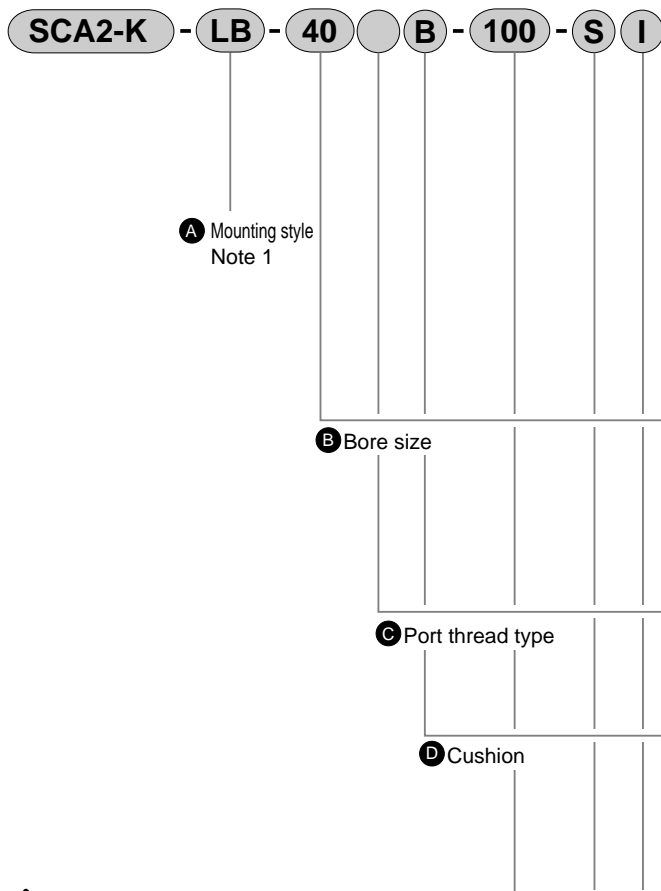


How to order



Note on model no. selection

- Note 1: The mounting bracket is shipped with the product. (However, trunnion type is attached to the product when shipped.)
- Note 2: Refer to Ending 74 if the maximum stroke is exceeded.
- Note 3: Instantaneous maximum temperature is the temperature when spark and spatter etc. instantaneously contacts to bellows.
- Note 4: "I" and "Y" can not be selected at the same time.
- Note 5: Refer to Ending 89 for custom specifications of rod end form.
- Note 6: Refer to page 436 for variation and option combination.

<Example of model number>

SCA2-K-LB-40B-100-SI

Model: Medium bore size cylinder double acting standard single rod type, steel tube type

- A** Mounting style : Axial foot type
- B** Bore size : ϕ 40 mm
- C** Port thread type : Rc thread
- D** Cushion : Both sides cushioned
- E** Stroke length : 100 mm
- F** Option : Cushion needle position S
- G** Accessory : Rod eye

G Accessory
Note 5

Symbol	Descriptions			
A Mounting style				
00	Basic type			
LB	Axial foot type			
FA	Rod end flange type			
FB	Head end flange type			
FC	Special head end flange type			
CA	Eye bracket type			
CB	Clevis bracket type (pin and snap ring attached)			
TC	Center trunnion type			
TA	Rod end trunnion type			
TB	Head end trunnion type			
TF	Intermediate supporting hole (ϕ 40 cannot be selected.)			
TD	Rod end supporting hole (ϕ 40 cannot be selected)			
TE	Head end supporting hole (ϕ 40 cannot be selected.)			
B Bore size (mm)				
40	ϕ 40			
50	ϕ 50			
63	ϕ 63			
80	ϕ 80			
100	ϕ 100			
C Port thread type				
Blank	Rc thread			
N	NPT thread (custom order)			
G	G thread (custom order)			
D Cushion				
B	Both sides cushioned			
R	Rod end cushion			
H	Head end cushion			
N	No cushion			
E Stroke length (mm)				
Bore size	Stroke length	Available stroke length	Custom stroke length	
40	1 to 600	1600	Per 1 mm increment	
50	1 to 600	1900		
63	1 to 600	1900		
80	1 to 700	1900		
100	1 to 800	1900		
F Option				
		Max. ambient temperature	Instantaneous max. temperature	
J	Bellows	100 °C	200 °C	
L	Bellows	250 °C	400 °C	
M	Piston rod material (stainless steel)			
Blank	Cushion needle position R (standard)			
S	Cushion needle position S			
T	Cushion needle position T			
P6	Copper and PTFE free (custom order)			
G Accessory				
I	Rod eye			
Y	Rod clevis (pin and snap ring attached)			
B1	Eye bracket			
B2	Clevis bracket (pin and snap ring attached)			
B3	Eye bracket			
B4	Trunnion type No. 2 bracket			

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

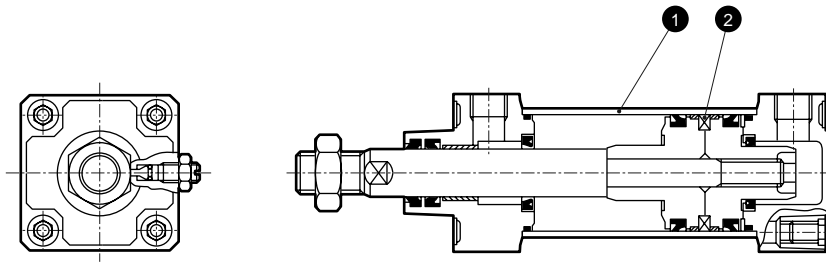
Medium bore size cylinder
Standard type

How to order mounting bracket

Bore size (mm)	ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100
Mounting bracket					
Foot (LB)	S1-LB-40	S1-LB-50	S1-LB-63	S1-LB-80	S1-LB-100
Flange (FA/FB)	S1-FA-40	S1-FA-50	S1-FA-63	S1-FA-80	S1-FA-100
Eye (CA)	S1-CA-40	S1-CA-50	S1-CA-63	S1-CA-80	S1-CA-100
Clevis (CB)	S1-CB-40	S1-CB-50	S1-CB-63	S1-CB-80	S1-CB-100

- Note 1: Refer to page 448 for the mounting bracket material.
- Note 2: The foot type bracket is 2 pcs./set.

Internal structure and parts list



No.	Parts name	Material	Remarks
1	Cylinder tube	Steel	Industrial chrome plating
2	Piston ring	Steel	Zinc chromate

- Note: Materials other than right table are the same as double acting standard single rod type (SCA2) on page 488.
- O.D. for 50 to 100 differ from the double acting standard single rod type.
Trunnion fittings are not compatible with double acting standard single rod type.

Repair parts list

Part numbers follow the SCA2 Series internal structure drawing (page 448).

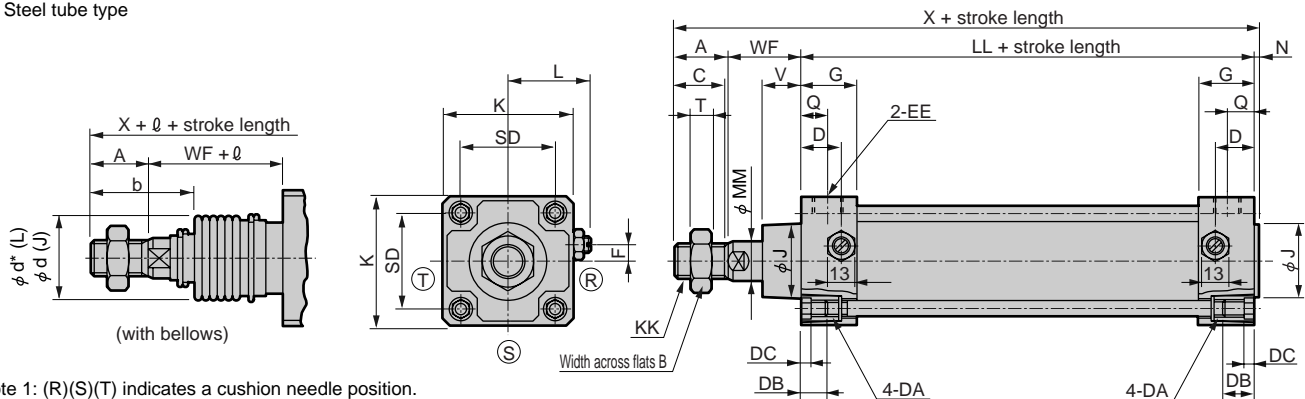
Bore size (mm)	Kit No.	Repair parts number
φ 40	SCA2-K-40K	
φ 50	SCA2-K-50K	
φ 63	SCA2-K-63K	
φ 80	SCA2-K-80K	
φ 100	SCA2-K-100K	

Note: Specify the kit No. when placing an order.

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

Dimensions

- Steel tube type



Note 1: (R)(S)(T) indicates a cushion needle position.
 Note 2: Refer to page 598, 599 for accessory dimensions.

Symbol	Basic type (00) basic dimensions																						
Bore size (mm)	A	B	C	D	DA	DB	DC	EE	F	G	J	K	KK	L	LL	MM	N	Q	SD	T	V	WF	X
φ 40	22	22	20	18	M8	12	4	Rc1/4	7.5	26	31	57	M14 x 1.5	38.0 to 39.5	93	16	2	13	40.5	8	18.5	33.5	150.5
φ 50	28	27	26	20	M8	12	4	Rc3/8	0	28	38	66	M18 x 1.5	41.0 to 43.5	101	20	2.5	14	48	11	20.5	37	168.5
φ 63	28	27	26	22	M8	12	4	Rc3/8	0	30	38	80	M18 x 1.5	47.5 to 50.0	105	20	3	15	59	11	21	35	171
φ 80	36	32	34	26	M12	16	5	Rc1/2	0	34	43	98	M22 x 1.5	56.0 to 59.0	116	25	3.5	17	74	13	23.5	48	203.5
φ 100	45	41	43	28	M12	16	5	Rc1/2	0	36	51	118	M26 x 1.5	66.0 to 69.0	128	30	4	18	90	16	32	53	230

Symbol	With bellows												
Bore size (mm)	A	X	b	d	d*	ℓ							
						50 or less	50 to 100	100 to 150	150 to 200	200 to 300	300 to 400	400 to 500	
φ 40	22	150.5	41	40	40	25.5	41.5	58.5	75.5	108.5	141.5	174.5	(stroke length/3.0) + 8
φ 50	28	168.5	47	47	48	22	36	49	63	90	119	146	(stroke length/3.6) + 7.5
φ 63	28	171	45	47	48	22	36	49	63	90	119	146	(stroke length/3.6) + 7.5
φ 80	36	203.5	58.5	53	55	14	26	38	49	72	96	119	(stroke length/4.3) + 2.5
φ 100	45	230	69.5	61	65	20	32	42	53	76	98	120	(stroke length/4.5) + 9

● Note: Each mounting style installation dimension is same as SCA2 (standard). Refer to pages 450 to 455.

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

Medium bore size cylinder
Standard type



Medium bore size cylinder
Double acting, low hydraulic type

SCA2-H Series

● Bore size: ϕ 40, ϕ 50, ϕ 63, ϕ 80, ϕ 100

JIS symbol



Specifications

Descriptions		SCA2-H (low hydraulic type)				
Bore size	mm	ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100
Actuation		Double acting				
Working fluid	Note 1	Hydraulic fluid				
Max. working pressure	MPa	1.0				
Min. working pressure	MPa	0.2		0.15		
Withstanding pressure	MPa	1.6				
Ambient temperature	°C	5 to 50				
Port size		Rc1/4	Rc3/8		Rc1/2	
Stroke tolerance	mm	$^{+0.9}_0$ (Up to 360), $^{+1.4}_0$ (Up to 800)				
Cushion		Cushioned				
Effective cushion length	mm	14.6	16.6	16.6	20.6	23.6
Allowable surge pressure	MPa	2.9 (cushioned), 4.9 (no cushion)				
Allowable energy absorption	Cushioned	Low hydraulic cylinder cushion performance cannot absorb large energy. So an external shock absorber should be used.				
	No cushion	0.067	0.079	0.079	0.201	0.301
		If "No cushion" is selected, the large energy generated by the external load cannot be absorbed. So an external shock absorber should be used.				

Note 1: Working oil viscosity should be 40 mm²/S at the working oil temperature.

The recommended oil is Fuji Kosan Fukkol Hydrol x22 or equivalent. Similar oils include Mitsubishi Diamond Power Fluid 18, Showa Shell Shell Terrace Oil 22, Esso Univil J26, Mobil Mobil DTE22, Cosmo Hydro HV22, Eneos Hiland Wide 22, and Idemitsu Daphney Super Hydro 22WR.

Stroke length

Bore size (mm)	Standard stroke length (mm)	Max. stroke length (mm)	Min. stroke length (mm)
ϕ 40	25, 50, 75, 100, 150, 200, 250, 300, 350, 400, 450, 500	600	1
ϕ 50			
ϕ 63			
ϕ 80			
ϕ 100			

Note 1: Custom stroke length is available per 1 mm increment.

Min. stroke length of type with switch

● T0/T5 type min. stroke length with switch

Switch quantity	Different surface installation				Same surface installation				Center trunnion installation				Rod end trunnion installation	Head end trunnion installation
	1	2	3	4	1	2	3	4	1	2	3	4	A position can not be detected at rod side stroke end.	A position can not be detected at head side stroke end.
ϕ 40	20 (10)	20 (20)	40 (40)	60 (60)	20 (10)	60 (45)	105 (75)	150 (105)	110 (110)	110 (110)	175 (145)	175 (145)	50 (50)	50 (50)
ϕ 50	15 (10)	20 (20)	40 (40)	60 (60)	15 (10)	20 (20)	65 (50)	65 (60)	135 (135)	135 (135)	135 (135)	135 (135)	60 (60)	60 (60)
ϕ 63	15 (10)	20 (20)	40 (40)	60 (60)	15 (10)	20 (20)	70 (55)	70 (60)	110 (95)	110 (95)	110 (100)	110 (100)	50 (45)	50 (45)
ϕ 80	15 (15)	25 (25)	45 (45)	65 (65)	15 (15)	25 (25)	70 (55)	70 (65)	115 (85)	115 (85)	115 (105)	115 (105)	55 (40)	55 (40)
ϕ 100	15 (15)	25 (25)	45 (45)	70 (70)	15 (15)	25 (25)	70 (55)	70 (70)	125 (95)	125 (95)	125 (115)	125 (115)	60 (45)	60 (45)

Note 1: Value in () for T*V (Radial lead wire).

Note 2: When stroke length is shorter than 15 mm, two switches could turn ON at the same time. In this case, adjust the distance between switches as far as possible.

● T8 type min. stroke length with switch

Switch quantity	Different surface installation				Same surface installation				Center trunnion installation				Rod end trunnion installation	Head end trunnion installation
	1	2	3	4	1	2	3	4	1	2	3	4	A position can not be detected at rod side stroke end.	A position can not be detected at head side stroke end.
ϕ 40	15 (10)	20 (20)	40 (40)	60 (60)	15 (10)	50 (35)	95 (65)	140 (95)	95 (85)	95 (85)	155 (125)	155 (125)	45 (40)	45 (40)
ϕ 50	10 (10)	20 (20)	40 (40)	60 (60)	10 (10)	20 (20)	70 (55)	70 (60)	115 (115)	115 (115)	135 (135)	135 (135)	50 (50)	50 (50)
ϕ 63	10 (10)	20 (20)	40 (40)	60 (60)	10 (10)	20 (20)	70 (55)	70 (60)	95 (75)	95 (75)	110 (110)	110 (110)	45 (35)	45 (35)
ϕ 80	15 (15)	25 (25)	45 (45)	65 (65)	15 (15)	25 (25)	70 (55)	70 (65)	100 (70)	100 (70)	115 (115)	115 (115)	50 (35)	50 (35)
ϕ 100	15 (15)	25 (25)	45 (45)	65 (65)	15 (15)	25 (25)	70 (55)	70 (65)	110 (80)	110 (80)	125 (125)	125 (125)	55 (40)	55 (40)

Note 1: Value in () for T*V (Radial lead wire).

Note 2: When stroke length is shorter than 15 mm, two switches could turn ON at the same time. In this case, adjust the distance between switches as far as possible.

Min. stroke length of type with switch

● T2/T3 type min. stroke length with switch

Switch quantity	Different surface installation				Same surface installation				Center trunnion installation				Rod end trunnion installation A position can not be detected at rod side stroke end.	Head end trunnion installation A position can not be detected at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
φ40	20 (10)	20 (15)	25 (25)	40 (40)	20 (10)	60 (45)	105 (75)	150 (105)	105 (75)	105 (75)	165 (135)	165 (135)	50 (35)	50 (35)
φ50	15 (10)	15 (15)	25 (25)	40 (40)	15 (10)	15 (15)	60 (45)	60 (45)	105 (75)	105 (75)	105 (75)	105 (75)	45 (30)	45 (30)
φ63	15 (10)	15 (15)	25 (25)	40 (40)	15 (10)	15 (15)	60 (45)	60 (45)	110 (80)	110 (80)	110 (85)	110 (85)	50 (35)	50 (35)
φ80	15 (10)	15 (15)	30 (30)	45 (45)	15 (10)	15 (15)	60 (45)	60 (45)	115 (85)	115 (85)	115 (90)	115 (90)	55 (40)	55 (40)
φ100	10 (10)	15 (15)	30 (30)	45 (45)	10 (10)	15 (15)	60 (45)	60 (45)	125 (95)	125 (95)	125 (100)	125 (100)	60 (45)	60 (45)

Note 1: Value in () for T*V (Radial lead wire).

Note 2: When stroke length is shorter than 15 mm, two switches could turn ON at the same time. In this case, adjust the distance between switches as far as possible.

● T1/T2Y/T3Y/T2YD type min. stroke length with switch

Switch quantity	Different surface installation				Same surface installation				Center trunnion installation				Rod end trunnion installation A position can not be detected at rod side stroke end.	Head end trunnion installation A position can not be detected at head side stroke end.
	1	2	3	4	1	2	3	4	1	2	3	4	1	1
φ40	20 (10)	20 (15)	25 (25)	40 (40)	20 (10)	60 (45)	105 (75)	150 (105)	105 (75)	105 (75)	165 (135)	165 (135)	50 (35)	50 (35)
φ50	15 (10)	15 (15)	25 (25)	40 (40)	15 (10)	15 (15)	60 (45)	60 (45)	100 (70)	100 (70)	100 (75)	100 (75)	45 (30)	45 (30)
φ63	15 (10)	15 (15)	25 (25)	40 (40)	15 (10)	15 (15)	60 (45)	60 (45)	105 (75)	105 (75)	105 (85)	105 (85)	50 (35)	50 (35)
φ80	15 (10)	15 (15)	30 (30)	45 (45)	15 (10)	15 (15)	60 (45)	60 (45)	110 (80)	110 (80)	110 (90)	110 (90)	55 (40)	55 (40)
φ100	10 (10)	15 (15)	30 (30)	45 (45)	10 (10)	15 (15)	60 (45)	60 (45)	120 (90)	120 (90)	120 (100)	120 (100)	60 (45)	60 (45)

Note 1: Value in () for T*V (Radial lead wire). Note that radial lead wire (V) is not available for T2YD.

Note 2: When stroke length is shorter than 15 mm, two switches could turn ON at the same time. In this case, adjust the distance between switches as far as possible.

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

Medium bore size cylinder
Standard type

Switch specifications (T type switch)

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

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

Descriptions	Proximity 2-wire			Proximity 3-wire			Reed 2-wire					Proximity 2-wire			
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/T2YV	T3H/T3V	T3PH/T3PV (Custom order)	T3YH/T3YV	T0H/T0V	T5H/T5V	T8H/T8V		T2YD				
Applications	Programmable controller relay, small solenoid valve	Programmable controller dedicated		Programmable controller, relay			Programmable controller, relay	Programmable controller, relay, IC circuit (w/o light), serial connection		Programmable controller, relay		Programmable controller dedicated			
Output method	-			NPN output	PNP output	NPN output	-								
Power voltage	-			10 to 28 VDC			-								
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less			12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC	24 VDC ± 10%	
Load current	5 to 100 mA	5 to 20 mA (Note 1)		100 mA or less			50 mA or less	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	5 to 20 mA
Light	LED (ON lighting)	LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Green LED (ON lighting)	Red/green LED (ON lighting)	LED (ON lighting)	Without indicator light		LED (ON lighting)		Red/green LED (ON lighting)			
Leakage current	1 mA or less with 100 VAC 2 mA or less with 200 VAC	1 mA or less		10 μA or less			0 mA					1 mA or less			

● With preventive maintenance output

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

Note 1: Refer to Ending 1 for other switch specifications.

Note 2: Max. load current above: 20 mA at 25 °C. The current will be lower than 20 mA if ambient temperature around switch is higher than 25 °C. (5 to 10 mA at 60 °C)

Cylinder weight

(Unit: kg)

Bore size (mm)	Product weight at stroke length (S) = 0 mm							Weight per switch (including mounting bracket)			Additional weight per S = 100 mm
	Basic type (00)	Foot type (LB)	Flange type (FA and FB)	Special flange type (FC)	Eye bracket type (CA)	Clevis bracket type (CB)	Trunnion type (TA, TB or TC)	T type	T2YD type		
									1 m	3 m	
φ40	0.83	1.00	1.24	0.92	1.15	1.19	1.21	0.018	0.08	0.17	0.39
φ50	1.20	1.45	1.69	1.31	1.58	1.61	1.74				0.46
φ63	1.60	1.97	2.69	1.78	2.17	2.22	2.45				0.50
φ80	2.60	3.34	4.46	2.96	3.87	4.08	3.94				0.90
φ100	4.20	5.11	6.94	4.75	5.84	6.02	6.77				1.12

(E.g.) Product weight of SCA2-H-LB-50B-200-R0-D

Product weight when stroke length (S) = 0 mm ... 1.45 kg
 Additional weight at stroke length 200 mm ... $0.46 \times \frac{200}{100} = 0.92$ kg
 Weight of two switches ... $0.018 \times 2 = 0.036$ kg
 Product weight ... $1.45 + 0.92 + 0.036$ kg = 2.406 kg

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

Medium bore size cylinder
Standard type

How to order

Without switch

SCA2-H - LB - 40 - B - 100 - S - I

With switch

SCA2-H - LB - 40 - B - 100 - T0 - R - S - I

A Mounting style
Note 1

B Bore size

C Port thread type

D Cushion

E Stroke length
Note 2

F Switch model no.

G Switch quantity
Note 4

H Option
Note 5

I Accessory
Note 6

Symbol	Descriptions
A Mounting style	
00	Basic type
LB	Axial foot type
FA	Rod end flange type
FB	Head end flange type
FC	Special head end flange type
CA	Eye bracket type
CB	Clevis bracket type (pin and snap ring attached)
TC	Center trunnion
TA	Rod end trunnion type
TB	Head end trunnion type
TF	Intermediate supporting hole (φ 40 cannot be selected.)
TD	Rod end supporting hole (φ 40 cannot be selected)
TE	Head end supporting hole (φ 40 cannot be selected.)

B Bore size (mm)	
40	φ 40
50	φ 50
63	φ 63
80	φ 80
100	φ 100

C Port thread type	
Blank	Rc thread
N	NPT thread (custom order)
G	G thread (custom order)

D Cushion	
B	Both sides cushioned
R	Rod end cushion
H	Head end cushion
N	No cushion

E Stroke length (mm)		
Bore size	Stroke length Note 3	Custom stroke length
φ40	1 to 600	Per 1 mm increment
φ50	1 to 600	
φ63	1 to 600	
φ80	1 to 700	
φ100	1 to 800	

F Switch model no.	
Refer to the switch model no. table on the following page.	
*Lead wire length	
Blank	1m (standard)
3	3m (option)
5	5m (option)

G Switch quantity	
R	One on rod end
H	One on head end
D	Two
T	Three

H Option		
	Max. ambient	Max. instantaneous
J	100 °C	200 °C
L	250 °C	400 °C
M	Piston rod material (stainless steel)	
Blank	Cushion needle position R (standard)	
S	Cushion needle position S	
T	Cushion needle position T	
P6	Copper and PTFE free (custom order)	

I Accessory	
I	Rod eye
Y	Rod clevis (pin and snap ring attached)
B1	Eye bracket
B2	Clevis bracket (pin and snap ring attached)
B3	Eye bracket
B4	Trunnion type No. 2 bracket

⚠ Note on model no. selection

- Note 1: The mounting bracket is shipped with the product. However, trunnion type is attached to the product when shipped.
- Note 2: If the maximum stroke is exceeded, refer to Ending 74.
- Note 3: Refer to page 550 for min. stroke length.
- Note 4: When selecting TA or TB for mounting, the number of switches is limited to "H" (one on head side) for TA, and "R" (one on rod side) for TB.
- Note 5: Instantaneous maximum temperature is the temperature when spark and spatter etc. instantaneously contacts to bellows.
- Note 6: "I" and "Y" can not be selected at the same time.
- Note 7: Refer to Ending 89 for custom specifications of rod end form.
- Note 8: Refer to page 436 for variation and option combination.

<Example of model number>

SCA2-H-LB-40B-100-T0-R-SI

Model: Medium bore size cylinder double acting low hydraulic type

- A** Mounting style : Axial foot type
- B** Bore size : φ 40 mm
- C** Port thread type : Rc thread
- D** Cushion : Both sides cushioned
- E** Stroke length : 100 mm
- F** Switch model no. : Reed T0 switch, lead wire length 1 m
- G** Switch quantity : One on rod end
- H** Option : Cushion needle position S
- I** Accessory : Rod eye

How to order mounting bracket

Bore size (mm)	φ40	φ50	φ63	φ80	φ100
Mounting bracket					
Foot (LB)	S1-LB-40	S1-LB-50	S1-LB-63	S1-LB-80	S1-LB-100
Flange (FA/FB)	S1-FA-40	S1-FA-50	S1-FA-63	S1-FA-80	S1-FA-100
Eye (CA)	S1-CA-40	S1-CA-50	S1-CA-63	S1-CA-80	S1-CA-100
Clevis (CB)	S1-CB-40	S1-CB-50	S1-CB-63	S1-CB-80	S1-CB-100

Note 1: Refer to page 448 for the mounting bracket material.

Note 2: The foot type bracket is 2 pcs./set.

[F] switch model no.

T type switch model no.			
Axial lead wire	Radial lead wire	Contact	Indicator
T0H*	T0V*	Reed	1 color indicator type
T5H*	T5V*		Without indicator light
T8H*	T8V*		1 color indicator type
T1H*	T1V*	Proximity	1 color indicator type
T2H*	T2V*		2-wire
T3H*	T3V*		3-wire
T2YH*	T2YV*		2 color indicator type
T3YH*	T3YV*		2-wire
T3PH*	T3PV*		3-wire
T2YFH*	T2YFV*		1 color indicator type (custom order)
T3YFH*	T3YFV*		2 color indicator type (Without light for preventive maintenance output)
T2YMH*	T2YMV*		3-wire
T3YMH*	T3YMV*		2 color indicator type (With light for preventive maintenance output (1 color))
T2YD*	-		4-wire
T2YDT*	-		Strong magnetic field proof switch
T2JH*	T2JV*	2-wire	
		Off-delay type	

R type switch					
Grommet type	Terminal box type		Contact	Indicator	Lead wire
	Standard type	Splash prf.			
R0	R0B	R0A	1 color indicator type		

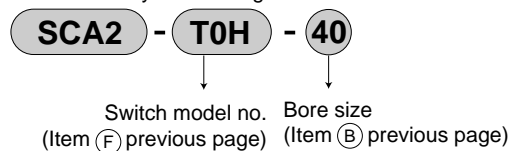
These types have been changed to T-switch integrated type since Oct 1st 2007.

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

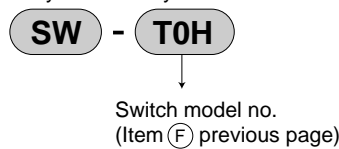
How to order switch

(T type switch)

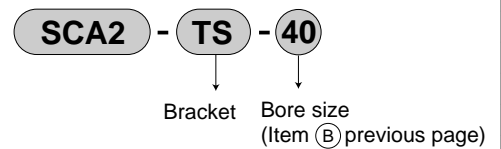
● Switch body + mounting bracket



● Only switch body



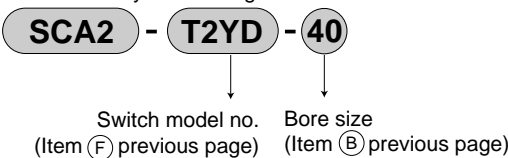
● Switch bracket set



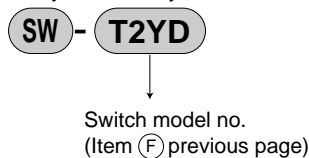
* Consult with CKD when using the environment compatible T-type switch.

(T2YD type switch)

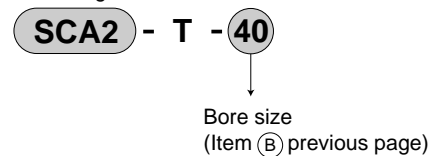
● Switch body + mounting bracket



● Only switch body



● Mounting bracket

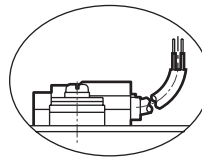
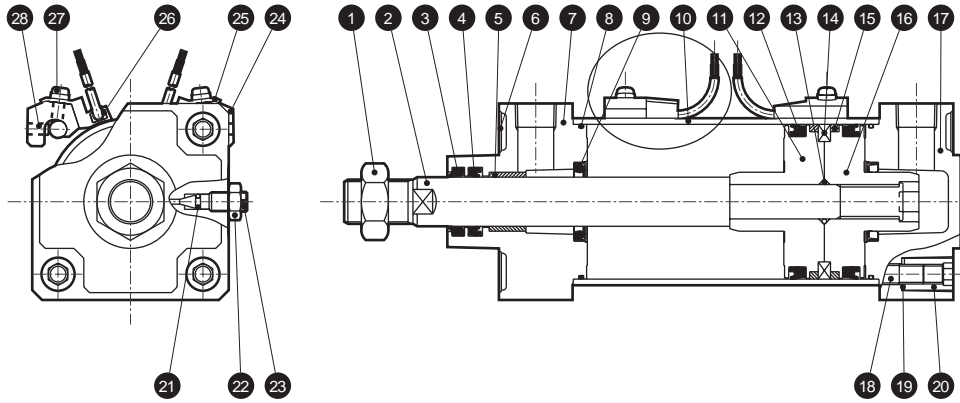


Dimensions

This is the same as double acting standard single rod type. Refer to pages 449 to 455.

Medium bore size cylinder
Standard type

Internal structure and parts list



R type switch

No.	Parts name	Material	Remarks	No.	Parts name	Material	Remarks
1	Rod nut	Steel	Zinc chromate	16	Piston H	Aluminum alloy die-casting	
2	Piston rod	Steel	Industrial chrome plating	17	Head cover	Aluminum alloy die-casting	Paint
3	Dust wiper	Nitrile rubber		18	Tie rod	Steel	Zinc chromate
4	Rod packing seal	Nitrile rubber		19	Conical spring washer	Steel	Blackening
5	Bush	Oil impregnated bearing alloy	Note 1	20	Round nut	Steel	Zinc chromate
6	Masking plate	Aluminum alloy	Paint	21	Needle gasket	Nitrile rubber	
7	Rod cover	Aluminum alloy die-casting	Paint	22	Needle nut	Copper alloy	Note 2
8	Cylinder gasket	Nitrile rubber		23	Cushion needle	Copper alloy	Note 2
9	Cushion packing seal	Urethane rubber, steel					
10	Cylinder tube	Aluminum alloy	Hard alumite treatment	With switch			
11	Piston R	Aluminum alloy die-casting		24	Switch installation unit	Aluminum alloy	
12	Piston packing seal	Nitrile rubber		25	Switch holder	Aluminum alloy	
13	Piston gasket	Nitrile rubber		26	Cylinder switch		
14	Magnet	Plastic		27	Cross headed pan w/washer	Steel	Zinc chromate
15	Wear ring	Polyacetal resin		28	Hexagon socket head set screw	Alloy steel	Blackening

Note 1: Oil impregnated cast iron bearing is used for copper and PTFE free. Note 2: Copper + galvanizing is used for copper and PTFE free.

Repair parts list

Bore size (mm)	Kit No.	Repair parts number
φ 40	SCA2-H-40K	
φ 50	SCA2-H-50K	3 4 8 9 12
φ 63	SCA2-H-63K	15 21
φ 80	SCA2-H-80K	
φ 100	SCA2-H-100K	

Note: Specify the kit No. when placing an order.

Dimensions

It is the same dimensions as the double acting single rod type. Refer to pages 449 to 455.