

SC / SU Series

Standard Cylinder



The way to automation

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ



Ordering Code

SC	D	50	x	50	25	S	LB	MT
Series	Series Code	Bore	Stroke	Adjustable Stroke	Magnet	Mountings	Sensor	
SC: Tie rod type 	Blank: Standard double acting 	32 40 50			S: With magnet Blank: Without magnet	Blank: Basic mounting LB: Foot 	JEL-21 Type 	
SU: Profile type 	D: Double-shaft double acting J: Double-shaft with adjustable stroke type 	63 80 100 125 160 200 250 320				FA: Front flange FB: Rear flange CA: Rear hinge CB: Rear hinge TC-M: Center trunnion 	SC: Bracket for switch SU: Bracket for switch 	

Specification

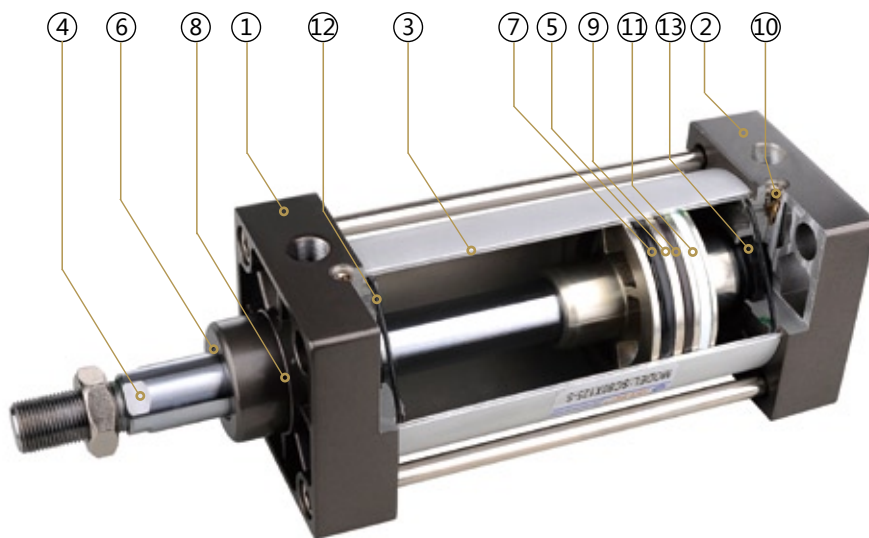
Bore (mm)	32	40	50	63	80	100	125	160	200	250	320	
Operation	Double Acting											
Working Medium	Air											
*Mountings	Basic FA FB CA CB LB TC TC-M											
Operating Voltage Range	1 ~ 9.0 Kgf/cm ²											
Proof Pressure	13.5 Kgf/cm ²											
Operating Temperature Range	0 ~ 70 °C											
Operating Speed Range	50 ~ 800 mm/s											
Cushion	Adjustable Cushioning											
Adjustable Cushioning Stroke	20 mm				26 mm				45 mm	52 mm	66 mm	
Port Size	G 1/8"	G 1/4"		G 3/8"		G 1/2"			G 3/4"	G 1"		

*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
160	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
250	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
320	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	Material	Quantity
1	Front Cover	Painted Aluminium	1
2	Back Cover	Painted Aluminium	1
3	Barrel	Anodised Aluminium	1
4	Piston Rod	Chromed Carbon Steel	1
5	Piston	Aluminium	1
6	Piston Rod Seal	NBR	1
7	Piston Seal	NBR	2
8	Bearing	Non-lub Bearing	1
9	Magnet	Plastic	1
10	Cushion Screw	Brass	2
11	Anti-friction Ring	PTFE	1
12	End cap Seal	NBR	2
13	Cushion Seal	NBR	2

Cylinder
Sizing
SI
SI A.
SC / SU
SCT
SC A.
DSN
DSN A.
MA
MAL
MA/MAL A.
SDA
CQ2
CJ2
CDU
TN
CXS
MGP
MSQ

SC / SU Series

Standard Cylinder

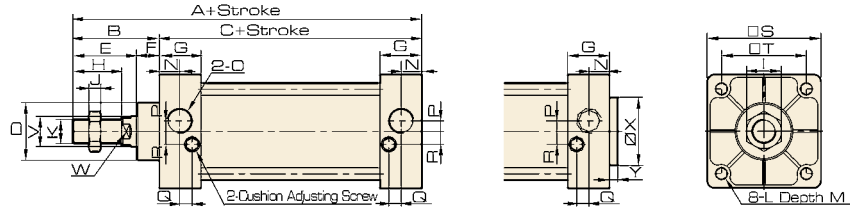


The way to automation

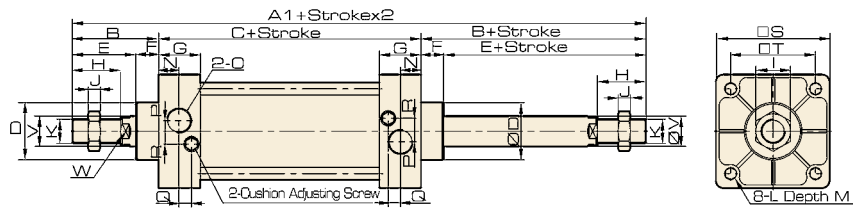
- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

Overall Dimension

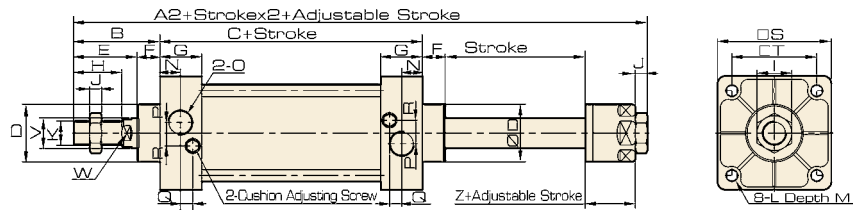
SC



SCD



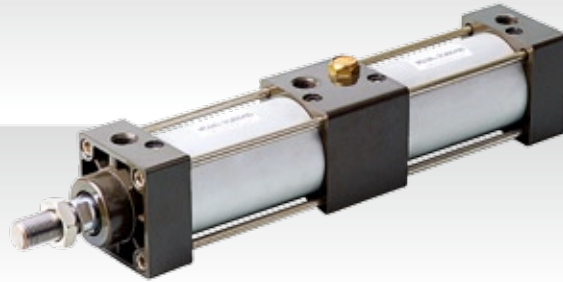
SCJ



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	142	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	15	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	/	/	104	122	55	70	34	33	54	40	10	M27 × 2	M12
160	291	/	/	123	168	62	93	30	50	72	55	18	M36 × 2	M16
200	347	/	/	167	180	80	112	55	50	72	55	18	M36 × 2	M16
250	389	/	/	189	200	90	122	67	54	84	65	21	M42 × 2	M20
320	436	/	/	216	220	110	126	90	65	96	75	24	M48 × 2	M24

Bore/ Symbol	M	N	O	P	Q	R	S	T	V	W	Z	X	Y
32	9.5	13.5	G 1/8	3.5	7.5	7	45	33	12	10	21	/	/
40	9.5	1.5	G 1/4	6	8.2	9	50	37	16	14	21	/	/
50	9.5	13.5	G 1/4	8.5	8.2	9	62	47	20	17	23	/	/
63	9.5	13.5	G 3/8	7	8.2	8.5	75	56	20	17	23	/	/
80	11.5	16.5	G 3/8	10	9.5	14	94	70	25	22	29	/	/
100	11.5	16.5	G 1/2	11	9.5	14	112	84	25	22	29	/	/
125	15.5	16.5	G 1/2	10	10	11	140	110	32	27	/	/	/
160	17.5	25	G 1/2	/	/	/	180	140	40	36	/	/	/
200	17.5	25	G 3/4	/	/	/	220	175	40	36	/	/	/
250	25	31	G 1	18.5	5	40	270	220	50	46	/	90	10
320	28	31	G 1	35	15	35	350	270	63	55	/	110	10



- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT**
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

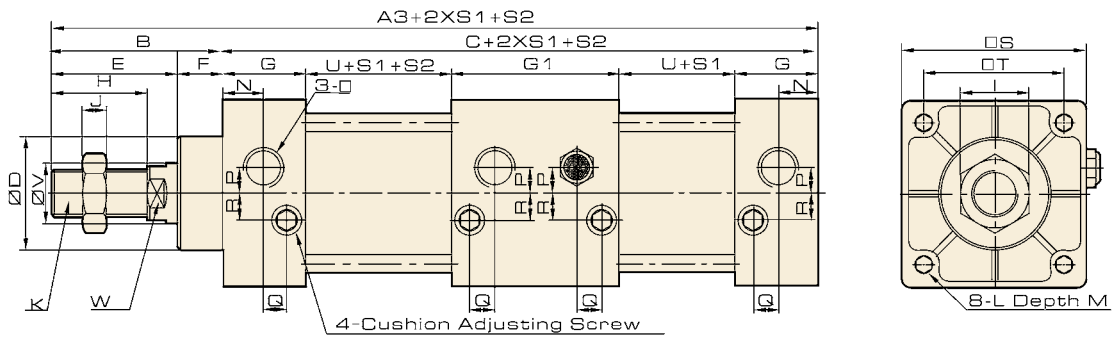
Ordering Code

SCT	63 x	30	50	S	LB
Series	Bore	Stroke 1	Stroke 2	Magnet	Mountings
SCT: Muti-position cylinder	32 40 50 63 80 100			S: With magnet Blank: Without magnet	Blank: Basic mounting LB: Foot FA: Front flange FB: Rear flange CA: Rear hinge CB: Rear hinge

*It is booster cylinder while second stroke is 0.

Overall Dimension

SCT



Dimension

Bore/ Symbol	A3	B	C	D	E	F	G	G1	H	I	J	K
32	233	47	186	28	32	15	27.5	55	22	17	6	M10 x 1.25
40	235	49	186	32	34	15	27.5	55	24	17	7	M12 x 1.25
50	243	57	186	38	42	15	27.5	55	32	23	8	M16 x 1.5
63	249	57	192	38	42	15	27.5	55	32	23	8	M16 x 1.5
80	296	75	221	47	54	21	33	73	40	26	10	M20 x 1.5
100	308	75	233	47	54	21	33	73	40	26	10	M20 x 1.5
125	350	104	122	55	70	34	33	66	54	40	10	M27 x 2

Bore/ Symbol	L	M	N	O	P	Q	R	S	T	V	U	W
32	M6 x 1	9.5	13.7	G1/8	3.5	7.5	7	45	33	12	38	10
40	M6 x 1	9.5	13.5	G1/4	6	8.2	9	50	37	16	38	14
50	M6 x 1	9.5	13.5	G1/4	8.5	8.2	9	62	47	20	38	17
63	M8 x 1.25	9.5	13.5	G3/8	7	8.2	8.5	75	56	20	41	17
80	M10 x 1.5	11.5	16.5	G3/8	10	9.5	14	94	70	25	41	22
100	M10 x 1.5	11.5	16.5	G1/2	10	9.5	14	112	84	25	47	22
125	M12 x 1.75	15.5	16.5	G1/2	10	10	11	140	110	32	57	27

SC / SU Series

Standard Cylinder Accessory



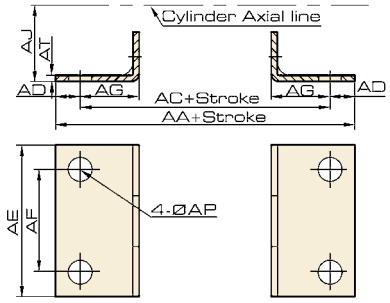
The way to automation

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA / MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

LB Foot

Overall Dimension

LB

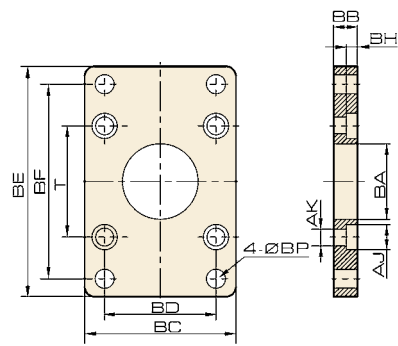


Dimension

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	30
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	3.2	3.2	3.2	3.2	4	4	8	8	10

FA / FB Flange

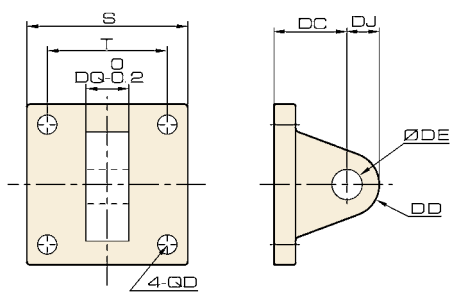
FA, FB



Bore / Symbol	32	40	50	63	80	100	125	160	200
BA	28.3	32.3	38.3	38.3	47.3	47.3	56	63	81
BB	10	10	10	12	16	16	20	25	25
BC	47	52	65	76	95	115	140	180	220
BD	33	36	47	56	70	84	90	115	135
BE	72	84	104	116	143	162	224	280	320
BF	58	70	86	98	119	138	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	15	20	20
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	16.5	16.5
BP	7	7	9	9	12	12	16	18	22
T	33	37	47	56	70	84	110	140	175

CA Clevis

CA



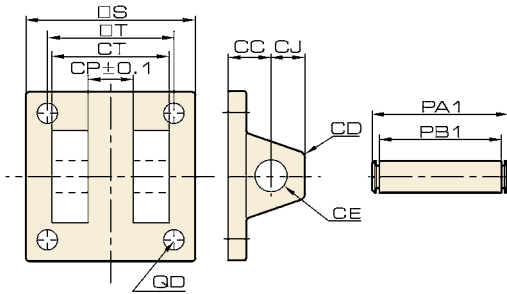
Bore / Symbol	32	40	50	63	80	100	125	160	200
S	45	50	62	75	94	112	140	180	220
T	33	37	47	56	70	84	110	140	175
DC	34	34	34	34	48	48	50	55	60
DD	14	14	15	15	20	20	25	30	30
DE	12	14	14	14	20	20	25	30	30
DJ	14	14	15	15	20	20	25	30	30
DQ	16	20	20	20	32	32	70	90	90
D	6.5	6.5	6.5	8.5	10.5	10.5	12.5	16.5	16.5

CB Double Earring

Overall Dimension

Dimension

CB



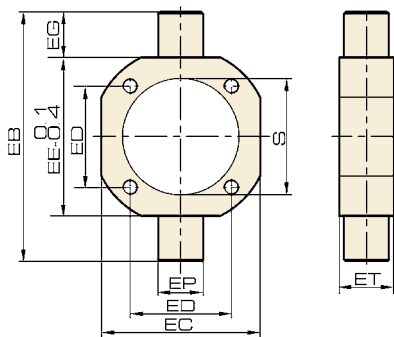
Bore Symbol	32	40	50	63	80	100	125	160	200
CC	19	19	19	19	32	32	50	55	60
CD	5	5	3	3	8	8	25	30	30
CE	12	14	14	14	20	20	25	30	30
CJ	13	13	15	15	21	21	25	30	30
CP	16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
CT	32	44	52	52	64	64	120	160	160
PAI	41	51.8	60.3	60.3	73.8	73.8	130	170	170
PBI	33.5	45.8	54	54	65.5	65.5	121.5	161.5	161.5
S	48	50	62	75	94	112	140	180	220
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	16.5	16.5

TC Center Trunion

Overall Dimension

Dimension

TC



Bore Symbol	40	50	63	80	100	125	160	200
EB	113	126	138	164	182	210	264	336
EC	63	76	88	114	132	160	200	245
ED	37	47	56	70	84	110	140	175
EE	63	76	88	114	132	160	200	245
EG	25	25	25	25	25	25	32	35
EP	25	25	25	25	25	30	32	32
ET	30	30	30	35	40	38	38	52
S	45.5	55.5	68.5	87.5	107.5	134.5	172.5	212.5

SC / SU Series

Standard Cylinder Accessory

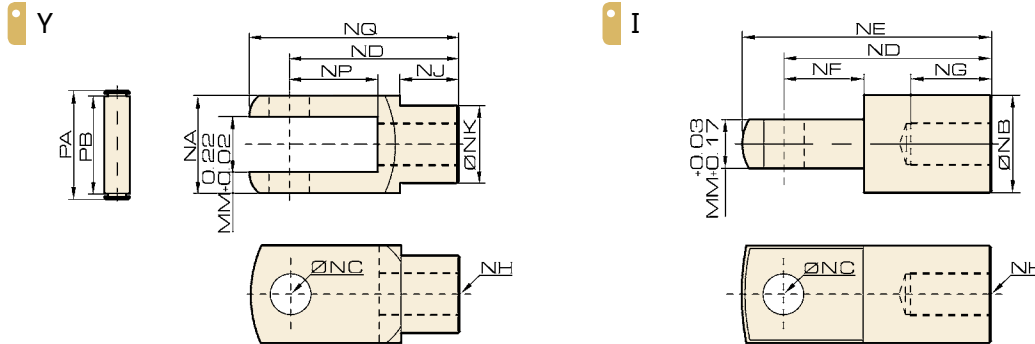


The way to automation

Y/I Knuckle

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

Overall Dimension

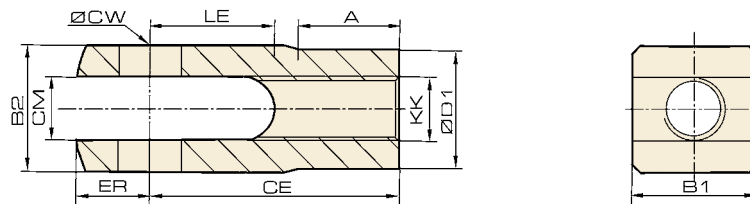


Dimension

Bore / Symbol	NA	NB	NC	ND	NE	NF	NG	NH	NJ	NK	MM	NP	NQ	PA	PB
32	19	20	10	40	52	15	20	M10 × 1.25	15.5	16	10	20	52	26.2	20
40	24	24	12	48	67	24	20	M12 × 1.25	20.5	20	12	24	62	32.8	26.5
50	32	32	16	64	89	32	23	M16 × 1.5	26	30	16	32	83	39.3	33
63	32	32	16	64	89	32	23	M16 × 1.5	26	30	16	32	83	39.3	33
80	40	40	20	80	112	40	30	M20 × 1.5	30	38	20	39.5	105	53.3	45
100	40	40	20	80	112	40	30	M20 × 1.5	30	38	20	39.5	105	53.3	45
125	62	49	20	99	122	54	50	M27 × 2	28	38	30	34	120	75	66
160	70	61	30	125	155	43	70	M36 × 2	40	53	40	34	153	96	82
200	70	61	30	125	155	43	70	M36 × 2	40	53	40	34	153	96	82

Overall Dimension

CK Type Y Knuckle

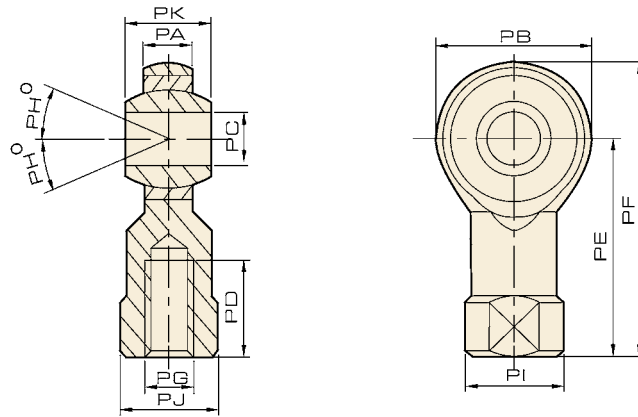


Dimension

Bore / Symbol	NH	KK	A	B1	B2	CE	CW	CM	D1	ER	LE
20	CK-M6 × 1	M6 × 1	9.5	12	12	24	6	6	10	7	12
25	CK-M8 × 1.25	M8 × 1.25	13.5	16	16	32	8	8	14	10	16
32	CK-M10 × 1.25	M10 × 1.25	15.5	19	19	40	10	10	16	12	20
40	CK-M12 × 1.25	M12 × 1.25	20.5	24	24	48	12	12	20	14	24
50/63	CK-M16 × 1.5	M16 × 1.5	26	32	32	64	16	16	30	19	32
80/100	CK-M20 × 1.5	M20 × 1.5	30	40	40	80	20	20	39	25	39.5

PHSA Universal Piston Rod Eye

Overall Dimension

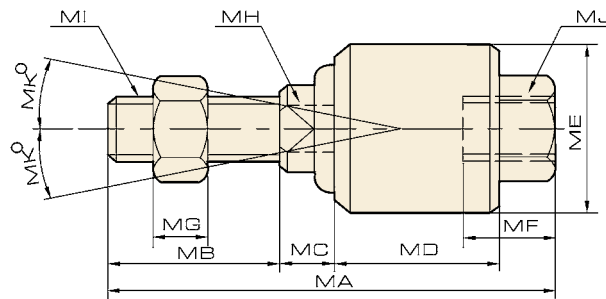


Dimension

Bore/Symbol	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
32	11	26	10	20	43	56	M10×1.25	13	19	17	14
40	12	32	12	24	50	66	M12×1.25	13	22	19	16
50	15	40	16	28	64	84	M16×1.5	15	27	22	21
63	15	40	16	28	61.4	84	M16×1.5	15	27	22	21
80	18	46	20	35	77	100	M20×1.5	15	34	30	25
100	18	46	20	35	77	100	M20×1.5	15	34	30	25

PDJT Piston Rod Swivel

Overall Dimension



Dimension

Bore/Symbol	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK
32	58	22	7	21	26	11.5	7	10	M10×1.25	M10×1.25	12
40	58	22	8	21	28	11.5	8	12	M12×1.25	M12×1.25	12
50	90	27	10	41	44.5	20	10	17	M16×1.5	M16×1.5	7
63	90	27	10	41	44.5	20	10	17	M16×1.5	M16×1.5	7
80	102	29	13	46	53	24	13	22	M20×1.5	M20×1.5	10
100	102	29	13	46	53	24	13	22	M20×1.5	M20×1.5	10

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA/ MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ