×10 <sup>3</sup>	1.37×10 <sup>3</sup>	1.57×10 <sup>3</sup>	1.77×10 <sup>3</sup>	1.96×10 <sup>3</sup>
	Pull	1.04×10 <sup>2</sup>	1.67×10 <sup>2</sup>	2.92×10 <sup>2</sup>	4.18×10 <sup>2</sup>	5.44×10 <sup>2</sup>	6.69×10 <sup>2</sup>	7.95×10 <sup>2</sup>	9.21×10 <sup>2</sup>	1.05×10 <sup>3</sup>	1.17×10 <sup>3</sup>

# STK-JY1 Series

SCP\*3  
CMK2  
CMA2  
SCM  
SCG  
SCA2  
SCS2  
CKV2  
CAV2/  
COVPIN2  
SSD2  
SSG  
SSD  
CAT  
MDC2  
MVC  
SMG  
MSD/  
MSDG  
FC\*  
**STK**  
SRL3  
SRG3  
SRM3  
SRT3  
MRL2  
MRG2  
SM-25  
ShkAbs  
FJ  
FK  
Spd  
Contr  
Ending

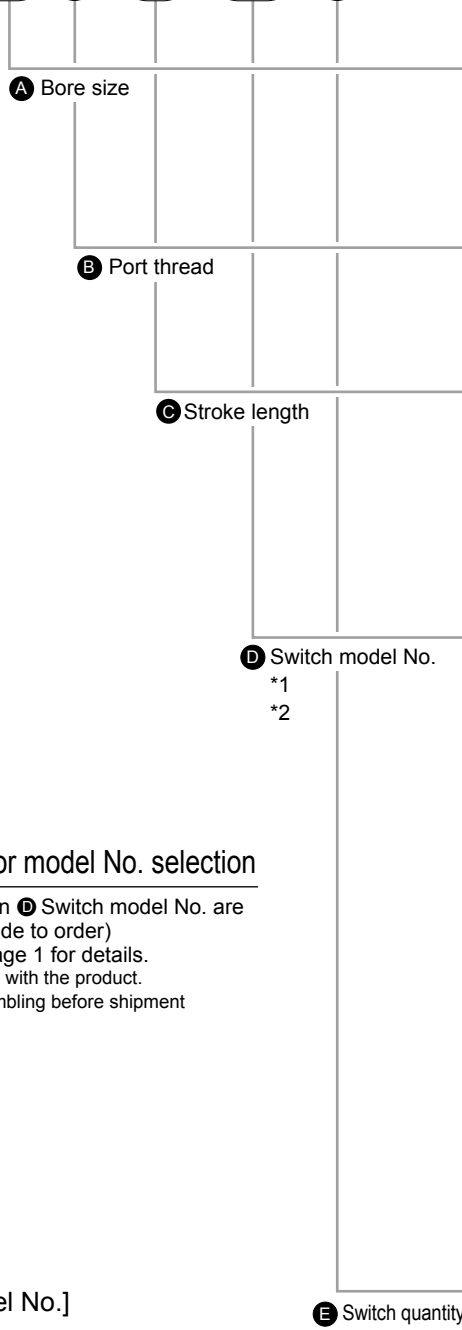
## How to order

Without switch (built-in magnet for switch)

**STK-JY1 - 20 - 10**

With switch (built-in magnet for switch)

**STK-JY1 - 20 - 10 - T0H - R**



### ⚠ Precautions for model No. selection

\*1: Switches other than **D** Switch model No. are also available. (Made to order)  
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.]

**STK-JY1-20-10-T0H-R**

Model: Stopper cylinder  
Double acting/spring integrated/rod end form roller

- A** Bore size :  $\phi 20$  mm
- B** Port thread : Rc thread
- C** Stroke length : 10mm
- D** Switch model No. : Reed T0H switch,  
Lead wire 1m
- E** Switch quantity : 1 on rod side

Code	Description
<b>A Bore size (mm)</b>	
20	$\phi 20$
32	$\phi 32$
40	$\phi 40$
50	$\phi 50$

<b>B Port thread</b>	
Blank	Rc thread
NN	NPT thread ( $\phi 32$ and over) (made-to-order product)
GN	G thread ( $\phi 32$ and over) (made-to-order product)

<b>C Stroke length (mm)</b>				
Bore size	$\phi 20$	$\phi 32$	$\phi 40$	$\phi 50$
10	10	●	●	
15	15	●	●	
20	20	●	●	●
25	25			●
30	30			●

<b>D Switch model No.</b>						
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	3-wire
T3PH*	T3PV*			●		
T2WH*	T2WV*			●	2-color display	2-wire
T2YH*	T2YV*			●		
T3WH*	T3WV*		●	3-wire		
T3YH*	T3YV*		●			
T2JH*	T2JV*		●	1-color display off-delay	2-wire	

<b>* Lead wire length (m)</b>	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

<b>E Switch quantity</b>	
R	1 on rod side
H	1 on head side
D	2

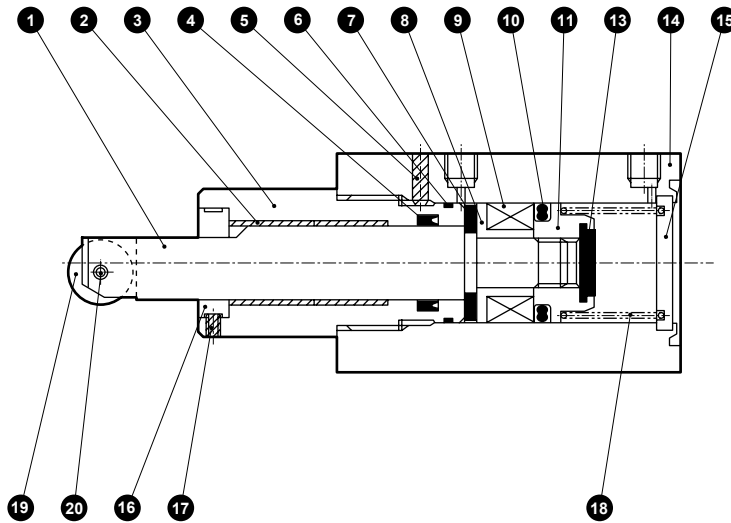
## How to order switch

**SW - T0H**

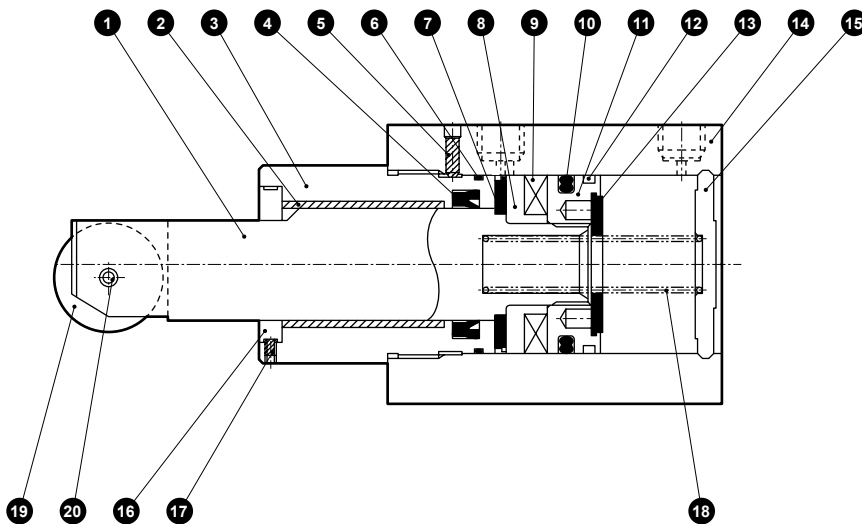
Switch model No.  
(Item **D** above)

## Internal structure and parts list

### ● STK-JY1-20



### ● STK-JY1-32/40/50



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Piston rod	Stainless steel	Industrial chrome plating	12	Wear ring	Acetal resin	
2	Bush	Dry bearing		13	Cushion rubber H	Urethane rubber	
3	Rod cover	Aluminum alloy	Alumite	14	Body	Aluminum alloy	Hard alumite
4	Rod packing	Nitrile rubber		15	Cover	ø20: Steel ø32 to 50: Aluminum alloy	ø20: Galvanizing ø32 to 50: Chromate
5	Hexagon socket set screw	Steel	Black finish	16	Rotation-stop spacer	Steel	Nickeling
6	Metal gasket	Nitrile rubber		17	Hexagon socket set screw	Steel	Black finish
7	Cushion rubber R	Urethane rubber		18	Coil spring	Steel	Electrodeposition
8	Spacer	Aluminum alloy	Chromate	19	Roller	Resin	
9	Magnet	Plastic		20	Spring pin	Carbon tool steel	
10	Piston packing	Nitrile rubber					
11	Piston	Aluminum alloy	Chromate				

### Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	STK-Y1-20K	
ø32	STK-Y1-32K	4 6 10
ø40	STK-Y1-40K	12 13
ø50	STK-Y1-50K	

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

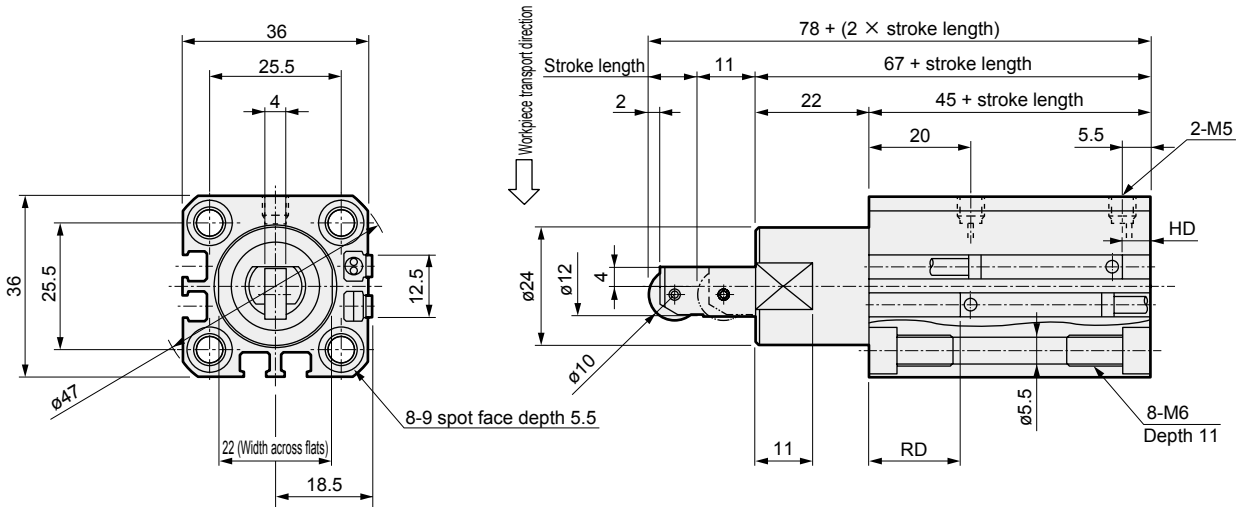
Ending

# STK-JY1 Series

## Dimensions



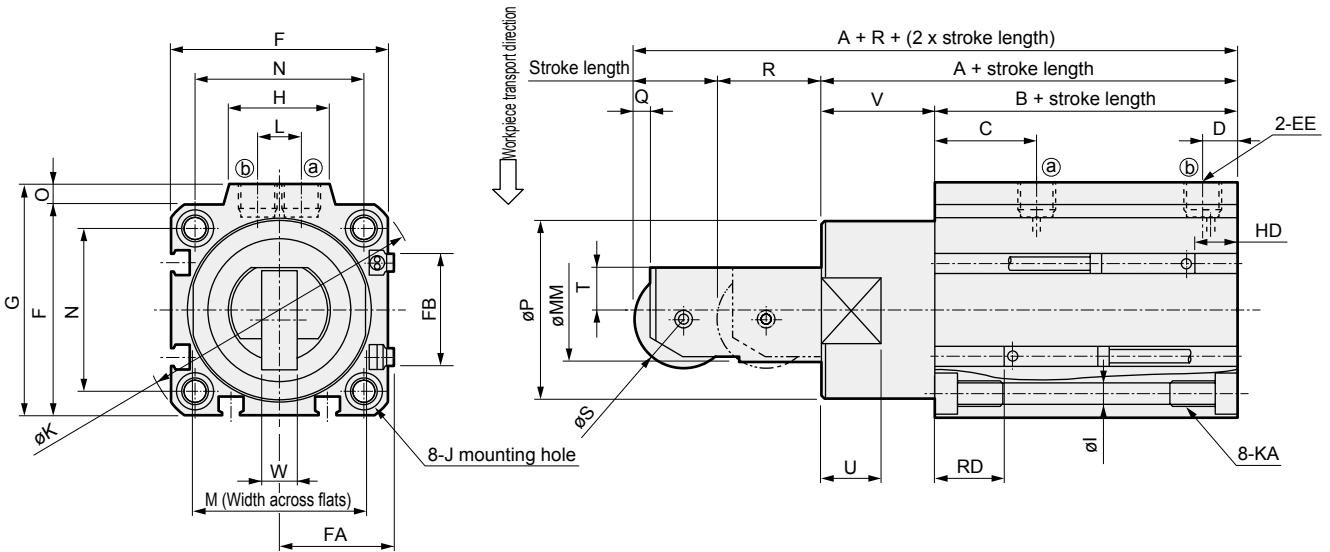
### ● STK-JY1-20



### Dimensions with switch

Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø20	7	19.5	7	19.5	8.5	21

### ● STK-JY1-32/40/50



Code	A	B	C	D	EE	F	FA	FB	G	H	I	J	K	KA	L	M	MM	N	O	P	Q	R	S	T	U	V	W
ø32	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	10	32	20	34	4.5	36	3	19	18	8	13	20	8
ø40	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	10	41	25	40	5	44	4	25	24	10	15	28	9
ø50	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	15	50	30	50	7	56	4	25	28	12	15	28	10

### Dimensions with switch

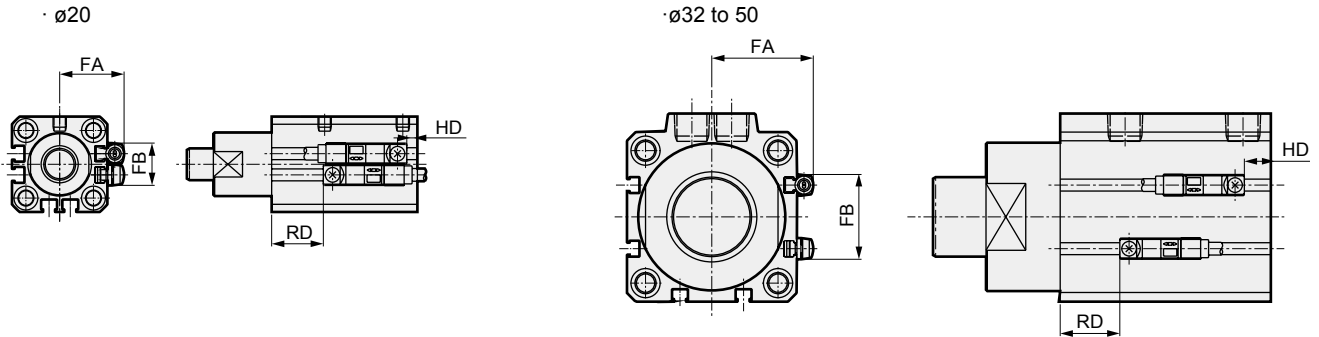
Bore size	Reed T0H/T0V/T5H/T5V		Proximity T2H/T2V/T3H/T3V		Proximity T2WH/T2WV/T3WH/T3WV	
	HD	RD	HD	RD	HD	RD
ø32	10.5	20	10.5	20	12	21.5
ø40	11.5	23	11.5	23	13	24.5
ø50	12.5	23	12.5	23	14	24.5

Note: Refer to page 1560 for HD, RD and protruding dimensions of the 2-color display, off-delay, T1\* and T8\* switches.

### STK Series common dimensions (2-color display, off-delay, with T1\* and T8\* switches)

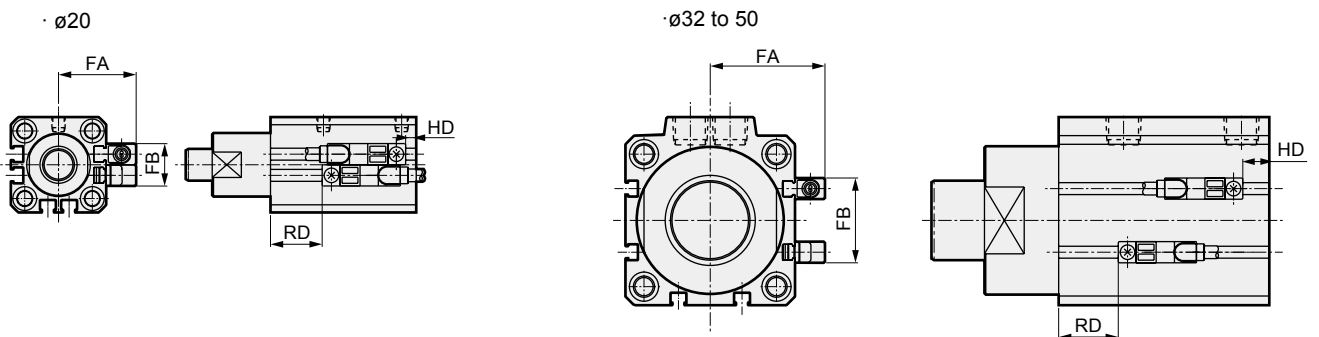
#### Double acting (STK, STK-M)

- T2YH/V, T3YH/V, T2JH/V, T8H/V



Code Bore size (mm)	FA	FB	T2JH/V, T2YH/V, T3YH/V		T8H/V	
			RD	HD	RD	HD
ø20	24.3	16	19.5	4	15	0
ø32	28.8	24	19.5	8	15	3.5
ø40	32.3	31	22.5	8.5	18	4.5
ø50	38.3	32	22.5	10	18	5.5

- T1H/V



Code Bore size (mm)	FA	FB	RD	HD
ø20	24.3	16	19.5	4
ø32	28.8	24	19.5	8
ø40	32.3	31	22.5	8.5
ø50	38.3	32	22.5	10

SCP\*3

CMK2

CMA2

SCM

SCG

SCA2

SCS2

CKV2

CAV2/  
COVP/N2

SSD2

SSG

SSD

CAT

MDC2

MVC

SMG

MSD/  
MSDG

FC\*

**STK**

SRL3

SRG3

SRM3

SRT3

MRL2

MRG2

SM-25

ShkAbs

FJ

FK

Spd  
Contr

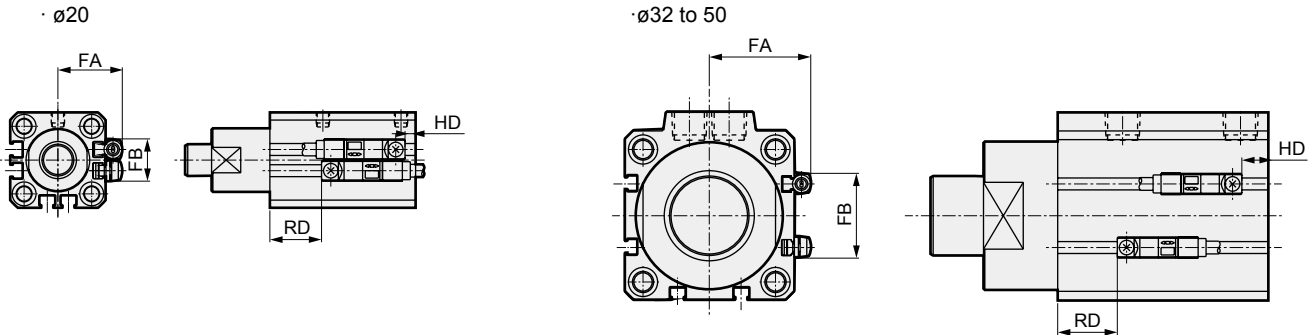
Ending



## STK Series common dimensions (2-color display, off-delay, with T1\* and T8\* switches)

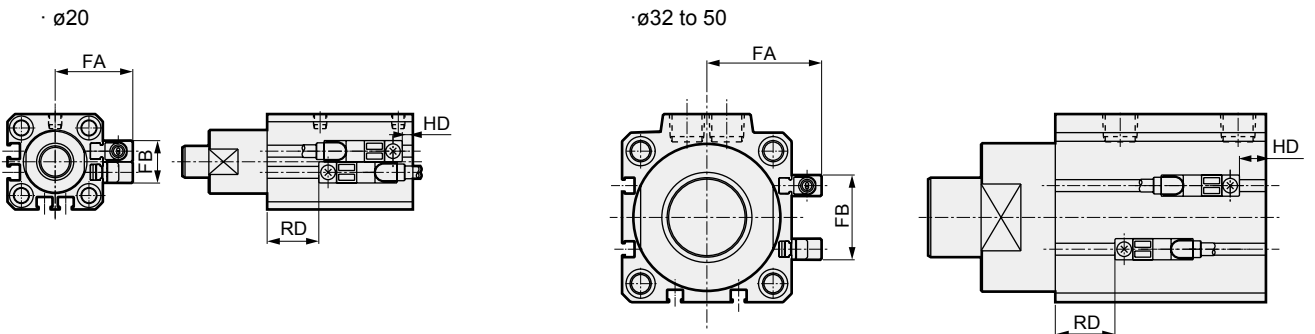
Single acting pull, double acting spring integrated (STK-Y, STK-Y1, STK-MY, STK-MY1, STK-JY, STK-JY1)

● T2YH/V, T3YH/V, T2JH/V, T8H/V



Code Bore size (mm)	FA	FB	T2JH/V, T2YH/V, T3YH/V		T8H/V	
			RD	HD	RD	HD
$\phi 20$	24.3	16	18	5.5	13.5	1
$\phi 32$	28.8	24	18.5	9	14	4.5
$\phi 40$	32.3	31	21.5	10	17	5.5
$\phi 50$	38.3	32	21.5	11	17	6.5

● T1H/V



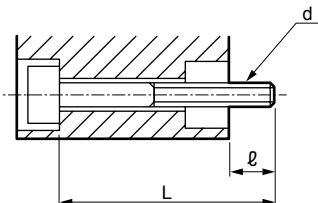
Code Bore size (mm)	FA	FB	RD	HD
$\phi 32$	28.8	24	18.5	9
$\phi 40$	32.3	31	21.5	10
$\phi 50$	38.3	32	21.5	11

Mounting bolt model No.

**STK** - **BOLT** - **d×L**

Mounting bolts (Bolts are available in units of 4 bolts per set.)

How to read the list



Material: Steel  
 Treatment: Black finish  
 d: Mounting bolt screw diameter  
 L: Mounting bolt length  
 ℓ Mating side screw-in available length  
 (Note) The mounting bolts will be displayed as d x L.

Mounting bolt for STK-

Model No.	ℓ	d×L
STK-20-10	10.5	M5×60
15		×65
20		×70
STK-32-10	12.5	M5×65
15		×70
20		×75

Model No.	ℓ	d×L
STK-40-20	13	M5×80
25		×85
30		×90
STK-50-20	12.5	M6×80
25		×85
30		×90

- SCP\*3
- CMK2
- CMA2
- SCM
- SCG
- SCA2
- SCS2
- CKV2
- CAV2/  
COVP/N2
- SSD2
- SSG
- SSD
- CAT
- MDC2
- MVC
- SMG
- MSD/  
MSDG
- FC\*
- STK**
- SRL3
- SRG3
- SRM3
- SRT3
- MRL2
- MRG2
- SM-25
- ShkAbs
- FJ
- FK
- Spd  
Contr
- Ending