Oil buffer




How to order:

AC — **14** — **16** — **1** — **N**

- **AC** — Series
  - Auto compensation
  - Adjustable
- **14** — Male connection
- **16** — Stroke
- **1** — impact velocity
  - 1: High speed
  - 2: Medium speed
  - 3: Lower speed
- **N** — buffer cap
  - No mark:buffer cap
  - N:Without buffer cap

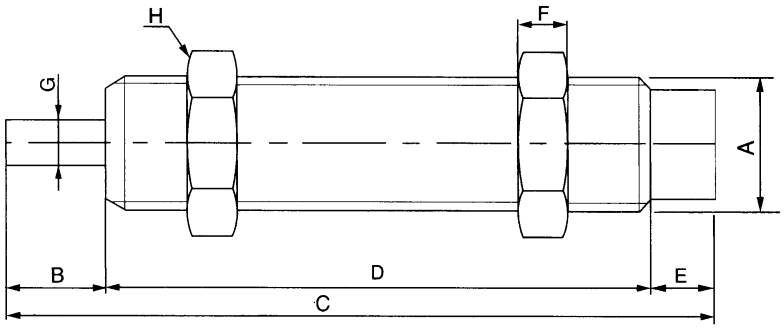
Technical Parameter:

Item	Stroke (mm)	Max absorb energy (Nm)	Absorb energy per hour(Nm)	Max effective weight(kg)			Highest ramming Speed(m/s)			Ambient temperature(℃)
				1	2	3	1	2	3	
AC-0806	6	2	1200	0.5	2	6	2	1	0.5	-10~80
AC-1005	5	3	3600	1	3	7	3	1.5	0.8	-10~80
AC-1008	8	4	5000	2	4	9	3	1.5	0.8	-10~80
AC-1210	10	5	10000	5	10	30	2	1.5	0.8	-10~80
AC-1412	12	15	30000	8	50	100	3	1.5	0.8	-10~80
AC-1416	16	20	35000	10	70	150	3	1.5	0.8	-10~80
AC-2020	20	40	40000	30	200	700	3.5	2	1	-10~80
AC-2050	50	60	60000	60	400	1200	3.5	2	1	-10~80
AC-2525	25	80	70000	200	800	1500	4	2.5	1	-10~80
AC-2540	40	120	75000	300	1200	2000	4	2.5	1	-10~80
AC-3660	60	250	120000	400	1500	2400	4	2.5	1	-10~80

Item	Stroke (mm)	Max absorb energy (Nm)	Absorb energy per hour(Nm)	Max effective weight(kg)			Highest ramming Speed(m/s)			Ambient temperature(℃)
				1	2	3	1	2	3	
AD-1410	10	20	25000	80			3			-10~80
AD-2016	16	25	30000	200			3.5			-10~80
AD-2525	25	85	70000	400			3.5			-10~80
AD-2540	40	100	80000	700			3.5			-10~80
AD-3650	50	300	100000	1400			3			-10~80
AD-4225	25	260	125000	3000			3.5			-10~80
AD-4250	50	500	150000	4000			4.5			-10~80
AD-4275	75	750	180000	6000			4.5			-10~80
AD-6450	50	12000	1500000	12727			1.5			-10~80
AD-64100	100	24000	2000000	18181			1.5			-10~80
AD-64150	150	36000	2500000	23636			1.5			-10~80

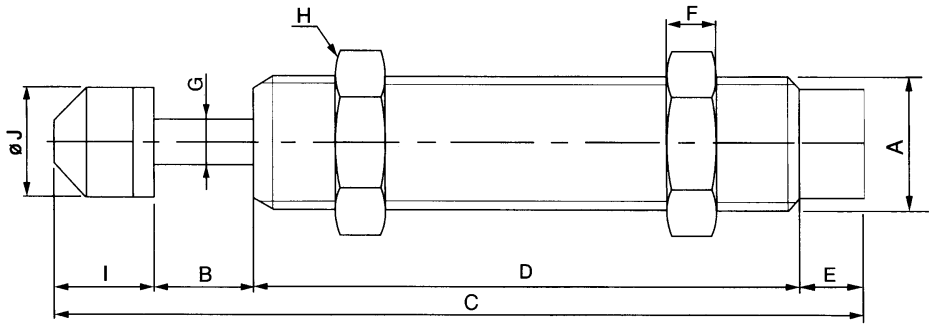
Dimension:

Without buffer cap



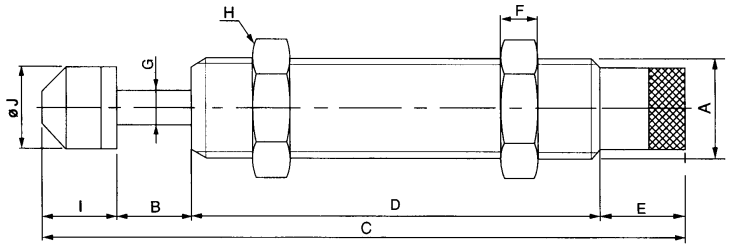
Spec/sign	A	B	C	D	E	F	G	H
AC–0806	M8 × 1.0	6	44	33	5	3	2.8	11
AC–1005	M10 × 1.0	5	32.7	22.9	4.8	3	3	12.7
AC–1008	M10 × 1.0	8	51	38	5	3	3	12.7
AC–1210	M12 × 1.0	10	60	45.5	4.5	4	3	14
AC–1412	M14 × 1.5	12	88	67	9	6	4	19
AC–1416	M14 × 1.5	16	111	86	9	6	4	19

buffer cap

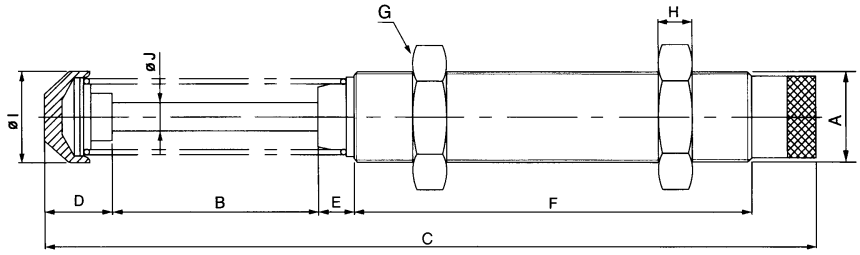


Spec/sign	A	B	C	D	E	F	G	H	J
AC–0806	M8 × 1.0	6	52.4	33	5	3	2.8	11	6.6
AC–1005	M10 × 1.0	5	41.2	22.9	4.8	3	3	12.7	8.6
AC–1008	M10 × 1.0	8	59.5	38	5	3	3	12.7	8.6
AC–1210	M12 × 1.0	10	69.5	45.5	4.5	4	3	14	10.3
AC–1412	M14 × 1.5	12	102.5	67	9	6	4	19	12
AC–1416	M14 × 1.5	16	125.5	86	9	6	4	19	12
AC–2020	M20 × 1.5	20	146.5	101	9	8	6	26	18
AC–2050	M20 × 1.5	50	233.5	158	9	8	6	26	18
AC–2525	M25 × 1.5	25	154.3	101	10	10	8	32	22
AC–2540	M25 × 1.5	40	208.3	127	10	10	8	32	22
AC–3660	M36 × 1.5	60	243	134	11	15	10	46	35

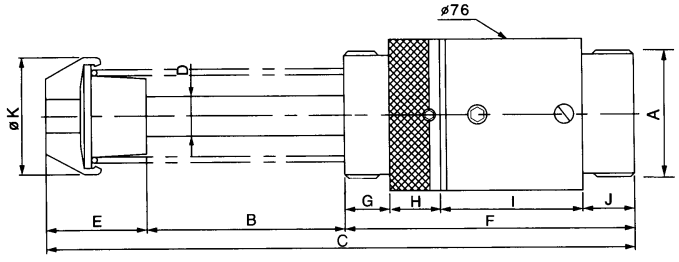
Without buffer cap



Spec/sign	A	B	C	D	E	F	G	H	I	J
AD-1410	M14 × 1.5	10	113.5	73	16	6	4	19	14.5	12
AD-2016	M20 × 1.5	16	149.5	101	16	8	6	26	16.5	18
AD-2525	M25 × 1.5	25	161.8	101	17.5	10	8	32	18.3	22
AD-2540	M25 × 1.5	40	215.8	127	17.5	10	8	32	31.3	22

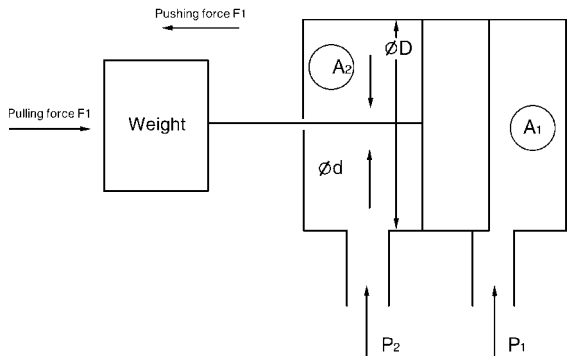


Spec/sign	A	B	C	D	E	F	G	H	I	J
AD-3650	M36 × 1.5	50	242	21	17	146	46	15	35	10
AD-4225	M42 × 1.5	25	186.5	34	26	104.5	50	15	44.5	12
AD-4250	M42 × 1.5	50	241	34	26	134	50	15	44.5	12
AD-4275	M42 × 1.5	75	301.5	39	26	164.5	50	15	44.5	12



Spec/sign	A	B	C	D	E	F	G	H	I	J	K
AD-6450	2 1/2-UNF(63.5)	50	247.8	20	51.8	146	23	20	77	26	59
AD-64100	2 1/2-UNF(63.5)	100	347.8	20	51.8	196	23	20	127	26	59
AD-64150	2 1/2-UNF(63.5)	150	467.8	20	61.8	256	23	20	187	26	59

Oil Hydraulic Cylinder Theoretical Force Output Form:



Pushing force F1=A1 × P1 × β

Pulling force F2=A2 × P2 × β

A1: Side piston compression area for push (cm^2) A1=π/4D2=0.785D2

A2: Side piston compression area for Pull (cm^2) A2=π/4(D^2–d^2)=0.785D2

D: Hydraulic cylinder inside diameter,namely piston diameter (cm)

d: Piston rod diameter (cm)

P1: Side action pressure for push (kgf/cm^2)

P2: Side action pressure for pull (kgf/cm^3)

β: Load rate

1.Hydraulic cylinder actual output lower than theoretical force outpu.

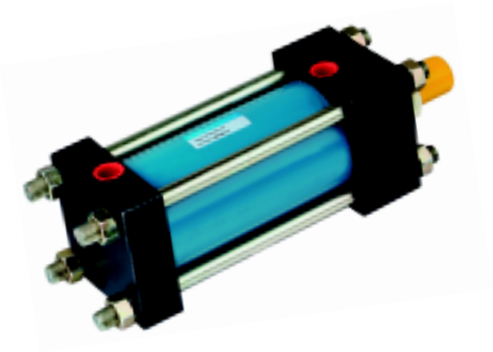
2.Load rate B value,when the inertial force small take 80%,others 60%.

Hydraulic cylinder inside diameter	compression area for push (cm^2)	Rod diameter of hydraulic cylinder	Rod srew thread of hydraulic cylinder	Compression area for pull (cm^2)	Velocity ratir	70kgf/cm^2		70kgf/cm^2		70kgf/cm^2	
						Pulling force F_2	Pulling force F_1	Pulling force F_2	Pulling force F_1	Pulling force F_2	Pulling force F_1
ϕ 30	7.07	16	M14 × 1.5	5.06	1.4	354	495	708	990	1063	1485
ϕ 40	12.57	20	M16 × 1.5	9.43	1.33	660	880	1302	1760	1980	2640
		25	M22 × 1.5	7.66	1.64	536	880	1072	1760	1608	2640
ϕ 50	19.64	20	M16 × 1.5	16.5	1.19	1150	1372	2310	2744	3465	4116
		30	M26 × 1.5	12.57	1.56	880	1372	1760	2744	2460	4116
ϕ 63	31.17	25	M22 × 1.5	26.26	1.19	1838	2184	3676	4368	5514	6552
		35	M30 × 1.5	21.55	1.45	1508	2184	3016	4368	4525	6552
ϕ 80	50.27	30	M26 × 1.5	43.2	1.16	3024	3521	6048	7042	9072	10563
		40	M30 × 1.5	37.7	1.33	2639	3521	5278	7042	7917	10563
ϕ 100	78.54	35	M30 × 1.5	68.92	1.14	4824	5498	9649	11000	14473	16493
		50	M40 × 2.0	58.92	1.33	4124	5498	8248	11000	12373	16493
ϕ 125	122.72	50	M40 × 2.0	103.1	1.19	7217	8590	14434	17180	21651	25770
		60	M50 × 2.0	94.46	1.3	6612	8590	13224	17180	19836	25770
ϕ 150	176.72	60	M50 × 2.0	148.46	1.19	10392	12369	20784	24738	31176	37107
		80	M70 × 2.0	126.48	1.4	8853	12369	17707	24738	26560	37107
ϕ 180	254.47	80	M70 × 2.0	204.23	1.25	14296	17813	28592	35626	42888	53439
		100	M90 × 2.0	175.97	1.45	12318	17813	24636	35626	36954	43439
ϕ 200	314.16	80	M70 × 2.0	263.92	1.19	18474	21991	36948	43982	55423	65974
		100	M90 × 2.0	235.66	1.33	16496	21991	32992	43982	49488	65974
ϕ 250	490.87	100	M90 × 2.0	412.37	1.19	28866	34360	57732	68723	86598	103083
		125	M100 × 3.0	368.16	1.33	25771	34360	51542	68723	77313	103083

Heavy Oil Hydraulic Cylinder

Technical Parameter:

Hydraulic cylinder inside diameter(mm)	40	50	63	80	100	125	150	180	200
Fluid	Standard hydraulic pressure oil								
Material of steel Tube	Carbon steel pipe/Galvanized iron pipe/AL Tubre A6063 TDS-T5								
Operating Pressure range (Mpa)	0.3~1.4								
Ambient temperature (℃)	-10~60								
The range of speed (mm/sec)	8~300								
Cushion Stroke (mm)	25	25	25	30	35	40	45	50	55
Standard Piston Length (PM)	30	35	35	50	60	70	60	70	70
Piston Length for stroke from1501-2500mm(PM)	60	70	70	80	100	100	100	140	140
Piston Length for stroke from2501-4000mm(PM)	120	140	140	150	180	180	180	200	200



How to order:

HOB × **63** × **100** × **FA**

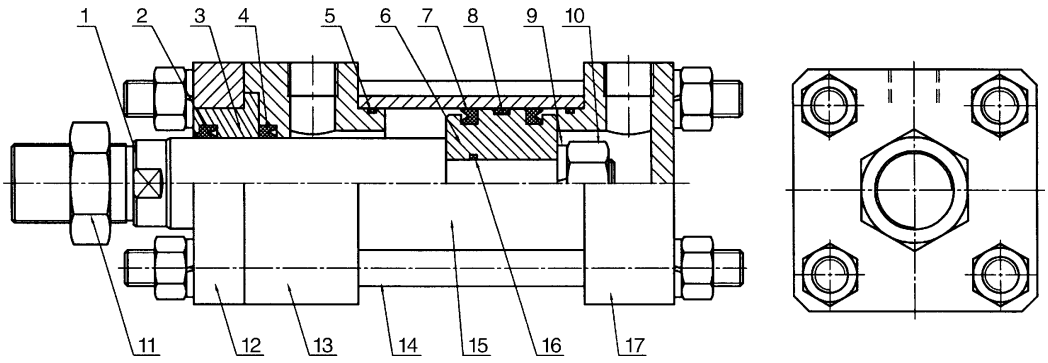
- **HOB**: HOB:Standard Type
- **63**: Bore

ϕ 40	ϕ 125
ϕ 50	ϕ 150
ϕ 63	ϕ 180
ϕ 80	ϕ 200
ϕ 100	

- **100**: Storke
- **FA**: Mounting Type

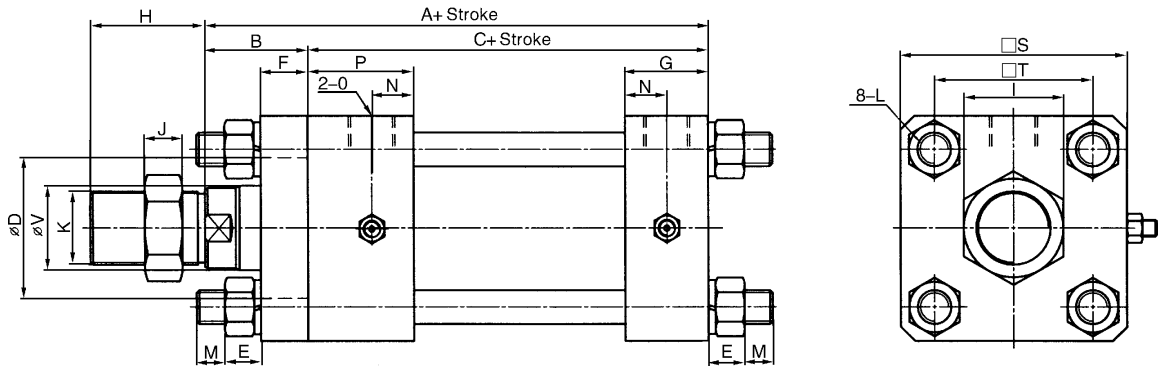
FA	CB
FB	LB
CA	TC

Inner Structure Drawing:



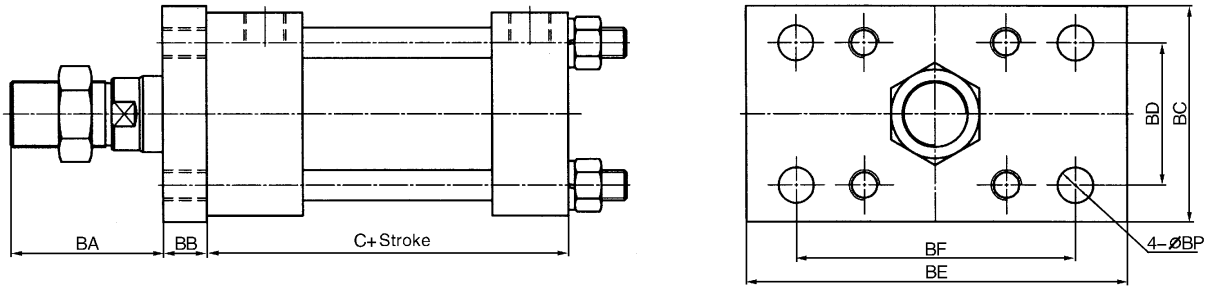
NO	Part name	Qty	NO	Part name	Qty	NO	Part name	Qty	NO	Part name	Qty
1	Piston rod	1	6	Piston	1	11	Rod nut	1	16	O-ring	1
2	Dustproof ring	1	7	Piston packing	2	12	Flange board	1	17	Rear cover	1
3	Copper cover	1	8	Guard seals	1	13	Front cover	1			
4	Rod packing	1	9	Spring washer	1	14	Rod	4			
5	O-ring	2	10	Nut	1	15	Tube	1			

Basic Type



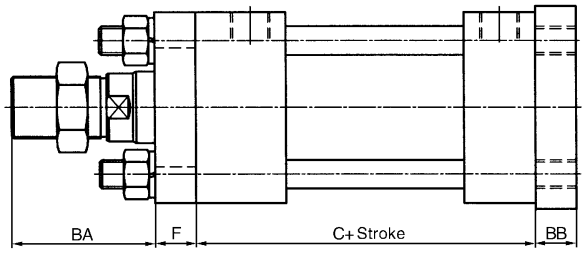
symbol/bore	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	S	T	V
40	148	37	111	40	10.5	17	28	40	32	13	M22 × 1.5	M10 × 1.25	10	13	G3/8	33	65	45	25
50	160	37	123	50	13	17	30	40	35	13	M26 × 1.5	M12 × 1.25	10	15	G3/8	38	80	56	30
63	160	37	123	50	14.5	17	30	45	41	13	M30 × 1.5	M14 × 1.25	10	15	G3/8	38	90	65	35
80	188	40	148	60	17	20	35	45	41	13	M30 × 1.5	M16 × 1.25	10	16	G1/2	38	110	80	40
100	213	45	168	80	19.5	20	37	55	55	15	M40 × 2	M18 × 1.5	10	16.75	G1/2	41	131	95	50
125	269	65	204	90	23.5	30	47	70	65	15	M50 × 2	M22 × 1.5	10	21.5	G3/4	57	162	122	60
150	265	65	200	110	31	30	50	80	90	20	M70 × 2	1" -8NUC	15	22.5	G3/4	60	195	144	80
180	315	75	240	135	39	40	55	100	110	20	M90 × 2	1.1/4" -8NUC	20	26	G1	65	235	175	100
200	325	80	245	135	39	40	60	100	110	20	M90 × 2	1.1/4" -8NUC	20	27.5	G1	65	262	193	100

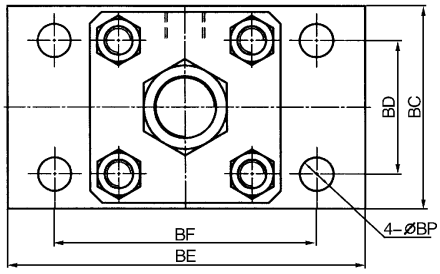
FA Dimension



symbol/bore	C	BA	BB	BC	BD	BE	BF	BP
40	111	60	17	75	50	115	93	12
50	123	60	17	85	56	150	110	14
63	123	45	17	95	68	155	126	14
80	148	45	20	120	75	190	152	18
100	168	55	20	140	100	220	180	20
125	204	70	30	170	122	280	222	24
150	200	80	30	206	155	310	260	28
180	240	100	40	250	188	375	315	35
200	245	100	40	272	207	425	355	35

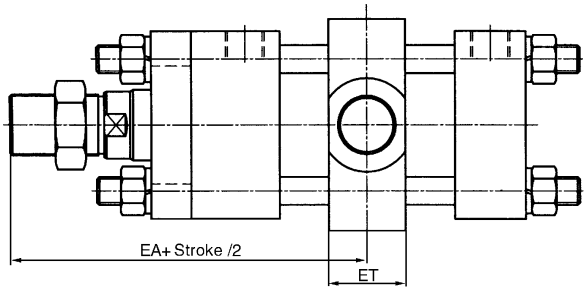
FB Dimension

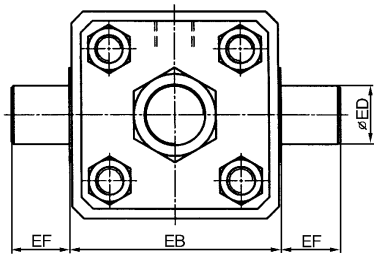




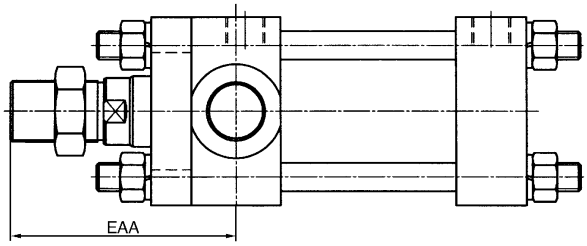
symbol/bore	C	F	BA	BB	BC	BD	BE	BF	BP
40	111	17	60	17	75	50	115	93	12
50	123	17	60	17	85	56	150	110	14
63	123	17	45	17	95	68	155	126	14
80	148	20	45	20	120	75	190	152	18
100	168	20	55	20	140	100	220	180	20
125	204	30	70	30	170	122	280	222	24
150	200	30	80	30	206	155	310	260	28
180	240	40	100	40	250	188	375	315	35
200	245	40	100	40	272	207	425	355	35

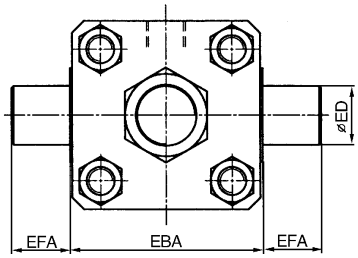
TC Dimension





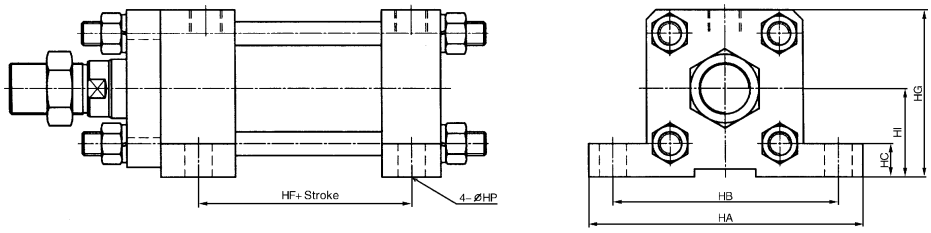
TA Dimension



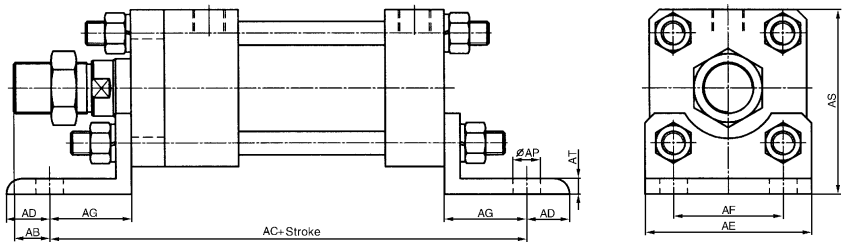


symbol/bore	EA	EB	ED	EF	ET	EAA	EBA	EFA
40	95	75	20	20	28	–	–	–
50	102.5	90	25	25	33	53.5	69	20
63	102.5	102	32	32	40	56	84	25
80	115.5	120	32	32	43	56	94	30
100	131	140	40	40	53	59	114	30
125	172	175	50	50	58	65.5	135	35
150	170	206	60	60	73	93.5	168	45
180	200	243	80	80	98	95	200	50
200	205	272	90	90	108	–	–	–

LA Dimension

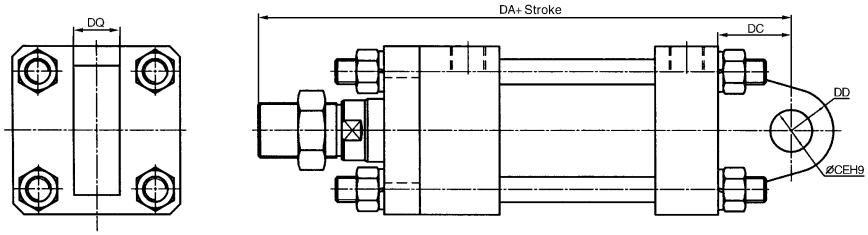


LB Dimension

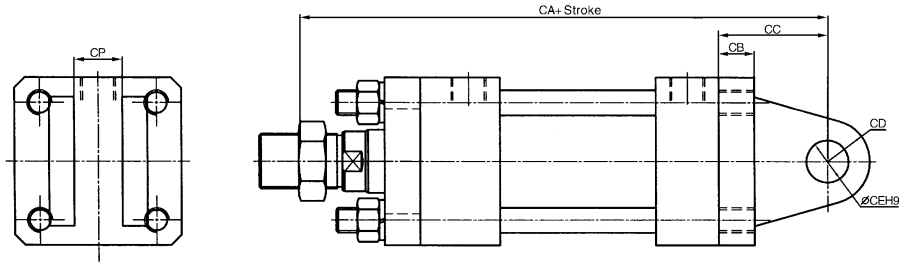


symbol/bore	AB	AC	AD	AE	AF	AG	AP	AS	AT	HA	HB	HC	HF	HG	HI	HP
40	22.5	203	12.5	68	45	37.5	11	78.5	6	112	90	14	80.5	69.5	37	12
50	18	224	22	85	56	42	14	94	8	140	115	17	89	85	45	14
63	21	228	22	95	62	44	16	102	8	156	128	19	89	95	50	14
80	2	29	27	120	80	63	18	131	13	184	152	25	111.5	115	60	18
100	14	320	24	140	100	66	20	158.5	15	210	178	27	129	135.5	70	21
125	25	394	30	169	122	80	24	195	15	280	230	30	152	171	90	24
150	35	390	30	200	144	80	28	220	20	325	270	35	145	208	113	28
180	45	460	40	240	175	90	35	267.5	20	395	330	45	180	260.5	143	35
200	45	475	54	265	193	95	35	301	25	430	360	50	182.5	292	161	35

CA Dimension



CB Dimension



symbol/bore	DA	DC	DD	Φ DE	DQ	CA	CC	CB	CD	Φ CE	CP
40	213	25	15	16	22	230	42	17	15	16	23
50	235	35	20	20	22	252	52	17	20	20	23
63	250	45	25	25	30	267	62	17	25	25	31
80	283	50	30	30	35	303	70	20	30	30	36
100	328	60	35	35	40	348	80	20	35	35	41
125	409	70	50	50	50	439	100	30	50	50	56
150	425	80	60	60	60	455	110	30	60	60	61
180	515	100	80	80	80	555	140	40	80	80	81
200	535	110	90	90	90	575	150	40	90	90	91

Light Oil Hydraulic Cylinder

Technical Parameter:

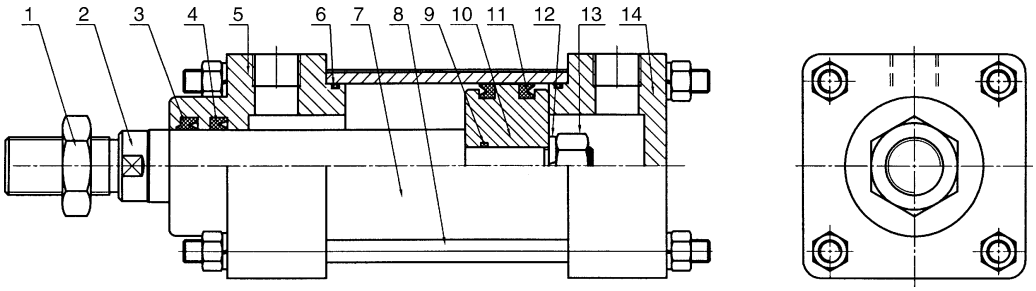
Hydraulic cylinder inside diameter(mm)	30	40	50	63	80	100	125
Fluid	Standard hydraulic pressure oil						
Material of steel Tube	Carbon steel pipe/Galvanized iron pipe/AL Tubre A6063 TDS-T5						
Operating Pressure range (Mpa)	0.3~0.7						
Ambient temperature (℃)	-10~60						
The range of speed (mm/sec)	8~300						
Standard Piston Length (PM)	30	30	30	30	35	50	50
Piston Length for stroke from1501-2500mm(PM)	60	60	60	60	70	100	100
Piston Length for stroke from2501-4000mm(PM)	120	120	120	120	140	150	150

How to order:

MOB | **63** × **100** | **FA**

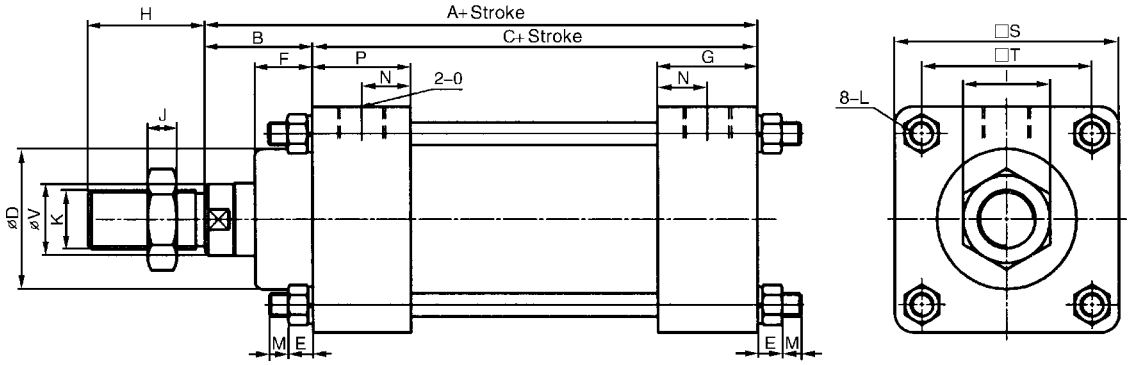
- MOB: MOB:Standard Type
- 63: Bore
  - ϕ 30, ϕ 40, ϕ 50, ϕ 63, ϕ 80, ϕ 100, ϕ 125
- 100: Storke
- FA: Mounting Type
  - FA, CB, FB, LB, CA, TC

Inner Structure Drawing:



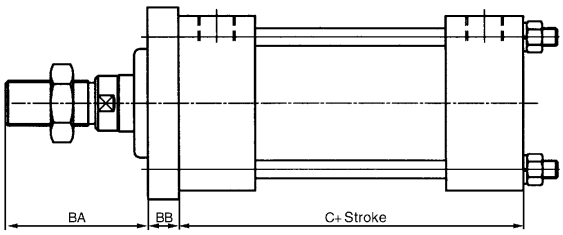
NO	Part name	Qty	NO	Part name	Qty	NO	Part name	Qty
1	Rod nut	1	6	O-ring	2	11	Piston packing	2
2	Piston rod	1	7	Tube	1	12	Spring washer	1
3	Dustproof ring	1	8	Rod	4	13	Nut	1
4	Rod packing	1	9	O-ring	1	14	Rear cover	1
5	Front cover	1	10	Piston	1	15		

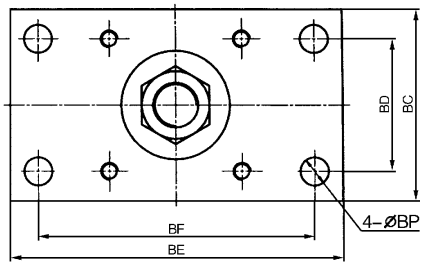
Basic Type



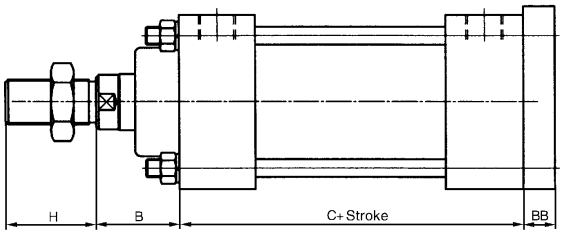
symbol/bore	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	S	T	V
30	128	28	100	30	8.5	15	25	28	22	8	M14 × 1.5	M8 × 1.25	8	12.5	G1/4	25	50	34	16
40	147	37	110	40	8.5	20	30	28	23.5	8	M16 × 1.5	M8 × 1.25	8	15	G3/8	30	64	45	20
50	145	37	108	45	10.5	20	28	28	23.5	8	M16 × 1.5	M10 × 1.25	10	14.5	G3/8	30	70	50	20
63	162	40	122	55	10.5	20	31	40	32	13	M22 × 1.5	M10 × 1.25	10	15.5	G3/8	31	85	60	25
80	179	52	127	62	13	32	35	40	35	13	M26 × 1.5	M12 × 1.5	10	18	G1/2	37	106	74	30
100	206	52	154	78	14.5	32	37	45	41	13	M30 × 1.5	M14 × 1.5	10	18.5	G1/2	37	122	89	35
125	216	56	160	85	17	31	41	55	55	15	M40 × 2	M16 × 1.5	10	20	G1/2	40	147	110	50

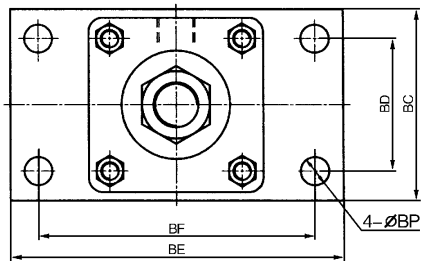
FA Dimension





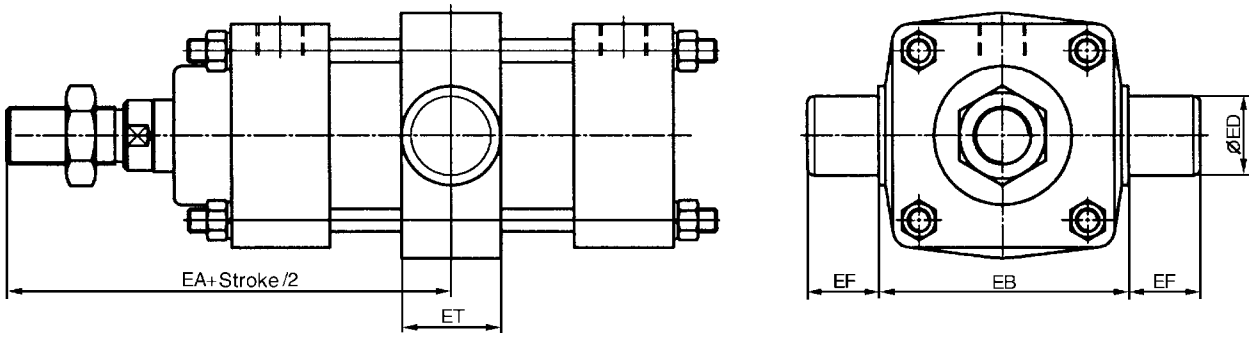
FB Dimension





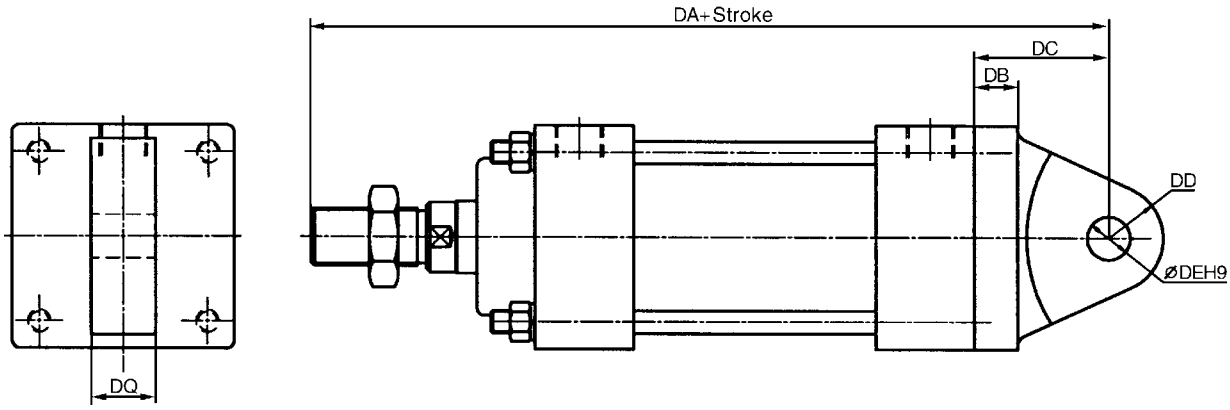
symbol/bore	B	C	H	BA	BB	BC	BD	BE	BF	BP
30	28	100	28	45	11	52	34	105	80	9
40	37	110	28	54	11	72	50	115	93	12
50	37	108	28	54	11	72	50	115	93	12
63	40	122	40	76	14	90	60	140	117	14
80	52	127	40	72	20	105	75	180	152	14
100	52	154	45	77	20	125	90	200	158	16
125	56	160	55	91	20	153	110	225	184	16

TC Dimension



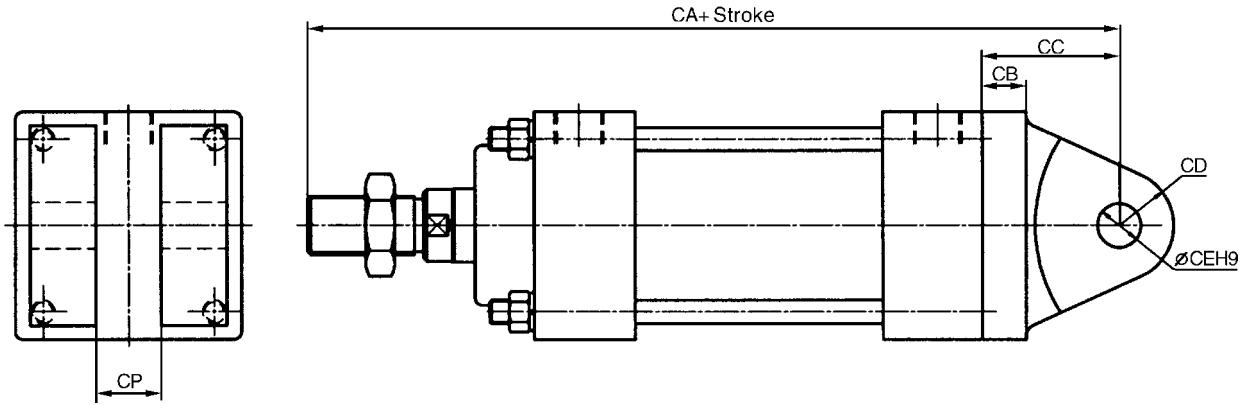
symbol/bore	EA	EB	ED	EF	ET
30	106	55	16	16	25
40	120	69	18	29	25
50	120	83	20	35	28
63	146	98	25	36	32
80	146.5	124	28	35	35
100	174	142	30	40	38
125	191	175	32	40	40

CA Dimension



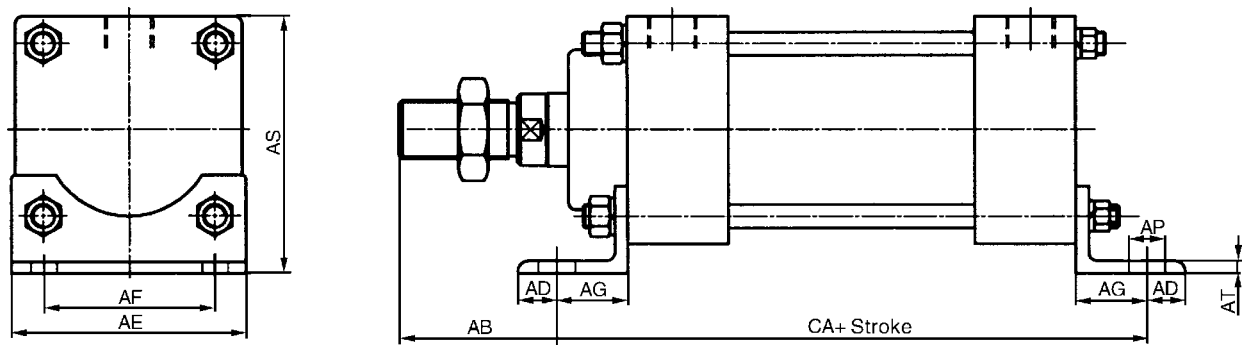
symbol/bore	DA	DB	DC	DD	Φ DE	DQ
30	187	11	31	10	10	16
40	211	11	36	13	12	22
50	209	12	36	13	12	22
63	252	19	50	24	20	30
80	287	18	68	30	30	30
100	324	18	73	35	35	35
125	344	18	73	35	35	35

CB Dimension



symbol/bore	DA	DB	DC	DD	Φ CE	CP
30	190	12	34	10	10	10
40	215	14	40	13	12	13
50	213	14	40	13	12	13
63	252	18	50	24	20	24
80	287	18	68	30	30	30
100	324	18	73	35	35	35
125	344	18	73	35	35	35

LB Dimension



symbol/bore	AB	AC	AD	AE	AF	AG	AP	AS	AT
30	28	156	10	53	34	28	9	60	5
40	27	186	12	68	45	38	9	77	6
50	27	184	12	73	50	38	11	81	6
63	42	188	12	88	60	38	11	96	6
80	56	199	14	105	74	36	13	113	6
100	49	250	27	127	89	48	16	139	9
125	60	262	24	150	110	51	18	161	9

Hydraulic Station

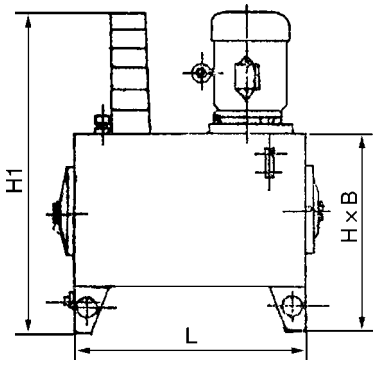
Product Introduction:

The hydraulic station have good performance

1.According system to config the chip ,or without chip.

2.Setup cooler,heater,Accumulator .

3.Electrical control devices can be set, but also run without the electrical control device.



Dimension:

Oil box capacity(L)	L	B	H
25	–	–	–
40	–	–	–
63	–	–	–
100	700	500	520
160	800	600	600
250	900	700	700
400	1000	800	850
530	1200	900	930
800	1300	1000	970