

# Support Uint

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## SBC SUPPORT UNIT

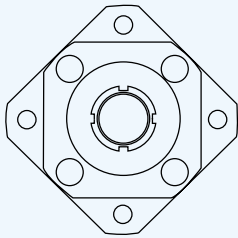
### SBC SUPPORT UNIT

	Fixed Side	Supported Side
Flange type	FK	FF
Block type	BK	BF

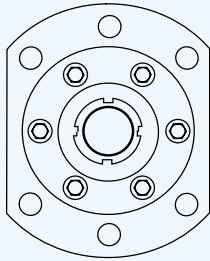
### SBC SUPPORT UNITS AND APPLICABLE SCREW-SHAFT DIAMETERS

Fixed-Side Support Unit ID (mm)	Fixed-Side Support Unit Applicable Model NO.	Supported-Side Support Unit ID (mm)	Supported-Side Support Unit Applicable Model No.	Applicable Screw-shaft OD (mm)
8	BK 8	6	BF 8	Φ 10
	FK 8		FF 8	
10	BK 10	8	BF 10	Φ 10, Φ 12, Φ 14
	FK 10		FF 10	
12	BK 12	10	BF 12	Φ 14, Φ 15, Φ 16
	FK 12		FF 12	
15	BK 15	15	BF 15	Φ 20
	FK 15		FF 15	
17	BK 17	17	BF 17	Φ 20, Φ 25
20	BK 20	20	BF 20	Φ 25, Φ 28, Φ 32
	FK 20		FF 20	
25	BK 25	25	BF 25	Φ 36
	FK 25		FF 25	
30	BK 30	30	BF 30	Φ 40, Φ 45
	FK 30		FF 30	
40	BK 40	40	BF 40	Φ 50
	FK 40		FF 40	

FK (Fixed Side)

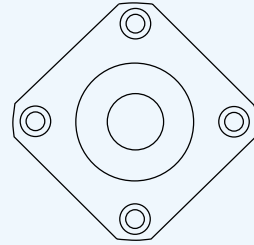


FK[8,10,12,15,20]

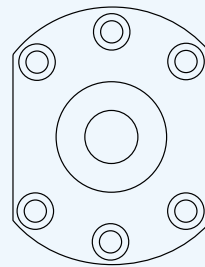


FK[25,30,40]

FF (Supported Side)

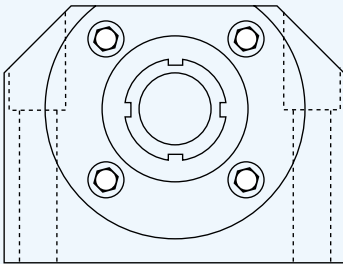


FF[8,10,12,15,20]

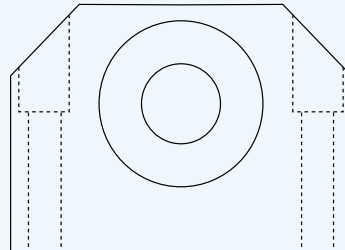


FF[25,30,40]

BK (Fixed Side)



BF (Supported Side)



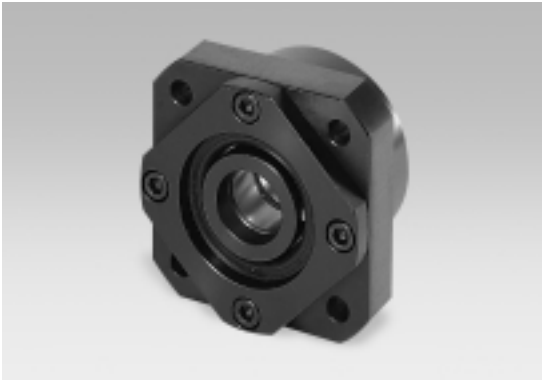
## LOAD CAPACITY

Dimension : N

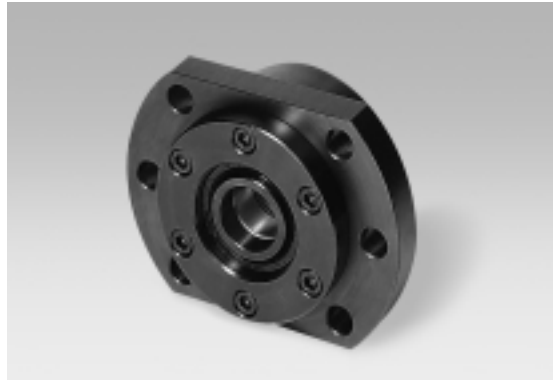
Size			Model	Ball Bearing	Axial Dynamic Load	Radial Dynamic Load	Permissible Load
φ 8	Fixed	Block type	BK8	608ZZ	1,607	3,283	-
		Flange type	FK8				
	Supported	Block type	BF8	606ZZ	-	2,264	-
		Flange type	FF8				
φ 10	Fixed	Block type	BK10	7000ADF	6,566	-	2,724
		Flange type	FK10				
	Supported	Block type	BF10	608ZZ	-	3,283	-
		Flange type	FF10				
φ 12	Fixed	Block type	BK12	7001ADF	7,105	-	3,038
		Flange type	FK12				
	Supported	Block type	BF12	6000ZZ	-	4,557	-
		Flange type	FF12				
φ 15	Fixed	Block type	BK15	7002ADF	7,595	-	3,989
		Flange type	FK15				
	Supported	Block type	BF15	6002ZZ	-	5,586	-
		Flange type	FF15				
φ 17	Fixed	Block type	BK17	7203ADF	13,720	-	5,831
		Flange type	-				
	Supported	Block type	BF17	6203ZZ	-	9,555	-
		Flange type	-				
φ 20	Fixed	Block type	BK20	7004ADF	12,691	-	9,506
		Flange type	FK20	7204BDF	17,934		
	Supported	Block type	BF20	6004ZZ	-	9,359	-
		Flange type	FF20	6204ZZ	-	12,740	
φ 25	Fixed	Block type	BK25	7205ADF	20,188	-	11,466
		Flange type	FK25				
	Supported	Block type	BF25	6205ZZ	-	14,014	-
		Flange type	FF25				
φ 30	Fixed	Block type	BK30	7206ADF	28,028	-	16,268
		Flange type	FK30				
	Supported	Block type	BF30	6206ZZ	-	19,404	-
		Flange type	FF30				
φ 40	Fixed	Block type	BK40	7208ADF	44,100	-	27,146
		Flange type	FK40				
	Supported	Block type	BF40	6208ZZ	-	29,106	-
		Flange type	FF40				

## SUPPORT UNIT PRODUCTS

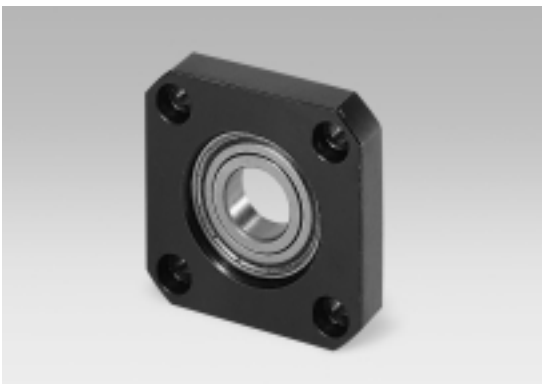
FK[8,10,12,15,20]



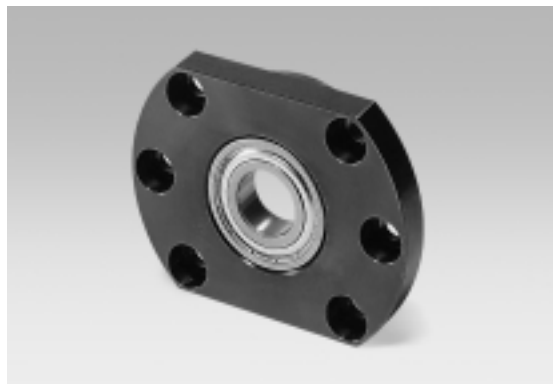
FK[25,30,40]



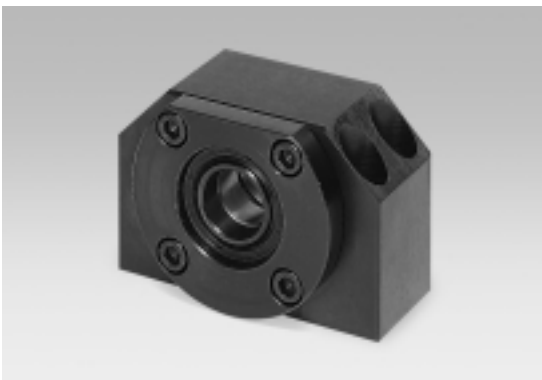
FF[8,10,12,15,20]



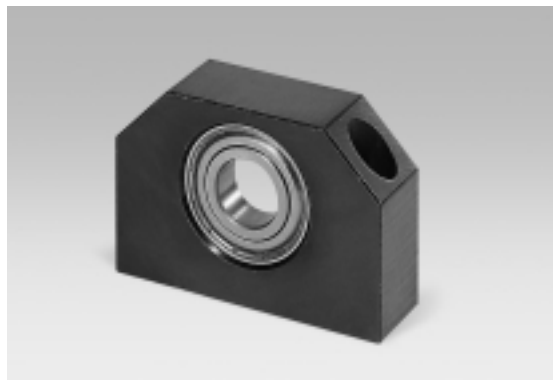
FF[25,30,40]



BK



BF



## FK

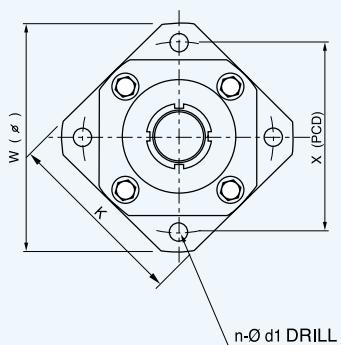


fig. 1-1  
FK[8, 10, 12, 15, 20]

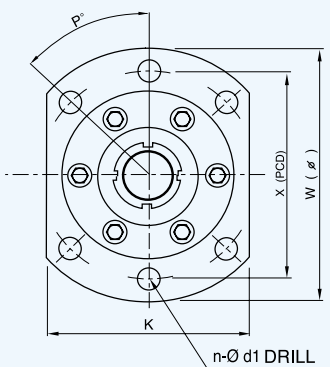
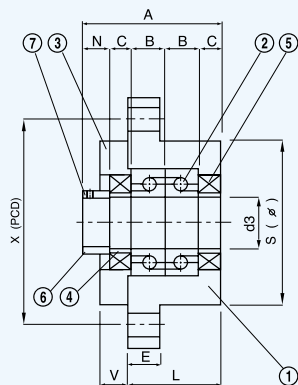


fig. 1-2  
FK[25, 30, 40]



### FK PART LIST

No	①	②	③	④	⑤	⑥	⑦
PART NAME	HOUSING	BEARING	BRACKET	COLLAR	SEAL	RING NUT	SET SCREW
Q ty	1	2	1	2	2	1	1

Reference	W	L	S -0.005 -0.015	K	E	V	X	Mounting Dimension			M	A	B	C	N	d3	BRG	
								n	d1	P°								
FK 8	43	21	28	35	7	5	35	4	3.4	90	M8×1	30	7	5	6	8	608	fig. 1-1
FK10	52	25	34	42	7	6	42	4	4.5	90	M10×1	38	8	7	8	10	7000A	
FK12	54	25	36	44	8	6	44	4	4.5	90	M12×1	38	8	7	8	12	7001A	
FK15	63	27	40	52	10	7	50	4	5.5	90	M15×1	40	9	7	8	15	7002A	
FK20	85	37	57	68	15	7	70	4	6.6	90	M20×1	52	14	7	10	20	7204A	
FK25	122	42	80	92	15	11	100	6	11	45	M25×1.5	62	15	10	12	25	7205A	fig. 1-2
FK30	138	45	90	106	16	12	116	6	11	45	M30×1.5	66	16	11	12	30	7206A	
FK40	176	61	120	128	19	15	150	6	14	45	M40×1.5	82	18	16	14	40	7208A	

## FF

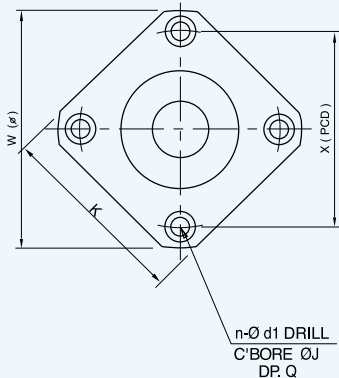


fig. 2-1  
FF[8,10,12,15,20]

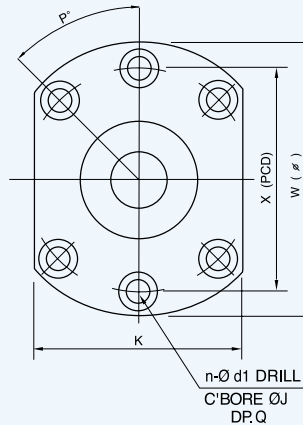
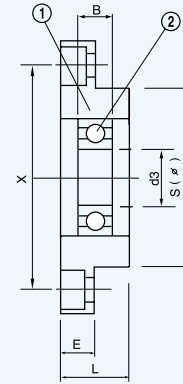


fig. 2-2  
FF[25,30,40]

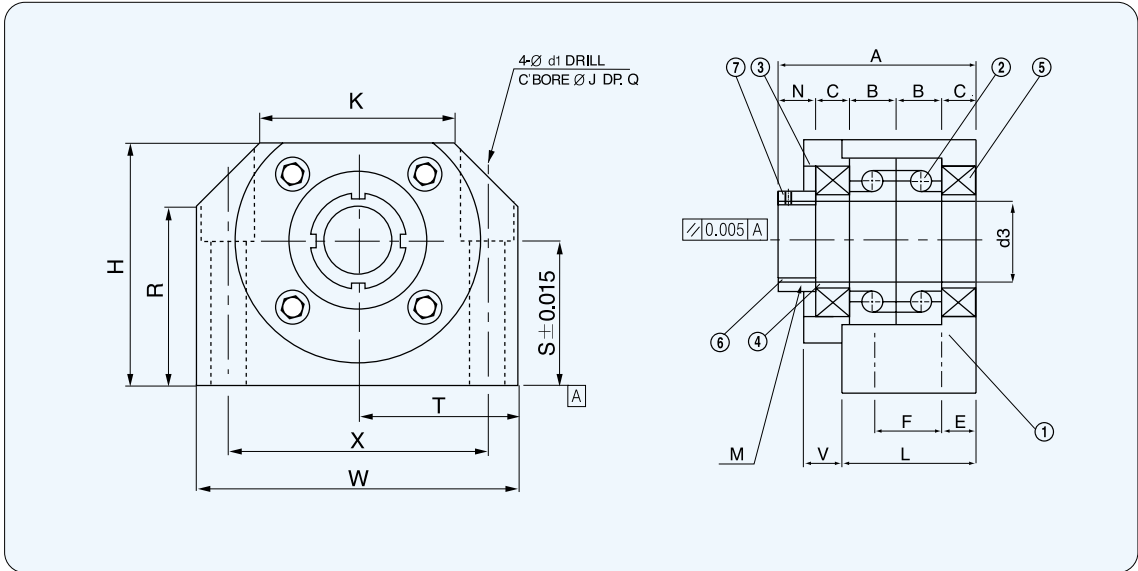


### FF PART LIST

No	①	②	③
PART NAME	HOUSING	BEARING	SNAP RING
Q' ty	1	1	1

Reference	W	L	S -0.005 -0.015	K	E	X	Mounting Dimension					d3	B	BRG	
							n	d1	J	Q	P°				
FF8	43	11	28	35	6	35	4	3.4	6.5	4	90	6	6	606	fig. 2-1
FF10	52	12	34	42	7	42	4	4.5	8	5	90	8	7	608	
FF12	54	15	36	44	8	44	4	4.5	8	5	90	10	8	6000	
FF15	63	17	40	52	9	50	4	5.5	9.5	6	90	15	9	6002	
FF20	85	20	57	68	14	70	4	6.6	11	10	90	20	14	6204	
FF25	122	30	80	92	15	100	6	11	17.5	11	45	25	15	6205	fig. 2-2
FF30	138	32	90	106	15	116	6	11	17.5	11	45	30	16	6206	
FF40	176	36	120	128	18	150	6	14	20	13	45	40	18	6208	

## BK



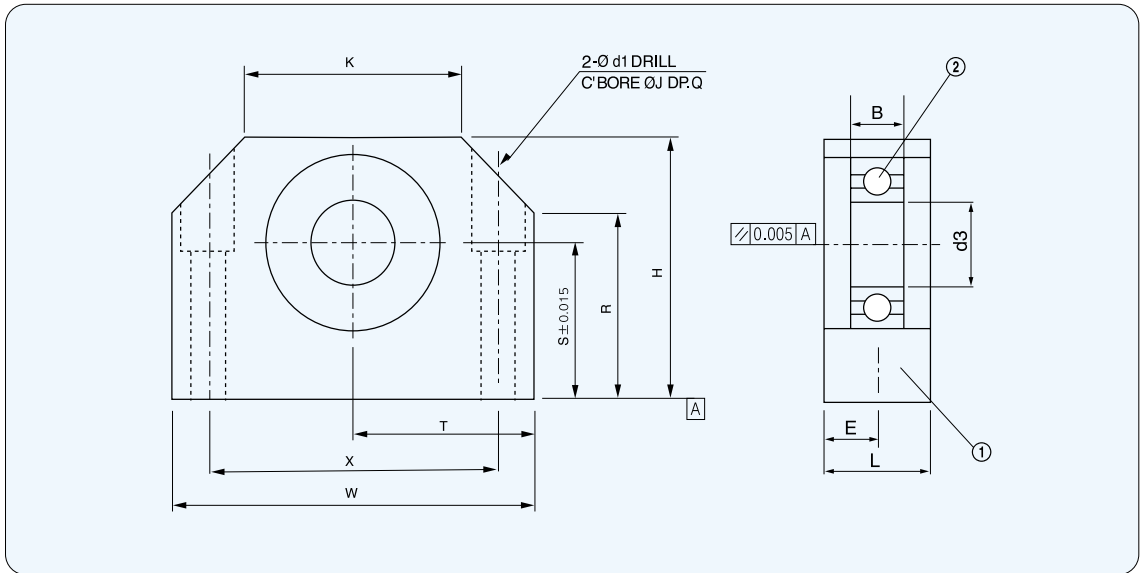
### BK PART LIST

No	①	②	③	④	⑤	⑥	⑦
PART NAME	HOUSING	BEARING	BRACKET	COLLAR	SEAL	RING NUT	SET SCREW
Q'ty	1	2	1	2	2	1	1

Reference	W	H	S	R	T	X	K	Mounting Dimension			M	L	E	F	V	A	B	C	N	d3	BRG
								d1	J	P°											
BK8	52	32	17	18.5	26	38	25	6.6	11	6.5	M8×1	23	11.5	5	33	7	6	6	8	608	
BK10	60	39	22	26	30	46	34	6.6	11	6.5	M10×1	25	6	13	6	38	8	7	8	10	700A
BK12	60	43	25	30	30	46	34	6.6	11	6.5	M12×1	25	6	13	6	38	8	7	8	12	7001A
BK15	70	48	28	33	35	54	40	6.6	11	6.5	M15×1	27	6	15	7	40	9	7	8	15	7002A
BK17	86	64	39	46	43	68	50	9	14	8.5	M17×1	35	8	19	9	52	12	9	10	17	7203A
BK20	88	60	34	42	44	70	52	9	14	8.5	M20×1	35	8	19	9	52	12	9	10	20	7004A
BK25	106	80	48	59	53	85	64	11	17.5	11	M25×1.5	42	10	22	11	62	15	10	12	25	7205A
BK30	128	89	51	63	64	102	76	14	20	13	M30×1.5	45	11	23	12	66	16	11	12	30	7206A
BK40	160	110	60	80	80	130	100	18	26	17.5	M40×1.5	61	14	33	15	82	18	16	14	40	7208A



## BF



### BF PART LIST

No	①	②	③
PART NAME	HOUSING	BEARING	SNAPRING
Q' ty	1	1	1

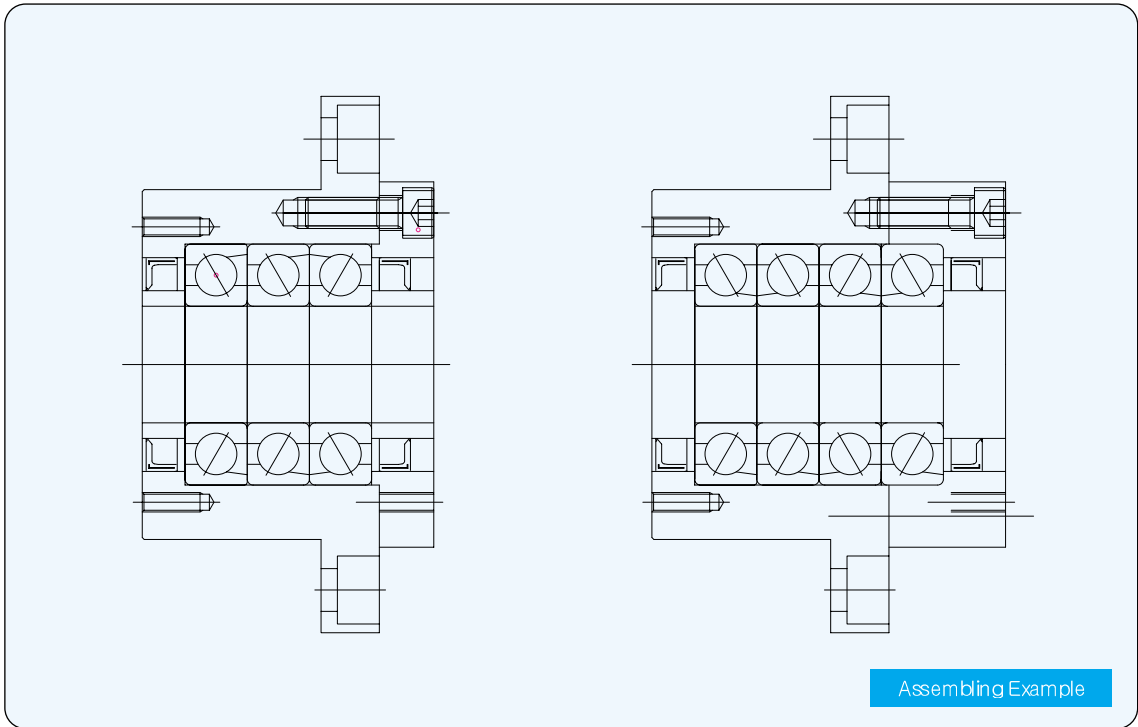
Reference	W	H	S	R	T	X	K	Mounting Dimension			L	E	d3	B	BRG
								d1	J	Q					
BF8	52	32	17	18.5	26	38	25	6.6	11	6.5	20	10	6	6	606
BF10	60	39	22	26	30	46	34	6.6	11	6.5	20	10	8	7	608
BF12	60	43	25	30	30	46	34	6.6	11	6.5	20	10	10	8	6000
BF15	70	48	28	33	35	54	40	6.6	11	6.5	20	10	15	9	6002
BF17	86	64	39	46	43	68	50	9	14	8.5	23	11.5	17	12	6203
BF20	88	60	34	42	44	70	52	9	14	8.5	26	13	20	12	6004
BF25	106	80	48	59	53	85	64	11	17.5	11	30	15	25	15	6205
BF30	128	89	51	63	64	102	76	14	20	13	32	16	30	16	6206
BF40	160	110	60	80	80	130	100	18	26	17.5	37	18.5	40	18	6208

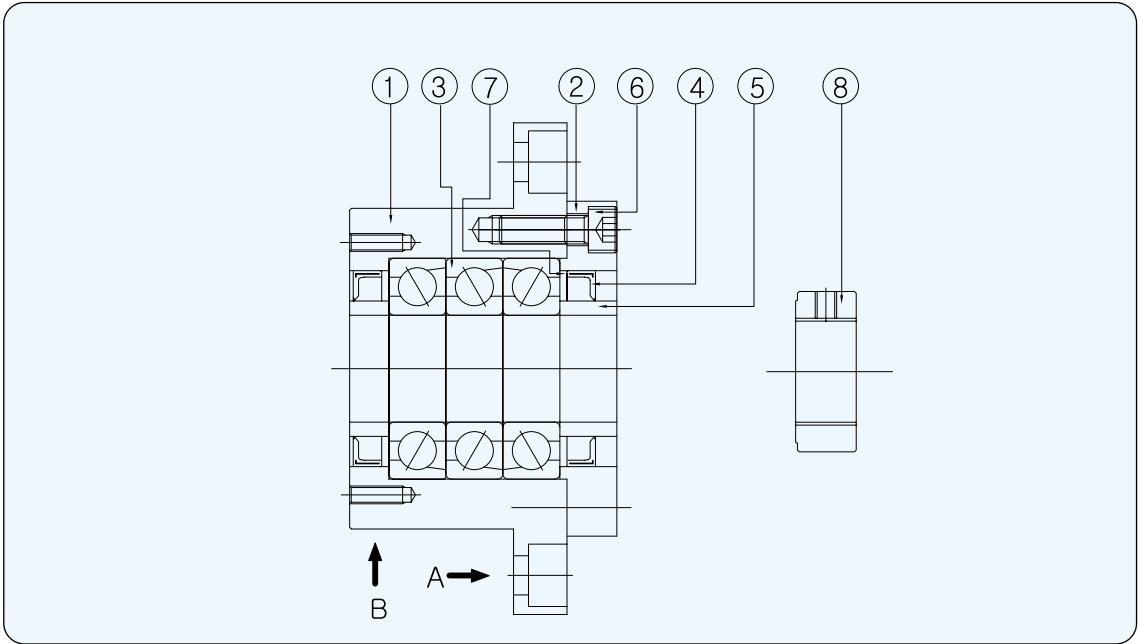
## SUPPORT UNIT FOR HIGH-PRELOAD AND MACHINE TOOL

### Structure and Feature

Support unit for high-preload and machine tool as a support bearing of ball thread have optimum function and structure. Also, it adopts high-precision and high-rigidity of angular bearing

#### 1. Assembling Example

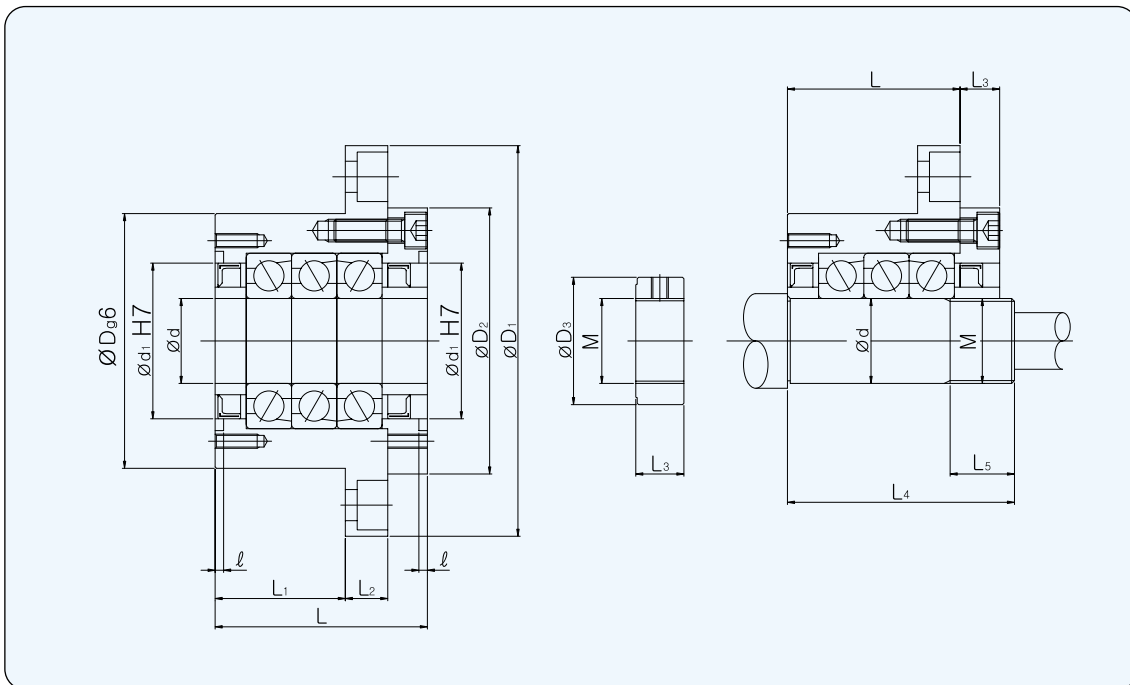




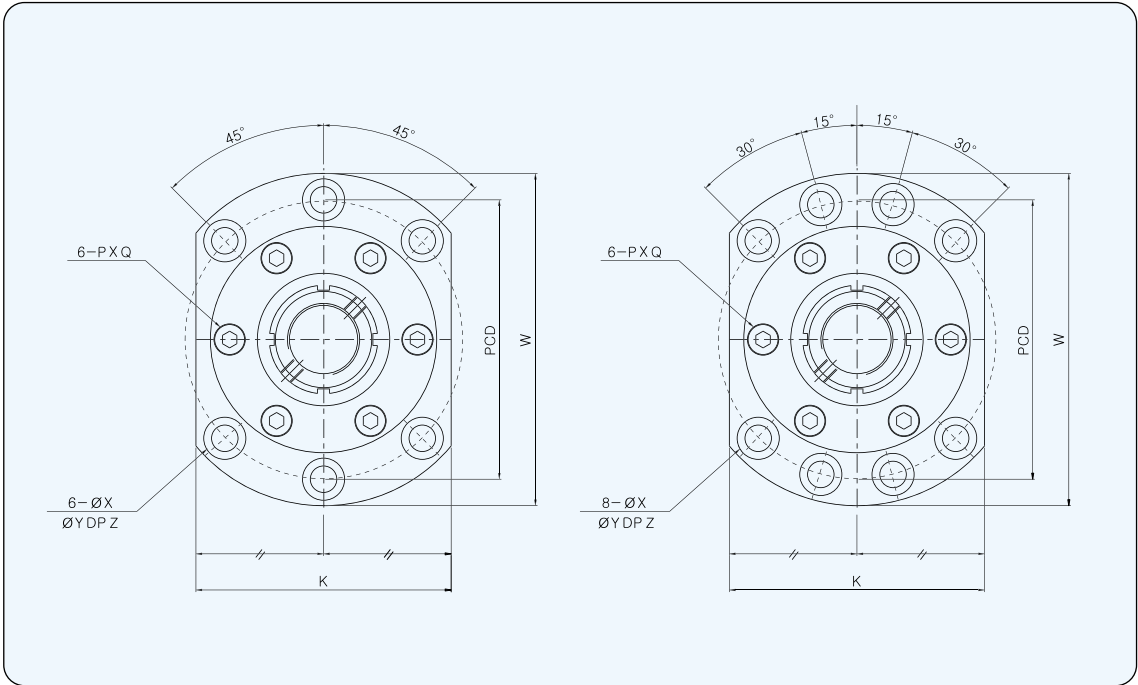
Unit:mm

Part No	Part Name	Quantity
1	Housing	1
2	Push plate	1
3	Thrust angular ball bearing	1 set
4	Dust seal	2
5	Collar	2
6	Preload fixing bolt	6 or 8
7	Pin	1 set
8	Lock nut	1





Model No	Support unit part																
	d	D	D <sub>1</sub>	D <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	K	W	X	Y	Z	d <sub>1</sub>	ℓ	PCD	P	Q
FK25DFD	25	85	130	90	81	48	18	100	110	11	7.5	11	57	4	70	M6	12
FK25DFF	25	85	130	90	96	48	18	100	110	11	7.5	11	57	4	70	M6	12
FK30DFD	30	85	130	90	81	48	18	100	110	11	7.5	11	57	4	70	M6	12
FK30DFF	30	85	130	90	96	48	18	100	110	11	7.5	11	57	4	70	M6	12
FK35DFD	35	95	142	102	81	48	18	106	121	11	17.5	11	69	4	80	M6	12
FK35DFF	35	95	142	102	96	48	18	106	121	11	17.5	11	69	4	80	M6	12
FK40DFD	40	95	142	102	81	48	18	106	121	11	17.5	11	69	4	80	M6	12
FK40DFF	40	95	142	102	96	48	18	106	121	11	17.5	11	69	4	80	M6	12



Unit:mm

Basic dynamic load rating Ca (Kgf)	Limited radial load (Kgf)	Preloadload (Kgf)	Axial rigidity ((Kgf/μm)	Torque ((Kgf·m)	Lock nut part			Unit part		
					M	D <sub>3</sub>	L <sub>3</sub>	d	L <sub>4</sub>	L <sub>5</sub>
4,740	8,300	439	298	1.43	M25x1.5	45	20	25	104	26
4,740	8,300	298	200	2.14	M25x1.5	45	20	25	119	26
4,847	8,775	459	156	3.26	M30x1.5	50	20	30	104	26
4,847	8,775	307	116	2.24	M30x1.5	50	20	30	119	26
5,150	10,200	530	174	3.78	M35x1.5	55	22	35	107	30
5,150	10,200	780	240	2.40	M35x1.5	55	22	35	122	30
5,255	10,610	541	185	3.87	M40x1.5	60	22	40	107	30
5,255	10,610	801	245	5.82	M40x1.5	60	22	40	122	30

1KN= 102kg · f