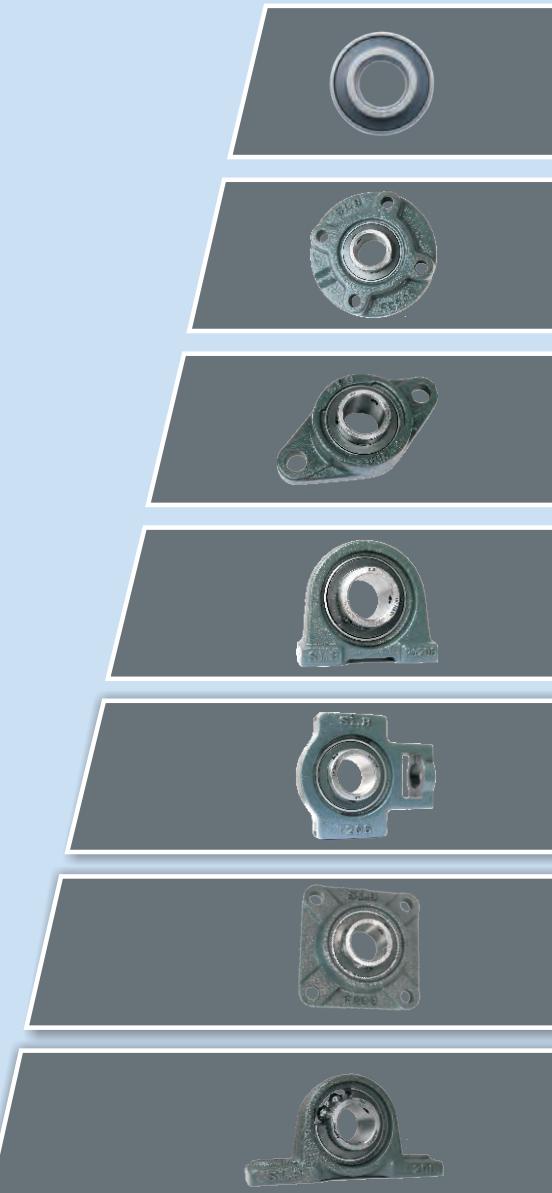




CATALOGUE FOR SUPREME MOUNTED UNITS

SUPREME MOUNTED UNITS



SUPREME MOUNTED UNITS

SLB[®]





This **SLB** catalogue has been completely revised and contains considerable alterations and supplementary information compared to previous catalogue.

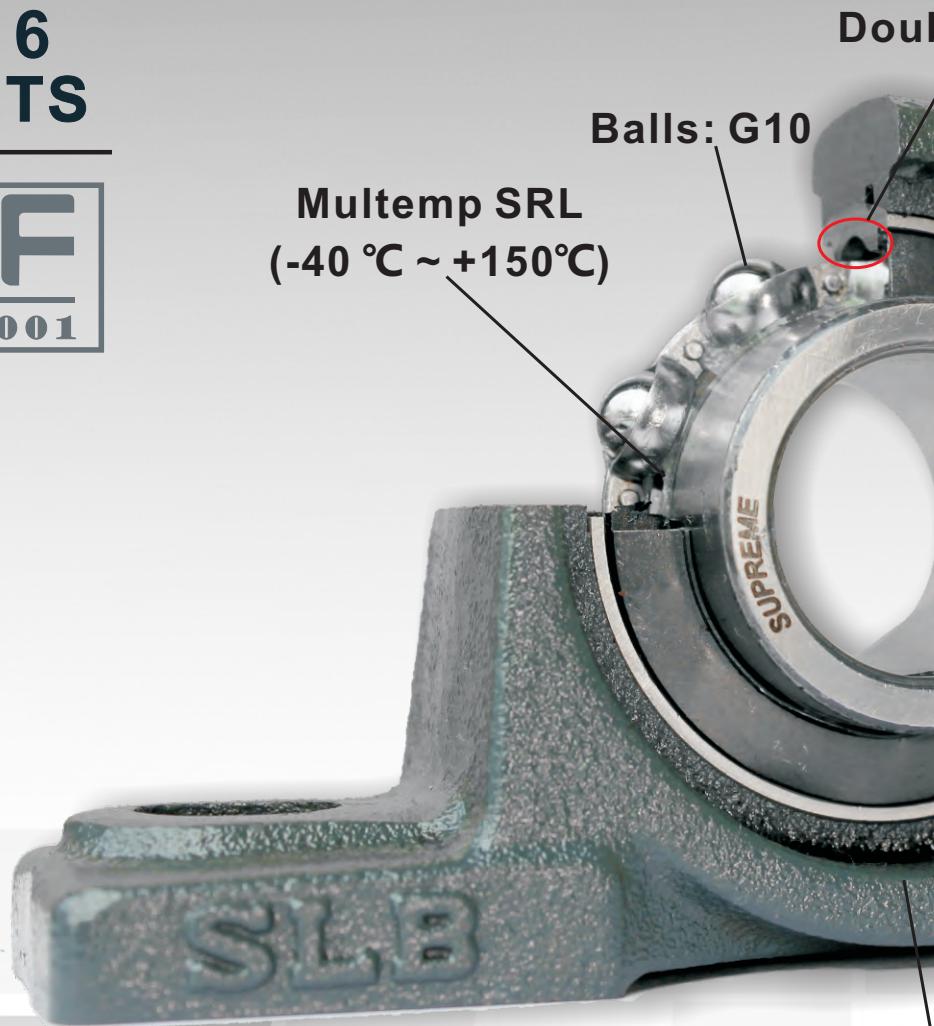
Products that are not shown may be available, but this should be checked in each case.

The **SLB** data in this catalogue are based on current production, in accordance with ISO standard (International Organization for Standardization) ■





SUPREME 2016 MOUNTED UNITS



Material:
8 * 1 CNC
Powder P



ble Lips



Gray Iron
C Machines
Painting (Anti-corrosion 450 Hours)



17 in SLB®

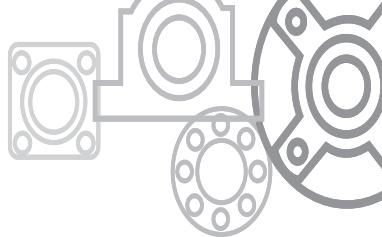
[Http://www.slbgroup.com](http://www.slbgroup.com)

PACKING

Double Lips

Single Lip

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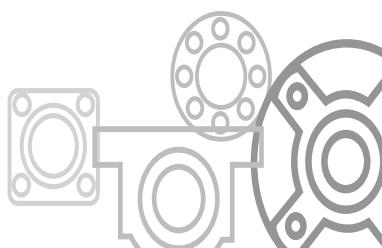
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Feature

The Spherical Outside Surface Ball Bearings of **SLB** are deep groove ball bearing with wide and narrow inner rings, consisting of insert bearings (UC200, UK200) and various housings. The types of bearing units are defined according to the different mounting methods of the bearings to shafts : the set-screws type, the adapter type, the eccentric locking collar type.

The **SLB** housings are mainly casting housings. There are pressed steel plate housings as well align with ease during operation and can be conveniently mounted or dismounted.

The bearing units can operate satisfactorily under working conditions, especially for machines operating in dusty or muddy surroundings. Thus, they are widely used in agricultural, construction and transmission machineries, etc..

There are various types of sealing devices for our products, such as synthetic rubber seals, slinger with synthetic rubber seals and triple lip seals etc..

Sufficient lubricating grease has been put into the bearings during manufacturing, which can act as lubricating as well as rust proof. No more grease is needed to put in during the lubricating period when the bearings operate under normal conditions. Lubricating grease can be added from the fittings when the relubricate bearings operate under hard conditions.

The outer ring of the bearing has spherical outside surface which can be fitted to the concave spherical surface of the housing, and the fit between them can be clearance fit or interference fit according to different conditions. This combination provides self-alignment between the self-contained bearing and the housing, and compensates for a certain alignment errors or flexing of the shaft when the bearing is in operation. This definitely increases the bearing service life.

1. Lubrication

The Spherical Outside Surface Ball Bearings of **SLB** use Multemp SRL lubricating grease, with physical chemical properties shown in the following Table 1.1. Grease is filled in the Spherical Outside Surface Ball Bearings during manufacturing. Multemp SRL is a high-grade high-performance low-noise grease that also provides excellent low-temperature starting torque and provides long life over a wide working temperature range. The grease is used in applications ranging from hard disk drive spindles to medical pumps. The operating temperature range is -50C to 150C.

Table 1.1 Physical chemical properties of lubricating grease

MULTEMP SRL

Typical analyses

Usage temperature range $-50^{\circ}\text{C} \leftrightarrow 150^{\circ}\text{C}$

Test item	Test method	MULTEMP SRL
Thickener	_____	lithium
Base oil	_____	polyolester + diester oil
Base oil kinematic viscosity (40°C) mm^2/s	ASTM D 445	26.0
Appearance	_____	light brown, buttery
Worked penetration	ASTM D 217	250
Dropping point $^{\circ}\text{C}$	ASTM D 566	190
Copper strip corrosion (100°C, 24h)	ASTM D 4048	Pass
Evaporation loss (99°C, 22 h) mass%	ASTM D 972	0.30
Oil separation (100°C, 24h) mass%	FTMS 791C-321 Mod.	1.2
Oxidation stability (99°C, 100h) kPa	ASTM D 942	25
Foreign particles particles/ cm^3	10 μm or larger 25 μm or larger 75 μm or larger 125 μm or larger	400 FTMS 791C-3005 Mod. 100 0 0
Working stability	FTMS 791C-313	306
Water washout (38°C, 1h) mass%	ASTM D 1264	1.3
Low-temperature torque N·cm	(-40°C) Starting torque Running torque	ASTM D 1478-63 11 2.8
Life performance	h	ASTM D 1741 4000
Corrosion preventive properties (52°C, 48h)		ASTM D 1743-73 # 1

The permissible speed of rotation is connected with the fit between shaft and bearing. It is recommended that, under normal operating conditions, the fit between the bearing and the shaft is h7. Looser fit allowing lower speed is recommended when heavier load is applied.

2. Tolerance for Bearing Units

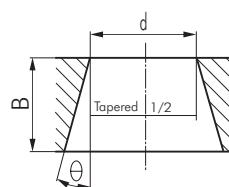
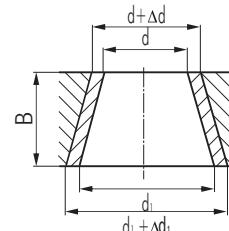
Table 2.1.1 Tolerances on inner rings of bearing with cylindrical bore Unit:0.001 mm

Nominal bore diameter d	Cylindrical bore						Radial run-out (Max.)	
	Bore diameter		Width					
	dm	d	Bi					
Over (mm)	Incl. (mm)	Deviations	Deviations	Deviations	Deviations	Deviations		
		High	Low	High	Low	High	Low	
10	18	+18	0	+22	-4	0	-120	12
18	30	+21	0	+25	-4	0	-120	15
30	50	+25	0	+30	-5	0	-120	18
50	80	+30	0	+36	-6	0	-150	22
80	120	+35	0	+42	-7	0	-200	28
120	150	+40	0	+48	-8	0	-250	35

Note: dm is defined as the arithmetical mean of the largest and the smallest diameter obtained by two-point measurements.

Table 2.1.2 Tolerances on inner rings of bearings with tapered bore Unit:0.001 mm

Nominal bore diameter d	Δd		$\Delta d_1 - \Delta d$	
	Deviations	High	Max.	Min.
Over (mm)	Incl. (mm)	High	Low	
18	30	+33	0	+21 0
30	50	+39	0	+25 0
50	80	+46	0	+30 0
80	120	+54	0	+35 0
120	150	+63	0	+40 0



Note (1) The deviations from nominal taper are defined by the limits of ($\Delta d_1 - \Delta d$), where (Δd_1) is actual deviation of d_1 from nominal diameter at the largest end of bore and Δd is actual deviation of d from bearing bore nominal diameter.

(2) d_1 is obtained by the following formula:

$$d_1 = d + 0.083333 B$$

Where B is width of the bearing inner ring.

(3) The nominal taper angle = $2^\circ 23' 9.4''$

(4) Please refer to the Figs. 2.1.2

Figs. 2.1.2

Table 2.1.3 Tolerances on outer ring Unit: 0.001 mm

Nominal bore diameter D		Dm Deviations		Radial run-out
Over (mm)	Incl. (mm)	High	Low	(Max.)
40	50	0	-11	20
50	80	0	-13	25
80	120	0	-15	35
120	180	0	-18	40
180	250	0	-20	45

Note: (1) Dm is defined as the arithmetical means of the largest and the smallest diameter obtained by two-point measurement.

(2) The low deviation of outside diameter Dm does not apply within the distance of 1/4 the width of outer ring from the sides.

Table 2.1.4 Tolerance for distance "n" between the radial plane passing through center of outer ring and aside of inner ring

Unit: 0.001 mm

Nominal bore diameter d		n Deviations
Over (mm)	Incl. (mm)	
40	50	± 200
50	80	± 250
80	120	± 300
120	160	± 350

Please refer to Fig. 2.1.4

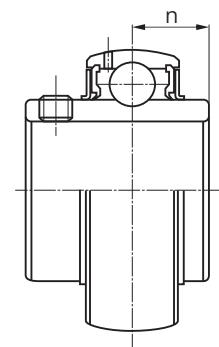


Fig. 2.1.4

Table 2.1.5 Chamfer dimensions

Nominal dimensions r (mm)	r	Max. (mm)	Min. (mm)
1.0		1.5	0.6
1.5		2.0	1.0
2.0		2.5	1.5
2.5		3.0	2.0
3.0		3.5	2.5
3.5		4.0	3.0
4.0		4.5	3.5
5.0		6.0	4.0

Please refer to Fig. 2.1.5

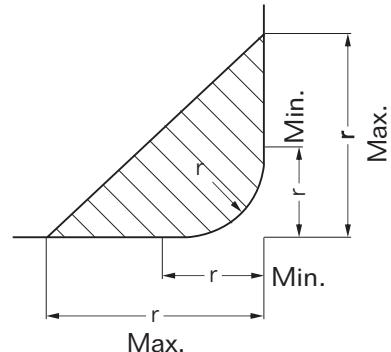


Fig. 2.1.5

2.2.1 Center height tolerances for pillow block type housings

Please refer to below Figs. 2.2.1 and Table 2.2.1

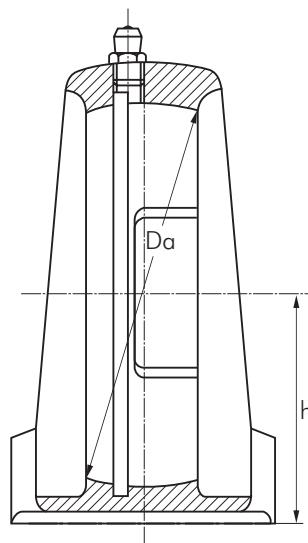


Fig. 2.2.1

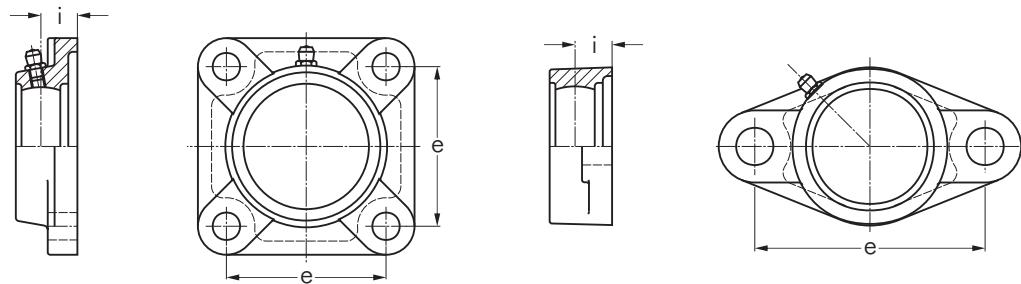
**Table 2.2.1 Center height tolerances for pillow block type housings
(P, PA)**

Unit: 0.001 mm

Housing No.	h Deviations
P 203	PA 203
P 204	PA 204
P 205	PA 205
P 206	PA 206
P 207	PA 207
P 208	PA 208
P 209	PA 209
P 210	PA 210
P 211	PA 211
P 212	PA 212
P 213	PA 213
P 214	
P 215	
P 216	
P 217	
P 218	

2.2.2 Tolerances for flanged type housings (F, FL, FC)

Please refer to below Figs. 2.2.2 (a), 2.2.2 (b) and Table 2.2.2 (a), 2.2.2 (b).



Figs. 2.2.2 (a)

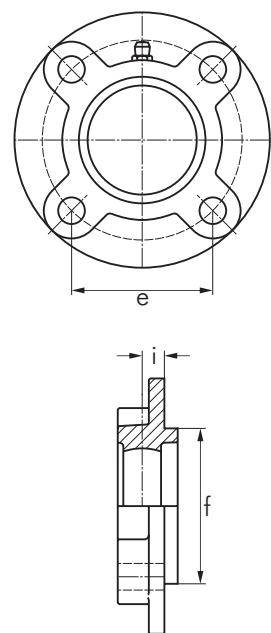
Table 2.2.2 (a) Tolerances for flanged type housings (F, FL)

Unit: 0.001 mm

Housing number	e Deviations	i Deviations
F 204	FL 204	
F 205	FL 205	
F 206	FL 206	
F 207	FL 207	±700
F 208	FL 208	±500
F 209	FL 209	
F 210	FL 210	
F 211	FL 211	
F 212	FL 212	
F 213	FL 213	
F 214	FL 214	
F 215	FL 215	±1000
F 216	FL 216	±800
F 217	FL 217	
F 218	FL 218	

Table 2.2.2 (b) Tolerance for flanged type housing (FC)
Unit: 0.001 mm

Housing number	f Deviations High Low	e Deviations	i Deviations	Radial run-out of machined pilot Max.
FC 204				
FC 205	0 -46			
FC 206				
FC 207		±700	±500	200
FC 208				
FC 209	0 -54			
FC 210				
FC 211				
FC 212				
FC 213				
FC 214				
FC 215	0 -63	±1000	±800	300
FC 216				
FC 217				
FC 218	0 -72			



Figs. 2.2.2 (b)

2.2.3 Tolerance for take-up type housing (T)

Unit: 0.001 mm

Housing No.	k Deviations High Low	e Deviations	Parallelism of guide Max.
T204	+200	0	500
~T210	0	-500	
T211	+300	0	600
~T217	0	-800	

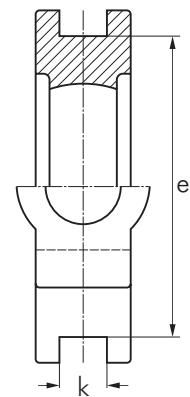


Fig. 2.2.3

Table 2.2.4 Tolerance on spherical inside diameter**Unit: 0.001 mm**

Nominal spherical inside diameter		Symbol H7				Symbol J7			
Da		Dam Deviations		Da Deviations		Dam Deviations		Da Deviations	
Over (mm)	Incl. (mm)	High	Low	High	Low	High	Low	High	Low
30	50	+25	0	+30	-5	+14	-11	+19	-16
50	80	+30	0	+36	-6	+18	-12	+24	-18
80	120	+35	0	+42	-7	+22	-13	+29	-20
120	180	+40	0	+48	-8	+26	-14	+34	-22
180	250	+46	0	+55	-9	+30	-16	+39	-25

Note: (1) Dam = (Damax + Damin)/2

Damax - maximum measured value of Da

Damin - minimum measured value of Da

(2) Dimensional tolerances for spherical inside diameter of housing are classified as H7 for clearance fit and J7 for interference fit.

(3) As the self-contained for bearings are equipped with locking-pin, clearance fit H7 is normally applied.

Table 2.2.5 Machining tolerances

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
4	16	±0.2
16	63	±0.3
63	250	±0.5

Table 2.2.6 Casting tolerances on length

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
Up	100	±1.5
100	200	±2.0
200	400	±3.0
400	800	±4.0

Table 2.2.7 Casting tolerances on thickness

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
Up	5	±1.0
5	10	±1.5
10	20	±2.0
20	30	±3.0
30	50	±3.5

Table 2.2.8 One side machining tolerances

Nominal dimension		Dimensional Tolerance
Over (mm)	Incl. (mm)	(mm)
Up	~ 5	±1.0
5	~ 100	±1.5
100	~ 200	±2.0
200	~ 400	±3.0

Note: (1) Dimensional tolerances and deviations are for ordinary grade.

(2) Dimensional tolerances on length and thickness may be added with deviations on draft taper.

3. Radial Internal Clearance of Bearings

The radial internal clearance of the bearing for the unit is the same as the value of ISO 9628, the internal radial clearance for the Spherical Outside Surface Ball Bearing is usually greater than that for the same size of Deep Groove Ball Bearing. The clearance for the cylindrical bore bearing is shown in Table 3.1 while the clearance for the tapered bore bearing is shown in Table 3.2 .

**Table 3.1 Radial internal clearance of cylindrical bore bearings
(with set-screws and eccentric locking collar)**

Unit: 0.001mm

Nominal bore diameter d		Clearance symbol			
Over (mm)	Incl. (mm)	Normal		C 3	
		Min.	Max.	Min.	Max.
10	18	10	25	18	33
18	20	12	28	20	36
20	32	12	28	23	41
32	40	13	33	28	46
40	50	14	36	30	51
50	65	18	43	38	61
65	80	20	51	46	71
80	100	24	58	53	84

Table 3.2 Radial internal clearance of tapered bore bearings (with adapter sleeve)

Unit: 0.001mm

Nominal bore diameter d		Clearance symbol			
Over (mm)	Incl. (mm)	Normal		C 3	
		Min.	Max.	Min.	Max.
10	18	18	33	25	45
18	20	20	36	28	48
20	32	23	41	30	53
32	40	28	46	40	64
40	50	30	51	45	73
50	65	38	61	55	90
65	80	46	71	65	105
80	100	53	84	75	120

Note: Contents which underline "—" in red color, means dimensions are differ from **SLB®** Mounted Units Catalogue 2007.

4. Bearing Size Selection

4.1 The bearing size is usually selected according to the required life and reliability under a specific type of load charged on the Spherical Outside Surface Ball Bearing

The load applied to the bearing operating under static or slow oscillating and rotating ($n < 10 \text{ r/min}$) condition is defined as static load, while the load applied to the bearing operating under a speedy rotating ($n > 10 \text{ r/min}$) condition is defined as dynamic load.

The load capacity of the bearing is expressed by the basic dynamic load rating which is shown in the Spherical Outside Surface Ball Bearing's table.

Under normal mounting, lubricating and maintaining conditions, the operating bearing will have fatigue flaking due to the repeating action of variable load charged on the contact area between the rings and rolling elements. Generally, the fatigue flaking is the cause of normal damage of rolling bearings. Therefore, the usual bearing life refers to the bearing fatigue life. The life of group of apparently identical bearings operating under a considerable dispersion. For this reason, the bearing life is closely connected with the damaging probability or the reliability requirement.

The radial rating load of ball bearing with 90% reliability and 500 hours minimum life is shown in Fig. 4.1 (Refer to page 18).

Life: The life of a rolling bearing is defined as the total number of revolution which the bearing is capable of enduring before the first evidence of fatigue flaking develops on any one rings or rolling elements.

Reliability: The reliability is the percentage of the bearings of a group of apparently identical bearings operating under identical conditions which can expect to attain or exceed a certain defined life. The reliability of individual bearing is the probability of the bearing to attain or exceed a defined life.

Basic rating life: For a group of apparently identical rolling bearings operating under identical conditions, the basic rating life is defined as the total number of revolution that 90% of the bearings can be expected to complete or exceed.

Basic Rating life

The fatigue rating life of Spherical Outside Surface Ball Bearing is calculated by the following formula:

$$L_{10} = \left(\frac{C}{P}\right)^3 \text{ or } \frac{C}{P} = L_{10}^{1/3}$$

Where L_{10} = basic rating life (10^6 r)

P = basic dynamic load rating (N)

N = equivalent dynamic bearing load (N)

The basic dynamic load rating C is a hypothetical constant load with a fixed direction under which the bearing can attain a basic life of one million revolutions theoretically. For radial bearings , the load refers to the radial load.

The equivalent dynamic bearing load P is a constant load with a fixed direction under which the bearing life is identical to that of the bearing operating under actual load.

For a bearing operating with a constant rotation speed, the basic rating life can be expressed in terms of operating hours:

$$L_{10h} = \frac{10^6}{60n} \left(\frac{C}{P} \right)^3 \quad \text{or} \quad L_{10h} = \frac{10^6}{60n} \quad L_{10h} = \frac{16666}{n} \left(\frac{C}{P} \right)^3$$

Where: L_{10h} = basic rating life (h)
 n = bearing operating speed of rotation (r/min)

For easier calculation, 500 hours as base of rating life is taken, and the speed factor f_n and the life factor f_h is introduced.

$$f_n = \left(\frac{331/3}{n} \right)^{1/3} \quad f_h = \left(\frac{L_{10h}}{500} \right)^{1/3}$$

In this way, the formula is simplified to:

$$C = \frac{f_h}{f_n} P$$

The values of f_h and f_n can be found in Fig. 4.1 by referring to the operation speed n and the anticipated bearing service life L_{10h} . Then, with the radial load (or the equivalent dynamic bearing load), the basic dynamic load rating can be determined. By this way, the bearing size can be determined according to the basic dynamic load rating value in the Spherical Outside Surface Ball Bearing's table.

If the bearing operate under indeterminate loads and rotation speed, the following formula should be applied when calculating the bearing life:

$$P_m = \sqrt[3]{\frac{1}{N} \int_0^N P^3 dN}$$

Where P_m = mean equivalent dynamic bearing load (N)
 P = equivalent dynamic bearing load (N)
 N = total revolution numbers within one load changing cycle (r)

4.2 Anticipated bearing service life

Where selecting a bearing, one should usually predetermine an appropriate service life according to the relevant machine type, operating condition and reliability requirement. Generally the anticipated bearing service life can be determined by referring to the maintenance period of a machine.

Calculating method of equivalent dynamic bearing load P

The basic equivalent dynamic bearing load is determined under a hypothetical condition. When calculating the bearing life, the actual load has to be converted to dynamic bearing load which is in conformity with the load condition determining the dynamic load rating. General equation for calculating the equivalent dynamic bearing load:

$$P = X F_r + Y F_a$$

Where: P --- equivalent dynamic bearing load (N)
 F_r --- actual radial load (N)
 F_a --- actual axial load (N)
 X --- radial factor
 Y --- thrust factor

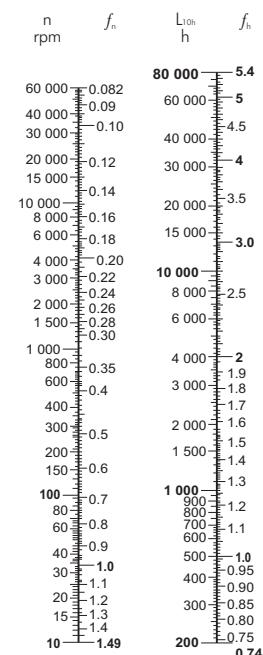


Fig. 4.1

The values of X and Y are determined by the ratio between the applied axial load F_a and the basic static load rating C_0 . The axial load which the Spherical Outside Surface Ball Bearing can carry is determined by the mounting method of the bearing on the shaft.

For bearings of set-screw Locking type or eccentric Locking collar type, if flexible shafts are applied and the set-screws are tightened enough, the axial load F_a which the bearings can carry not surpass 20% of the radial load F_r .

For bearing of adapter sleeve Locking type, if the nut is properly tightened, the axial load F_a can be maximally 15% to 20% of the radial load.

The value of radial and thrust factors X and Y for Spherical Outside Surface Ball Bearings can be obtained from the following Table 4.3.1.

When twist load is applied to the bearing, the equivalent dynamic bearing load is calculated by the following equation:

Where: $P_m = f_m \cdot P$

P_m --- equivalent dynamic bearing load when considering twist load

f_m --- twist load factor, which is defined as follows:

when the twist load is small : $f_m = 1.5$

when the twist load is big : $f_m = 2$

4.3 Example of bearing size selection

When shocking load is applied to the bearing, the equivalent dynamic bearing load can be calculated by the following equation:

$$P_d = f_d \cdot P$$

Where: P_d --- equivalent dynamic bearing load when considering shocking load

f_d --- shocking load factor, which is defined as follows:

when no shocking load or mirror shocking load is applied: $f_d = 1 - 1.2$

when adequate shocking load is applied: $f_d = 1.2 - 1.8$

Table 4.3.1 Radial and thrust factors X and Y for Spherical Outside Surface Ball Bearings

$\frac{F_a}{C_0}$	Clearance for normal				e	Clearance for C 3				e		
	$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$			$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$				
	X	Y	X	Y		X	Y	X	Y			
0.025	1	0	0.56	2.0	0.22	1	0	0.46	1.74	0.3		
0.04	1	0	0.56	1.8	0.24	1	0	0.46	1.61	0.33		
0.07	1	0	0.56	1.6	0.27	1	0	0.46	1.46	0.36		
0.13	1	0	0.56	1.4	0.31	1	0	0.46	1.30	0.41		
0.25	1	0	0.56	1.2	0.37	1	0	0.46	1.14	0.47		
0.5	1	0	0.56	1.0	0.44	1	0	0.46	1.00	0.54		

How to select the size of bearing

One Spherical Outside Surface Ball Bearings is to operate at a rotation speed of 1000 r/min under only a radial load of $F_r = 3000 \text{ N}$, with a basic rating life of at least 20,000 hours.

Select the bearing size.

From the required rotation speed it can be found that:

$$f_n = 0.322 \quad (\text{Fig. 4.1 shows about 0.32, refer to page 18})$$

From the required basic rating life (anticipated service life), it can be found that:

$$f_h = 3.42 \quad (\text{Fig. 4.1 shows about 3.4, refer to page 18})$$

Under only radial load, i.e.

$$P = F_r = 3000 \text{ N}$$

Therefore,

$$C = \frac{f_h}{f_n} P = \frac{3.42}{0.322} \times 3000 = 31,863 \text{ (N)}$$

A simplified way to calculate the bearing life can be applied by using Fig. 4.3: By connecting n and the required basic rating life L_{10h} with a straight line, it can be found that C/P value is 10.6. As is known, $P = F_r = 3000 \text{ N}$, thus the required basic dynamic load rating is:

$$C = 3000 \times 10.6 = 31,800 \text{ (N)}$$

In this way, we can select the Spherical Outside Surface Ball Bearings inside this catalogue(Refer to pages 116-127).

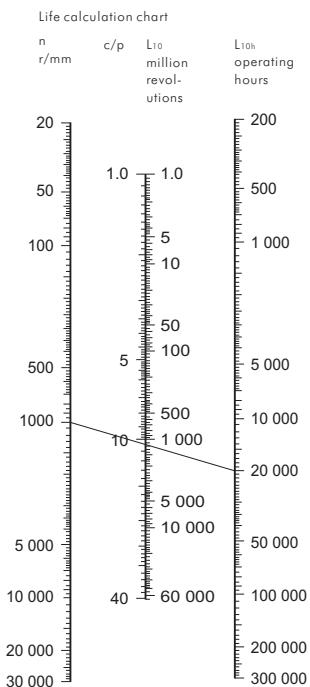


Fig. 4.3

4.4 Adjusted rating life equation

The basic rating life L_{10} calculated with the bearing life calculation formula can be applied to calculate the rating life of bearing made of ordinary bearing steel (i.e. bearing life with reliability of 90%).

Due to more and more of machinery products demanding higher reliability and better quality steel (ISO 281/1-1977), an adjusted rating life calculation equation is suggested, i. e.

$$L_n = a_1 \cdot a_2 \cdot a_3 \cdot L_{10}$$

For Spherical Outside Surface Ball Bearing:

$$L_n = a_1 \cdot a_2 \cdot a_3 \cdot (C/P)^3$$

Where L_n ---under specified material and lubricating conditions, bearing life with $(100-n)\%$ no breaking probability (i. e. reliability).

a_1 ---- life adjustment factor for reliability (Table 4.4.1)

a_2 ---- life adjustment factor materials (Table 4.4.2)

a_3 ---- life adjustment factor for operating conditions (Table 4.4.3)

Table 4.4.1 Life adjustment factor for reliability a_1

Reliability%	90	95	96	97	98	99
L_n	L_{10}	L_5	L_4	L_3	L_2	L_1
a_1	1	0.62	0.53	0.44	0.33	0.21

Table 4.4.2 Life adjustment factor for materials a2

Normal chromium bearing steel	a2 = 1
Special smelted bearing steel	--- Vacuum degassed bearing steel --- Vacuum remelted bearing steel
	a2 = 3
	a2 = 5
When material hardness lowered by high frequency tempering	a2 < 1

Table 4.4.3 Life adjustment factor for operating conditions a3

When under normal operating conditions:	
(1) Properly mounted,	
(2) Sufficiently lubricated,	a3 = 1
(3) Without outside matters intrusion.	
When under operating temperature, the Spherical Outside Surface Ball Bearings lubricating grease viscosity lower than 13 mm ² /s	a3 < 1

5. Selection of Shaft

The shaft on which bearing units are mounted shall be free from bend and flexure.

For the units with cylindrical bore (with set-screws or eccentric locking collar) clearance fit is usually adopted for mounting the units on the shaft, and shaft tolerances in Table 5.1 are recommended for such loose fit, but for high speed or highly accurate operation or such application which is accompanied by heavy shock loads, interference fit is to be adopted. Table 5.2 shows recommended shaft tolerances for interference fit, when bearing units with eccentric locking collar are mounted on the shaft with interference fit, the eccentric locking collar may be omitted.

Tapered bore bearings permit wider tolerances of the shaft since they are locked to the shaft by means of adapted sleeves.

Recommended shaft tolerances for tapered bore bearings listed in Table 5.3.

Table 5.1 Shaft tolerances for clearance fit for bearing with cylindrical bore

Shaft diameter		Deviation of tolerances in shaft							
		For lower speed		For medium speed		For rather high speed		For high speed	
Over	Incl.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
mm	mm								
10	18	0	-43	0	-27	0	-18	+8	-3
18	30	0	-52	0	-33	0	-21	+9	-4
30	50	0	-62	0	-39	0	-25	+11	-5
50	80	0	-74	0	-46	0	-30	+12	-7
80	120	0	-87	0	-54	0	-35	+13	-9
120	180	0	-100	0	-63	0	-40	+14	-11

Table 5.2 Shaft tolerance for interference fit for bearing with cylindrical bore

Shaft diameter		Deviation of tolerances in shaft							
		Higher speed		Rather heavy load		Highest load		Heavy load	
Over mm	Incl. mm	m6 Max.	m6 Min.	m7 Max.	m7 Min.	m6 Max.	m6 Min.	m7 Max.	m7 Min.
10	18	+18	+7	+25	+7	+23	+12	+30	+12
18	30	+21	+8	+29	+8	+28	+15	+36	+15
30	50	+25	+9	+34	+9	+33	+17	+42	+17
50	80	+30	+11	+41	+11	+39	+20	+50	+20
80	120	+35	+13	+48	+13	+45	+23	+58	+23
120	180	+40	+15	+55	+15	+52	+27	+67	+27

Table 5.3 Shaft tolerances for bearing with tapered bore

Shaft diameter		Deviation of tolerances in shaft			
		For shot shaft		For shot shaft	
Over mm	Incl. mm	h9 Max.	h9 Min.	h10 Max.	h10 Min.
10	18	0	-43	0	-70
18	30	0	-52	0	-84
30	50	0	-62	0	-100
50	80	0	-74	0	-120
80	120	0	-87	0	-140
120	180	0	-100	0	-160

6. Mounting of Bearing Units on Shaft

The bearing units can be easily installed in principle at any place. However, in order to have a long service life, it is desirable that the mounting base if flat and rigid.

In case of either the vibration is caused to the bearing, the alternating movement takes place, the load applied to the bearing is large, or the shaft rotation speed is rapid, it is desired to provide with the filed seat or concave section at the part where the set-screws contact with the shaft. If large thrust load is charged, it is recommended that joggling tightened with nuts be used to install the bearing most effectively to the shaft: As shown in Fig 6.1.

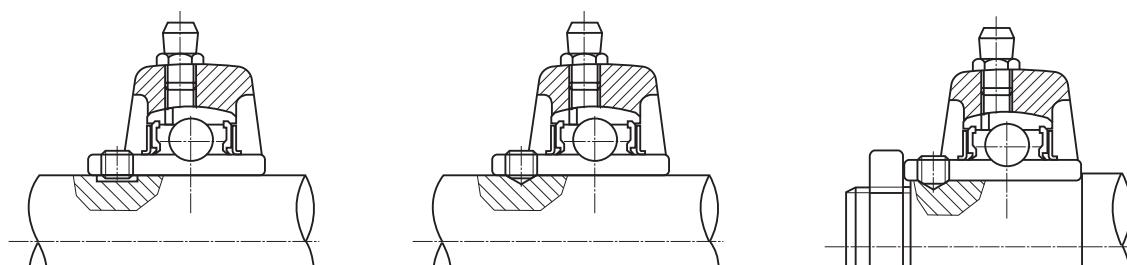


Fig 6.1

6.1 Bearings units with adapter sleeve

Bearing unit with adapter sleeve permits wider shaft tolerance and can be used in applications where vibrations and shocks are heavy.

Mounting processes of these units are as follows:

First, the sleeve is installed to an arbitrary position. After the shark proof washer is inserted, the nut is tightened. The proper nut tightening condition can be obtained if it is tightened enough by hand and then rotated by 2/5 to 3/5 revolution with a spanner.

After tightening the nut, bend the shark proof washer within the slot. Otherwise, the nut may be loosened and creep may be caused between the shaft and sleeve. It is necessary the nut can not be tightened too much.

6.2 Bearings units with eccentric locking collar

The eccentric part of the collar mates with the inner ring of the bearing which is made eccentric with the collar. When locked to the shaft by hand in direction of the shaft rotation, the eccentric locking collar tightens automatically to the shaft by force of working radial load. Then, lock the set-screws provided on the collar to fix the eccentric collar to the shaft. At the shaft rotation force or load is not charged on the set-screws directly, it will not loosen during operation.

7. Bearing units with set-screws

There are two set-screws located at two places on one side of the wide inner ring 120° apart with which the bearing units can be mounted to the shaft. When mounting the bearing to the shaft, the torque shown in the following Table 7.1 is recommended to tighten the set-screws to shaft.

Table 7.1 Proper tightening torque of set-screws

Set-screws tap (mm)	Bearing No.	Tightening torque (N.m) (lbf.in)	
M 5X0.8	UC 201 D1~UC 203 D1	3.0~3.5	28
M 6X1	UC 204 D1~UC 206 D1	3.5~4.0	30~35.4
M 8X1	UC 207 D1~UC 209 D1	8.0~8.5	69~73.5
M 10X1.25	UC 210 D1~UC 213 D1	16.5~17.5	144~152
M 12X1.5	UC 214 D1~UC 218 D1	33.5~34.5	296~304

8. The Material for Cast Iron Housing

The material of cast iron housing under ISO / DIS GG20, the mechanical properties please refer to Table 8.1.

Table 8.1 The mechanical properties of cast iron housing

Number	Major wall thickness of casting piece (mm)	Strain stress σ_b (N/mm ²)	Hardness
ISO / DIS GG20	2.5 - 10	220	
U.S.A Grade 35	>10 - 20	195	170 - 220
JIS FC20	>20 - 30	170	
	>30 - 50	160	

8. The Material for Cast Iron Housing

The material of cast iron housing under ISO / DIS GG20, the mechanical properties please refer to Tabel 8.1.

Table 8.1 The mechanical properties of cast iron housing

Number	Major wall thickness of casting piece	Strain stress σ_b	Hardness
	(mm)	(N/mm ²)	HB
ISO / DIS GG20	2.5 - 10	220	
U.S.A Grade 35	>10 - 20	195	170 - 220
JIS FC20	>20 - 30	170	
	>30 - 50	160	



Supreme Mounted Units



PRODUCT INFORMATION

P 20 - 36



Pillow Blocks Type

P 20 - 23



Flanged Units Type

P 24 - 25



Two Bolts Flanged Units Type

P 26 - 27



Flanged Cartridge Units Type

P 28 - 29



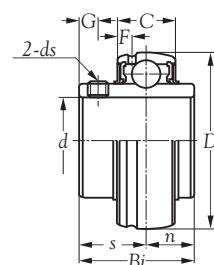
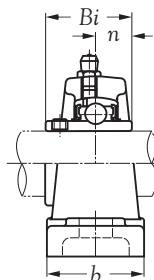
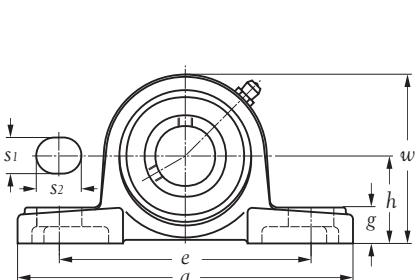
Take Up Units Type

P 30 - 31



Insert Bearings

P 32 - 33



(Single Lips)

(Double Lips DL)

Shaft dia. mm	Unit number	Nominal dimensions mm										Bolt size mm inch	Bearing number	Housing number	Mass of unit Kg
		h	a	e	b	s 1	s 2	g	w	Bi	n				
12	UCP 201	30.2	127	96	37	13	19	14	60.7	31.0	12.7	M 10	UC 201	P 203	0.68
15	UCP 202	30.2	127	96	37	13	19	14	60.7	31.0	12.7	M 10	UC 202	P 203	0.67
17	UCP 203	30.2	127	96	37	13	19	14	60.7	31.0	12.7	M 10	UC 203	P 203	0.66
20	UCP 204	33.3	127	96	37	13	16	14	65.0	31.0	12.7	M 10	UC 204	P 204	0.66
25	UCP 205	36.5	140	105	38	13	19	15	71.0	34.1	14.3	M 10	UC 205	P 205	0.77
30	UCP 206	42.9	160	121	44	14	19	16	83.0	38.1	15.9	M 12	UC 206	P 206	1.22
35	UCP 207	47.6	167	126	48	15	19	17	93.0	42.9	17.5	M 12	UC 207	P 207	1.55
40	UCP 208	49.2	180	136	52	15	21	18	100.0	49.2	19.0	M 12	UC 208	P 208	1.88
45	UCP 209	54	190	146	54	15	21	20	108.0	49.2	19.0	M 12	UC 209	P 209	2.19
50	UCP 210	57.2	204	159	57	19	22	21	114.0	51.6	19.0	M 16	UC 210	P 210	2.73
55	UCP 211	63.5	217	172	60	19	22	22	126	55.6	22.2	M 16	UC 211	P 211	3.38
60	UCP 212	69.9	238	186	66	19	25	24	138	65.1	25.4	M 16	UC 212	P 212	4.75
65	UCP 213	76.2	262	203	70	23	29	26	151	65.1	25.4	M 20	UC 213	P 213	5.81
70	UCP 214	79.4	266	210	72	23	29	27	155	74.6	30.2	M 20	UC 214	P 214	6.50
75	UCP 215	82.6	274	217	74	25	29	28	161.6	77.8	33.3	M 20	UC 215	P 215	7.11
80	UCP 216	88.9	292	232	78	25	30	30	174	82.6	33.3	M 20	UC 216	P 216	8.69
85	UCP 217	95.2	310	247	83	25	30	32	186	85.7	34.1	M 20	UC 217	P 217	10.63
90	UCP 218	101.6	326	262	88	27	30	33	198	96.0	39.7	M 22	UC 218	P 218	12.95

Remark: 1) Regular production in "J" tolerance.

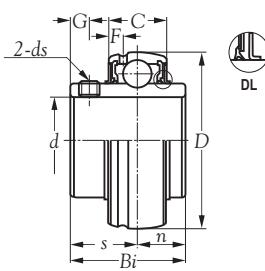
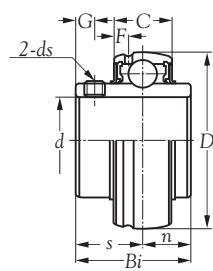
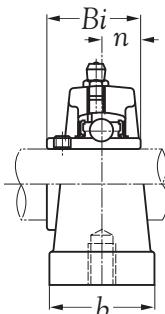
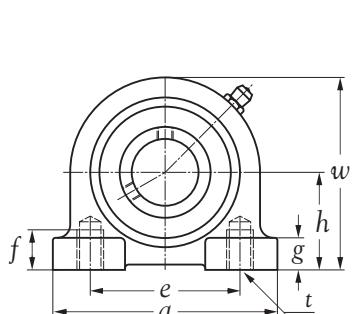
2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ucp200.htm](http://www.slbgroup.com/su-ucp200.htm)





(Single Lips)

(Double Lips DL)

Shaft dia. mm	Unit number	Nominal dimensions mm										Bolt size mm inch	Bearing number	Housing number	Mass of unit Kg
		h	a	e	b	s ₁	s ₂	g	w	B _i	n				
12	UCPA 201	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 201	PA 204	0.57
15	UCPA 202	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 202	PA 204	0.56
17	UCPA 203	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 203	PA 204	0.55
20	UCPA 204	30.2	76	52	40	11	62	13	M 10	31.0	12.7	M 10	UC 204	PA 204	0.53
25	UCPA 205	36.5	84	56	38	12	72	15	M 10	34.1	14.3	M 10	UC 205	PA 205	0.71
30	UCPA 206	42.9	94	66	48	13	84	18	M 14	38.1	15.9	M 14	UC 206	PA 206	1.07
35	UCPA 207	47.6	110	80	48	13	95	20	M 14	42.9	17.5	M 14	UC 207	PA 207	1.49
40	UCPA 208	49.2	116	84	54	13	100	20	M 14	49.2	19.0	M 14	UC 208	PA 208	1.75
45	UCPA 209	54.2	120	90	60	13	108	25	M 14	49.2	19.0	M 14	UC 209	PA 209	2.17
50	UCPA 210	57.2	130	94	60	14	116	25	M 16	51.6	19.0	M 16	UC 210	PA 210	2.53
55	UCPA 211	63.5	140	104	66	14	125	25	M 16	55.6	22.2	M 16	UC 211	PA 211	3.17
60	UCPA 212	69.9	150	114	68	15	138	25	M 16	65.1	25.4	M 16	UC 212	PA 212	4.17
65	UCPA 213	76.2	160	124	70	15	150	25	M 16	65.1	25.4	M 16	UC 213	PA 213	4.96

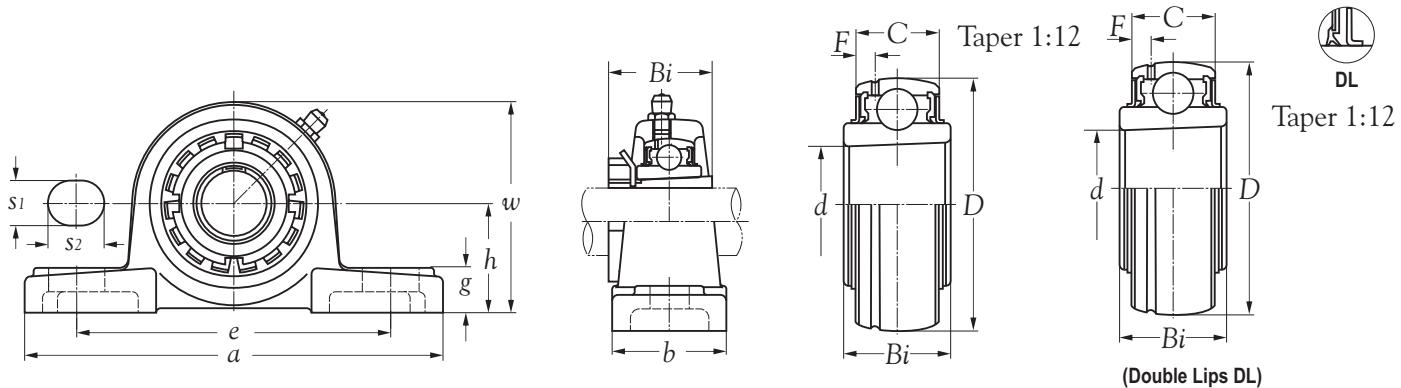
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

 SLB web-site: [Http://www.slbgroup.com/su-ucpa200.htm](http://www.slbgroup.com/su-ucpa200.htm)

Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		h	a	e	b	s1	s2	g	w	Bi				
20	UKP 205	36.5	140	105	38	13	19	15	71.0	35	M 10	UK 205	P 205	0.71
25	UKP 206	42.9	160	121	44	14	19	16	83.0	38	M 12	UK 206	P 206	1.15
30	UKP 207	47.6	167	126	48	15	19	17	93.0	43	M 12	UK 207	P 207	1.45
35	UKP 208	49.2	180	136	52	15	21	18	100.0	46	M 12	UK 208	P 208	1.72
40	UKP 209	54.0	190	146	54	15	21	20	108.0	50	M 12	UK 209	P 209	2.04
45	UKP 210	57.2	204	159	57	19	22	21	114.0	55	M 16	UK 210	P 210	2.52
50	UKP 211	63.5	217	172	60	19	22	22	126.0	59	M 16	UK 211	P 211	3.03
55	UKP 212	69.9	238	186	66	19	25	24	138.0	62	M 16	UK 212	P 212	4.25
60	UKP 213	76.2	262	203	70	23	29	26	151.0	65	M 20	UK 213	P 213	5.31

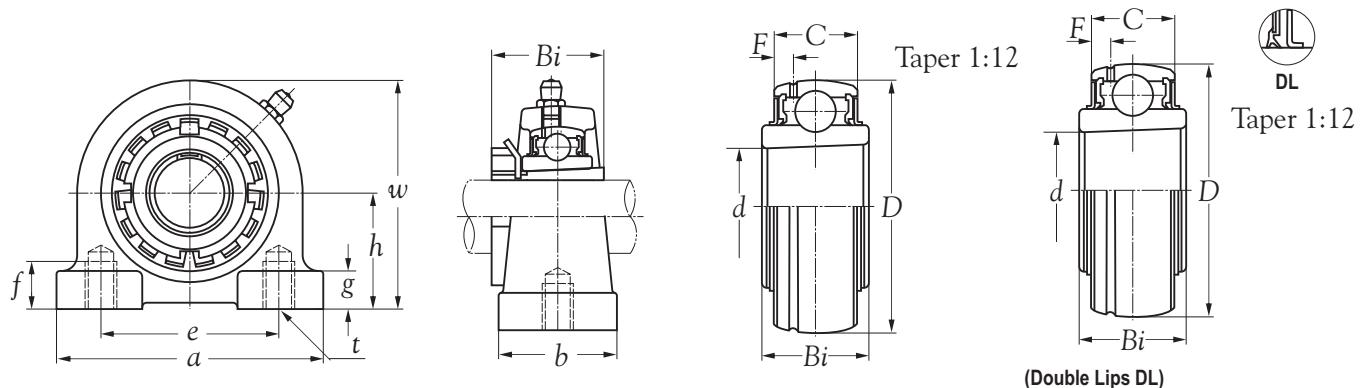
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UK 204 ~ UK 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ukp200.htm](http://www.slbgroup.com/su-ukp200.htm)



Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		h	a	e	b	g	w	f	t	Bi				
20	UKPA 205	36.5	84	56	38	12	72	15	M 10	35	M 10	UK 205	PA 205	0.65
25	UKPA 206	42.9	94	66	48	13	84	18	M 14	38	M 14	UK 206	PA 206	1.00
30	UKPA 207	47.6	110	80	48	13	95	20	M 14	43	M 14	UK 207	PA 207	1.39
35	UKPA 208	49.2	116	84	54	13	100	20	M 14	46	M 14	UK 208	PA 208	1.59
40	UKPA 209	54.2	120	90	60	13	108	25	M 14	50	M 14	UK 209	PA 209	2.02
45	UKPA 210	57.2	130	94	60	14	116	25	M 16	55	M 16	UK 210	PA 210	2.32
50	UKPA 211	63.5	140	104	66	14	125	25	M 16	59	M 16	UK 211	PA 211	2.82
55	UKPA 212	69.9	150	114	68	15	138	25	M 16	62	M 16	UK 212	PA 212	3.67
60	UKPA 213	76.2	160	124	70	15	150	25	M 16	65	M 16	UK 213	PA 213	4.46

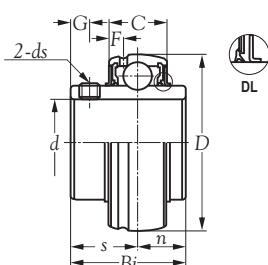
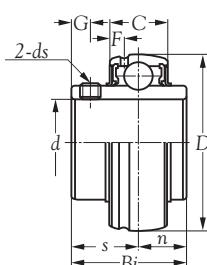
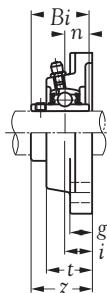
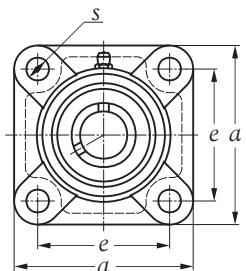
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UK 204 ~ UK 209 with Double Lips(DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/ukpa200.htm](http://www.slbgroup.com/ukpa200.htm)



UC 204 DL ~ UC 209 DL (Metric model)

Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm inch	Bearing number	Housing number	Mass of unit Kg
		a	e	i	g	t	s	z	Bi	n				
12	UCF 201	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 201	F 204	0.57
15	UCF 202	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 202	F 204	0.56
17	UCF 203	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 203	F 204	0.55
20	UCF 204	86	64	15	12	25.5	12	33.3	31.0	12.7	M 10	UC 204	F 204	0.53
25	UCF 205	95	70	16	13	27.0	12	35.7	34.1	14.3	M 10	UC 205	F 205	0.74
30	UCF 206	108	83	18	13	31.0	12	40.2	38.1	15.9	M 10	UC 206	F 206	1.05
35	UCF 207	117	92	19	15	34.0	14	44.4	42.9	17.5	M 12	UC 207	F 207	1.34
40	UCF 208	130	102	21	15	36.0	16	51.2	49.2	19.0	M 14	UC 208	F 208	1.77
45	UCF 209	137	105	22	16	38.0	16	52.2	49.2	19.0	M 14	UC 209	F 209	2.05
50	UCF 210	143	111	22	16	40.0	16	54.6	51.6	19.0	M 14	UC 210	F 210	2.35
55	UCF 211	162	130	25	18	43.0	19	58.4	55.6	22.2	M 16	UC 211	F 211	3.00
60	UCF 212	175	143	29	18	48.0	19	68.7	65.1	25.4	M 16	UC 212	F 212	3.57
65	UCF 213	187	149	30	22	50.0	19	69.7	65.1	25.4	M 16	UC 213	F 213	4.92
70	UCF 214	193	152	31	22	54.0	19	75.4	74.6	30.2	M 16	UC 214	F 214	5.62
75	UCF 215	200	159	34	22	56.0	19	78.5	77.8	33.3	M 16	UC 215	F 215	5.55
80	UCF 216	208	165	34	24	58.0	23	83.3	82.6	33.3	M 20	UC 216	F 216	6.99
85	UCF 217	220	175	36	26	63.0	23	87.6	85.7	34.1	M 20	UC 217	F 217	8.58
90	UCF 218	235	187	40	26	68.0	23	96.3	96.0	39.7	M 20	UC 218	F 218	11.20

Remark: 1) Regular production in "J" tolerance.

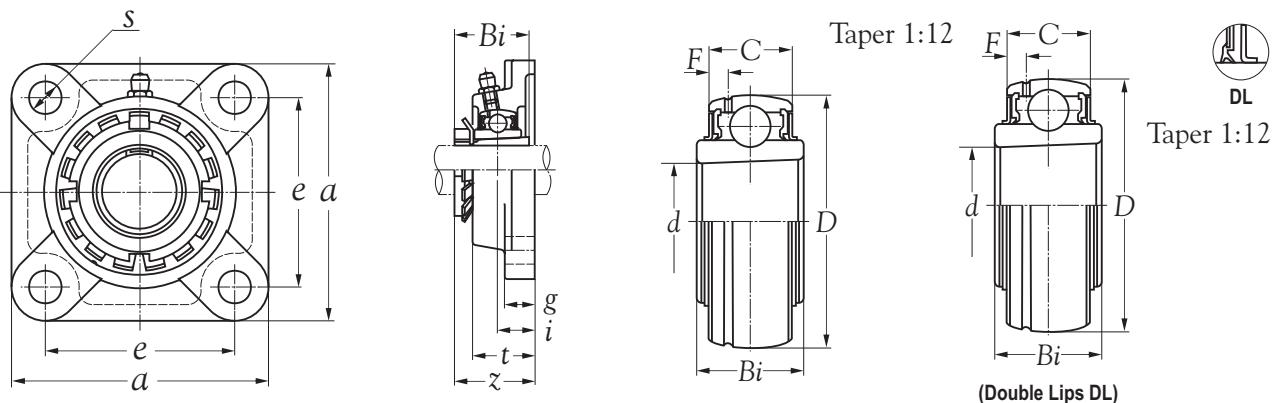
2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ucf200.htm](http://www.slbgroup.com/su-ucf200.htm)





Shaft dia. mm	Unit number	Nominal dimensions mm								Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	e	i	g	t	s	z	Bi				
20	UKF 205	95	70	16	13	27.0	12	35.5	35	M 10	UK 205	F 205	0.68
25	UKF 206	108	83	18	13	31.0	12	39.0	38	M 10	UK 206	F 206	0.98
30	UKF 207	117	92	19	15	34.0	14	42.5	43	M 12	UK 207	F 207	1.24
35	UKF 208	130	102	21	15	36.0	16	46.5	46	M 14	UK 208	F 208	1.61
40	UKF 209	137	105	22	16	38.0	16	48.5	50	M 14	UK 209	F 209	1.90
45	UKF 210	143	111	22	16	40.0	16	50.0	55	M 14	UK 210	F 210	2.14
50	UKF 211	162	130	25	18	43.0	19	54.5	59	M 16	UK 211	F 211	2.65
55	UKF 212	175	143	29	18	48.0	19	61.0	62	M 16	UK 212	F 212	3.07
60	UKF 213	187	149	30	22	50.0	19	64.0	65	M 16	UK 213	F 213	4.42

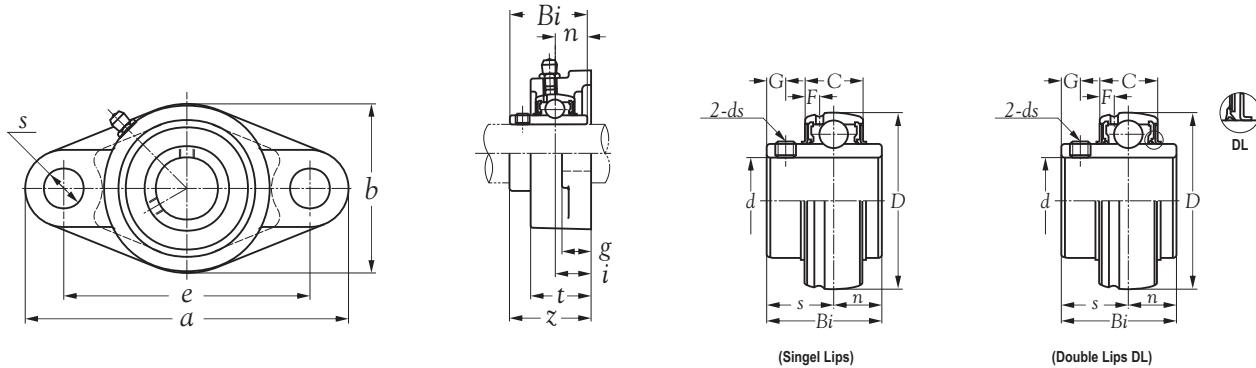
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UK 204 ~ UK 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ukf200.htm](http://www.slbgroup.com/su-ukf200.htm)



Shaft dia. mm	Unit number	Nominal dimensions mm										Bolt size mm inch	Bearing number	Housing number	Mass of unit Kg
		a	e	i	g	t	s	b	z	Bi	n				
12	UCFL 201	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 201	FL 204	0.47
15	UCFL 202	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 202	FL 204	0.46
17	UCFL 203	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 203	FL 204	0.45
20	UCFL 204	113	90	15	11	25.5	12	60	33.3	31.0	12.7	M 10	UC 204	FL 204	0.43
25	UCFL 205	130	99	16	13	27.0	16	68	35.7	34.1	14.3	M 14	UC 205	FL 205	0.60
30	UCFL 206	148	117	18	13	31.0	16	80	40.2	38.1	15.9	M 14	UC 206	FL 206	0.91
35	UCFL 207	161	130	19	14	34.0	16	90	44.4	42.9	17.5	M 14	UC 207	FL 207	1.14
40	UCFL 208	175	144	21	14	36.0	16	100	51.2	49.2	19.0	M 14	UC 208	FL 208	1.43
45	UCFL 209	188	148	22	16	38.0	19	108	52.2	49.2	19.0	M 16	UC 209	FL 209	1.80
50	UCFL 210	197	157	22	16	40.0	19	115	54.6	51.6	19.0	M 16	UC 210	FL 210	2.13
55	UCFL 211	224	184	25	18	43.0	19	130	58.4	55.6	22.2	M 16	UC 211	FL 211	2.86
60	UCFL 212	250	202	29	18	48.0	23	140	68.7	65.1	25.4	M 20	UC 212	FL 212	3.76
65	UCFL 213	258	210	30	20	50.0	23	155	69.7	65.1	25.4	M 20	UC 213	FL 213	4.63
70	UCFL 214	265	216	31	20	54.0	23	160	75.4	74.6	30.2	M 20	UC 214	FL 214	5.22
75	UCFL 215	275	225	34	22	55.0	23	164	78.5	77.8	33.3	M 20	UC 215	FL 215	5.36
80	UCFL 216	290	233	34	22	58.0	25	180	83.3	82.6	33.3	M 22	UC 216	FL 216	6.99
85	UCFL 217	305	248	36	22	63.0	25	190	87.6	85.7	34.1	M 22	UC 217	FL 217	8.28
90	UCFL 218	320	265	40	23	68.0	25	205	96.3	96.0	39.7	M 22	UC 218	FL 218	10.70

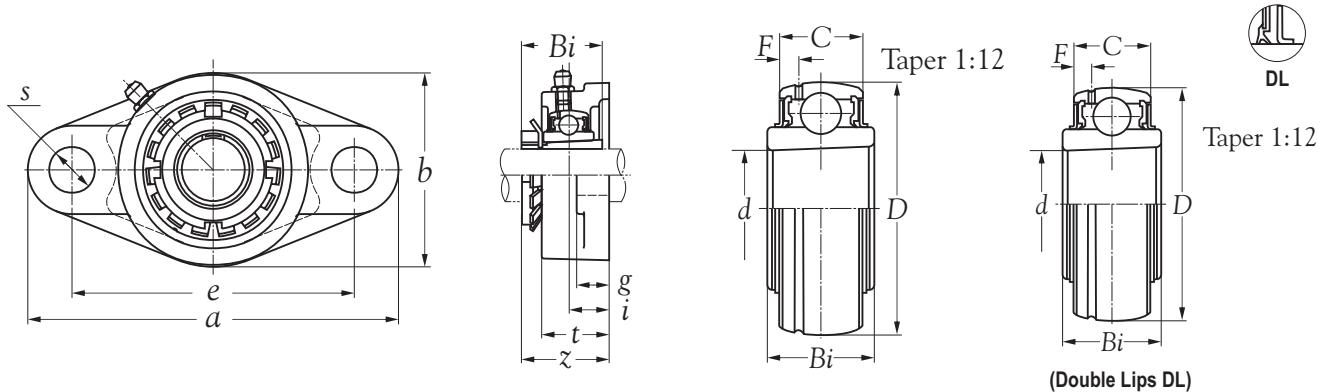
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ucfl200.htm](http://www.slbgroup.com/su-ucfl200.htm)



Shaft dia. mm	Unit number	Nominal dimensions mm									Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	e	i	g	t	b	s	z	Bi				
20	UKFL 205	130	99	16	13	27.0	68	16	35.5	35	M 14	UK 205	FL 205	0.54
25	UKFL 206	148	117	18	13	31.0	80	16	39.0	38	M 14	UK 206	FL 206	0.84
30	UKFL 207	161	130	19	14	34.0	90	16	42.5	43	M 14	UK 207	FL 207	1.04
35	UKFL 208	175	144	21	14	36.0	100	16	46.5	46	M 14	UK 208	FL 208	1.27
40	UKFL 209	188	148	22	16	38.0	108	19	48.5	50	M 16	UK 209	FL 209	1.65
45	UKFL 210	197	157	22	16	40.0	115	19	50.0	55	M 16	UK 210	FL 210	1.92
50	UKFL 211	224	184	25	18	43.0	130	19	54.5	59	M 16	UK 211	FL 211	2.51
55	UKFL 212	250	202	29	18	48.0	140	23	61.0	62	M 20	UK 212	FL 212	3.26
60	UKFL 213	258	210	30	20	50.0	155	23	64.0	65	M 20	UK 213	FL 213	4.13

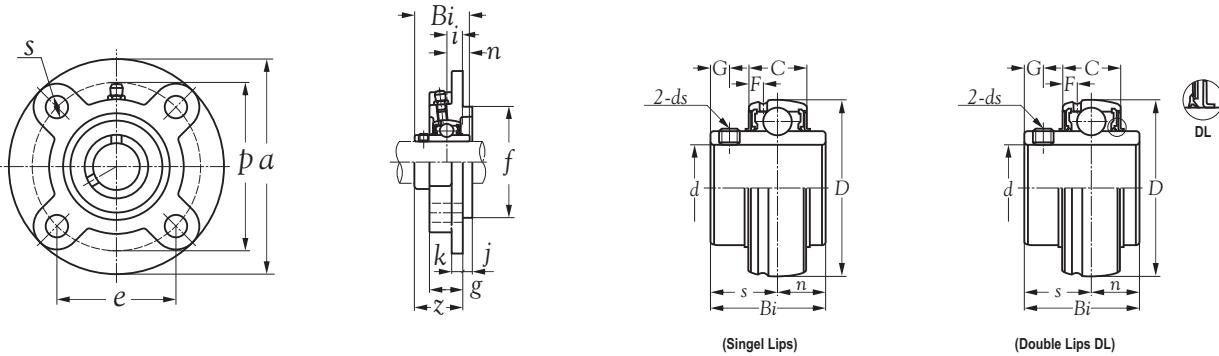
Remark: 1) Regular production in "J" tolerance.

Remark: If you have more inquiry of technical, please inquire

2) Bearing unit with grease holes and grease groove.

SLB web-site: [Http://www.slbgroup.com/su-ukfl200.htm](http://www.slbgroup.com/su-ukfl200.htm)

3) Bearing units UK 204 ~ UK 209 with Double Lips (DL).



Shaft dia. mm	Unit number	Nominal dimensions mm												Bolt size mm inch	Bearing number	Housing number	Mass of unit Kg
		a	p	e	i	s	j	k	g	f	z	Bi	n				
12	UCFC 201	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 201	FC 204	0.73
15	UCFC 202	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 202	FC 204	0.72
17	UCFC 203	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 203	FC 204	0.71
20	UCFC 204	100	78	55.1	10	12	5	6	20.5	62	28.3	31.0	12.7	M 10	UC 204	FC 204	0.69
25	UCFC 205	115	90	63.6	10	12	6	7	21.0	70	29.7	34.1	14.3	M 10	UC 205	FC 205	0.99
30	UCFC 206	125	100	70.7	10	12	8	8	23.0	80	32.2	38.1	15.9	M 10	UC 206	FC 206	1.25
35	UCFC 207	135	110	77.8	11	14	8	9	26.0	90	36.4	42.9	17.5	M 12	UC 207	FC 207	1.64
40	UCFC 208	145	120	84.8	11	14	10	9	26.0	100	41.2	49.2	19.0	M 12	UC 208	FC 208	2.01
45	UCFC 209	160	132	93.3	10	16	12	10	26.0	105	40.2	49.2	19.0	M 14	UC 209	FC 209	2.57
50	UCFC 210	165	138	97.6	10	16	12	14	28.0	110	42.6	51.6	19.0	M 14	UC 210	FC 210	2.85
55	UCFC 211	185	150	106.1	13	19	12	13	30.0	125	46.4	55.6	22.2	M 16	UC 211	FC 211	3.92
60	UCFC 212	195	160	113.1	17	19	12	15	36.0	135	56.7	65.1	25.4	M 16	UC 212	FC 212	5.03
65	UCFC 213	205	170	120.2	16	19	14	15	35.0	145	55.7	65.1	25.4	M 16	UC 213	FC 213	5.52
70	UCFC 214	215	177	125.1	17	19	14	16	38.0	150	61.4	74.6	30.2	M 16	UC 214	FC 214	6.55
75	UCFC 215	220	184	130.1	18	19	16	17	39.0	160	62.5	77.8	33.3	M 16	UC 215	FC 215	7.01
80	UCFC 216	240	200	141.4	18	23	16	18	42.0	170	67.3	82.6	33.3	M 20	UC 216	FC 216	8.94
85	UCFC 217	250	208	147.1	18	23	18	20	45.0	180	69.6	85.7	34.1	M 20	UC 217	FC 217	10.68
90	UCFC 218	265	220	155.5	22	23	18	20	50.0	190	78.3	96.0	39.7	M 20	UC 218	FC 218	12.95

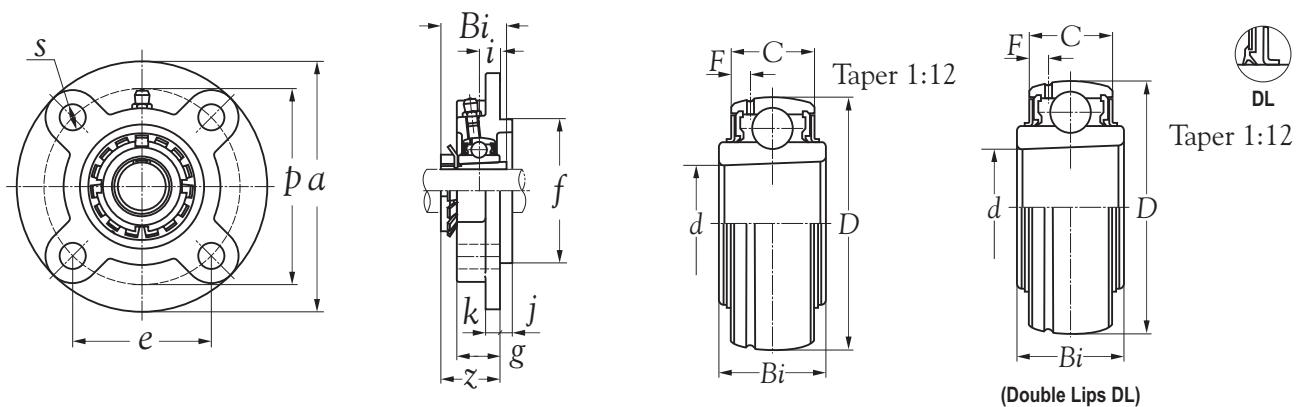
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

 SLB web-site: [Http://www.slbgroup.com/su-ucfc200.htm](http://www.slbgroup.com/su-ucfc200.htm)

Shaft dia. mm	Unit number	Nominal dimensions mm												Bolt size mm	Bearing number	Housing number	Mass of unit Kg
		a	p	e	i	s	j	k	g	f	z	Bi					
20	UKFC 205	115	90	63.6	10	12	6	7	21.0	70	29.5	35	M 10	UK 205	FC 205	0.93	
25	UKFC 206	125	100	70.7	10	12	8	8	23.0	80	31.0	38	M 10	UK 206	FC 206	1.18	
30	UKFC 207	135	110	77.8	11	14	8	9	26.0	90	34.5	43	M 12	UK 207	FC 207	1.54	
35	UKFC 208	145	120	84.8	11	14	10	9	26.0	100	36.5	46	M 12	UK 208	FC 208	1.85	
40	UKFC 209	160	132	93.3	10	16	12	10	26.0	105	36.5	50	M 14	UK 209	FC 209	2.42	
45	UKFC 210	165	138	97.6	10	16	12	14	28.0	110	38.0	55	M 14	UK 210	FC 210	2.64	
50	UKFC 211	185	150	106.1	13	19	12	13	30.0	125	42.5	59	M 16	UK 211	FC 211	3.57	
55	UKFC 212	195	160	113.1	17	19	12	15	36.0	135	49.0	62	M 16	UK 212	FC 212	4.53	
60	UKFC 213	205	170	120.2	16	19	14	15	35.0	145	50.0	65	M 16	UK 213	FC 213	5.02	

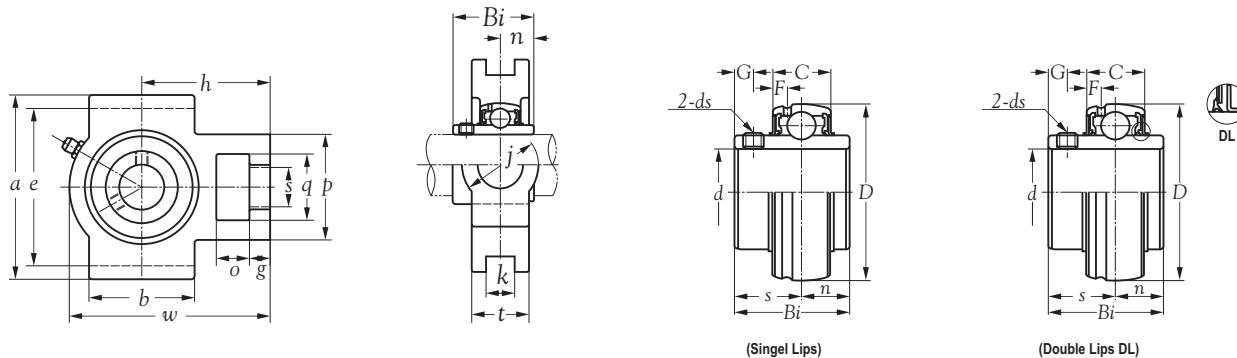
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

3) Bearing units UK 204 ~ UK 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ukfc200.htm](http://www.slbgroup.com/su-ukfc200.htm)



Shaft dia. mm	Unit number	Nominal dimensions mm														Bearing number	Housing number	Mass of unit Kg	
		<i>o</i>	<i>g</i>	<i>p</i>	<i>q</i>	<i>s</i>	<i>b</i>	<i>k</i>	<i>e</i>	<i>a</i>	<i>w</i>	<i>j</i>	<i>t</i>	<i>h</i>	<i>Bi</i>	<i>n</i>			
12	UCT 201	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 201	T 204	0.77
15	UCT 202	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 202	T 204	0.76
17	UCT 203	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 203	T 204	0.75
20	UCT 204	16	10	51	32	19	51	12	76	89	94	32	21	61	31.0	12.7	UC 204	T 204	0.73
25	UCT 205	16	10	51	32	19	51	12	76	89	97	32	24	62	34.1	14.3	UC 205	T 205	0.83
30	UCT 206	16	10	56	37	22	57	12	89	102	113	37	28	70	38.1	15.9	UC 206	T 206	1.26
35	UCT 207	16	13	64	37	22	64	12	89	102	129	37	30	78	42.9	17.5	UC 207	T 207	1.58
40	UCT 208	19	16	83	49	29	83	16	102	114	144	49	33	88	49.2	19.0	UC 208	T 208	2.31
45	UCT 209	19	16	83	49	29	83	16	102	117	144	49	35	87	49.2	19.0	UC 209	T 209	2.28
50	UCT 210	19	16	83	49	29	86	16	102	117	149	49	37	90	51.6	19.0	UC 210	T 210	2.50
55	UCT 211	25	19	102	64	35	95	22	130	146	171	64	38	106	55.6	22.2	UC 211	T 211	3.79
60	UCT 212	32	19	102	64	35	102	22	130	146	194	64	42	119	65.1	25.4	UC 212	T 212	4.79
65	UCT 213	32	21	111	70	41	121	26	151	167	224	70	44	137	65.1	25.4	UC 213	T 213	6.66
70	UCT 214	32	21	111	70	41	121	26	151	167	224	70	46	137	74.6	30.2	UC 214	T 214	6.75
75	UCT 215	32	21	111	70	41	121	26	151	167	232	70	48	140	77.8	33.3	UC 215	T 215	7.11
80	UCT 216	32	21	111	70	41	121	26	165	184	235	70	51	140	82.6	33.3	UC 216	T 216	8.19
85	UCT 217	38	29	124	73	48	157	30	173	198	260	73	54	162	85.7	34.1	UC 217	T 217	10.58

Remark: 1) Regular production in "J" tolerance.

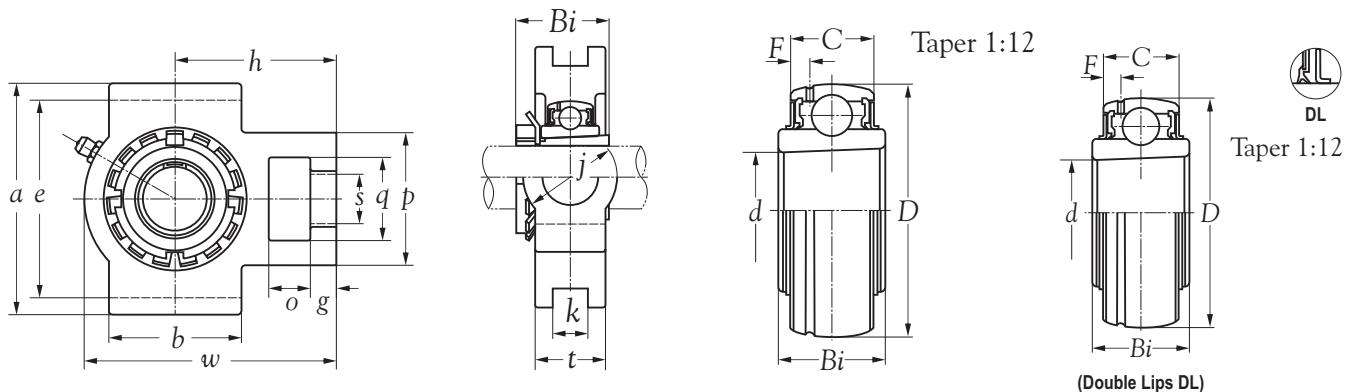
2) Bearing unit with grease holes and grease groove.

3) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-uct200.htm](http://www.slbgroup.com/su-uct200.htm)





Shaft dia. mm	Unit number	Nominal dimensions mm													Bearing number	Housing number	Mass of unit Kg	
		o	g	p	q	s	b	k	e	a	w	j	t	h	Bi			
20	UKT 205	16	12	51	32	19	51	12	76	89	97	32	24	62	35	UK 205	T 205	0.77
25	UKT 206	16	12	56	37	22	57	12	89	102	113	37	28	70	38	UK 206	T 206	1.19
30	UKT 207	16	15	64	37	22	64	12	89	102	129	37	30	78	43	UK 207	T 207	1.48
35	UKT 208	19	18	83	49	29	83	16	102	114	144	49	33	88	46	UK 208	T 208	2.15
40	UKT 209	19	18	83	49	29	83	16	102	117	144	49	35	87	50	UK 209	T 209	2.13
45	UKT 210	19	18	83	49	29	86	16	102	117	149	49	37	90	55	UK 210	T 210	2.29
50	UKT 211	25	21	102	64	35	95	22	130	146	171	64	38	106	59	UK 211	T 211	3.44
55	UKT 212	32	21	102	64	35	102	22	130	146	194	64	42	119	62	UK 212	T 212	4.29
60	UKT 213	32	23	111	70	41	121	26	151	167	224	70	44	137	65	UK 213	T 213	6.16

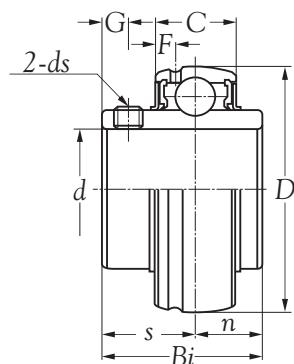
Remark: 1) Regular production in "J" tolerance.

2) Bearing unit with grease holes and grease groove.

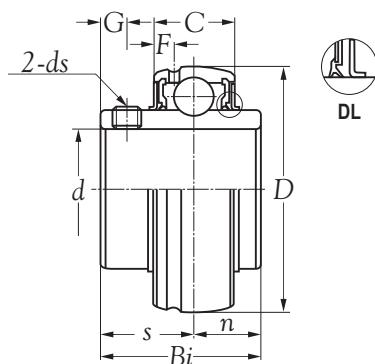
3) Bearing units UK 204 ~ UK 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-ukt200.htm](http://www.slbgroup.com/su-ukt200.htm)



(Single Lips)



(Double Lips DL)

Shaft dia. mm	Bearing number	Nominal dimensions mm									Basic load ratings N		Weight Kg
		d	D	Bi	C	n	s	G	F	ds	dynamic Cr	static Cor	
12	UC 201 D1	12	47	31.0	16	12.7	18.3	5.0	4.0	M 5X0.8	12,800	6,650	0.21
15	UC 202 D1	15	47	31.0	16	12.7	18.3	5.0	4.0	M 5X0.8	12,800	6,650	0.20
17	UC 203 D1	17	47	31.0	16	12.7	18.3	5.0	4.0	M 5X0.8	12,800	6,650	0.19
20	UC 204 D1 DL	20	47	31.0	16	12.7	18.3	5.0	4.0	M 6X1	12,800	6,650	0.17
25	UC 205 D1 DL	25	52	34.1	17	14.3	19.8	5.5	4.3	M 6X1	14,000	7,850	0.21
30	UC 206 D1 DL	30	62	38.1	19	15.9	22.2	6.0	4.7	M 6X1	19,500	11,300	0.32
35	UC 207 D1 DL	35	72	42.9	20	17.5	25.4	6.5	4.6	M 8X1	25,700	15,300	0.47
40	UC 208 D1 DL	40	80	49.2	21	19.0	30.2	8.0	4.6	M 8X1	29,100	17,800	0.64
45	UC 209 D1 DL	45	85	49.2	22	19.0	30.2	8.0	4.9	M 8X1	32,500	20,400	0.68
50	UC 210 D1	50	90	51.6	24	19.0	32.6	9.0	5.5	M 10X1.25	35,000	23,200	0.80
55	UC 211 D1	55	100	55.6	25	22.2	33.4	9.0	5.4	M 10X1.25	43,500	29,200	1.12
60	UC 212 D1	60	110	65.1	27	25.4	39.7	10.5	5.9	M 10X1.25	52,500	36,000	1.53
65	UC 213 D1	65	120	65.1	28	25.4	39.7	12.0	5.5	M 12X1.25	57,500	40,000	1.86
70	UC 214 D1	70	125	74.6	30	30.2	44.4	12.0	6.1	M 12X1.5	62,000	44,000	2.05
75	UC 215 D1	75	130	77.8	32	33.3	44.5	12.0	7.0	M 12X1.5	66,000	49,500	2.21
80	UC 216 D1	80	140	82.6	33	33.3	49.3	14.0	7.5	M 12X1.5	72,500	53,000	2.79
85	UC 217 D1	85	150	85.7	35	34.1	51.6	14.0	7.5	M 12X1.5	83,500	64,000	3.38
90	UC 218 D1	90	160	96.0	37	39.7	56.3	15.0	8.0	M 12X1.5	96,000	71,500	4.45

Remark: 1) Bearing with grease holes and grease groove.

2) Bearing units UC 204 ~ UC 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-uc200.htm](http://www.slbgroup.com/su-uc200.htm)



Technical supplement



Cage

Slingers

Precision

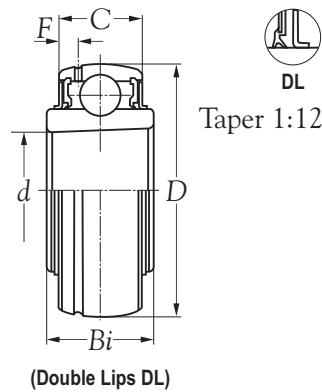
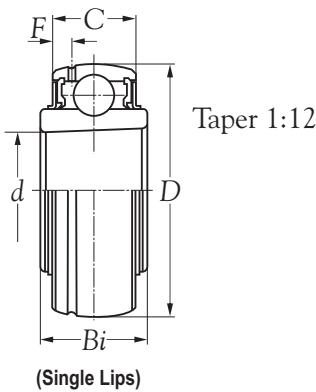
Grease

Steel

Steel

PO

MULTEMP SRL
-50°C ~ +150°C



Shaft dia. mm	Bearing number	Nominal dimensions mm					Basic load ratings N		Weight Kg
		d	D	Bi	C	F	dynamic Cr	static Cor	
20	UK 205 D1 DL	25	52	23	17	4.3	14,000	7,850	0.15
25	UK 206 D1 DL	30	62	26	19	4.7	19,500	11,300	0.25
30	UK 207 D1 DL	35	72	27	20	4.6	25,700	15,300	0.37
35	UK 208 D1 DL	40	80	29	21	4.6	29,100	17,800	0.48
40	UK 209 D1 DL	45	85	30	22	4.9	32,500	20,400	0.53
45	UK 210 D1	50	90	31	24	5.5	35,000	23,200	0.59
50	UK 211 D1	55	100	33	25	5.4	43,500	29,200	0.77
55	UK 212 D1	60	110	36	27	5.9	52,500	36,000	1.03
60	UK 213 D1	65	120	38	28	5.5	57,500	40,000	1.36

Remark: 1) Bearing with grease holes and grease groove.

2) Bearing units UK 204 ~ UK 209 with Double Lips (DL).

Remark: If you have more inquiry of technical, please inquire

SLB web-site: [Http://www.slbgroup.com/su-uk200.htm](http://www.slbgroup.com/su-uk200.htm)



Technical supplement

Cage

Slingers

Precision

Grease

Steel

Steel

PO

MULTEMP SRL
-50°C ~ +150°C



SLB Plant

Established in 1984

SLB Trademark

Since 1993

Registered in USA

Year 2000



CATALOGUE FOR SUPREME MOUNTED UNITS



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