

(5) Fracture prevention for tapped areas

For bolt mounting method units, sufficient mounting strength is needed to prevent possible creep fracture in the clearance space between the shaft and the inner race. Bolt type and locking torque are shown in Table 13.1 for reference. Additionally a part of bearings go through special heat treatment to prevent a crack by the extreme working condition in JIB.

(6) High accuracy ball bearing unit

The quality of the surface finish or surface roughness of the inner and outer race typically represents the overall quality and the ultimate capability of the bearing. The surface finish for JIB bearings are specially produced by an advanced technique developed by JIB for producing excellent quality surfaces. The surface finish of other bearing parts are equivalent to standard ball bearings to guarantee stability and accuracy in high rotation speed.

(7) Abundant styles for all situations and conditions

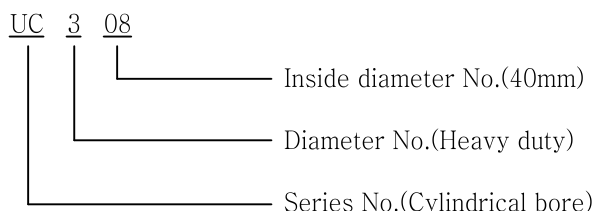
JIB has been producing abundant variety of bearing styles for all types of situations and conditions. Each bearing unit is designed and produced with the long time experience and skills of the company combined with the many special requests and feedbacks provided by our customers. JIB has strived to improve the overall performance of application machines by providing the best possible ball bearing units for each and every operating condition and situations.

2. BALL BEARING UNIT'S BEARING AND HOUSING NO.

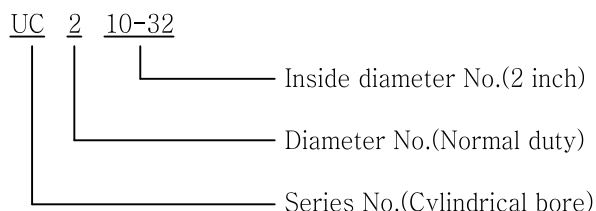
2.1 Bearing No.

Bearing No. describes the bearing's style and basic dimensions. The part number is written in the order of style No., diameter No. and inside diameter No.

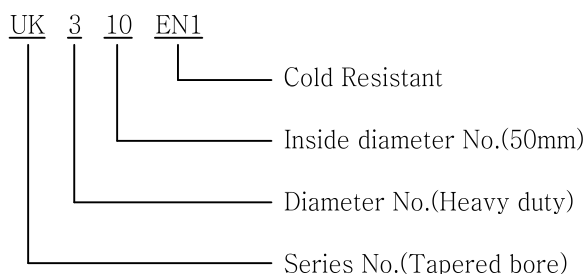
EXAMPLE 1)



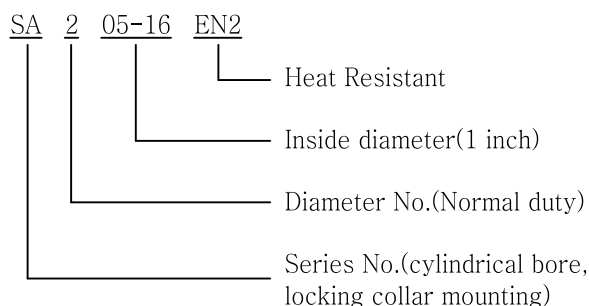
EXAMPLE 2)



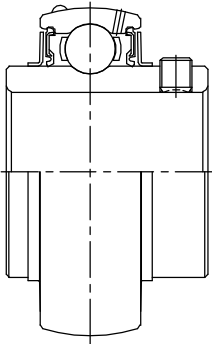
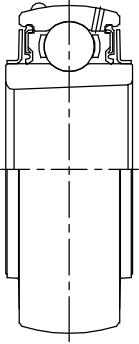
EXAMPLE 3)



EXAMPLE 4)



<TABLE 2.1> KS standard sizes

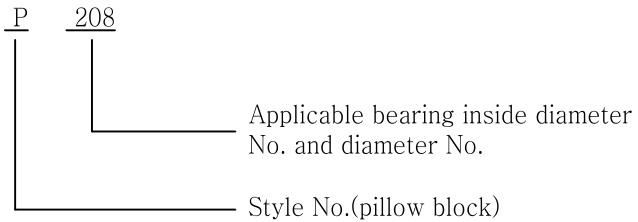
Bearing Type	Bearing diameter No.	Bearing inside diameter No.			
		in mm		in inch	
		inside diameter No.	Inside diameter	inside diameter No.	Inside diameter
 <p>UC Cylindrical bore</p>	2 (normal duty)	01	12	01- 8	1/2
		02	15	02-10	5/8
		03	17		
		04	20	04-12	3/4
		05	25	05-14	7/8
				05-16	1
		06	30	06-18	1 1/8
		07	35	07-20	1 1/4
				07-22	1 3/8
		08	40	08-24	1 1/2
 <p>UK Tapered bore</p>	X (medium duty)	09	45	09-26	1 5/8
				09-28	1 3/4
		10	50	10-32	2
		11	55	11-32	2
		12	60	12-36	2 1/4
				12-39	2 7/16
		13	65	13-40	2 1/2
		14	70	14-44	2 3/4
		15	75	15-48	3
		16	80		
	3 (heavy duty)	17	85	17-52	3 1/4
		18	90	18-56	3 1/2
		19	95	19-60	3 3/4
		20	100	20-64	4
		21	105		
		22	110		
		24	120		
		26	130	26-82	5 1/8
		28	140	28-88	5 1/2

Remark : Products with size in inches follow the JIB standards.

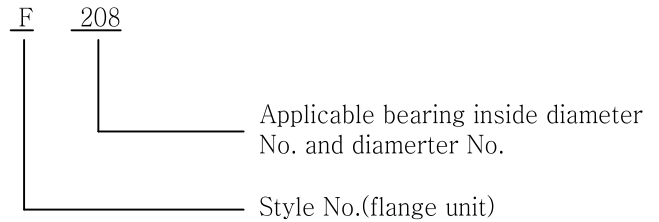
2.2 Housing style and housing No.

The housing style can be determined from Table 2.2 below. Housing No. represents in order, the housing style No., the applicable bearing inside diameter No. and the diameter No.

EXAMPLE 1)



EXAMPLE 2)



<TABLE 2.2> Housing styles

 <p>Pillow block</p> <p>P</p>	 <p>Square flange unit</p> <p>F</p>	 <p>Round piloted flange unit</p> <p>FC</p>	 <p>Round piloted flange unit</p> <p>FCC</p>
 <p>Square piloted flange unit</p> <p>FS</p>	 <p>Oval flange unit</p> <p>FL</p>	 <p>Take-up unit</p> <p>T</p>	 <p>Cartridge unit</p> <p>C</p>
 <p>High center of axis pillow block</p> <p>PH</p>	 <p>Narrow base pillow block</p> <p>PA</p>	 <p>Adjustable angle flange unit</p> <p>FA</p>	 <p>One side bracket flange unit</p> <p>FB</p>
 <p>Hanger unit</p> <p>HA</p>	 <p>Light weight pillow block</p> <p>LP</p>	 <p>Light weight oval flange unit</p> <p>LF</p>	 <p>Pressed steel pillow block</p> <p>PP</p>
 <p>Pressed steel flange unit</p> <p>PF</p>	 <p>Pressed steel oval flange unit</p> <p>PFL</p>	 <p>Silver Series_Pillow block</p> <p>UP</p>	 <p>Silver Series_Oval flange unit</p> <p>UFL</p>

<TABLE 2.3> Unit to. examples

Style	Part No.			Style No.		Ceuter No.	Inside diameter No.	Shaft diameter (mm)	Shaft mounting method
	Unit	Bearing	Housing	Bearing	Housing				
Pillow block(P)	UCP 205	UC 205	P 205	UC	P	2	05	25	Wrench bolt
	UKP 206	UK 206	P 206	UK	P	2	06	30	Adapter, Eccentric self-locking collar
	HCP 208	HC 208	P 208	HC	P	2	08	40	
Flange unit(F)	UCF 308	UC 308	F 308	UC	F	3	08	40	Wrench bolt
Round piloted flange unit(FC)	UCFC 210	UC 210	FC 210	UC	FC	2	10	50	Wrench bolt
Square piloted flang unit(FS)	UCFSX 05	UCX 05	FSX 05	UC	FS	X	05	25	Wrench bolt
Oval flange unit(FL)	SAFL 204	SA 204	FL 204	SA	FL	2	04	20	Eccentric self-locking collar
Take-up unit(T)	UCT 212	UC 212	T 212	UC	T	2	12	60	Wrench bolt
	UKT 310	UK 310	T 310	UK	T	3	10	50	Adapter
Cartridge unit(C)	UCC 215	UC 215	C 215	UC	C	2	15	75	Wrench bolt

Remark : The style discrimination is based on KS B2050(rolling bearing unit bearing housing) standards.

3. Special purpose ball bearing units

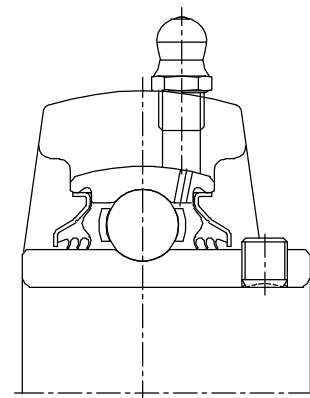
3.1 Blower unit(classification J5)

Ball bearing units for use in high speed blowers must not generate large amounts of heat, vibration or noise at high rotation speeds. Therefore, unit ball bearings for blowers must be of a high accuracy and low noise design.

Unit ball bearings for blowers(classification J5) are standardized by JIB. The best technology and designs are used by JIB in producing the bearing units for blowers. Therefore, the bearings made for blower use are the best products made by JIB with the highest quality in surface roughness, orbital shape and bearing rotation accuracy.

3.2 Triple structure seal

Triple structure seal unit is composed of a special lubricant seal structure made of synthetic rubber which is attached to a stamped steel shield. The combined piece is then attached to the outer race of the bearing. The specially designed triple lip system can effectively prevent dust and moisture from entering the bearing and therefore extend the life of the bearing. The mechanical assembly and handling of the triple structure seal unit is equivalent to the regular bearing since the seal and the bearing form a one piece structure. This triple structure seal is a new method that can be operated safely for extended periods in comparison with the double protection method seal because it does not have the locking side pressure of the double protection method.



[FIGURE 3.1] Triple structure seal unit(L3)

3.3 Unit for anti-oxidation and anti-corrosion

This unit is suitable for anti-oxidation and anti-corrosion by coating the standard bearing with Alkali black layer and also, the bearing life is lengthen. UC, SA and SB bearings are generally applied, and other bearings are applied on demand. (On demand product)



[FIGURE 3.2] Unit for anti-oxidation and anti-corrosion