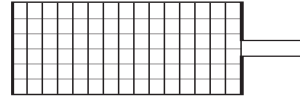




FUJIKURA COMPOSITES

# Fujikura BF Cylinders

**FC** SERIES



**FCS** Single Action Push Type

**FCD** Double Action Type



Fujikura  
Cylinder

**FUJIKURA RUBBER LTD.**



# Fujikura BF Cylinders

## DESIGN CONCEPTION :

### "No Leakage and Less Friction"

— *The main Design conception that lies extended at the basis of **BF Cylinders**.*

### "Precision Control rather than Power"

— *The main object of developing **BF Cylinders**.*

## INDEX

	Page
General Description of <b>BF Cylinders</b> .....	2
<b>FC Series MODEL FCS Single Action Push Type/FCD Double Action Type</b>	
Features/Specifications/Ordering Data .....	3
Internal Construction/Parts Description (for $D_c \geq 40$ Cylinders) .....	4
MODEL FCS-10-6 to 20-22      Internal Construction/Outline Dimensions/Parts Description ...	5
MODEL FCS-25-6 to 31.5-35      Internal Construction/Outline Dimensions/Parts Description ...	5
MODEL FCS-25-6 to 31.5-35      Size/Mount .....	5,6
MODEL FCD-25-6 to 31.5-35      Internal Construction/Outline Dimensions/Parts Description ...	7
MODEL FCD-25-6 to 31.5-35      Size/Mount .....	7,8
MODEL FCS-40-8 to 140-204      Outline Dimensions .....	9
MODEL FCS-40-8 to 140-204      Size/Mount .....	9,10
MODEL FCD-40-8 to 140-204      Outline Dimensions .....	11
MODEL FCD-40-8 to 140-204      Size/Mount .....	11,12
MODEL FCS-160-82 to 200-320      Outline Dimensions .....	13
MODEL FCS-160-82 to 200-320      Size/Mount .....	13,14
MODEL FCD-160-82 to 200-320      Outline Dimensions .....	15
MODEL FCD-160-82 to 200-320      Size/Mount .....	15,16



## General Description of BF Cylinders

### TYPES

**FC Series** : Single/Double Action ..... Standard Cylinders

### FEATURES IN COMMON

**BF Cylinders** are bound together by unique unrivaled common features, which are all attributable to the rolling action of **BF Diaphragms**.

- **Perfect Leak-proof** ..... No Blow-By Leakage.
- **Very Low Friction** ..... : Responsive to minute pressure variations.
  - : Virtually no hysteresis-loss in movement.
  - : Low start up pressure as low as 0.01MPa.
  - : Smooth "Non-Jarring" action.
  - : Ready to start even after long interval.
- **Lubrication-Free** ..... No Lubricator required in the air line.
- **Excellent resistance to pressure** ... Assured by the rolling principle of **BF Diaphragms**.  
(Molded products of durable fabric-reinforced NBR)

### PREFERRED APPLICATIONS

**BF Cylinders** find its best applications in such cases where air leakage is not allowed and/or sensitive response is desired to minute pressure variations.

- Sensitive Actuators in Automatic Controllers & Instruments, Pressure rollers and Dancer rollers.
- Air line equipment in the clean factories disliking oil mist contamination.
- Polishing equipment for Lenses and Jewels.
- Precision actuators of constant output force. (Spot welder etc.)
- Actuator for emergency use.



**Model FCS: Single Action (push)**

**Model FCD: Double Action**

■ SPECIFICATIONS

Operating Style	Single Action (Push)/Double Action	
Cylinder Diameter	mm	10 to 200
Stroke	mm	6 to 320
Working Fluid	Compressed Air (Non-Lubricated)	
Working Pressure Range	MPa	0.01~0.7
Working Temperature Range	°C	0 to 60
Rod Bearing	Dry Bearing	
Mounting	Direct, L, Front Flange, Rear Flange, Trunnion, Pivot-Mounting	

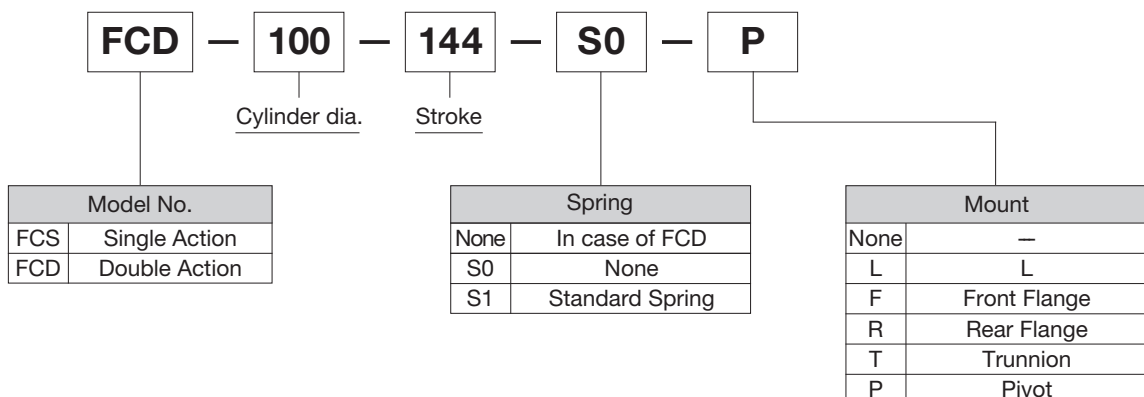
■ FEATURES

- FC Series are standard type of **BF Cylinders**. They are designed in a variety of sizes from 10 to 200.
- Each size is available in both a single action and a double action style.
- A variety of mounts is provided.

■ NOTE

- Customers are requested to follow the "**BF Cylinders Handling Manual**" (KS-569E) before installing and putting in service.
- Large size **BF Cylinders** of 112mm and over in diameter are customized only for individual requirement.  
Customers are kindly advised to check up the delivery time.
- Consult Fujikura for any special requirements.

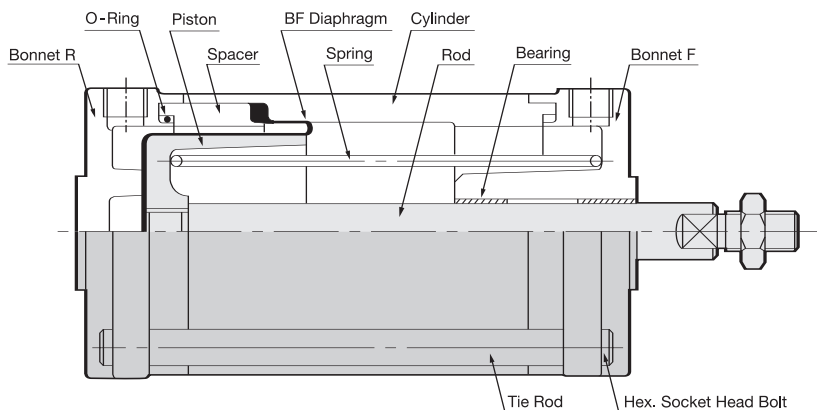
■ ORDERING DATA [ Example ]



# INTERNAL CONSTRUCTION/PARTS DESCRIPTION

(For Cylinders of 40mm and over in diameter)

## SINGLE ACTION TYPE Model FCS-40 to-200

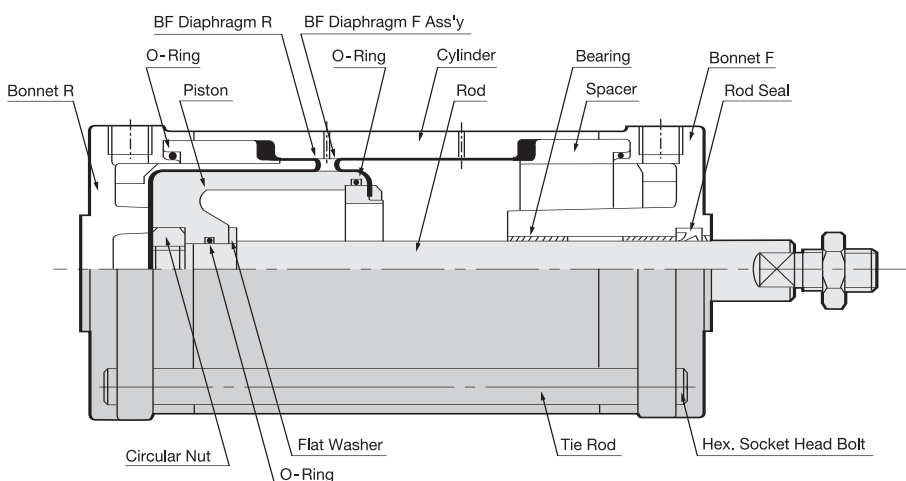


### ■ PARTS LIST

DESCRIPTION	MATERIAL
Bonnet F/R	A $\ell$ Alloy Die-Casting A $\ell$ Alloy Casting (FCS-160 & over)
O-Ring	NBR
Piston	A $\ell$ Alloy Casting
Cylinder/Spacer	A $\ell$ Alloy
Rod	Stainless Steel Hard Steel, Hard Chrome Plated (FCS-80 & over)
BF Diaphragm	Fabric Reinforced NBR
Return Spring	Spring Steel Wire
Bearing	Dry Bearing
Tie Rod	Carbon Steel

Note : 1. A $\ell$  parts are anodic treated.  
2. Unless otherwise specified, steel parts are galvanized.  
3. A $\ell$  die-casting parts are bake painted.

## DOUBLE ACTION TYPE Model FCD-40 to-100

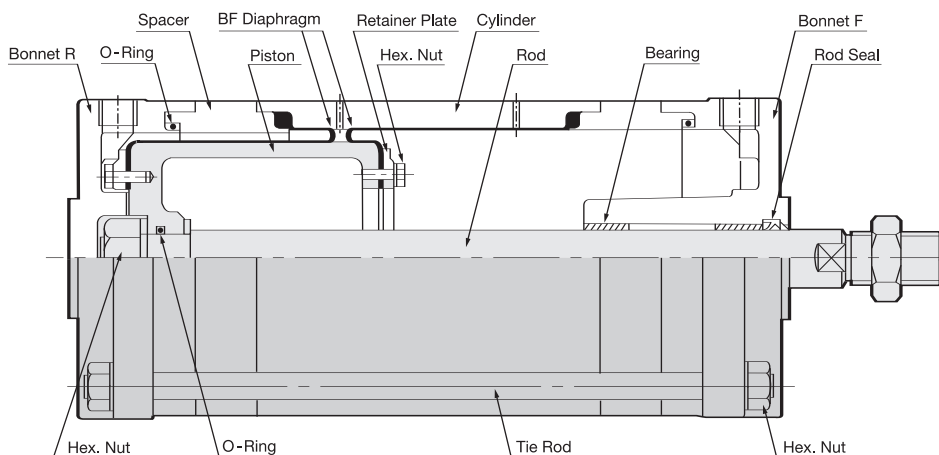


### ■ PARTS LIST

DESCRIPTION	MATERIAL
Bonnet F/R	A $\ell$ Alloy Die-Casting
Circular Nut	Carbon Steel
O-Ring	NBR
Piston	A $\ell$ Alloy Casting
BF Diaphragm R	Fabric Reinforced NBR
BF Diaphragm F Ass'y	Fabric Reinforced NBR with Fitting Caulked
Cylinder/Spacer	A $\ell$ Alloy
Rod	Stainless Steel Hard Steel, Hard Chrome Plated (FCD-80 & -100)
Bearing	Dry Bearing
Rod Seal	NBR
Tie Rod	Carbon Steel

Note : 1. A $\ell$  parts are anodic treated.  
2. Unless otherwise specified, steel parts are galvanized.  
3. A $\ell$  die-casting parts are bake painted.

## DOUBLE ACTION TYPE Model FCD-112 to-200

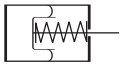


### ■ PARTS LIST

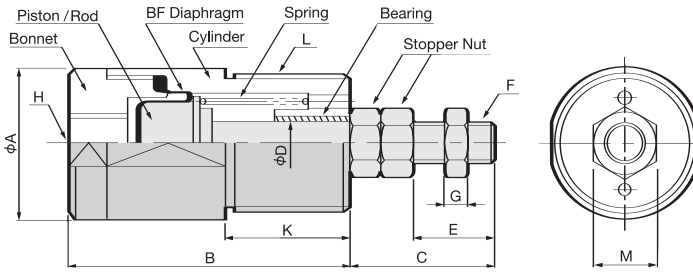
DESCRIPTION	MATERIAL
Bonnet F/R	A $\ell$ Alloy Die-Casting A $\ell$ Alloy Casting (FCD-160 & over)
Cylinder/Spacer	A $\ell$ Alloy Casting
Piston	A $\ell$ Alloy Casting
BF Diaphragm	Fabric Reinforced NBR
Retainer Plate	A $\ell$ Alloy Casting
Rod	Hard Steel, Hard Chrome Plated
Bearing	Dry Bearing
Rod Seal	NBR
Tie Rod	Carbon Steel

Note : 1. A $\ell$  parts are anodic treated.  
2. Unless otherwise specified, steel parts are galvanized.  
3. A $\ell$  die-casting parts are bake painted.

# Model FCS-10-6 to 20-22



**Internal Construction Outline Dimensions**



## ■ PARTS LIST

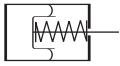
DESCRIPTION	MATERIAL
Piston/Rod	Stainless Steel
BF Diaphragm	Fabric Reinforced NBR
Bonnet	Brass
Cylinder	Brass
Spring	Spring Steel Wire
Bearing	Dry Bearing
Stopper Nut	Carbon Steel

F<sub>0</sub>/F<sub>1</sub> : Spring force at zero/full stroke (N)  
A<sub>e</sub> : Effective area (mm<sup>2</sup>)

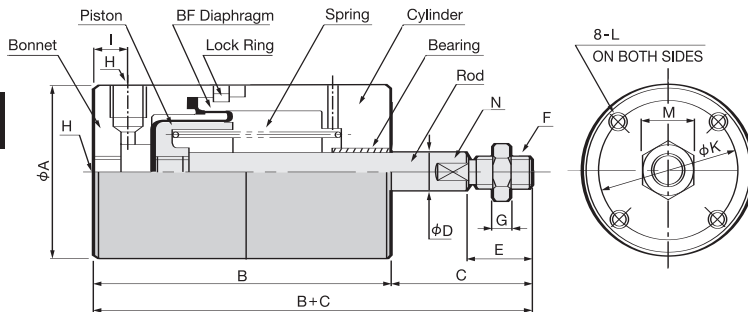
## ■ OUTLINE DIMENSIONS

Dc-STROKE	A	B	C	D	E	F	G	H	K	L	M	A <sub>e</sub>	SPRING FORCE	
													F <sub>0</sub>	F <sub>1</sub>
10 - 6	18	35	18	5	10	M5×0.5	3.2	Rc 1/8	16	M16×1.5	8	57	0.3	0.9
12.5 - 11	20	45	20		12				20	M18×1.5			0.8	2
16 - 10	24	45	23	7	13	M6×0.75	3.6	Rc 1/8	20	M22×1.5	10	165	1.5	2.9
16 - 16		58							25	2				
20 - 8	28	44	26	8	16	M6×0.75	3.6	Rc 1/8	20	M26×1.5	10	269	2	4.9
20 - 22		72							30	2				

# Model FCS-25-6 to 31.5-35



**Internal Construction Outline Dimensions**



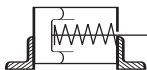
## ■ PARTS LIST

DESCRIPTION	MATERIAL
Bonnet	Al Alloy
Piston	Al Alloy
BF Diaphragm	Fabric Reinforced NBR
Lock Ring	Brass Wire
Spring	Spring Steel Wire
Cylinder	Al Alloy
Bearing	Dry Bearing
Rod	Stainless Steel

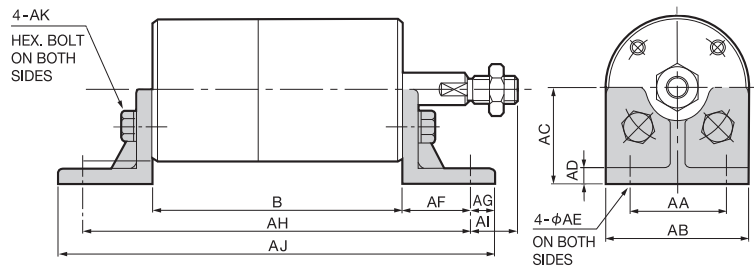
F<sub>0</sub>/F<sub>1</sub> : Spring force at zero/full stroke (N)  
A<sub>e</sub> : Effective area (mm<sup>2</sup>)  
N : Wrench flat width

## ■ OUTLINE DIMENSIONS

Dc-STROKE	A	B	C	B+C	D	E	F	G	H	I	K	L	M	N	A <sub>e</sub>	SPRING FORCE	
																F <sub>0</sub>	F <sub>1</sub>
25 - 6	38	46	30	76	8	12	M6 P=0.75	3.6	Rc 1/8	9	30	M4 DP6	10	6	400	3.4	6.9
25 - 16		63		93													
25 - 26		79		109													
31.5 - 14	45	61	36	97	10	16	M8 P=1	5	Rc 1/8	10	35	M5 DP7.5	13	8	660	4.9	11.8
31.5 - 24		78		114													
31.5 - 35		97		133													

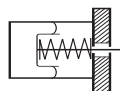


## L Type Mount

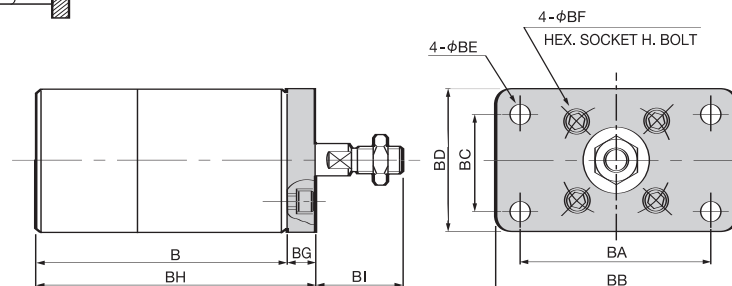


Dc-STROKE	B	AH	AJ
25 - 6	46	84	96
25 - 16	63	101	113
25 - 26	79	117	129
31.5 - 14	61	105	121
31.5 - 24	78	122	138
31.5 - 35	97	141	157

Dc	AA	AB	AC	AD	AE	AF	AG	AI	AK
25	25	38	25	4	6	19	6	11	M4×10
31.5	30	45	30	5	6	22	8	14	M5×12

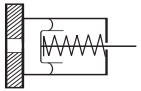


## Front Flange Type Mount

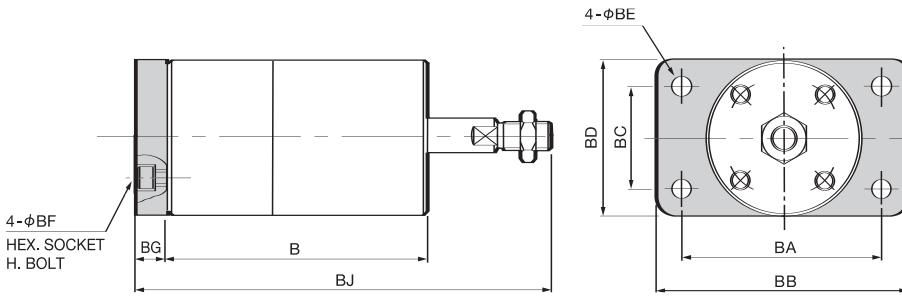


Dc-STROKE	B	BH
25 - 6	46	52
25 - 16	63	69
25 - 26	79	85
31.5 - 14	61	69
31.5 - 24	78	86
31.5 - 35	97	105

Dc	BA	BB	BC	BD	BE	BF	BG	BI
25	50	65	25	38	5	M4×6	6	24
31.5	60	75	30	45	6	M5×8	8	28

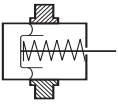


## Rear Flange Type Mount

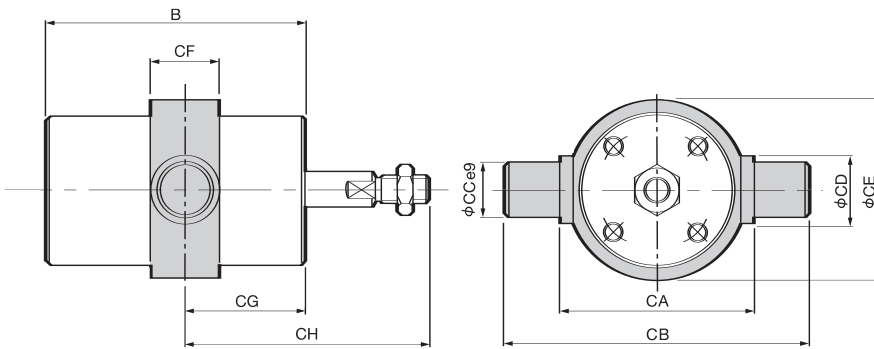


Dc-STROKE	B	BJ
25 - 6	46	82
	63	99
	79	115
31.5 - 14	61	105
	78	122
	97	141

Dc	BA	BB	BC	BD	BE	BF	BG
25	50	65	25	38	5	M4×6	6
31.5	60	75	30	45	6	M5×8	8

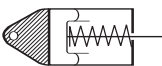


## Trunnion Type Mount

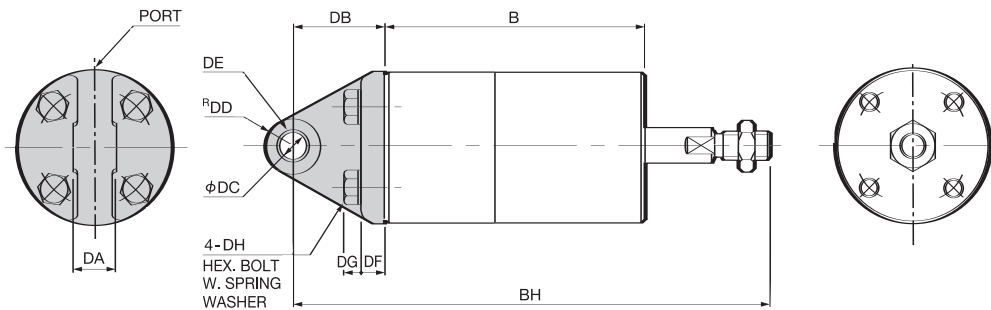


Dc-STROKE	B	CG	CH
25 - 6	46	12	42
	63	24	54
	79	40	70
31.5 - 14	61	24	60
	78	36	72
	97	48	84

Dc	CA	CB	CC	CD	CE	CF
25	46	66	10	15	46	16
31.5	54	78	12	16	53	17



## Pivot Type Mount

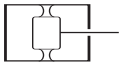


Dc-STROKE	B	BH
25 - 6	46	101
	63	118
	79	134
31.5 - 14	61	124
	78	141
	97	160

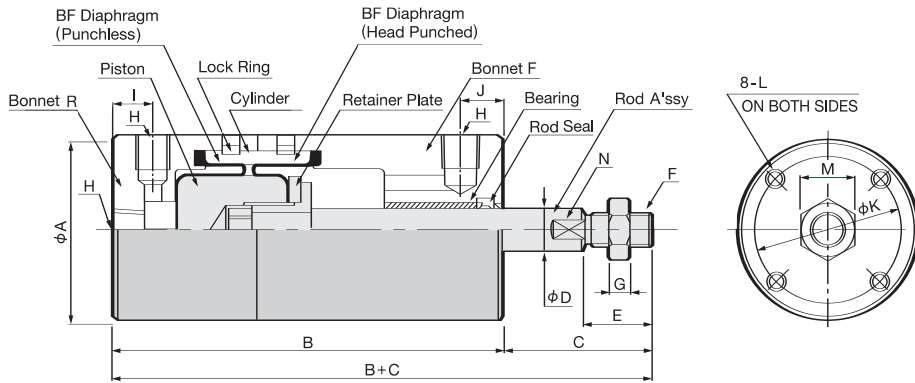
Dc	DA	DB	DC	DD	DE	DF	DG	DH
25	12	25	8	8	0812	6	3.8	M4×12
31.5	13	27	8	8	0812	7	4.8	M4×14

DE : Bearing Size No.

# Model FCD-25-6 to 31.5-35



## Internal Construction Outline Dimensions



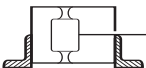
## PARTS LIST

DESCRIPTION	MATERIAL
Bonnet	A l Alloy
Piston	A l Alloy
BF Diaphragm	Fabric Reinforced NBR
Lock Ring	Brass Wire
Cylinder	A l Alloy
Retainer Plate	A l Alloy
Bearing	Dry Bearing
Rod Seal	NBR
Rod Ass'y	Stainless Steel/ Carbon Steel

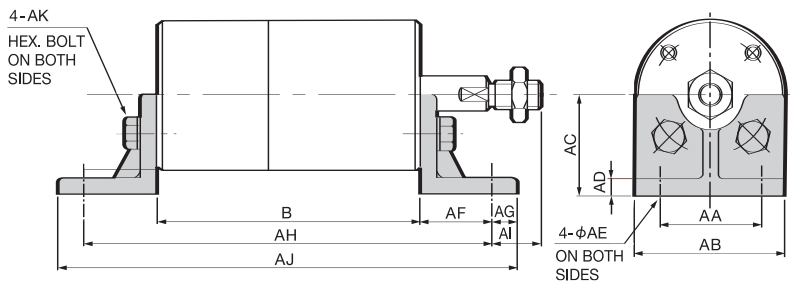
## OUTLINE DIMENSIONS

Ae : Effective area (mm<sup>2</sup>)  
N : Wrench flat width

Dc-STROKE	A	B	C	B+C	D	E	F	G	H	I	J	K	L	M	N	Ae	
																PUSH	PULL
25 - 6	38	71	30	101	8	12	M6 P=0.75	3.6	Rc1/8	9	9	30	M4 DP6	10	6	400	350
		86		116													
		101		131													
31.5 - 14	45	85	36	121	10	16	M8 P=1	5	Rc1/8	10	10	35	M5 DP7.5	13	8	660	580
		101		137													
		118		154													

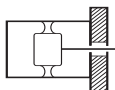


## L Type Mount

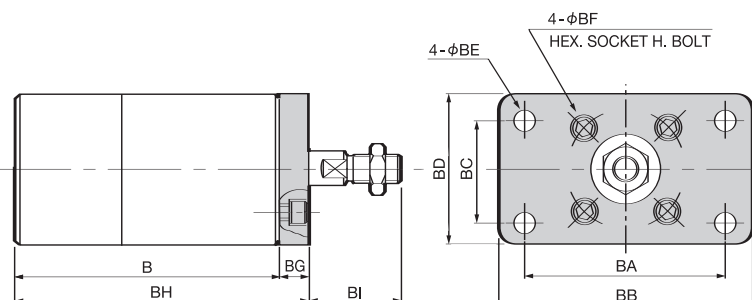


Dc-STROKE	B	AH	AJ
25 - 6	71	109	121
	86	124	136
	101	139	151
31.5 - 14	85	129	145
	101	145	161
	118	162	178

Dc	AA	AB	AC	AD	AE	AF	AG	AI	AK
25	25	38	25	4	6	19	6	11	M4x10
31.5	30	45	30	5	6	22	8	14	M5x12



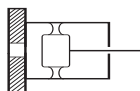
## Front Flange Type Mount



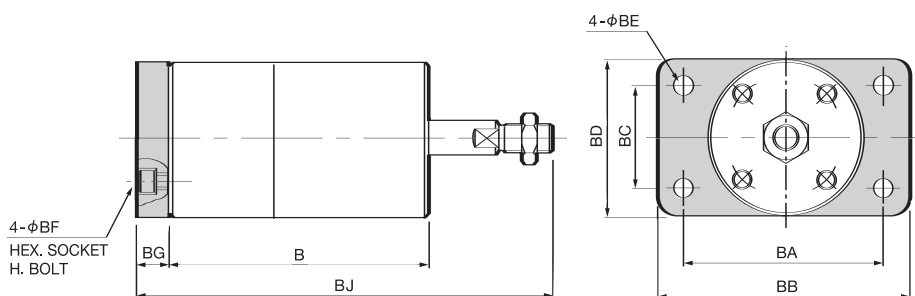
Dc-STROKE	B	BH
25 - 6	71	77
	86	92
	101	107
31.5 - 14	85	93
	101	109
	118	126

Dc	BA	BB	BC	BD	BE	BF	BG	BI
25	50	65	25	38	5	M4x6	6	24
31.5	60	75	30	45	6	M5x8	8	28



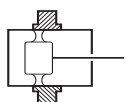


### Rear Flange Type Mount

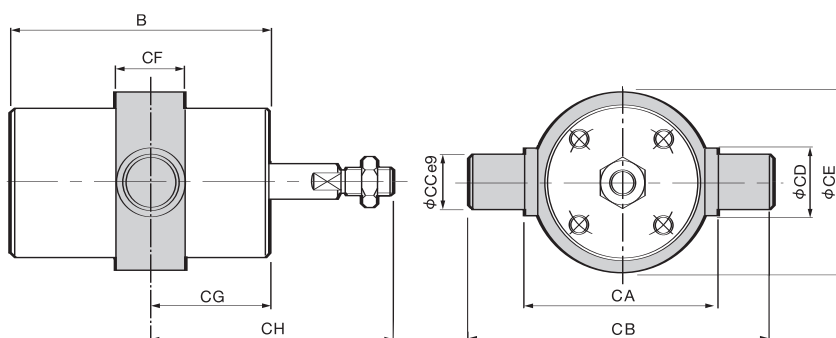


Dc-STROKE	B	BJ
25	6	71
	16	86
	26	101
31.5	14	85
	24	101
	35	118

Dc	BA	BB	BC	BD	BE	BF	BG
25	50	65	25	38	5	M4×6	6
31.5	60	75	30	45	6	M5×8	8

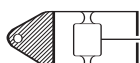


### Trunnion Type Mount

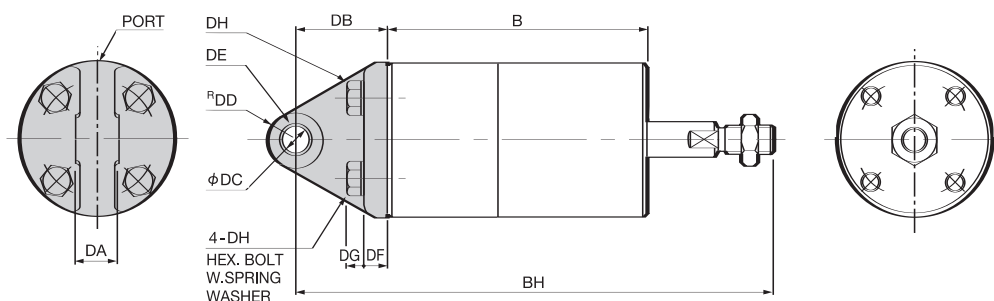


Dc-STROKE	B	CG	CH
25	6	71	56
	16	86	63
	26	101	68
31.5	14	85	80
	24	101	96
	35	118	103

Dc	CA	CB	CC	CD	CE	CF
25	46	66	10	15	46	16
31.5	54	78	12	16	53	17



### Pivot Type Mount



Dc-STROKE	B	BH
25	6	126
	16	141
	26	156
31.5	14	148
	24	164
	35	181

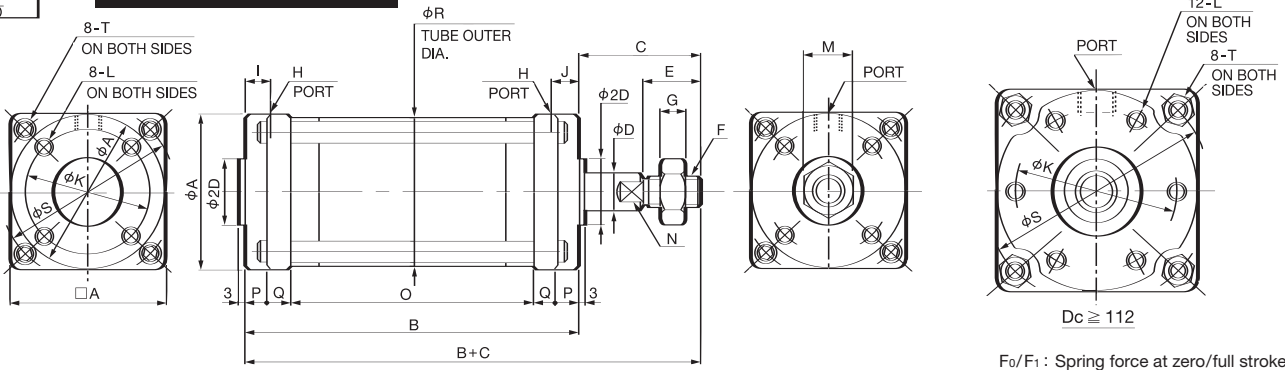
Dc	DA	DB	DC	DD	DE	DF	DG	DH
25	12	25	8	8	0812	6	3.8	M4×12
31.5	13	27	8	8	0812	7	4.8	M4×14

DE : Bearing Size No.

# Model FCS-40-8 to 140-204



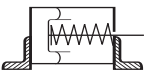
## Outline Dimensions



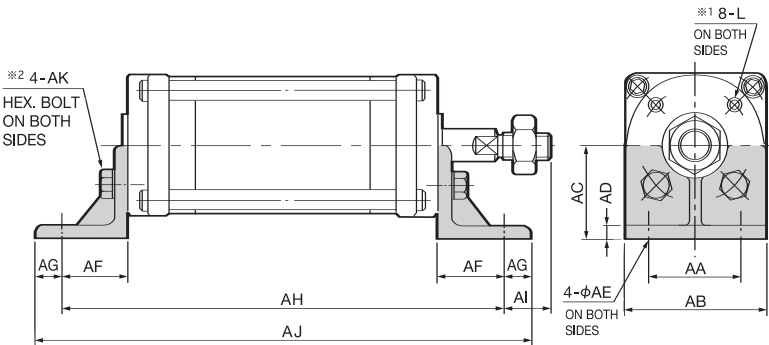
F<sub>0</sub>/F<sub>1</sub> : Spring force at zero/full stroke (N)  
 Ae : Effective area (mm<sup>2</sup>)  
 N : Wrench flat width

## OUTLINE DIMENSIONS

Dc-STROKE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Ae	SPRING FORCE	
																						F <sub>0</sub>	F <sub>1</sub>
40 - 8	53	44	42	12	20	M10 × 1.25	6	Rc 1/8	9	-	42	M6 DP 9	17	10	14	8	7	51.5	61	M5	1100	7.8	19.6
		38																					
		57																					
		75																					
50 - 16	63	57	45	12	20	M10 × 1.25	6	Rc 1/8	10	-	50	M6 DP 9	17	10	25	8	8	61.5	73	M6	1770	14.7	29.4
		55																					
		77																					
		98																					
63 - 16	82	66	50	16	24	M12 × 1.5	7	Rc 1/4	12	-	63	M8 DP 12	19	13	26	9	11	78.5	94	M8	2730	23.5	47
		65																					
		91																					
		120																					
80 - 30	100	87	58	20	32	M16 × 1.5	10	Rc 1/4	14	-	80	M8 DP 12	24	17	39	10	14	97	114	M8	4540	39.2	78.4
		87																					
		125																					
		157																					
100 - 46	120	118	65	25	40	M20 × 1.5	12	Rc 1/4	14	-	98	M10 DP 15	30	22	64	11	16	117.5	136	M10	7240	61.7	127.4
		124																					
		169																					
		214																					
112 - 42	137	117	72	25	44	M22 × 1.5	13	Rc 3/8	18	-	112	M10 DP 15	32	22	55	12	19	135	156	M12	8820	76.4	158.8
		124																					
		176																					
		228																					
125 - 52	150	132	76	30	48	M24 × 1.5	14	Rc 3/8	18	-	125	M10 DP 15	36	24	58	16	20	149	170	M14	11100	95.1	198
		133																					
		191																					
		249																					
140 - 62	165	154	84	35	52	M27 × 1.5	16	Rc 3/8	18	-	140	M12 DP 18	41	30	74	16	24	164	190	M14	14100	119.6	254.8
		164																					
		226																					
		290																					



## L Type Mount



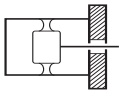
※1 : 12-L FOR Dc ≥ 112 ON BOTH SIDES

※2 : 6-AK FOR Dc ≥ 112 ON BOTH SIDES

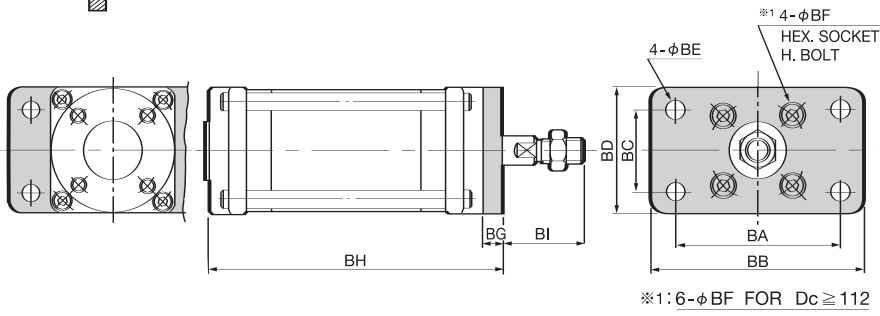
Dc-STROKE	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
40 - 8	35	53	35	5	6.5	25	10	94	17	114	M6 × 14
								118		138	
								137		157	
								155		175	
50 - 16	40	63	40	6	7.5	26	11	109	19	131	M6 × 14
								139		161	
								161		183	
								182		204	
63 - 16	50	82	50	6	9.5	31	14	128	19	156	M8 × 20
								167		195	
								193		221	
								222		250	
80 - 30	60	100	60	8	9.5	35	17	157	23	191	M8 × 20
								205		239	
								243		277	
								275		309	
100 - 46	75	120	70	8	12	40	20	198	25	238	M10 × 25
								258		298	
								303		343	
								348		388	
112 - 42	85	137	80	8	14	44	23	205	28	251	M10 × 25
								274		320	
								326		372	
								378		424	
125 - 52	95	150	87	10	14	46	24	224	30	272	M10 × 25
								299		347	
								357		405	
								415		463	
140 - 62	100	165	95	10	16	46	24	246	38	294	M12 × 30
								336		384	
								398		446	
								462		510	



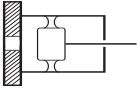




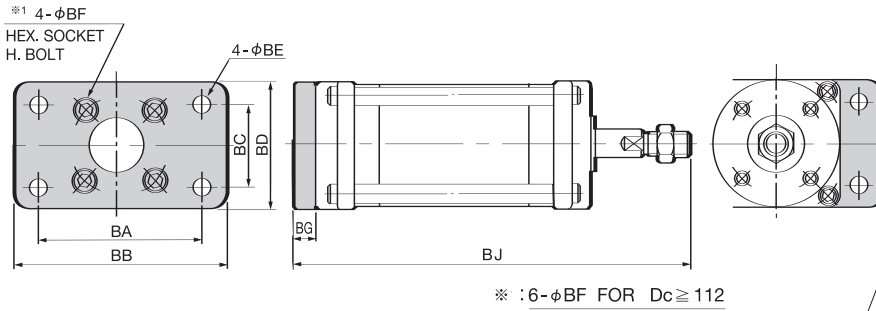
### Front Flange Type Mount



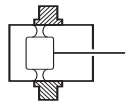
Dc-STROKE	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	
40	8	70	90	35	53	6.5	9	63	33	105	
	24									87	129
	36									106	148
	48									125	167
50	16	80	100	40	63	7.5	10	77	35	122	
	36									107	152
	50									129	174
	64									151	196
63	16	105	130	55	82	9.5	12	91	38	141	
	42									130	179
	59									157	207
	78									187	237
80	30	120	150	70	100	9.5	13	113	45	171	
	62									161	219
	87									200	258
	108									233	291
100	46	150	180	85	120	11.5	14	146	51	211	
	86									206	271
	115									253	318
	144									298	363
112	42	166	195	100	137	14	15	153	57	225	
	88									222	294
	122									275	347
	156									328	400
125	52	180	210	115	150	14	16	169	60	245	
	102									244	320
	140									303	379
	178									362	438
140	62	195	225	125	165	16	19	192	65	276	
	122									282	366
	162									345	429
	204									411	495



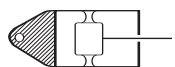
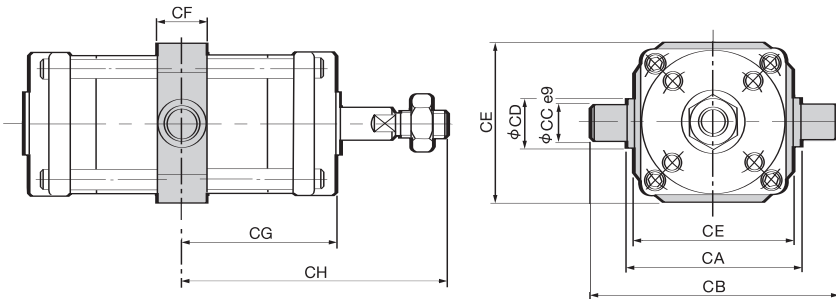
### Rear Flange Type Mount



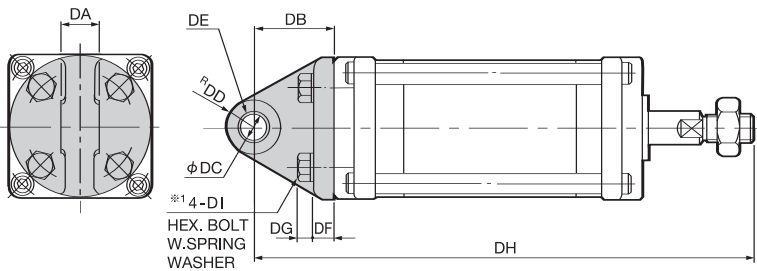
Dc-STROKE	CA	CB	CC	CD	CE	CF	CG	CH	
40	8	64	92	14	18	60	18	27	
	24							39	81
	36							48.5	90.5
	48							58	100
50	16	74	106	16	20	70	20	33.5	
	36							48.5	93.5
	50							59.5	104.5
	64							70.5	115.5
63	16	94	134	20	25	88	25	39.5	
	42							59	109
	59							72.5	122.5
	78							87.5	137.5
80	30	114	168	25	30	108	30	50	
	62							74	132
	87							93.5	151.5
	108							110	168
100	46	134	194	30	35	128	35	66	
	86							96	161
	115							119.5	184.5
	144							142	207
112	42	156	216	30	35	150	35	69	
	88							103.5	175.5
	122							130	202
	156							156.5	228.5
125	52	170	234	32	38	164	38	76.5	
	102							114	190
	140							143.5	219.5
	178							173	249
140	62	190	260	35	42	184	42	86.5	
	122							131.5	215.5
	162							163	247
	204							196	280



### Trunnion Type Mount



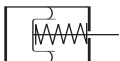
### Pivot Type Mount



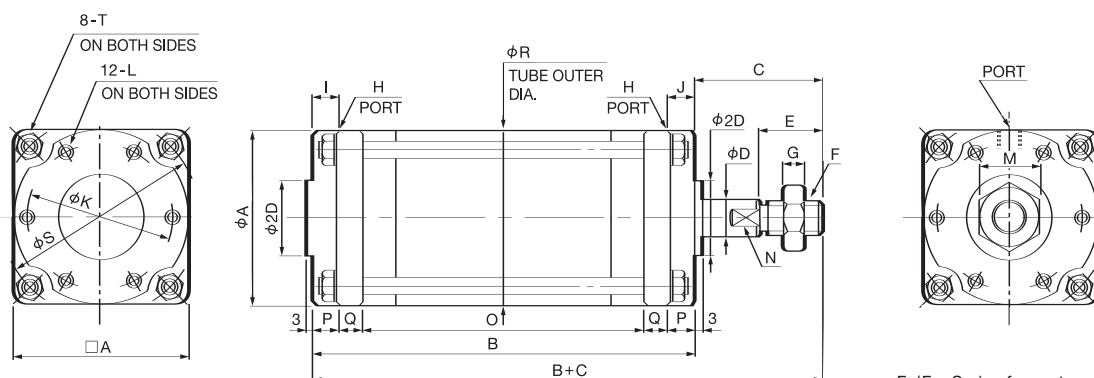
Dc-STROKE	DA	DB	DC	DD	DE	DF	DG	DH	DI	
40	8	15	30	10	14	1015	8	5.5	126	
	24								150	M6
	36								169	18
	48								188	
50	16	15	33	10	14	1015	9	5.5	145	
	36								175	M6
	50								197	18
	64								219	
63	16	20	38	12	15	1220	10	7.5	167	
	42								206	M8
	59								233	22
	78								263	
80	30	20	44	15	16.5	1520	12	7.5	202	
	62								250	M8
	87								289	22
	108								322	
100	46	25	50	18	18	1825	15	9.5	247	
	86								307	M10
	115								354	30
	144								399	
112	42	28	54	18	20	1810	16	9.5	264	
	88								333	M10
	122								386	30
	156								439	
125	52	30	59	20	23	2010	17	9.5	288	
	102								363	M10
	140								422	30
	178								481	
140	62	34	64	22	25	2210	19	11	321	
	122								411	M12
	162								474	35
	204								570	

DE: Bearing Size No.

# Model FCS-160-82 to 200-320



## Outline Dimensions



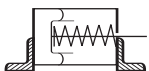
F<sub>0</sub>/F<sub>1</sub> : Spring force at zero/full stroke (N)

Ae : Effective area (mm<sup>2</sup>)

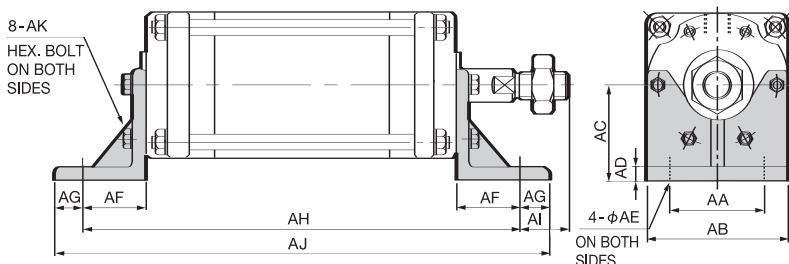
N : Wrench flat width

### OUTLINE DIMENSIONS

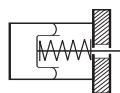
Dc-STROKE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Ae	SPRING FORCE	
																						F <sub>0</sub>	F <sub>1</sub>
160 - 82		184				M30 × 1.5	18	Rc 1/2	22	-	160	M12 DP 18	46	30	86	23	26	185	215	M16	18600	158.8	356.7
	142	274	94	35	60										176								
	192	351													253								
	240	425													327								
180 - 96		213				M33 × 1.5	20	Rc 1/2	22	-	176	M14 DP 21	50	36	101	26	30	205	238	M18	23800	205.8	490
	168	321	104	40	64										209								
	226	410													298								
	280	493													381								
200 - 112		244				M36 × 1.5	21	Rc 3/4	24	-	194	M16 DP 24	55	41	118	28	35	225	262	M20	29600	254.8	656.6
	192	364	120	45	72										238								
	256	462													336								
	320	560													434								



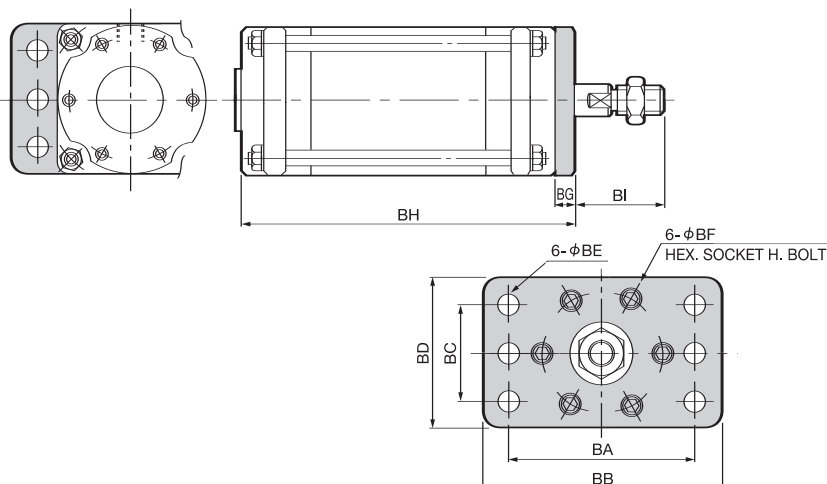
## L Type Mount



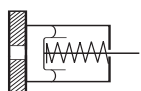
Dc-STROKE	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
160 - 82											M12 × 30
	115	185	105	13	18	49	26	282	334	424	
								372	449	501	
								449	523	575	
180 - 96											M14 × 35
	130	205	115	14	18	52	28	317	373	481	
								425	514	570	
								514	597	653	
200 - 112											M16 × 35
	140	225	125	14	18	52	28	348	404	524	
								468	566	622	
								566	664	720	



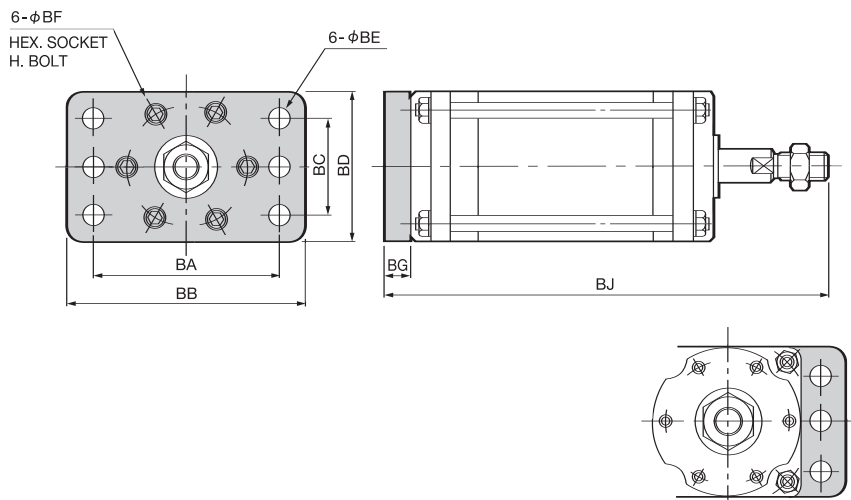
## Front Flange Type Mount



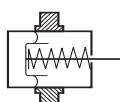
Dc-STROKE	BA	BB	BC	BD	BE	BF	BG	BH	BI
160 - 82									
	220	260	140	185	16	M12 × 20	19	203	75
								293	370
								444	
180 - 96									
	250	300	160	205	18	M14 × 25	22	235	82
								343	432
								515	
200 - 112									
	275	320	180	225	18	M16 × 25	25	269	95
								389	487
								585	



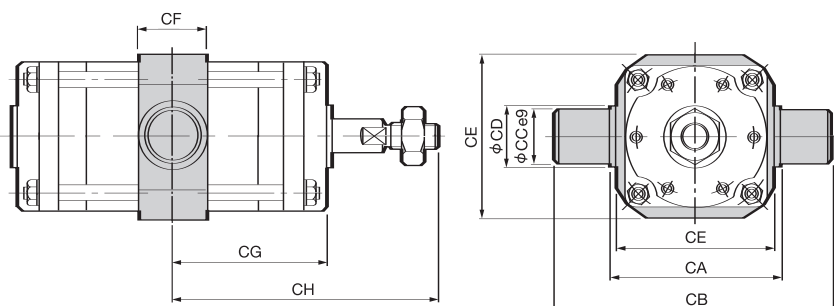
### Rear Flange Type Mount



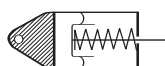
Dc-STROKE	BA	BB	BC	BD	BE	BF	BG	BJ	
160	82					M12 × 20	19	297	
	142	220	260	140	185			16	387
	192								464
	240								538
180	96					M14 × 25	22	339	
	168	250	300	160	205			18	447
	226								536
	280								619
200	112					M16 × 25	25	389	
	192	275	320	180	225			18	509
	256								607
	320								705



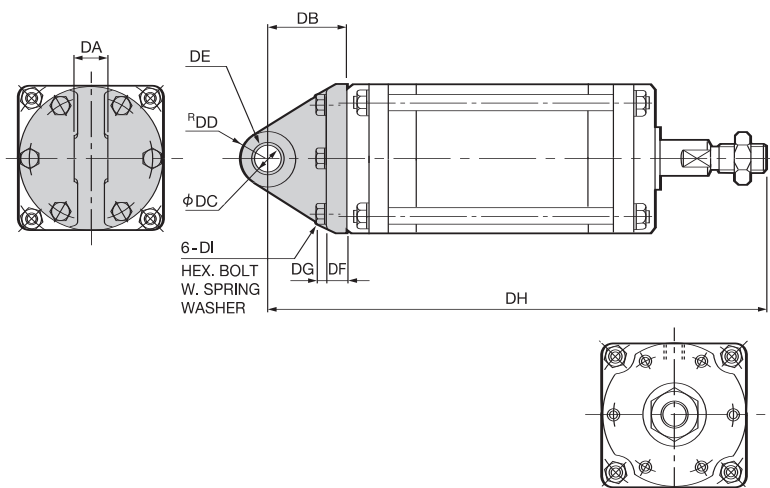
### Trunnion Type Mount



Dc-STROKE	CA	CB	CC	CD	CE	CF	CG	CH
160	82						92	186
	142	215	295	40	60	205	60	137 231
	192							175.5 269.5
	240							212.5 306.5
180	96							106.5 210.5
	168	235	325	45	63	225	63	160.5 264.5
	226							205 309
	280							246.5 350.5
200	112							122 242
	192	260	350	45	65	250	65	182 302
	256							231 351
	320							280 400



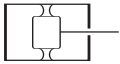
### Pivot Type Mount



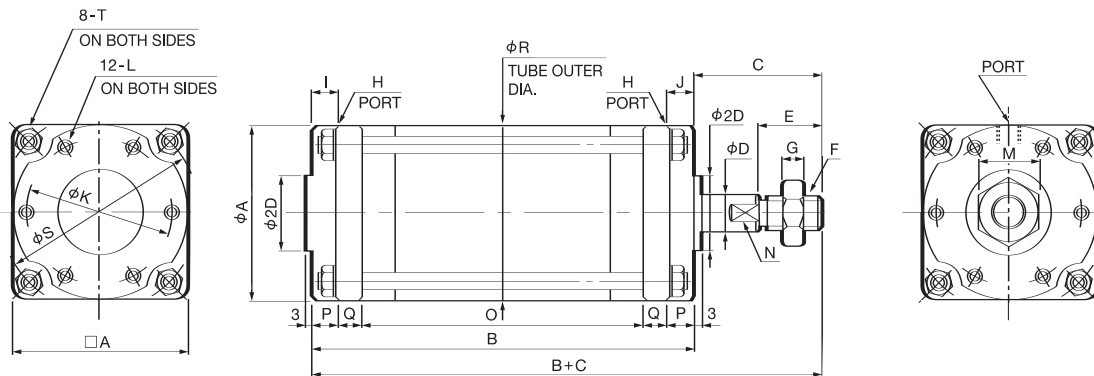
Dc-STROKE	DA	DB	DC	DD	DE	DF	DG	DH	DI
160	82								348
	142	38	70	25	28	2510	21	11	438
	192					2pcs.			515
	240								589
180	96								394
	168	42	77	28	32	2812	24	12.5	502
	226					2pcs.			591
	280								674
200	112								449
	192	45	85	30	34	3012	26	14	569
	256					2pcs.			667
	320								765

DE : Bearing Size No.

# Model FCD-160-82 to 200-320



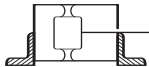
## Outline Dimensions



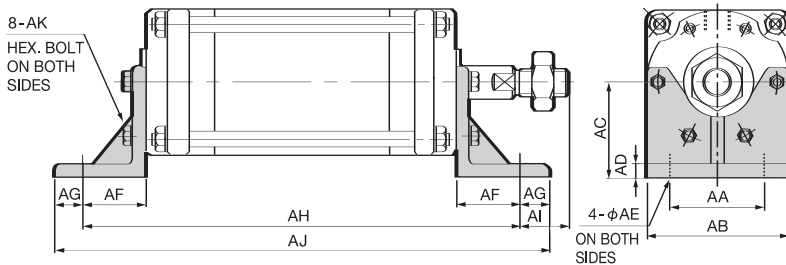
### OUTLINE DIMENSIONS

Ae : Effective area (mm<sup>2</sup>)  
N : Wrench flat width

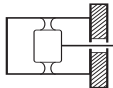
Dc-STROKE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Ae	
																					PUSH	PULL
160 - 82		230				M30 × 1.5	18	Rc 1/2	22	22	160	M12 DP 18	46	30	132	23	26	185	215	M16	18600	17600
	142	320		222																		
	192	399		301																		
	240	475		377																		
180 - 96		260				M33 × 1.5	20	Rc 1/2	22	22	176	M14 DP 21	50	36	148	26	30	205	238	M18	23800	22500
	168	368		256																		
	226	459		347																		
	280	544		432																		
200 - 112		292				M36 × 1.5	21	Rc 3/4	24	24	194	M16 DP 24	55	41	166	28	35	225	262	M20	29600	28000
	192	412		286																		
	256	512		386																		
	320	612		486																		



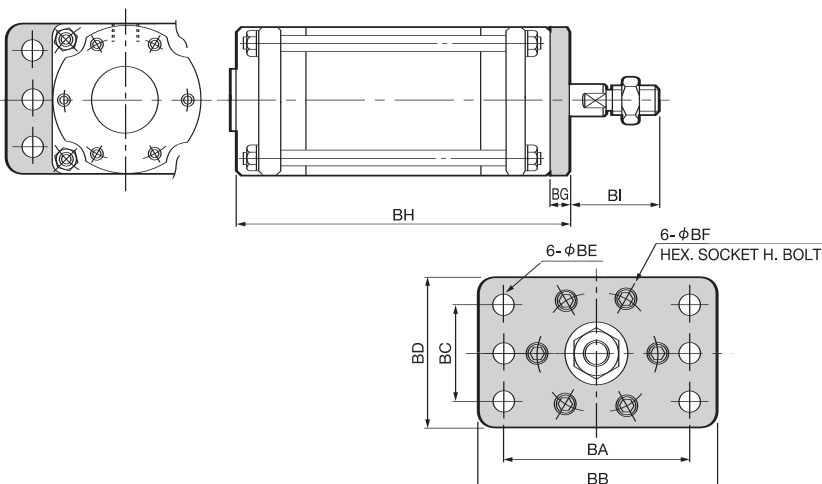
## L Type Mount



Dc-STROKE	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
160 - 82								328		380	M12 × 30
								418		470	
		115	185	105	13	18	49	26	45	549	
								573		625	
180 - 96								364		420	M14 × 35
								472		528	
		130	205	115	14	18	52	28	52	619	
								648		704	
200 - 112								396		452	M16 × 35
								516		572	
		140	225	125	14	18	52	28	68	672	
								716		772	

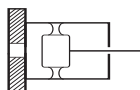


## Front Flange Type Mount

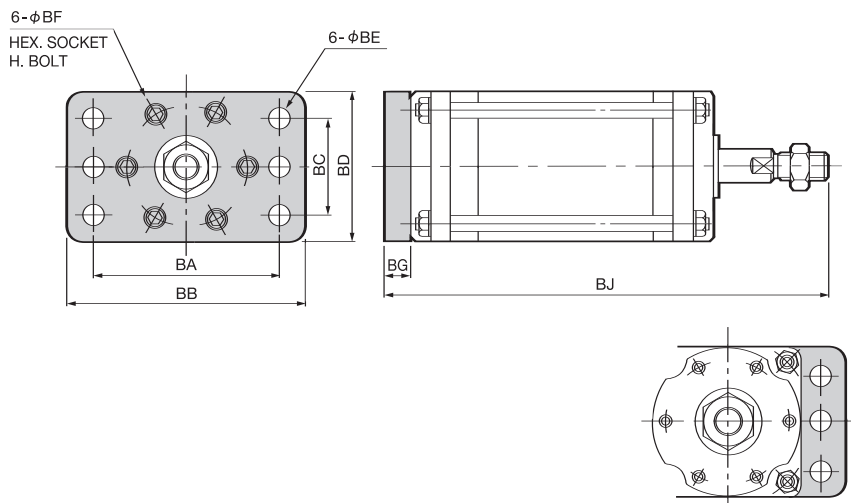


Dc-STROKE	BA	BB	BC	BD	BE	BF	BG	BH	BI
160 - 82								249	
						M12 × 20	19	339	75
		220	260	140	185	16		418	
								494	
180 - 96								282	
						M14 × 25	22	390	82
		250	300	160	205	18		481	
								566	
200 - 112								317	
						M16 × 25	25	437	95
		275	320	180	225	18		537	
								637	

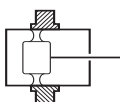




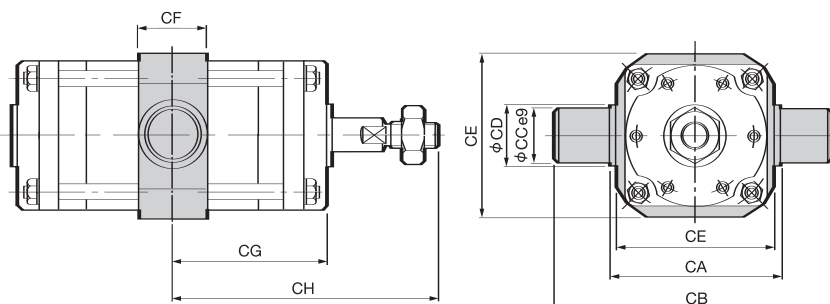
### Rear Flange Type Mount



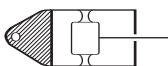
Dc-STROKE	BA	BB	BC	BD	BE	BF	BG	BJ
160	82							343
	142	220	260	140	185	16	M12 × 20	433
	192							512
	240							588
	19							
180	96							386
	168	250	300	160	205	18	M14 × 25	494
	226							585
	280							670
	22							
200	112							437
	192	275	320	180	225	18	M16 × 25	557
	256							657
	320							757
	25							



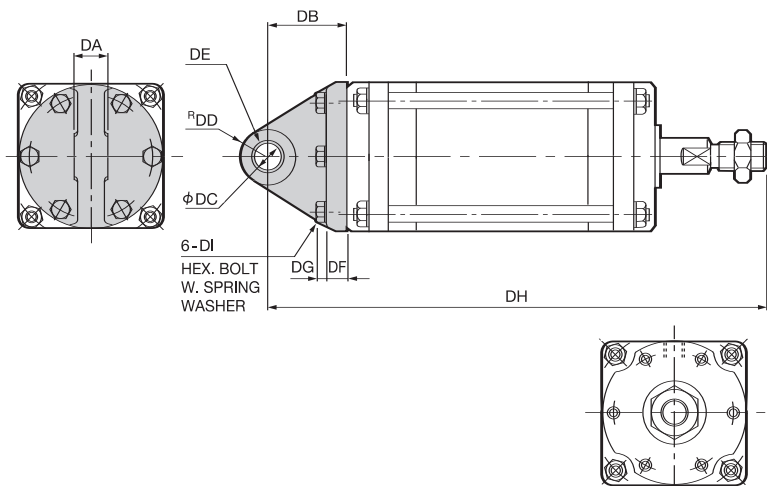
### Trunnion Type Mount



Dc-STROKE	CA	CB	CC	CD	CE	CF	CG	CH
160	82						115	209
	142	215	295	40	60	205	60	160
	192							254
	240							293.5
	237.5							331.5
180	96						130	234
	168	235	325	45	63	225	63	184
	226							288
	280							333.5
	272							376
200	112						146	266
	192	260	350	45	65	250	65	206
	256							326
	320							376
	256							426



### Pivot Type Mount



Dc-STROKE	DA	DB	DC	DD	DE	DF	DG	DH	DI
160	82							394	M12 × 40
	142	38	70	25	28	2510 2pcs.	21	484	
	192							563	
	240							639	
	441								
180	96							441	M14 × 45
	168	42	77	28	32	2812 2pcs.	24	549	
	226							640	
	280							725	
	497								
200	112							617	M16 × 50
	192	45	85	30	34	3012 2pcs.	26	717	
	256							817	
	320								

DE : Bearing Size No.





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## Fujikura's Pneumatic Control Products Line

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■ General Guide		Cat. No. KS-572E
■ Fujikura BF Cylinder	<b>Series FC</b>	Cat. No. KS-570E
■ Super Precision Air Regulators	<b>Series RS</b>	} Cat. No. KS-128E
■ Super Precision Air Relays	<b>Series RR</b>	
■ Precision Air Regulators	<b>Series RP</b>	Cat. No. KS-129E
■ Precision Vacuum Pressure Regulators	<b>Series RV</b>	Cat. No. KS-131E

[Please request respective catalog for detailed contents of each product.]

Note: Specifications subject to change without notice for improvements and modifications.



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