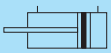
DOUBLE ACTING
-SINGLE END ROD TYPE DA-5

DOUBLE ACTING
-SINGLE END ROD TYPE
(piston with magnet) DA-5R



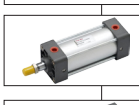
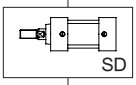
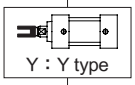
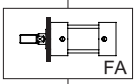
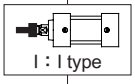
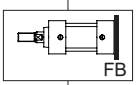
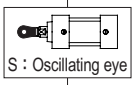
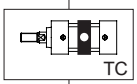
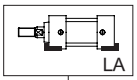
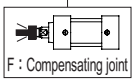
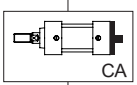
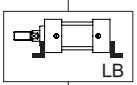
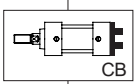
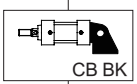
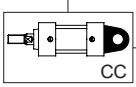
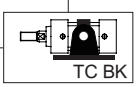
Features

- The series cylindersaccording to JAPAN JIS, and magnetic piston(optional)。
- High quality , durability and ，several bracing frame。

Specification

Type	DA-5	DA-5R
Bore	Φ32、40、50、63、80、100	
Power fluid	Filtered air with or without lubrication	
The range of pressure	1～9.9 kgf/cm^2	
The range of temperature	-20～+80 ℃ (Don't freeze)	
Piston speed	Max. 1 m/s	
Material of cylinder barrel	Aluminium extrusion, Anodised 20 microns	

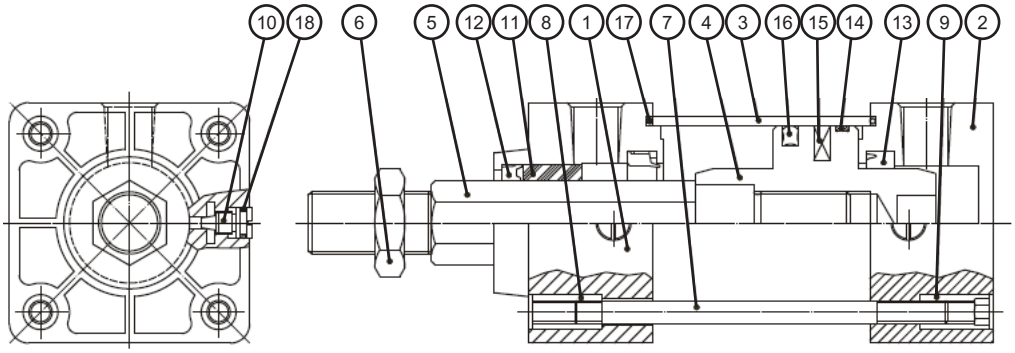
How to order

DA-5	SD	50	B	50	–	Y	–	A	1
Type	Holder	Bore	Cushion	Stroke		Accessories		Sensor switch	Quantity
 DA-5	 SD	32：Φ32 40：Φ40 50：Φ50 63：Φ63 80：Φ80 100：Φ100	N：No cushion B：With cushion	Please see stroke table		 Y：Y type		KT20R	1：1pc 2：2pcs
 DA-5R	 FA					 I：I type			
	 FB					 S：Oscillating eye			
	 TC	 LA				 F：Compensating joint			
	 CA	 LB							
	 CB	 CB BK							
	 CC	 TC BK							

Stroke table

Bore	Stroke (mm)	Stroke tolerance	Cushion stroke(mm)
Φ32、40、50、63	25,50,75,100,125,150, 200,250,300,350,400	S ≦ 500：+2.0～0	20
Φ80、100		501 ≦ S ≦ 1250：+3.2～0	25

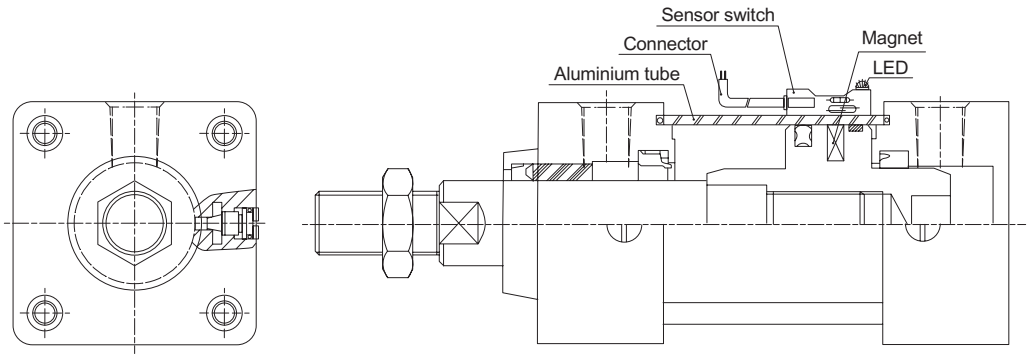
DA-5 Double acting type / Inside structure



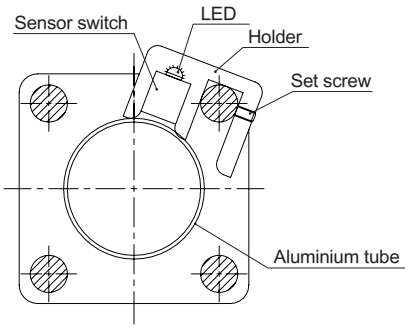
Parts list

No.	Part name	Quantity	No.	Part name	Quantity	No.	Part name	Quantity
1	Rod cover	1	7	Fixed column	4	13	Cushion seal	2
2	Head cover	1	8	Rod cover nut(full thread)	4	14	Piston wearing ring	1
3	Cylinder tube	1	9	Head cover nut(socket head cap)	4	15	Magnet	1
4	Piston	1	10	Cushion screw	2	16	Piston seal	1
5	Piston rod	1	11	Powder brass lining	1	17	Cylinder gasket	2
6	Piston nut	1	12	Piston rod seal	1	18	Needle gasket	2

K20TR Sensor switch / Inside structure



K20TR Sensor switch / Mounting type



K20TR Sensor switch / Adjustable method

1. Take 2mm L type wrench to loosen 2 set screw M4, and motion sensor switch and holder along the fixed column.
2. After set position, left hand press the sensor switch to seal sensor switch and plane of cylinder tube tightly.
3. Then lock fixed screw.
4. LED of sensor switch will light when set position is correct.

Theoretic force

Unit：kg

Bore	Rod (mm)	Direction	Area (cm^2)	Operating pressure (kgf/cm^2)					
				3	4	5	6	7	8
Φ32	12	Push	8.04	24	32	40	48	56	64
		Pull	6.91	21	27	34	41	48	55
Φ40	16	Push	12.56	38	50	63	75	88	100
		Pull	10.56	32	40	53	63	74	84
Φ50	20	Push	19.63	59	79	98	118	137	157
		Pull	16.49	49	66	82	99	115	132
Φ63	20	Push	31.16	93	125	156	187	218	249
		Pull	28.02	84	112	140	168	196	224
Φ80	25	Push	50.24	151	201	251	301	352	402
		Pull	45.34	136	181	227	272	317	363
Φ100	25	Push	78.5	236	314	393	471	550	628
		Pull	73.6	221	294	368	442	515	589

Oil seal specification

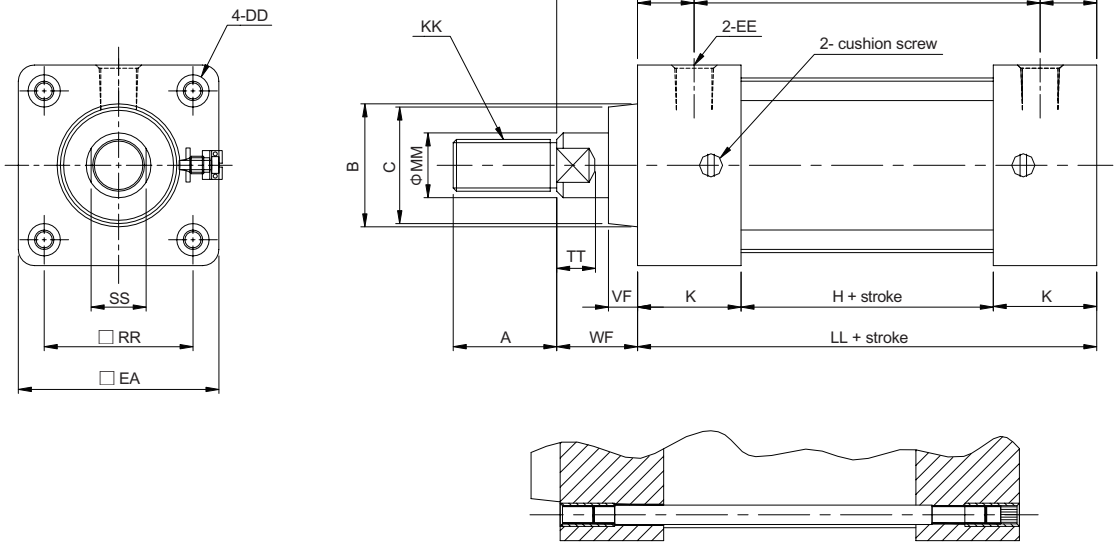
Name / Quantity / Bore	Piston rod seal	Piston seal	Cushion seal	Cushion screw gasket	Cover gasket	Piston wearing ring
	1	1	2	2	2	1
Φ32	PDU12	APA32	(PEI16)	SM5	SM30	WRP32
Φ40	PDU16	APA40	DR20	SM5	SM40	WRP40
Φ50	PDU20	APA50	CTU28	SM6	SM50	WRP50
Φ63	PDU20	APA63	CTU28	SM6	SM63	WRP63
Φ80	PDU25	APA80	CTU35	SM8	SM80	WRP80
Φ100	PDU25	APA100	CTU35	SM8	SM100	WRP100

Mounting weight

Unit：g

Mark / Bore	SD		FA/FB	TC	CA	CC	CB	LA	LB	CB BK	TC BK	Y	I	S	FT	Pin
	Basic weight	Stroke 50mm														
Φ40	720	80	220	540	320	170	160	200	120	400	1120	320	280	114	142	70
Φ50	1040	100	340	660	420	250	300	280	160	660	1120	320	280	200	552	80
Φ63	1380	120	480	740	540	400	400	400	220	660	1120	320	280	200	552	80
Φ80	2420	200	1260	1240	1400	900	900	780	360	2020	1580	700	720	372	808	192
Φ100	3180	200	1840	1580	1820	1600	1600	1220	480	2020	1580	700	720	372	808	192

DA-5 Double acting type / Dimensional features

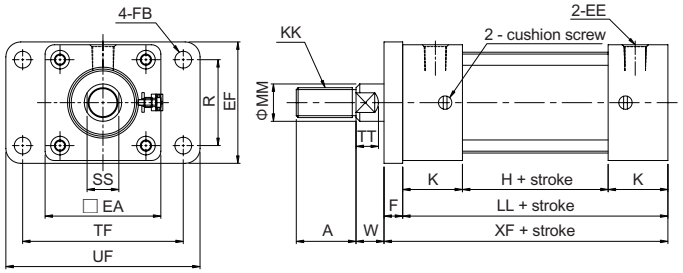


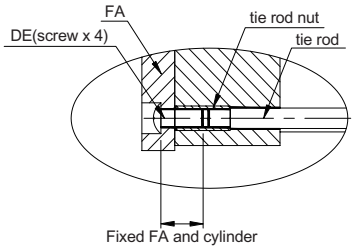
SD instattation of tie rod nuts

Dimensional talbe

Mark / Bore	A	MM	KK	B	C	DD	EA	EE	H	K	LL	P	RR	SS	TT	VF	WF	YP	ZJ	Y
Φ32	22	12	M10xP1.25	28	28	M6xP1.0	45	RC1/8	29	32	93	58	33	10	7	15	25	17.5	118	60
Φ40	24	16	M12xP1.25	32	30	M6xP1.0	50	RC1/4	28	32	92	57	37	14	12	9	25	17.5	117	60
Φ50	32	20	M16xP1.5	38	36	M6xP1.0	62	RC1/4	28	32	92	57	46	17	12	9	25	17.5	117	60
Φ63	32	20	M16xP1.5	38	36	M8xP1.25	75	RC3/8	31	32	95	60	56	17	12	9	25	17.5	120	60
Φ80	40	25	M20xP1.5	47	43	M10xP1.5	94	RC3/8	31	38	107	64	70	21	14	14	35	21.5	142	70
Φ100	40	25	M20xP1.5	47	43	M10xP1.5	112	RC1/2	39	38	115	72	84	21	14	14	35	21.5	150	70

FA Accessories





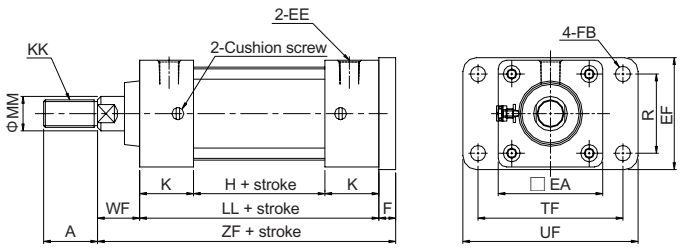
Dimensional table

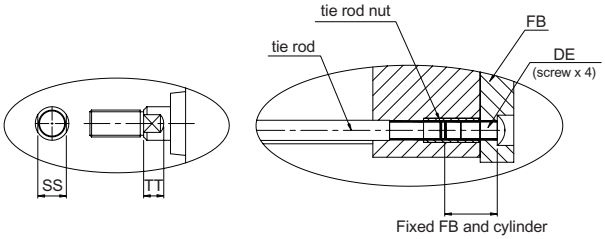
Mark / Bore	A	MM	KK	DE	EA
Φ32	22	12	M10xP1.25	M6xP1.0	45
Φ40	24	16	M12xP1.25	M6xP1.0	50
Φ50	32	20	M16xP1.5	M6xP1.0	62
Φ63	32	20	M16xP1.5	M8xP1.25	75
Φ80	40	25	M20xP1.5	M10xP1.5	94
Φ100	40	25	M20xP1.5	M10xP1.5	112

Mark / Bore	EE	EF	F	FB	H	K
Φ32	RC1/8	47	10	Φ7	29	32
Φ40	RC1/4	52	10	Φ7	28	32
Φ50	RC1/4	65	10	Φ9	28	32
Φ63	RC3/8	76	10	Φ9	31	32
Φ80	RC3/8	95	16	Φ12	31	38
Φ100	RC1/2	115	16	Φ12	39	38

Mark / Bore	LL	R	SS	TF	TT	UF	W	XF
Φ32	93	33	10	58	7	72	15	103
Φ40	92	36	14	70	12	91	15	103
Φ50	92	46	17	86	12	104	15	102
Φ63	95	56	17	98	12	116	15	105
Φ80	107	70	21	119	14	146	19	123
Φ100	115	84	21	138	14	165	19	131

FB Accessories





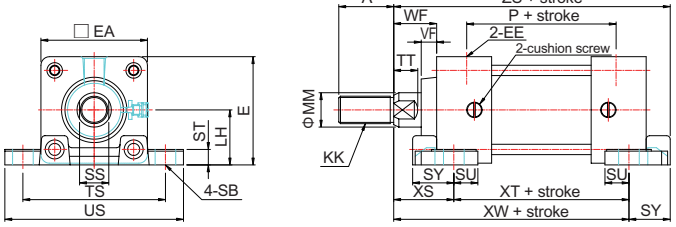
Dimensional table

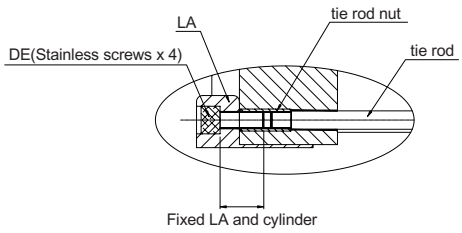
Mark / Bore	A	MM	KK	DE	EA
Φ32	22	12	M10xP1.25	M6xP1.0	45
Φ40	24	16	M12xP1.25	M6xP1.0	50
Φ50	32	20	M16xP1.5	M6xP1.0	62
Φ63	32	20	M16xP1.5	M8xP1.25	75
Φ80	40	25	M20xP1.5	M10xP1.5	94
Φ100	40	25	M20xP1.5	M10xP1.5	112

Mark / Bore	EE	EF	F	FB	H	K
Φ32	RC1/8	47	10	Φ7	29	32
Φ40	RC1/4	52	10	Φ7	28	32
Φ50	RC1/4	65	10	Φ9	28	32
Φ63	RC3/8	76	10	Φ9	31	32
Φ80	RC3/8	95	16	Φ12	31	38
Φ100	RC1/2	115	16	Φ12	39	38

Mark / Bore	LL	R	SS	TF	TT	UF	WF	ZF
Φ32	93	33	10	58	7	72	25	128
Φ40	92	36	14	70	12	91	25	127
Φ50	92	46	17	86	12	104	25	127
Φ63	95	56	17	98	12	116	25	130
Φ80	107	70	21	119	14	146	35	158
Φ100	115	84	21	138	14	165	35	166

LA Accessories





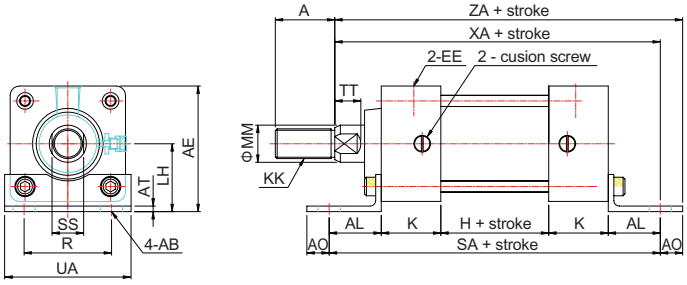
Dimensional talbe

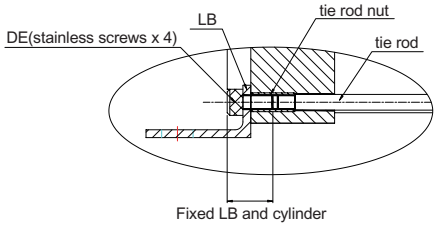
Mark / Bore	A	MM	KK	DE	E
Φ40	24	16	M12xP1.25	M6xP1.0	53
Φ50	32	20	M16xP1.5	M6xP1.0	63
Φ63	32	20	M16xP1.5	M8xP1.25	75.5
Φ80	40	25	M20xP1.5	M10xP1.5	95
Φ100	40	25	M20xP1.5	M10xP1.5	115

Mark / Bore	EA	EE	LH	P	SB	SS	ST	SU
Φ40	50	RC1/4	27	57	12	14	8	14
Φ50	62	RC1/4	32	57	12	17	9	14
Φ63	75	RC3/8	38	60	12	17	9	14
Φ80	94	RC3/8	48	64	14	21	12	18
Φ100	112	RC1/2	58	72	14	21	14	18

Mark / Bore	SY	TS	TT	US	VF	WF	XS	XT	XW	ZS
Φ40	23	70	12	91	9	25	35	72	107	129
Φ50	24	83	12	104	9	25	35	72	107	131
Φ63	26	95	12	116	9	25	35	75	110	136
Φ80	33	121	14	146	14	35	48	81	129	162
Φ100	37	140	14	165	14	35	48	89	137	174

LB Accessories





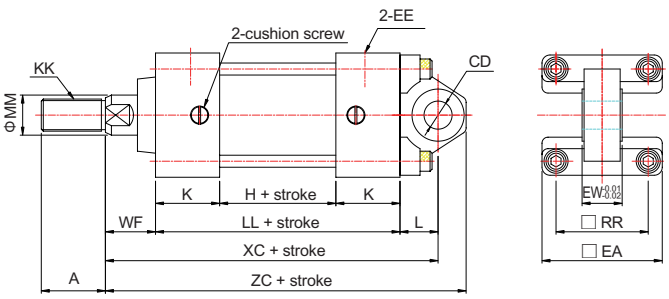
Dimensional table

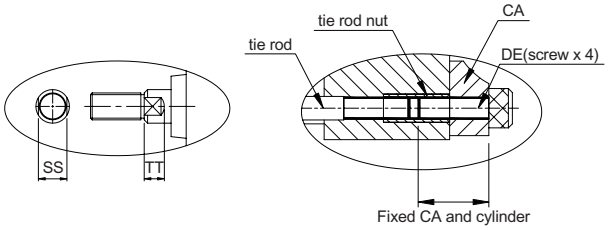
Mark / Bore	A	MM	KK	AB	AE	AH
Φ32	22	12	M10xP1.25	Φ9	50.5	28
Φ40	24	16	M12xP1.25	Φ12	56	30
Φ50	32	20	M16xP1.5	Φ12	67.5	36.5
Φ63	32	20	M16xP1.5	Φ12	78.5	41
Φ80	40	25	M20xP1.5	Φ14	96	49
Φ100	40	25	M20xP1.5	Φ14	114	57

Mark / Bore	AL	AO	AT	DE	EE	H
Φ32	20.5	9.5	3	M6xP1.0	RC1/8	29
Φ40	23.5	12.5	3	M6xP1.0	RC1/4	28
Φ50	28	12	3	M6xP1.0	RC1/4	28
Φ63	31	14	3	M8xP1.25	RC3/8	31
Φ80	30	16	4	M10xP1.5	RC3/8	31
Φ100	30	16	4	M10xP1.5	RC1/2	39

Mark / Bore	K	R	SA	SS	TT	UA	XA	ZA
Φ32	32	33	134	10	7	50	138.5	148
Φ40	32	36	139	14	12	57	140.5	153
Φ50	32	47	148	17	12	68	145	157
Φ63	32	56	157	17	12	80	151	164
Φ80	38	70	167	21	14	97	172	188
Φ100	38	84	175	21	14	112	180	196

CA Accessories





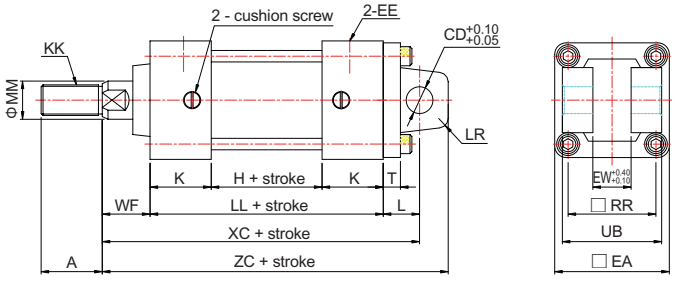
Dimensional table

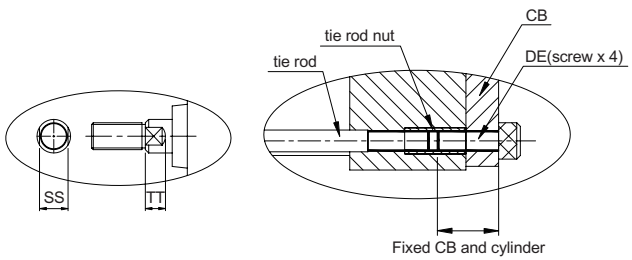
Mark / Bore	A	MM	KK	CD	DE
Φ40	24	16	M12xP1.25	Φ14	M6xP1.0
Φ50	32	20	M16xP1.5	Φ14	M6xP1.0
Φ63	32	20	M16xP1.5	Φ14	M8xP1.25
Φ80	40	25	M20xP1.5	Φ20	M10xP1.5
Φ100	40	25	M20xP1.5	Φ20	M10xP1.5

Mark / Bore	EA	EE	EW	H	K	L
Φ40	50	RC1/4	20	28	32	19
Φ50	62	RC1/4	20	28	32	19
Φ63	75	RC3/8	20	31	32	19
Φ80	94	RC3/8	30	31	38	32
Φ100	112	RC1/2	30	39	38	32

Mark / Bore	LL	RR	SS	TT	WF	XC	ZC
Φ40	92	37	14	12	25	136	150
Φ50	92	46	17	12	25	136	150
Φ63	95	56	17	12	25	139	153
Φ80	107	70	21	14	35	174	194
Φ100	115	84	21	14	35	182	202

CB Accessories





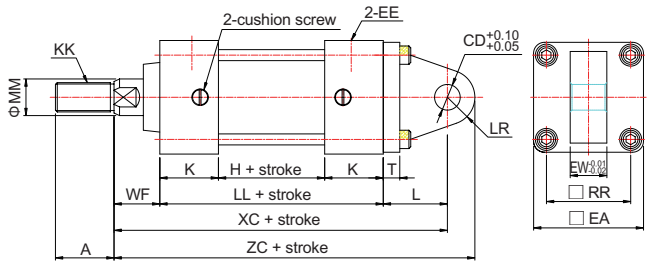
Dimensional table

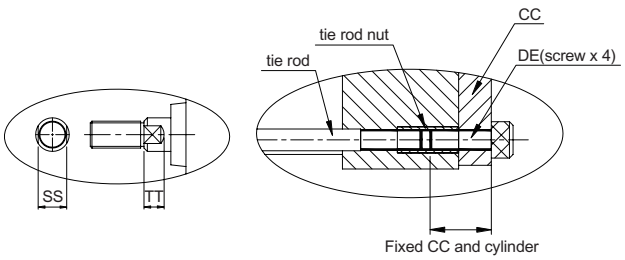
Mark / Bore	A	MM	KK	CD	DE
Φ40	24	16	M12xP1.25	Φ14	M6xP1.0
Φ50	32	20	M16xP1.5	Φ14	M6xP1.0
Φ63	32	20	M16xP1.5	Φ14	M8xP1.25
Φ80	40	25	M20xP1.5	Φ20	M10xP1.5
Φ100	40	25	M20xP1.5	Φ20	M10xP1.5

Mark / Bore	EA	EE	EW	H	K	L	LL
Φ40	50	RC1/4	20	28	32	19	92
Φ50	62	RC1/4	20	28	32	19	92
Φ63	75	RC3/8	20	31	32	19	95
Φ80	94	RC3/8	30	31	38	32	107
Φ100	112	RC1/2	30	39	38	32	115

Mark / Bore	LR	RR	SS	T	TT	UB	WF	XC	ZC
Φ40	R16	37	14	9	12	44	25	136	151
Φ50	R16	46	17	9	12	52	25	136	151
Φ63	R16	56	17	9	12	52	25	139	154
Φ80	R24	70	21	14	14	64	35	174	195
Φ100	R24	84	21	14	14	64	35	182	203

CC Accessories





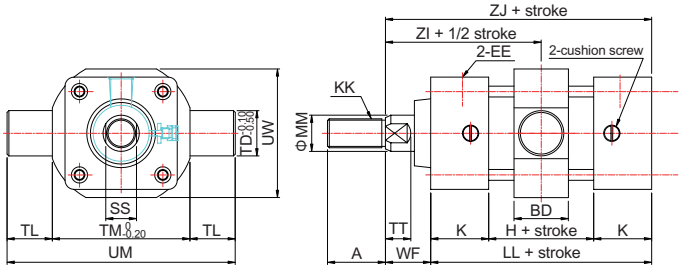
Dimensional table

Mark / Bore	A	MM	KK	CD	DE
Φ40	24	16	M12xP1.25	Φ14	M6xP1.0
Φ50	32	20	M16xP1.5	Φ14	M6xP1.0
Φ63	32	20	M16xP1.5	Φ14	M8xP1.25
Φ80	40	25	M20xP1.5	Φ20	M10xP1.5
Φ100	40	25	M20xP1.5	Φ20	M10xP1.5

Mark / Bore	EA	EE	EW	H	K	L	LL
Φ40	50	RC1/4	20	28	32	35	92
Φ50	62	RC1/4	20	28	32	35	92
Φ63	75	RC3/8	20	31	32	35	95
Φ80	94	RC3/8	30	31	38	50	107
Φ100	112	RC1/2	30	39	38	50	105

Mark / Bore	LR	RR	SS	T	TT	WF	XC	ZC
Φ40	R16	37	14	9	12	25	152	168
Φ50	R16	46	17	9	12	25	152	168
Φ63	R16	56	17	9	12	25	155	171
Φ80	R24	70	21	14	14	35	192	216
Φ100	R24	84	21	14	14	35	200	224

TC Accessories



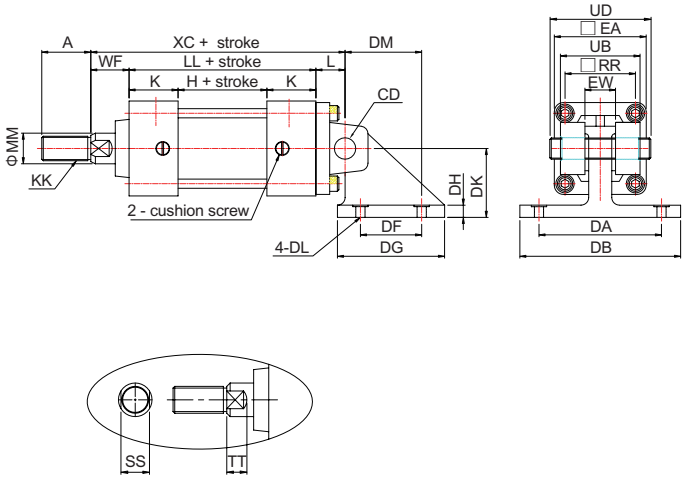
Dimensional table

Mark / Bore	A	MM	KK	BD	EE
Φ32	22	12	M10xP1.25	30	RC1/8
Φ40	24	16	M12xP1.25	30	RC1/4
Φ50	32	20	M16xP1.5	30	RC1/4
Φ63	32	20	M16xP1.5	30	RC3/8
Φ80	40	25	M20xP1.5	35	RC3/8
Φ100	40	25	M20xP1.5	40	RC1/2

Mark / Bore	H	K	LL	SS	TD	TL	TM
Φ32	29	32	93	10	16	16	55
Φ40	28	32	92	14	25	25	63
Φ50	28	32	92	17	25	25	76
Φ63	31	32	95	17	25	25	88
Φ80	31	38	107	21	25	25	114
Φ100	39	38	115	21	25	25	132

Mark / Bore	TT	UM	UW	WF	ZI	ZJ
Φ32	12	87	52	25	71.5	118
Φ40	12	113	59	25	71	117
Φ50	12	126	71	25	71	117
Φ63	12	138	86	25	72.5	120
Φ80	14	164	104	35	88.5	142
Φ100	14	182	128	35	92.5	150

CB BK Accessories



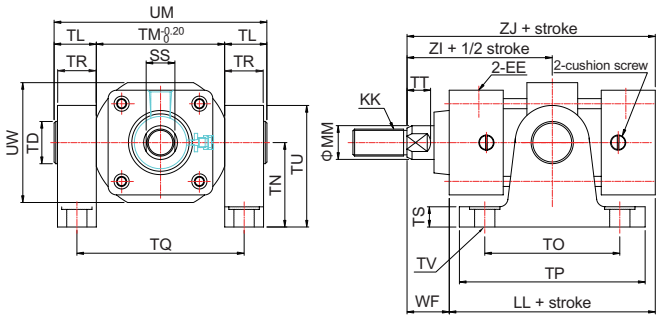
Dimensional table

Mark / Bore	A	MM	KK	CD	DA	DB	DF
Φ32	22	12	M10xP.125	Φ14	65	85	40
Φ40	24	16	M12xP1.25	Φ14	80	105	40
Φ50	32	20	M16xP1.5	Φ14	80	105	40
Φ63	32	20	M16xP1.5	Φ14	80	105	40
Φ80	40	25	M20xP1.5	Φ20	105	135	65
Φ100	40	25	M20xP1.5	Φ20	105	135	65

Mark / Bore	DG	DH	DK	DL	DM	EA	EE	EW
Φ32	55	8	35	Φ9	45	44	RC1/8	20
Φ40	70	8	45	Φ11	50	50	RC1/4	20
Φ50	70	8	45	Φ11	50	62	RC3/8	20
Φ63	70	8	45	Φ11	50	75	RC3/8	20
Φ80	95	12	60	Φ14	70	94	RC3/8	30
Φ100	95	12	60	Φ14	70	112	RC1/2	30

Mark / Bore	H	K	L	LL	RR	SS	TT	UB	UD	WF	XC
Φ32	29	32	19	93	33	10	12	44	58	25	137
Φ40	28	32	19	92	37	14	12	44	58	25	136
Φ50	28	32	19	91	46	17	12	52	66	25	136
Φ63	31	32	19	95	56	17	12	52	66	25	139
Φ80	31	38	32	107	70	21	14	64	78	35	174
Φ100	39	38	32	115	84	21	14	64	78	35	182

TC BK Accessories



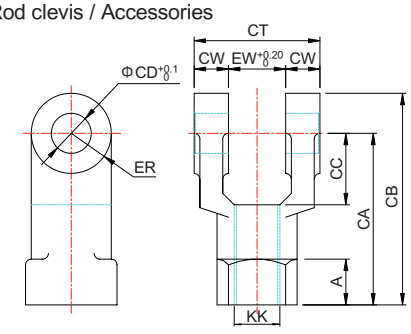
Dimensional table

Mark / Bore	A	MM	KK	EE	LL	SS	TD
Φ32	22	12	M10xP1.25	RC1/8	93	10	16
Φ40	24	16	M12xP1.25	RC1/4	92	14	25
Φ50	32	20	M16xP1.5	RC1/4	92	17	25
Φ63	32	20	M16xP1.5	RC3/8	95	17	25
Φ80	40	25	M20xP1.5	RC3/8	107	21	25
Φ100	40	25	M20xP1.5	RC1/2	115	21	25

Mark / Bore	TL	TM	TN	TO	TP	TQ	TR	TT
Φ32	16	55	40	60	80	70	15	12
Φ40	25	63	50	80	110	86	23	12
Φ50	25	76	50	80	110	99	23	12
Φ63	25	88	50	80	110	111	23	12
Φ80	25	114	70	85	120	137	23	14
Φ100	25	132	70	85	120	155	23	14

Mark / Bore	TS	TU	TV	UW	WF	WF	ZI	ZJ
Φ32	12	56	9	87	25	52	71.5	118
Φ40	12	72	12	113	25	59	71	117
Φ50	12	72	12	126	25	71	71	117
Φ63	12	72	12	138	25	86	72.5	120
Φ80	12	92	14	164	35	104	88.5	142
Φ100	12	92	14	182	35	128	92.5	146

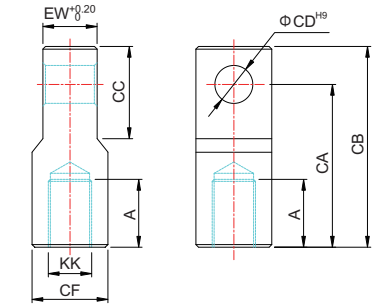
Y Rod clevis / Accessories



Dimensional table

Mark / Bore	KK	A	CA	CB	CC	CD	CT	CW	EW	E
Φ32	M10x1.25	16	55	67	20	12	32	8	16	1
Φ40	M12x1.25	16	60	74	25	14	44	12	20	1
Φ50	M16x1.5	16	60	74	25	14	44	12	20	1
Φ63	M16x1.5	16	60	74	25	14	44	12	20	1
Φ80	M20x1.5	20	85	103	35	20	62	16	30	1
Φ100	M20x1.5	20	85	103	35	20	62	16	30	1

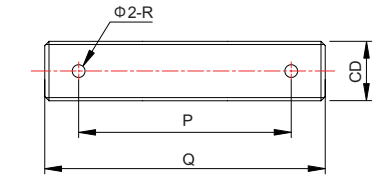
I I rod end mounting / Accessories



Dimensional table

Mark / Bore	KK	A	CA	CB	CC	CD	CF	EW
Φ32	M10x1.25	20	55	67	32	12	25	16
Φ40	M12x1.25	20	60	74	34	14	28	20
Φ50	M16x1.5	25	60	74	34	14	28	20
Φ63	M16x1.5	25	60	74	34	14	28	20
Φ80	M20x1.5	30	85	105	50	20	38	30
Φ100	M20x1.5	30	85	105	50	20	38	30

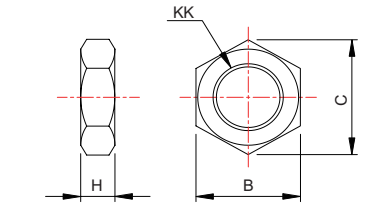
PIN Accessories



Dimensional table

Mark / Bore		CD	P	Q	R
Φ40		14	50	58	3
Φ50	Y pin	14	50	58	3
	CB pin	14	58	66	3
Φ63	CB BK pin	14	58	66	3
Φ80		20	70	78	3
Φ100		20	70	78	3

NUT Accessories



Dimensional table

Mark / Bore	KK	B	C	H
Φ32	M10x1.25	17	19	6
Φ40	M12x1.25	19	22	7
Φ50	M16x1.5	24	27	8
Φ63	M16x1.5	24	27	8
Φ80	M20x1.5	30	34	9
Φ100	M20x1.5	30	34	9