

# SC / SU Series Standard Cylinder



- Cylinder
- Calculation
- SI
- SI A.
- SIB
- SQ
- DNT
- SC/SU
- SCT
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- TCQ2
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- JSQB
- Sensor



## Ordering Code

SC	D	50	x	50	10	S	LB
Series	Series Code	Bore	Stroke	Adjustable Stroke	Magnet	Mountings	
SC: Tie rod type 	Blank: Standard double acting 	32 40 50		10: 10mm 20: 20mm 30: 30mm	S: With magnet Blank: Without magnet	Blank: Basic mounting LB: Foot 	
SU: Profile type 	D: Double-shaft double acting  J: Double-shaft with adjustable stroke type 	63 80 100 125		50: 50mm 75: 75mm 100: 100mm		FA: Front flange FB: Back flange 	
						CA: Back hinge 	
						CB: Back hinge 	
						TC-M: Center trunnion 	

\* Sensor model JEL-21, please refer to P173 for the specific ordering code.

## Specification

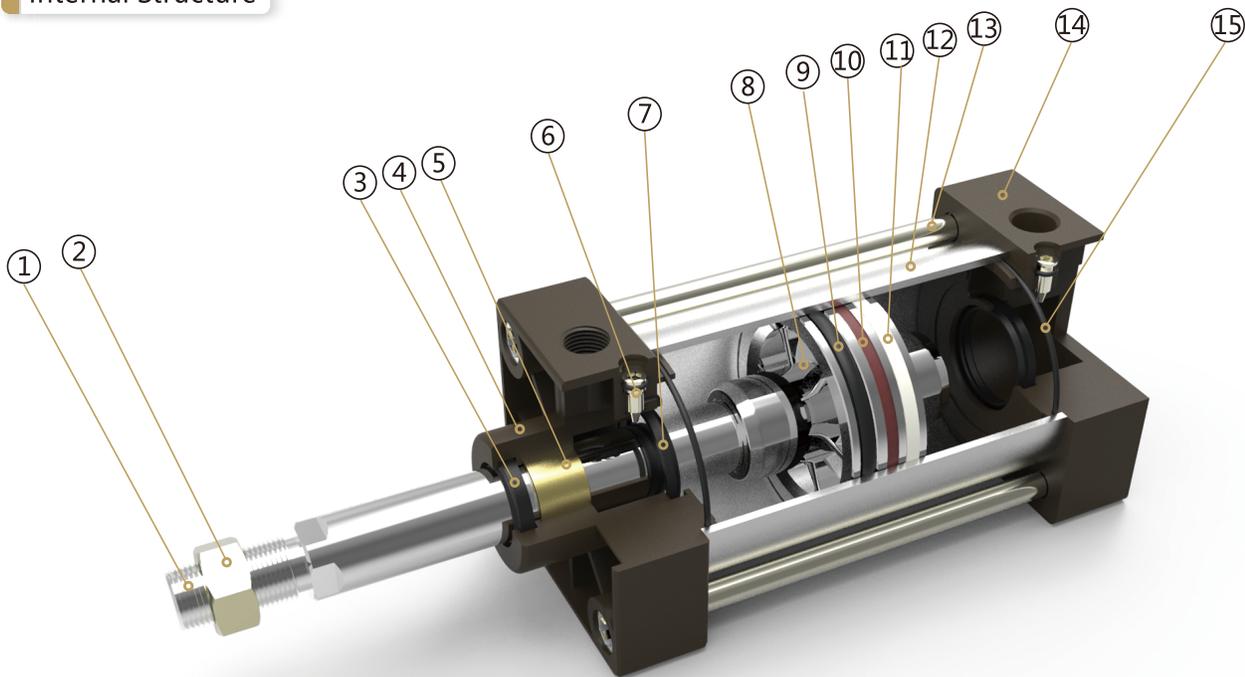
Bore (mm)	32	40	50	63	80	100	125
Operation	Double Acting						
Working Medium	Air						
**Mountings	Basic FA FB CA CB LB TC TC-M						
Operating Pressure Range	1 ~ 9.0Kgf/cm <sup>2</sup>						
Proof Pressure	13.5Kgf/cm <sup>2</sup>						
Operating Temperature Range	-20 ~ 80°C						
Operating Speed Range	50 ~ 800mm/s						
Cushion	Adjustable Cushion						
Adjustable Cushion Stroke	20mm			26mm			
Port Size	G1/8"	G1/4"		G3/8"		G1/2"	

\* SCD, SCJ mountings: FA, FB, LB, TC and TC-M type.

### Stroke

Bore	Standard Stroke															Max. Stroke	Allowable Stroke						
32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	1000	2000					
40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	1200	2000		
50	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1200	2000
63	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
80	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
100	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
125	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000

### Internal Structure



### Parts

Number	Name	Number	Name
1	Piston rod	9	Piston seal
2	Hexagon nut	10	Magnet
3	Shaft seal	11	Anti-friction ring
4	Front cover	12	Barrel
5	Copper tube	13	Pull rod
6	Cushion adjust screw	14	Back cover
7	Cushion seal	15	O ring
8	Piston		

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TCQ2  
ADN  
TADN  
PPRM

JHL2  
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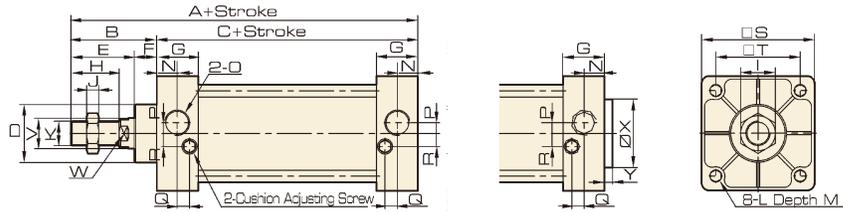
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JXH  
JXQ

JXS  
TN  
JGP  
JSQB

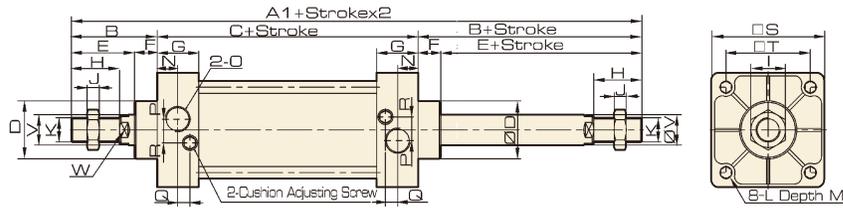
Sensor

## Overall Dimension

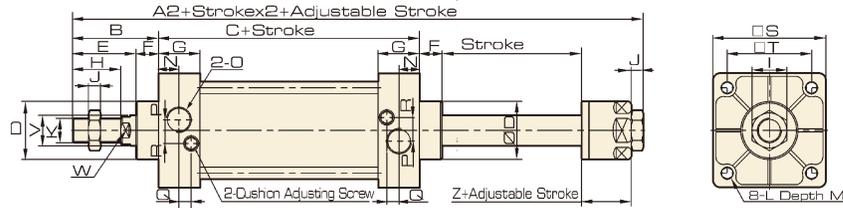
### SC



### SCD



### SCJ



## Dimension

Bore/ Symbol	A	A1	A2	B	C	D	E	F	G	H	I	J	K	L
32	140	187	182	47	93	28	32	15	27.5	22	17	6	M10×1.25	M6
40	141	191	185	48	93	32	34	15	27.5	24	17	7	M12×1.25	M6
50	150	207	196	57	93	38	42	15	27.5	32	23	8	M16×1.5	M6
63	153	210	199	57	96	38	42	15	27.5	32	23	8	M16×1.5	M8
80	183	258	243	75	108	47	54	21	33	40	26	10	M20×1.5	M10
100	189	264	249	75	114	47	54	21	33	40	26	10	M20×1.5	M10
125	226	330	313	104	122	55	70	34	33	54	40	10	M27×2	M12

Bore/ Symbol	M	N	O	P	Q	R	S	T	V	W	Z
32	9.5	13.5	G1/8	3.5	7.5	7	45	33	12	10	21
40	9.5	1.5	G1/4	6	8.2	9	50	37	16	14	21
50	9.5	13.5	G1/4	8.5	8.2	9	62	47	20	17	23
63	9.5	13.5	G3/8	7	8.2	8.5	75	56	20	17	23
80	11.5	16.5	G3/8	10	9.5	14	94	70	25	22	25.5
100	11.5	16.5	G1/2	11	9.5	14	112	84	25	22	25.5
125	15.5	16.5	G1/2	10	10	11	140	110	32	27	30

# SC/SU Series Standard Cylinder & SQ Series Large Size Cylinder Accessory

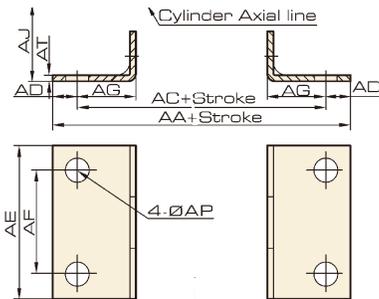


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## LB Foot

### Overall Dimension

#### LB

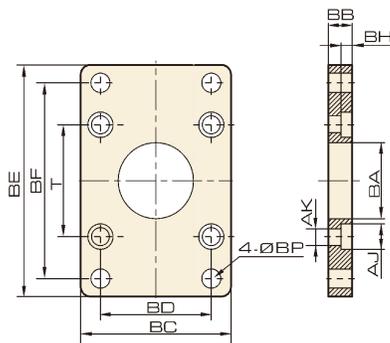


### Dimension

Bore/Symbol	32	40	50	63	80	100	125	160	200
AA	153	169	173	184	200	210	249	328	380
AC	134	140	149	158	168	174	249	288	320
AD	9.5	14.5	12	12	16	18	18	20	28
AE	50	57	68	80	97	112	140	180	220
AF	33	36	47	56	70	84	90	115	135
AG	20.5	23.5	28	31	30	30	45	60	70
AJ	28	30	36.5	41	49	57	90	115	135
AP	9	12	12	12	14	14	16	18	22
AT	3	3	3	3	4	4	7	7	9

## FA / FB Flange

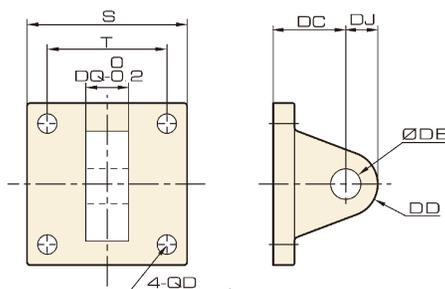
#### FA, FB



Bore/Symbol	32	40	50	63	80	100	125	160	200
BA	28.3	32.3	38.3	38.3	47.3	47.3	62	72	82
BB	10	10	10	12	16	16	20	20	25
BC	47	52	65	76	95	115	141	180	220
BD	33	36	47	56	70	84	90	115	135
BE	72	84	104	116	143	162	218	278	322
BF	58	70	86	98	119	138	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	13	15	18
AJ	10.5	10.5	10.5	13.5	16.6	16.6	19	25	25
AK	6.5	6.5	6.5	8.5	10.5	10.5	12.5	18	18
BP	7	7	9	9	12	12	16	18	22
T	33	37	47	56	70	84	110	140	175

## CA Clevis

#### CA



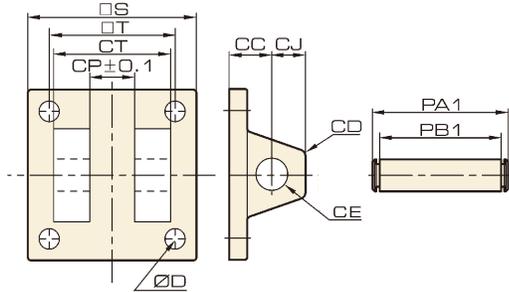
Bore/Symbol	32	40	50	63	80	100	125	160	200
S	45	50	62	75	94	112	140	177	217
T	33	37	47	56	70	84	110	140	175
DC	34	34	34	34	48	48	50	55	60
DD	14	14	15	15	20	20	25	30	30
DE	12	14	14	14	20	20	25	30	30
DJ	14	14	15	15	20	20	25	28	25
DQ	16	20	20	20	32	32	70	90	90
D	6.5	6.5	6.5	8.5	10.5	10.5	12.5	18	18

## CB Double Earring

Overall Dimension

Dimension

CB



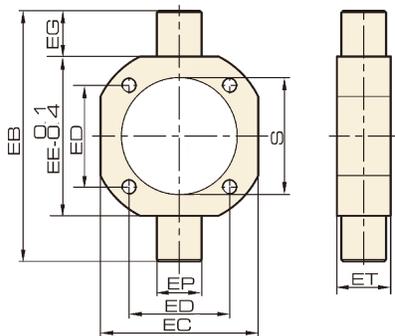
Bore/Symbol	32	40	50	63	80	100	125	160	200
CC	19	19	19	19	32	32	50	55	60
CD	5	5	3	3	8	8	25	30	35
CE	12	14	14	14	20	20	25	30	30
CJ	13	13	15	15	21	21	25	25	33
CP	16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
CT	32	44	52	52	64	64	120	162	75
PA1	41	53	61	61	75	75	136	176	188
PB1	34	46	54	54	66	66	124	162	177
S	48	50	62	75	94	112	140	176	217
T	33	37	47	56	70	84	110	140	175
D	6.5	6.5	6.5	8.5	10.5	10.5	12.5	18	18

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## TC Center Trunnion

Overall Dimension

TC



Bore/Symbol	32	40	50	63	80	100	125	160	200
EB	87	113	126	138	164	182	210	276	320
EC	53	63	76	88	114	132	150	94	244
ED	33	37	47	56	70	84	110	140	175
EE	55	63	76	88	114	132	160	200	245
EG	16	25	25	25	25	25	25	36	36
EP	16	25	25	25	25	25	30	32	32
ET	30	30	30	30	35	40	36	40	46
S	37.5	45.5	55.5	68.5	87.5	107.5	135	72	210

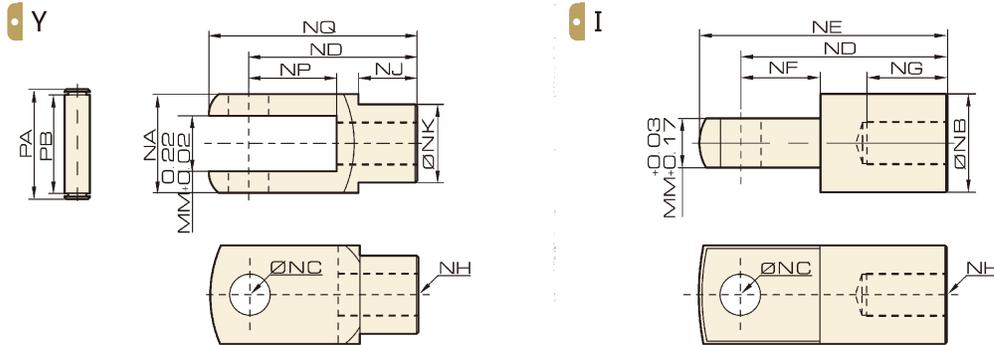
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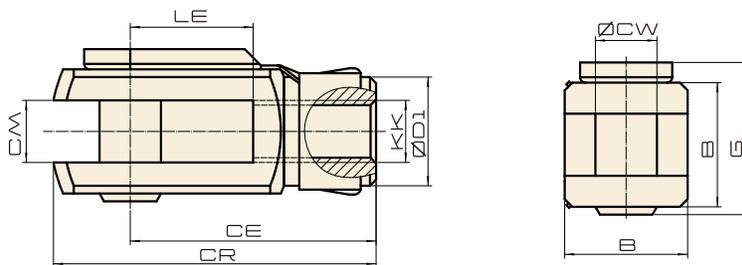
## Y/I Knuckle

### Overall Dimension



### Dimension

Model	NA	NB	NC	ND	NE	NF	NG	NH	NJ	NK	MM	NP	NQ	PA	PB
F-M10125I/Y	19	20	10	40	52	15	20	M10×1.25	15.5	16	10	20	52	30	21
F-M12125I/Y	24	24	12	48	62	24	20	M12×1.25	20.5	20	12	24	62	36	27
F-M16150I/Y	32	32	16	64	89	32	23	M16×1.5	26	30	16	32	83	44	34
F-M16150I/Y	32	32	16	64	89	32	23	M16×1.5	26	30	16	32	83	44	34
F-M20150I/Y	40	40	20	80	112	40	30	M20×1.5	30	38	20	39.5	105	52	42
F-M20150I/Y	40	40	20	80	112	40	30	M20×1.5	30	38	20	39.5	105	52	42
F-M27200I/Y	62	49	20	99	122	54	50	M27×2	28	38	30	43	120	75	66
F-M36200I/Y	70	61	30	125	155	43	70	M36×2	40	53	40	43	153	96	82
F-M36200I/Y	70	61	30	125	155	43	70	M36×2	40	53	40	43	153	96	82



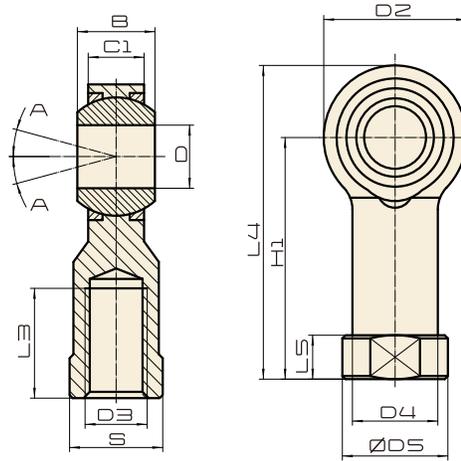
## CK Type Y Knuckle

### Dimension

Model	KK	B	CE	CM	CR	CW	D1	G	LE
F-M04070CK	M4X0.7	8	16	4	21	4	8	11	8
F-M05080CK	M5X0.8	10	20	5	26	5	9	13	10
F-M06100CK	M6×1	12	24	6	31	6	10	16	12
F-M08125CK	M8×1.25	16	32	8	42	8	14	20	16
F-M10125CK	M10×1.25	20	40	10	52	10	18	25.5	20
F-M12125CK	M12×1.25	24	48	12	62	12	20	29.5	24
F-M14150CK	M14×1.5	27	56	14	72	14	24	29.5	28
F-M16150CK	M16×1.5	32	64	16	83	16	26	38.5	32
F-M18150CK	M18×1.5	36	72	18	94	18	30	42	36
F-M20150CK	M20×1.5	40	80	20	105	20	34	47	40
F-M27200CK	M27×2	55	112	30	148	30	48	63	56

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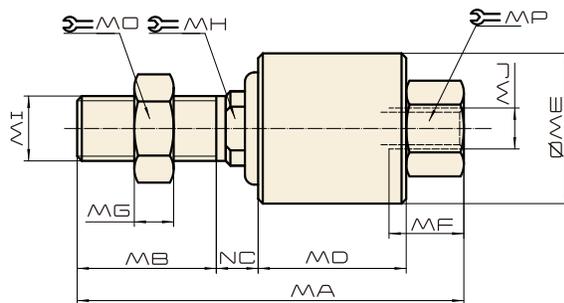
Overall Dimension



PHSA Universal  
Piston Rod Eye

Dimension

Model	D3	D	D2	D5	S	B	L5	C1	H1	L3	D4	L4	A°
F-M05070PHSA	M5X0.8	5	18	11	9	8	4	6	27	10	8.5	36	13
F-M06100PHSA	M6X1	6	20	13	11	9	5	6.75	30	12	10	40	13
F-M08125PHSA	M8X1.25	8	24	16	14	12	5	9	36	16	12.5	48	14
F-M10125PHSA	M10X1.25	10	28	19	17	14	6.5	10.5	43	20	15	57	13
F-M12125PHSA	M12X1.25	12	32	22	19	16	6.5	12	50	22	17.5	66	13
F-M14125PHSA	M14X1.5	14	36	25	22	19	8	13.5	57	25	20	75	16
F-M16125PHSA	M16X1.5	16	40	27	24	21	8	15	64	28	22	84	15
F-M18150PHSA	M18X1.5	18	44	31	27	23	10	16.5	71	32	25	93	15
F-M20150PHSA	M20X1.5	20	50	34	30	25	10	18	77	33	27.5	102	14
F-M27200PHSA	M27X2	30	70	50	41	37	15	25	110	51	40	145	17



FDJT Piston  
Floating Joint

Dimension

Model	MI	MJ	MA	MB	MD	ME	MF	MH	MP	MC	MO	MG
F-M06100FDJT	M6X1	M6X1	35	13	12	16	8	6	10	5	10	5
F-M08125FDJT	M8X1.25	M8X1.25	53	20	18	24	12	8	13	6	14	6
F-M10125FDJT	M10X1.25	M10X1.25	58	22	21	26	13	10	17	7	17	6
F-M12125FDJT	M12X1.25	M12X1.25	64	22	24	32	15	12	19	8	19	7
F-M16150FDJT	M16X1.5	M16X1.5	90	27	36	45	23	17	27	12	24	8
F-M20150FDJT	M20X1.5	M20X1.5	102	32	40	53	28	22	32	13	30	10
F-M27200FDJT	M27X2	M27X2	120	37	48	60	35	26	41	15	36	12