

A. Technical section

1. Nomenclature

1.1 Bearing model code ----- A01

1.2 Housing model code ----- A01

1.3 Ball bearing unit model code ----- A01

2. Tolerances

2.1 Tolerances of bearings ----- A02

2.2 Radial internal clearance ----- A02

2.3 Tolerances of housings ----- A03

3. Materials

3.1 Bearing materials ----- A04

3.2 Housing materials ----- A04

3.3 Grease materials ----- A04

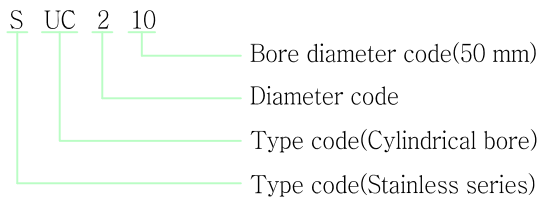
4. Product overview ----- A05

1. Nomenclature

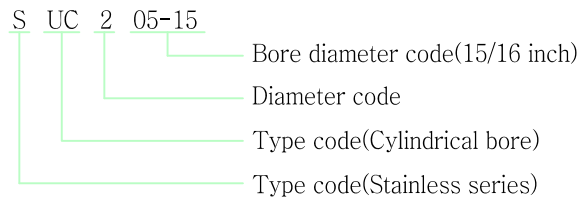
1.1 Bearing model code

The bearing model code describes the bearing type and basic dimensions, it is written in the order of the type code, the diameter code and the bore diameter code.

Ex.1)



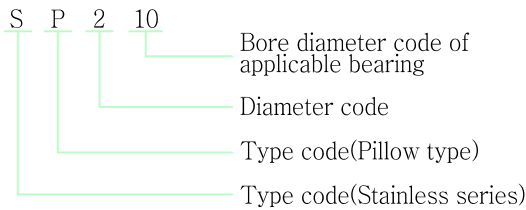
Ex.2)



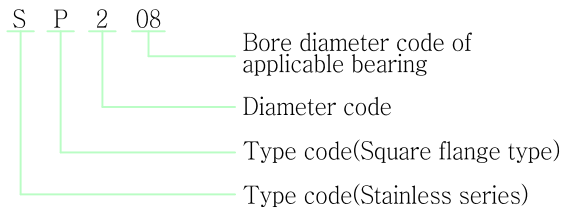
1.2 Housing model code

The housing code is written in the order of the housing type code, the diameter code and bore diameter code of the applicable bearing.

Ex.1)



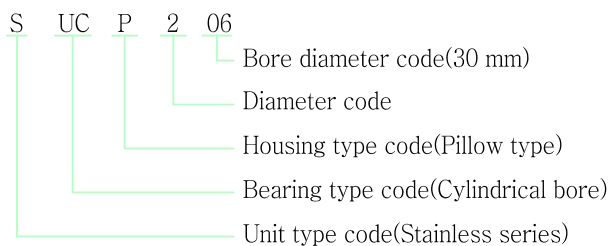
Ex.2)



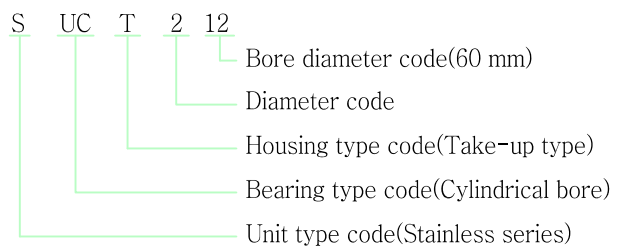
1.3 Ball bearing unit model code

The ball bearing unit model code comprises the bearing model code and the housing model code.

Ex.1)



Ex.2)



[Example of ball bearing unit code]

Type		Model code			Type code		Diameter code	Bore diameter code	Shaft diameter (mm)	Fixing to shaft
		Unit	Bearing	Housing	Bearing	Housing				
Pillow	(P)	SUCP205	SUC205	SP205	SUC	SP	2	05	25	Set screws
Square flange	(F)	SUCF208	SUC208	SF208	SUC	SF	2	08	40	Set screws
Oval flange	(FL)	SUCFL204	SUC204	SFL204	SUC	SFL	2	04	20	Set screws
Take-up	(T)	SUCT212	SUC212	ST212	SUC	ST	2	12	60	Set screws

2. Tolerances

2.1 Tolerances of bearings

(Unit : 0.001mm)

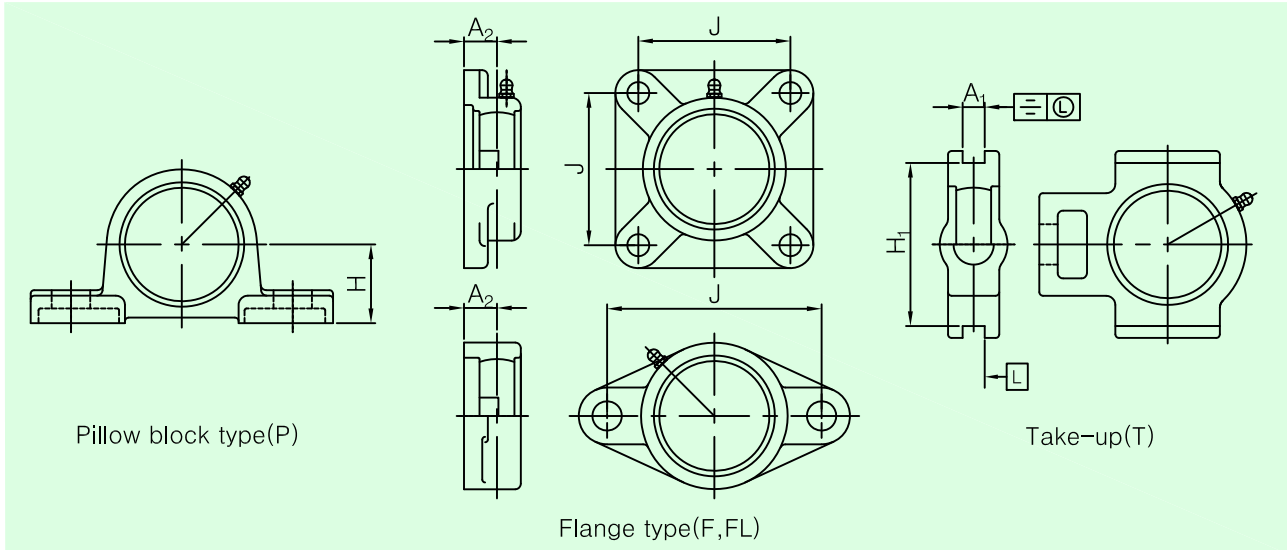
Inner ring								Outer ring				
Nominal bore diameter, ϕd (mm)		Single plane mean bore diameter deviation (Δdmp)		Single radial plane bore diameter variation (Vdp)	Single inner ring width deviation (ΔBs)		Radial runout of assembled bearing inner ring (Kia)	Nominal bore diameter, ϕD (mm)		Single plane means outer diameter deviation (ΔDmp)		Radial runout of assembled bearing outer ring (Kea)
over	incl.	high	low	max	high	low	max	over	incl.	high	low	max
-	10	+15	0	10	0	-120	10	30	50	0	-11	20
10	18	+15	0	10	0	-120	15	50	80	0	-13	25
18	31.75	+18	0	12	0	-120	18	80	120	0	-15	35
31.75	50.80	+21	0	14	0	-120	20					
50.80	80	+24	0	16	0	-150	25					

2.2 Radial internal clearance

(Unit : 0.001mm)

Nominal bore diameter, ϕd (mm)		Internal clearance									
		C2		CN(normal)		C3		C4		C5	
over	incl.	min	max	min	max	min	max	min	max	min	max
10	18	0	9	3	18	11	25	18	33	25	45
18	24	0	10	5	20	13	28	20	36	28	48
24	30	1	11	5	20	13	28	23	41	30	53
30	40	1	11	6	20	15	33	28	46	40	64
40	50	1	11	6	23	18	36	30	51	45	73
50	65	1	15	8	28	23	43	38	61	55	90

2.3 Tolerances of housings

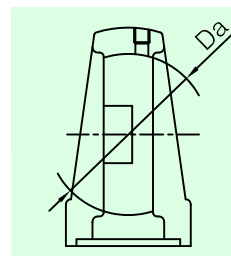


(Unit : 0.001mm)

Housing code	Pillow block type (P)	Flange type (F, FL)		Take-up type (T)		
	H	A ₂	J	A ₁	H ₁	Parallelism of guide rail (Max)
204	±150	±500	±700	+200 0	0 -500	500
205						
206						
207						
208						
209						
210						
211	±200	±800	±1000	+300 0	0 -800	600
212						

[Tolerance classes of spherical bore diameter of housings]
(Unit : 0.001mm)

Nominal spherical bore diameter, Da(mm)		H7		J7		K7	
over	incl.	high	low	high	low	high	low
30	50	+25	0	+14	-11	+7	-18
50	80	+30	0	+18	-12	+9	-21
80	120	+35	0	+22	-13	+10	-25
120	180	+40	0	+26	-14	+12	-28
180	250	+46	0	+30	-16	+13	-33
250	315	+52	0	+36	-16	+16	-36



Remark :

$\Delta Damp$ is calculated by the equation where,
 $\Delta Damp = (Da_{max} + Da_{min}) / 2$
 Da_{max} and Da_{min} are maximum and minimum measurements of Da .

3. Materials

3.1 Bearing materials

Component		Material	Type code	Standard code
Bearing	Inner ring, outer ring	Stainless steel	STS440C	KS D 3706
	Ball(rolling element)	Stainless steel	STS440C	KS D 3692
	Slinger	Stainless steel	STS304	KS D 3706
	Cage	Stainless steel	STS304	KS D 3706
	Seal(standard type)	Nitrile rubber	NBR	–
	Seal(EN1,EN2,EN2-C type)	Fluorocarbon rubber	FKM	–
	Set screw	Stainless steel	STS304	KS D 3692

3.2 Housing materials

Component		Material	Type code	Standard code
Housing	Housing	Stainless cast steel	SSC13	–
	Grease nipple	Stainless steel	STS304	KS D 3692

3.3 Grease materials

Product name	Thickner	Base oil	Dropping point(°C)	Feature
Multis EP2–Total (Standard type)	Lithium	Mineral oil	–20~130	All–purpose grease
Super lube–Synco (EN1,EN2 type)	Teflon	PAO (Poly Alpha Olefine)	–30~232	High temperature grease
Carbaflo–Fuchs (EN2–C type)	Lithium	–	–35~280	High temperature grease

4. Product overview



Bearing material : Stainless(KS-ST5440C)
 Housing material : Stainless(KS-SSC13)

Unit

Stainless series
 Pillow block type

SUCP 2 - B01

- Mounting with SUC bearing
- Multidirectional installation
- High load capacity



Stainless series
 Square flange type

SUCF 2 - B02

- Mounting with SUC bearing
- Installation on the side surface of machine



Stainless series
Oval flange type

SUCFL 2 – B03

- Mounting with SUC bearing
- Installation on the side surface of machine



Stainless series
Take-up type

SUCT 2 – B04

- Mounting with SUC bearing
- Suitable for machine needed tension adjustment



Bearing

Stainless series
Set screw type

SUC 2 – B05

- Cylindrical bore bearing
- Sealing method : LS type
- Same dynamic/static load carryin capacity with UC
- Available to resupply grease
- Identical dimensions with UC

