

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



Rotary clamp cylinder Double acting/single rod

RCC2 Series

● Bore size: ø16/ø20/ø25/ø32/ø40/ø50/ø63

JIS symbol  Double acting



* Made-to-order product.

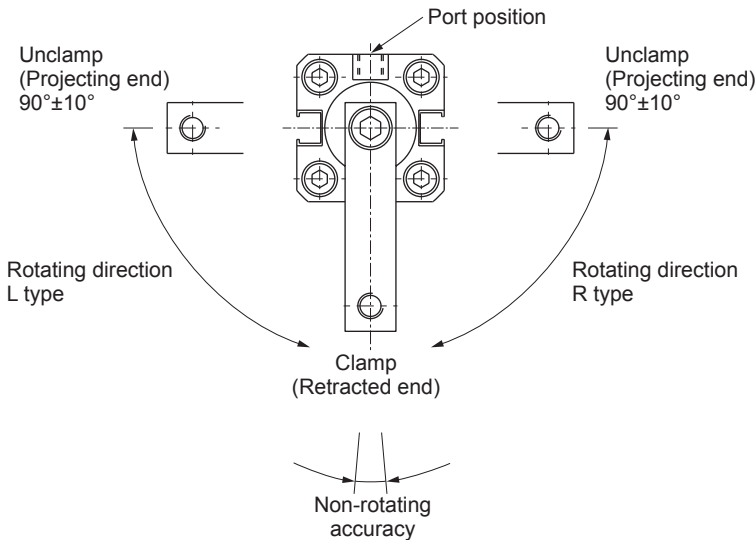
Specifications

Item		RCC2						
Bore size	mm	ø16	ø20	ø25	ø32	ø40	ø50	ø63
Actuation		Double acting						
Working fluid		Compressed air						
Max. working pressure MPa		1.0 (≈150 psi, 10 bar)						
Min. working pressure MPa		0.2 (≈29 psi, 2 bar)						
Proof pressure MPa		1.6 (≈230 psi, 16 bar)						
Ambient temperature °C		-10 (14°F) to 60 (140°F) (no freezing)						
Port size		M5			Rc1/8		Rc1/4	
Working piston speed mm/s		50 to 200						
Cushion		With rubber cushion						
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)						
Rotating angle		90°±10°						
Rotating direction		Right/Left						
Non-rotating accuracy (clamping): Initial value		±1°			±0.9°		±0.7°	
Pressurized area	Pull	123	201	377	603	1055	1649	2626
	mm ² Push	201	314	490	804	1256	1963	3117
Durability		1 million times						

Stroke

Bore size (mm)	Stroke (mm)	Rotor stroke (mm)	Clamp section stroke (mm)
ø16	19, 29	9	10, 20
ø20	21, 31	11	10, 20
ø25			
ø32	25, 35	15	10, 20
ø40			
ø50	40, 70	20	20, 50
ø63			

Rotating direction



Switch specifications

● 1-color/2-color LED/for AC magnetic field proof

Item	Proximity 2-wire			Proximity 3-wire				Reed 2-wire		Proximity 2-wire
	T2H/T2V	T2YH/ T2YV	T2WH/ T2WV	T3H/T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V	T5H/T5V	T2YD
Applications	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay	For programmable controller, relay, IC circuit (no indicator lamp), serial connection	For programmable controller
Output method	-			NPN output	PNP output	NPN output	NPN output	-		
Pwr. supp. V.	-			10 to 28 VDC				-		
Load voltage	10 to 30 VDC		24 VDC ±10%	30 VDC or less				12/24 VDC	110 VAC	5/12/24 VDC
Load current	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
Indicator lamp	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 LED	Red/green LED (Lit when ON)
Leakage current	1 mA or less			10 µA or less				0 mA		
Weight g	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80	1 m:33 3 m:87 5 m:142	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80	1 m:18 3 m:49 5 m:80		
										1 m:61 3 m:166 5 m:272

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

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

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

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

Cylinder weight

(Unit: kg)

Item/mounting	Stroke (mm)								Rod side flange (FA)	Head side flange FB	Switch weight
	19	29	21	31	25	35	40	70			
ø16	0.22	0.28	-	-	-	-	-	-	0.07	0.07	Refer to the weight in the switch specifications.
ø20	-	-	0.35	0.43	-	-	-	-	0.13	0.13	
ø25	-	-	0.38	0.45	-	-	-	-	0.16	0.16	
ø32	-	-	-	-	0.8	0.9	-	-	0.16	0.16	
ø40	-	-	-	-	1.0	1.1	-	-	0.25	0.25	
ø50	-	-	-	-	-	-	1.6	2.2	0.5	0.5	
ø63	-	-	-	-	-	-	2.8	3.6	0.65	0.65	

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa									
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
ø16	Push	40.2	60.3	80.4	1.01x10 ²	1.21x10 ²	1.41x10 ²	1.61x10 ²	1.81x10 ²	2.01x10 ²	
	Pull	24.5	36.8	49.0	61.3	73.5	85.8	98.0	1.10x10 ²	1.23x10 ²	
ø20	Push	62.8	94.2	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²	2.51x10 ²	2.83x10 ²	3.14x10 ²	
	Pull	40.2	60.3	80.4	1.01x10 ²	1.21x10 ²	1.41x10 ²	1.61x10 ²	1.81x10 ²	2.01x10 ²	
ø25	Push	98.2	1.47x10 ²	1.96x10 ²	2.45x10 ²	2.95x10 ²	3.44x10 ²	3.93x10 ²	4.42x10 ²	4.91x10 ²	
	Pull	75.6	1.13x10 ²	1.51x10 ²	1.89x10 ²	2.27x10 ²	2.64x10 ²	3.02x10 ²	3.40x10 ²	3.78x10 ²	
ø32	Push	1.61x10 ²	2.41x10 ²	3.22x10 ²	4.02x10 ²	4.83x10 ²	5.63x10 ²	6.43x10 ²	7.24x10 ²	8.04x10 ²	
	Pull	1.21x10 ²	1.81x10 ²	2.41x10 ²	3.02x10 ²	3.62x10 ²	4.22x10 ²	4.83x10 ²	5.43x10 ²	6.03x10 ²	
ø40	Push	2.51x10 ²	3.77x10 ²	5.03x10 ²	6.28x10 ²	7.54x10 ²	8.80x10 ²	1.01x10 ³	1.13x10 ³	1.26x10 ³	
	Pull	2.11x10 ²	3.17x10 ²	4.22x10 ²	5.28x10 ²	6.33x10 ²	7.39x10 ²	8.45x10 ²	9.50x10 ²	1.06x10 ³	
ø50	Push	3.93x10 ²	5.89x10 ²	7.85x10 ²	9.82x10 ²	1.18x10 ³	1.37x10 ³	1.57x10 ³	1.77x10 ³	1.96x10 ³	
	Pull	3.30x10 ²	4.95x10 ²	6.60x10 ²	8.25x10 ²	9.90x10 ²	1.15x10 ³	1.32x10 ³	1.48x10 ³	1.65x10 ³	
ø63	Push	6.23x10 ²	9.35x10 ²	1.25x10 ³	1.56x10 ³	1.87x10 ³	2.18x10 ³	2.49x10 ³	2.81x10 ³	3.12x10 ³	
	Pull	5.25x10 ²	7.88x10 ²	1.05x10 ³	1.31x10 ³	1.58x10 ³	1.84x10 ³	2.10x10 ³	2.36x10 ³	2.63x10 ³	

RCC2 Series

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

How to order

Without switch (built-in magnet for switch)

RCC2-00-20-21-R

With switch (built-in magnet for switch)

RCC2-00-20-21-R-T0H-R

A Mounting

B Bore size

C Stroke

D Rotating direction

E Switch model No.

*1
*2

F Switch quantity

G Option

⚠ Precautions for model No. selection

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

2: T3P^Δ, T2Y^Δ*, T3Y^Δ*, T2YD*, and T2YDT* switches cannot be used for ø16.

*3: When the type with the switch is selected, the product could interfere with the fixing screws depending on the switch mounting surface and switch.

[Example of model No.]

RCC2-00-20-21-R-T0H-R

Model: Rotary clamp cylinder double acting

- A** Mounting : Basic
- B** Bore size : ø20 mm
- C** Stroke : 21 mm
- D** Rotating direction : Clamp (Pull) looking from rod side:
Rotated 90° in CW direction
- E** Switch model No. : Reed T0H switch, lead wire
length 1 m
- F** Switch quantity : 1 on rod side

Code	Description				
A Mounting					
00	Basic				
FA	Rod side flange				
FB	Head side flange *3				
HI	With spigot at head side				
B Bore size (mm)					
16	ø16				
20	ø20				
25	ø25				
32	ø32				
40	ø40				
50	ø50				
63	ø63				
C Stroke (mm)					
Stroke	Bore size	Rotor	Clamp		
19	ø16	9	10		
21	ø20/ø25	11	10		
25	ø32/ø40	15	10		
29	ø16	9	20		
31	ø20/ø25	11	20		
35	ø32/ø40	15	20		
40	ø50/ø63	20	20		
70	ø50/ø63	20	50		
D Rotating direction					
R	Clamp (Pull) looking from rod side: Rotated 90° in CW direction				
L	Clamp (Pull) looking from rod side: Rotated 90° in CCW direction				
E Switch model No.					
Axial lead wire	Radial lead wire	Contact	Voltage	Indicator	Lead wire
			ACDC		
T0H*	T0V*	Reed	● ●	1-color LED	2-wire
T5H*	T5V*		● ●	Without LED	
T2H*	T2V*	Proximity	●	1-color LED	2-wire
T3H*	T3V*		●		3-wire
T3PH*	T3PV*		●	1-color LED	3-wire
T2WH*	T2WV*		●	2-color LED	2-wire
T2YH*	T2YV*		●		2-wire
T3WH*	T3WV*		●		3-wire
T3YH*	T3YV*		●		3-wire
T2YD*	-		●	2-color LED	2-wire
T2YDT*	-		●	AC magnetic field	
* Lead wire length (m)					
Blank	1 m (standard)				
3	3 m (option)				
5	5 m (option)				
F Switch quantity					
R	1 on rod side				
H	1 on head side				
D	2				
G Option					
Blank	Rod end width across flats				
N4	Rod end 2 widths across flats (ø16 only)				

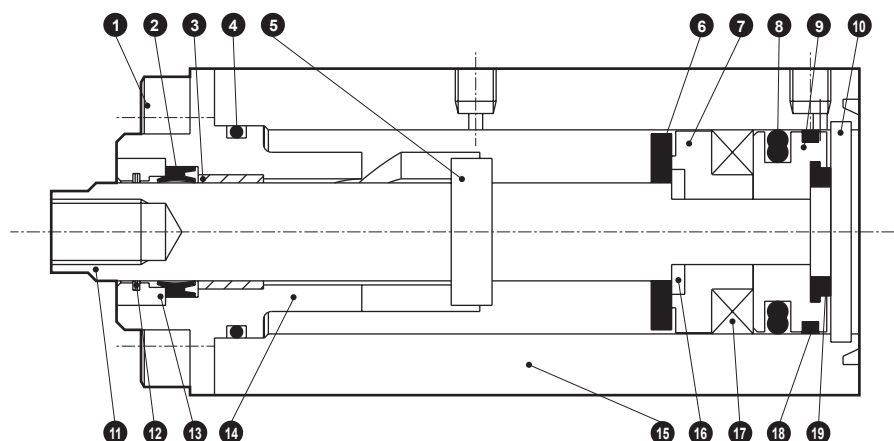
How to order switch

SW-T0H

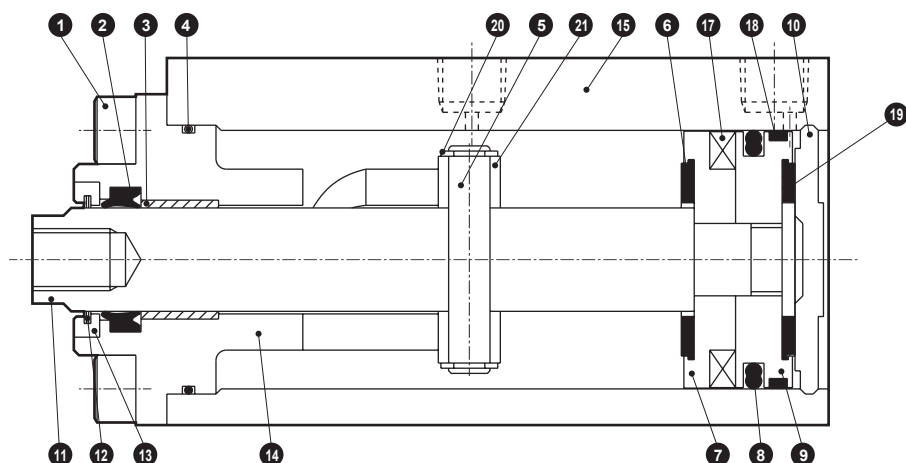
Switch model No.
(Item E above)

Internal structure and parts list

● RCC2-16/20/25



● RCC2-32/40/50/63



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Hexagon socket head cap screw	Stainless steel		11	Piston rod	ø16: Stainless steel ø20 to ø63: Steel	
2	Rod packing	Nitrile rubber		12	Coil scraper	Copper alloy	Except for ø16
3	Bush	Copper-based		13	Holder	Aluminum alloy	
4	Cylinder gasket	Nitrile rubber		14	Rod cover	Steel	
5	Pin	Steel		15	Cylinder body	Aluminum alloy	
6	Cushion rubber (R)	Urethane rubber		16	Spacer washer	Stainless steel	Except for ø16
7	Spacer	ø20, ø25: Special resin ø16, ø32 to ø63: Aluminum alloy		17	Magnet	Plastic	
8	Piston packing	Nitrile rubber		18	Wear ring	Acetal resin	
9	Piston	Aluminum alloy		19	Cushion rubber (H)	Urethane rubber	
10	Cover	ø16, ø20, ø25: Stainless steel ø32 to ø63: Aluminum alloy		20	E type snap ring	Steel	
				21	Roller	Steel	

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø16	RCC2-16K	
ø20	RCC2-20K	
ø25	RCC2-25K	
ø32	RCC2-32K	
ø40	RCC2-40K	
ø50	RCC2-50K	
ø63	RCC2-63K	



Note: 12 Coil scraper is not supplied for ø16.

Note: 6 Cushion rubber (R) cannot be replaced for ø16 to ø25.

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

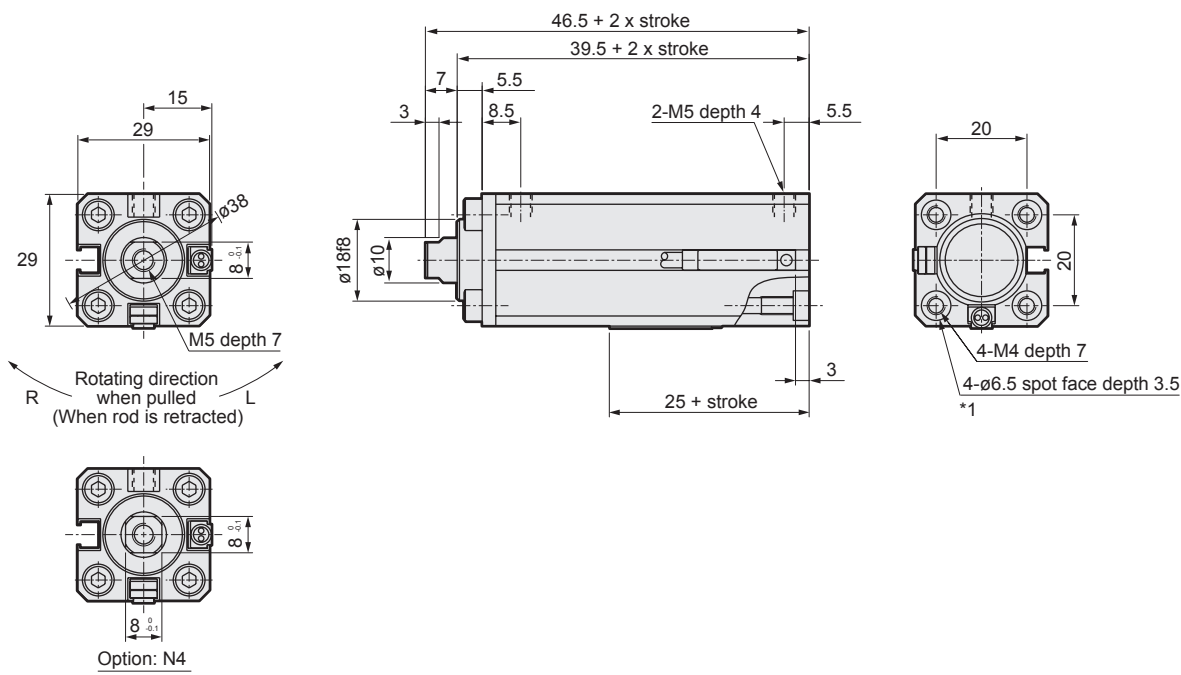
Dimensions (ø16, ø20, ø25)

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

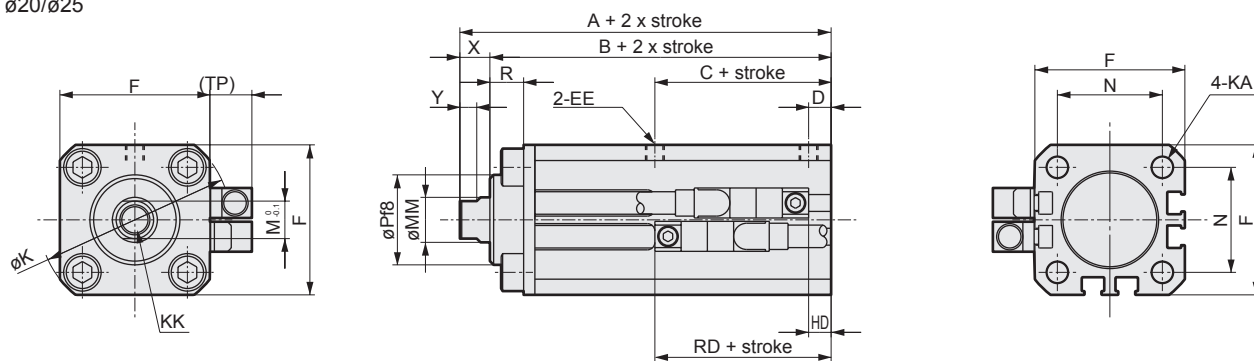
Dimensions (ø16, ø20, ø25)

- Basic (00)

Ø16



ø20/ø25



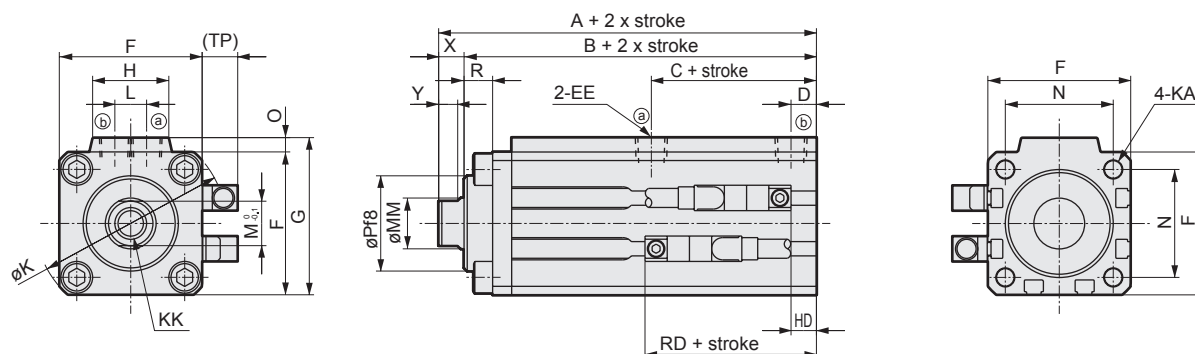
Code	Basic (00) dimensions table															
Bore size (mm)	A	B	C	D	EE	F	K	KA	KK	M	MM	N	P	R	X	Y
ø20	56	48	24	5.5	M5x0.8	36	47	M6 depth 11	M8 depth 15	10	12	25.5	24	9	8	4.5
ø25	57	49	26	6	M5x0.8	40	51	M6 depth 11	M8 depth 15	10	12	28	24	9	8	4.5
Code	With switch															
Bore size (mm)	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*						
	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP				
ø20	7	26	0	6	27	0	6	27	5	6	27	11				
ø25	6	25	0	5	26	0	5	26	5	5	26	11				

*1: Cannot be mounted with a through bolt.

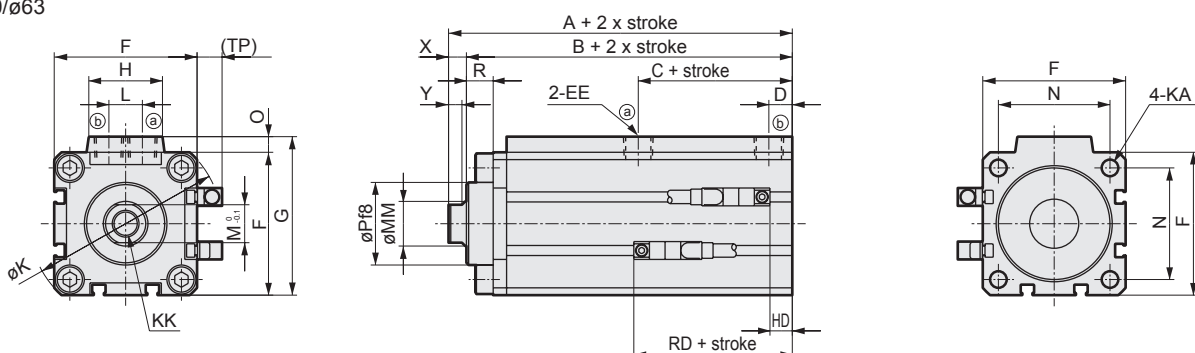
Dimensions (ø32, ø40, ø50, ø63)

• Basic (00)

ø32/ø40



ø50/ø63



Code	Basic (00) dimensions table																			
Bore size (mm)	A	B	C	D	EE	F	G	H	K	KA	KK	L	M	MM	N	O	P	R	X	Y
ø32	69	61	27	8	Rc1/8	45	49.5	24	60	M6 depth 11	M10 depth 15	10	14	16	34	4.5	30	9	8	6
ø40	70	62	29	8.5	Rc1/8	52	57	24	69	M6 depth 11	M10 depth 15	10	14	16	40	5	35	9	8	6
ø50	74	66	29	10.5	Rc1/4	64	71	33	86	M8 depth 13	M12 depth 15	15	17	20	50	7	37	12	8	6
ø63	85	75	38	11	Rc1/4	77	84	33	103	M10 depth 25	M16 depth 21	15	22	25	60	7	48	12	10	8
Code	With switch																			
Bore size (mm)	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*										
	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP								
ø32	9	28	0	8	29	0	8	29	5	8	29	11								
ø40	10	29	0	9	30	0	9	30	5	9	30	11								
ø50	11	30	0	10	31	0	10	31	5	10	31	11								
ø63	19	37	0	18	38	0	18	38	5	18	38	11								

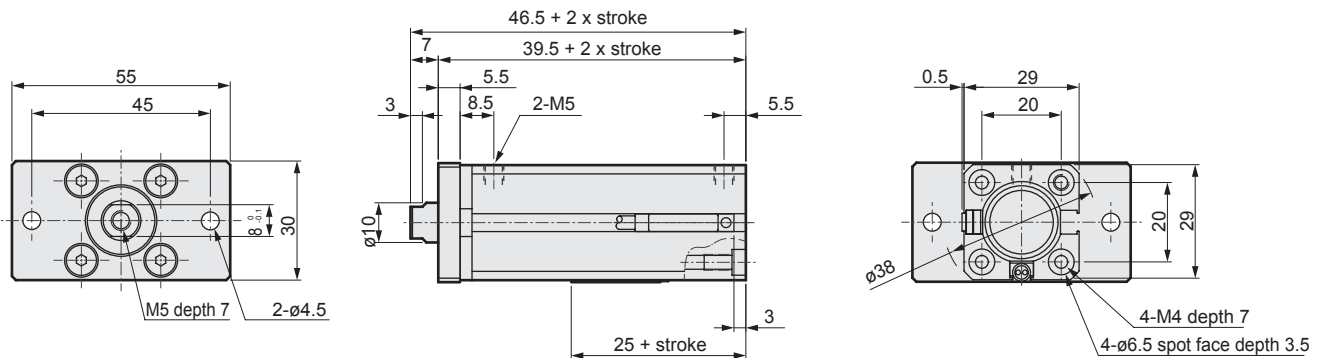
*1: Cannot be mounted with a through bolt.

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

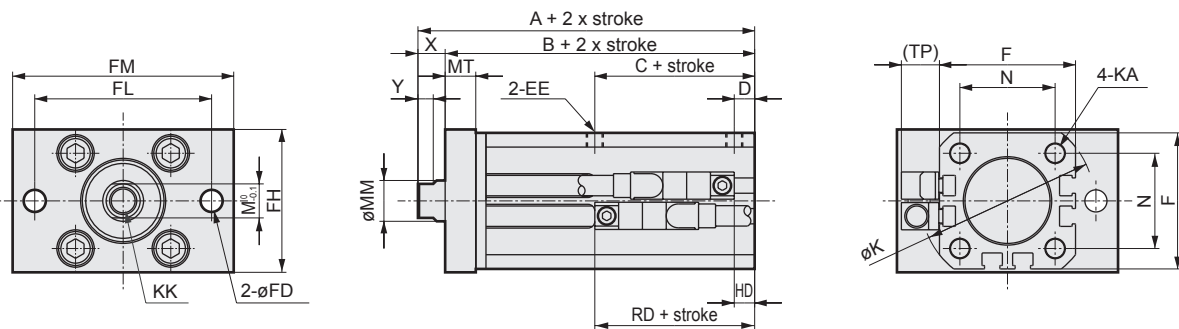
Dimensions (ø16, ø20, ø25)

● Rod side flange (FA)

ø16



ø20/ø25



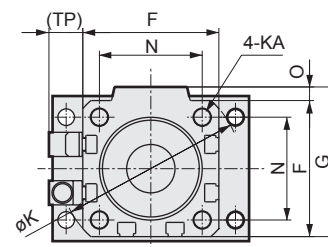
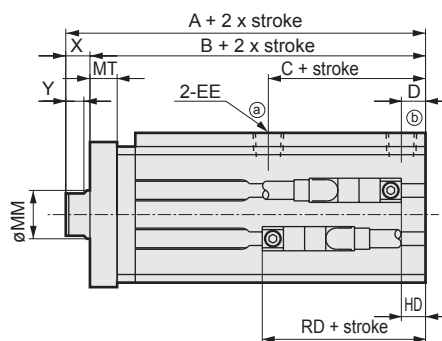
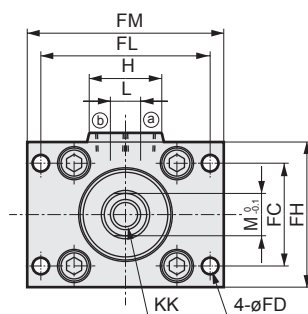
Code	Rod side flange (FA) basic dimensions																	
Bore size (mm)	A	B	C	D	EE	F	K	KA	KK	M	MM	N	X	Y	FD	FH	FL	FM
ø20	56	48	24	5.5	M5x0.8	36	47	M6 depth 11	M8 depth 15	10	12	25.5	8	4.5	6.5	38	48	60
ø25	57	49	26	6	M5x0.8	40	51	M6 depth 11	M8 depth 15	10	12	28	8	4.5	6.5	42	52	65

Code	With switch												
Bore size (mm)	MT	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*		
		HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP
ø20	9	7	26	0	6	27	0	6	27	5	6	27	11
ø25	9	6	25	0	5	26	0	5	26	5	5	26	11

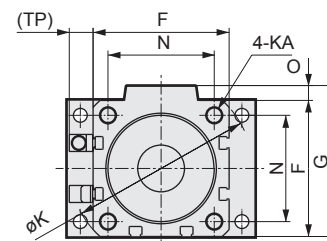
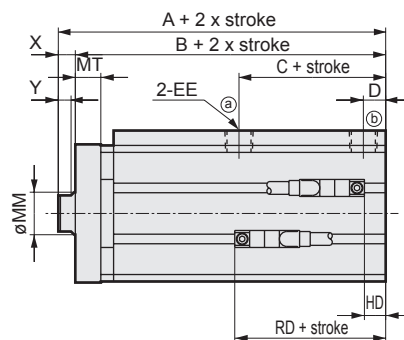
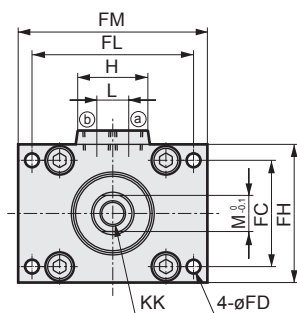
Dimensions (ø32, ø40, ø50, ø63)

● Rod side flange (FA)

ø32/ø40



ø50/ø63



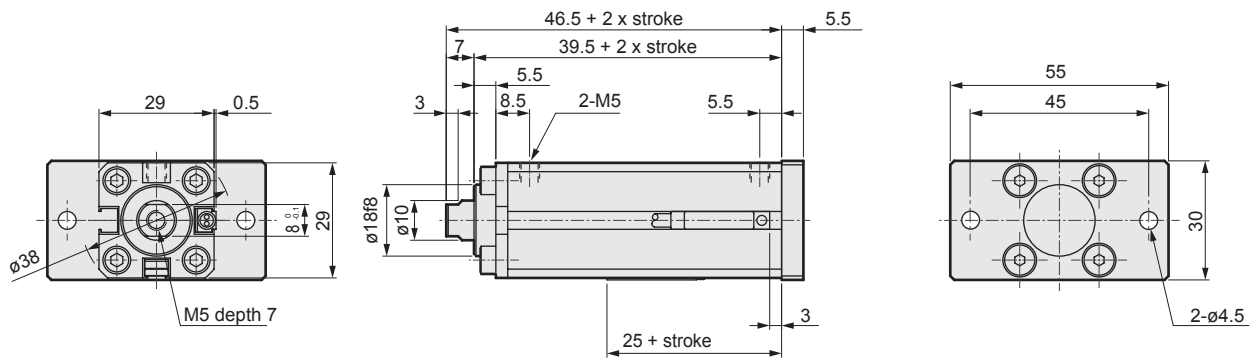
Code	Rod side flange (FA) basic dimensions																	
Bore size (mm)	A	B	C	D	EE	F	G	H	K	KA	KK	L	M	MM	N	O	X	Y
ø32	69	61	27	8	Rc1/8	45	49.5	24	60	M6 depth 11	M10 depth 15	10	14	16	34	4.5	8	6
ø40	70	62	29	8.5	Rc1/8	52	57	24	69	M6 depth 11	M10 depth 15	10	14	16	40	5	8	6
ø50	74	66	29	10.5	Rc1/4	64	71	33	86	M8 depth 13	M12 depth 15	15	17	20	50	7	8	6
ø63	85	75	38	11	Rc1/4	77	84	33	103	M10 depth 25	M16 depth 21	15	22	25	60	7	10	8
Code	With switch																	
Bore size (mm)	FD	FC	FH	FL	FM	MT	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*		
							HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP
ø32	5.5	34	48	56	65	9	9	28	0	8	29	0	8	29	5	8	29	11
ø40	5.5	40	55	62	75	9	10	29	0	9	30	0	9	30	5	9	30	11
ø50	6.5	50	66	76	89	12	11	30	0	10	31	0	10	31	5	10	31	11
ø63	9	60	82	92	108	12	19	37	0	18	38	0	18	38	5	18	38	11

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

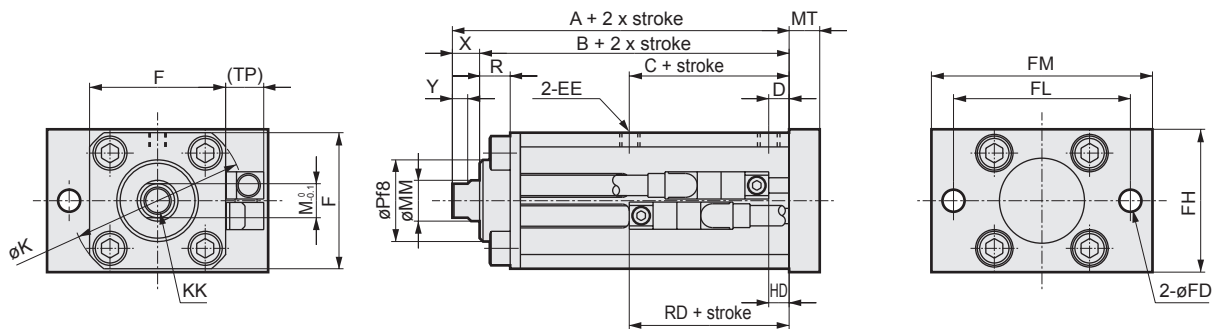
Dimensions (ø16, ø20, ø25)

● Head side flange (FB)

ø16



ø20/ø25



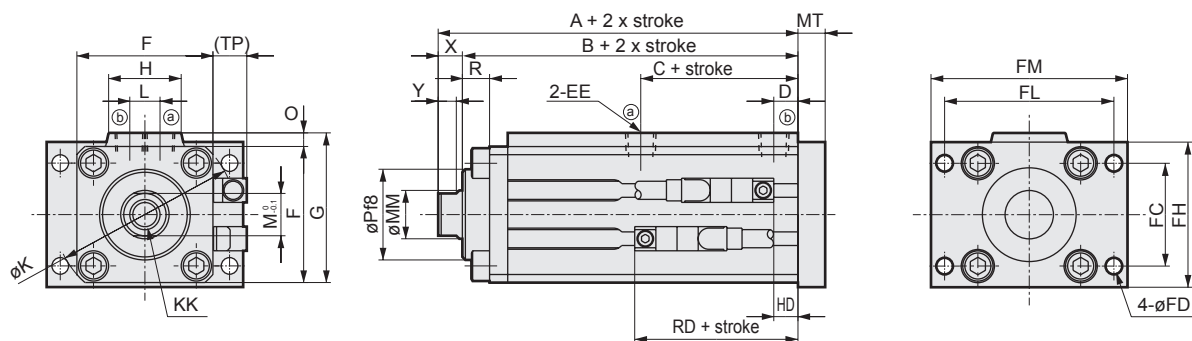
Code	Head side flange (FB) basic dimensions																		
Bore size (mm)	A	B	C	D	EE	F	K	KK	M	MM	P	R	X	Y	FD	FH	FL	FM	MT
ø20	56	48	24	5.5	M5x0.8	36	47	M8 depth 15	10	12	24	9	8	4.5	6.5	38	48	60	9
ø25	57	49	26	6	M5x0.8	40	51	M8 depth 15	10	12	24	9	8	4.5	6.5	42	52	65	9

Code	With switch											
Bore size (mm)	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*		
	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP
ø20	7	26	0	6	27	0	6	27	5	6	27	11
ø25	6	25	0	5	26	0	5	26	5	5	26	11

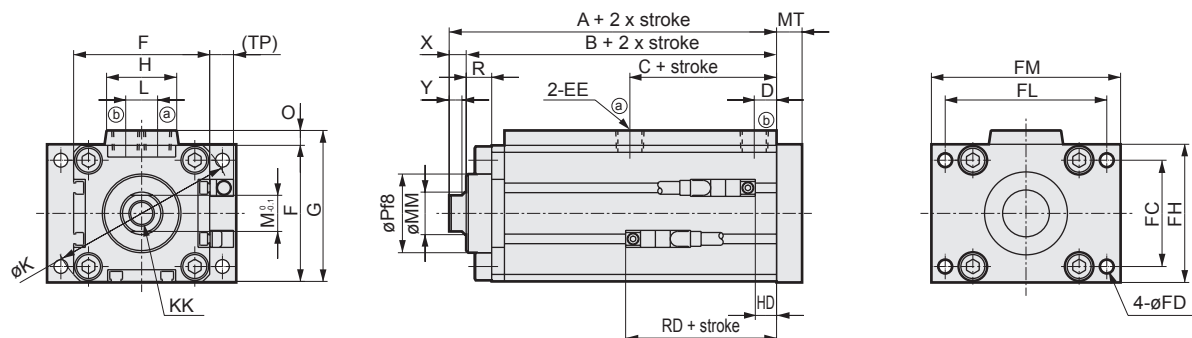
Dimensions (ø32, ø40, ø50, ø63)

● Head side flange (FB)

ø32/ø40



ø50/ø63



Code	Head side flange (FB) basic dimensions																		
Bore size (mm)	A	B	C	D	EE	F	G	H	K	KK	L	M	MM	O	P	R	X	Y	FD
ø32	69	61	27	8	Rc1/8	45	49.5	24	60	M10 depth 15	10	14	16	4.5	30	9	8	6	5.5
ø40	70	62	29	8.5	Rc1/8	52	57	24	69	M10 depth 15	10	14	16	5	35	9	8	6	5.5
ø50	74	66	29	10.5	Rc1/4	64	71	33	86	M12 depth 15	15	17	20	7	37	12	8	6	6.5
ø63	85	75	38	11	Rc1/4	77	84	33	103	M16 depth 21	15	22	25	7	48	12	10	8	9

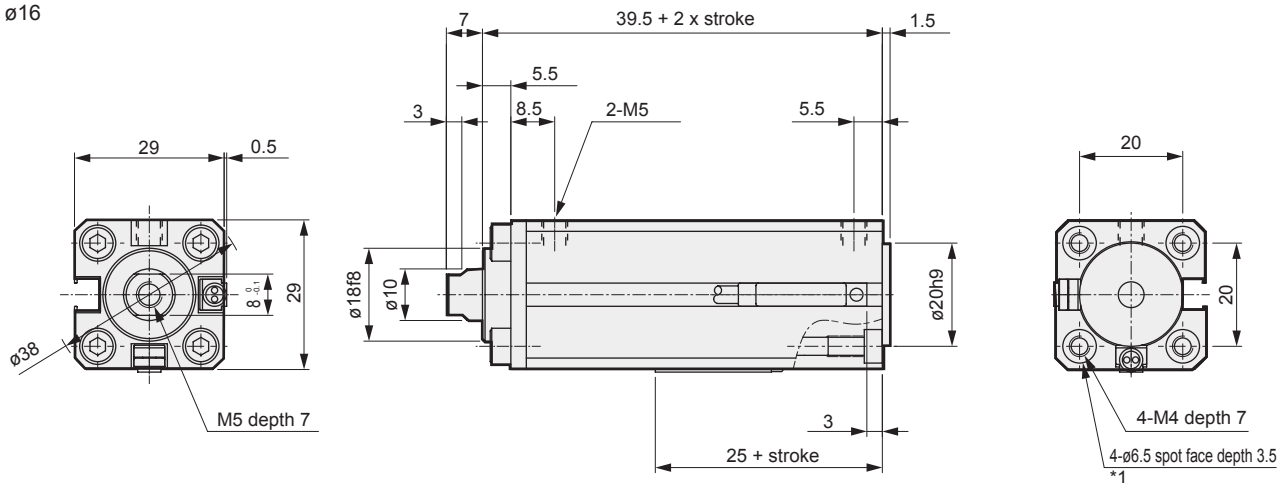
Code	With switch															
Bore size (mm)	FC	FH	FL	FM	MT	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*	
						HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD
ø32	34	48	56	65	9	9	28	0	8	29	0	8	29	5	8	29
ø40	40	55	62	75	9	10	29	0	9	30	0	9	30	5	9	30
ø50	50	66	76	89	12	11	30	0	10	31	0	10	31	5	10	31
ø63	60	82	92	108	12	19	37	0	18	38	0	18	38	5	18	38

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

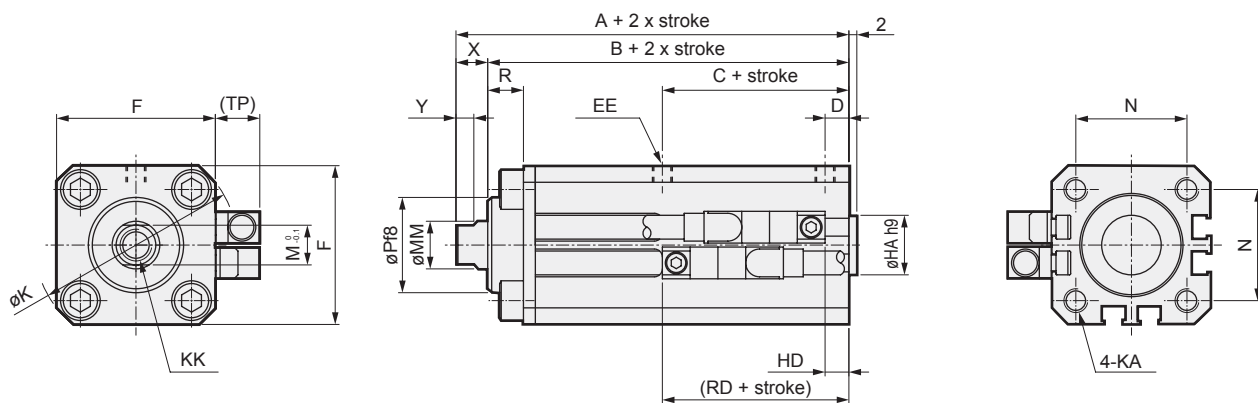
Dimensions (ø16, ø20, ø25)

● With spigot at head side (HI)

ø16



ø20/ø25



Code	Basic dimensions with spigot at head side (HI)																
Bore size (mm)	A	B	C	D	EE	F	HA	K	KA	KK	M	MM	N	P	R	X	Y
ø20	56	48	24	5.5	M5x0.8	36	13	47	M6 depth 11	M8 depth 15	10	12	25.5	24	9	8	4.5
ø25	57	49	26	6	M5x0.8	40	15	51	M6 depth 11	M8 depth 15	10	12	28	24	9	8	4.5

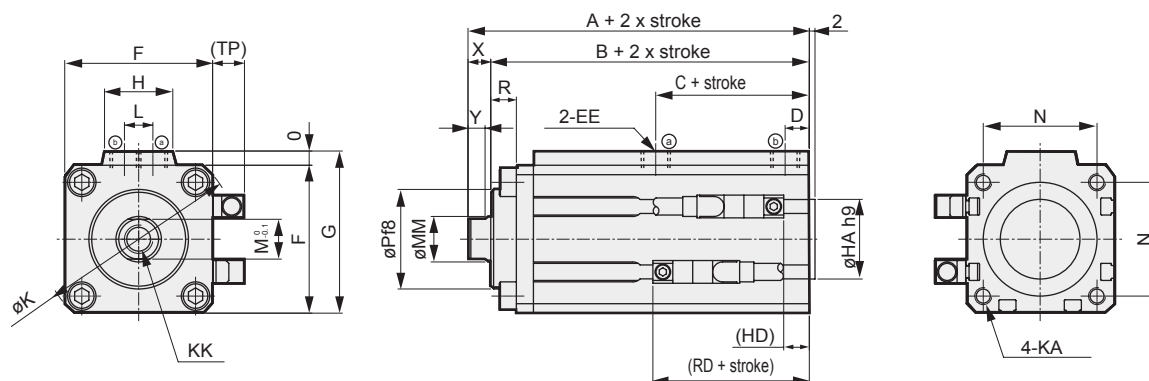
Code	With switch											
Bore size (mm)	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*		
	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP
ø20	7	26	0	6	27	0	6	27	5	6	27	11
ø25	6	25	0	5	26	0	5	26	5	5	26	11

*1: Cannot be mounted with a through bolt.

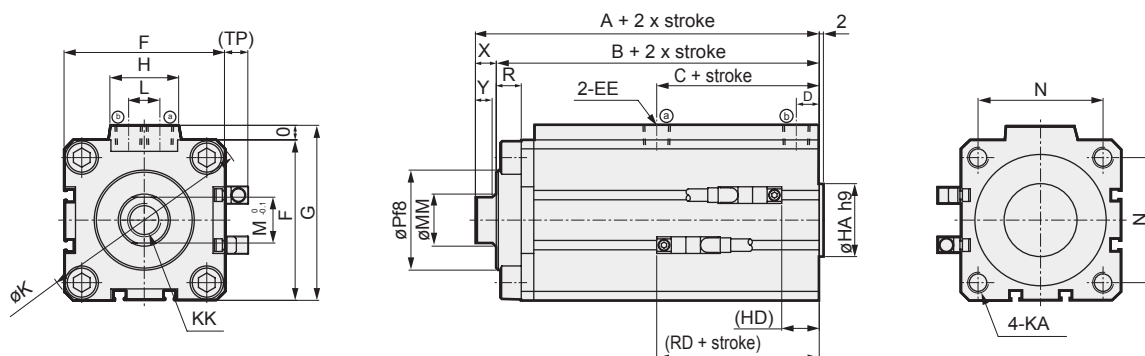
Dimensions (ø32, ø40, ø50, ø63)

● With spigot at head side (HI)

ø32, ø40



ø50, ø63



Code	Basic dimensions with spigot at head side (HI)																					
Bore size (mm)	A	B	C	D	EE	F	G	H	HA	K	KA	KK	L	M	MM	N	O	P	R	X	Y	
ø32	69	61	27	8	Rc1/8	45	49.5	24	21	60	M6 depth 11	M10 depth 15	10	14	16	34	4.5	30	9	8	6	
ø40	70	62	29	8.5	Rc1/8	52	57	24	28	69	M6 depth 11	M10 depth 15	10	14	16	40	5	35	9	8	6	
ø50	74	66	29	10.5	Rc1/4	64	71	33	35	86	M8 depth 13	M12 depth 15	15	17	20	50	7	37	12	8	6	
ø63	85	75	38	11	Rc1/4	77	84	33	35	103	M10 depth 25	M16 depth 21	15	22	25	60	7	48	12	10	8	
Code	With switch																					
Bore size (mm)	T2/3H / T2/3V			T0/5H, T0/5V			T*YH/T*YV			T2YD*												
	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP										
ø32	9	28	0	8	29	0	8	29	5	8	29	11										
ø40	10	29	0	9	30	0	9	30	5	9	30	11										
ø50	11	30	0	10	31	0	10	31	5	10	31	11										
ø63	19	37	0	18	38	0	18	38	6	18	38	11										

*1: Cannot be mounted with a through bolt.

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

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



Rotary clamp cylinder Double acting/anti-spatter adherence

RCC2-G4 Series

● Bore size: ø20/ø25/ø32/ø40/ø50/ø63

JIS symbol



Specifications

* Made-to-order product.

Item			RCC2-G4					
Bore size		mm	ø20	ø25	ø32	ø40	ø50	ø63
Actuation			Double acting					
Max. working pressure		MPa	1 (≈150 psi, 10 bar)					
Min. working pressure		MPa	0.2 (≈29 psi, 2 bar)					
Proof pressure		MPa	1.6 (≈230 psi, 16 bar)					
Ambient temperature		°C	-10 (14°F) to 60 (140°F) (no freezing)					
Port size			M5		Rc1/8		Rc1/4	
Working piston speed		mm/s	50 to 200					
Cushion			With rubber cushion					
Lubrication			Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)					
Rotating angle			90°±10°					
Rotating direction			Right/Left					
Non-rotating accuracy (clamping): Default value			±1°		±0.9°		±0.7°	
Pressurized area	mm ²	Pulling side	201	377	603	1055	1649	2626
		Pushing side	314	490	804	1256	1963	3117

Stroke

Bore size (mm)	Stroke (mm)	Rotor stroke (mm)	Clamp section stroke (mm)
ø20	21, 31	11	10, 20
ø25			
ø32	25, 35	15	10, 20
ø40			
ø50	40, 70	20	20, 50
ø63			

Switch specifications

● 1-color/2-color LED/for AC magnetic field proof

Item	Proximity 2-wire			Proximity 3-wire				Reed 2-wire				Proximity 2-wire
	T2H/T2V	T2YH/ T2YV	T2WH/ T2WV	T3H/T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V		T5H/T5V		T2YD
Applications	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay		For programmable controller, relay, IC circuit (no indicator lamp), serial connection		For programmable controller
Output method	-			NPN output	PNP output	NPN output	NPN output	-				
Pwr. supp. V.	-			10 to 28 VDC				-				
Load voltage	10 to 30 VDC		24 VDC ±10%	30 VDC or less				12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	24 VDC ±10%
Load current	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 20 mA
Indicator lamp	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 LED		Red/green LED (Lit when ON)
Leakage current	1 mA or less			10 μA or less				0 mA				1 mA or less
Weight g	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:61
	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49					3 m:166
	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80					5 m:272

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

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

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

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

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa								
		0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	62.8	94.2	1.26x10 ²	1.57x10 ²	1.89x10 ²	2.20x10 ²	2.51x10 ²	2.83x10 ²	3.14x10 ²
	Pull	40.2	60.3	80.4	1.01x10 ²	1.21x10 ²	1.41x10 ²	1.61x10 ²	1.81x10 ²	2.01x10 ²
ø25	Push	98.2	1.47x10 ²	1.96x10 ²	2.45x10 ²	2.95x10 ²	3.44x10 ²	3.93x10 ²	4.42x10 ²	4.91x10 ²
	Pull	75.6	1.13x10 ²	1.51x10 ²	1.89x10 ²	2.27x10 ²	2.64x10 ²	3.02x10 ²	3.40x10 ²	3.78x10 ²
ø32	Push	1.61x10 ²	2.41x10 ²	3.22x10 ²	4.02x10 ²	4.83x10 ²	5.63x10 ²	6.43x10 ²	7.24x10 ²	8.04x10 ²
	Pull	1.21x10 ²	1.81x10 ²	2.41x10 ²	3.02x10 ²	3.62x10 ²	4.22x10 ²	4.83x10 ²	5.43x10 ²	6.03x10 ²
ø40	Push	2.51x10 ²	3.77x10 ²	5.03x10 ²	6.28x10 ²	7.54x10 ²	8.80x10 ²	1.01x10 ³	1.13x10 ³	1.26x10 ³
	Pull	2.11x10 ²	3.17x10 ²	4.22x10 ²	5.28x10 ²	6.33x10 ²	7.39x10 ²	8.45x10 ²	9.50x10 ²	1.06x10 ³
ø50	Push	3.93x10 ²	5.89x10 ²	7.85x10 ²	9.82x10 ²	1.18x10 ³	1.37x10 ³	1.57x10 ³	1.77x10 ³	1.96x10 ³
	Pull	3.30x10 ²	4.95x10 ²	6.60x10 ²	8.25x10 ²	9.90x10 ²	1.15x10 ³	1.32x10 ³	1.48x10 ³	1.65x10 ³
ø63	Push	6.23x10 ²	9.35x10 ²	1.25x10 ³	1.56x10 ³	1.87x10 ³	2.18x10 ³	2.49x10 ³	2.81x10 ³	3.12x10 ³
	Pull	5.25x10 ²	7.88x10 ²	1.05x10 ³	1.31x10 ³	1.58x10 ³	1.84x10 ³	2.10x10 ³	2.36x10 ³	2.63x10 ³

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

RCC2-G4 Series

How to order

Without switch (built-in magnet for switch)

RCC2-G4-00-20-21-R

With switch (built-in magnet for switch)

RCC2-G4-00-20-21-R-T0H-R

Model No.

A Mounting

B Bore size

C Stroke

D Rotating direction

E Switch model No.
*1

⚠ Precautions for model No. selection

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

*2: When the type with the switch is selected, the product could interfere with the fixing screws depending on the switch mounting surface and switch.

[Example of model No.]

RCC2-G4-00-20-21-R-T2YD3-D

Model: Rotary clamp cylinder Double acting/
anti-spatter adherence

- A** Mounting : Basic
- B** Bore size : $\varnothing 20$
- C** Stroke : 21 mm
- D** Rotating direction : Clamp (Pull) looking from rod side, rotated 90° in CW direction
- E** Switch model No. : Strong magnetic field proof proximity T2YD switch, Lead wire length 3 m
- F** Switch quantity : 2

How to order switch

SW - T0H

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

F Switch quantity

Code	Description
A Mounting	
00	Basic
FA	Rod side flange
FB	Head side flange *2
HI	With spigot at head side

B Bore size (mm)	
20	$\varnothing 20$
25	$\varnothing 25$
32	$\varnothing 32$
40	$\varnothing 40$
50	$\varnothing 50$
63	$\varnothing 63$

C Stroke (mm)			
Stroke	Bore size	Rotor	Clamp
21	$\varnothing 20/\varnothing 25$	11	10
25	$\varnothing 32/\varnothing 40$	15	10
31	$\varnothing 20/\varnothing 25$	11	20
35	$\varnothing 32/\varnothing 40$	15	20
40	$\varnothing 50/\varnothing 63$	20	20
70	$\varnothing 50/\varnothing 63$	20	50

D Rotating direction	
R	Clamp (Pull) looking from rod side: Rotated 90° in CW direction
L	Clamp (Pull) looking from rod side: Rotated 90° in CCW direction

E Switch model No.						
Axial lead wire	Axial lead wire	Contact	Voltage		Indicator	Lead wire
			AC	DC		
T0H*	T0V*	Reed	●	●	1-color LED	2-wire
T5H*	T5V*		●	●	Without LED	
T2H*	T2V*	Proximity		●	1-color LED	2-wire
T3H*	T3V*			●		3-wire
T3PH*	T3PV*			●	1-color LED	3-wire
T2WH*	T2WV*			●	2-color LED	2-wire
T2YH*	T2YV*			●		2-wire
T3WH*	T3WV*			●		3-wire
T3YH*	T3YV*			●		3-wire
T2YD*	-				●	2-color LED for AC magn field

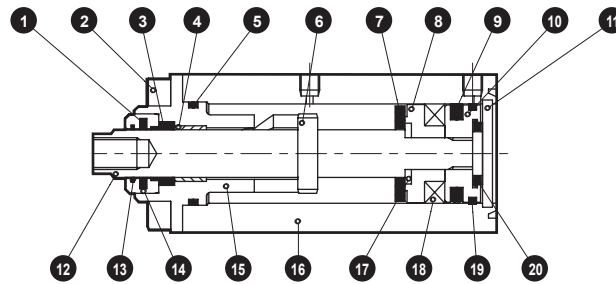
* Lead wire length (m)

Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

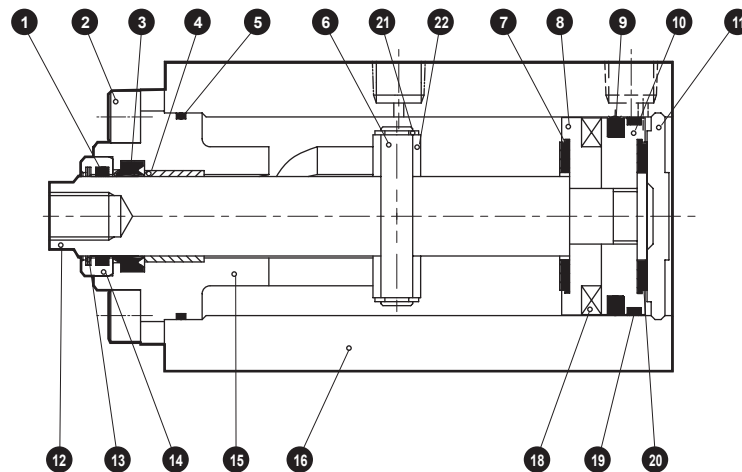
F Switch quantity	
R	1 on rod side
H	1 on head side
D	2

Internal structure and parts list

● RCC2-G4-20/25



● RCC2-G4-32/40/50/63



No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Lube keeping structure	Special rubber		12	Piston rod	Steel	
2	Hexagon socket head cap screw	Stainless steel		13	Coil scraper	Copper alloy	
3	Rod packing	Nitrile rubber		14	Holder	Aluminum alloy	
4	Bush	Copper-based		15	Rod cover	Steel	
5	Cylinder gasket	Nitrile rubber		16	Cylinder body	Aluminum alloy	
6	Pin	Steel		17	Spacer washer	Stainless steel	
7	Cushion rubber (R)	Urethane rubber		18	Magnet	Plastic magnet	
8	Spacer	ø20/ø25: Special resin ø32 to ø63: Aluminum alloy		19	Wear ring	Acetal resin	
9	Piston packing	Nitrile rubber		20	Cushion rubber (H)	Urethane rubber	
10	Piston	Aluminum alloy		21	E type snap ring	Steel	
11	Cover	ø20/ø25: Stainless steel ø32 to ø63: Aluminum Alloy		22	Roller	Steel	

Repair parts list

Bore size (mm)	Kit No.	Repair parts No.
ø20	RCC2-20K	
ø25	RCC2-25K	
ø32	RCC2-32K	3 5 7 9
ø40	RCC2-40K	13 19 20
ø50	RCC2-50K	
ø63	RCC2-63K	

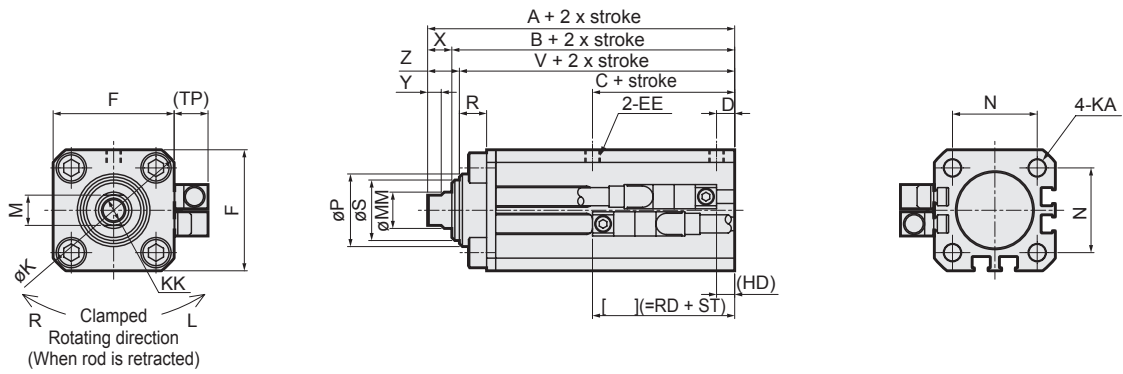
Note: 7 Cushion rubber (R) cannot be replaced for ø20 and ø25.
Note: Contact CKD separately if 1 Lube keeping structure is required.

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

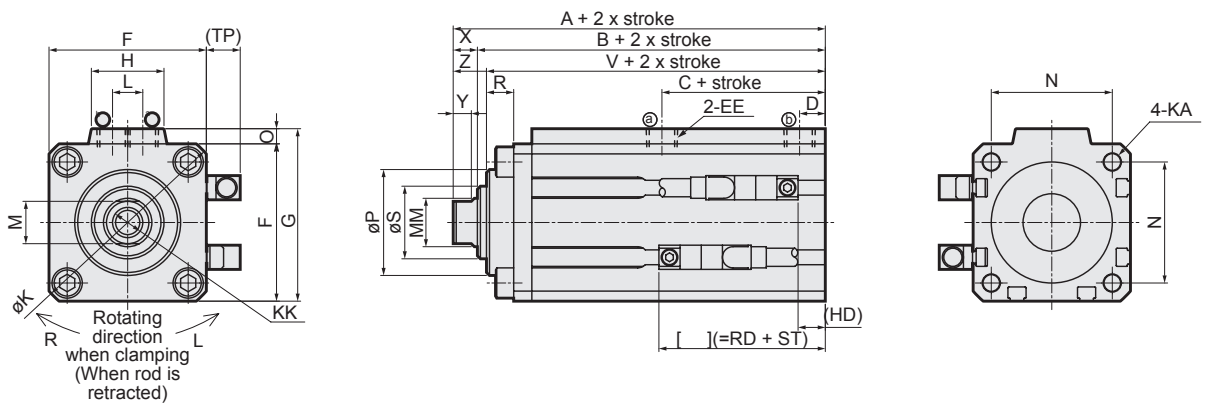
RCC2-G4 Series

Dimensions

● $\varnothing 20, \varnothing 25$



● $\varnothing 32$ to $\varnothing 63$



Note) The $\varnothing 50$ and $\varnothing 63$ switch grooves differ from the dimensions above. Refer to RCC2 Series double acting/single rod.

Code	A	B	C	D	EE	F	G	H	K	KA	KK	L	M	MM
Bore size														
ø20	58.5	50.5	24	5.5	M5x0.8	36	-	-	47	M6 depth 11	M8 depth 15	-	10	12
ø25	59.5	51.5	26	6	M5x0.8	40	-	-	51	M6 depth 11	M8 depth 15	-	10	12
ø32	72	64	27	8	Rc1/8	45	49.5	24	60	M6 depth 11	M10 depth 15	10	14	16
ø40	73	65	29	8.5	Rc1/8	52	57	24	69	M6 depth 11	M10 depth 15	10	14	16
ø50	77	69	29	10.5	Rc1/4	64	71	33	86	M8 depth 13	M12 depth 15	15	17	20
ø63	88	78	38	11	Rc1/4	77	84	33	103	M10 depth 25	M16 depth 21	15	22	25

Code	N	O	P	R	X	Y	V	Z	S
Bore size									
ø20	25.5	-	24	9	8	4.5	48	10.5	20
ø25	28	-	24	9	8	4.5	49	10.5	20
ø32	34	4.5	30	9	8	6	61	11	24
ø40	40	5	35	9	8	6	62	11	24
ø50	50	7	37	12	8	6	66	11	30
ø63	60	7	48	12	10	8	75	13	36

Switch code	T2/3H, T2/3V			T0/5H, T0/5V			T*YH, T*YV			T2YD*		
Bore size	HD	RD	TP	HD	RD	TP	HD	RD	TP	HD	RD	TP
ø20	7	26	0	6	27	0	6	27	5	6	27	11
ø25	6	25	0	5	26	0	5	26	5	5	26	11
ø32	9	28	0	8	29	0	8	29	5	8	29	11
ø40	10	29	0	9	30	0	9	30	5	9	30	11
ø50	11	30	0	10	31	0	10	31	5	10	31	11
ø63	19	37	0	18	38	0	18	38	5	18	38	11

Note: Installation method of the mountings are the same as those of RCC2 (double acting). Refer to pages 1100 to 1107.