SYK®

Professional manufacturer 2019



(Our products don't Contain hazardous substance restricted by RoHS.)

Price List

For enquiry of price,please visit www.syk.tw

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Example of identification number Support unit :

BK30B_C5 G N C A S M

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❶	B	Contact Angle B 40°
❷	C5	Accuracy Grade
❸	G	Grease Fitting
❹	N	Electroless Nickel Plating
❺	C	Clean Room Grease
❻	A	Aluminum
❼	S	Stainless Steel
❽	M	Custom made or with Motor Bracket

Example of identification number Motor bracket :

MBCB12-D N C J

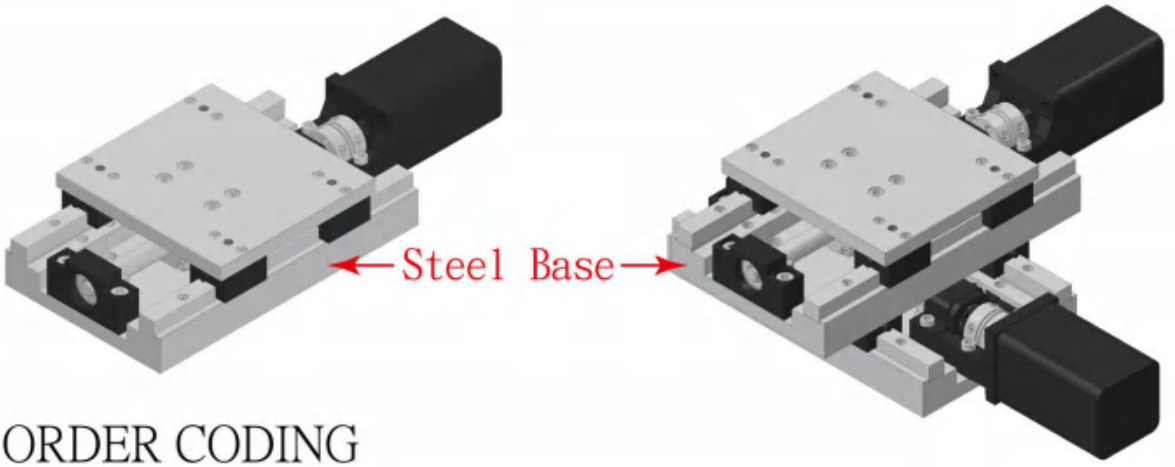
❶ ❷ ❸ ❹ ❺

❶	B	Equivalent to BK type support unit
	E	Equivalent to EK type support unit
❷	D	Servo motor specification code
❸	N	Electroless Nickel Plating
❹	C	Clean Room Grease
❺		Taiwanese brand P5 bearing
	J	Japanese brand P5 bearings

Usage Note

- Do not disassemble the Support Unit of LK.EK,BK,FK,FKA,AK,CKD,MBC.
- The Bearing of LK.EK,BK,FK,FKA,AK,CKD,MBC are filled up grease.
- When inserting a screw shaft into Support Unit, take care to prevent peeling the oil-seal lip.

SX15 / SXY15 Ball Screw Actuator



ORDER CODING

S X Y 15 - 05 05 P

AXIS		Table Size	
SX	Single Axis	15	150mm
SXY	Two Axis		

X-axis Stroke		Y-axis Stroke		Accuracy Grade	
05	50mm	05	50mm	P	Precision Class
10	100mm	10	100mm	R	Standard Class
15	150mm	15	150mm		
		20	200mm		
		25	250mm		
		30	300mm		
		40	400mm		
		50	500mm		
		60	600mm		
		70	700mm		
		80	800mm		

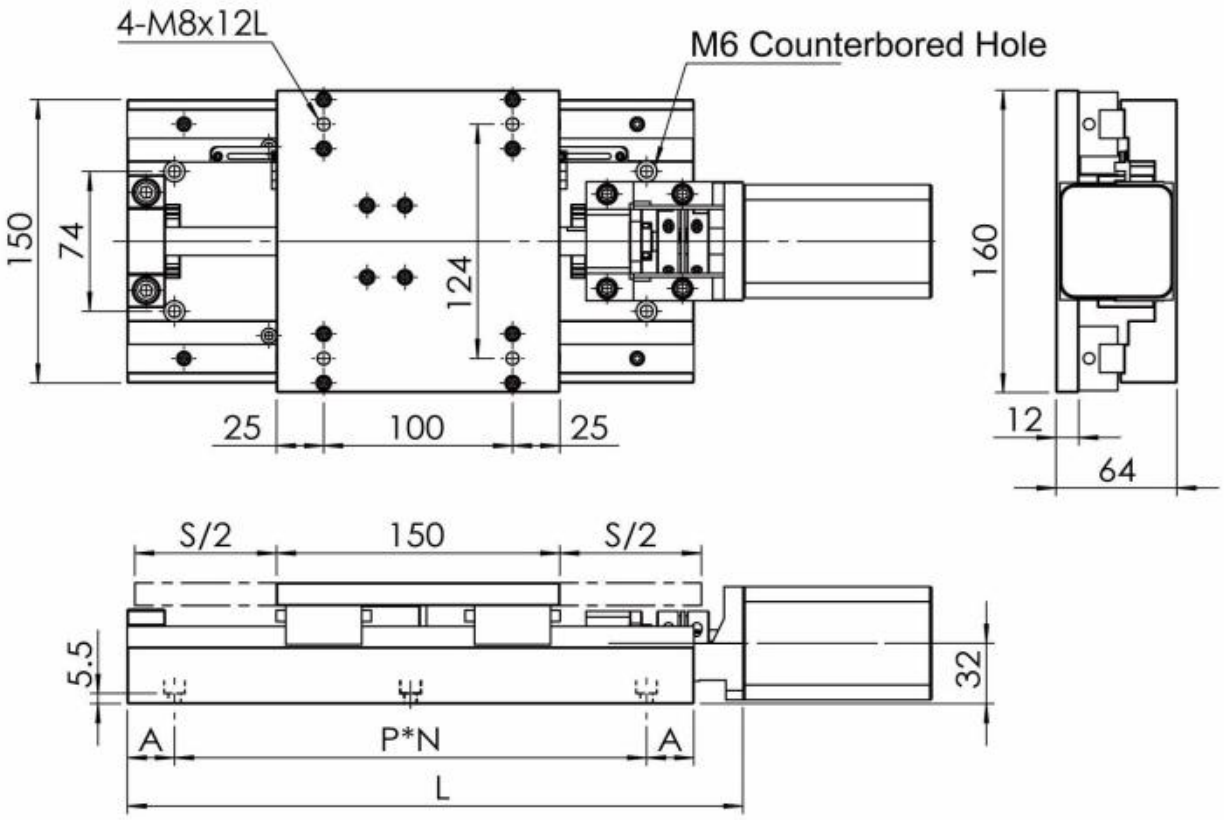
Specification of Single Axis

Model no.	Table Size (W * L)	Stroke
SX15-05P	150x160mm	±25
SX15-10P		±50
SX15-15P		±75
SX15-20P		±100
SX15-25P		±125
SX15-30P		±150
SX15-40P		±200
SX15-50P		±250
SX15-60P		±300
SX15-70P		±350
SX15-80P		±400

Specification of Two Axis

Model no.	Table Size (W * L)	Stroke	
		X-axis	Y-axis
SXY15-0505P	150x160mm	±25	±25
SXY15-0510P		±25	±50
SXY15-0515P		±25	±75
SXY15-1010P		±50	±50
SXY15-1015P		±50	±75
SXY15-1515P		±75	±75
SXY15-1520P		±75	±100
SXY15-1525P		±75	±125
SXY15-1530P		±75	±150
SXY15-1540P		±75	±200
SXY15-1550P		±75	±250
SXY15-1560P		±75	±300
SXY15-1570P		±75	±350
SXY15-1580P		±75	±400

SX15 Single Axis Ball Screw Actuator



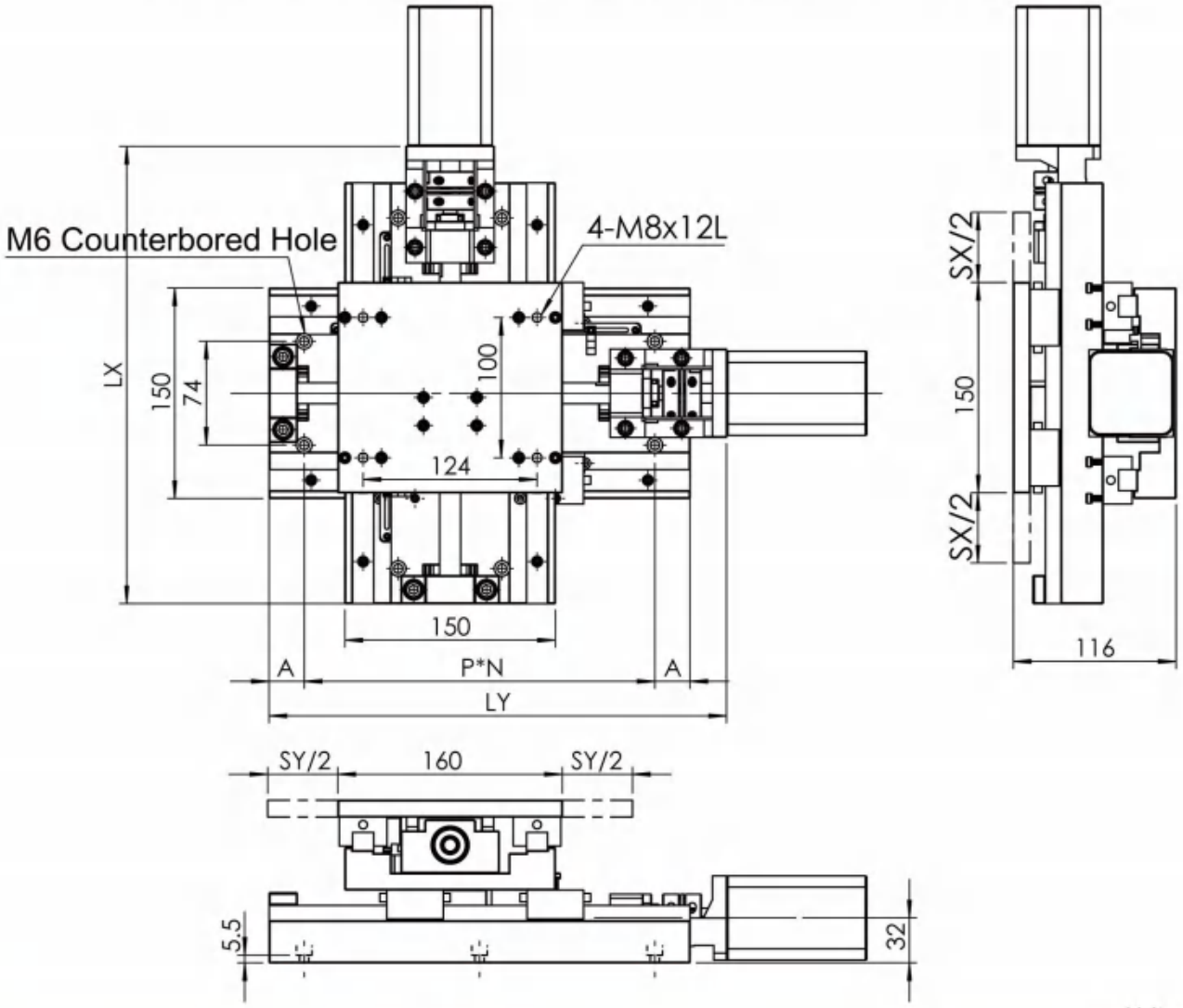
Unit : mm

Model no.		Stroke	Straightness		Mounting Dimensions		Length (L)
Precision Class	Standard Class	S	Precision Class	Standard Class	A	PxN	
SX15-05P	SX15-05R	±25	0.005	0.01	37.5	125x1	226
SX15-10P	SX15-10R	±50	0.005	0.01	62.5	125x1	276
SX15-15P	SX15-15R	±75	0.01	0.015	25	125x2	326
SX15-20P	SX15-20R	±100	0.01	0.02	50	125x2	376
SX15-25P	SX15-25R	±125	0.02	0.025	75	125x2	426
SX15-30P	SX15-30R	±150	0.02	0.03	37.5	125x3	476
SX15-40P	SX15-40R	±200	0.02	0.04	25	125x4	576
SX15-50P	SX15-50R	±250	0.025	0.04	75	125x4	676
SX15-60P	SX15-60R	±300	0.03	0.05	62.5	125x5	776
SX15-70P	SX15-70R	±350	0.03	0.05	50	125x6	876
SX15-80P	SX15-80R	±400	0.03	0.05	37.5	125x7	976

Unit : mm

Repeatability		Load Capacity (kgf)	Linear Guide Way		Ball Screw		Ball Screw Accuracy	
Precision Class	Standard Class		Precision Class	Standard Class	O.D.	Lead	Precision Class	Standard Class
±0.002	±0.006	40	P	H	Ø16 or Ø15	5 or 10	C5	R

SXY15 Two Axis Ball Screw Actuator



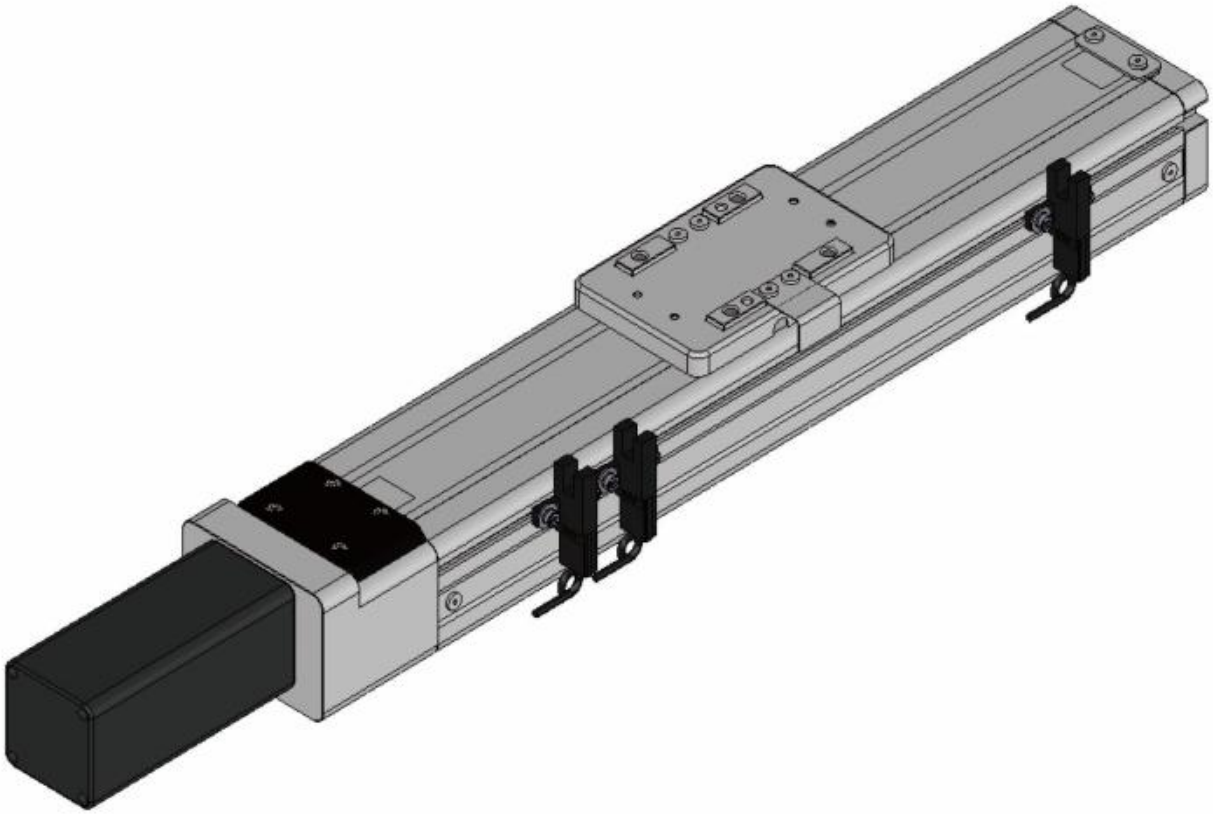
Unit : mm

Model no.		X-axis Stroke	Y-axis Stroke	Straightness		Mounting Dimensions		Length (L)	
Precision Class	Standard Class	SX	SY	Precision Class	Standard Class	A	PxN	LX	LY
SXY15-0505P	SXY15-0505R	±25	±25	0.005	0.01	37.5	125x1	226	226
SXY15-0510P	SXY15-0510R	±25	±50	0.005	0.01	62.5	125x1	226	276
SXY15-0515P	SXY15-0515R	±25	±75	0.01	0.015	25	125x2	226	326
SXY15-1010P	SXY15-1010R	±50	±50	0.005	0.01	62.5	125x1	276	276
SXY15-1015P	SXY15-1015R	±50	±75	0.01	0.015	25	125x1	276	326
SXY15-1515P	SXY15-1515R	±75	±75	0.01	0.015	25	125x2	326	326
SXY15-1520P	SXY15-1520R	±75	±100	0.01	0.02	50	125x2	326	376
SXY15-1525P	SXY15-1525R	±75	±125	0.02	0.025	75	125x2	326	426
SXY15-1530P	SXY15-1530R	±75	±150	0.02	0.03	37.5	125x3	326	476
SXY15-1540P	SXY15-1540R	±75	±200	0.02	0.04	25	125x4	326	576
SXY15-1550P	SXY15-1550R	±75	±250	0.025	0.04	75	125x4	326	676
SXY15-1560P	SXY15-1560R	±75	±300	0.03	0.05	62.5	125x5	326	776
SXY15-1570P	SXY15-1570R	±75	±350	0.03	0.05	50	125x6	326	876
SXY15-1580P	SXY15-1580R	±75	±400	0.03	0.05	37.5	125x7	326	976

Unit : mm

Repeatability		Load Capacity (kgf)	Linear Guide Way		Ball Screw		Ball Screw Accuracy	
Precision Class	Standard Class		Precision Class	Standard Class	O.D.	Lead	Precision Class	Standard Class
±0.002	±0.006	30	P	H	Ø16 or Ø15	5 or 10	C5	R

ETHS6M Single Axis Ball Screw Actuator



Max. Stroke	500mm
Max. Speed	1000mm/s
Motor Power	100W
Ball Screw O.D.	ϕ 12mm
Linear Guide Way	42x9.5-1

Order Coding

ETHS6M - L5 - 200 - BC - M10B - C 4 - M5 - 0001

Model no. / Special Order no.

■Lead of Ball Screw

2	2mm
5	5mm
10	10mm
20	20mm

■Stroke

200-500mm
Gap 100

■Motor Position

BC	Exposed

■Mounting Holes

Mounting from Bottom	M5

■Motor Brand

M	Mitsubishi
P	Panasonic
Y	Yaskawa
T	Delta

■Motor Power

10	100W

■Brake

B

※If no indication, it means no Brake

■Home Sensor

External Type	
C	Motor Side
D	Anti-Motor Side
No Sensor	
E	No Sensor

■Limit Sensor

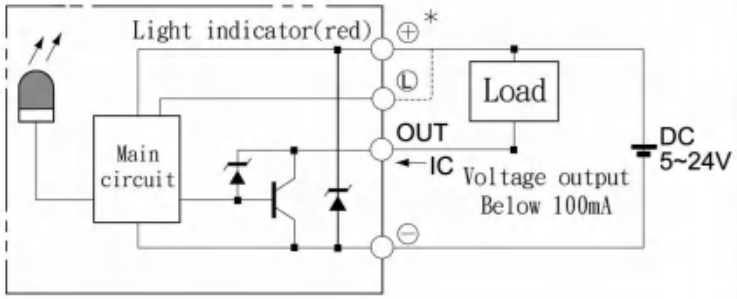
External Type	
3	1 pc
4	2 pcs
No Sensor	
5	No Sensor

ETHS6M Single Axis Ball Screw Actuator

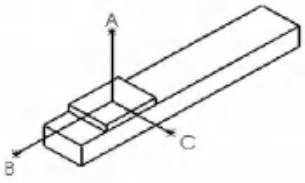
Specification

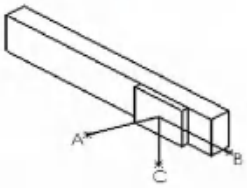
Spec	Repeatability (mm)		±0.01			
	Ball Screw Lead (mm)		2	5	10	20
	Max. Speed (mm/s)		100	250	500	1000
	Max. Load Capacity	Horizontal (kg)	30	30	15	10
		Vertical (kg)	15	10	5	2
	Rated Thrust (N)		122	490	245	85
	Stroke (mm)		200-500mm/Gap 100			
Parts	AC Servo Motor Power (W)		100			
	Ball Screw O.D. (mm)		C7Ø12			
	High Rigidity Linear Guide Way (mm)		W42X9.5			
	Coupling (mm)		8x6			
	Home Sensor	External	EE-SX672(NPN)			

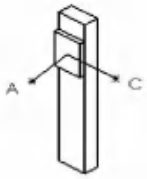
Sensor Layout



Allowable Overhang Table / Static Loading Moment







Unit : mm

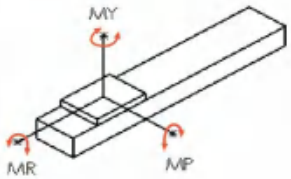
Horizontal Installation		A	B	C
2 Lead	10kg	600	55	147
	30kg	160	13	36
5 Lead	10kg	500	43	107
	30kg	125	10	24
10 Lead	3kg	790	145	310
	8kg	280	49	107
	15kg	135	23	50
20 Lead	3kg	325	119	198
	6kg	156	55	93
	10kg	87	30	52

Unit : mm

Wall Mount Installation		A	B	C
2 Lead	15kg	90	34	580
	30kg	35	13	160
5 Lead	15kg	63	25	304
	30kg	22	9	119
10 Lead	3kg	304	140	776
	8kg	104	48	273
	15kg	48	22	131
20 Lead	3kg	193	116	321
	6kg	91	54	153
	10kg	50	30	86

Unit : mm

Vertical Installation		A	C
2 Lead	5kg	125	125
	15kg	42	42
5 Lead	2kg	250	250
	4kg	125	125
	10kg	50	50
10 Lead	1kg	446	446
	2kg	223	223
	5kg	89	89
20 Lead	1kg	353	353
	2kg	177	177



Unit : N.m

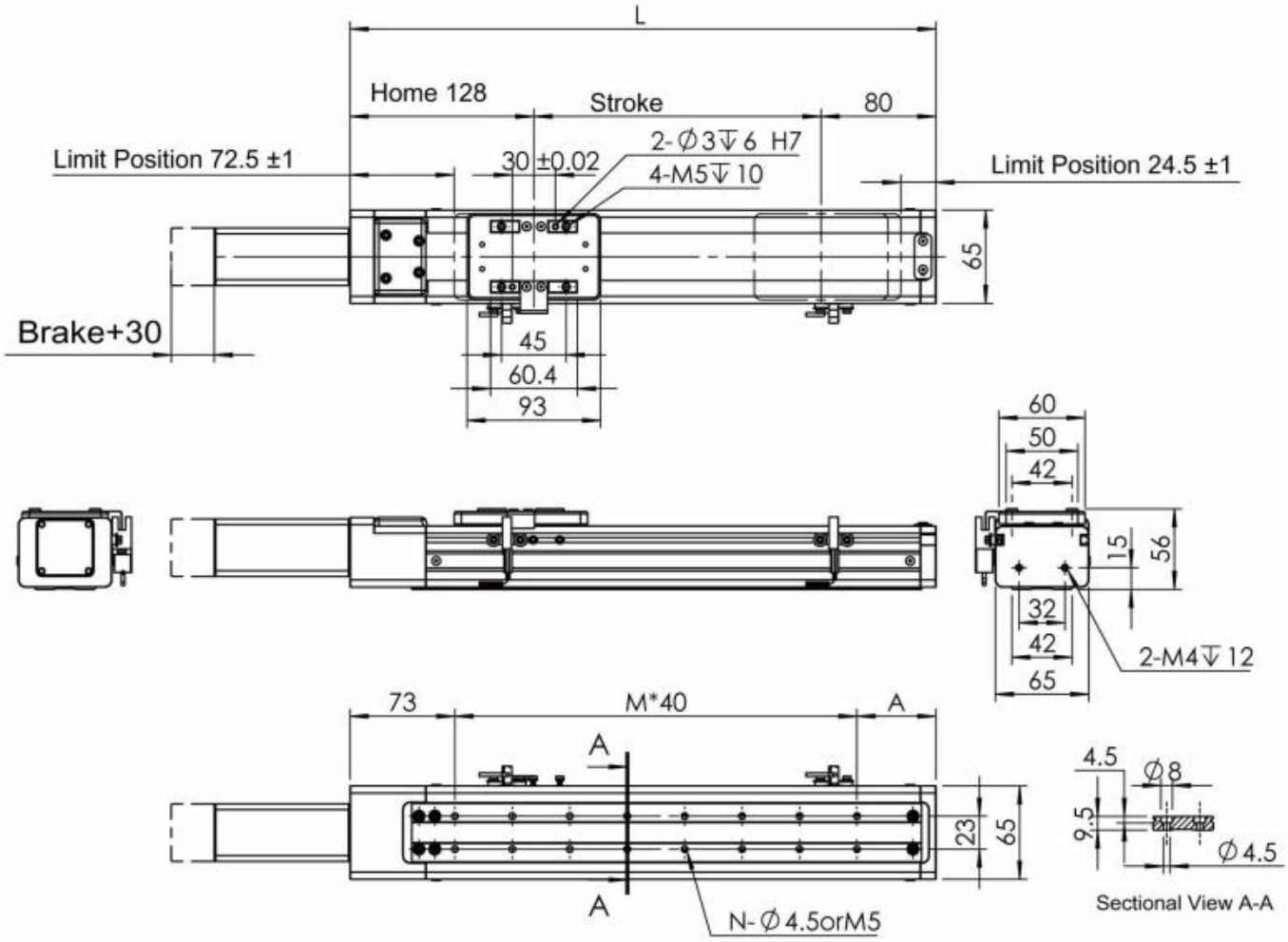
Horizontal Operation	
MY	70
MP	80
MR	75

※ The value in the table indicates the center of gravity。
※ Under conforming catalog specification, the guarantee life is 10,000 km.
※ The catalog specification is not applicable to use for ceiling-mount. Please contact us for details.

Applicable Motor Brand

Brand	Label	Brake	Motor Power (W)	AC-Voltage (V)	Motor Model	Driver Model
Mitsubishi	M	No Brake (Horizontal Type)	100	220	HG - KR13	MR-J4-10A
		With Brake (Vertical Type)	100	220	HG - KR13B	MR-J4-10A
Panasonic	P	No Brake (Horizontal Type)	100	220	MSMD012G1U	MADHT1505
		With Brake (Vertical Type)	100	220	MSMD012G1V	MADHT1505
Delta	T	No Brake (Horizontal Type)	100	220	ECMA-C20401ES	ASD-B20121-B
		With Brake (Vertical Type)	100	220	ECMA-C20401FS	ASD-B20121-B

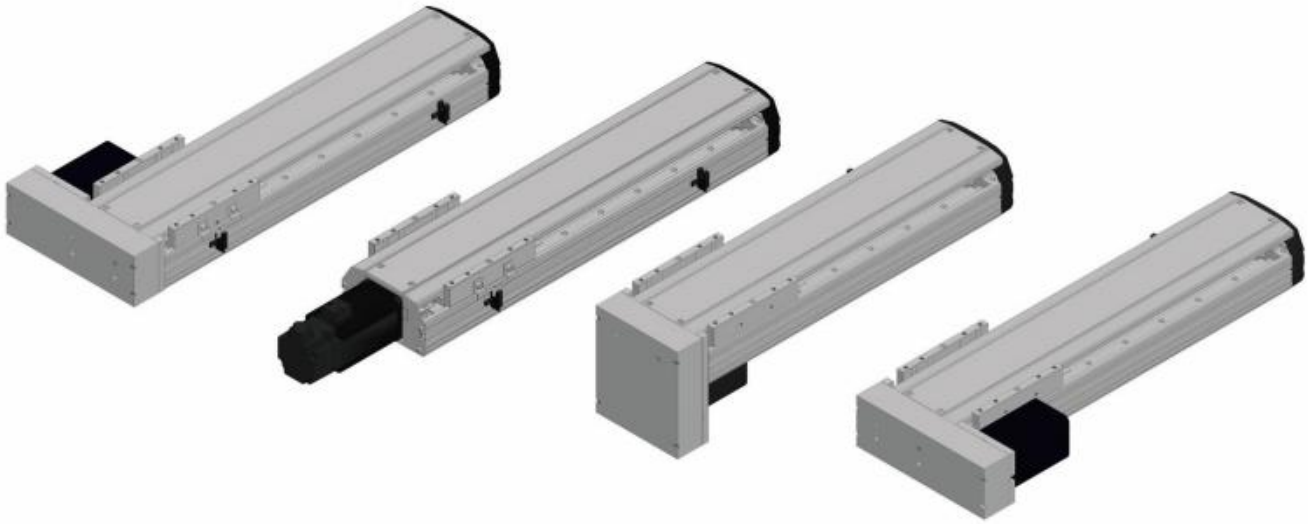
ETHS6M Motor Exposed



Unit：mm

Stroke	200	300	400	500
L	408	508	608	708
A	55	35	55	35
M	7	10	12	15
N	16	22	26	32

ETHS14 Single Axis Ball Screw Actuator



Max. Stroke 1000mm

Max. Speed 1600mm/s

Motor Power 200W 400W

Ball Screw O.D. ϕ 16mm

Linear Guide Way 15x13-2

Order Coding

ETHS14 - L10 - 300 - BC - M20B - C 4 - 0001

Model no. / Special Order no.

■Lead of Ball Screw

5	05mm
10	10mm
20	20mm
32	32mm

■Stroke

300-1000mm
Gap 100

■Brake

B

※If no indication, it means no Brake

■Motor Position

BC	Exposed
BM	Bottom Side
BR	Right Side
BL	Left Side

■Motor Brand

M	Mitsubishi
P	Panasonic
Y	Yaskawa
T	Delta

■Motor Power

10	-
20	200W
40	400W
75	-

■Home Sensor

Internal Type	
A	Motor Side
B	Anti-Motor Side
External Type	
C	Motor Side
D	Anti-Motor Side
No Sensor	
E	No Sensor

■Limit Sensor

Internal Type	
1	1 pc
2	2 pcs
External Type	
3	1 pc
4	2 pcs
No Sensor	
5	No Sensor

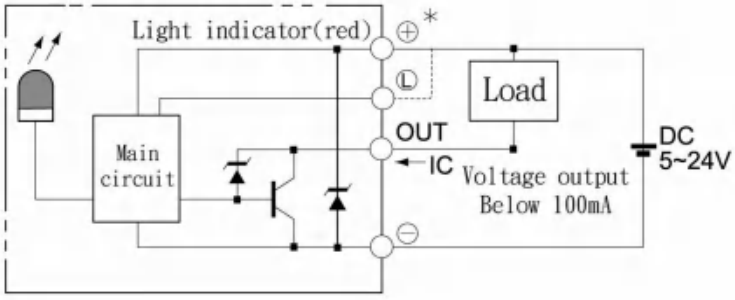
ETHS14 with 200W Motor

Specification

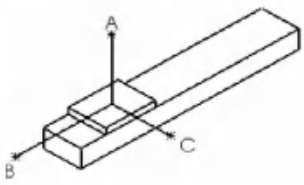
Spec	Repeatability (mm)		±0.01			
	Ball Screw Lead (mm)		5	10	20	32
	Max. Speed (mm/s)		250	500	1000	1600
	Max. Load Capacity	Horizontal (kg)	95	75	35	15
		Vertical (kg)	27	18	7	-
	Rated Thrust (N)		683	341	174	107
	Stroke (mm)		300-1000mm/Gap 100			
Parts	AC Servo Motor Power (W)		200			
	Ball Screw O.D. (mm)		C7Ø16			
	High Rigidity Linear Guide Way (mm)		W15xH13			
	Coupling (mm)		10X14			
	Home Sensor	External	EE-SX672(NPN)			
		Internal	EE-SX674(NPN)			

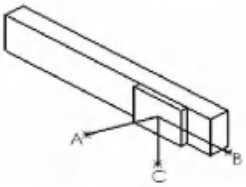
※When the stroke is over 750mm, we recommend to reduce the speed to avoid the runout of ball screw.
※Motor Acceleration and deceleration time setting 0.2 seconds

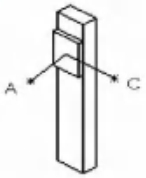
Sensor Layout

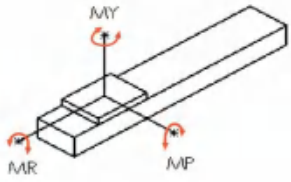


Allowable Overhang Table / Static Loading Moment









Unit : mm

Horizontal Installation		A	B	C
5 Lead	60kg	2512	242	232
	80kg	1811	172	164
	95kg	1537	138	133
10 Lead	30kg	2727	470	430
	50kg	1577	266	242
	75kg	1004	164	150
20 Lead	10kg	2304	1222	1028
	22kg	1443	540	451
	35kg	1005	324	271
32 Lead	10kg	1555	840	623
	15kg	1033	545	405

Unit : mm

Wall Mount Installation		A	B	C
5 Lead	55kg	257	269	2883
	75kg	178	186	2000
	95kg	133	138	1537
10 Lead	35kg	363	395	2368
	55kg	218	238	1445
	75kg	150	164	1004
20 Lead	12kg	854	1019	2552
	20kg	500	596	1588
	35kg	271	324	1005
32 Lead	8kg	787	1060	1980
	15kg	405	545	1033

Unit : mm

Vertical Installation		A	C
5 Lead	15kg	1118	1118
	22kg	770	770
	27kg	626	626
10 Lead	10kg	1500	1500
	14kg	1072	1072
	18kg	833	833
20 Lead	4kg	2980	2980
	7kg	1700	1700

Unit : N.m

Horizontal Operation	
MY	551
MP	552
MR	485

※ The value in the table indicates the center of gravity。
※ Under conforming catalog specification, the guarantee life is 10,000 km.
※ The catalog specification is not applicable to use for ceiling-mount. Please contact us for details.

Applicable Motor Brand

Brand	Label	Brake	Motor Power (W)	AC-Voltage (V)	Motor Model	Driver Model
Mitsubishi	M	No Brake (Horizontal Type)	200	220	HG - KR23	MR-J4-20A
		With Brake (Vertical Type)	200	220	HG - KR23B	MR-J4-20A
Panasonic	P	No Brake (Horizontal Type)	200	220	MHMD022G1U	MADHT1507
		With Brake (Vertical Type)	200	220	MHMD022G1V	MADHT1507
Delta	T	No Brake (Horizontal Type)	200	220	ECMA-C20602ES	ASD-B20221-B
		With Brake (Vertical Type)	200	220	ECMA-C20602FS	ASD-B20221-B

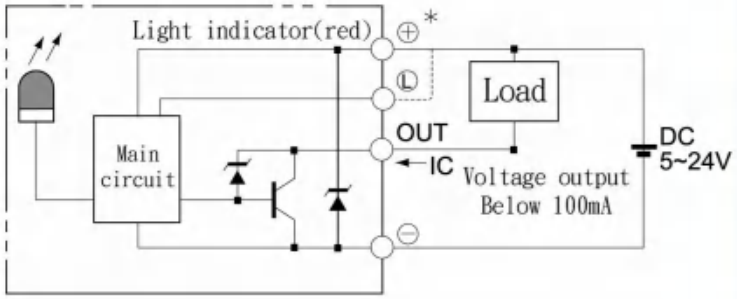
ETHS14 with 400W Motor

Specification

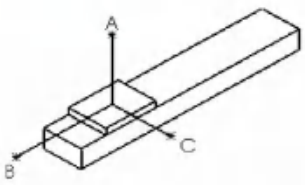
Spec	Repeatability (mm)		±0.01			
	Ball Screw Lead (mm)		5	10	20	32
	Max. Speed (mm/s)		250	500	1000	1600
	Max. Load Capacity	Horizontal (kg)	110	88	40	30
		Vertical (kg)	33	22	10	8
	Rated Thrust (N)		1388	694	347	218
	Stroke (mm)		300-1000mm/Gap 100			
Parts	AC Servo Motor Power (W)		400			
	Ball Screw O.D. (mm)		C7Ø16			
	High Rigidity Linear Guide Way (mm)		W15xH13			
	Coupling (mm)		14x10			
	Home Sensor	External	EE-SX672(NPN)			
		Internal	EE-SX674(NPN)			

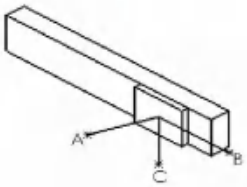
※When the stroke is over 750mm, we recommend to reduce the speed to avoid the runout of ball screw.
※Motor Acceleration and deceleration time setting 0.2 seconds

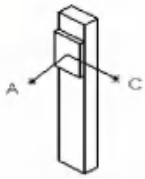
Sensor Layout



Allowable Overhang Table / Static Loading Moment







Unit : mm

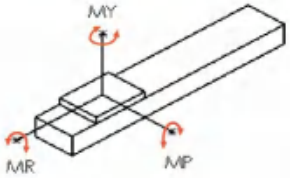
Horizontal Installation		A	B	C
5 Lead	60kg	2512	242	232
	80kg	1811	172	164
	110kg	1284	114	108
10 Lead	30kg	2727	470	430
	50kg	1577	266	242
	88kg	854	134	122
20 Lead	10kg	2304	1222	1028
	22kg	1443	540	451
	40kg	860	277	233
32 Lead	15kg	1033	545	405
	25kg	604	311	233
	30kg	495	251	188

Unit : mm

Wall Mount Installation		A	B	C
5 Lead	55kg	257	269	2883
	75kg	178	186	2000
	110kg	108	114	1284
10 Lead	35kg	363	395	2368
	55kg	218	238	1445
	88kg	123	134	854
20 Lead	12kg	854	1019	2552
	20kg	500	596	1588
	40kg	233	277	860
32 Lead	15kg	405	545	1033
	30kg	188	251	495

Unit : mm

Vertical Installation		A	C
5 Lead	15kg	1118	1118
	22kg	770	770
	33kg	513	513
10 Lead	10kg	1500	1500
	14kg	1072	1072
	22kg	682	682
20 Lead	7kg	1700	1700
	10kg	1188	1188
32 Lead	5kg	1503	1503
	8kg	944	944



Unit : N.m

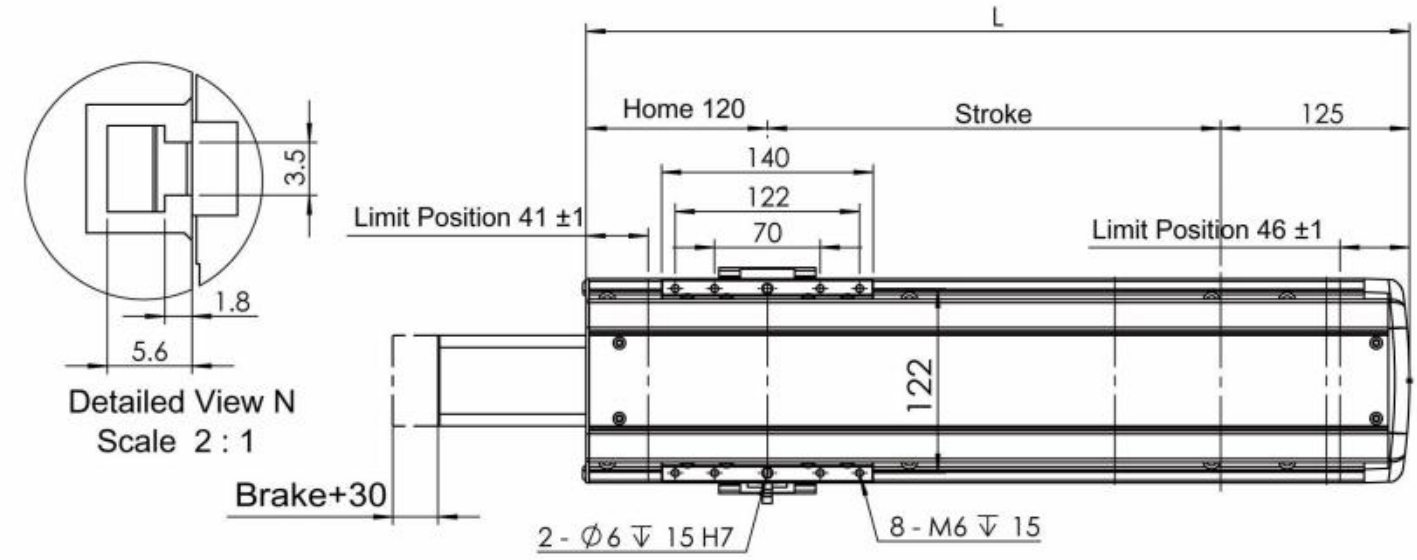
Horizontal Operation	
MY	551
MP	552
MR	485

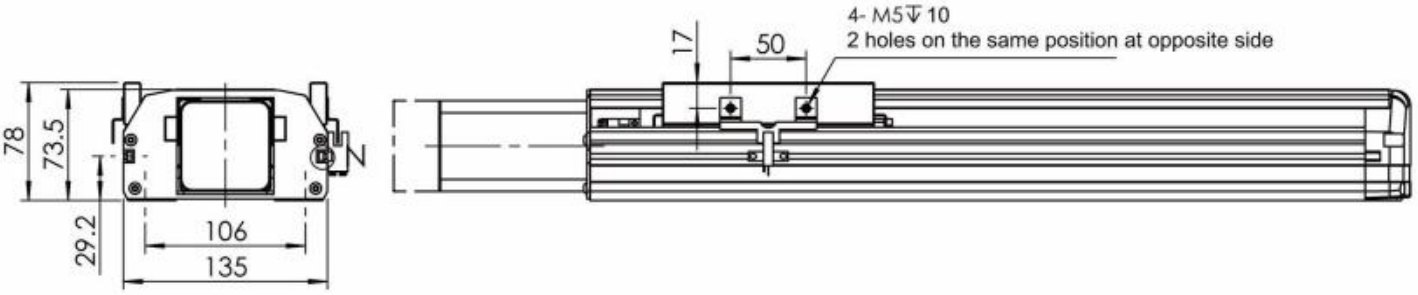
※ The value in the table indicates the center of gravity。
※ Under conforming catalog specification, the guarantee life is 10,000 km.
※ The catalog specification is not applicable to use for ceiling-mount. Please contact us for details.

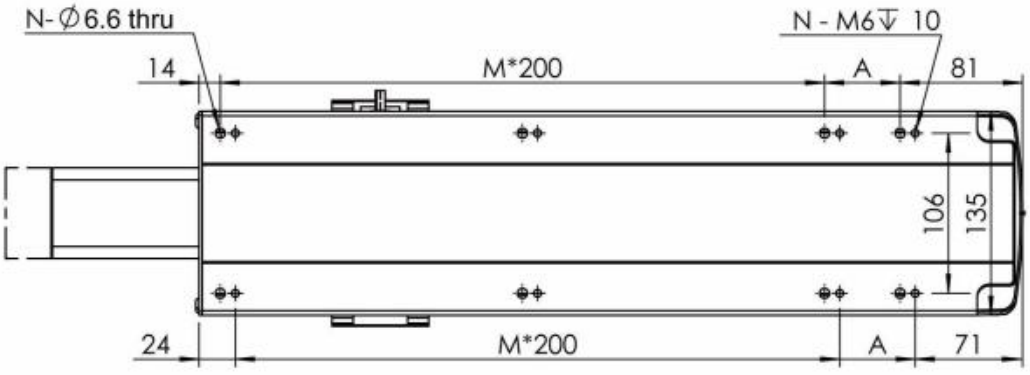
Applicable Motor Brand

Brand	Label	Brake	Motor Power (W)	AC-Voltage (V)	Motor Model	Driver Model
Mitsubishi	M	No Brake (Horizontal Type)	400	220	HG - KR43	MR-J4-40A
		With Brake (Vertical Type)	400	220	HG - KR43B	MR-J4-40A
Panasonic	P	No Brake (Horizontal Type)	400	220	MHMD042G1U	MBDHT2510
		With Brake (Vertical Type)	400	220	MHMD042G1V	MBDHT2510
Delta	T	No Brake (Horizontal Type)	400	220	ECMA-C20604ES	ASD-B20421-B
		With Brake (Vertical Type)	400	220	ECMA-C20604FS	ASD-B20421-B

ETHS14 Motor Exposed



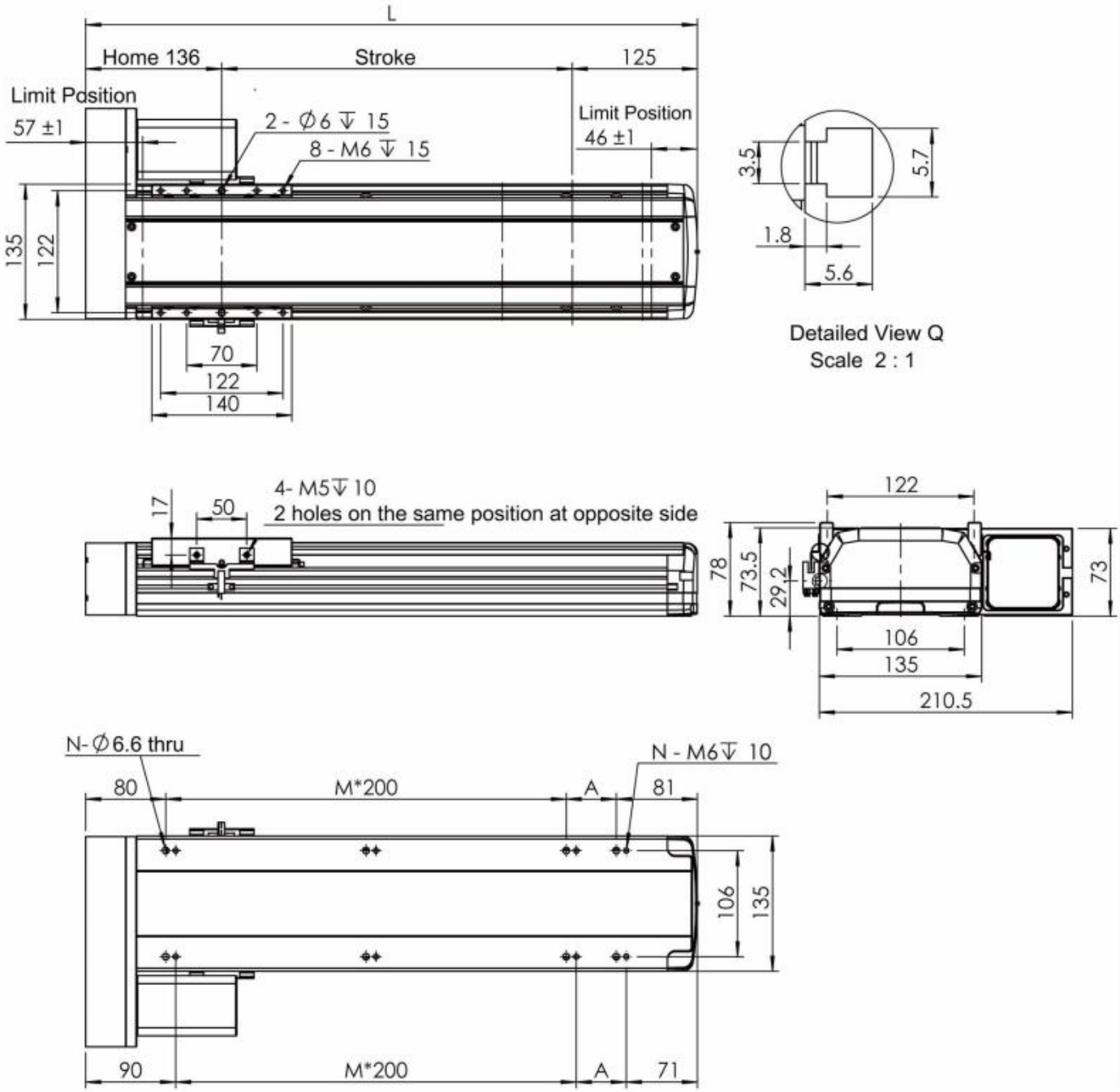




Unit : mm

Stroke	300	400	500	600	700	800	900	1000
L	545	645	745	845	945	1045	1145	1245
A	50	150	50	150	50	150	50	150
M	2	2	3	3	4	4	5	5
N	8	8	10	10	12	12	14	14

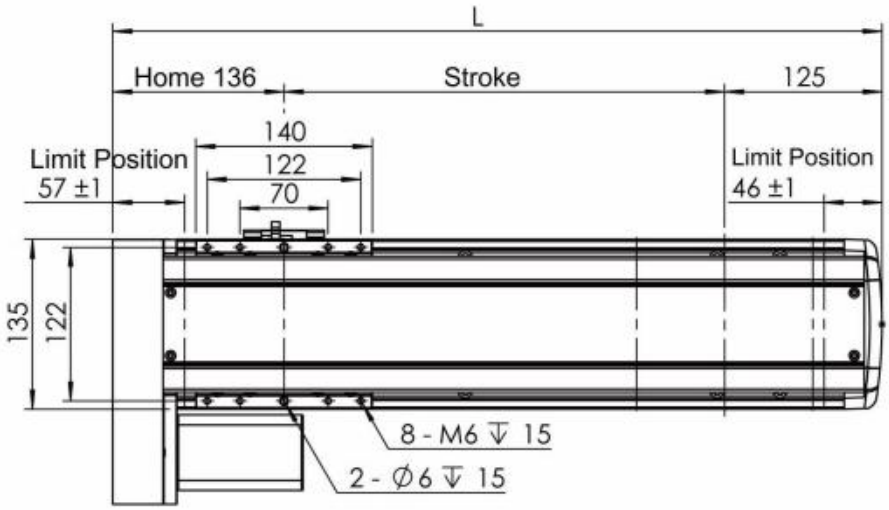
ETHS14 Motor Right Side

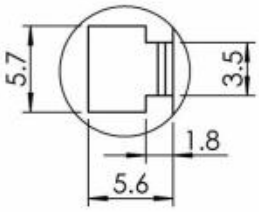


Unit : mm

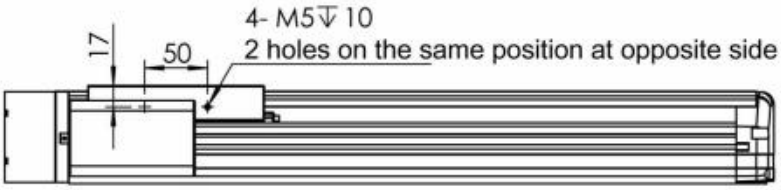
Stroke	300	400	500	600	700	800	900	1000
L	561	661	761	861	961	1061	1161	1261
A	200	100	200	100	200	100	200	100
M	1	2	2	3	3	4	4	5
N	6	8	8	10	10	12	12	14

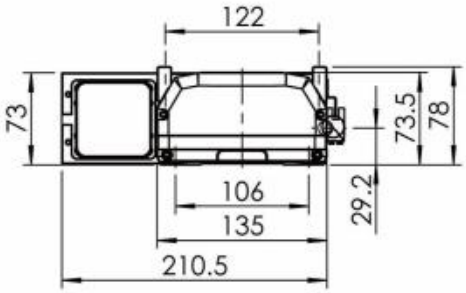
ETHS14 Motor Left Side

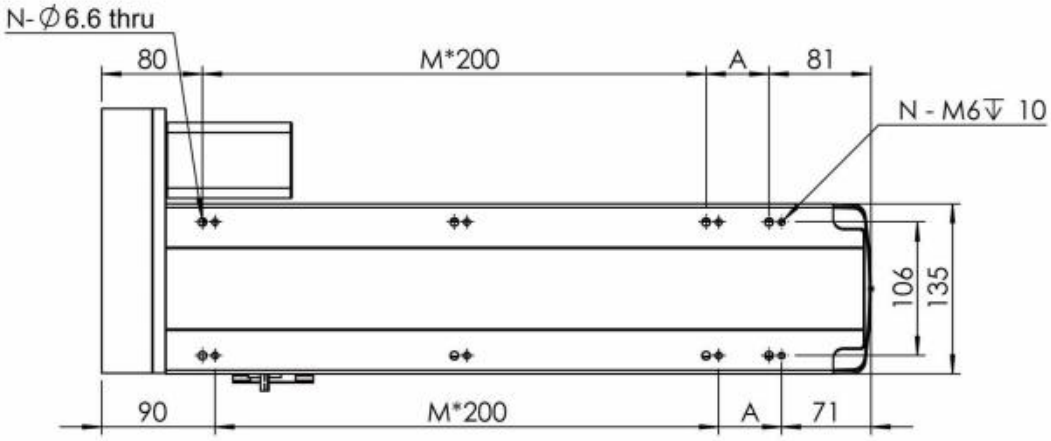




Detailed View Q
Scale 2 : 1



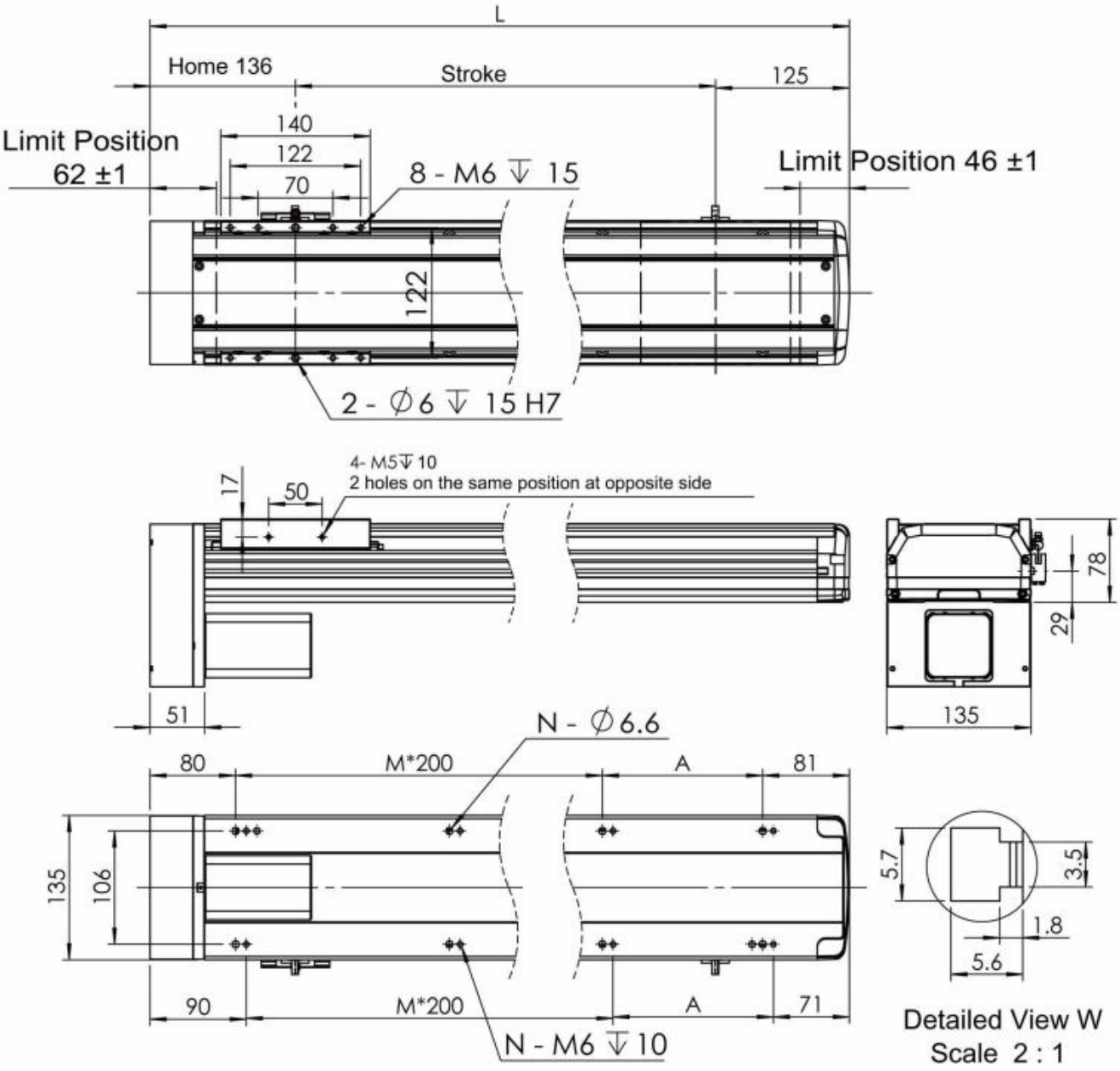




Unit : mm

Stroke	300	400	500	600	700	800	900	1000
L	561	661	761	861	961	1061	1161	1261
A	200	100	200	100	200	100	200	100
M	1	2	2	3	3	4	4	5
N	6	8	8	10	10	12	12	14

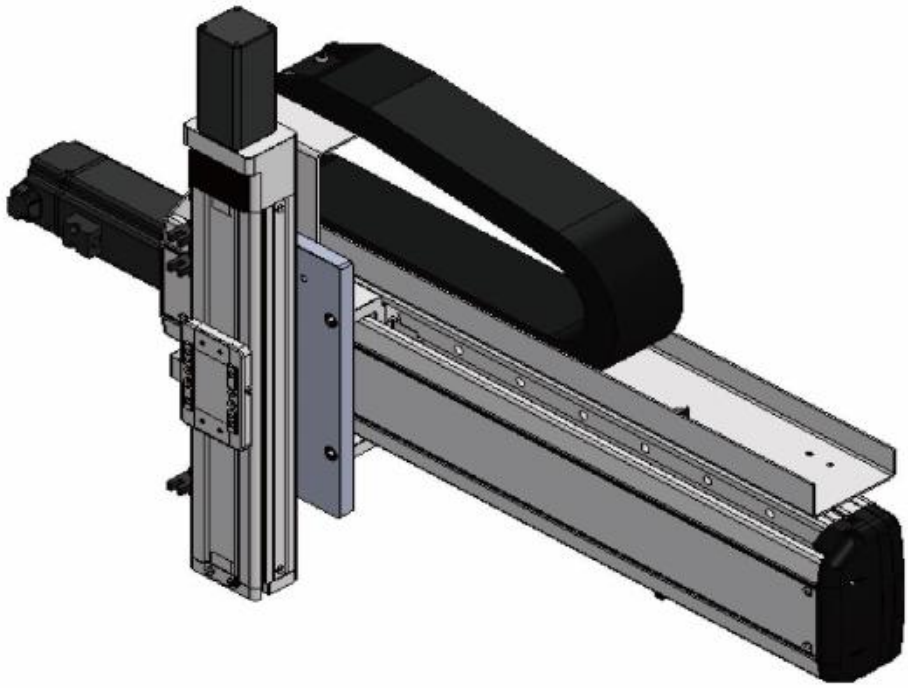
ETHS14 Motor Bottom Side



Unit : mm

Stroke	300	400	500	600	700	800	900	1000
L	561	661	761	861	961	1061	1161	1261
A	200	100	200	100	200	100	200	100
M	1	2	2	3	3	4	4	5
N	6	8	8	10	10	12	12	14

XYTHS620 X, Z Axis Ball Screw Actuator



Max. Stroke

X axis 1000mm Z axis 500mm

Max. Speed

X axis 500mm/s Z axis 250mm/s

AC Servo Motor Power

X axis 400W Z axis 100W

Specification

Item	X axis	Z axis
Model Type	ETHS14	ETHS6M
Repeatability (mm)	±0.01	±0.01
Lead (mm)	10	5
Max. Speed (mm/s) ※3	500	250
Stroke (Gap 100 mm)	300-1000	200-400
AC Servo Motor Power (w)	400	100
Environmen	0-40℃, 85%RH Below	

※3:The Max. speed is based on 3000RPM AC servo mortor.

Max. Load Capacity

Z axis Stroke (mm)	200-400
Load Capacity of Z axis (kg)	15

ORDER CODING

XYTHS620 - F 1 - 400 - 300 - M - C - 001

Model no. / Special Order no.

■Combination

F	XZ Axis

■Combination Direction

1
3

■X-axis Stroke

300-1000mm Gap 100

■Z-axis Stroke

200-400mm Gap 100

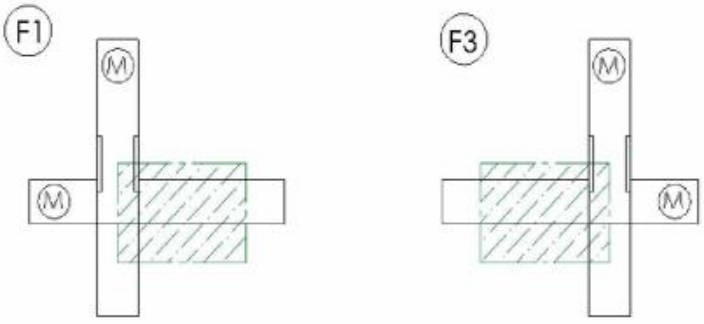
■Motor Brand

M	Mitsubishi
P	Panasonic
Y	Yaskawa
T	Delta

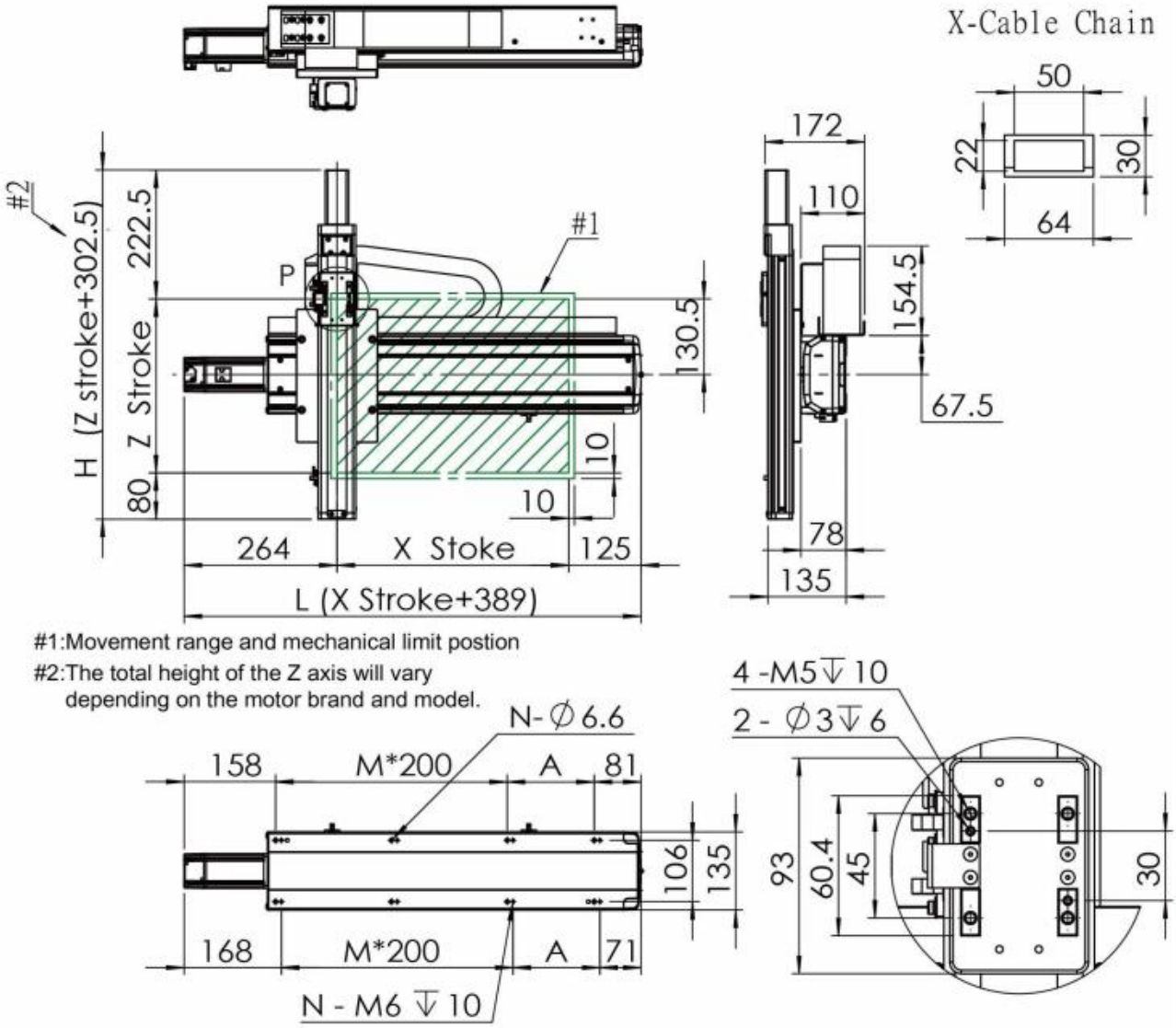
■Delivery Method

C	By set
K	By kit

Combination Direction



XYTHS620 X, Z Axis Ball Screw Actuator



#1:Movement range and mechanical limit postion

#2:The total height of the Z axis will vary depending on the motor brand and model.

Detailed View P
Scale 1 : 3

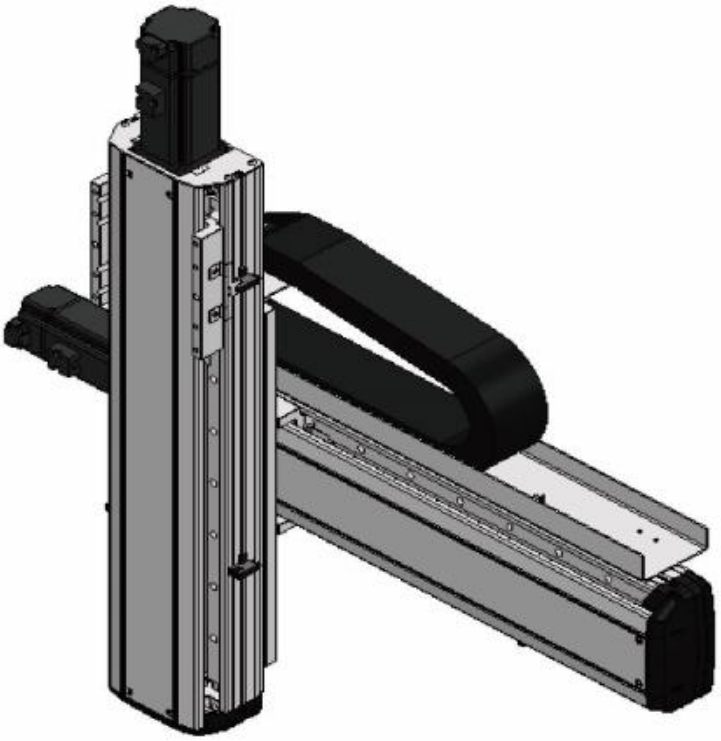
Unit : mm

X axis Stroke	300	400	500	600	700	800	900	1000
L	689	789	889	989	1089	1189	1289	1389
A	50	150	50	150	50	150	50	150
M	2	2	3	3	4	4	5	5
N	8	8	10	10	12	12	14	14
Max. Speed	500					450	350	250

Unit : mm

Z axis Stroke	300
H	602.5
Max. Speed	250

XYTHS660 X, Z Axis Ball Screw Actuator



Max. Stroke

X axis 1000mm　　Z axis 400mm

Max. Speed

X axis 500mm/s　　Z axis 500mm/s

AC Servo Motor Power

X axis 400W　　Z axis 200W

Specification

Item	X axis	Z axis
Model Type	ETHS14	ETHS14
Repeatability (mm)	±0.01	±0.01
Lead (mm)	10	10
Max. Speed (mm/s) ※3	500	500
Stroke (Gap 100 mm)	300-1000	300-400
AC Servo Motor Power (w)	400	200
Environmen	0-40℃, 85% RH Below	

※3:The Max. speed is based on 3000RPM AC servo mortor.

Max. Load Capacity

Z axis Stroke (mm)	300-400
Load Capacity of Z axis (kg)	15

ORDER CODING

XYTHS660 - F 1 - 400 - 300 - M - C - 001

Model no.

Special Order no.

■Combination

F	XZ Axis

■Combination Direction

1
3

■X-axis Stroke

300-1000mm
Gap 100

■Z-axis Stroke

300-400mm
Gap 100

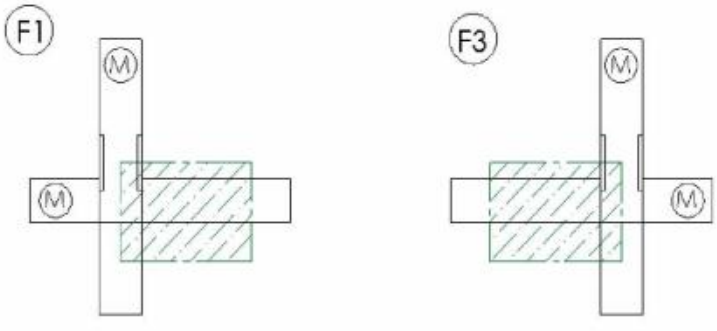
■Motor Brand

M	Mitsubishi
P	Panasonic
Y	Yaskawa
T	Delta

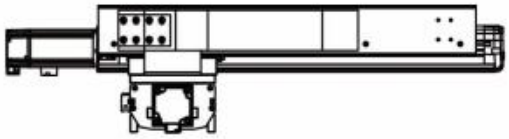
■Delivery Method

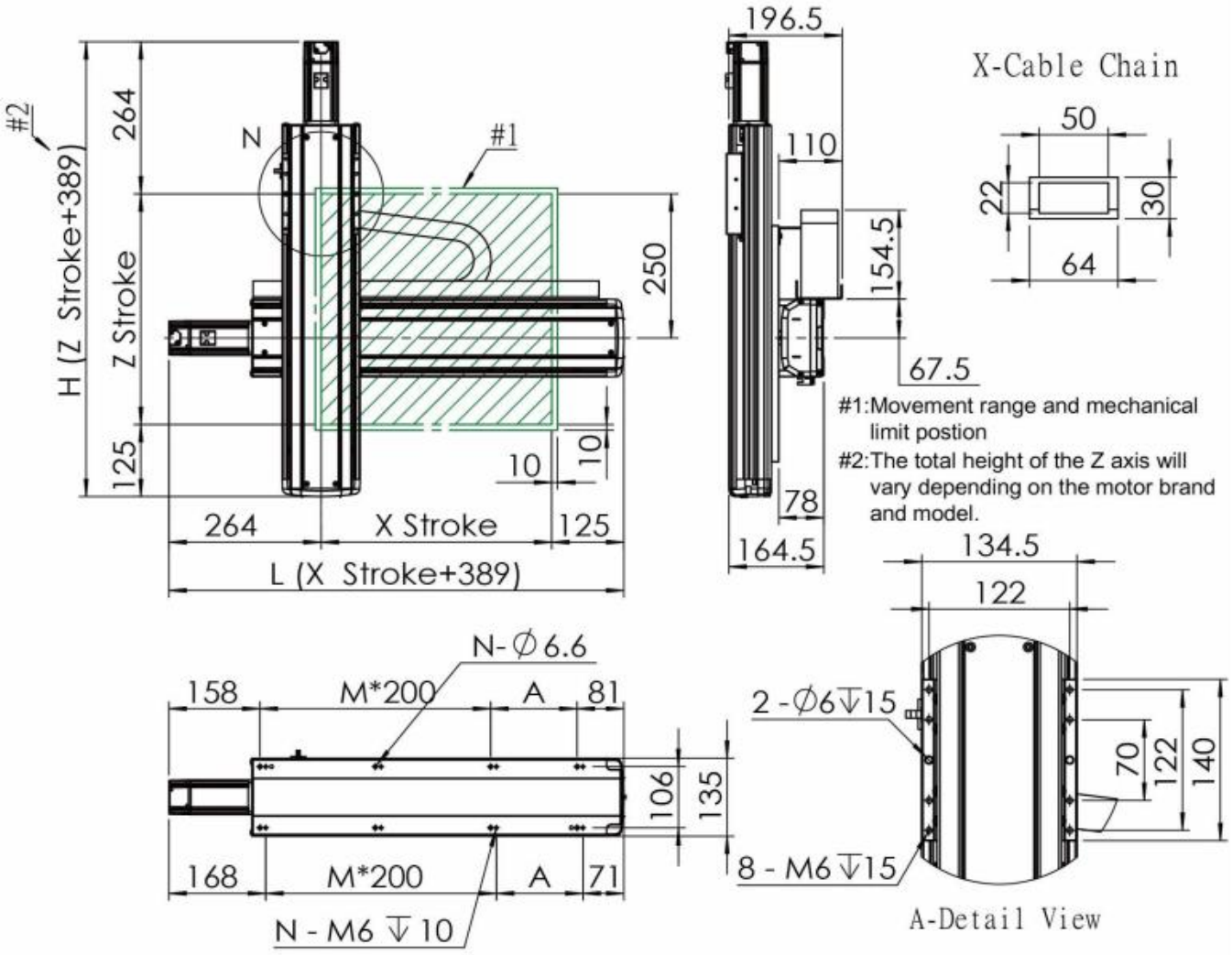
C	By set
K	By kit

Combination Direction



XYTHS660 X, Z Axis Ball Screw Actuator





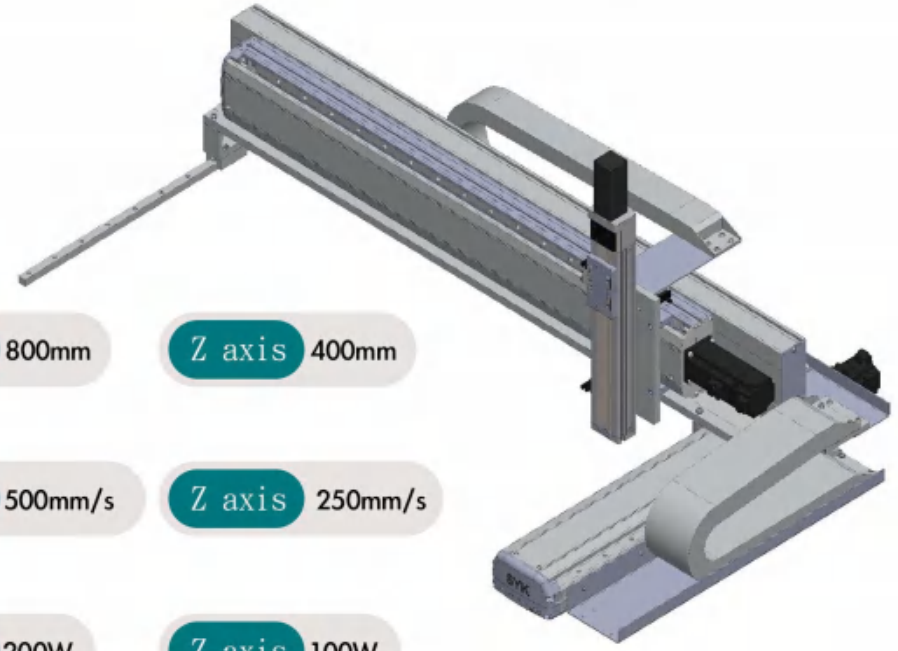
Unit : mm

X axis Stroke	300	400	500	600	700	800	900	1000
L	689	789	889	989	1089	1189	1289	1389
A	50	150	50	150	50	150	50	150
M	2	2	3	3	4	4	5	5
N	8	8	10	10	12	12	14	14
Max. Speed	500					450	350	250

Unit : mm

Z axis Stroke	300
H	689
Max. Speed	250

XYTHS662 X,Y,Z Axis Ball Screw Actuator



Max. Stroke

X axis 1000mm | Y axis 800mm | Z axis 400mm

Max. Speed

X axis 500mm/s | Y axis 500mm/s | Z axis 250mm/s

AC Servo Motor Power

X axis 400W | Y axis 200W | Z axis 100W

Specification

Item	X axis	Y axis	Z axis
Model Type	ETHS14	ETHS14	ETHS6M
Repeatability (mm)	±0.01	±0.01	±0.01
Lead (mm)	10	10	5
Max. Speed (mm/s) ※3	500	500	250
Stroke (Gap 100 mm)	300-1000	300-800	200-400
AC Servo Motor Power (w)	400	200	100
Environment	0-40℃, 85%RH Below		

※3:The Max. speed is based on 3000RPM AC servo mortor.

Max. Load Capacity

Y axis Stroke (mm)						
Load Capacity of Z axis (kg)	300	400	500	600	700	800
200	13	13	13	13	13	13
300	13	13	13	13	13	12
400	13	13	13	13	13	11

ORDER CODING

XYTHS662 - G 1 - 400 - 300 - 200 - M - C - 001

Model no. / Special Order no.

Combination	
G	Gantry Type

Combination Direction
1
2
3
4

X-axis Stroke
300-1000mm
Gap 100

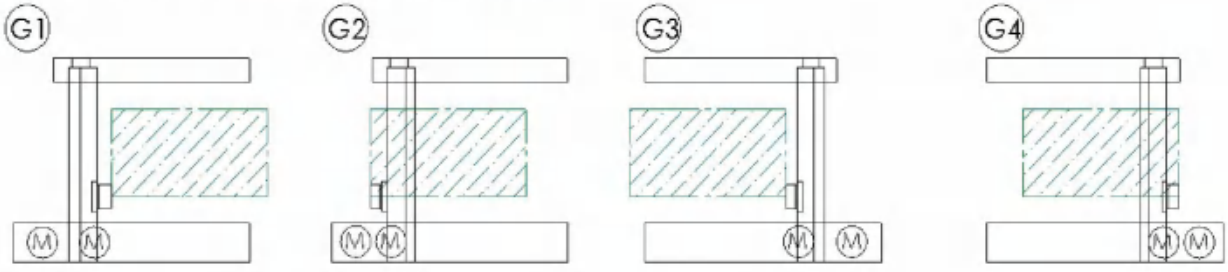
Y-axis Stroke
300-800mm
Gap 100

Z-axis Stroke
200-400mm
Gap 100

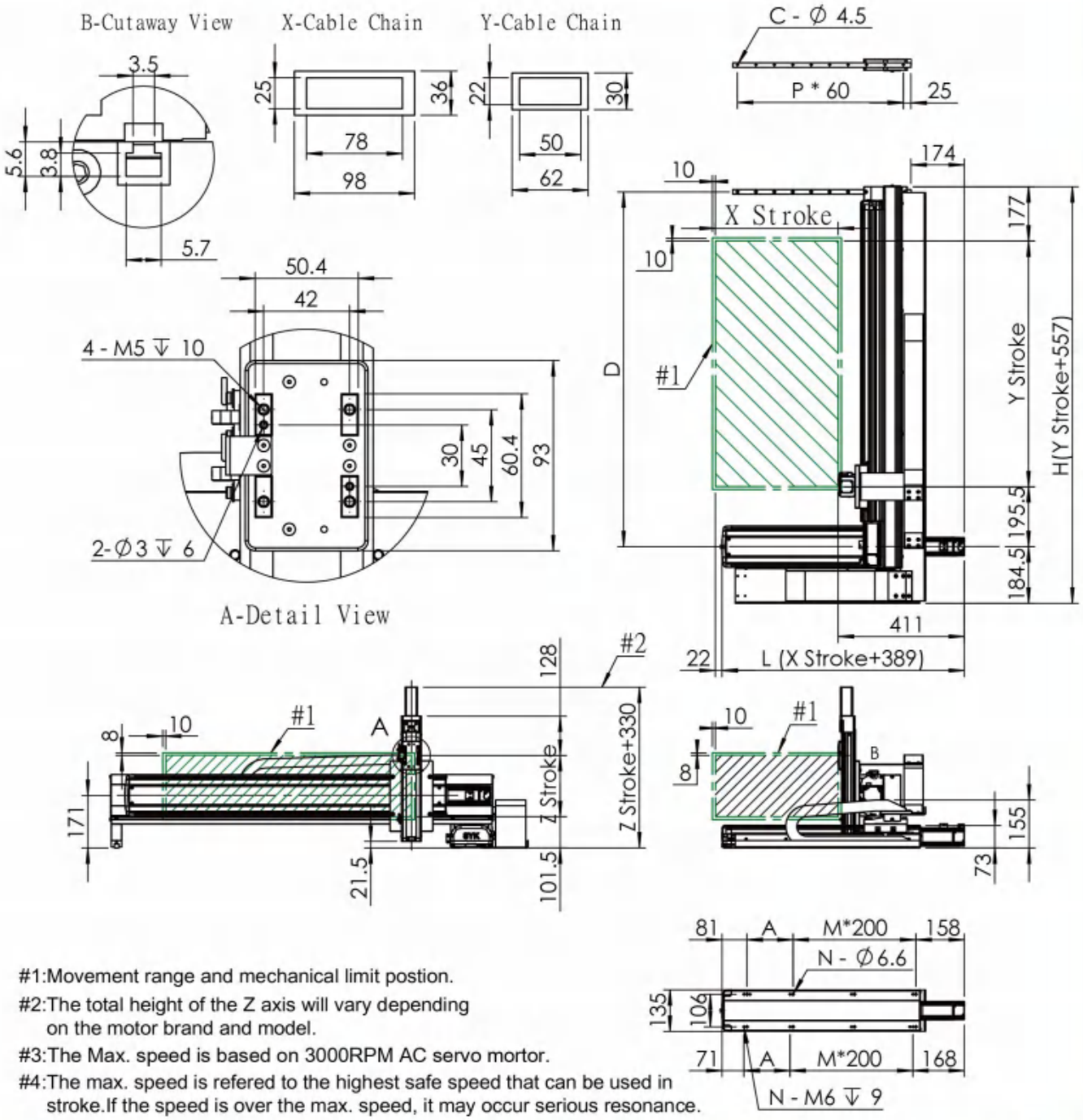
Motor Brand	
M	Mitsubishi
P	Panasonic
Y	Yaskawa
T	Delta

Delivery Method	
C	By set
K	By kit

Combination Direction



XYTHS662 X,Y, Z Axis Ball Screw Actuator



#1:Movement range and mechanical limit postion.

#2:The total height of the Z axis will vary depending on the motor brand and model.

#3:The Max. speed is based on 3000RPM AC servo mortor.

#4:The max. speed is refered to the highest safe speed that can be used in stroke.If the speed is over the max. speed, it may occur serious resonance.

Unit : mm

X-axis Stroke	300	400	500	600	700	800	900	1000
L	689	789	889	989	1089	1189	1289	1389
A	50	150	50	150	50	150	50	150
M	2	2	3	3	4	4	5	5
N	8	8	10	10	12	12	14	14

Unit : mm

Y-axis Stroke	300	400	500	600	700	800
H	857	957	1057	1157	1257	1357
Max. Speed	500					

Unit : mm

Auxiliary X-axis Stroke	300	400	500	600	700	800	900	1000
D	655.5	755.5	855.5	955.5	1055.5	1155.5	1255.5	1355.5
P	7	9	11	12	14	16	17	19
C	8	10	12	13	15	17	18	20

ETLS14 Linear Motor Actuator



Max. Stroke 1594mm

Max. Speed 2500mm/s

Linear Guide Way 15x13-2

ORDER CODING

ETLS14 - YA020 - C1 - 1270 - A - C 4 - 0001

Model no. / Special order no.

■Linear Motor Specification

YA020-C1

■Stroke

838-1594mm
Gap 108

■Tracked Direction

A	Right
B	Left

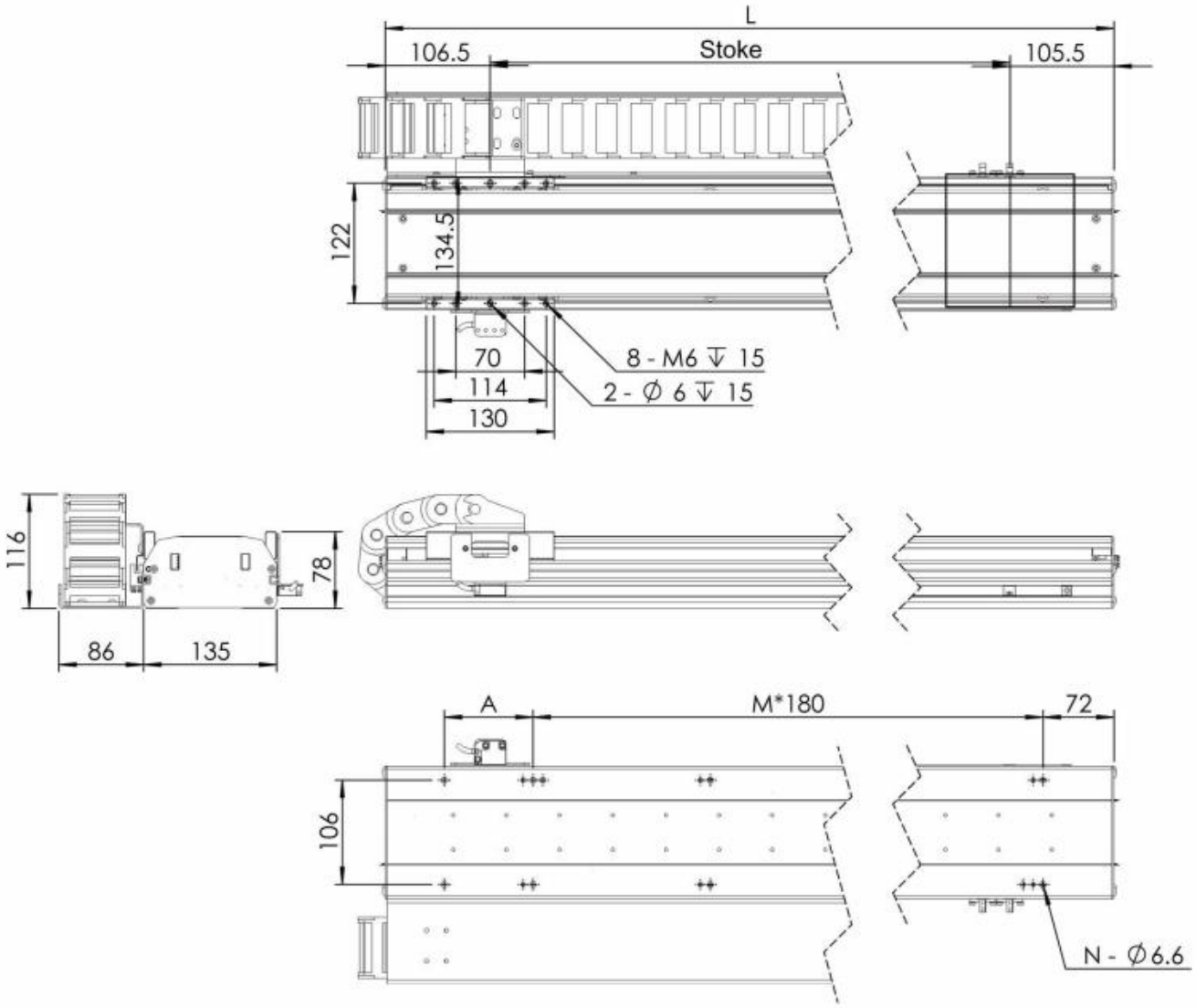
■Home Sensor

External Type	
C	Motor Side
D	Anti-Motor Side
No Sensor	
E	No Sensor

■Limit Sensor

External Type	
3	1 pc
4	2 pcs
No Sensor	
5	No Sensor

ETLS14 Linear Motor Actuator

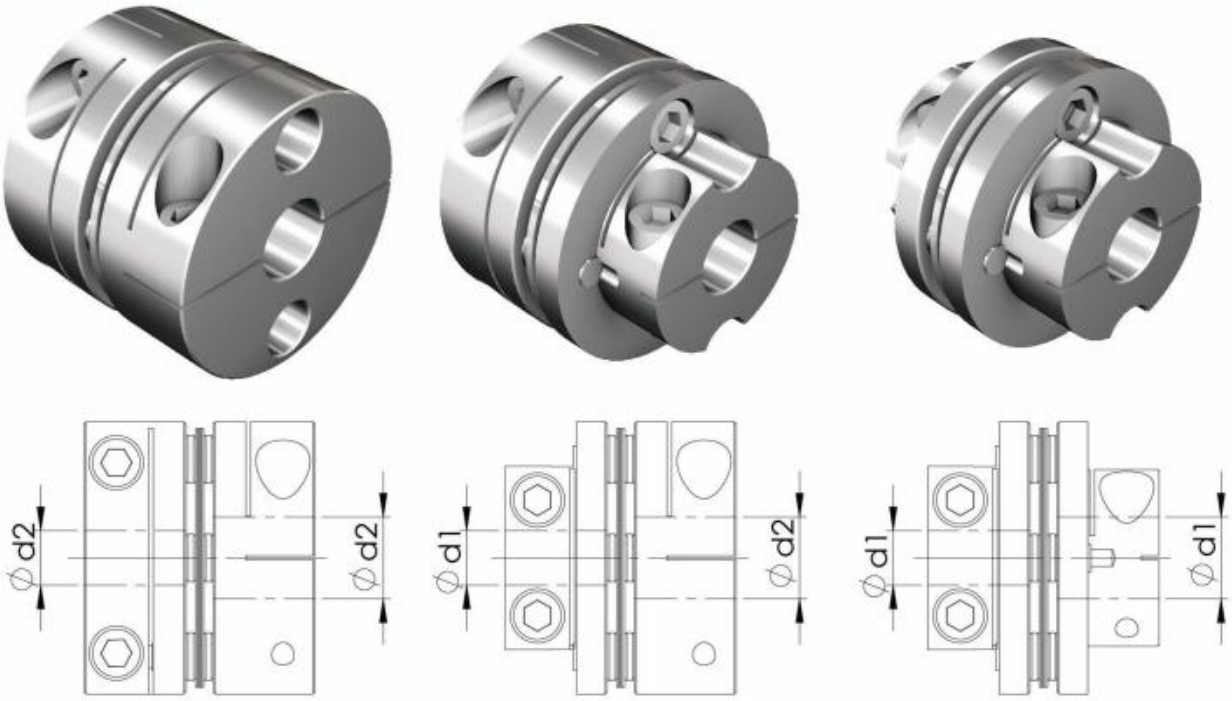


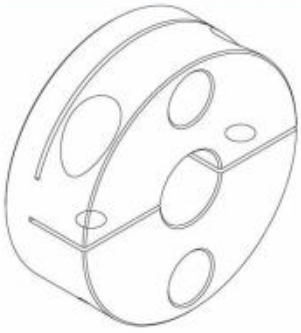
Unit : mm

Stroke	838	946	1054	1162	1270	1378	1486	1594
L	1064	1168	1266	1374	1482	1590	1698	1806
A	–	–	90	–	90	–	90	90
M	5	6	6	7	7	8	8	9
N	12	14	16	16	18	18	20	22

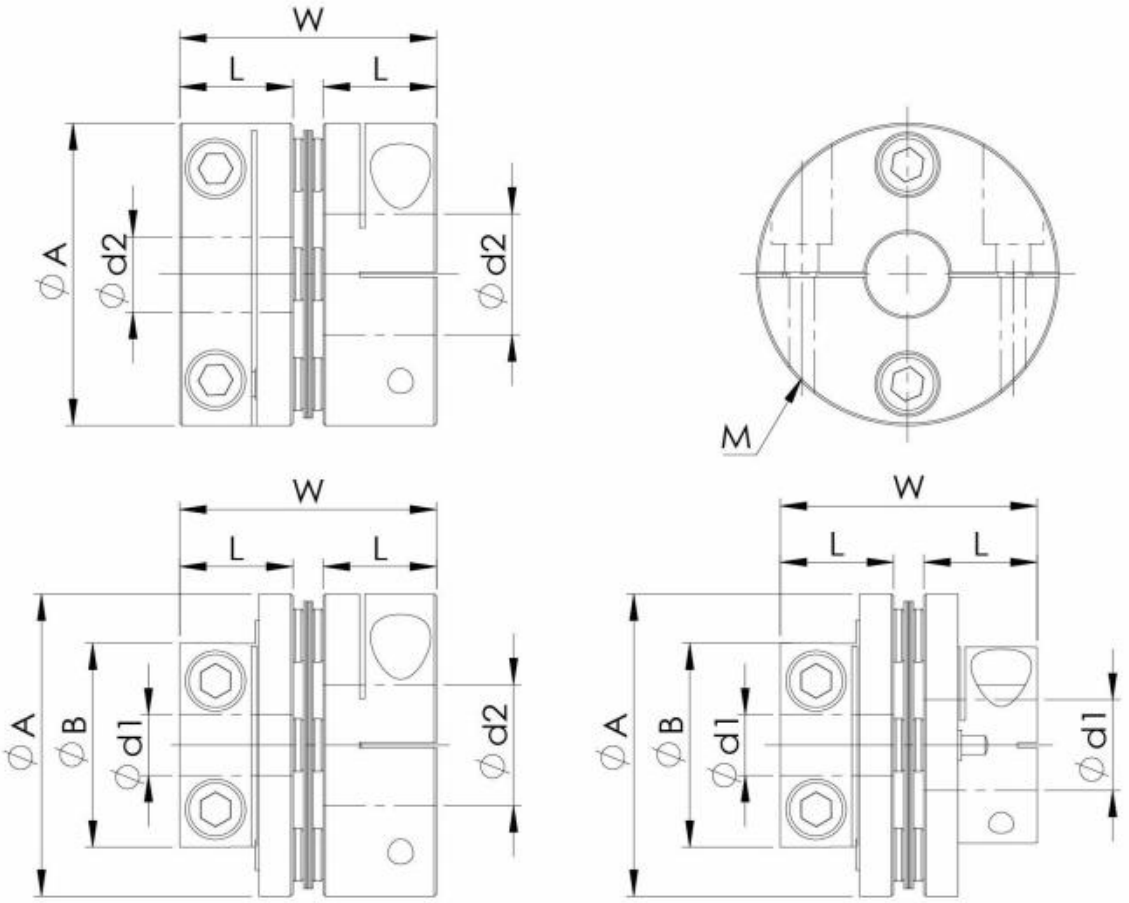
SGS-C DISK/CLAMP TYPE//SHORTER FLEXIBLE COUPLING

Features :
-Suitable for servo-motor and precision transmission mechanism.
-Single disk , compact design ,low moment of inertia and zero backlash.
-Allow minor deviation in angularity and end -play.
-Fixed method: Clamp type. Material: Aluminum alloy.



Model No.	ϕ d1	ϕ d2
Figure.		
SGS27C	4 ~ 6.35	7 ~ 10
SGS34C	6 ~ 9.525	10 ~ 14
SGS40C	8 ~ 10	11 ~ 16
SGS45C	10 ~ 13	14 ~ 19
SGS50C	10 ~ 16	17 ~ 22
SGS57C	12 ~ 18	19 ~ 24
SGS65C	12 ~ 21	22 ~ 28

SGS-C DISK/CLAMP TYPE// SHORTER FLEXIBLE COUPLING



Dimension

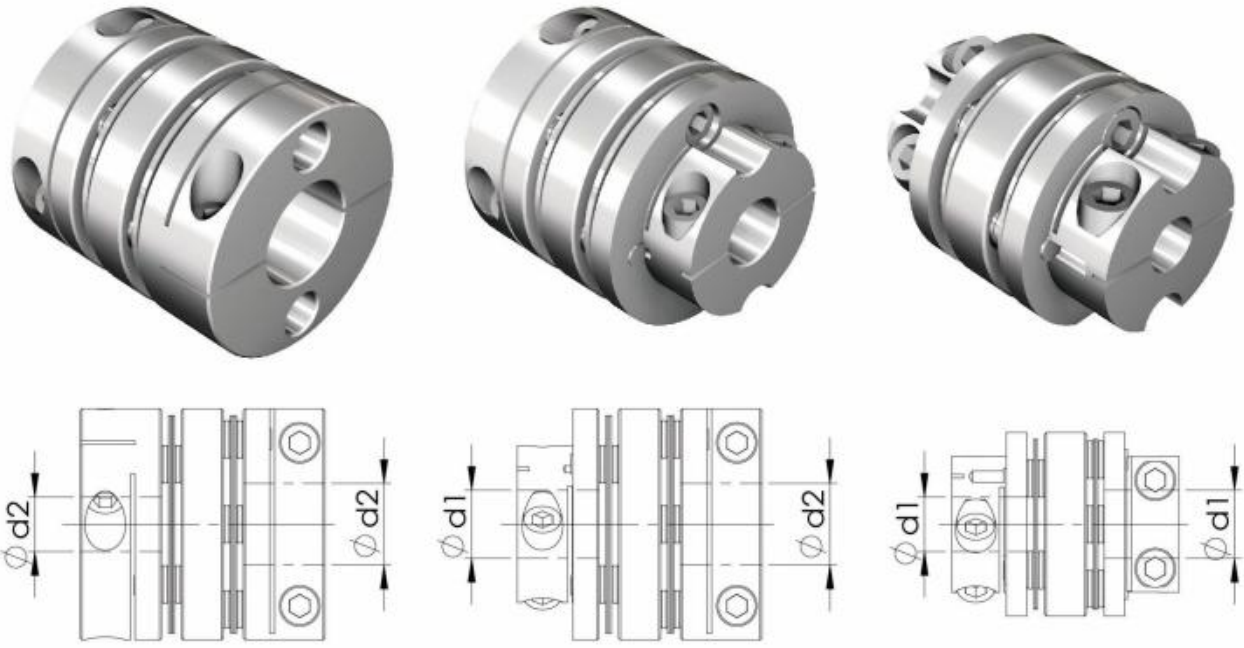
Catalog Number	ϕA	ϕB	L	W	ϕd1 x ϕd2 Stock bores. (H8) ϕd1	ϕd1 x ϕd2 Stock bores. (H8) ϕd2	Setscrew Max. torque. M	Setscrew Max. torque. kgf-cm
SGS-27C	27	20	11	24.5	4 ~ 6.35	7 ~ 10	4 - M3	20
SGS-34C	34	23	12	27	6 ~ 9.525	10 ~ 14	4 - M3	20
SGS-40C	40	27	15	34	8 ~ 10	11 ~ 16	4 - M4	35
SGS-45C	45	34	15	34	10 ~ 13	14 ~ 19	4 - M4	35
SGS-50C	50	40	20	45	10 ~ 16	17 ~ 22	4 - M5	75
SGS-57C	57	45	20	45	12 ~ 18	19 ~ 24	4 - M5	75
SGS-65C	65	50	24	54	12 ~ 21	22 ~ 28	4 - M6	100

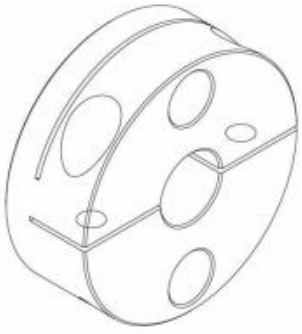
Specifications

Catalog Number	Rated Torque (N . m)	Max Torque (N . m)	Max Rotational Frequency (min-1)	Moment of Inertia (Kg.m2)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Errors of Shaft End-Play (mm)	Weight (g)
SGS-27C	2	4	10000	$3.1x10^{-6}$	0.02	1°	±0.15	-
SGS-34C	5	10		$8.0x10^{-6}$			±0.2	-
SGS-40C	7	14		$2.0x10^{-5}$			±0.25	-
SGS-45C	10	20		$2.8x10^{-5}$			±0.3	-
SGS-50C	16	32		$6.6x10^{-5}$			±0.35	-
SGS-57C	26	52		$9.8x10^{-5}$			±0.4	-
SGS-65C	60	120		$24.0x10^{-5}$			±0.45	-

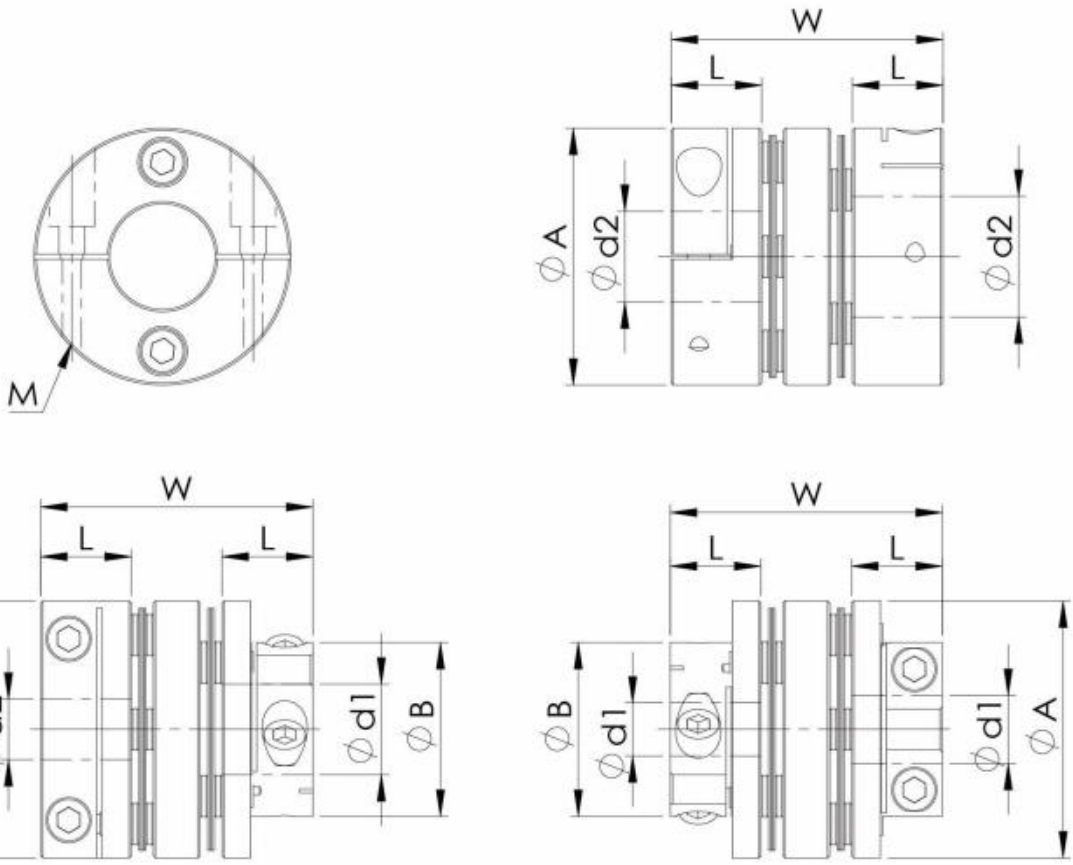
SGL-C DISK/CLAMP TYPE//LONGER FLEXIBLE COUPLING

Features :
-Suitable for servo-motor and precision transmission mechanism.
-double disks , low moment of inertia and zero backlash.
-Allow minor deviation in eccentricity , angularity and end -play.
-Fixed method: Clamp type. Material: Aluminum alloy.



Model No.	ϕ d1	ϕ d2
Figure.		
SGL27C	4 ~ 6.35	7 ~ 10
SGL34C	6 ~ 9.525	10 ~ 14
SGL40C	8 ~ 10	11 ~ 16
SGL45C	10 ~ 13	14 ~ 19
SGL50C	10 ~ 16	17 ~ 22
SGL57C	12 ~ 18	19 ~ 24
SGL65C	12 ~ 21	22 ~ 28

SGL-C DISK/CLAMP TYPE//LONGER FLEXIBLE COUPLING



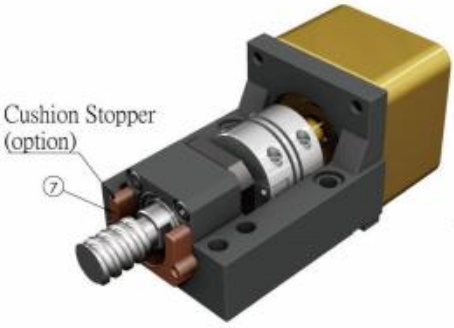
Dimension

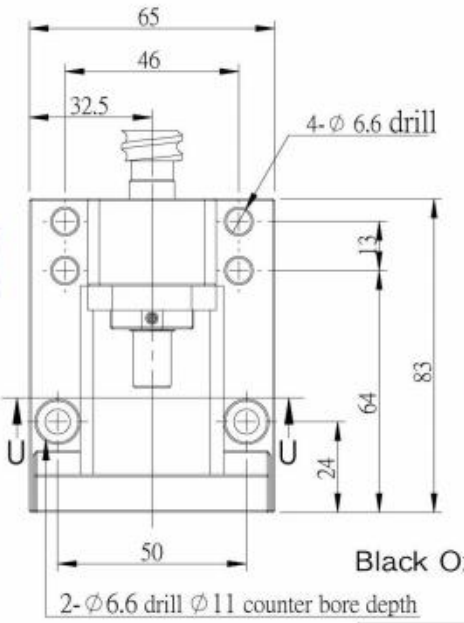
Catalog Number	ϕ A	ϕ B	L	W	ϕ d1x ϕ d2		Setscrew Max. torque.	
					Stock bores. (H8)		M	kgf-cm
					ϕ d1	ϕ d2		
SGL-27C	27	20	11	33.5	4 ~ 6.35	7 ~ 10	4 - M3	20
SGL-34C	34	23	12	36	6 ~ 9.525	10 ~ 14	4 - M3	20
SGL-40C	40	27	15	46	8 ~ 10	11 ~ 16	4 - M4	35
SGL-45C	45	34	15	46	10 ~ 13	14 ~ 19	4 - M4	35
SGL-50C	50	40	20	59	10 ~ 16	17 ~ 22	4 - M5	75
SGL-57C	57	45	20	59	12 ~ 18	19 ~ 24	4 - M5	75
SGL-65C	65	50	24	71	12 ~ 21	22 ~ 28	4 - M6	100

Specifications

Catalog Number	Rated Torque (N . m)	Max Torque (N . m)	Max Rotational Frequency (min-1)	Moment of Inertia (Kg.m2)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Errors of Shaft End-Play (mm)	Weight (g)
SGL-27C	2	4	10000	$4.7x10^{-6}$	0.15	2°	±0.33	-
SGL-34C	5	10		$1.4x10^{-5}$	0.17		±0.4	-
SGL-40C	7	14		$3.1x10^{-5}$	0.22		±0.5	-
SGL-45C	10	20		$4.8x10^{-5}$	0.22		±0.6	-
SGL-50C	16	32		$9.8x10^{-5}$	0.24		±0.7	-
SGL-57C	26	52		$16.2x10^{-5}$	0.27		±0.8	-
SGL-65C	60	120		$40x10^{-5}$	0.35		±0.9	-

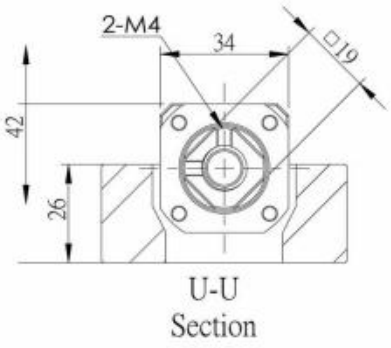
Motor Bracket MBCB12

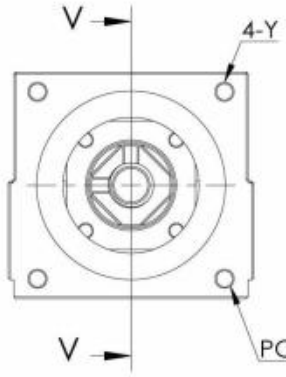


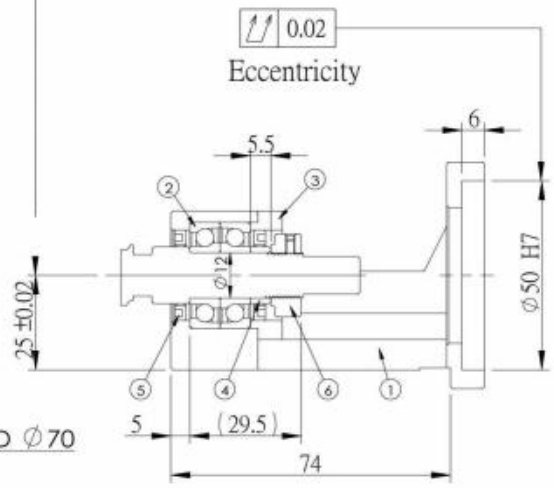




Surface treatment:
Black Oxide / Electroless Nickel Plating







No.	Part name	Qty
1	Housing	1
2	7001 Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1

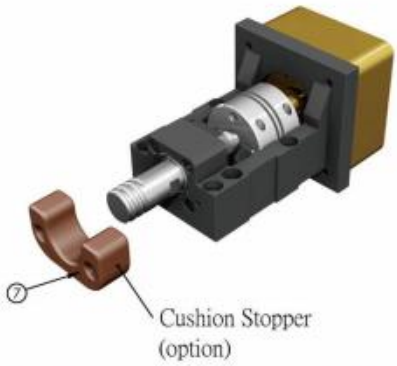
Unit : mm

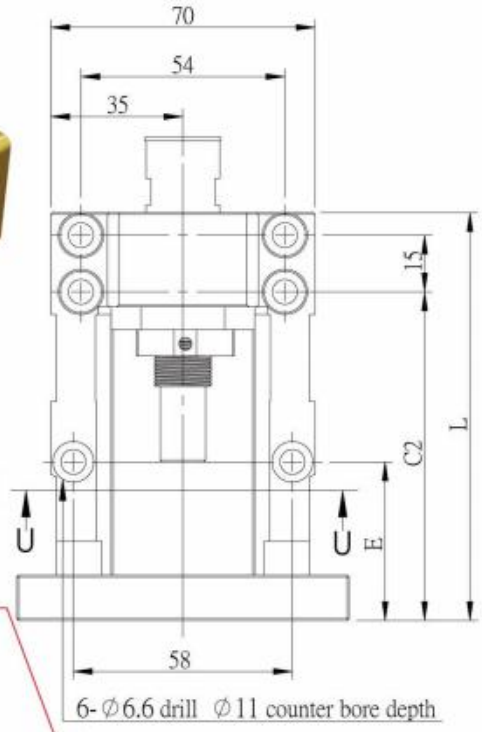
Model No.	Y	Weight (Kgs)	Support unit	Suggest Coupling
			Supported-side	
MBCB12-D	M5	0.8	BF12	SGS 34C
MBCB12-DP	M4			

Note :

1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Motor Bracket MBCB15

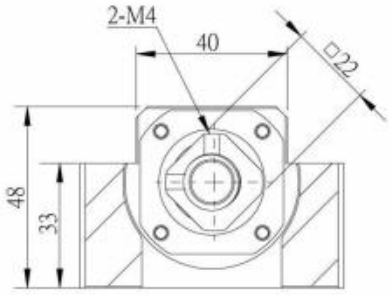




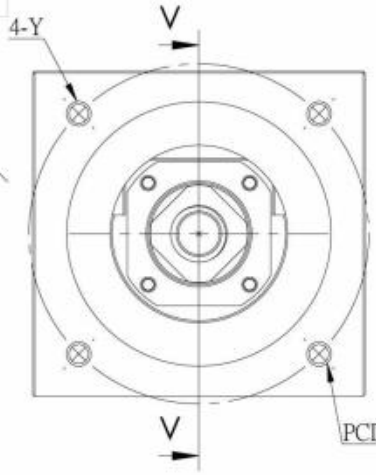


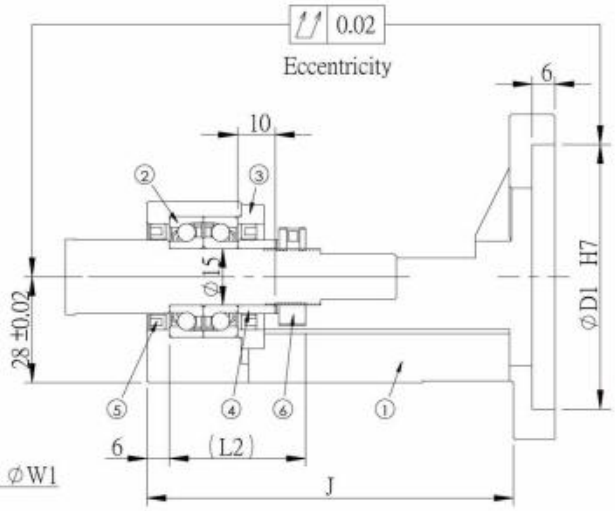
Surface treatment:
Black Oxide /
Electroless Nickel Plating

No.	Part name	Qty
1	Housing	1
2	MBCB15 Bearing 7002 MBCB15M Bearing 7202	1set
3	Holding lid	1
4	Collar thin thickness 10 Collar thin thickness 6	1 2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



U-U
Section





Unit : mm

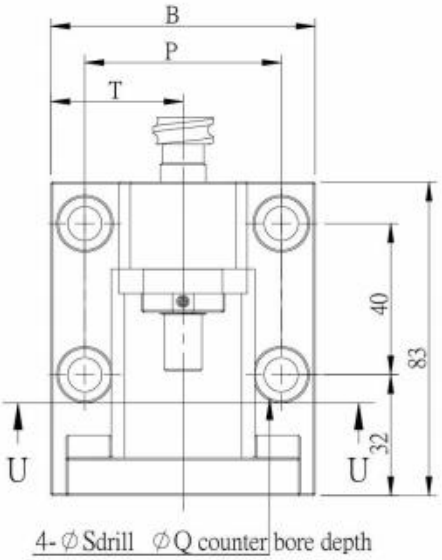
Model No.	D1	W1	Y	L	L2	E	C2	J	Weight (Kgs)	Support unit Supported-side	Suggest Coupling
MBCB15-D	50	70	M5	98	36	32	77	89	0.98	BF15	SGS 34C SGS 40C
MBCB15-DP			M4						0.99		
MBCB15-E	70	90	M6	108		42	87	97	1.39		SGS 40C SGS 45C
MBCB15-EP			M5						1.45		
MBCB15M-E			M6	110	40	44	89	99	-		
MBCB15M-EP			M5						-		

Note :

1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Motor Bracket MBCE10/12、MBCF10/12(New Product)

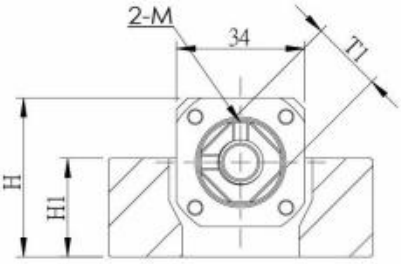




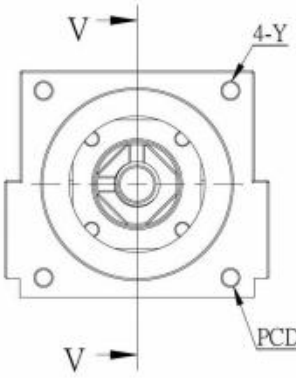


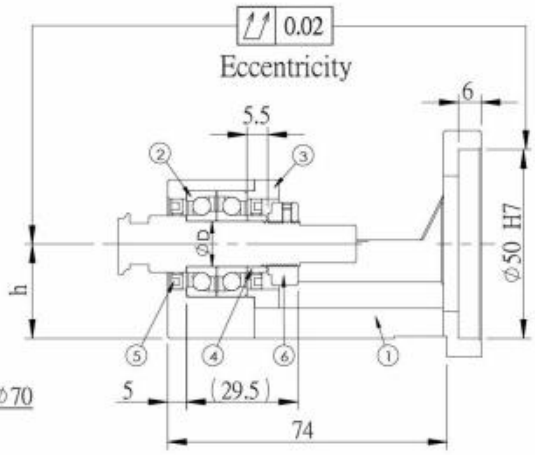
Surface treatment:
Black Oxide
/
Electroless Nickel Plating

No.	Part name	Qty
1	Housing	1
2	Bearing MBC*10 with bearings 7000 MBC*12 with bearings 7001	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



Section U-U





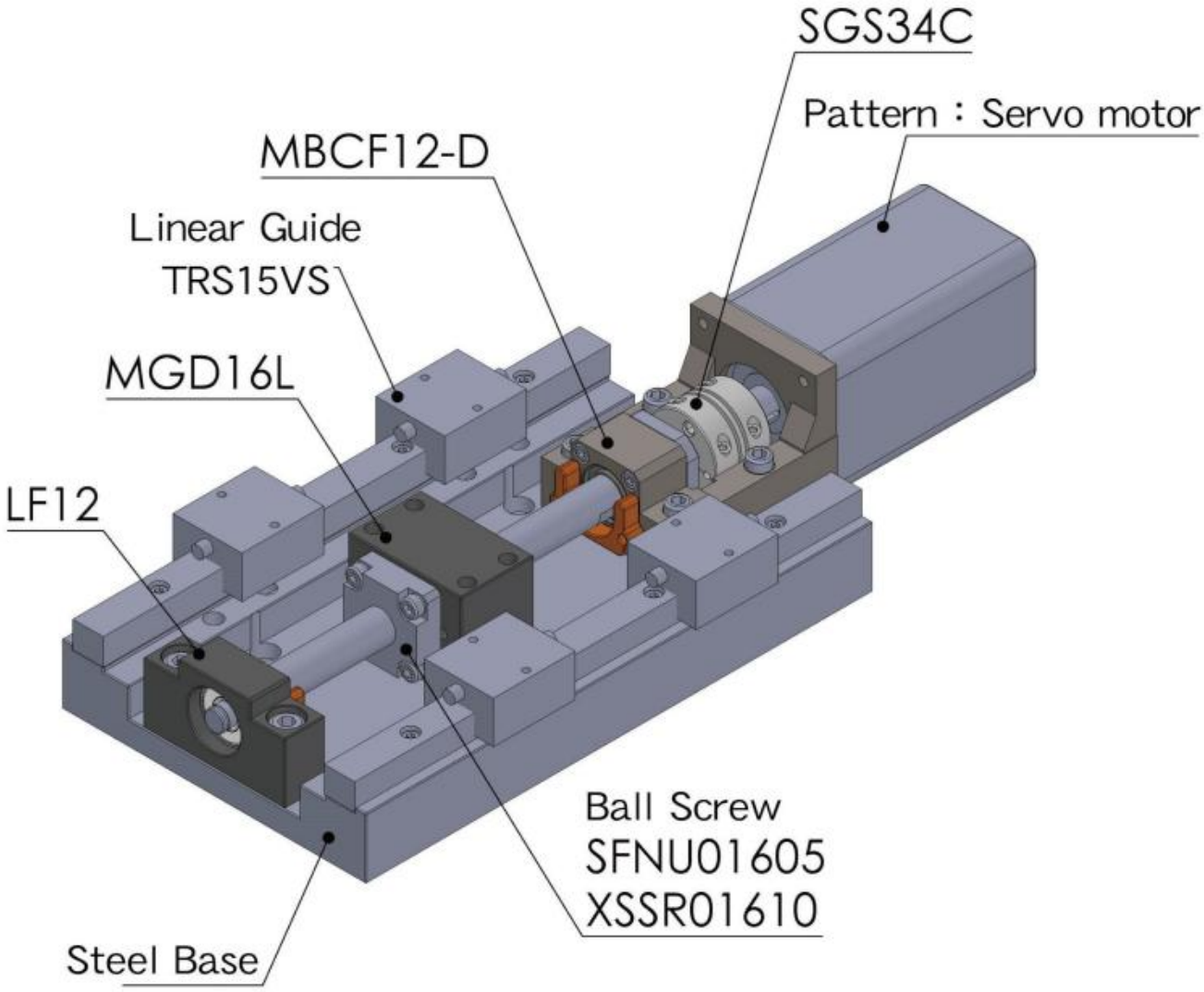
Unit : mm

Model No.	B	P	T	H	H1	h ±0.02	∅D	T1	M	Y	S	Q	Weight (Kgs)	Support unit Supported-side	Suggest Coupling
MBCE10-D	70	52	35	42	26	25	10	□16	M3	M5	9	14	-	EF10 AF 10	SGS 34C
MBCE10-DP										M4			-		
MBCE12-D							12	□19	M4	M5			0.84	EF12 AF 12	
MBCE12-DP										M4			0.86		
MBCF10-D	63	50	31.5	37	21	20	10	□16	M3	M5	6.6	11	-	LF12 LFA 15	
MBCF10-DP										M4			-		
MBCF12-D							12	□19	M4	M5			-		
MBCF12-DP										M4			-		

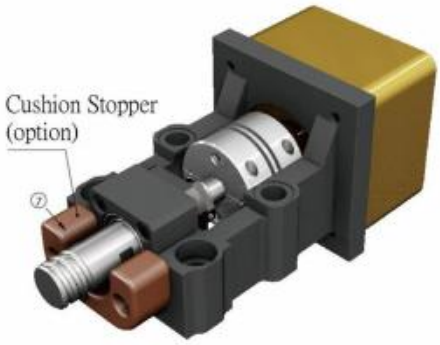
Note :

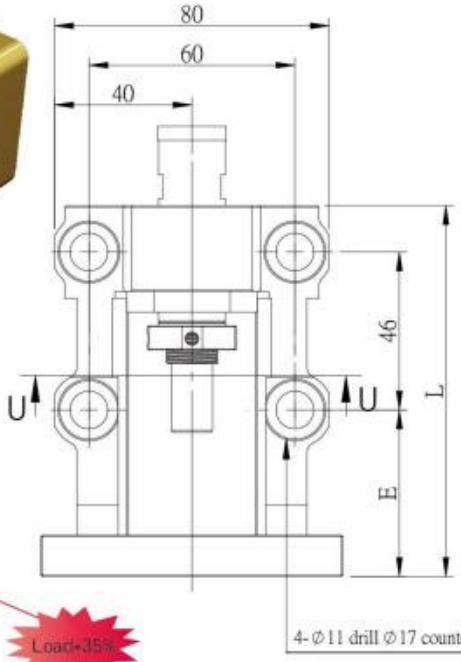
1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Illustration for MBCF10/12



Motor Bracket MBCE15

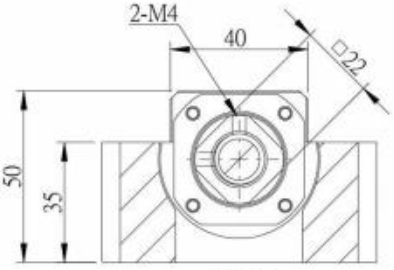




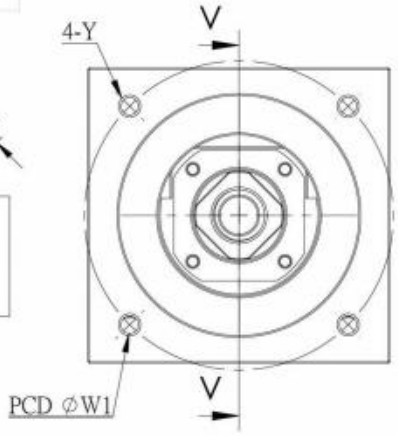


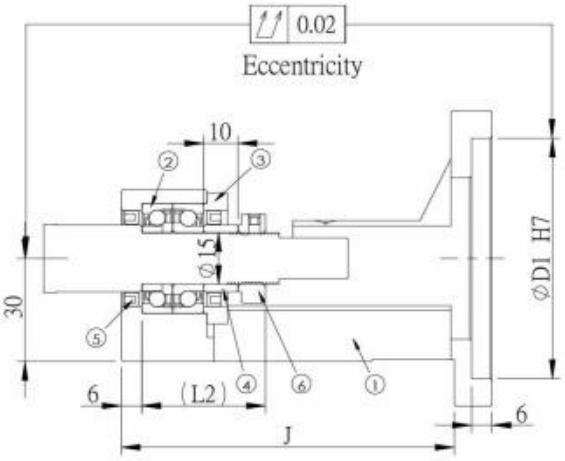
Surface treatment:
Black Oxide /
Electroless Nickel Plating

No.	Part name	Qty
1	Housing	1
2	Bearing MBCE15 with bearings 7002 MBCE15M with bearings 7202	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



U-U
Scale 1 : 2.2





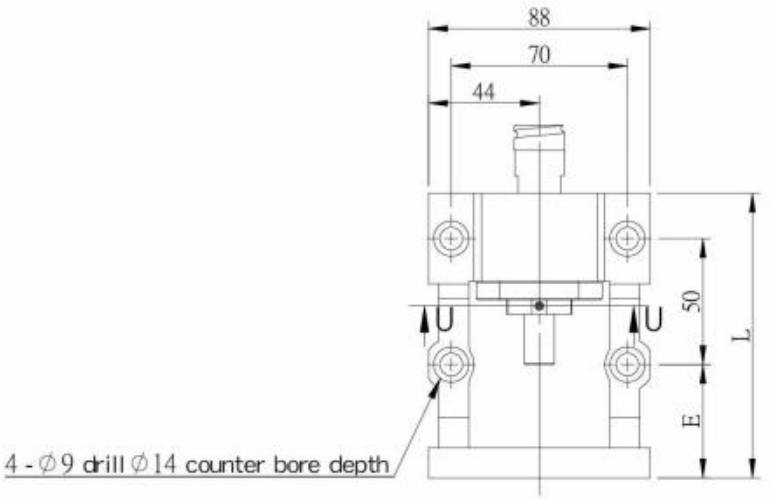
Unit : mm

Model No.	D1	W1	Y	L	L2	E	J	Weight (Kgs)	Support unit Supported-side	Suggest Coupling
MBCE15-D	50	70	M5	98	36	38.5	平底	1.09	EF 15 AF 15	SGS 34C SGS 40C
MBCE15-DP			M4					1.07		
MBCE15-E	70	90	M6	108		48.5	97	1.52		SGS 40C SGS 45C
MBCE15-EP			M5					1.52		
MBCE15M-E			M6	110	40	50.5	99	-		
MBCE15M-EP			M5					-		

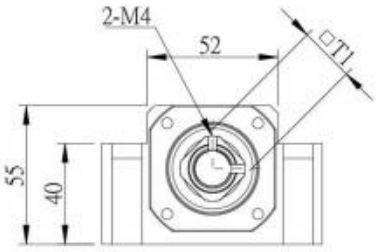
Note :

1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

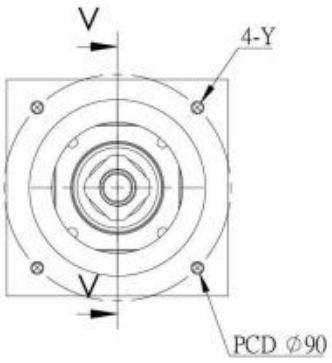
Motor Bracket MBCA15 / 20

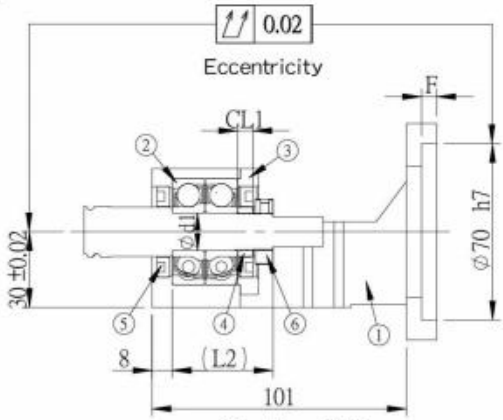






Section U-U
Scale 1 : 3





Section V-V
Scale 1 : 3

No.	Part name	Qty
1	Housing	1
2	Bearing MBCA15 (7302A) MBCA20 (7004A)	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1

Heavy load



Unit : mm

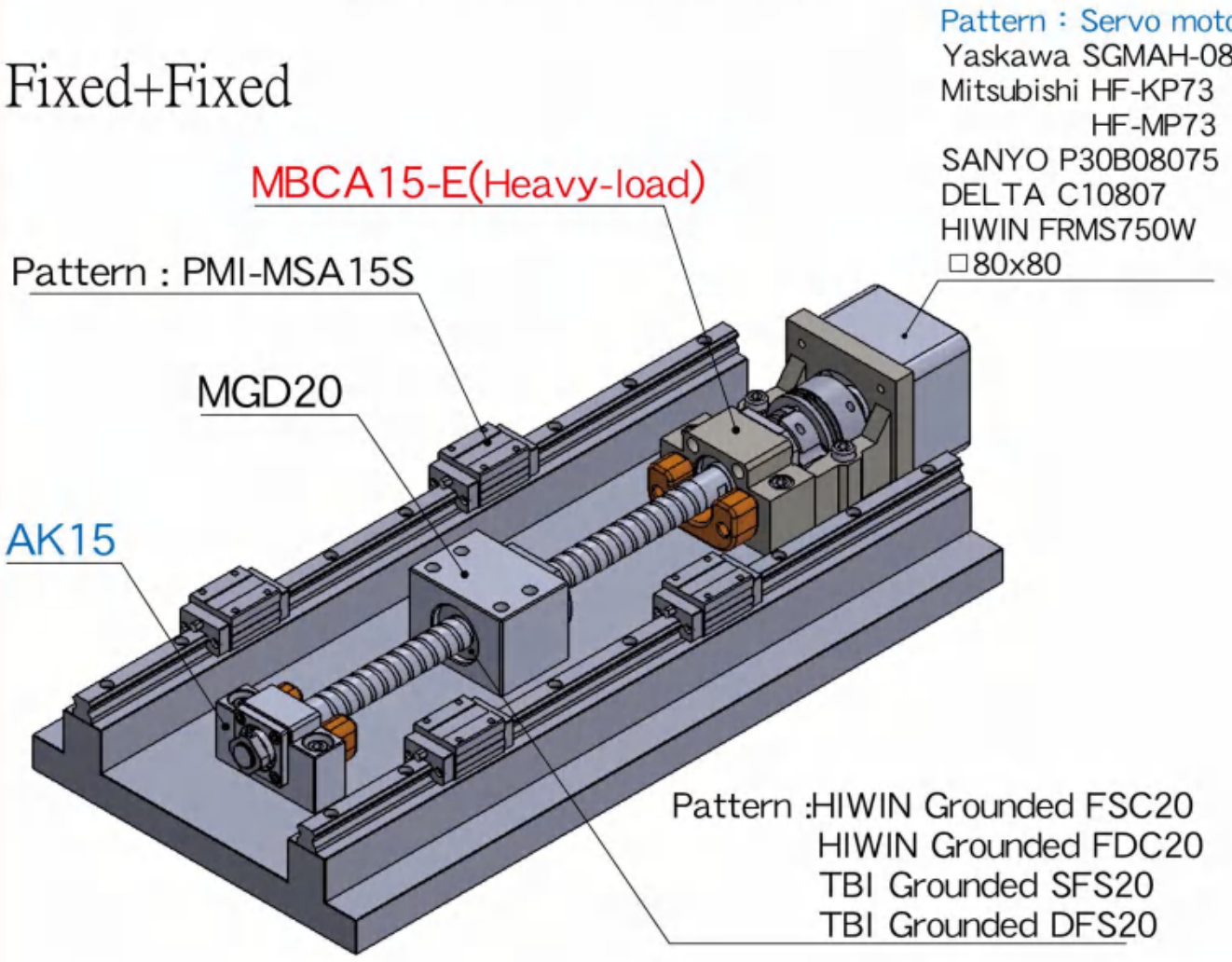
Model No.	Y	L	Shaft diameter d1	CL1	L2	E	F	T1	Weight (Kgs)	Support unit / Supported-side	Suggest Coupling
MBCA15-E	M6	115	15	6	40	47	8	22	-	AK15 / AF15	SGS 50C
MBCA15-EP	M5	113				45	6		-		
MBCA20-E	M6	115	20	8	43	47	8	30	-	AK20 / AF20	
MBCA20-EP	M5	113				45	6		-		

Note :

1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Illustration for MBCA15

Fixed+Fixed



Fixed+Supported

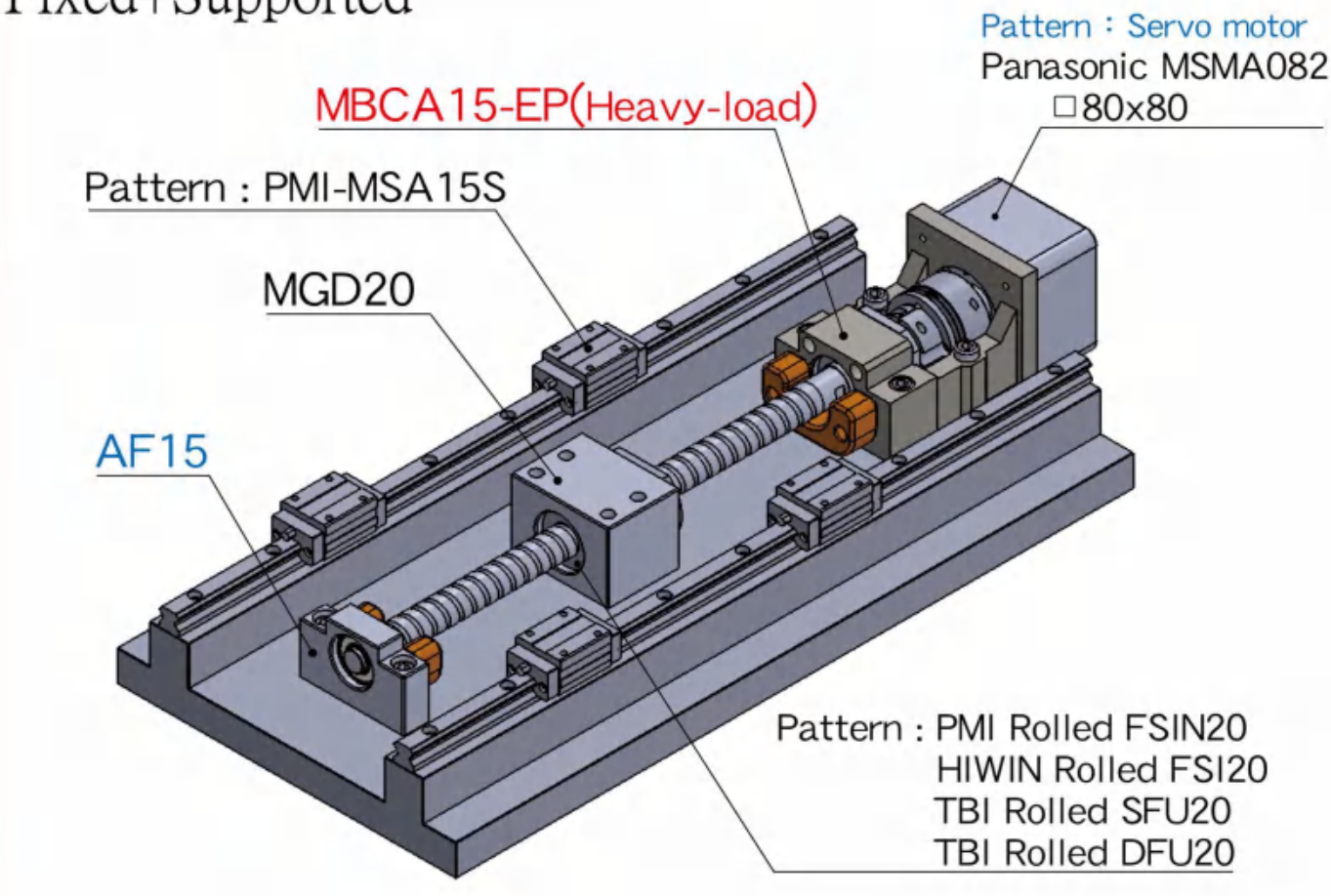
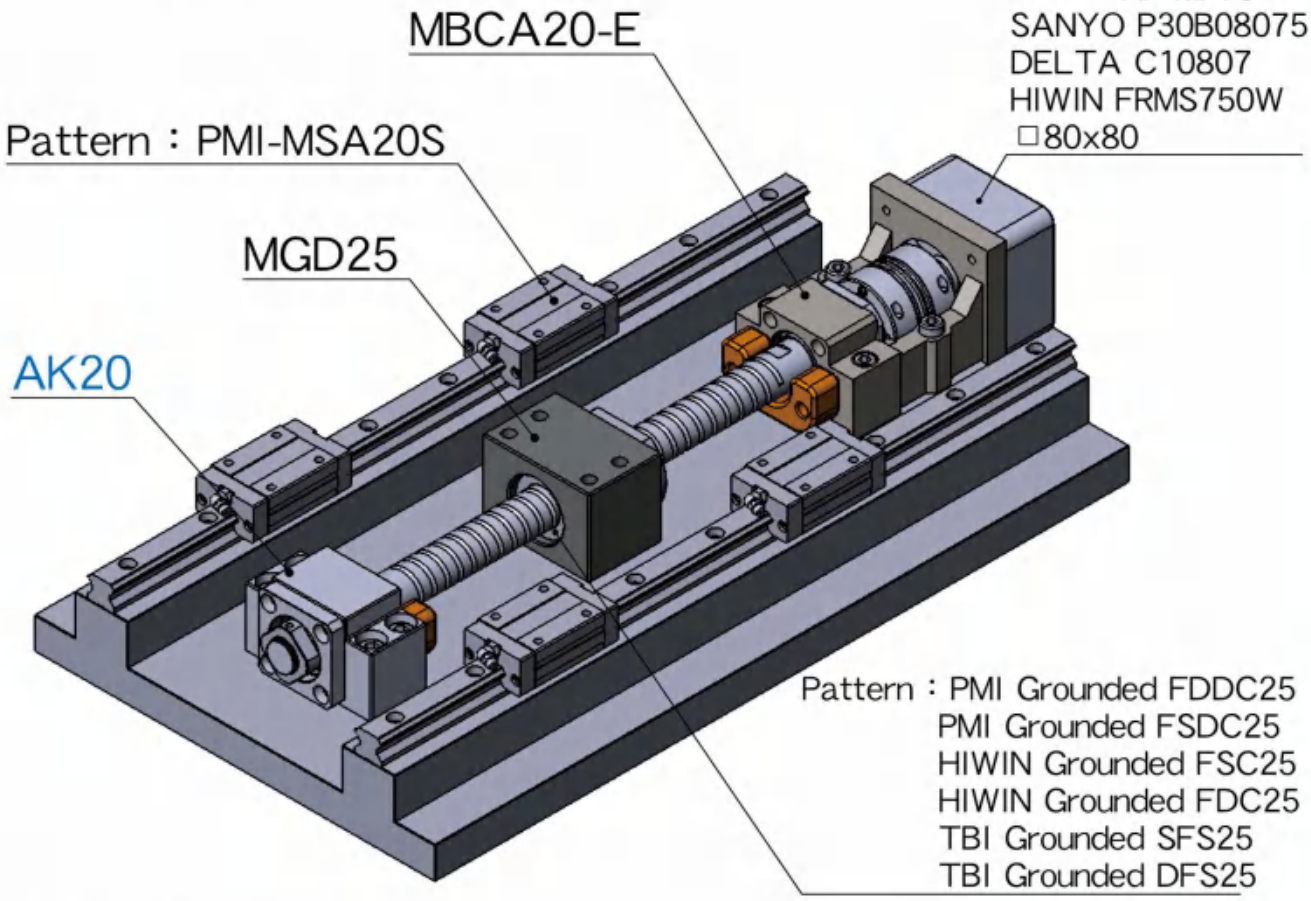
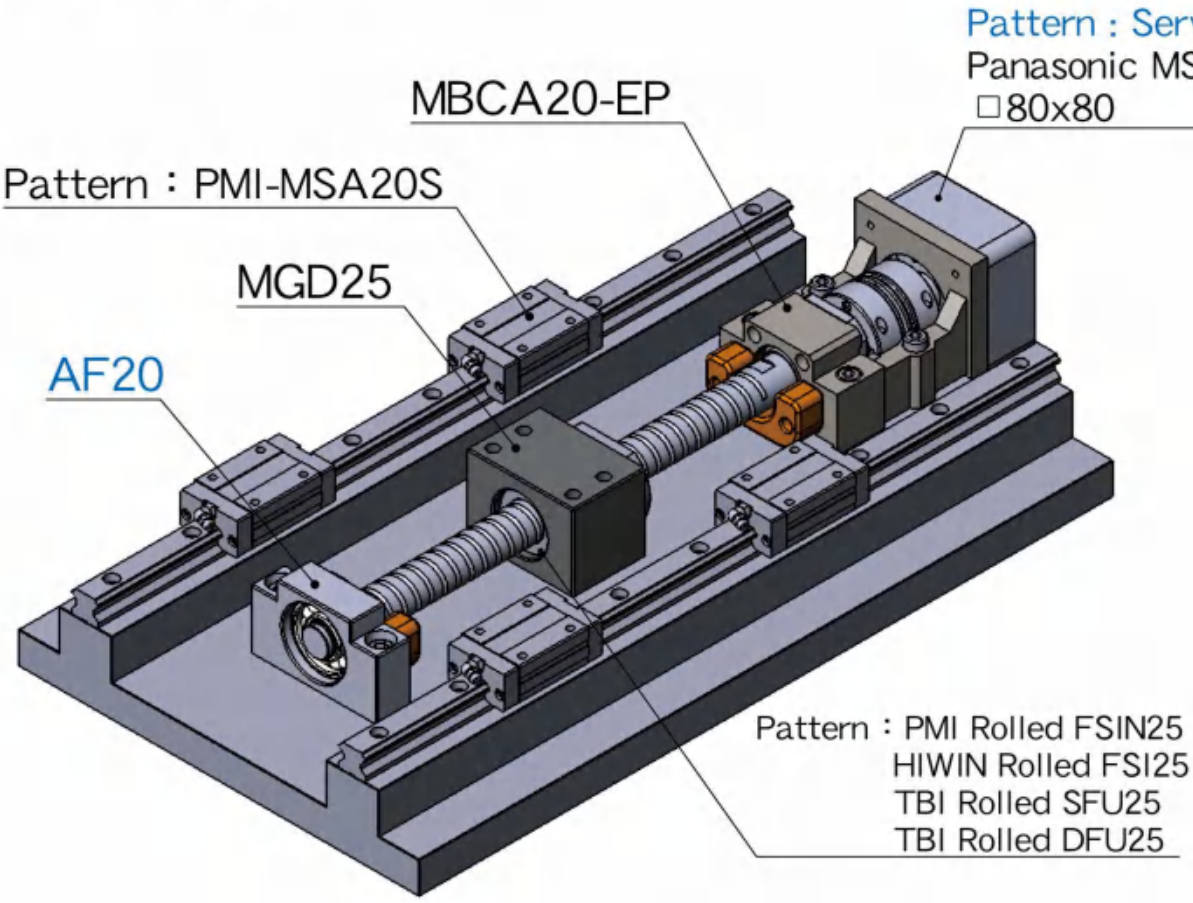


Illustration for MBCA20

Fixed+Fixed

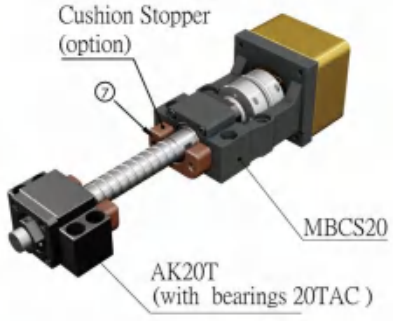


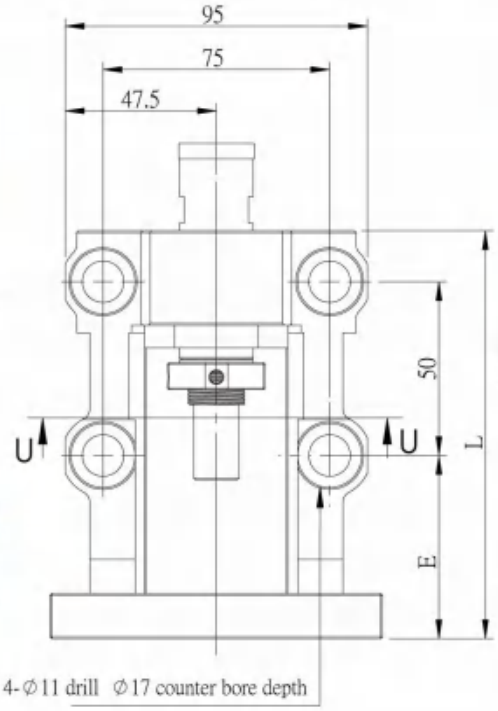
Fixed+Supported



Motor Bracket MBCS15~20 / MBCF20

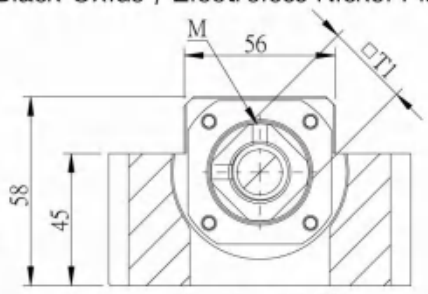
Fig→Fixed+Fixed





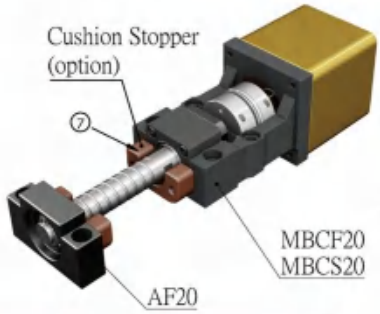


Surface treatment:
Black Oxide / Electroless Nickel Plating

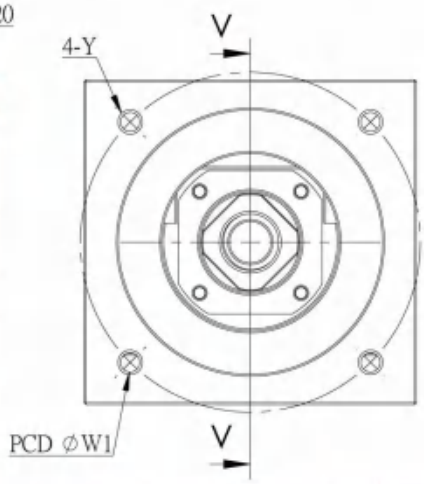


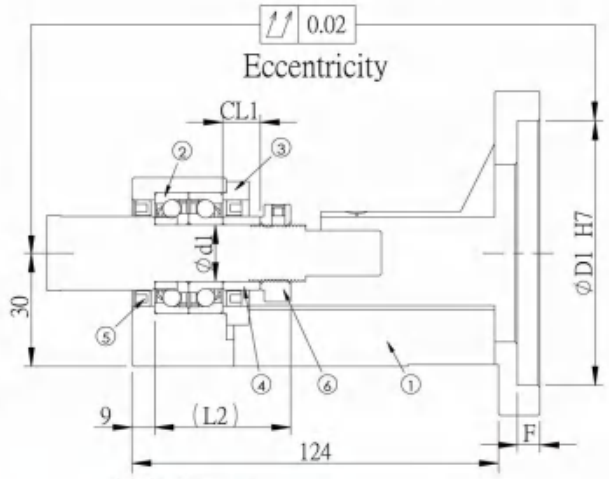
Section U-U

Fig→Fixed+Supported



No.	Part name	Qty
1	Housing	1
2	Bearing MBCS15 with bearings 15TAC MBCS17 with bearings 17TAC MBCF20 with bearings 7204 MBCS20 with bearings 20TAC	1set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



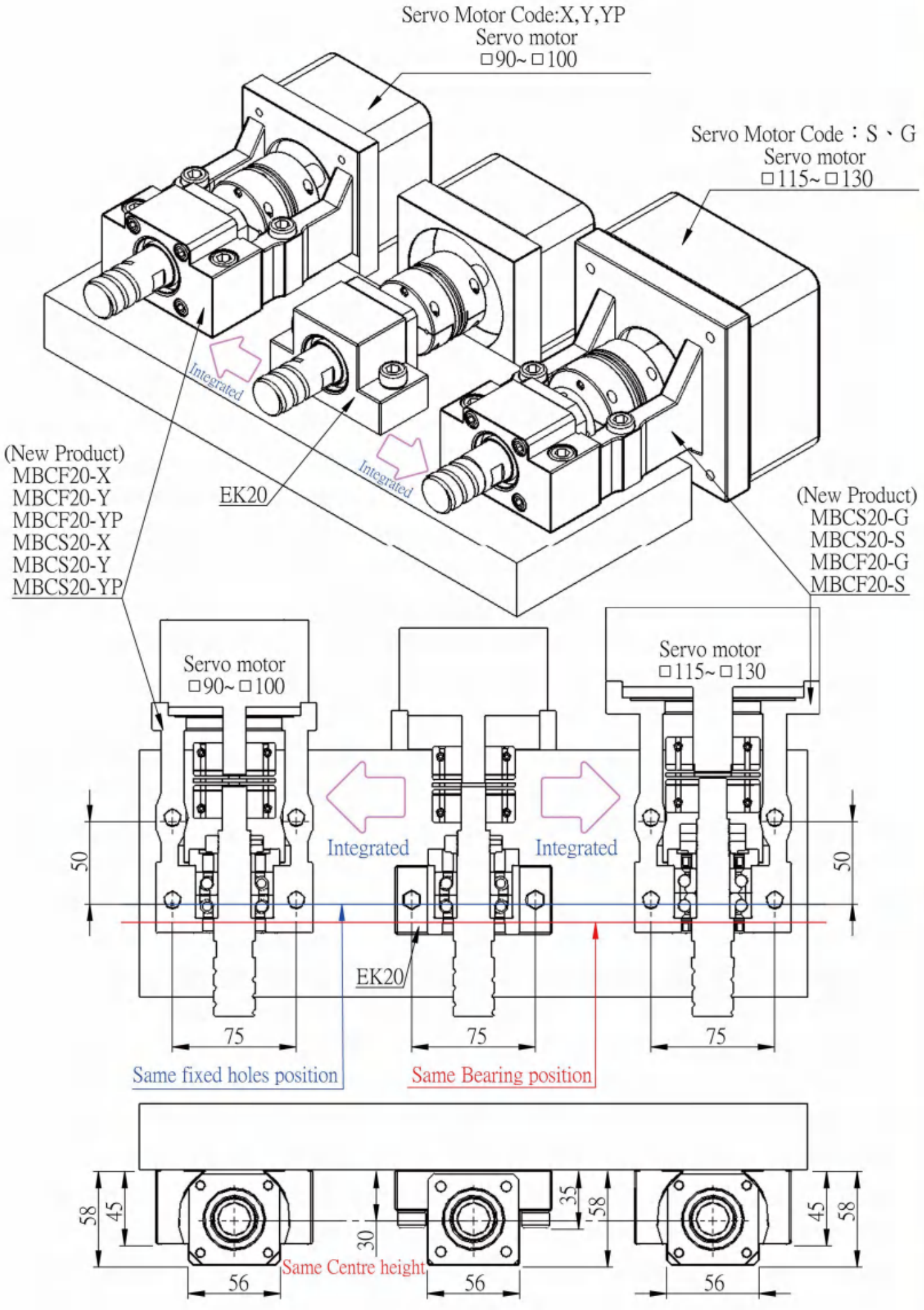


Unit : mm

Model No.	D1	W1	Y	L	Shaft diameter d1	CL1	L2	E	F	M	T1	Weight (Kgs)	Support unit / Supported-side	Suggest Coupling
MBCS15-X	80	100	M6	140	15	9	47	70	8	2-M4	□22	-	AF 15 EF 15	SGS 50C
MBCS15-Y	95	115	M8	141				71						SGS 50C SGS 57C
MBCS15-YP			M6											SGS 57C
MBCS15-S	110	130	M8	151				81						SGL 57C
MBCS15-G		145		153				83	10					SGS 57C
MBCS17-X	80	100	M6	140	17	9	57	70	8	4-M6	ϕ36	-	-	SGS 50C
MBCS17-Y	95	115	M8	141				71						SGS 50C SGS 57C
MBCS17-YP			M6											SGS 57C
MBCS17-S	110	130	M8	151				81						SGL 57C
MBCS17-G		145		153				83	10					SGS 57C
MBCF20-X	80	100	M6	140	20	11	50	70	8	2-M4	□30	2.76	EF 20 AF 20	SGS 50C
MBCF20-Y	95	115	M8	141				71				2.71		SGS 50C SGS 57C
MBCF20-YP			M6									2.73		SGS 57C
MBCF20-S	110	130	M8	151				81				3.6		
MBCF20-G		145		153				83	10			3.77		
MBCS20-X	80	100	M6	140	20	9	57	70	8	4-M6	ϕ40	-	AK20T AF20 EF20	SGS 50C
MBCS20-Y	95	115	M8	141				71				2.81		SGS 50C SGS 57C
MBCS20-YP			M6									2.85		
MBCS20-S	110	130	M8	151				81				3.69		SGS 57C
MBCS20-G		145		153				83	10			3.92		

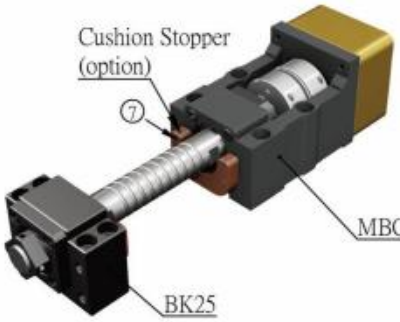
Note : 1. The matched bearing in the support unit has already done the preload.
2. The matched bearings are assembled in DF way, which is the most suitable for ball screw use.
3. The accurancy of TAC bearing is P4 grade and 7204 is P5 grade.

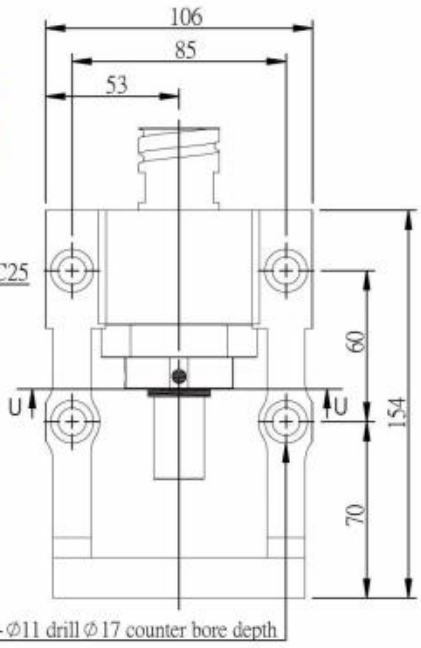
Illustration for MBC_20



Motor Bracket MBC25

Fig→Fixed+Fixed

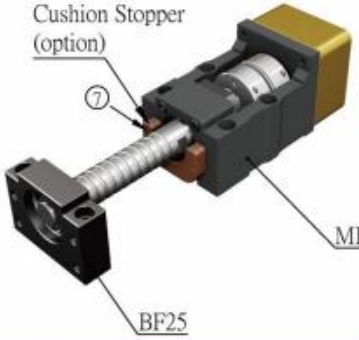


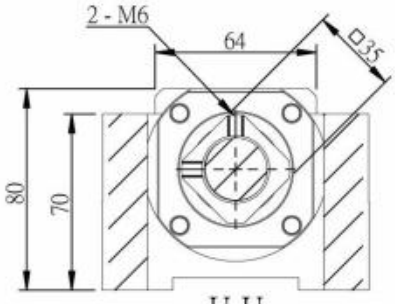




Surface treatment: Black Oxide

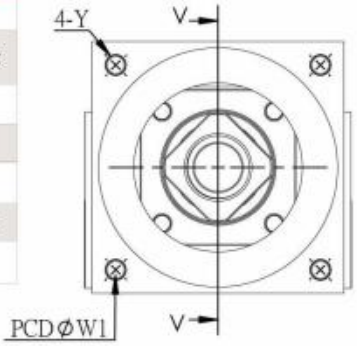
Fig→Fixed+Supported

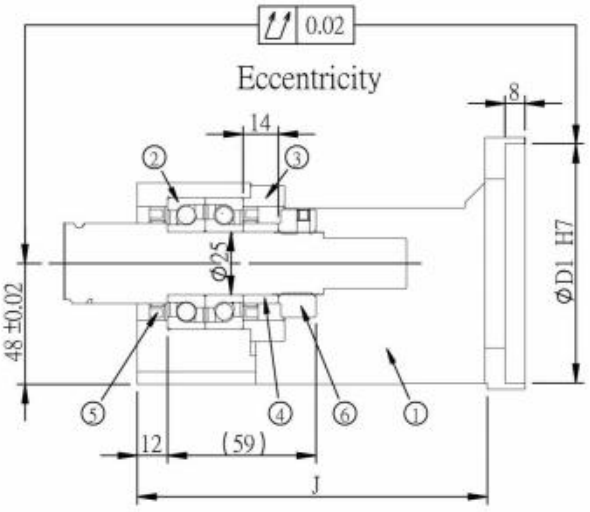




U-U
Section

No.	Part name	Qty
1	Housing	1
2	Bearing Bearing 7205	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1





Unit : mm

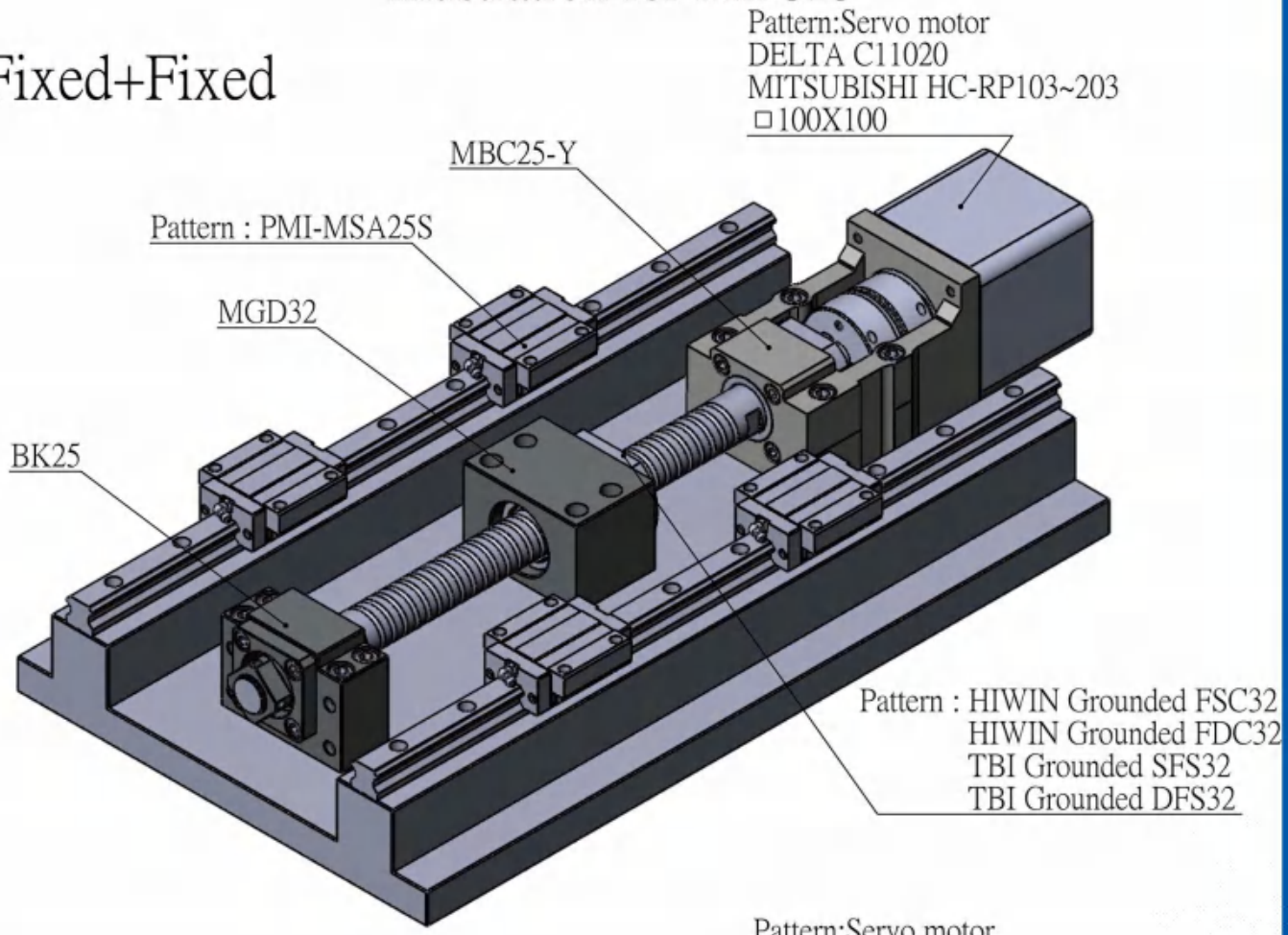
Model No.	D1	W1	Y	J	Weight (Kgs)	Support unit Supported-side	Suggest Coupling
MBC25-X	80	100	M6	flat	-	BK25 BF25	SGS 57C SGS 65C
MBC25-Y	95	115	M8	139			
MBC25-YP			M6				

Note :

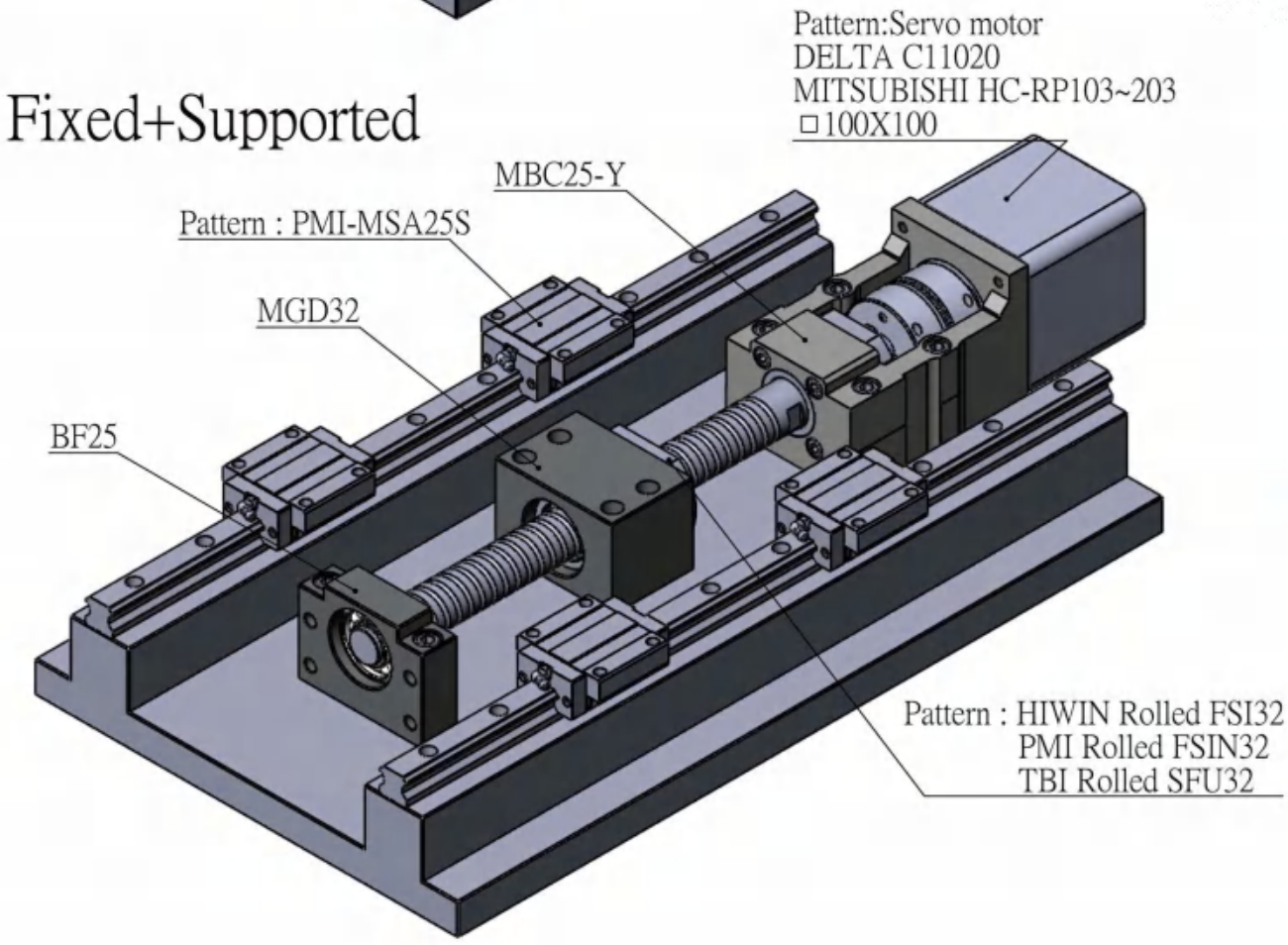
1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Illustration for MBC25

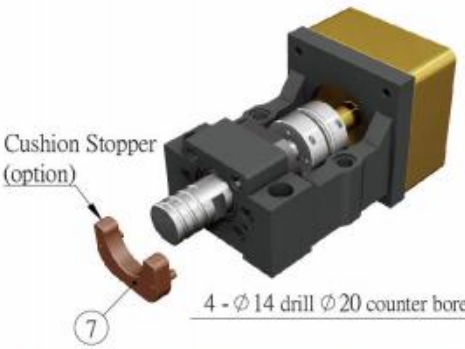
Fixed+Fixed

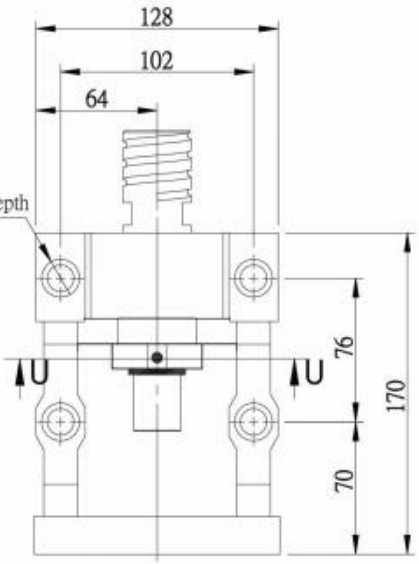


Fixed+Supported



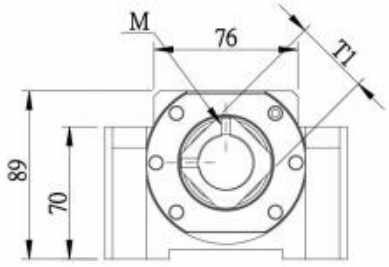
Motor Bracket MBCS25 / MBC30



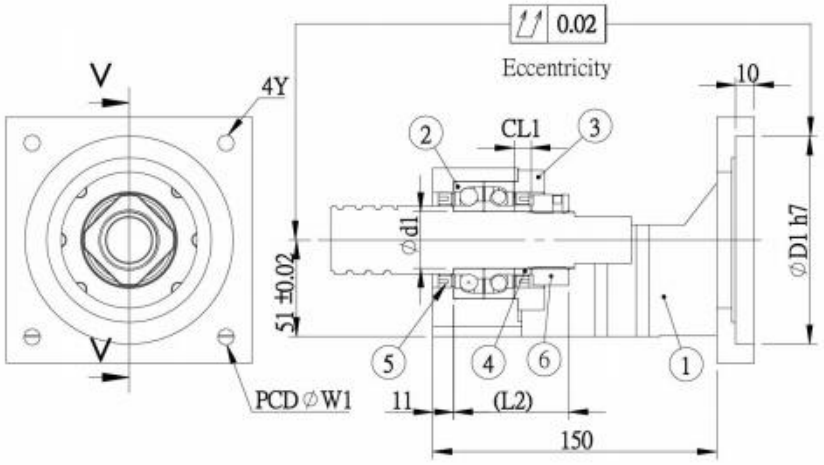




No.	Part name	Qty
1	Housing	1
2	Bearing MBCS25 with bearings 25TAC MBCF30 with bearings 7206 MBCS30 with bearings 30TAC	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



Section U-U
Scale 1 : 4



Unit : mm

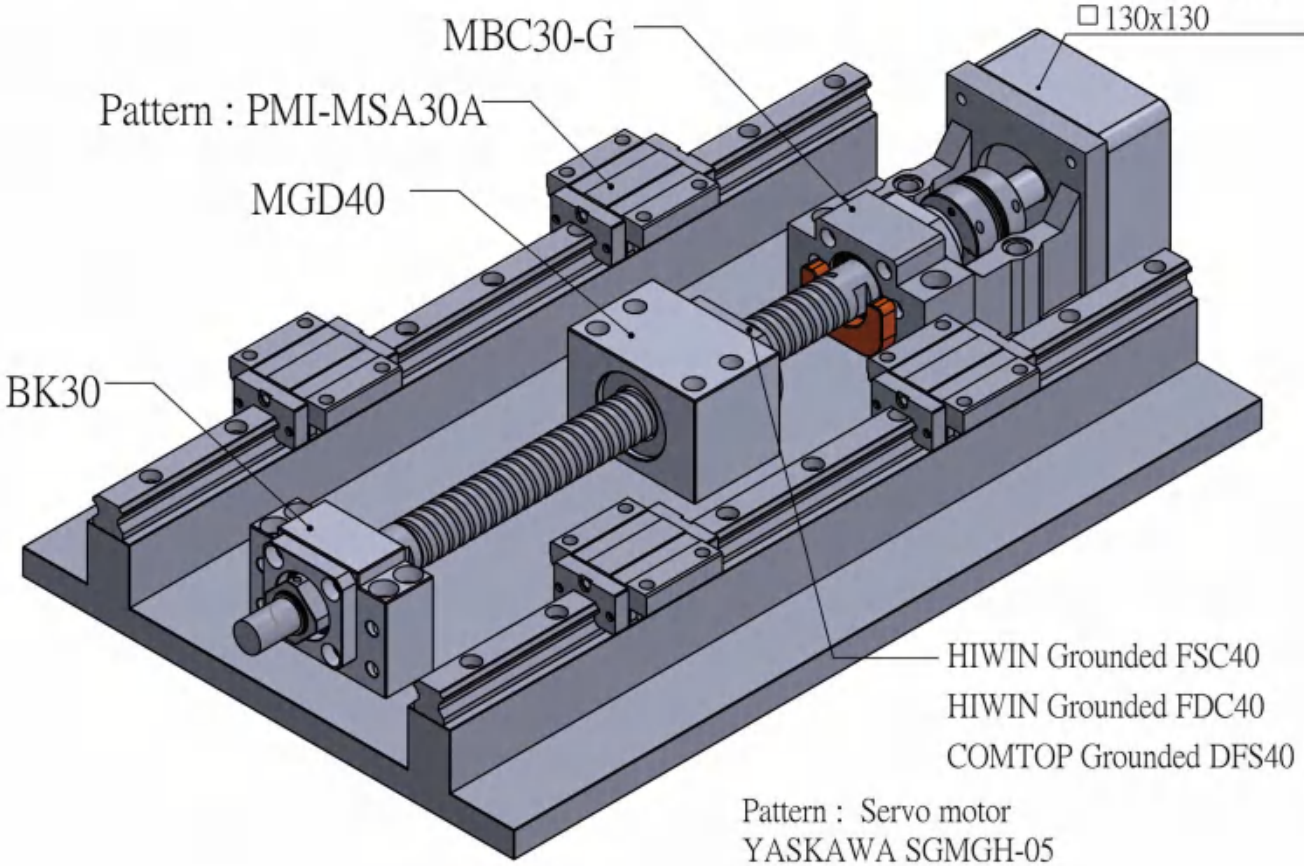
Model No.	D1	W1	Y	Shaft diameter d1	CL1	L2	M	T1	Weight (Kgs)	Support unit Supported-side	Suggest Coupling
MBCS25-Y	95	115	M8	25	15	65	4-M6	ϕ45	-	SBK25/SF25	SGL 65C
MBCS25-YP			M6						-		
MBCS25-S	110	130	M8						-		SGS 65C
MBCS25-G		145							-		
MBCF30-Y	95	115	M8	30	9	61	2-M4	□40	-	BK30/BF30	SGL 65C
MBCF30-YP			M6						-		
MBCF30-S	110	130	M8						-		SGS 65C
MBCF30-G		145							-		
MBCS30-Y	95	115	M8	30	15	65	4-M6	ϕ50	-	SBK30 BK30/BF30	SGL 65C
MBCS30-YP			M6						-		
MBCS30-S	110	130	M8						-		SGS 65C
MBCS30-G		145							-		

Note :

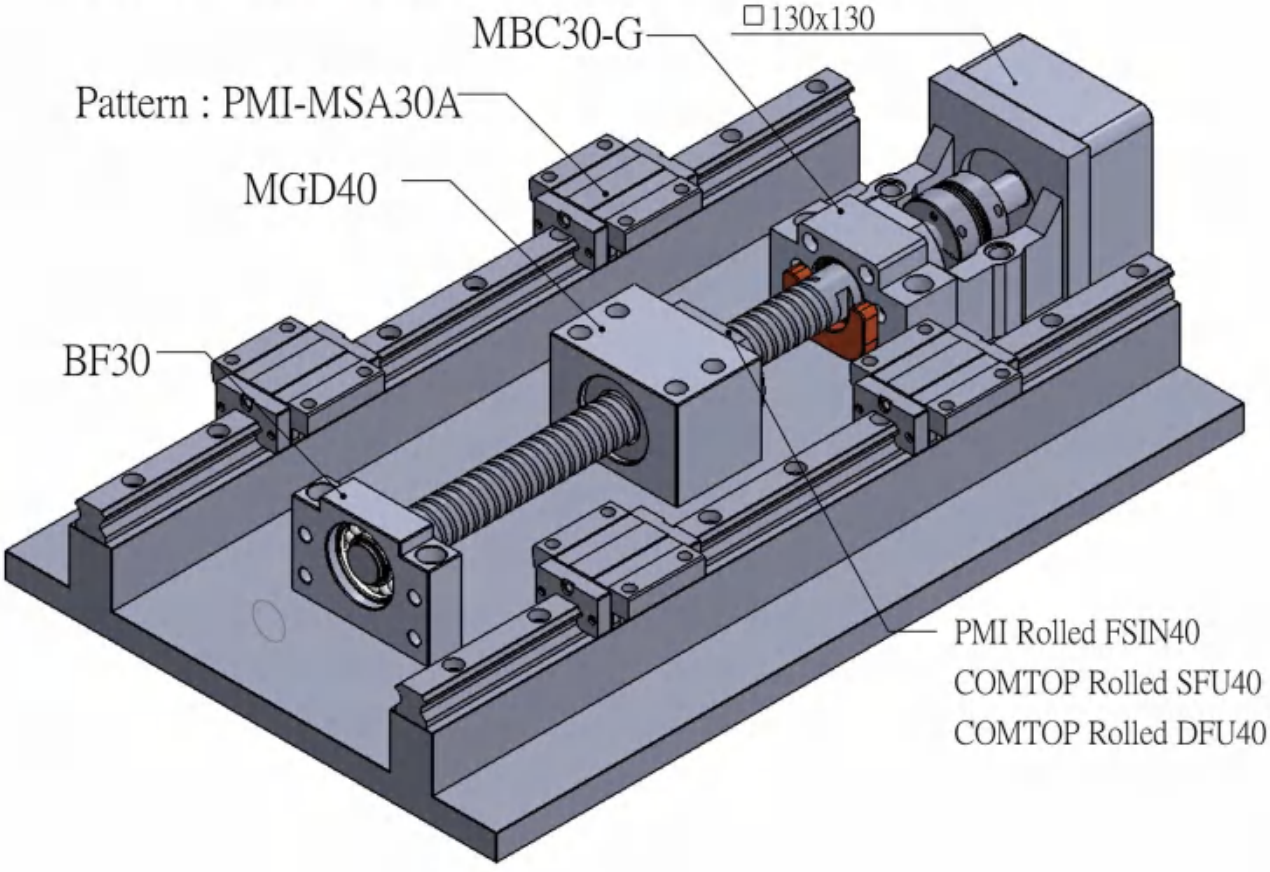
1. The matched bearing in the support unit has already done the preload.
2. The matched P5 bearings are assembled in DF way, which is the most suitable for ball screw use.

Illustration for MBC30

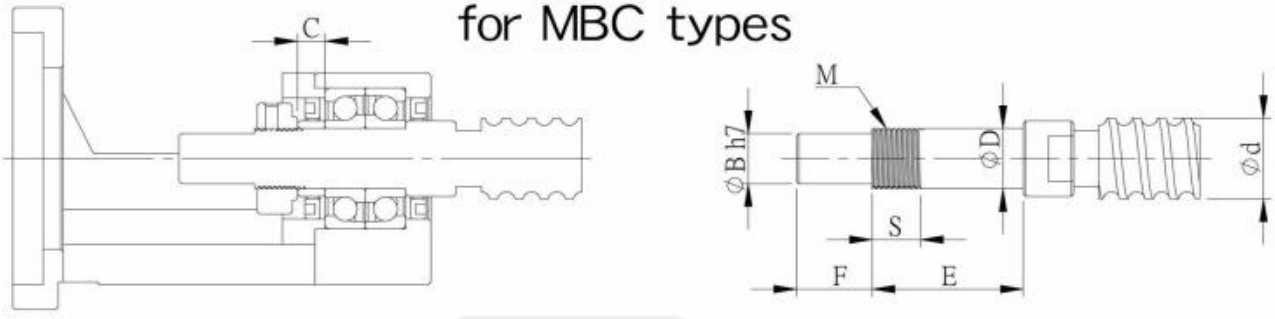
Fixed+Fixed



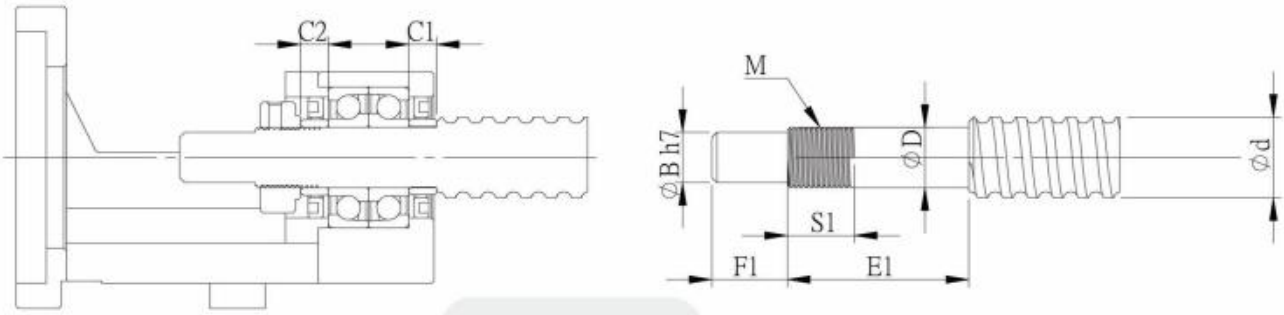
Fixed+Supported



Recommended shaft end shape (Fixed-side) for MBC types



Ground Ballscrew

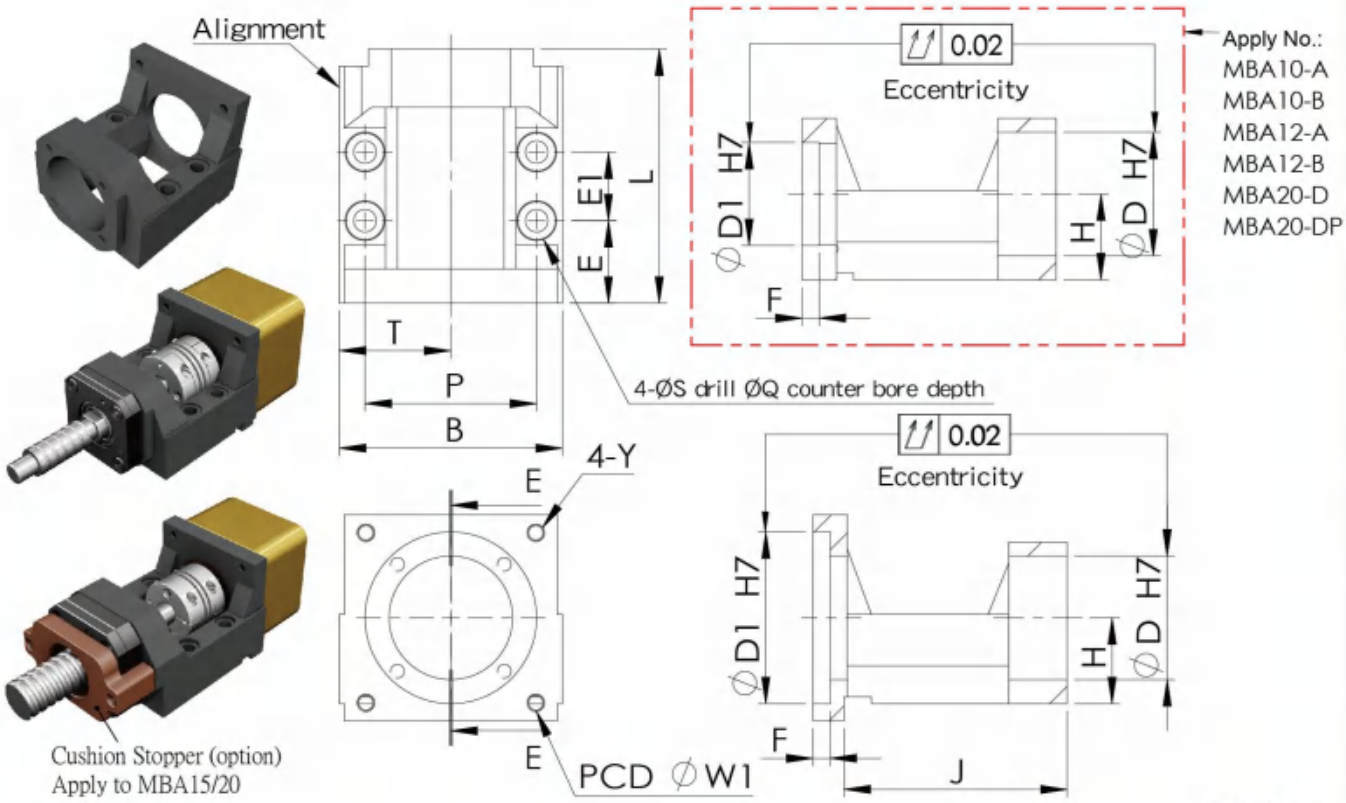


Rolled Ballscrew

Unit : mm

Model No.	Ballscrew shaft OD	Shaft support portion OD						Metric screw thread			Length of Sleeve		
MBC types	d	D	B	E	E1	F	F1	M	S	S1	C	C1	C2
MBCE10 MBCF10	12/14/15	10 -0.005 -0.017	8	30	36	15		M10X1	10	12	5.5	5.5	
MBCB12	14/15/16	12 -0.005 -0.017	10	30	36	15		M12X1	10	12	5.5	5.5	
MBCE12 MBCF12													
MBCB15	18/20	15 -0.005 -0.017	12	40	40	20		M15X1	15	12	10	6	
MBCB15M					48							6	10
MBCE15												10	
MBCE15M												6	10
MBCA15												6	
MBCS15				53	62	25			16			9	
MBCS17	20/25	17 -0.005 -0.017	15	60	69	19		M17X1	23			9	
MBCF20	25/28	20 -0.006 -0.017	17	53	64	27		M20X1	16			11	
MBCS20				60	69	25			23			9	
MBCA20				43	51	22			16			8	
MBC25	30/32/36	25 -0.006 -0.017	20	62	76	33	30	M25X1.5	20			14	
MBCS25				67	82	27			26			15	
MBCF30	36/40	30 -0.010 -0.020	25	64	73	30		M30X1.5	25			9	
MBCS30				67	82	27			26			15	

Motor Bracket MBA (Narrow Type)

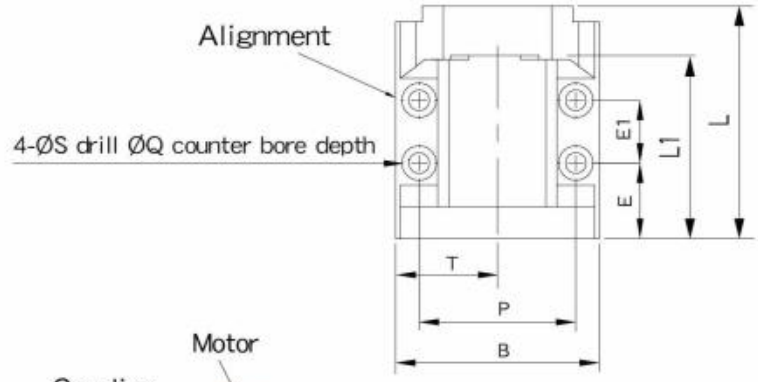


Unit : mm

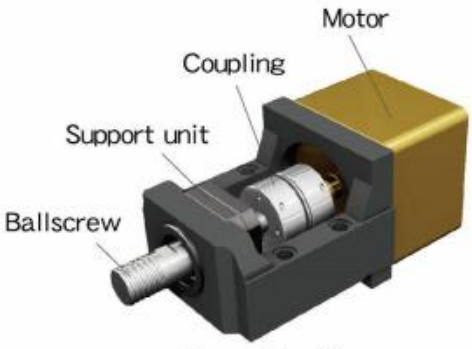
Model No.	Dimensions of Motor Bracket																Support unit		Suggest Coupling
	D1	W1	Y	D	L	H ±0.02	B	P	T	S	Q	E	E1	F	J	Weight (Kgs)	Fixed-side	Supported-side	
MBA6/8-A	30	45	M3	28	61	17	52	41	26	5.5	9.5	19	20	5	54	0.29	FKA06 FKA08	EF08	SGS 27C
MBA6/8-B		46	M4																
MBA10-A	30	45	M3	34	74	22	65	50	32.5	6.6	11	24	20	5	flat	0.62	FK10	BF10	SGL 27C
MBA10-B		46	M4																
MBA10-C	38.1	66.7													65	0.66			SGL 34C
MBA10-D	50	70	M5													0.62			SGS 34C
MBA10-DP			M4																
MBA12-A	30	45	M3	36	74	25	65	50	32.5	6.6	11	24	20	5	flat	0.67	FK12	BF12	SGL 27C
MBA12-B		46	M4																
MBA12-BF	36	70.7												Through hole	65	-			SGL 34C
MBA12-C	38.1	66.7												5		0.7			
MBA12-D	50	70	M5													0.66			SGS 34C
MBA12-DP			M4													0.68			
MBA15-C	38.1	66.7	M4	40	84	28	70	55	35	6.6	11	25	28	5	74	0.85	FK15	BF15	SGL 34C
MBA15-D	50	70	M5													0.86			SGS 34C
MBA15-DP			M4													0.85			SGL 34C
MBA15-F	73	98.4	M6		94		88	70	44	8.5	14	30		6	82	1.3			SGS 40C SGS 45C SGL 40C SGL 50C
MBA15-E	70	90														1.37			
MBA15-EP			M5		92							29			81	1.31			
MBA20-D	50	70	M5	57	113	34	88	70	44	8.5	14	29	42	5	flat	1.56	FKA20	BF20	SGL 45C
MBA20-DP			M4													1.54			
MBA20-F	73	98.4	M6											6	102	1.59			SGS 45C
MBA20-E	70	90														1.61			
MBA20-EP			M5													1.62			SGL 45C

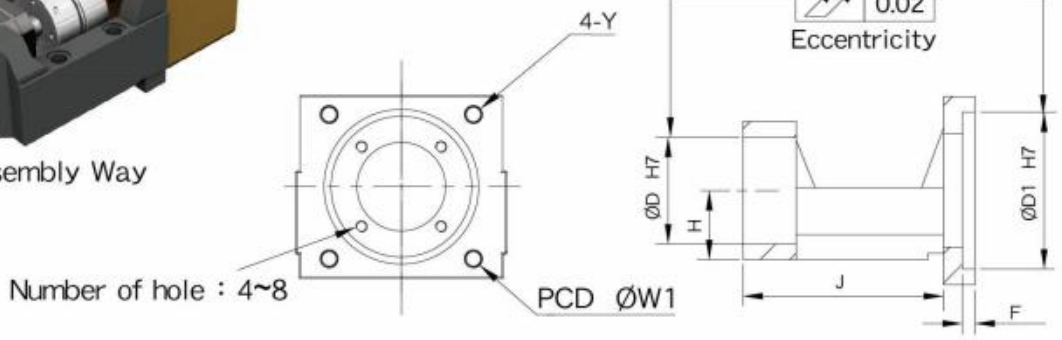
Note :
1.Can choose B angle bearings when use support unit with FKA20

Motor Bracket MBB (Hidden Type)









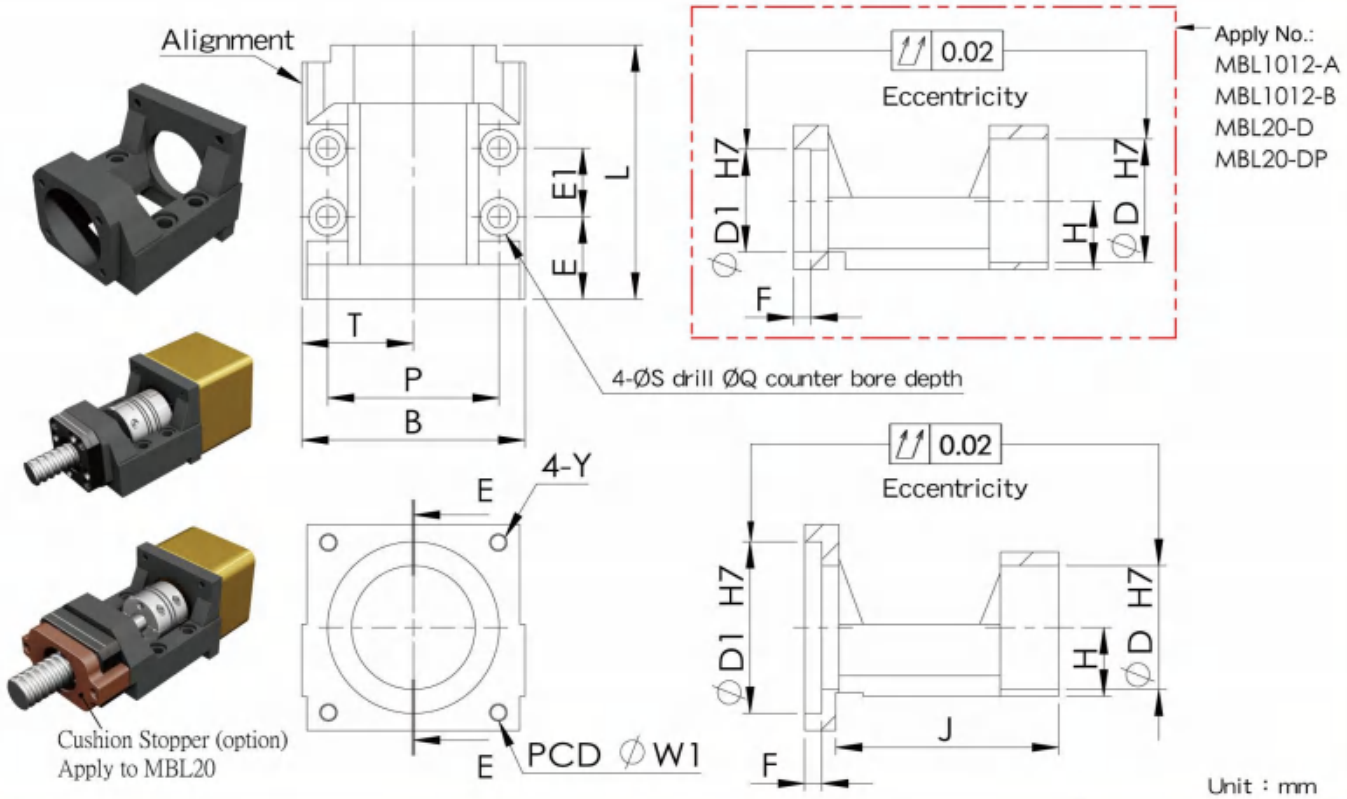
Unit : mm

Model No.	Dimensions of Motor Bracket																Support unit		Suggest Coupling
	D1	W1	Y	D	L	L1	H ±0.02	B	P	T	S	Q	E	E1	F	J	Weight (Kgs)	Fixed-side	Supported-side	
MBB20L-G	110	145	M8	57	170	143	48	150	126	75	14	20	53	59	10	151	6.46	FK20B	BF20H	SGL 65C
MBB20-G				58														MBK15DF	BF15+20mm	
																		MBK17DF	BF17+9mm	
																		MBK20DF	BF20H	
MBB25L-S	110	130	M8	63	168	141	48	150	126	75	14	20	51	59	8	146	-	FK25	BF25	SGL 65C
MBB25L-G		145			170	143							53		10	151	6.23			SGL 65C
MBB25L-G-M													55	70			5.9			SGS 65C
MBB30-H	114.3	200	M12	85	230	189	51	200	170	100	18	26	75	75	-	201	14	WBK25DF WBK25DFD	SF25 SBK25	SAP-82C SAP-94C
																		WBK30DF WBK30DFD	BF30 SBK30	

Note :

1.Can choose B angle bearings when use support unit with FK20/FK25

Motor Bracket MBL (Low Narrow Type)



Unit : mm

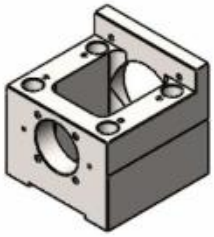
Model No.	Dimensions of Motor Bracket																Support unit		Suggest Coupling
	D1	W1	Y	D	L	H ±0.02	B	P	T	S	Q	E	E1	F	J	Weight (Kgs)	Fixed-side	Supported-side	
MBL6/8-A	30	45	M3	28	61	15.5	52	41	26	5.5	9.5	19	20	5	54	0.27	FKA06 FKA08	LF08 LFA12	SGS 27C
MBL6/8-B		46	M4																
MBL10/12-A	30	45	M3	36	74	20	65	50	32.5	6.6	11	24	20	5	flat	0.56	FKA10 FKA12	LF12 LFA15	SGL 27C
MBL10/12-B		46	M4													0.53			
MBL10/12-C	38.1	66.7													65	0.61			SGL 34C
MBL10/12-D	50	70	M5													0.57			SGS 34C
MBL10/12-DP			M4																
MBL15-C	38.1	66.7	M4	40	82	22	70	55	35	6.6	11	24	28	5	73	0.73	FKA15	LF15 LFA20	SGL 34C
MBL15-D	50	70	M5		84							25			74	0.74			SGS 34C
MBL15-DP			M4													0.75			
MBL15-F	73	98.4	M6		92		88	70	44	8.5	14	29		6	81	1.15			SGS 40C
MBL15-E	70	90			94							30			82	1.21			
MBL15-EP			M5		92							29			81	1.17			
MBL20-D	50	70	M5	57	113	30	88	70	44	8.5	14	29	42	5	flat	1.43	FKA20	AF20 EF20 LFA25	SGL 45C
MBL20-DP			M4													1.41			
MBL20-F	73	98.4	M6											6	102	1.44			SGS 45C
MBL20-E	70	90														1.47			
MBL20-EP			M5													1.48			SGL 45C

Note :

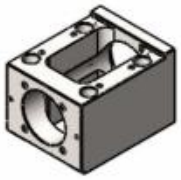
1.Can choose B angle bearings when use support unit with FKA20

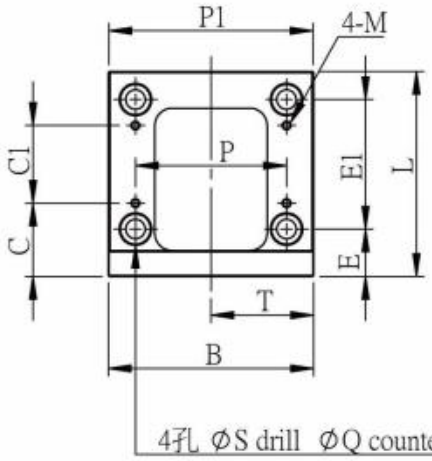
Motor Bracket MBH

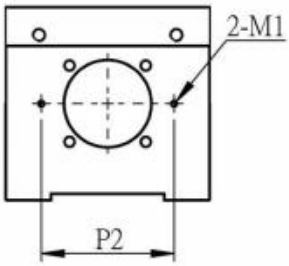
Pattern:MBH15-EP

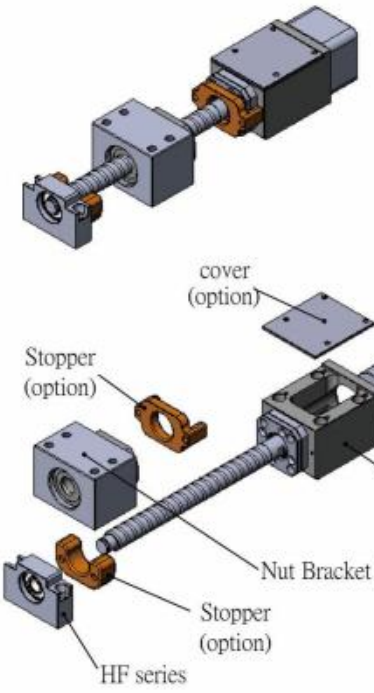


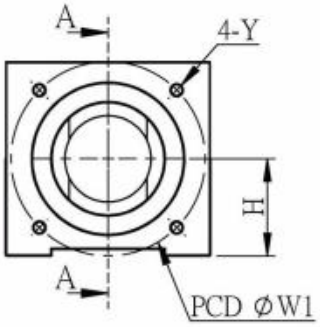
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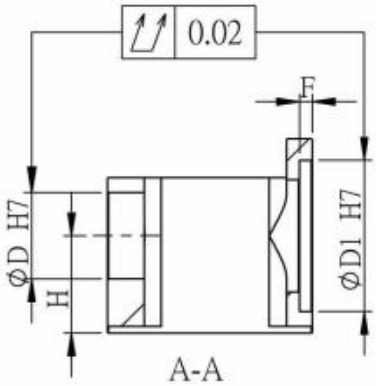












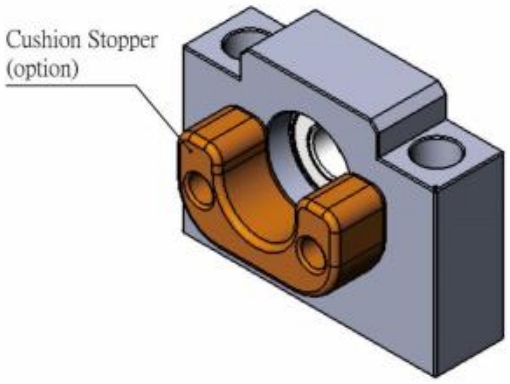
Unit : mm

Model No.	D1	W1	Y	L	D	H ±0.02	B	T	P	S	Q	E
MBH15-D	50	70	M5	88	40	30	70	35	54	6.6	11	23
MBH15-DP			M4									
MBH15-E	70	90	M6	95	40	45	95	47.5	70	9	14	22
MBH15-EP			M5									
※ MBH15H-EP					50							

Model No.	E1	P1	M	C	C1	M1	P2	F	Weight (Kgs)	Support unit		Suggest Coupling
										Fixed-side	Supported-side	
MBH15-D	50	-	M4	33	30	M3	61.5	5	-	FK 15	HF 15	SGS 34C SGS 40C
MBH15-DP									1.09			
MBH15-E	60	94.6	M4	34	36	M3	61.5	6	-	FK 15	HF 15H	SGS 45C SGS 50C
MBH15-EP									-			
※ MBH15H-EP						-	-		-	FKA15H		SGB 50C

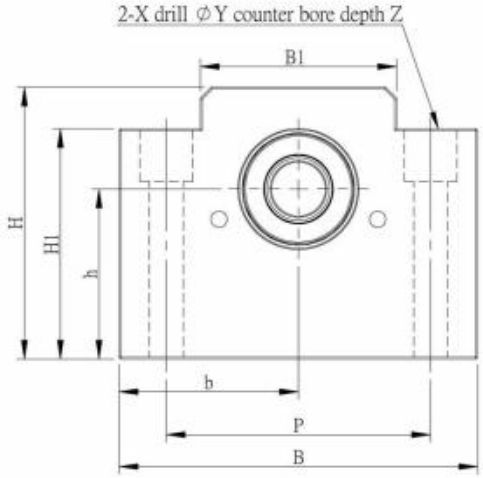
※Under development

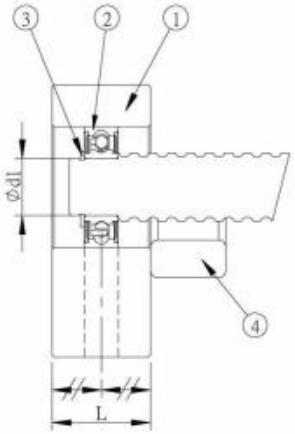
Pattern : HF15H



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1
4	Cushion Stopper (option)	1

HF

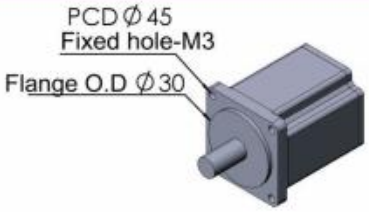
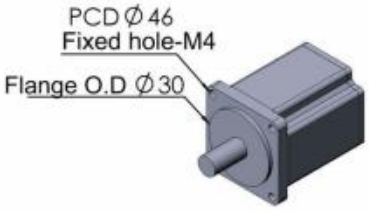
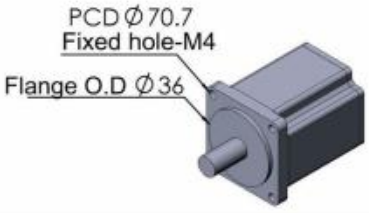
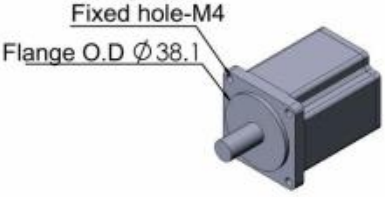
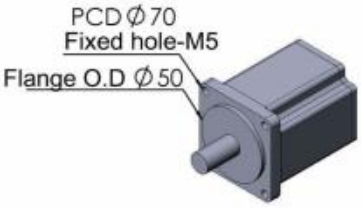
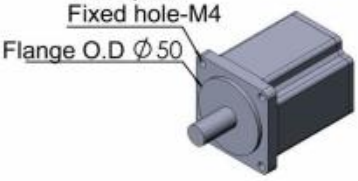




Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
HF15	15	20	70	50	35	30	41	40	60	6.6	12	10	6002ZZ	S 15	0.34
HF15H	15	26	95	72	47.5	45	52	61	70	9	14	14	6002ZZ	S 15	-

Motor Bracket MB and Corresponding motor reference table

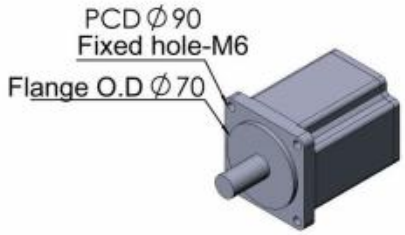
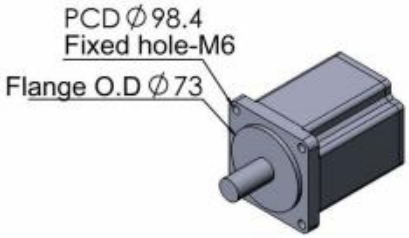
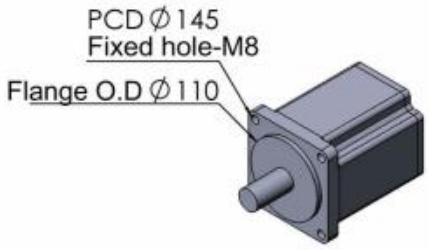
Motor Bracket	Servo Motor Brand Specification		
	Manufacturer	Model No.	Flange Width
MB*-A 	Panasonic	MSMA3A MSMA5A MSMA01	38
	HIWIN	FRLS50W/100W	
MB*-B 	Yaskawa electric	SGMAH-A3 SGMAH-A5	40
	Mitsubishi electric	HF-KP053 / 13 HF-MP053 /13	
	OMRON	R88M-W03030 R88M-W05030 R88M-W10030	
	SANYO	P30B04003 P30B04005 P30B04010	
MB*-BF 	Oriental motor	ARM69AC	60
MB*-C 	Yaskawa electric	02SGMAH-21 04SGMAH-21	60
MB*-D 	Yaskawa electric	SGMAH-02 / 04A SGMAH-03D	60
	Mitsubishi electric	HF-KP23 / 43 HF-MP23 /43	
	OMRON	R88M-W20030 R88M-W40030	
	SANYO	P30B06020 P30B06040	
	DELTA	C10602 C10604	
	HIWIN	FRLS200W FRLS400W	
MB*-DP 	Panasonic	MSMA021 MSMA041	60

Note：

1.Please notice the length of motor shaft.

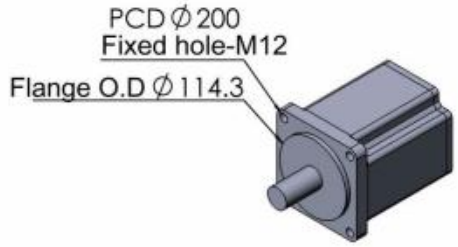
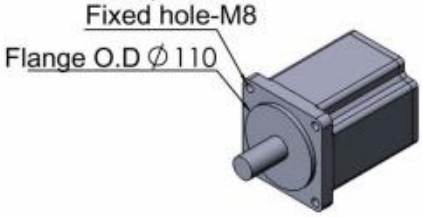
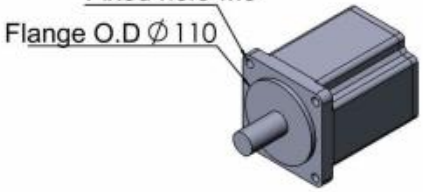
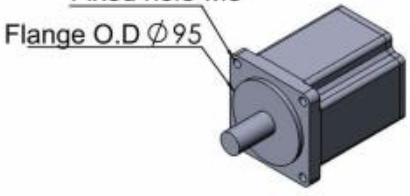
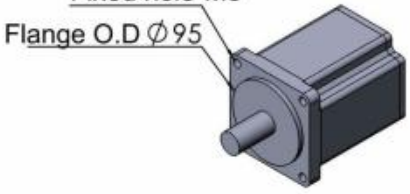
2.Specifications are subject to change without prior notice if required to improve perfomance。

Motor Bracket MB and Corresponding motor reference table

Motor Bracket	Servo Motor Brand Specification		
	Manufacturer	Model No.	Flange Width
MB*-E 	Yaskawa electric	SGMAH-08A	80
	Mitsubishi electric	HF-KP73 HF-MP73	
	SANYO	P30B08075	
	DELTA	C10807	
	HIWIN	FRMS750W	
MB*-EP 	Panasonic	MSMA082	80
MB*-F 	Yaskawa electric	SGMAH-N21	85
MB*-G 	Yaskawa electric	SGMGH-05 SGMGH-09 SGMGH-13	120~130
	Mitsubishi electric	HF-SP51~81 HF-SP52~152 HF-SP524~1524 HC-LP52~152	
	DELTA	E11305、G11303 E11310、G11306 E11315、G11309 E11320	
	Panasonic	MDMA102 MDMA152 MDMA202 MDMA252 MDMA302	130
	FANUC	B8、B12	
	HIWIN	FRMM1KW	

Note：
1.Please notice the length of motor shaft.
2.Specifications are subject to change without prior notice if required to improve perfomance。

Motor Bracket MB and Corresponding motor reference table

Motor Bracket	Servo Motor Brand Specification		
	Manufacturer	Model No.	Flange Width
MB*-H 	Yaskawa electric	SGMGH-20 SGMGH-30 SGMGH-44	180
	DELTA	E11820 E11830 F11830	
	Mitsubishi electric	HF-SP121~421 HF-SP202~702 HF-SP2024 HF-SP3524 HF-SP5024 HF-SP7024 HC-LP202 HC-LP302	176
	Panasonic	MDMA452 MDMA502	
MB*-S 	SIEMENS	1FK7060 1FT6062	126 116
MB*-X 	FANUC	β 2/4000is β 4/4000is	90
	SIEMENS	1FT6044 1FK7042-5	96
MB*-Y 	DELTA	C11010 C11020	100
	Mitsubishi electric	HC-RP103 /153 HC-RP203	
MB*-YP 	Yaskawa electric	SGMSH-10 SGMSH-15 SGMSH-20	100

Note：
1.Please notice the length of motor shaft.
2.Specifications are subject to change without prior notice if required to improve perfomance。

Characteristic Values of (Fixed-side) Support Units and Bearing

Applicable Ballscrew OD	Fixed-side					Supported-side		
	Basic dynamic load rating Ca (N)	Load limit (N)	Stiffness (N/μm)	Bearing code	Applicable model	Applicable model	Bearing code	Radial direction Basic dynamic load rating Cr (N)
φ8	2670	1040	32.8	706 A	FK06 EK06	FF06 EF06	606 ZZ	2260
φ10 ~ φ12	4400	1450	48.9	708 A	FK08 EK08	FF06 EF08 LF08	606 ZZ	2260
					LK08	LFA12	6801 ZZ	1920
φ10 ~ φ15	6600	2730	94	7000 A	BK10 FK10	BF10 FF10 EF10 AF10	608 ZZ	3300
					LK10	LF12	6000 ZZ	4550
					EK10 AK10	LFA15	6902 ZZ	4350
φ14 ~ φ18	7100	3040	104	7001 A	BK12 FK12 LK12	BF12 FF12 LF12 EF12 AF12	6000 ZZ	4550
					EK12 AK12 MBC*12	LFA15	6902 ZZ	4350
φ20	7600	3380	113	7002 A	BK15 FK15 LK15	BF15 FF15 LF15 EF15 AF15	6002 ZZ	5600
					EK15 AK15 MBC*15	LFA20	6804 ZZ	4000
	17200	6900		7302 A	MBCA15	AF15	6002 ZZ	5600
φ25~ φ28	12000	5800	120	7203 A	BK17 FK17	BF17 FF17	6203 ZZ	9550
	12700	6400	139	7004 A	BK20	BF20	6004 ZZ	9400
					MBCA20	AF20	6204 ZZ	12800
	17900	8240	155	7204 A	AK20 FK20 EK20 MBCF20	EF20 AF20 FF20	6204 ZZ	12800
	20000	7400		7204 B	AK20B FK20B EK20B	LFA25 (with AK20)	6005 ZZ	10100
φ30~ φ36	20200	10000	193	7205 A	BK25 FK25 AK25 MBC25	BF25 FF25 AF25	6205 ZZ	14000
	23300	8900		7205 B	BK25B FK25B AK25B			
φ40	28000	13700	210	7206 A	BK30 FK30	BF30 FF30	6206 ZZ	19500
	30700	12500		7206 B	BK30B FK30B			
φ45	37200	16500		7207 B	BK35	BF35	6207 ZZ	25700
φ50	44100	20900		7208 B	BK40	BF40	6208 ZZ	29100

NOTE:
1.IF THE MOUNTING METHOD IS "FIXED SIDE + FIXED SIDE", THE VALUE OF BASIC DYNAMIC LOAD RATE SHOULD BE DOUBLED.
(The value is for reference only. Please refer the catalogue from each bearing company for actual value)
2.ABOVE TABLE IS FOR NSK BEARING.

Characteristic Values of (Heavy-load) Support Units and Bearing

Applicable Ballscrew OD	Fixed-side							Supported-side		
	Basic dynamic load rating Ca (N)	limiting axial load (N)	preload (N)	axial rigidity (N/μm)	starting torque (N・cm)	permissible rotational speed (min^{-1})	Bearing code	Applicable Ballscrew OD	Bearing code	Radial Basic dynamic load ratingCr (N)
φ20	21900	26600	1000	555	19	7600	15TAC 47C	AF15	6002 ZZ	5600
φ20~φ25	21900	26600	1000	555	19	7600	17TAC 47C			
	47500	79500	2010	1110	32					
φ25~φ28	21900	26600	1000	555	19	7600	20TAC 47C	EF20 AF20 FF20	6204 ZZ	12800
	47500	79500	2010	1110	32					
φ30~φ36	28500	40500	1490	733	28	5800	25TAC 62	FF25 SF25	6205 ZZ	14000
	46500	81500	2030	1050	39					
	61500	122000	2980	1465	49					
φ40	29200	43000	1560	772	29	5500	30TAC 62C	BF30 FF30	6206 ZZ	19500
	47500	86000	2130	1105	39					
	63000	129000	3130	1545	51					
φ45	31000	50000	1785	890	33	4600	35TAC 72C	BF35	6207 ZZ	25700
	50500	100000	2430	1275	41					
	50500	100000	3570	1780	52					
φ50	31500	52000	1860	930	34	4600	40TAC 72C	SF40	6208 ZZ	29100
	51500	104000	2530	1330	43					
	51500	104000	3720	1860	55					

Fixed-side Applicable mode
MBK15DF MBCS15
WBK17 DF MBK17 DF MBCS17
MBK17 DFF
WBK20 DF MBCS20 MBK20 DF
MBK20 DFF
WBK25 DF SBK25 DF MBCS25
WBK25 DFD SBK25 DFD
WBK25 DFF
WBK30 DF SBK30 DF MBCS30
WBK30 DFD SBK30 DFD
WBK30 DFF
WBK35 DF SBK35 DF
WBK35 DFD SBK35 DFD
WBK35 DFF
WBK40 DF SBK40 DF
WBK40 DFD SBK40 DFD
WBK40 DFF

NOTE: 1. THE MAXIMUM STARTING TORQUE VALUE INCLUDES PRE-LOAD OF BEARINGS. (Torque of seals is not included)

2. ALLOWANCE AXISAL LOAD IS 0.7 TIMES OF LOAD LIMIT.

3. ABOVE TABLE IS FOR NSK BEARING.

Support Unit AK (fixed-side rectangular type)



AK10～AK15



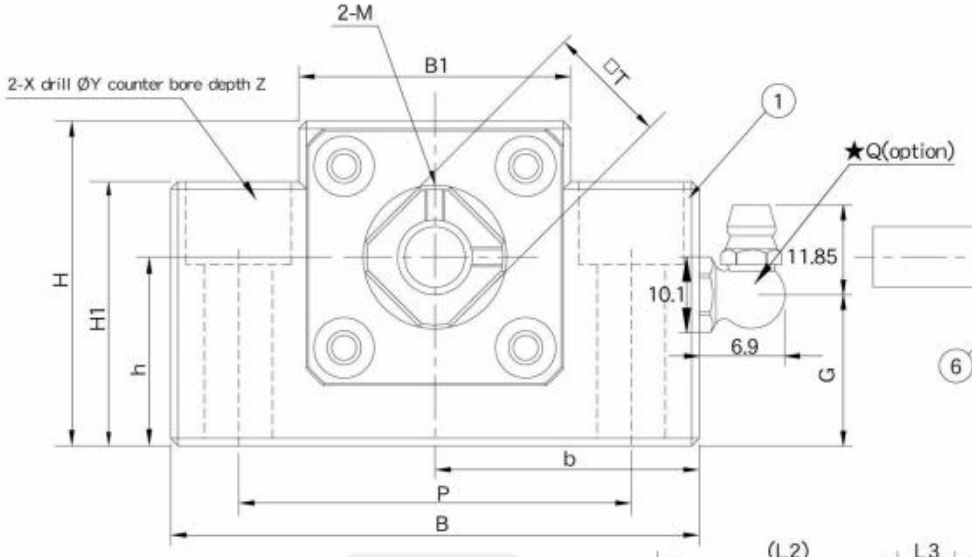
AK20



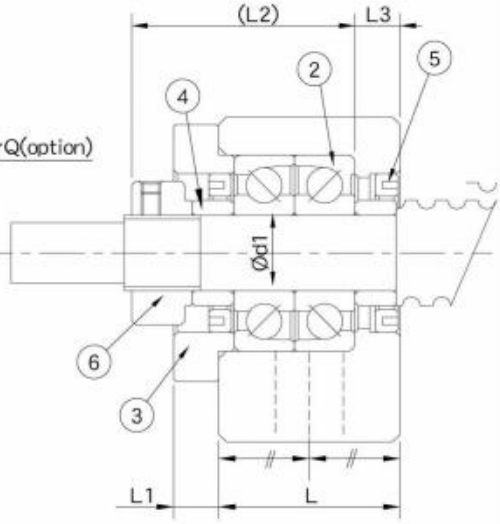


AK25

AK

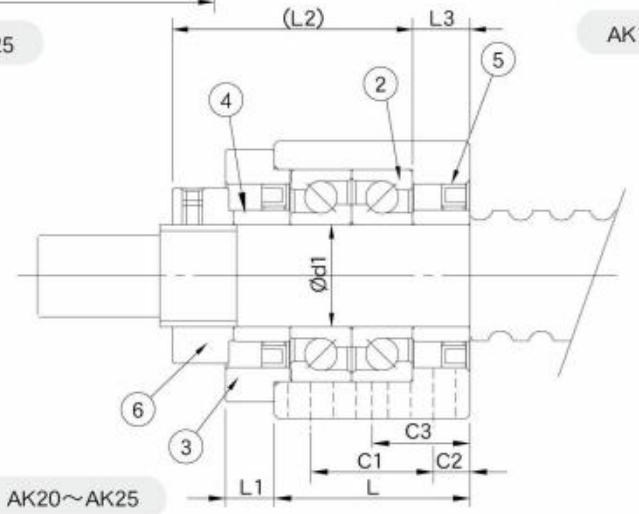


AK10～AK25



AK10～AK15

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



AK20～AK25

Unit : mm

Model No.	Shaft diameter d1	L	L1	L2	L3	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	M	T	C1	C2	C3	G	Q	Weight (Kgs)
AK10	10	24	6	29.5	6	70	43	35	25	36	35	52	9	14	11	M3	16	-	-	-	20	M6	0.5
AK12	12	24	6	29.5	6	70	43	35	25	36	35	52	9	14	11	M4	19	-	-	-	20	M6	0.5
AK15	15	25	6	36	5	80	50	40	30	41	40	60	11	17	15	M4	22	-	-	-	21	M6	0.62
AK20	20	42	10	50	10	95	58	47.5	30	56	45	75	11	17	15	M4	30	22	10	-	24	M6	1.43
AK25	25	48	12	59	14	105	68	52.5	35	66	25	85	11	-	-	M5	35	30	9	24	58	-	1.92

Support Unit AK (fixed-side rectangular type)

Order Codin	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
AK10	AK10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK
AK10_C5			C5 ~ C10	7000A P0	190	EX-STOCK
AK10_C3			C3	7000A P5	190	EX-STOCK
AK10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	3 days
AK10_C5N			C5 ~ C10	7000A P0	190	3 days
AK10_C3N			C3	7000A P5	190	3 days
AK12	AK12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK
AK12_C5			C5 ~ C10	7001A P0	210	EX-STOCK
AK12_C3			C3	7001A P5	210	EX-STOCK
AK12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	EX-STOCK
AK12_C5N			C5 ~ C10	7001A P0	210	3 days
AK12_C3N			C3	7001A P5	210	3 days
AK15	AK15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
AK15_C5			C5 ~ C10	7002A P0	230	EX-STOCK
AK15_C3			C3	7002A P5	230	EX-STOCK
AK15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	EX-STOCK
AK15_C5N			C5 ~ C10	7002A P0	230	3 days
AK15_C3N			C3	7002A P5	230	3 days
AK20	AK20	Black Oxide	C3 ~ C10	7204A P5	550	EX-STOCK
AK20_C5			C5 ~ C10	7204A P0	550	EX-STOCK
AK20B_C5			C5 ~ C10	7204B P0	550	EX-STOCK
AK20_C3			C3	7204A P5	550	3 days
AK20_N		Electroless Nickel Plating	C3~10	7204A P5	550	3 days
AK20_C5N			C5 ~ C10	7204A P0	550	3 days
AK20B_C5N			C5 ~ C10	7204B P0	550	3 days
AK20_C3N			C3	7204A P5	550	3 days
AK25	AK25	Black Oxide	C3~10	7205A P5	730	EX-STOCK
AK25_C5			C5 ~ C10	7205A P0	730	EX-STOCK
AK25B_C5			C5 ~ C10	7205B P0	730	3 days
AK25_C3			C3	7205A P5	730	3 days
AK25_N		Electroless Nickel Plating	C3~10	7205A P5	730	EX-STOCK
AK25_C5N			C5 ~ C10	7205A P0	730	3 days
AK25B_C5N			C5 ~ C10	7205B P0	730	3 days
AK25_C3N			C3	7205A P5	730	3 days



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.
3. The standard type is without Q , if required, please advise in advance.

Support Unit AF
(supported-side rectangular type)

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1
4	Cushion Stopper (option)	1

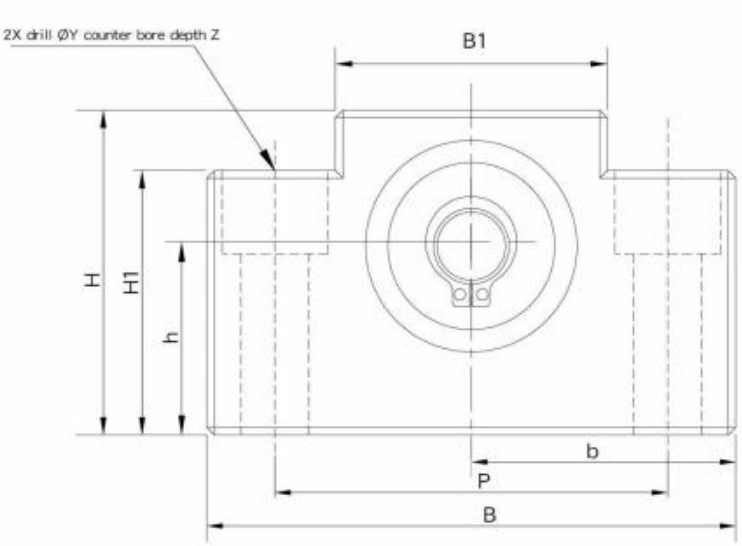


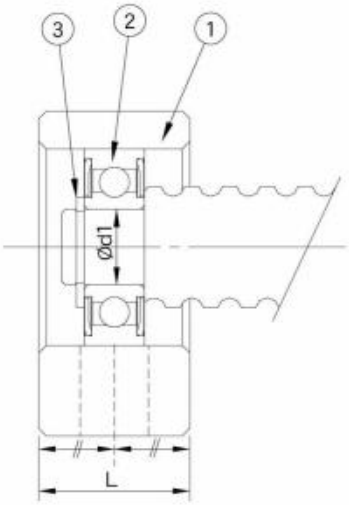
AF10~AF20



AF25

AF





Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
AF10	8	20	70	43	35	25	36	35	52	9	14	11	608ZZ	S 08	0.36
AF12	10	20	70	43	35	25	36	35	52	9	14	11	6000ZZ	S 10	0.36
AF15	15	20	80	50	40	30	41	40	60	9	14	11	6002ZZ	S 15	0.44
AF20	20	26	95	58	47.5	30	56	45	75	11	17	15	6204ZZ	S 20	0.73
AF25	25	30	105	68	52.5	35	66	25	85	11	-	-	6205ZZ	S 25	0.95

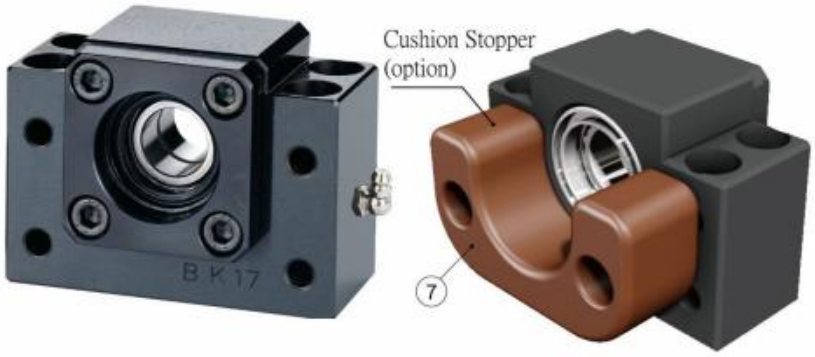
Support Unit AF
(Supported-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing	Delivery date	
AF10_C3	AF10	Black Oxide	C3 ~ C7	608ZZ	EX-STOCK	 Black Oxide (Application : General case)
AF10_C3N		Electroless Nickel Plating	C3 ~ C7	608VV	3 days	
AF12_C3	AF12	Black Oxide	C3 ~ C7	6000ZZ	EX-STOCK	
AF12_C3N		Electroless Nickel Plating	C3 ~ C7	6000VV	3 days	 Electroless Nickel Plating (Application : Clean room)
AF15_C3	AF15	Black Oxide	C3 ~ C7	6002ZZ	EX-STOCK	
AF15_C3N		Electroless Nickel Plating	C3 ~ C7	6002VV	EX-STOCK	
AF20_C3	AF20	Black Oxide	C3 ~ C7	6204ZZ	EX-STOCK	
AF20_C3N		Electroless Nickel Plating	C3 ~ C7	6204VV	3 days	
AF25_C3	AF25	Black Oxide	C3 ~ C7	6205ZZ	EX-STOCK	 Black Oxide (Application : General case)
AF25_C3N		Electroless Nickel Plating	C3 ~ C7	6205VV	3 days	 Electroless Nickel Plating (Application : Clean room)

Note :
1. It is used double pressed steel cages for Black Oxide type support units .
2. It is used double plastic cages for Electroless Nickel Plating type support units .
3. All of bearings use Japanese & Taiwanese brand bearings.

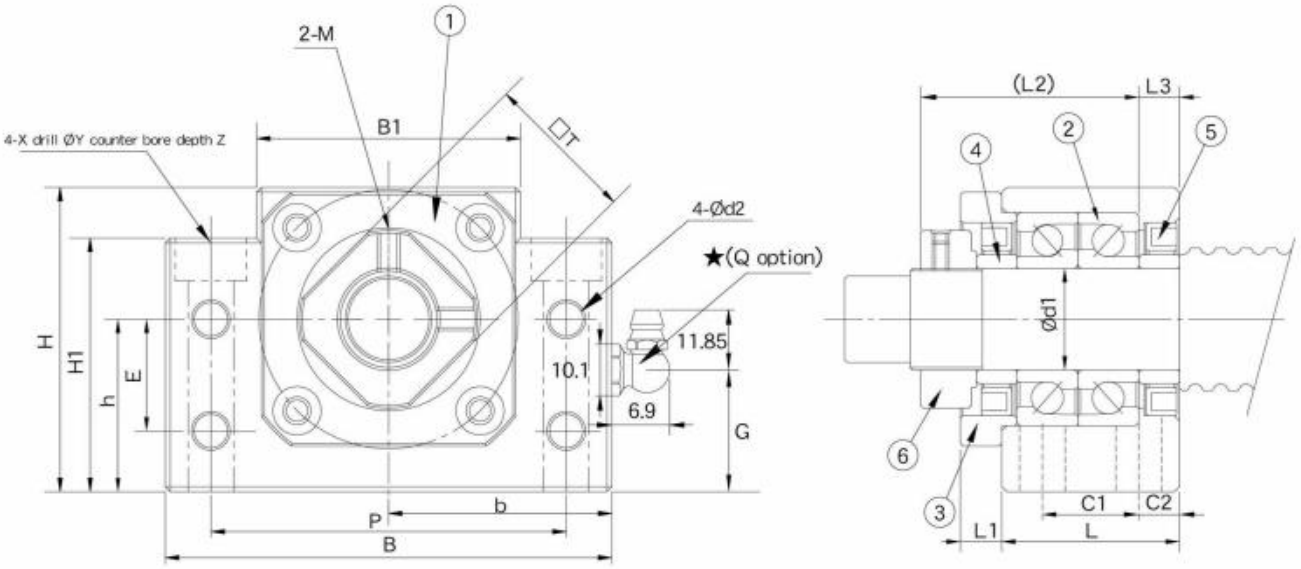
Support Unit BK
(fixed-side rectangular type)

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1



BK10~BK20

BK



Unit : mm

Model No.	Shaft diameter d1	L	L1	L2	L3	B	H	b ±0.02	h ±0.02	B1	H1	E	P	C1	C2	d2	X	Y	Z	M	T	G	Q	Weight (Kgs)
BK10	10	25	5	29.5	5	60	39	30	22	34	32.5	15	46	13	6	5.5	6.6	10.8	5	M3	16	15	M6	0.4
BK12	12	25	5	29.5	5	60	43	30	25	34	32.5	18	46	13	6	5.5	6.6	10.8	1.5	M4	19	18	M6	0.41
BK15	15	27	6	32	6	70	48	35	28	40	38	18	54	15	6	5.5	6.6	11	6.5	M4	22	18	M6	0.58
BK17	17	35	9	44	7	86	64	43	39	50	55	28	68	19	8	6.6	9	14	8.5	M4	24	30	M6	1.3
BK20	20	35	8	43	8	88	60	44	34	52	50	22	70	19	8	6.6	9	14	8.5	M4	30	24	M6	1.2
BK25	25	42	12	54	9	106	80	53	48	64	70	33	85	22	10	9	11	17	11	M6	35	37	M6	2.35
BK30	30	45	14	61	9	128	89	64	51	76	78	33	102	23	11	11	14	20	13	M6	40	37	M6	3.33
BK35	35	50	14	67	12	140	96	70	52	88	79	35	114	26	12	11	14	20	13	M6	50	37	M6	4.4
BK40	40	61	18	76	15	160	110	80	60	100	90	37	130	33	14	14	18	26	17.5	M6	50	43	M6	6.8

Support Unit BK
(fixed-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
BK10	BK10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK
BK10_C5			C5 ~ C10	7000A P0	190	EX-STOCK
BK10_C3			C3	7000A P5	190	EX-STOCK
BK10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	EX-STOCK
BK10_C5N			C5 ~ C10	7000A P0	190	3 days
BK10_C3N			C3	7000A P5	190	3 days
BK12	BK12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK
BK12_C5			C5 ~ C10	7001A P0	210	EX-STOCK
BK12_C3			C3	7001A P5	210	EX-STOCK
BK12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	EX-STOCK
BK12_C5N			C5 ~ C10	7001A P0	210	EX-STOCK
BK12_C3N			C3	7001A P5	210	3 days
BK15	BK15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
BK15_C5			C5 ~ C10	7002A P0	230	EX-STOCK
BK15_C3			C3	7002A P5	230	EX-STOCK
BK15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	EX-STOCK
BK15_C5N			C5 ~ C10	7002A P0	230	EX-STOCK
BK15_C3N			C3	7002A P5	230	3 days
BK17	BK17	Black Oxide	C3 ~ C10	7203A P5	370	EX-STOCK
BK17_C5			C5 ~ C10	7203A P0	370	3 days
BK17_C3			C3	7203A P5	370	3 days
BK17_N		Electroless Nickel Plating	C3 ~ C10	7203A P5	370	EX-STOCK
BK17_C5N			C5 ~ C10	7203A P0	370	3 days
BK17_C3N			C3	7203A P5	370	3 days
BK20	BK20	Black Oxide	C3 ~ C10	7004A P5	380	EX-STOCK
BK20_C5			C5 ~ C10	7004A P0	380	3 days
BK20_C3			C3	7004A P5	380	3 days
BK20_N		Electroless Nickel Plating	C3 ~ C10	7004A P5	380	EX-STOCK
BK20_C5N			C5 ~ C10	7004A P0	380	3 days
BK20_C3N			C3	7004A P5	380	3 days



Black Oxide

(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.
3. The standard type is without Q , if required, please advise in advance.

Support Unit BK
(fixed-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
BK25	BK25	Black Oxide	C3 ~ C10	7205A P5	730	EX-STOCK
BK25_C5			C5 ~ C10	7205A P0	730	EX-STOCK
BK25B_C5			C5 ~ C10	7205B P0	730	EX-STOCK
BK25_C3			C3	7205A P5	730	EX-STOCK
BK25_N		Electroless Nickel Plating	C3 ~ C10	7205A P5	730	EX-STOCK
BK25_C5N			C5 ~ C10	7205A P0	730	3 days
BK25B_C5N			C5 ~ C10	7205B P0	730	3 days
BK25_C3N			C3	7205A P5	730	3 days
BK30_C5	BK30	Black Oxide	C5 ~ C10	7206A P0	1050	EX-STOCK
BK30B_C5			C5 ~ C10	7206B P0	1050	EX-STOCK
BK30_C5N		Electroless Nickel Plating	C5 ~ C10	7206A P0	1050	EX-STOCK
BK30B_C5N			C5 ~ C10	7206B P0	1050	3 days
BK35_C5	BK35	Black Oxide	C5 ~ C10	7207B P0	1320	EX-STOCK
BK35_C5N		Electroless Nickel Plating	C5 ~ C10	7207B P0	1320	3 days
BK40_C5	BK40	Black Oxide	C5 ~ C10	7208B P0	2050	EX-STOCK
BK40_C5N		Electroless Nickel Plating	C5 ~ C10	7208B P0	2050	EX-STOCK



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.
3. The standard type is without Q , if required, please advise in advance.

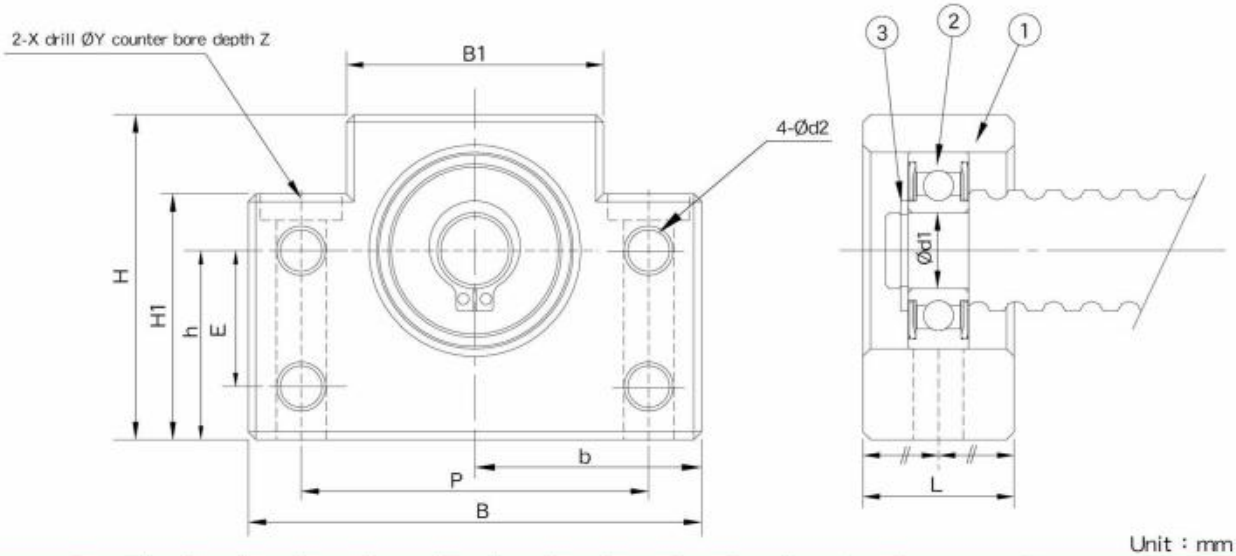
Support Unit BF
(Supported-side rectangular type)

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1
4	Cushion Stopper (option)	1



BF10~BF30

BF



Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	E	P	d2	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
BF10	8	20	60	39	30	22	34	32.5	15	46	5.5	6.6	10.8	5	608ZZ	S 08	0.3
BF12	10	20	60	43	30	25	34	32.5	18	46	5.5	6.6	10.8	1.5	6000ZZ	S 10	0.3
BF15	15	20	70	48	35	28	40	38	18	54	5.5	6.6	11	6.5	6002ZZ	S 15	0.4
BF17	17	23	86	64	43	39	50	55	28	68	6.6	9	14	8.5	6203ZZ	S 17	0.75
BF20	20	26	88	60	44	34	52	50	22	70	6.6	9	14	8.5	6004ZZ	S 20	0.76
BF20H	20	26	88	74	44	48	52	64	-	70	-	9	14	8.5	6004ZZ	S20	1.02
BF25	25	30	106	80	53	48	64	70	33	85	9	11	17	11	6205ZZ	S 25	1.43
SF25	25	32	128	89	64	51	76	78	-	102	-	14	20	13	6205ZZ	S 25	-
BF30	30	32	128	89	64	51	76	78	33	102	11	14	20	13	6206ZZ	S 30	1.94
BF35	35	32	140	96	70	52	88	79	35	114	11	14	20	13	6207ZZ	S 35	2.25
SF40	40	32	140	96	70	52	88	79	-	114	-	14	20	13	6208ZZ	S 40	-
BF40	40	37	160	110	80	60	100	90	37	130	14	18	26	17.5	6208ZZ	S 40	3.3

Support Unit BF
(Supported-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing	Delivery date
BF10_C3	BF10	Black Oxide	C3 ~ C7	608ZZ	EX-STOCK
BF10_C3N		Electroless Nickel Plating	C3 ~ C7	608VV	EX-STOCK
BF12_C3	BF12	Black Oxide	C3 ~ C7	6000ZZ	EX-STOCK
BF12_C3N		Electroless Nickel Plating	C3 ~ C7	6000VV	EX-STOCK
BF15_C3	BF15	Black Oxide	C3 ~ C7	6002ZZ	EX-STOCK
BF15_C3N		Electroless Nickel Plating	C3 ~ C7	6002VV	EX-STOCK
BF17_C3	BF17	Black Oxide	C3 ~ C7	6203ZZ	EX-STOCK
BF17_C3N		Electroless Nickel Plating	C3 ~ C7	6203VV	EX-STOCK
BF20_C3	BF20	Black Oxide	C3 ~ C7	6004ZZ	EX-STOCK
BF20_C3N		Electroless Nickel Plating	C3 ~ C7	6004VV	EX-STOCK
BF25_C3	BF25	Black Oxide	C3 ~ C7	6205ZZ	EX-STOCK
BF25_C3N		Electroless Nickel Plating	C3 ~ C7	6205VV	EX-STOCK
BF30_C3	BF30	Black Oxide	C3 ~ C7	6206ZZ	EX-STOCK
BF30_C3N		Electroless Nickel Plating	C3 ~ C7	6206VV	EX-STOCK
BF35_C3	BF35	Black Oxide	C3 ~ C7	6207ZZ	EX-STOCK
BF35_C3N		Electroless Nickel Plating	C3 ~ C7	6207VV	EX-STOCK
BF40_C3	BF40	Black Oxide	C3 ~ C7	6208ZZ	EX-STOCK
BF40_C3N		Electroless Nickel Plating	C3 ~ C7	6208VV	EX-STOCK



Black Oxide
(Application : General case)

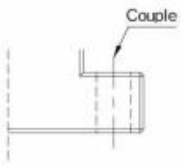


Electroless Nickel Plating
(Application : Clean room)

Note :
1. It is used double pressed steel cages for Black Oxide type support units .
2. It is used double plastic cages for Electroless Nickel Plating type support units .
3. All of bearings use Japanese & Taiwanese brand bearings.

Support Unit EK
(fixed-side rectangular type)

EK05

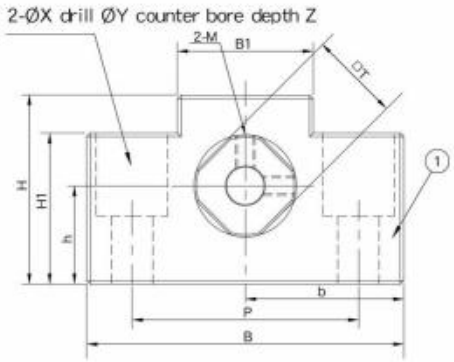


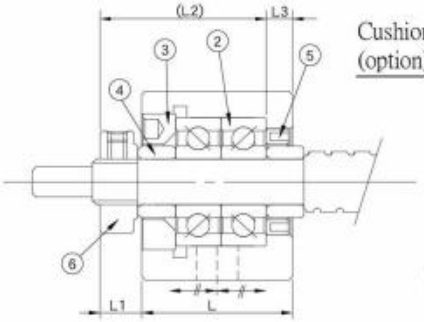
No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	1 (2)
6	Lock nut	1
7	Cushion Stopper (option)	1
8	Cushion Stopper (option)	2

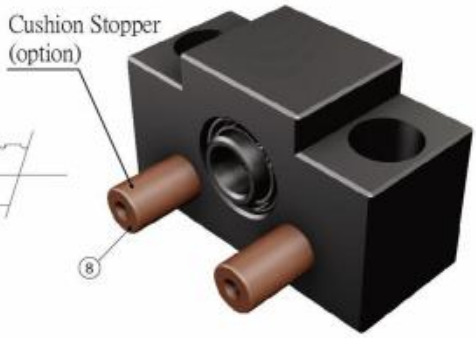


EK05

EK06,EK08

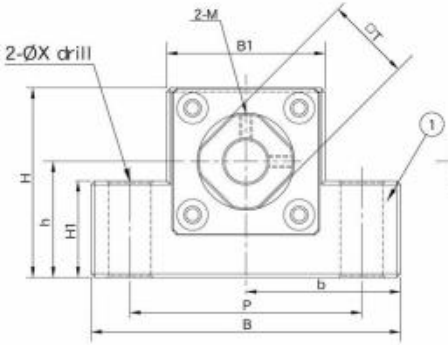


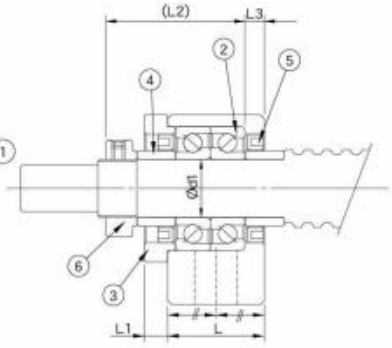




(EK06~08)

EK10~EK20







(EK10~20)

Unit : mm

Model No.	Shaft diameter d1	L	L1	L2	L3	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	M	T	Weight (Kgs)
EK05	5	16.5	5.5	18.5	3.5	36	21	18	11	20	8	28	4.5	-	-	M3	11	0.1
EK06	6	20	5.5	22	3.5	42	25	21	13	18	20	30	5.5	9.5	11	M3	12	0.15
EK08	8	23	7	26	4	52	32	26	17	25	26	38	6.6	11	12	M3	14	0.26
EK10-1	10	24	6	29.5	6	65	43	32.5	21	36	20	52	6.6	-	-	M3	16	0.45
EK10	10	24	6	29.5	6	70	43	35	25	36	24	52	9	-	-	M3	16	0.45
EK12	12	24	6	29.5	6	70	43	35	25	36	24	52	9	-	-	M4	19	0.44
EK15	15	25	6	36	5	80	50	40	30	41	25	60	11	-	-	M4	22	0.56
EK20	20	42	10	50	10	95	58	47.5	30	56	25	75	11	-	-	M4	30	1.34

Support Unit EK
(fixed-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
EK06	EK06	Black Oxide	C3~C10	706A P5	50	EX-STOCK
EK06_C5			C5 ~ C10	706A P0	50	EX-STOCK
EK06_C3			C3	706A P5	50	3 days
EK06_N		Electroless Nickel Plating	C3~C10	706A P5	50	3 days
EK06_C5N			C5 ~ C10	706A P0	50	3 days
EK06_C3N			C3	706A P5	50	3 days
EK08	EK08	Black Oxide	C3 ~ C10	708A P5	90	EX-STOCK
EK08_C5			C5 ~ C10	708A P0	90	EX-STOCK
EK08_C3			C3	708A P5	90	EX-STOCK
EK08_N		Electroless Nickel Plating	C3 ~ C10	708A P5	90	EX-STOCK
EK08_C5N			C5 ~ C10	708A P0	90	3 days
EK08_C3N			C3	708A P5	90	3 days
EK10	EK10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK
EK10_C5			C5 ~ C10	7000A P0	190	EX-STOCK
EK10_C3			C3	7000A P5	190	EX-STOCK
EK10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	EX-STOCK
EK10_C5N			C5 ~ C10	7000A P0	190	3 days
EK10_C3N			C3	7000A P5	190	3 days
EK12	EK12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK
EK12_C5			C5 ~ C10	7001A P0	210	EX-STOCK
EK12_C3			C3	7001A P5	210	EX-STOCK
EK12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	EX-STOCK
EK12_C5N			C5 ~ C10	7001A P0	210	3 days
EK12_C3N			C3	7001A P5	210	3 days



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

Support Unit EK
(fixed-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
EK15	EK15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
EK15_C5			C5 ~ C10	7002A P0	230	EX-STOCK
EK15_C3			C3	7002A P5	230	EX-STOCK
EK15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	EX-STOCK
EK15_C5N			C5 ~ C10	7002A P0	230	3 days
EK15_C3N			C3	7002A P5	230	3 days
EK20	EK20	Black Oxide	C3 ~ C10	7204A P5	550	EX-STOCK
EK20_C5			C5 ~ C10	7204A P0	550	3 days
EK20B_C5			C5 ~ C10	7204B P0	550	EX-STOCK
EK20_C3			C3	7204A P5	550	3 days
EK20_N		Electroless Nickel Plating	C3 ~ C10	7204A P5	550	EX-STOCK
EK20_C5N			C5 ~ C10	7204A P0	550	3 days
EK20B_C5N			C5 ~ C10	7204B P0	550	3 days
EK20_C3N			C3	7204A P5	550	3 days

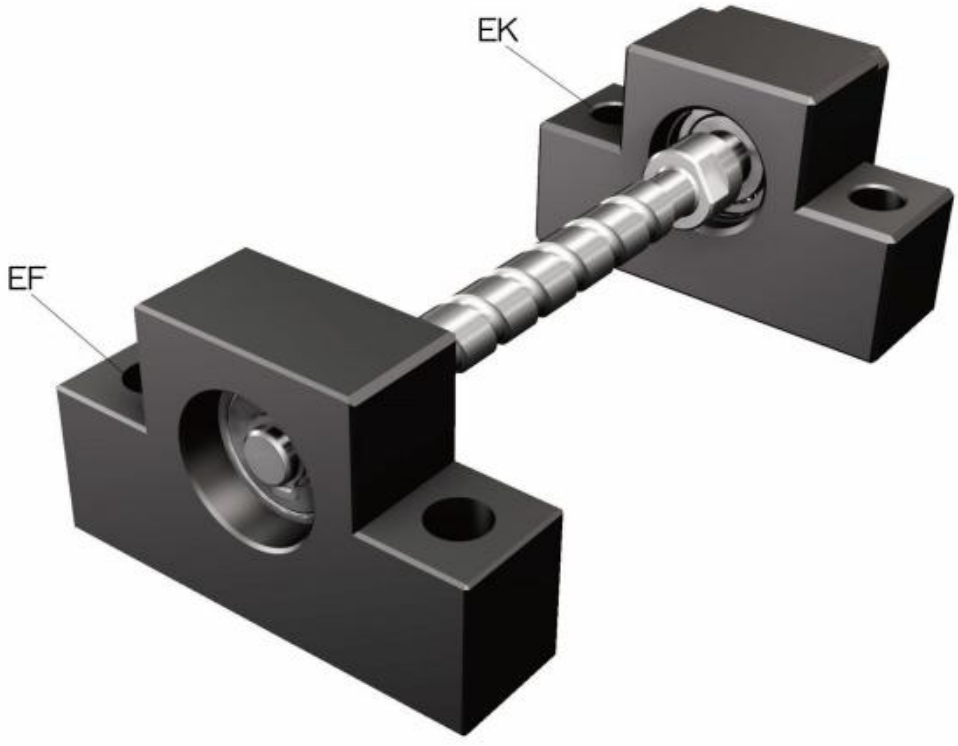


Black Oxide (Application : General case)

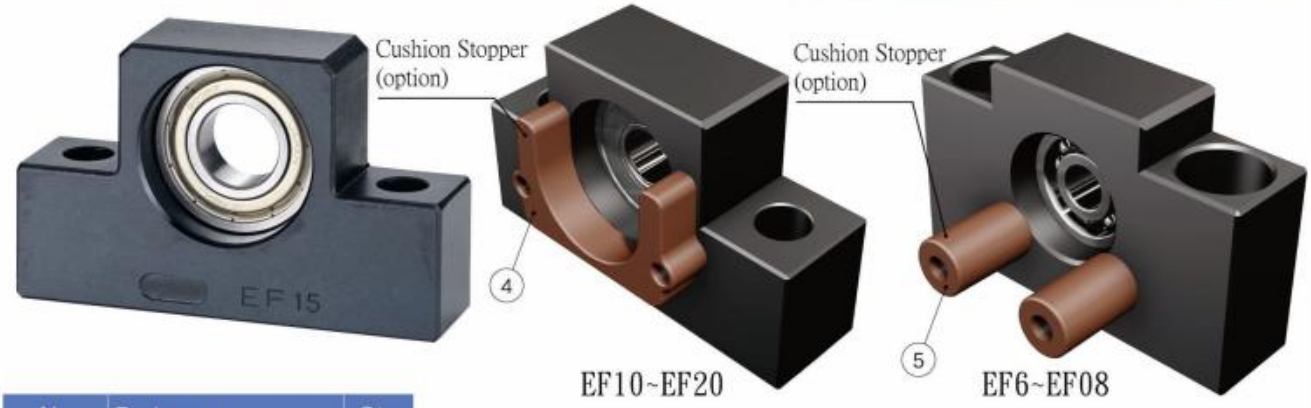


Electroless Nickel Plating (Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

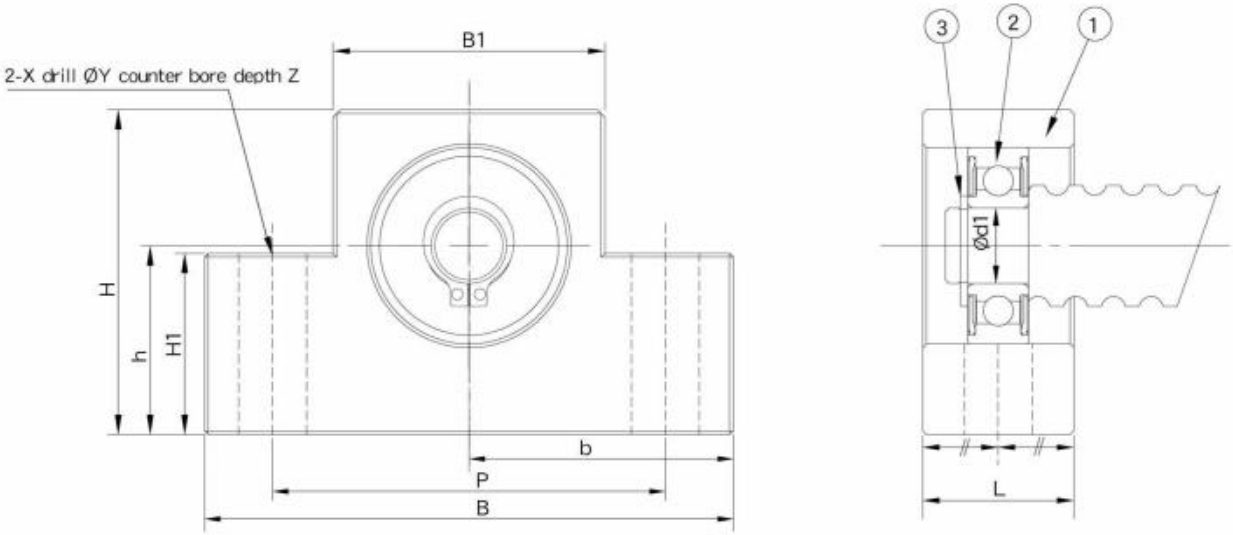


Support Unit EF
(supported-side rectangular type)



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1
4	Cushion Stopper (option)	1
5	Cushion Stopper (option)	2

EF



Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
EF06	6	12	42	25	21	13	18	20	30	5.5	9.5	11	606ZZ	S 06	0.1
EF08	6	14	52	32	26	17	25	26	38	6.6	11	12	606ZZ	S 06	0.15
EF10	8	20	70	43	35	25	36	24	52	9	-	-	608ZZ	S 08	0.33
EF12	10	20	70	43	35	25	36	24	52	9	-	-	6000ZZ	S 10	0.32
EF15	15	20	80	50	40	30	41	25	60	9	-	-	6002ZZ	S 15	0.38
EF20	20	26	95	58	47.5	30	56	25	75	11	-	-	6204ZZ	S 20	0.64

Support Unit EF
(Supported-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing	Delivery date
EF06_C3	EF06	Black Oxide	C3 ~ C7	606ZZ	EX-STOCK
EF06_C3N		Electroless Nickel Plating	C3 ~ C7	606VV	3 days
EF08_C3	EF08	Black Oxide	C3 ~ C7	606ZZ	EX-STOCK
EF08_C3N		Electroless Nickel Plating	C3 ~ C7	606VV	EX-STOCK
EF10_C3	EF10	Black Oxide	C3 ~ C7	608ZZ	EX-STOCK
EF10_C3N		Electroless Nickel Plating	C3 ~ C7	608VV	EX-STOCK
EF12_C3	EF12	Black Oxide	C3 ~ C7	6000ZZ	EX-STOCK
EF12_C3N		Electroless Nickel Plating	C3 ~ C7	6000VV	EX-STOCK
EF15_C3	EF15	Black Oxide	C3 ~ C7	6002ZZ	EX-STOCK
EF15_C3N		Electroless Nickel Plating	C3 ~ C7	6002VV	EX-STOCK
EF20_C3	EF20	Black Oxide	C3 ~ C7	6204ZZ	EX-STOCK
EF20_C3N		Electroless Nickel Plating	C3 ~ C7	6204VV	EX-STOCK



Black Oxide (Application : General case)



Electroless Nickel Plating(Application : Clean room)

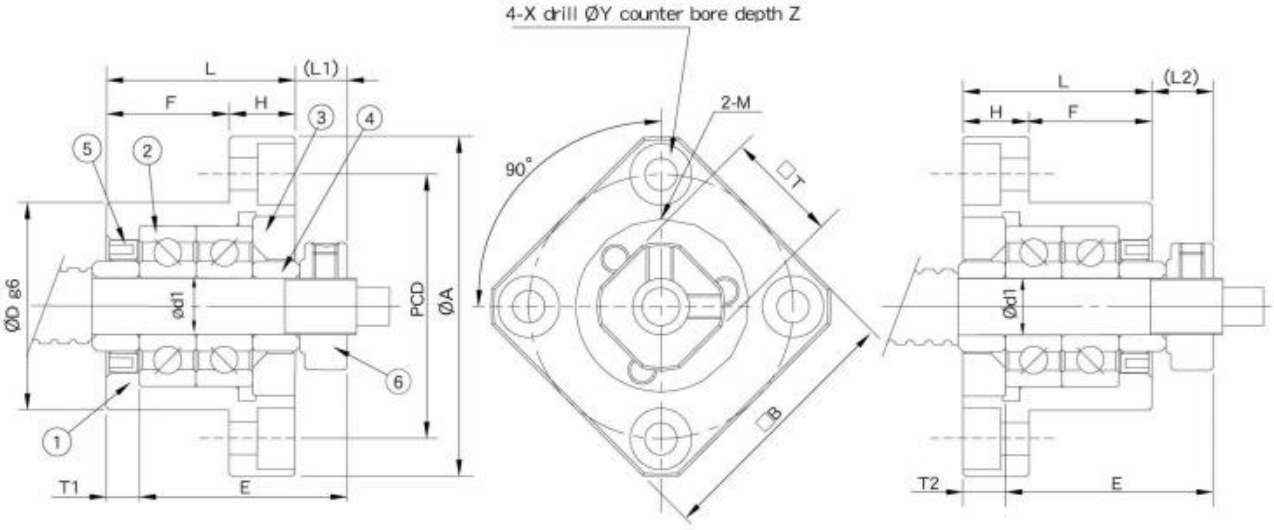
Note :
1. It is used double pressed steel cages for Black Oxide type support units .
2. It is used double plastic cages for Electroless Nickel Plating type support units .
3. All of bearings use Japanese & Taiwanese brand bearings.

Support Unit FK
(fixed-side round type)



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	1
6	Lock nut	1set

FK05~FK08



Mounting method A

Mounting method B

Unit : mm

Model No.	Shaft diameter d1	L	H	F	E	Dg6	A	PCD	B	Mounting method A		Mounting method B		X	Y	Z	M	T	Weight (Kgs)
										L1	T1	L2	T2						
FK05	5	16.5	6	10.5	18.5	20 -0.007 -0.02	34	26	26	5.5	3.5	5	3	3.4	6.5	3.5	M3	11	0.08
FK06	6	20	7	13	22	22 -0.007 -0.02	36	28	28	5.5	3.5	6.5	4.5	3.4	6.5	4	M3	12	0.1
FK08	8	23	9	14	26	28 -0.007 -0.02	43	35	35	7	4	8	5	3.4	6.5	4	M3	14	0.15

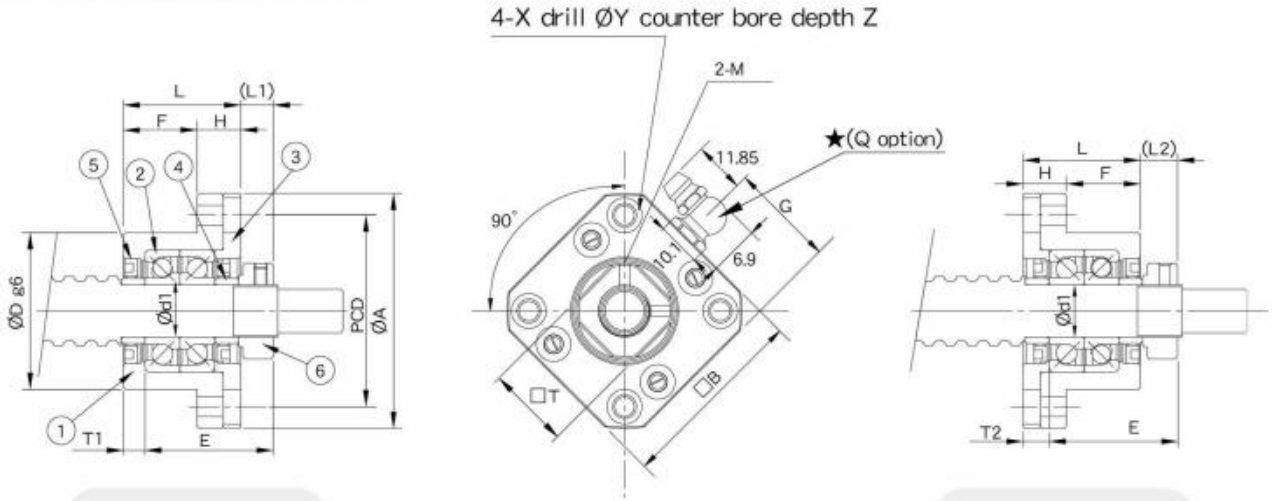
Support Unit FK
(fixed-side round type)



The position of oil grease is for reference only,
please visit our website to get more information on it.

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set

FK10～FK30



Mounting method A

Mounting method B

Unit : mm

Model No.	Shaft diameter d1	L	H	F	E	Dg6		A	PCD	B	Mounting method A		Mounting method B		X	Y	Z	M	T	G	Q	Weight (Kgs)
											L1	T1	L2	T2								
FK10	10	27	10	17	29.5	34	-0.009 -0.025	52	42	42	7.5	5	8.5	6	4.5	8	4	M3	16	-	-	0.23
FK12	12	27	10	17	29.5	36	-0.009 -0.025	54	44	44	7.5	5	8.5	6	4.5	8	4	M4	19	-	-	0.25
FK15	15	32	15	17	36	40	-0.009 -0.025	63	50	52	10	6	12	8	5.5	9.5	6	M4	22	26	M6	0.39
FK17	17	45	22	23	47	50	-0.009 -0.025	77	62	61	11	9	14	12	6.6	11	10	M4	24	30.5	M6	0.81
FK20	20	52	22	30	50	57	-0.010 -0.029	85	70	68	8	10	12	14	6.6	11	10	M4	30	34	M6	1.02
FK25	25	57	27	30	59	63	-0.010 -0.029	98	80	79	13	10	20	17	9	15	13	M5	35	39.5	M6	1.48
FK30	30	62	30	32	61	75	-0.010 -0.029	117	95	93	11	12	17	18	11	17.5	15	M6	40	46.5	M6	2.32

Support Unit FK
(fixed-side round type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
FK06	FK06	Black Oxide	C3~C10	706A P5	50	EX-STOCK
FK06_C5			C5 ~ C10	706A P0	50	EX-STOCK
FK06_C3			C3	706A P5	50	EX-STOCK
FK06_N		Electroless Nickel Plating	C3~C10	706A P5	50	3 days
FK06_C5N			C5 ~ C10	706A P0	50	3 days
FK06_C3N			C3	706A P5	50	3 days
FK08	FK08	Black Oxide	C3 ~ C10	708A P5	90	EX-STOCK
FK08_C5			C5 ~ C10	708A P0	90	EX-STOCK
FK08_C3			C3	708A P5	90	EX-STOCK
FK08_N		Electroless Nickel Plating	C3 ~ C10	708A P5	90	EX-STOCK
FK08_C5N			C5 ~ C10	708A P0	90	3 days
FK08_C3N			C3	708A P5	90	3 days
FK10	FK10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK
FK10_C5			C5 ~ C10	7000A P0	190	EX-STOCK
FK10_C3			C3	7000A P5	190	EX-STOCK
FK10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	EX-STOCK
FK10_C5N			C5 ~ C10	7000A P0	190	3 days
FK10_C3N			C3	7000A P5	190	3 days
FK12	FK12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK
FK12_C5			C5 ~ C10	7001A P0	210	EX-STOCK
FK12_C3			C3	7001A P5	210	EX-STOCK
FK12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	EX-STOCK
FK12_C5N			C5 ~ C10	7001A P0	210	EX-STOCK
FK12_C3N			C3	7001A P5	210	EX-STOCK
FK15	FK15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
FK15_C5			C5 ~ C10	7002A P0	230	EX-STOCK
FK15_C3			C3	7002A P5	230	EX-STOCK
FK15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	EX-STOCK
FK15_C5N			C5 ~ C10	7002A P0	230	EX-STOCK
FK15_C3N			C3	7002A P5	230	3 days



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

Support Unit FK
(fixed-side round type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
FK17	FK17	Black Oxide	C3 ~ C10	7203A P5	370	EX-STOCK
FK17_C5			C5 ~ C10	7203A P0	370	3 days
FK17_C3			C3	7203A P5	370	3 days
FK17_N		Electroless Nickel Plating	C3 ~ C10	7203A P5	370	EX-STOCK
FK17_C5N			C5 ~ C10	7203A P0	370	3 days
FK17_C3N			C3	7203A P5	370	3 days
FK20	FK20	Black Oxide	C3 ~ C10	7204A P5	550	EX-STOCK
FK20_C5			C5 ~ C10	7204A P0	550	EX-STOCK
FK20B_C5			C5 ~ C10	7204B P0	550	EX-STOCK
FK20_C3			C3	7204A P5	550	EX-STOCK
FK20_N		Electroless Nickel Plating	C3 ~ C10	7204A P5	550	EX-STOCK
FK20_C5N			C5 ~ C10	7204A P0	550	3 days
FK20B_C5N			C5 ~ C10	7204B P0	550	3 days
FK20_C3N			C3	7204A P5	550	3 days
FK25	FK25	Black Oxide	C3 ~ C10	7205A P5	730	EX-STOCK
FK25_C5			C5 ~ C10	7205A P0	730	EX-STOCK
FK25B_C5			C5 ~ C10	7205B P0	730	EX-STOCK
FK25_C3			C3	7205A P5	730	3 days
FK25_N		Electroless Nickel Plating	C3 ~ C10	7205A P5	730	EX-STOCK
FK25_C5N			C5 ~ C10	7205A P0	730	3 days
FK25B_C5N			C5 ~ C10	7205B P0	730	3 days
FK25_C3N			C3	7205A P5	730	3 days
FK30_C5	FK30	Black Oxide	C5 ~ C10	7206A P0	1050	EX-STOCK
FK30B_C5			C5 ~ C10	7206B P0	1050	EX-STOCK
FK30_C5N		Electroless Nickel Plating	C5 ~ C10	7206A P0	1050	EX-STOCK
FK30B_C5N			C5 ~ C10	7206B P0	1050	3 days



Black Oxide
(Application : General case)



(Application : Clean room)
Electroless Nickel Plating

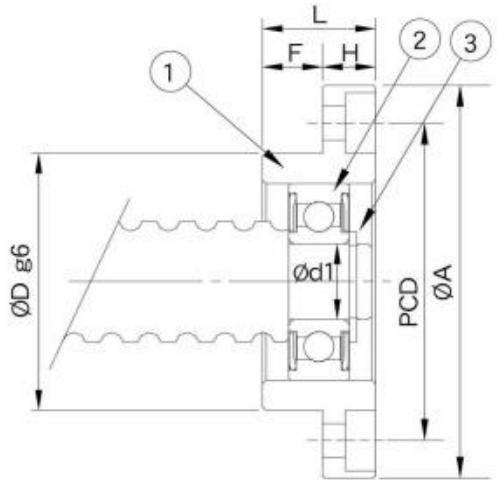
Note :
1.All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue),
Assembly by DF way. The most suitable way for ballscrew use.
3. The standard type is without Q , if required, please advise in advance.

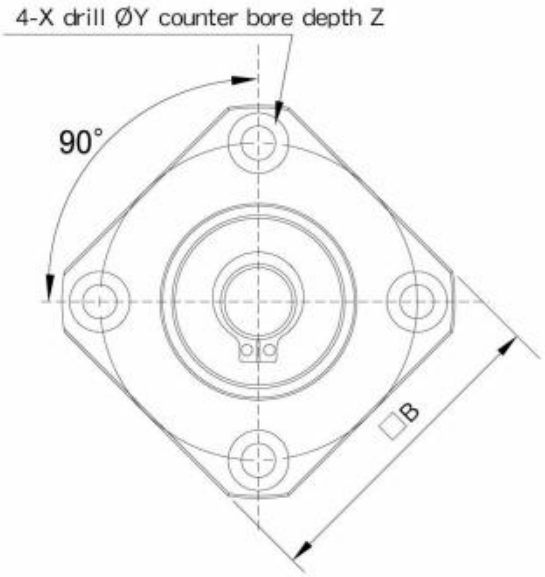
Support Unit FF
(Supported-side round type)



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1

FF





Unit : mm

Model No.	Shaft diameter d1	L	H	F	Dg6	A	PCD	B	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
FF06	6	10	6	4	22 -0.007 -0.02	36	28	28	3.4	6.5	3.5	606ZZ	S 06	0.06
FF10	8	12	7	5	28 -0.007 -0.02	43	35	35	3.4	6.5	4	608ZZ	S 08	0.1
FF12	10	15	7	8	34 -0.009 -0.025	52	42	42	4.5	8	4	6000ZZ	S 10	0.13
FF15	15	17	9	8	40 -0.009 -0.025	63	50	52	5.5	9.5	5.5	6002ZZ	S 15	0.2
FF17	17	20	11	9	50 -0.009 -0.025	77	62	61	6.6	11	6.5	6203ZZ	S17	0.33
FF20	20	20	11	9	57 -0.010 -0.029	85	70	68	6.6	11	6.5	6204ZZ	S 20	0.43
FF25	25	24	14	10	63 -0.010 -0.029	98	80	79	9	14	8.5	6205ZZ	S 25	0.66
FF30	30	27	18	9	75 -0.010 -0.029	117	95	93	11	17	11	6206ZZ	S 30	1.03

Support Unit FF
(Supported-side round type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing	Delivery date
FF06_C3	FF06	Black Oxide	C3 ~ C7	606ZZ	EX-STOCK
FF06_C3N		Electroless Nickel Plating	C3 ~ C7	606VV	3 days
FF10_C3	FF10	Black Oxide	C3 ~ C7	608ZZ	EX-STOCK
FF10_C3N		Electroless Nickel Plating	C3 ~ C7	608VV	EX-STOCK
FF12_C3	FF12	Black Oxide	C3 ~ C7	6000ZZ	EX-STOCK
FF12_C3N		Electroless Nickel Plating	C3 ~ C7	6000VV	EX-STOCK
FF15_C3	FF15	Black Oxide	C3 ~ C7	6002ZZ	EX-STOCK
FF15_C3N		Electroless Nickel Plating	C3 ~ C7	6002VV	EX-STOCK
FF17_C3	FF17	Black Oxide	C3 ~ C7	6203ZZ	EX-STOCK
FF17_C3N		Electroless Nickel Plating	C3 ~ C7	6203VV	EX-STOCK
FF20_C3	FF20	Black Oxide	C3 ~ C7	6204ZZ	EX-STOCK
FF20_C3N		Electroless Nickel Plating	C3 ~ C7	6204VV	EX-STOCK
FF25_C3	FF25	Black Oxide	C3 ~ C7	6205ZZ	EX-STOCK
FF25_C3N		Electroless Nickel Plating	C3 ~ C7	6205VV	EX-STOCK
FF30_C3	FF30	Black Oxide	C3 ~ C7	6206ZZ	EX-STOCK
FF30_C3N		Electroless Nickel Plating	C3 ~ C7	6206VV	EX-STOCK



Black Oxide
(Application : General case)

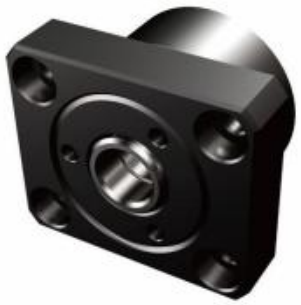


Electroless Nickel Plating
(Application : Clean room)

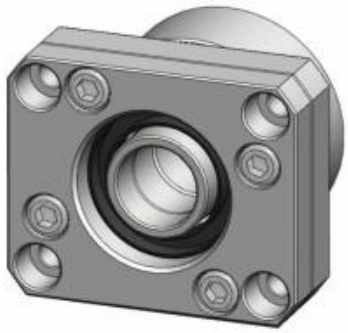
Note :
1. It is used double pressed steel cages for Black Oxide type support units .
2. It is used double plastic cages for Electroless Nickel Plating type support units .
3. All of bearings use Japanese & Taiwanese brand bearings.

Support Unit FKA
(fixed-side round type)

No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	1~2
6	Lock nut	1set

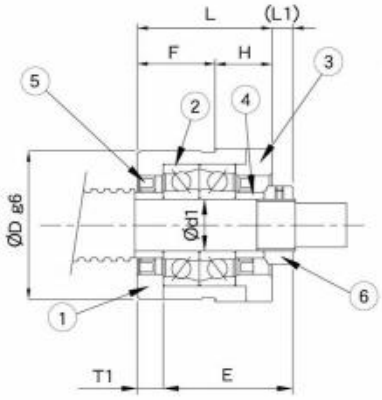


(FKA06~08)

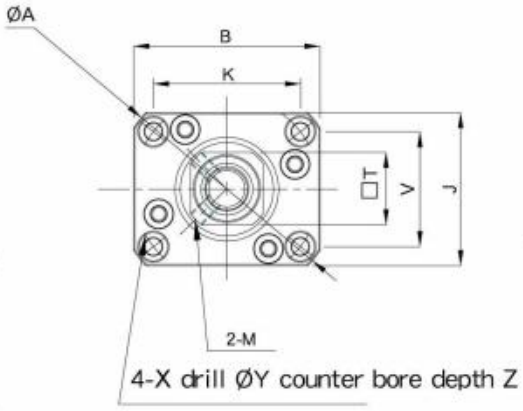


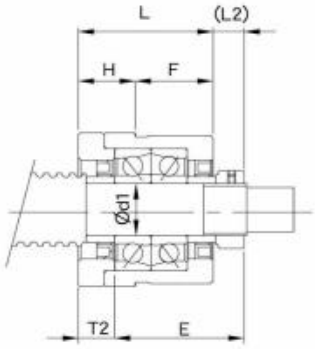
(FKA10~20)

FKA06~FKA20



Mounting method A
FKA15H is not applicable





Mounting method B

Unit : mm

Model No.	Shaft diameter d1	L	H	F	E	Dg6		A	B	J	K	V	Mounting method A L1	Mounting method A T1	Mounting method B L2	Mounting method B T2	X	Y	Z	M	T	Weight (Kgs)
FKA06	6	20	7	13	22	28	-0.007 -0.02	44	36	30	26.79	20.93	5.5	3.5	6.5	4.5	3.4	6.5	4	M3	12	0.14
FKA08	8	23	9	14	26	28	-0.007 -0.02	44	36	30	26.79	20.93	7	4	8	5	3.4	6.5	4	M3	14	0.15
FKA10	10	27	10	17	29.5	36	-0.009 -0.025	56	48	39	35.7	27.39	7.5	5	8.5	6	4.5	8	4	M3	16	0.26
FKA12	12	27	10	17	29.5	36	-0.009 -0.025	56	48	39	35.7	27.39	7.5	5	8.5	6	4.5	8	4	M4	19	0.3
FKA15	15	32	15	17	36	40	-0.009 -0.025	65	56	43	39.4	30.78	10	6	12	8	5.5	9.5	6	M4	22	0.37
FKA15H	15	43	17	26	40	50	-0.009 -0.025	77	63	52	49.64	38.79	4	7	7	10	5.5	9.5	8	M4	22	-
FKA20L	20	41	17	24	43	50	-0.009 -0.025	77	63	52	49.64	38.79	9	7	12	10	5.5	9.5	8	M4	30	-
FKA20	20	52	22	30	50	57	-0.010 -0.029	86	72	59	56.74	44.33	8	10	12	14	6.6	11	10	M4	30	1.28

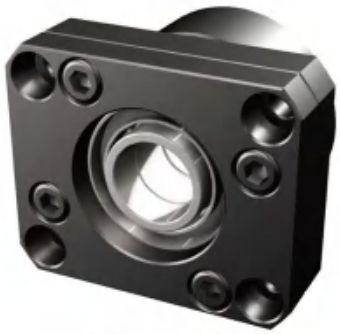
Support Unit FKA
(fixed-side round type)

Order Codin	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date	
				Model No.	Max.Starting torque (gf-cm)		
FKA06	FKA06	Black Oxide	C3~C10	706A P5	50	EX-STOCK	 (FKA06~FKA08) Black Oxide (Application : General case)
FKA06_C5			C5 ~ C10	706A P0	50	3 days	
FKA06_C3			C3	706A P5	50	3 days	
FKA06_N		Electroless Nickel Plating	C3~C10	706A P5	50	3 days	
FKA06_C5N			C5 ~ C10	706A P0	50	3 days	
FKA06_C3N			C3	706A P5	50	3 days	
FKA08	FKA08	Black Oxide	C3 ~ C10	708A P5	90	EX-STOCK	 (FKA06~FKA08) Electroless Nickel Plating (Application : Clean room)
FKA08_C5			C5 ~ C10	708A P0	90	3 days	
FKA08_C3			C3	708A P5	90	3 days	
FKA08_N		Electroless Nickel Plating	C3 ~ C10	708A P5	90	EX-STOCK	
FKA08_C5N			C5 ~ C10	708A P0	90	3 days	
FKA08_C3N			C3	708A P5	90	3 days	
FKA10	FKA10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK	 (FKA10~FKA20) Black Oxide (Application : General case)
FKA10_C5			C5 ~ C10	7000A P0	190	3 days	
FKA10_C3			C3	7000A P5	190	3 days	
FKA10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	3 days	
FKA10_C5N			C5 ~ C10	7000A P0	190	3 days	
FKA10_C3N			C3	7000A P5	190	3 days	
FKA12	FKA12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK	 (FKA10~FKA20) Electroless Nickel Plating (Application : Clean room)
FKA12_C5			C5 ~ C10	7001A P0	210	EX-STOCK	
FKA12_C3			C3	7001A P5	210	3 days	
FKA12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	EX-STOCK	
FKA12_C5N			C5 ~ C10	7001A P0	210	3 days	
FKA12_C3N			C3	7001A P5	210	3 days	

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

Support Unit FKA
(fixed-side round type)

Order Codin	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
FKA15	FKA15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
FKA15_C5			C5 ~ C10	7002A P0	230	3 days
FKA15_C3			C3	7002A P5	230	3 days
FKA15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	EX-STOCK
FKA15_C5N			C5 ~ C10	7002A P0	230	3 days
FKA15_C3N			C3	7002A P5	230	3 days
FKA15H	FKA15H	Black Oxide	C3 ~ C10	7302A P5	380	EX-STOCK
FKA20L	FKA20L	Black Oxide	C3 ~ C10	7004A P5	380	EX-STOCK
FKA20L_C3			C3	7004A P5	380	3 days
FKA20	FKA20	Black Oxide	C3 ~ C10	7204A P5	550	EX-STOCK
FKA20_C5			C5 ~ C10	7204A P0	550	EX-STOCK
FKA20B_C5			C5 ~ C10	7204B P0	550	3 days
FKA20_C3			C3	7204A P5	550	3 days
FKA20_N		Electroless Nickel Plating	C3 ~ C10	7204A P5	550	EX-STOCK
FKA20_C5N			C5 ~ C10	7204A P0	550	3 days
FKA20B_C5N			C5 ~ C10	7204B P0	550	3 days
FKA20_C3N			C3	7204A P5	550	3 days



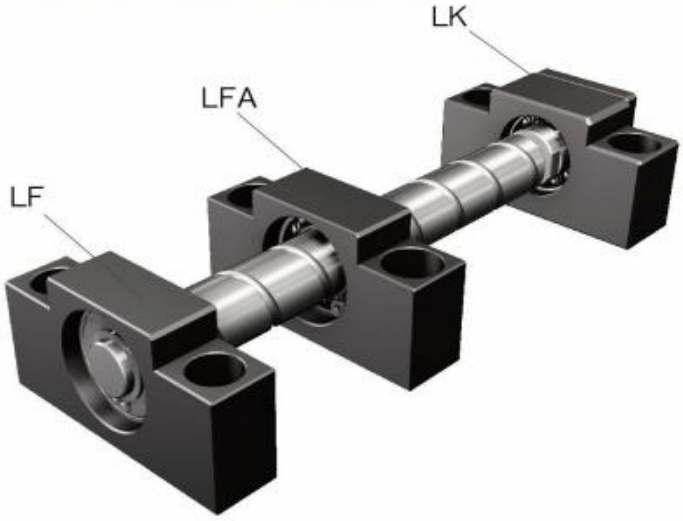
(FKA10~FKA20)
Black Oxide
(Application : General case)



(FKA10~FKA20)
Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

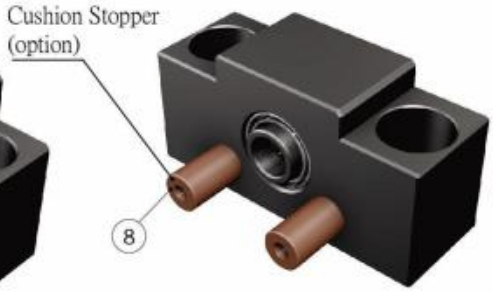
Low profile Support Unit LK
(fixed-side rectangular type)







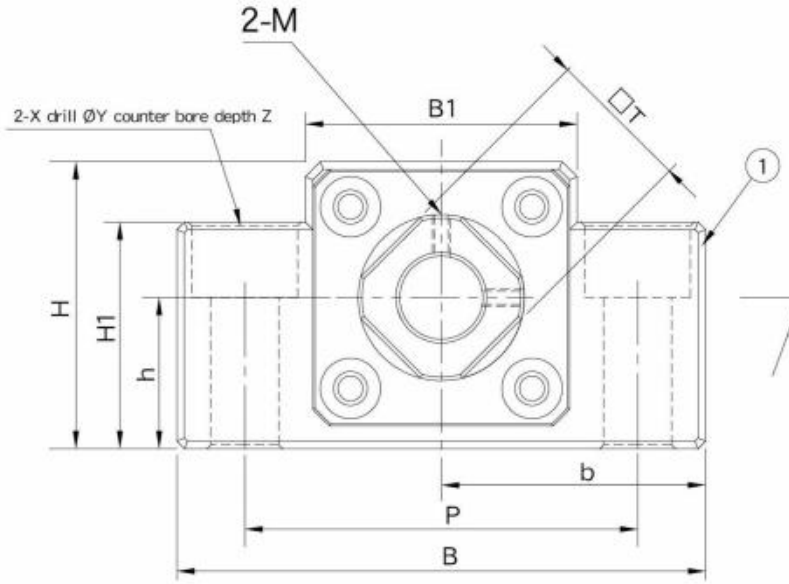
LK10~LK15

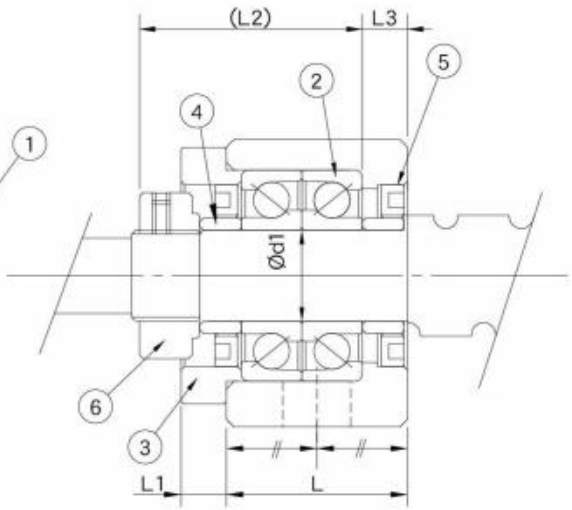


LK08

No.	Part name	Qty
1	Housing	1
2	Bearing	1set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1set
7	Cushion Stopper (option)	1
8	Cushion Stopper (option)	2

LK





Unit : mm

Model No.	Shaft diameter d1	L	L1	L2	L3	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	M	T	Weight (Kgs)
LK08	8	22.5	-	26	3.5	62	31	31	15.5	30	25.5	46	9	14	12.5	M3	14	0.28
LK10	10	24	6	29.5	6	70	38	35	20	36	30	52	9	14	10	M3	16	0.44
LK12	12	24	6	29.5	6	70	38	35	20	36	30	52	9	14	10	M4	19	0.42
LK15	15	25	6	36	5	80	42	40	22	41	32	60	11	17	13	M4	22	0.51

Low profile Support Unit LK
(fixed-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing		Delivery date
				Model No.	Max.Starting torque (gf-cm)	
LK08	LK08	Black Oxide	C3 ~ C10	708A P5	90	EX-STOCK
LK08_C5			C5 ~ C10	708A P0	90	3 days
LK08_C3			C3	708A P5	90	3 days
LK08_N		Electroless Nickel Plating	C3 ~ C10	708A P5	90	3 days
LK08_C5N			C5 ~ C10	708A P0	90	3 days
LK08_C3N			C3	708A P5	90	3 days
LK10	LK10	Black Oxide	C3 ~ C10	7000A P5	190	EX-STOCK
LK10_C5			C5 ~ C10	7000A P0	190	3 days
LK10_C3			C3	7000A P5	190	3 days
LK10_N		Electroless Nickel Plating	C3 ~ C10	7000A P5	190	3 days
LK10_C5N			C5 ~ C10	7000A P0	190	3 days
LK10_C3N			C3	7000A P5	190	3 days
LK12	LK12	Black Oxide	C3 ~ C10	7001A P5	210	EX-STOCK
LK12_C5			C5 ~ C10	7001A P0	210	3 days
LK12_C3			C3	7001A P5	210	3 days
LK12_N		Electroless Nickel Plating	C3 ~ C10	7001A P5	210	3 days
LK12_C5N			C5 ~ C10	7001A P0	210	3 days
LK12_C3N			C3	7001A P5	210	3 days
LK15	LK15	Black Oxide	C3 ~ C10	7002A P5	230	EX-STOCK
LK15_C5			C5 ~ C10	7002A P0	230	3 days
LK15_C3			C3	7002A P5	230	3 days
LK15_N		Electroless Nickel Plating	C3 ~ C10	7002A P5	230	3 days
LK15_C5N			C5 ~ C10	7002A P0	230	3 days
LK15_C3N			C3	7002A P5	230	3 days



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Note :
1. All types make Preload.
2. All of bearings use Japanese & Taiwanese brand bearings(Model No. in blue), Assembly by DF way. The most suitable way for ballscrew use.

Low profile Support Unit LF / LFA
(supported-side rectangular type)

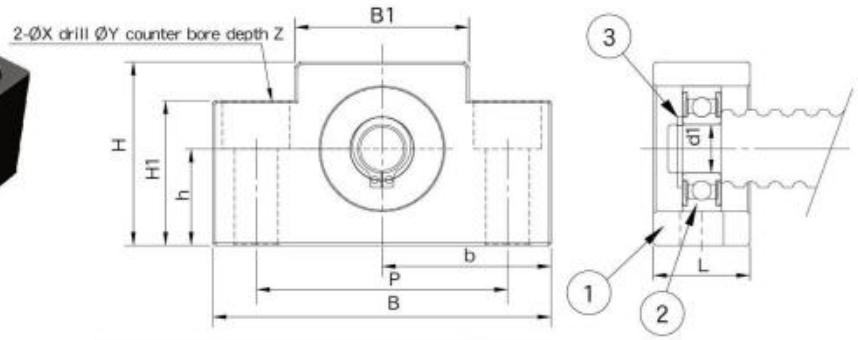
LF



LF12~LF15



LF08



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	1
4	Cushion Stopper (option)	1
5	Cushion Stopper (option)	2

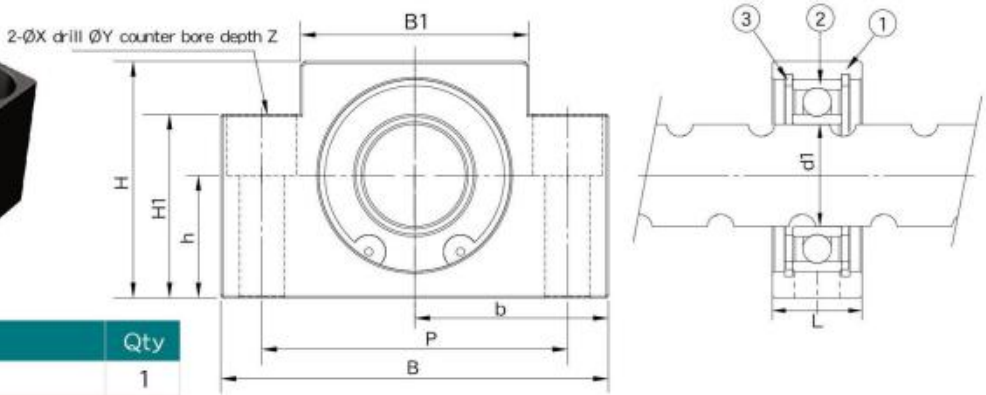
Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
LF08	6	16	62	31	31	15.5	30	25.5	46	9	14	12.5	606ZZ	S 06	0.19
LF12	10	20	70	38	35	20	36	30	52	9	14	10	6000ZZ	S 10	0.37
LF15	15	20	80	42	40	22	41	32	60	9	14	11	6002ZZ	S 15	0.35

LFA



LFA25



No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Snap ring	2
4	Cushion Stopper (option)	1

Unit : mm

Model No.	Shaft diameter d1	L	B	H	b ±0.02	h ±0.02	B1	H1	P	X	Y	Z	Bearing	Snap ring	Weight (Kgs)
LFA12	12	18	62	31	31	15.5	30	25.5	46	9	14	12.5	6801ZZ	R21	0.2
LFA15	15	18	70	38	35	20	36	30	52	9	14	10	6902ZZ	R28	0.26
LFA20	20	22	80	42	40	22	41	32	60	11	17	13	6804ZZ	R32	0.35
LFA25	25	22	95	58	47.5	30	56	45	75	11	17	15	6005ZZ	R47	0.61

Low profile Support Unit LF/LFA
(Supported-side rectangular type)

Order Coding	Model No.	Surface treatment	Applicable ballscrew accuracy grade	Bearing	Delivery date
LF08_C3	LF08	Black Oxide	C3 ~ C7	606ZZ	EX-STOCK
LF08_C3N		Electroless Nickel Plating	C3 ~ C7	606VV	3 days
LF12_C3	LF12	Black Oxide	C3 ~ C7	6000ZZ	EX-STOCK
LF12_C3N		Electroless Nickel Plating	C3 ~ C7	6000VV	EX-STOCK
LF15_C3	LF15	Black Oxide	C3 ~ C7	6002ZZ	EX-STOCK
LF15_C3N		Electroless Nickel Plating	C3 ~ C7	6002VV	3 days
LFA12_C3	LFA12	Black Oxide	C3 ~ C7	6801ZZ	EX-STOCK
LFA12_C3N		Electroless Nickel Plating	C3 ~ C7	6801ZZ	3 days
LFA15_C3	LFA15	Black Oxide	C3 ~ C7	6902ZZ	EX-STOCK
LFA15_C3N		Electroless Nickel Plating	C3 ~ C7	6902ZZ	3 days
LFA20_C3	LFA20	Black Oxide	C3 ~ C7	6804ZZ	EX-STOCK
LFA20_C3N		Electroless Nickel Plating	C3 ~ C7	6804ZZ	3 days
LFA25_C3	LFA25	Black Oxide	C3 ~ C7	6005ZZ	EX-STOCK
LFA25_C3N		Electroless Nickel Plating	C3 ~ C7	6005ZZ	3 days



Black Oxide (Application : General case)



Electroless Nickel Plating
(Application : Clean room)

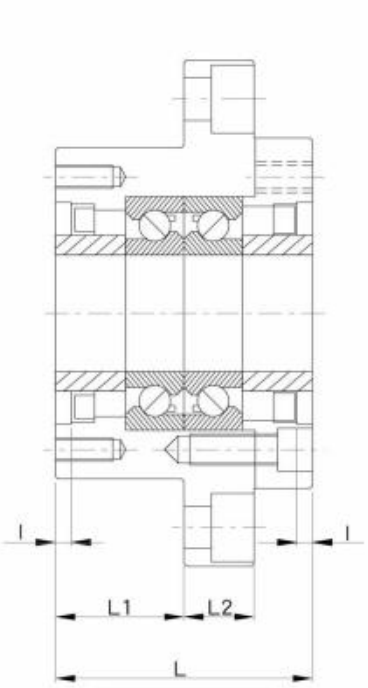
Note:
1.All of bearings use Japanese & Taiwanese brand bearings.

WBK type support Unit
(heavy-load)

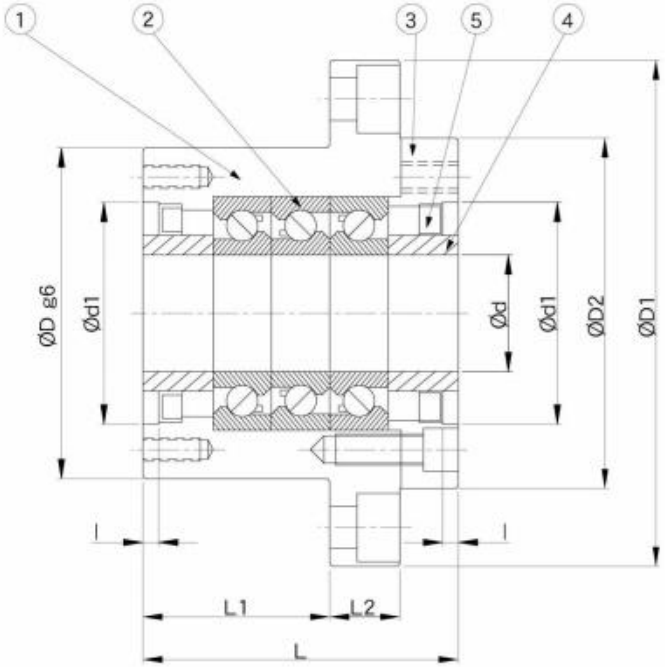
No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1 set



WBK



Assembly way DF

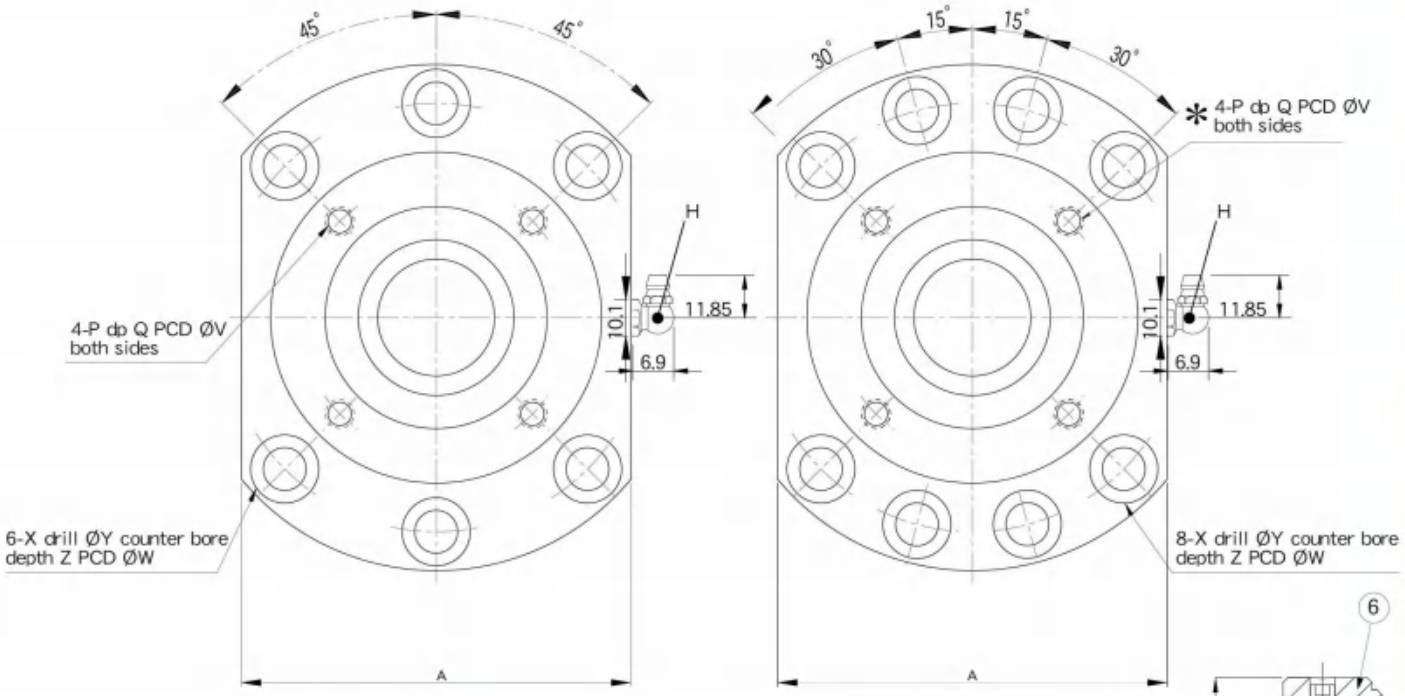


Assembly way DFD

Unit : mm

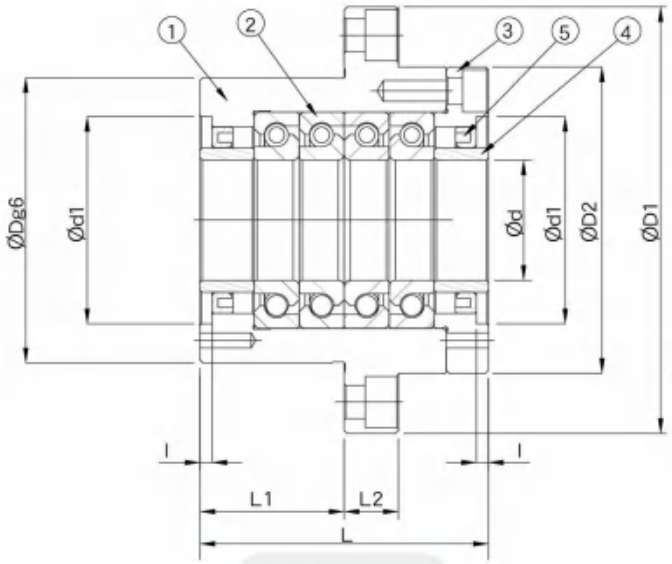
Model No.	Dimensions of support unit																	
	d	D	D1	D2	L	L1	L2	A	W	X	Y	Z	d1	I	V	P	Q	H
WBK 17DF	17	70	106	72	60	32	15	80	88	9	14	8.5	45	3	58	M5	10	M6
WBK 20DF	20	70	106	72	60	32	15	80	88	9	14	8.5	45	3	58	M5	10	M6
WBK 25DF					66	33												
WBK 25DFD	25	85	130	90	81	48	18	100	110	11	17	11	57	4	70	M6	12	M6
WBK 25DFF					96	48												
WBK 30DF					66	33												
WBK 30DFD	30	85	130	90	81	48	18	100	110	11	17	11	57	4	70	M6	12	M6
WBK 30DFF					96	48												
WBK 35DF					66	33												
WBK 35DFD	35	95	142	102	81	48	18	106	121	11	17	11	69	4	80	M6	12	M6
WBK 35DFF					96	48												
WBK 40DF					66	33												
WBK 40DFD	40	95	142	102	81	48	18	106	121	11	17	11	69	4	80	M6	12	M6
WBK 40DFF					96	48												

Note :
1.Inside bearings use Japanese & Taiwanese P4 grade TAC 60 degree contact ball bearing.
2.The standard type is without H , if required, please advise in advance.

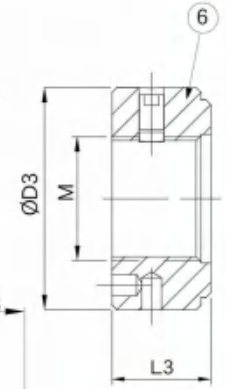


Shaft diameter Ød≦30

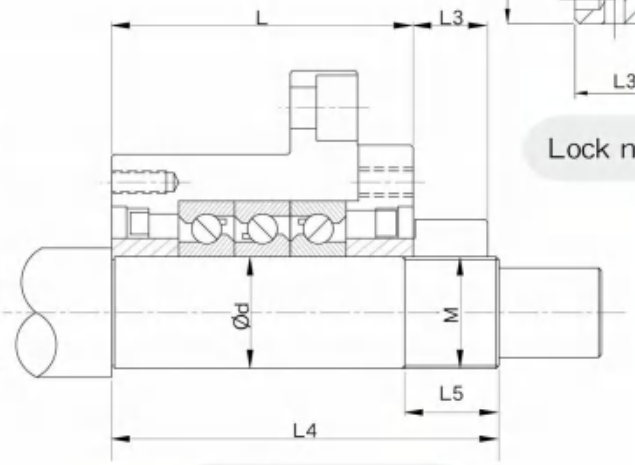
Shaft diameter Ød≧35



Assembly way DFF



Lock nut



Dimensions of shaft end

Unit : mm

Model No.	Basic dynamic load rating Ca (N)	limiting axial load (N)	preload (N)	axial rigidity (N/μm)	starting torque (N・cm)	permissible rotational speed (min⁻¹)	Lock nut			Weight (Kgs)	Dimensions of shaft end		
							M	D3	L3		d	L4	L5
WBK 17DF	21900	26600	1000	555	19	7600	M17X1	36	18	2	17 $^{-0.004}_{-0.017}$	81	23
WBK 20DF	47500	26600	1000	555	19	7600	M20X1	40	18	2	20 $^{-0.005}_{-0.020}$	81	23
WBK 25DF	28500	40500	1490	733	28					3.27		89	
WBK 25DFD	46500	81500	2030	1050	39	5800	M25X1.5	45	20	3.81	25 $^{-0.005}_{-0.020}$	104	26
WBK 25DFF	61500	122000	2980	1465	49					4.46		119	
WBK 30DF	29200	43000	1560	772	29					3.18		89	
WBK 30DFD	47500	86000	2130	1105	39	5500	M30X1.5	50	20	3.7	30 $^{-0.005}_{-0.020}$	104	26
WBK 30DFF	63000	129000	3130	1545	51					4.3		119	
WBK 35DF	31000	50000	1785	890	33					3.79		92	
WBK 35DFD	50500	100000	2430	1275	41	4600	M35X1.5	55	22	4.45	35 $^{-0.006}_{-0.025}$	107	30
WBK 35DFF	50500	100000	3570	1780	52					5.21		122	
WBK 40DF	31500	52000	1860	930	34					3.65		92	
WBK 40DFD	51500	104000	2530	1330	43	4600	M40X1.5	60	22	4.27	40 $^{-0.006}_{-0.025}$	107	30
WBK 40DFF	51500	104000	3720	1860	55					5		122	

Note :

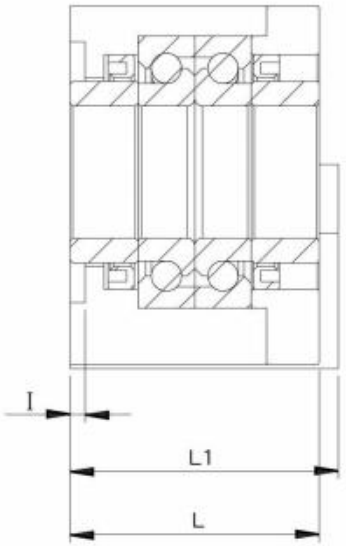
3.Dimensinons with mark can be used for dust cover and damper installation.
About Its correct position, please contact SYK.

SBK type support Unit
(heavy-load)

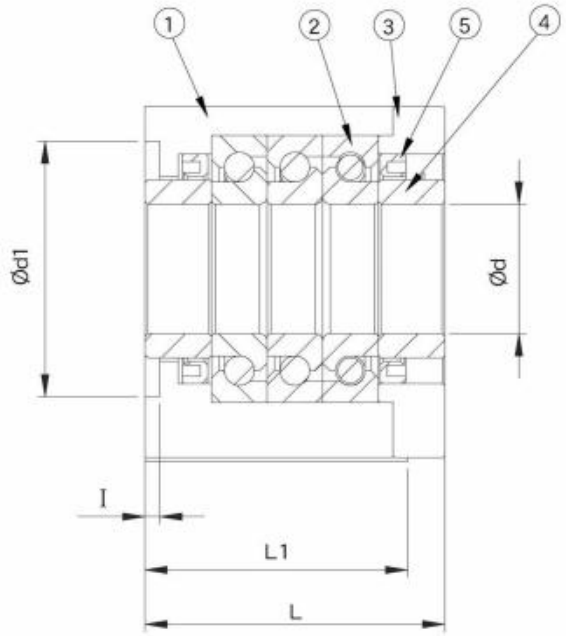
No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1 set



SBK



Assembly way DF

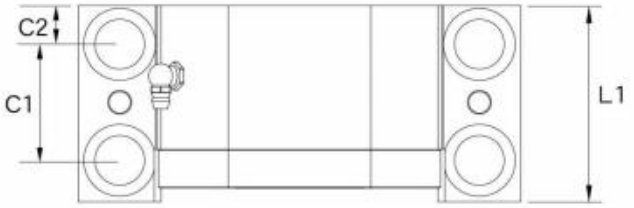


Assembly way DFD

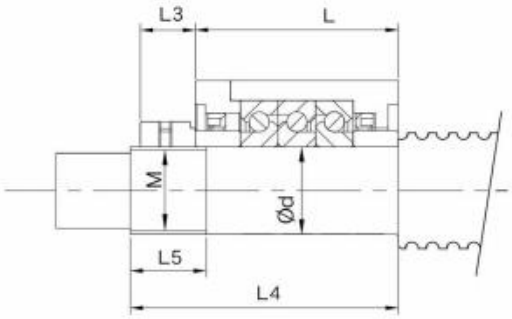
Unit : mm

Model No.	Dimensions of support unit																			Supported side
	d	A	h ±0.02	H1	L	L1	L3	B	d1	E	C2	C1	X	Y	Z	I	V	P	Q	H	
SBK 25DF	25	89	51	53	66	71	18	160	57	130	15.5	40	18	26	2	4	70	M6	10	M6	SF25
SBK 25DFD					81																
SBK 30DF	30	89	51	53	66	71	18	160	57	130	15.5	40	18	26	2	4	70	M6	10	M6	BF30
SBK 30DFD					81																
SBK 35DF	35	96	52	54	66	71	18	160	69	130	15.5	40	18	26	2	4	80	M6	10	M6	BF35
SBK 35DFD					81																
SBK 40DF	40	96	52	54	66	71	18	160	69	130	15.5	40	18	26	2	4	80	M6	10	M6	SF40
SBK 40DFD					81																

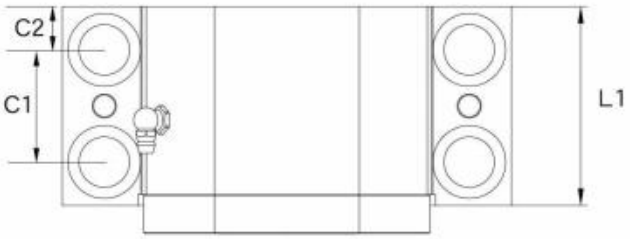
Note :
1.Inside bearings use Japanese & Taiwanese P4 grade TAC 60 degree contact ball bearing.
2. The standard type is without H , if required, please advise in advance.



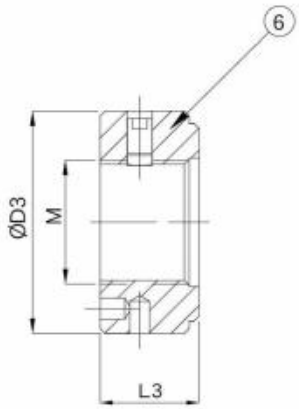
DF



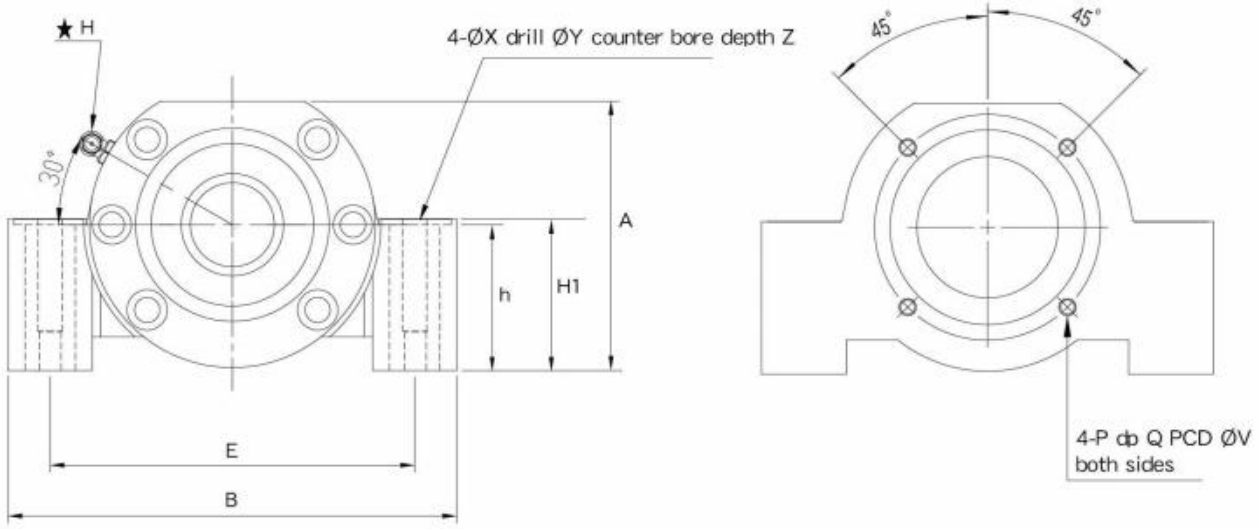
Dimensions of shaft end



DFD



Lock nut



Unit : mm

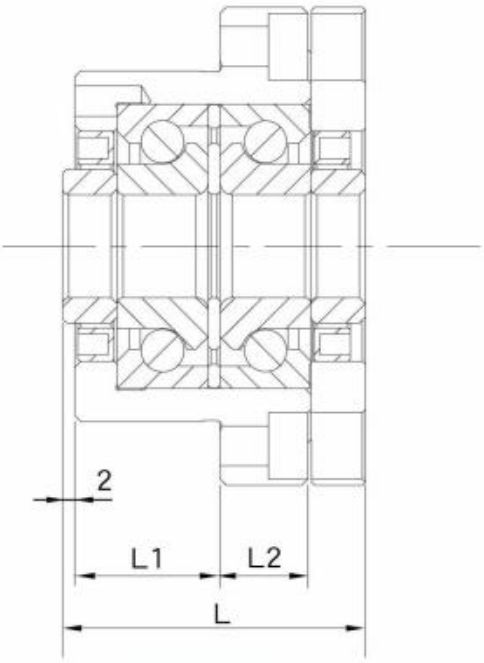
Model No.	Basic dynamic load rating Ca (N)	limiting axial load (N)	preload (N)	axial rigidity (N/μm)	starting torque (N・cm)	permissible rotational speed (min-1)	Lock nut			Weight (Kgs)	Dimensions of shaft end		
							M	D3	L3		d	L4	L5
SBK 25DF	28500	40500	1490	733	28	5800	M25X1.5	45	20	4.46	$25^{-0.005}_{-0.020}$	89	26
SBK 25DFD	46500	81500	2030	1050	39					5.25		104	
SBK 30DF	29200	43000	1560	772	29	5500	M30X1.5	50	20	4.35	$30^{-0.005}_{-0.020}$	89	26
SBK 30DFD	47500	86000	2130	1105	39					5.09		104	
SBK 35DF	31000	50000	1785	890	33	4600	M35X1.5	55	22	4.57	$35^{-0.006}_{-0.025}$	92	30
SBK 35DFD	50500	100000	2430	1275	41					5.3		107	
SBK 40DF	31500	52000	1860	930	34	4600	M40X1.5	60	22	4.6	$40^{-0.006}_{-0.025}$	92	30
SBK 40DFD	51500	104000	2530	1330	43					5.15		107	

MBK type suppory Unit
(heavy-load)

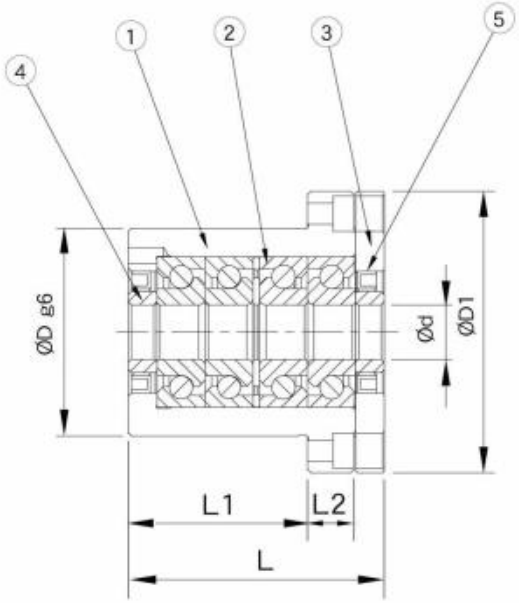
No.	Part name	Qty
1	Housing	1
2	Bearing	1 set
3	Holding lid	1
4	Collar	2
5	Seal	2
6	Lock nut	1 set



MBK



Assembly way DF

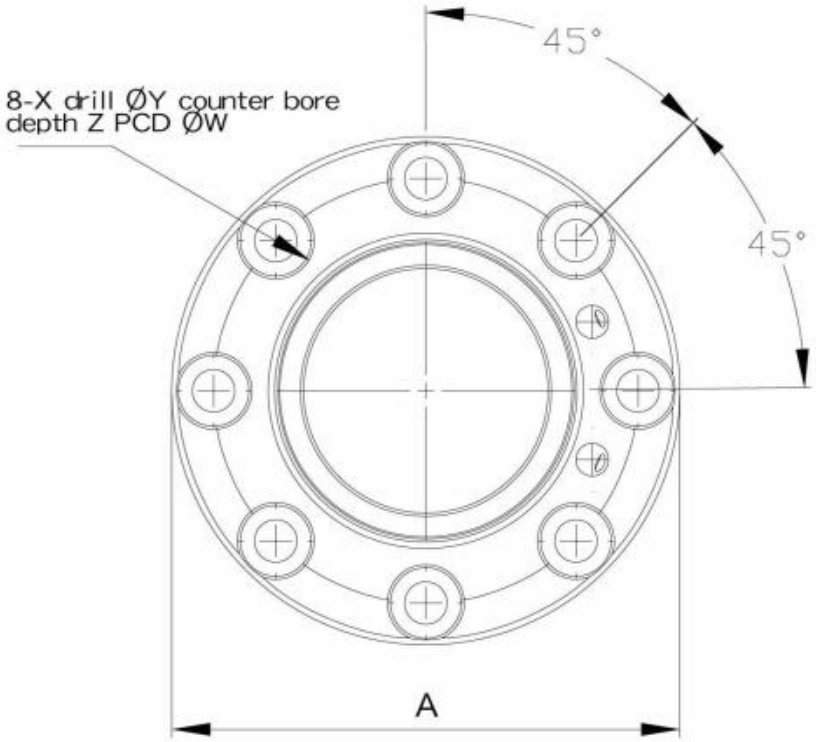


Assembly way DFF

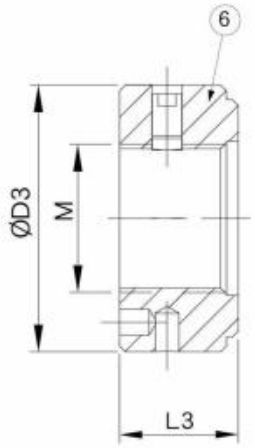
Unit : mm

Model No.	Dimensions of support unit											
	d	D	D1	L	L1	L2	A	W	X	Y	Z	H
MBK 15DF - G	15	58	79	50	24	14.5	79	66	6.6	11	7	M6
MBK 17DF - G	17	58	79	50	24	14.5	79	66	6.6	11	7	M6
MBK 17DFF - G		65	88	80	56		88	74				
MBK 20DF - G	20	58	79	50	24	14.5	79	66	6.6	11	7	M6
MBK 20DFF - G		65	88	80	56		88	74				

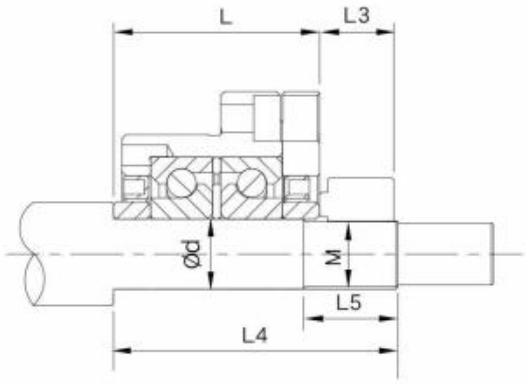
Note :
1.Inside bearings use Japanese & Taiwanese P4 grade TAC 60 degree contact ball bearing.



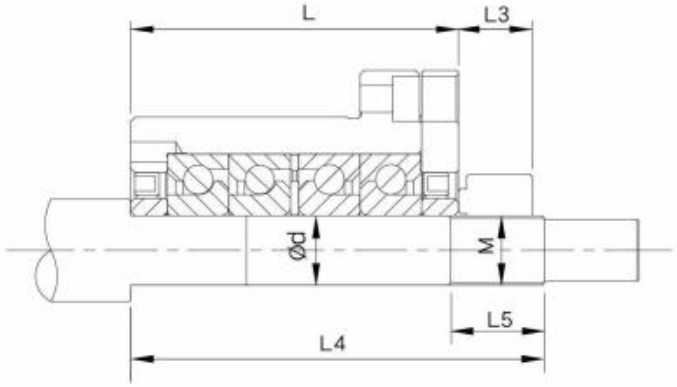
Shaft diameter Ød≦20



Lock nut



DF
Dimensions of shaft end



DFF
Dimensions of shaft end

Unit：mm

Model No.	Basic dynamic load rating Ca (N)	limiting axial load (N)	preload (N)	axial rigidity (N/μm)	starting torque (N・cm)	permissible rotational speed (min⁻¹)	Lock nut			Weight (Kgs)	Dimensions of shaft end		
							M	D3	L3		d	L4	L5
MBK 15DF	21900	26600	1000	555	19	7600	M15X1	-	-	1.44	$15^{-0.004}_{-0.017}$	69	23
MBK 17DF	21900	26600	1000	555	19	7600	M17X1	37	18	1.55	$17^{-0.004}_{-0.017}$	69	23
MBK 17DFF	47500	79500	2010	1110	32	7600				2.3		101	
MBK 20DF	21900	26600	1000	555	19	7600	M20X1	40	18	1.52	$20^{-0.005}_{-0.020}$	69	23
MBK 20DFF	47500	79500	2010	1110	32	7600				2.78		101	

Lock Nut

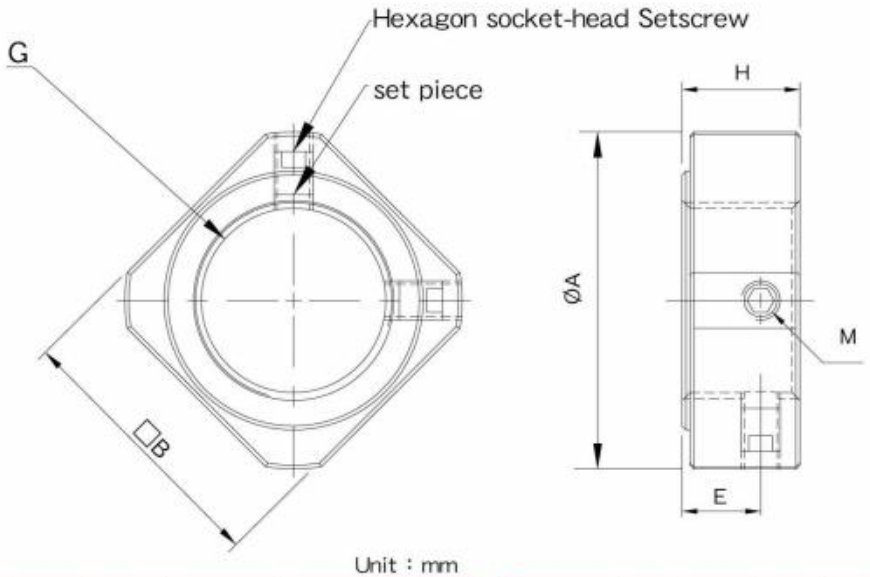






No.	Part name	Qty
1	Lock nut	1 set

Lock Nut



Unit : mm

Model No.	H	A	E	M	B	G
RN05 RN05_N	5	12.5	2.7	M3x0.5	11	M5x0.5
RN06 RN06_N	5	13.5	2.7	M3x0.5	12	M6x0.75
RN08 RN08_N	6.5	16.4	4	M3x0.5	14	M8x1.0
RN10 RN10_N	8	19	5.5	M3x0.5	16	M10x1.0
RN12 RN12_N	8	22.8	5.5	M4x0.7	19	M12x1.0
RN15 RN15_N	8	25.8	4.75	M4x0.7	22	M15x1.0

Unit : mm

Model No.	H	A	E	M	B	G
RN17 RN17_N	13	29	9	M4	24	M17x1.0
RN20 RN20_N	11	35	7	M4	30	M20x1.0
RN25 RN25_N	15	43	10	M6	35	M25x1.5
RN30 RN30_N	20	48	14	M6	40	M30x1.5
RN35 RN35_N	21	60	14	M6	50	M35x1.5
RN40 RN40_N	25	62	18	M6	50	M40x1.5

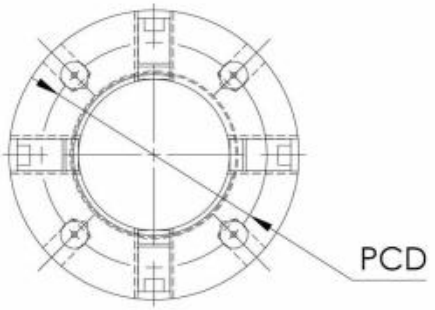
Lock Nut (Heavy-load)

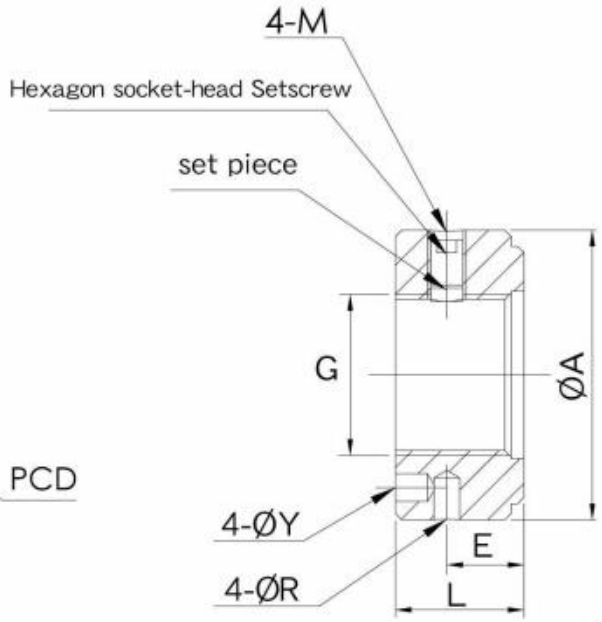




No.	Part name	Qty
1	Lock nut	1 set

Lock Nut (Heavy-load)







SPANNER

Unit : mm

Model No.	L	E	A	M	Y	R	PCD	G	SPANNER
RN17W RN17W_N	18	10	36	M6	4.3	4	27	M17x1.0	ZL017
RN20W RN20W_N	18	10	40	M6	4.3	4	30	M20x1.0	ZL020
RN25W RN25W_N	20	11	45	M6	4.3	5	35	M25x1.5	ZL025
RN30W RN30W_N	20	11	50	M6	4.3	5	40	M30x1.5	ZL025
RN35W RN35W_N	22	12	55	M6	4.3	5	45	M35x1.5	ZL035
RN40W RN40W_N	22	12	60	M6	4.3	5	50	M40x1.5	ZL040

Lock Nut

Order Coding	Model No.	Surface treatment	MAX.Torque (kgf-cm)	Setscrew MAX.Torque (kgf-cm)
RN05	M5*PO.5	Black Oxide	15	6(M3)
RN05_N		Electroless Nickel Plating		
RN06	M6*PO.75	Black Oxide	20	6(M3)
RN06_N		Electroless Nickel Plating		
RN08	M8*P1.0	Black Oxide	25	6(M3)
RN08_N		Electroless Nickel Plating		
RN10	M10*P1.0	Black Oxide	30	6(M3)
RN10_N		Electroless Nickel Plating		
RN12	M12*P1.0	Black Oxide	65	15(M4)
RN12_N		Electroless Nickel Plating		
RN15	M15*P1.0	Black Oxide	80	15(M4)
RN15_N		Electroless Nickel Plating		
RN17	M17*P1.0	Black Oxide	95	15(M4)
RN17_N		Electroless Nickel Plating		
RN17W	M17*P1.0 (Heavy-load)	Black Oxide	420	50(M6)
RN17W_N		Electroless Nickel Plating		
RN20	M20*P1.0	Black Oxide	170	15(M4)
RN20_N		Electroless Nickel Plating		
RN20W	M20*P1.0 (Heavy-load)	Black Oxide	460	50(M6)
RN20W_N		Electroless Nickel Plating		
RN25	M25*P1.5	Black Oxide	210	50(M6)
RN25_N		Electroless Nickel Plating		
RN25W	M25*P1.5 (Heavy-load)	Black Oxide	870	50(M6)
RN25W_N		Electroless Nickel Plating		
RN30	M30*P1.5	Black Oxide	320	50(M6)
RN30_N		Electroless Nickel Plating		
RN30W	M30*P1.5 (Heavy-load)	Black Oxide	1050	50(M6)
RN30W_N		Electroless Nickel Plating		
RN35	M35*P1.5	Black Oxide	480	50(M6)
RN35_N		Electroless Nickel Plating		
RN35W	M35*P1.5 (Heavy-load)	Black Oxide	1450	50(M6)
RN35W_N		Electroless Nickel Plating		
RN40	M40*P1.5	Black Oxide	720	50(M6)
RN40_N		Electroless Nickel Plating		
RN40W	M40*P1.5 (Heavy-load)	Black Oxide	1600	50(M6)
RN40W_N		Electroless Nickel Plating		



Black Oxide
(Application : General case)



Electroless Nickel Plating
(Application : Clean room)

Heavy-load



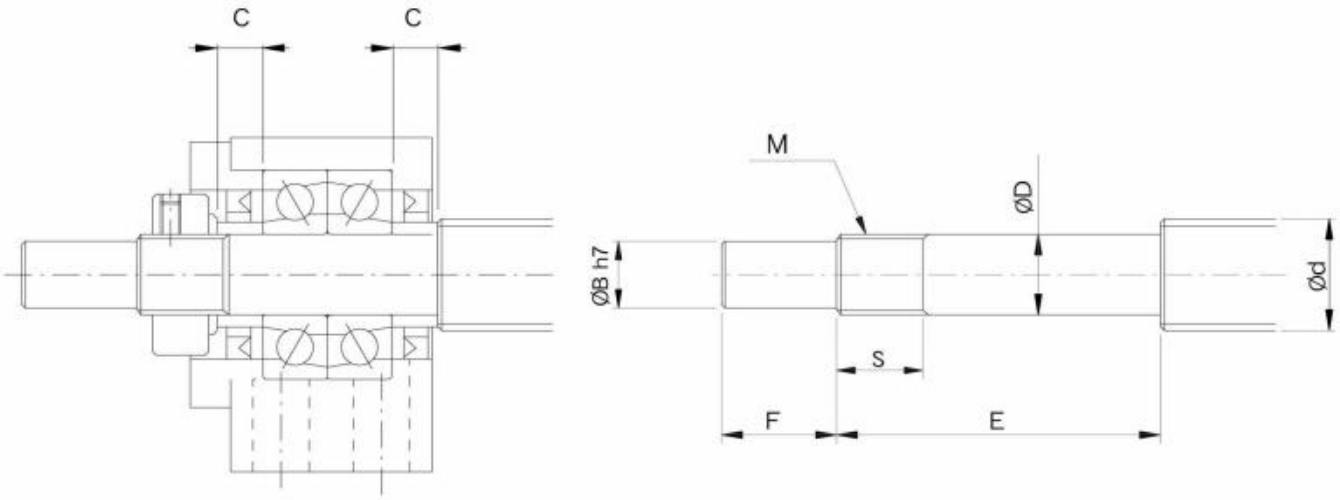
Black Oxide
(Application : General case)

Heavy-load



Electroless Nickel Plating
(Application : Clean room)

Recommended shaft end shape (Fixed-side) for Support Units types BK

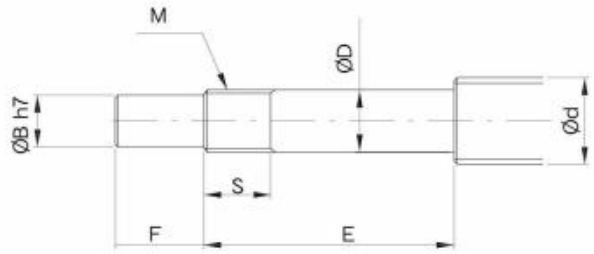


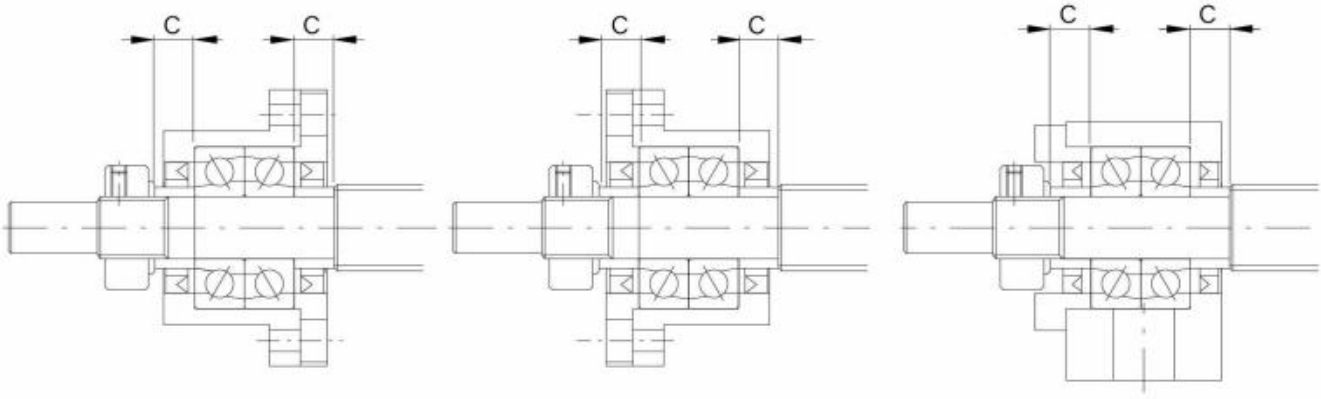
Type BK

Unit : mm

Support unit model No.	Ballscrew shaft OD	Shaft support portion OD					Metric screw thread		Length of Sleeve
Type BK	d	D		B	E	F	M	S	C
BK10	12/14/15	10	-0.008 -0.015	8	36	15	M10×1	12	5.5
BK12	14/15/16	12	-0.008 -0.017	10	36	15	M12×1	12	5.5
BK15	18/20	15	-0.008 -0.017	12	40	20	M15×1	12	6
BK17	20/25	17	-0.008 -0.017	15	53	23	M17×1	17	7
BK20	25/28	20	-0.010 -0.020	17	53	25	M20×1	15	8
BK25	32/36	25	-0.010 -0.020	20	66	30	M25×1.5	20	9
BK30	36/40	30	-0.010 -0.020	25	73	38	M30×1.5	25	9
BK35	45	35	-0.012 -0.025	30	82	45	M35×1.5	26	12
BK40	50	40	-0.012 -0.025	35	94	50	M40×1.5	30	15

Recommended shaft end shape (Fixed-side) for Support Units types FK,FKA,EK,AK,LK



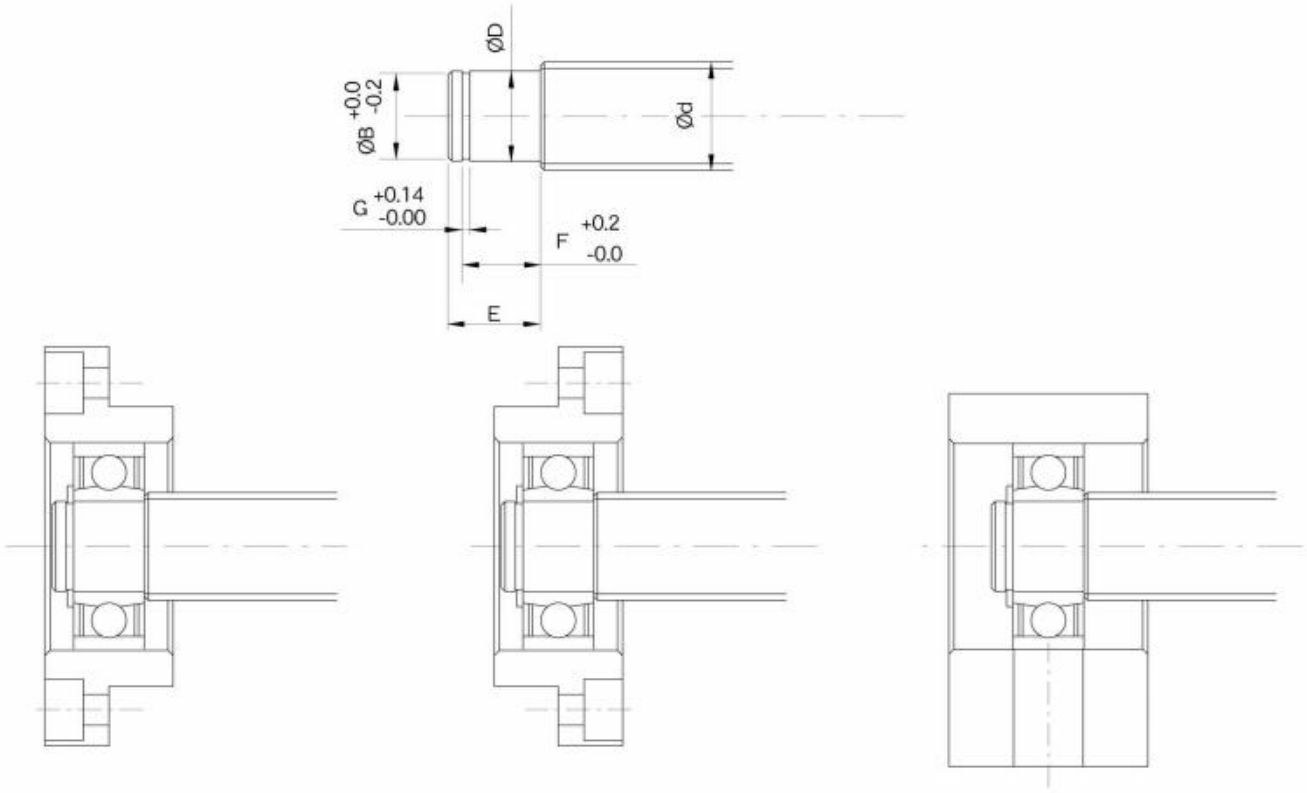


Type FK,FKA　　Type FK,FKA　　Type EK,AK,LK

Unit : mm

Support unit model No.				Ballscrew shaft OD	Shaft support portion OD					Metric screw thread		Length of Sleeve
Type FK,FKA	Type EK	Type AK	Type LK	d	D		B	E	F	M	S	C
FK05	EK05	-	-	8	5	-0.008 -0.015	4	23	6	M5x0.5	7	3.5
FK06 FKA06	EK06	-	-	8	6	-0.008 -0.015	4	28	8	M6x0.75	8	5
FK08 FKA08	EK08	-	LK08	10/12	8	-0.008 -0.015	6	32	9	M8x1	10	5.5
FK10 FKA10	EK10	AK10	LK10	12/14/15	10	-0.008 -0.015	8	36	15	M10x1	12	5.5
FK12 FKA12	EK12	AK12	LK12	14/15/16	12	-0.008 -0.017	10	36	15	M12x1	12	5.5
FK15 FKA15	EK15	AK15	LK15	18/20	15	-0.008 -0.017	12	48	20	M15x1	13	10
FKA15H												6
FK17	-	-	-	20/25	17	-0.008 -0.017	15	59	23	M17x1	17	10
FK20 FKA20	EK20	AK20	-	25/28/30	20	-0.010 -0.020	17	64	25	M20x1	16	11
FKA20L								53			15	8
FK25	-	AK25	-	30/32/36	25	-0.010 -0.020	20	76	30	M25x1.5	20	14
FK30	-	-	-	36/40	30	-0.010 -0.020	25	73	38	M30x1.5	25	9

Recommended shaft end shape (Supported-side) for Support Units types FF,EF,BF,AF,LF



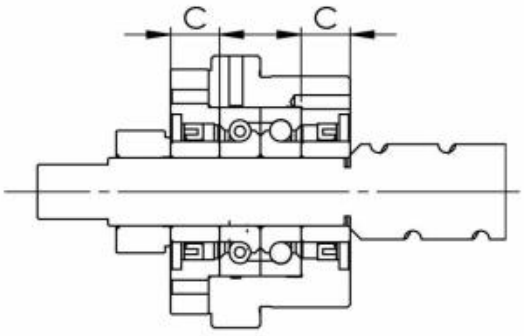
Type FF　　Type FF　　Type EF,BF,AF,LF,HF

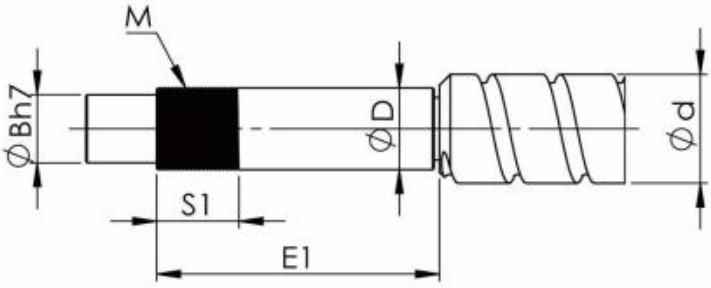
Unit : mm

Support unit model No.					Ballscrew shaft OD	Shaft support portion OD					
Type FF	Type EF	Type BF	Type AF	Type LF	d	D		E	B	F	G
FF06	EF06	-	-	-	8	6	-0.008 -0.015	9	5.7	6.8	0.8
-	EF08	-	-	LF08	10	6	-0.008 -0.015	9	5.7	6.8	0.8
FF10	EF10	BF10	AF10	-	12/14/15	8	-0.008 -0.015	10	7.6	7.9	0.9
FF12	EF12	BF12	AF12	LF12	14/15/16	10	-0.008 -0.015	11	9.6	9.15	1.15
FF15	EF15	BF15	AF15	LF15	18/20	15	-0.008 -0.017	13	14.3	10.15	1.15
FF17	-	BF17	-	-	20/25	17	-0.008 -0.017	16	16.2	13.15	1.15
-	-	BF20	-	-	25/28/30	20	-0.010 -0.020	16	19	13.35	1.35
FF20	EF20	-	AF20	-				19		15.35	
FF25	-	BF25	AF25	-	30/32/36	25	-0.010 -0.020	20	23.9	16.35	1.35
FF30	-	BF30	-	-	36/40	30	-0.010 -0.020	21	28.6	17.75	1.75
-	-	BF35	-	-	40/45	35	-0.012 -0.025	22	33	18.75	1.75
-	-	BF40	-	-	50	40	-0.012 -0.025	23	38	19.95	1.95

Note : Shaft end machining of SF, HF same as BF.

Recommended shaft end shape (Heavy-load)





Unit : mm

model No.	Ballscrew shaft OD	Shaft support portion OD			Metric screw thread		Length of Sleeve
WBK17 DF	20/25	17 -0.004 -0.017	15	81	M17x1	23	15
WBK20 DF	25/28	20 -0.005 -0.020	17		M20x1		
WBK25 DF	32/36	25 -0.005 -0.020	20	89	M25x1.5	26	18
WBK25 DFD				104			
WBK25 DFF				119			
WBK30 DF	36/40	30 -0.005 -0.020	25	89	M30x1.5	26	18
WBK30 DFD				104			
WBK30 DFF				119			
WBK35 DF	45	35 -0.006 -0.025	30	92	M35x1.5	30	18
WBK35 DFD				107			
WBK35 DFF				122			
WBK40 DF	50	40 -0.006 -0.025	35	92	M40x1.5	30	18
WBK40 DFD				107			
WBK40 DFF				122			
MBK15 DF	18/20	15 -0.004 -0.017	12	69	M15x1	23	9
MBK17 DF	20/25	17 -0.004 -0.017	15		M17x1		
MBK17 DFF				101			
MBK20 DF	25/28	20 -0.005 -0.020	17	69	M20x1	23	9
MBK20 DFF				101			
SBK25 DF	32/36	25 -0.005 -0.020	20	89	M25x1.5	26	18
SBK25 DFD				104			
SBK30 DF	36/40	30 -0.005 -0.020	25	89	M30x1.5	26	18
SBK30 DFD				104			
SBK35 DF	45	35 -0.006 -0.025	30	92	M35x1.5	30	18
SBK35 DFD				107			
SBK40 DF	50	40 -0.006 -0.025	35	92	M40x1.5	30	18
SBK40 DFD				107			

Ballscrew support unit equivalent interchangeable for major manufacturer

SYK & T*K
BK10
BK12
BK15
BK17
BK20
BK25
BK30
BK35
BK40

SYK&THK	KURODA	NSK	MISUMI
EK05	-	-	-
EK06	BUK-6	WBK06-01A	BSW06
EK08	BUK-8F	WBK08-01A	BSW08
EK10	-	-	-
EK12	-	-	-
EK15	-	-	-
EK20	-	-	-

SYK&THK	KURODA	NSK	MISUMI
FK05	-	-	-
FK06	-	WBK06-11	BRW06
FK08	BUM-8	WBK08-11	BRW08
FK10	BUM-10	WBK10-11	BRW10
FK12	BUM-12	WBK12-11	BRW12
FK15	BUM-15	WBK15-11	BRW15
FK17	-	-	-
FK20	BUM-20	WBK20-11	BRW20
FK25	BUM-25	WBK25-11	BRW25
FK30	-	-	-

BF10
BF12
BF15
BF17
BF20
BF25
BF30
BF35
BF40

EF06	-	-	BUN06
EF08	BUK-6S	WBK08S-01	BUN08
EF10	-	-	BUN10
EF12	-	-	BUN12
EF15	-	-	-
EF20	-	-	BUN20

FF06	-	-	BUR06
FF10	-	-	BUR10
FF12	-	-	BUR12
FF15	-	-	BUR15
FF17	-	-	-
FF20	-	-	BUR20
FF25	-	-	BUR25
FF30	-	-	-

SYK	KURODA	NSK	MISUMI
AK10	BUK-10F	WBK10-01A	BSW10
AK12	BUK-12F	WBK12-01A	BSW12
AK15	BUK-15F	WBK15-01A	BSW15
BK17	-	WBK17-01A	-
AK20	BUK-20F	WBK20-01	BSW20
AK25	BUK-25F	WBK25-01	BSW25

AF10	BUK-8S	WBK10S-01	-
AF12	BUK-10S	WBK12S-01	-
AF15	BUK-15S	WBK15S-01	-
BF17	-	WBK17S-01	-
AF20	BUK-20S	WBK20S-01	-
AF25	BUK-25S	WBK25S-01	BUN25

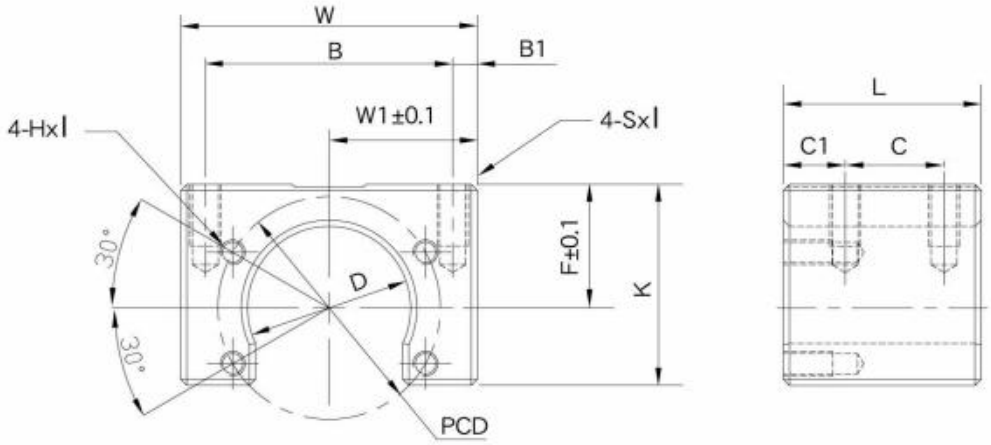
SYK	NSK
WBK 17DF	WBK 17DF-31
WBK 20DF	WBK 20DF-31
WBK 25DF	WBK 25DF-31
WBK 25DFD	WBK 25DFD-31
WBK 30DF	WBK 30DF-31
WBK 30DFD	WBK 30DFD-31
WBK 35DF	WBK 35DF-31
WBK 35DFD	WBK 35DFD-31
WBK 40DF	WBK 40DF-31
WBK 40DFD	WBK 40DFD-31

SYK	NSK	PMI
LK08	WBK08-01B	-
LK10	WBK10-01B	-
LK12	WBK12-01B	PBKN12
LK15	WBK15-01B	PBKN15
AK20	WBK20-01	PBKN20
LF08	WBK08S-01B	-
LF12	WBK12S-01B	-
LF15	WBK15S-01B	-
LFA12	WBK12SF-01	PBFN12
LFA15	WBK15SF-01	PBFN15
LFA20	WBK20SF-01	PBFN20
LFA25	WBK25SF-01	PBFN25

Nut Bracket MC



MC



Unit : mm

Model No.	Width W	W1	B	B1	Overall Length L	C	C1	F	K	D	PCD	Sxl	Hxl	Far factory automation equipment Supported Ball Screw models	Weight (Kgs)
MC 1004	48	24	40	4	32	16	10	20	32.5	26.4	36	M5×10	M4×7	BNK1004、BNK1005	0.24
MC 1205	60	30	47	6.5	36	24	6	21	37	30.4	40	M6×12	M4×7	BNK1205	0.38
MC 1408	60	30	50	5	36	20	10	21.5	37	34.4	45	M6×12	M5×8	BNK1408、BNK1510 BNK1520、BNK1616	0.34
MC 2010	86	43	70	8	50	30	10	31	54	46.4	59	M10×20	M6×10	BNK2010	1.04
MC 2020	86	43	70	8	40	24	8	28	51	39.4	59	M10×20	M6×10	BNK2020	0.83

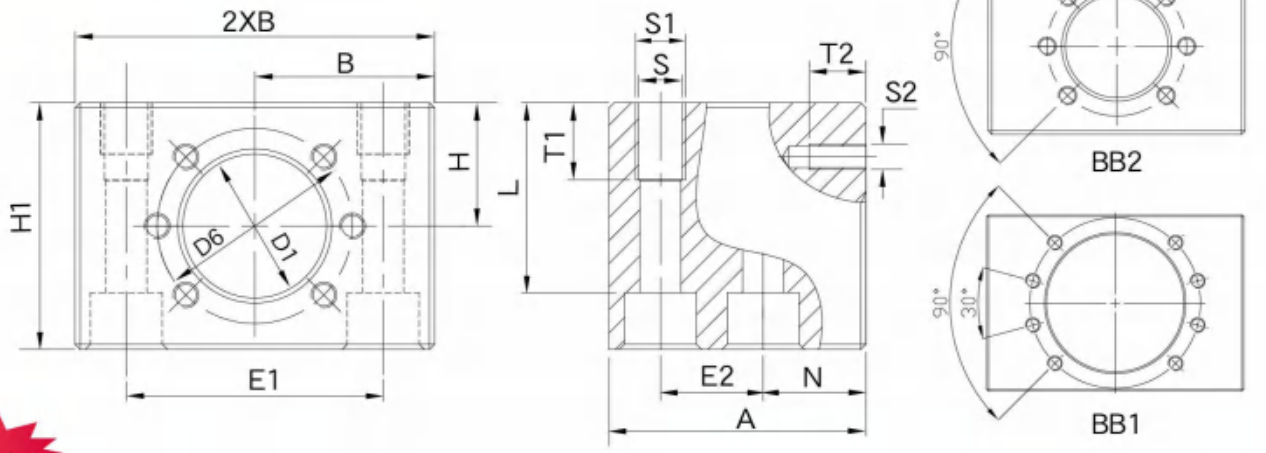
Application table of MC Nut bracket for ballscrew manufacturer.

Model NO.	Ballscrew manufacturer					
	THK	NSK	HIWIN	PMI	COMTOP	GTEN
MC 1004	BNK1004,BNK1005	W1004 FA,	R1004FSW	FSIW1404,FSIC1403 FSIC1404,FSIC1405		FSI1404,FSI1405
MC1205	BNK1205 BNK1205	W1205 FA,W1210 FA	R1205FSW,R1210FSW	FSWW1204 ,FSWC1204/05 FSWC1210,PTR1205/10/20	XSVR1210	FSC1210
MC 1408	BNK1408,BNK1510 BNK1520,BNK1616	W1405 FA,W1408 FA W1510 FA,W1520 FA W1616 FA,W1632 FA	R1405FSW,R1408FSW FSW1510,R1510DFSH R1520DFSH,R1520FSH,R1632DFSH	FSIC2005/06,FSWC1405 FSWC1510,FSKC1520 PTR1505/10/20	SFI 1610,SFI 2004 SFI 2005 XSVR1510,XSVR1520	FSI1610,FSI2005 FSC1520
MC 2010	BNK2010	W2010 FA,W2020 FA	R2010FSW,R2020FSW	FSWC2010,PTR2010	XSVR2010,XSVR2020	FSC2010
MC 2020	BNK2020		R 2020DFSH			

Nut Bracket MGD



MGD



New Product

Unit : mm

Model No.	Size	d_0xP	Part number	D1±0.1	D6	A	B±0.1	H±0.1	H1	E1	E2	N	S	S1	T1	S2	T2		ISO4762	L	Weight (Kgs)
MGD 16L	16×5 16×16	16×10	1506-0-0050	28.4	38	36	28	20	39	46±0.1	20±0.1	8	-	M6	12	M5	10	BB2	-	-	-
MGD 16						50	35	24	48	50±0.1		20	8.4	M10	15				M8	37	0.91
MGD 20L	20×5	20×20	1506-1-0050	36.4	47	55	37.5	23	48	55±0.1	23±0.1	22	-	M8	14	M6	11	BB2	-	-	-
MGD 20								28	54				8.4	M10	15				M8	45	1.18
MGD 25	25×5 25×25	25×10	1506-2-0050	40.4	51	55	40	30	58	60±0.1	23±0.1	22	8.4	M10	15	M6	11	BB2	M8	49	1.33
MGD 32S	32×5 32×20	32×10 32×32	1506-3-0050	50.4	65	70	45	35	68	70±0.1	45±0.1	12.5	-	M12	20	M8	14	BB2	-	-	2.5
MGD 32							50			75±0.1	30±0.1	27	13	M16					M12	52	2.77
MGD 40	40×5 40×12 40×20	40×10 40×16 40×40	1506-4-0050	63.4	78	80	60	42	84	90±0.1	35±0.1	31	15	M18	25	M8	17	BB1	M14	66	3.61

Application table of MGD Nut bracket for ballscrew manufacturer.

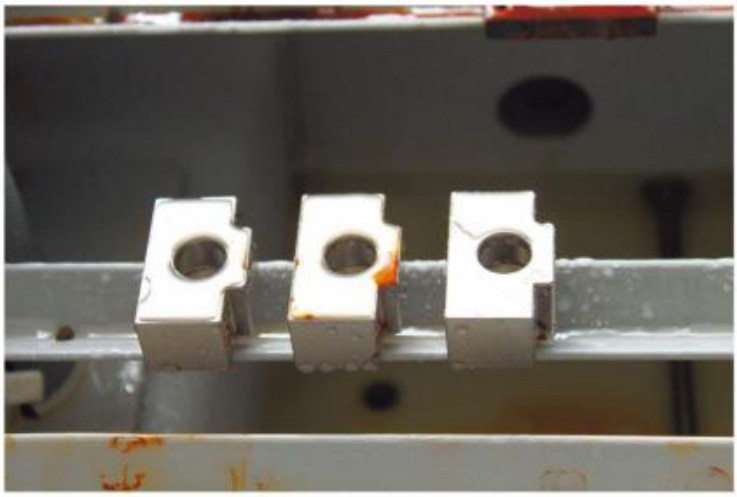
Model No.	Ballscrew manufacturer				
	STAR	HIWIN	PMI	COMTOP	GTEN
MGD 16	1502,1512-0-****	FSI-16-05	FSIN-16-05	SFU 1605	FSU 1605
MGD 20	1502,1512-1-****	FSI-20-05	FSIN-20-05	SFU 2005	FSU 2005
MGD 25	1502,1512-2-****	FSI-25-05	FSIN-25-05	SFU 2505	FSU 2505
		FSI-25-10	FSIN-25-10	SFU 2510	FSU 2510
MGD 32	1502,1512-3-****	FSI-32-05	FSIN-32-05	SFU 3205	FSU 3205
		FSI-32-10	FSIN-32-10	SFU 3210	FSU 3210
MGD 40	1502,1512-4-****	FSI-40-05	FSIN-40-05	SFU 4005	FSU 4005
		FSI-40-10	FSIN-40-10	SFU 4010	FSU 4010

Salt Spray Test (72 Hours)



Objective

Detection of nickel-plating surface of support unit the ability of anti-salt spray corrosion.



Manual

Salt spray test is a major use of salt spray test equipment created by the artificial analog to assess environmental conditions, salt spray product or metallic materials resistant to corrosion environmental tests.

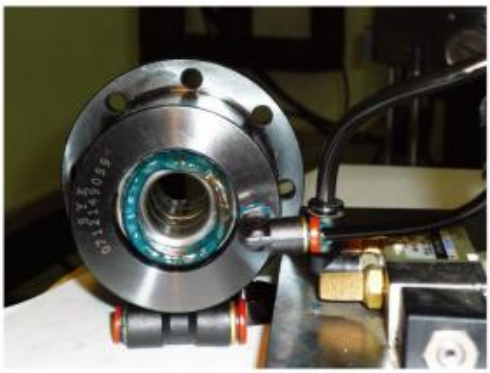
Artificial analogy environmental test using a certain volume of space,test equipment-salt spray test box. By artificial way to evaluation the product quality and corrosion resistance to salt spray environment.

Exposure in a natural environment, a product sample under test,until their corrosion may take a year, while in the artificial environment, under the conditions of salt spray test analog, as long as 24 hours, you can get similar results.

Patent Product: Support Unit
(Type of Dropping Oil from Center)



Before dropping oil



After dropping oil

1. Quick Infiltration

The Support Unit is with the structure of dropping oil from center.
Because of the special structure, adding lubricating oil becomes easier.
Infiltrate quickly.

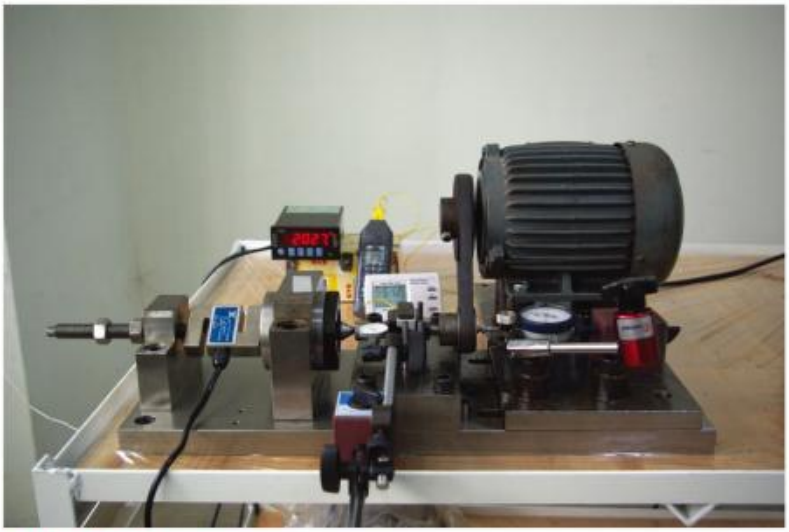
2. It's Easy to Changing Old Lubricating Oil

Lubricating oil is easy to be infiltrated to each bearing. Besides that,
you can just push the old lubricating oil from the inside part of each bearing,
then you can easy to change old lubricating oil periodically.

3. Increasing Lubrication and Decreasing Friction

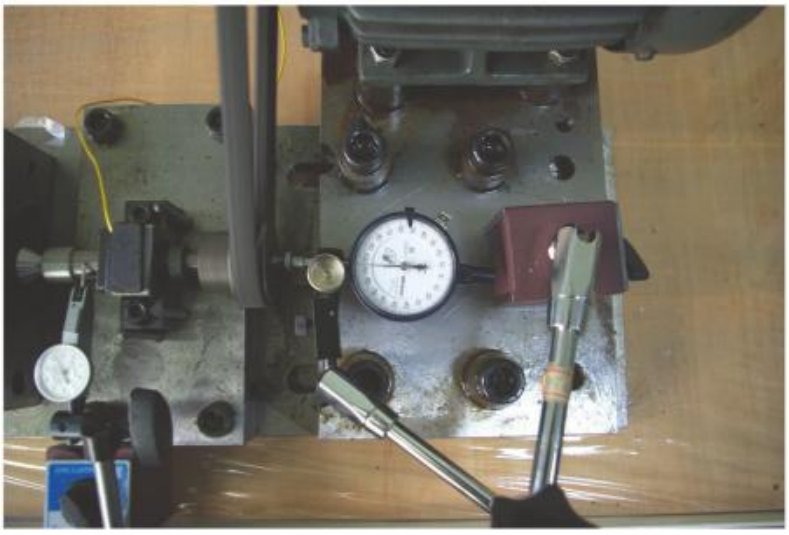
Because of quick infiltration and easy changing old lubricating oil periodically,
it can prevent the increase in frictional temperature and the decrease in friction
of bearing. It is very convenient and useful.

Bearings Life Testing



Objective

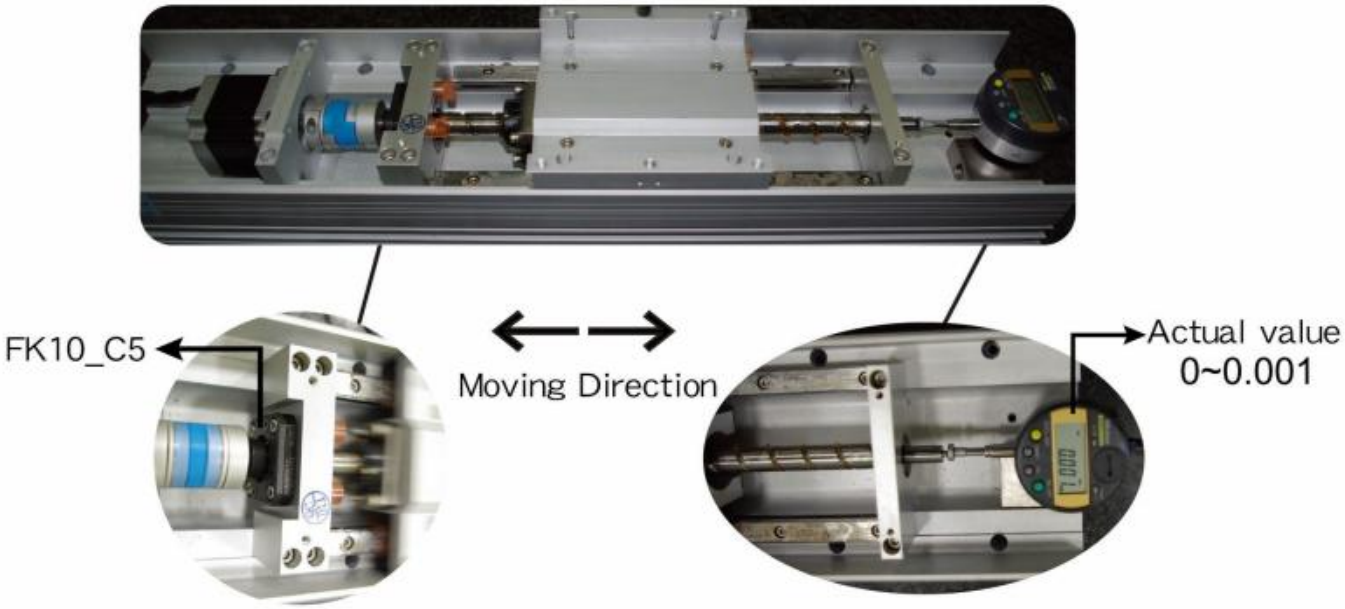
To get results of bearings
life for various brands .



Note

It needs a long time to get the results in normal condition. This test adopted to force maximum axial load on bearings for various brands to get the results in short time , Accordingly, this variation in life is considered statistically ,and calculated life test results.

Axial positioning repeatability test

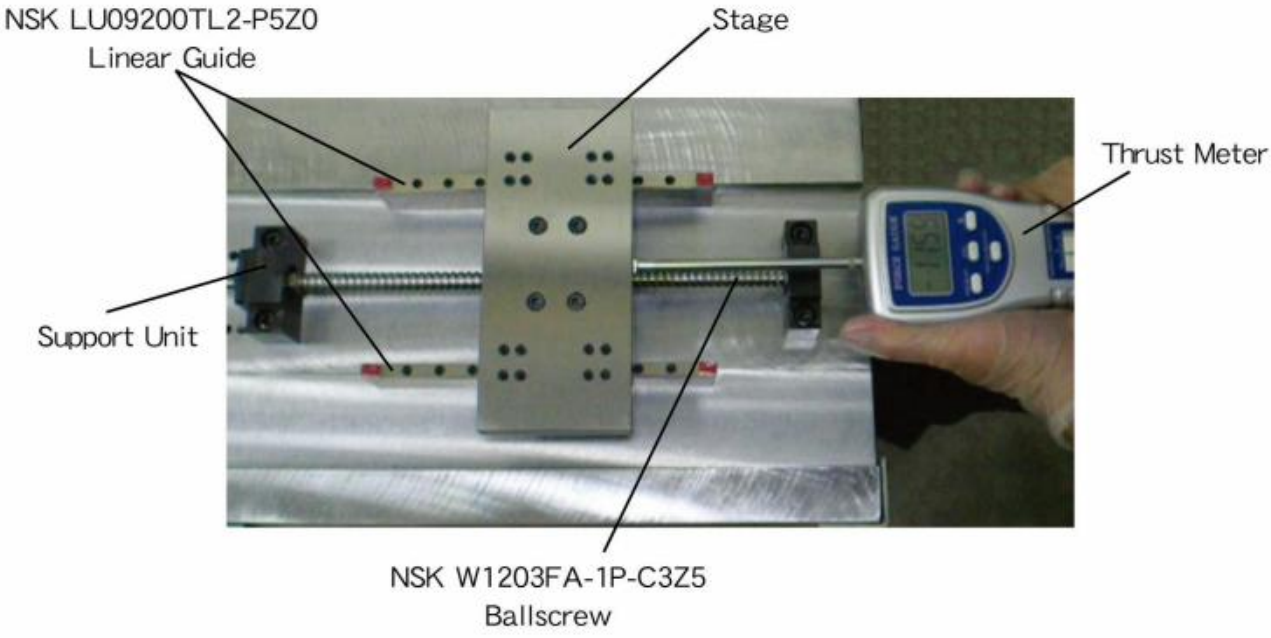


Axial positioning repatability illustration

Manual

The C5 grade support unit use precision angular contact ball bearings and with axial preload. It is not only can enhance the rigidity for the system, but also can have better positioning repeatability and positioning accuracy for machinery.It is indispensable for high accuracy equipment or machinery.

Thrust Testing



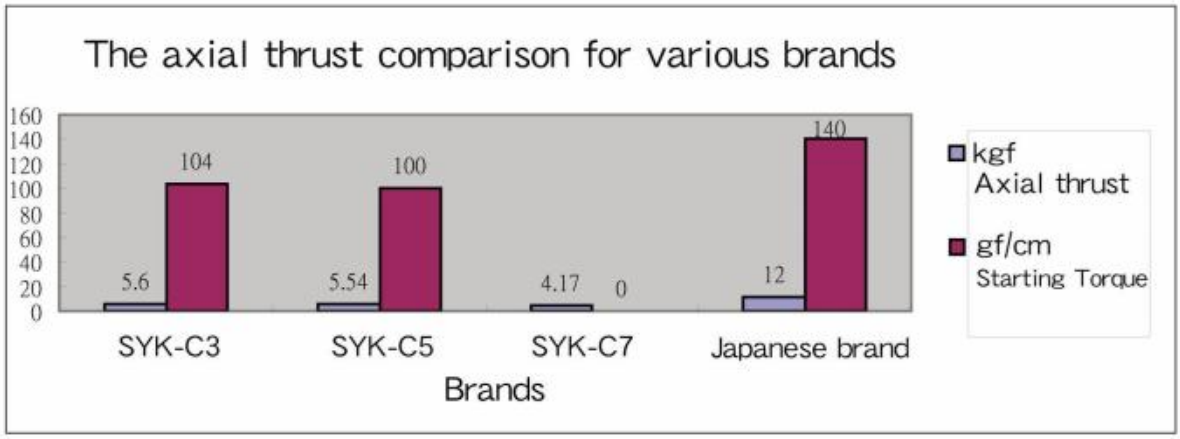
Objective

In order to obtain optimal bearings starting torque, It is very important to control fixed-side support unit in appropriate preload. Under identical motor running condition , It will get optimal starting torque value .. Following are results .

Note

There are axial clearance and weakness rigidity problem for bearings without or insufficient preload.

Too great a preload on bearings can lead to overheating , and increase staring torque of the bearing. Therefore , It lead to reduce out efficiency for motor operation. It also causes increasing bearing temperature and reducing Bearing life.





Assembly room



Manufacturing site





Warehouse
Area 800m²


2011/02/15 13:31


VAST


MARPOSS
MARPOSS


ZEISS
VAST





Our measure equipment





ZEISS

CMM, ZEISS, Germany

TRIMOS

2D Measuring machine ,
TRIMOS,Switzerland





Laser carving manufacturing series number on products.It can be traceable quality of products.





SYK follow the Spirit of ISO 9001
Insist On Quality & Keep Improving

Customer First · Ensure Quality





Pursue Excellence · Persistent Management

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Edition# NOV 2018