J-Line Bearing Units

Content

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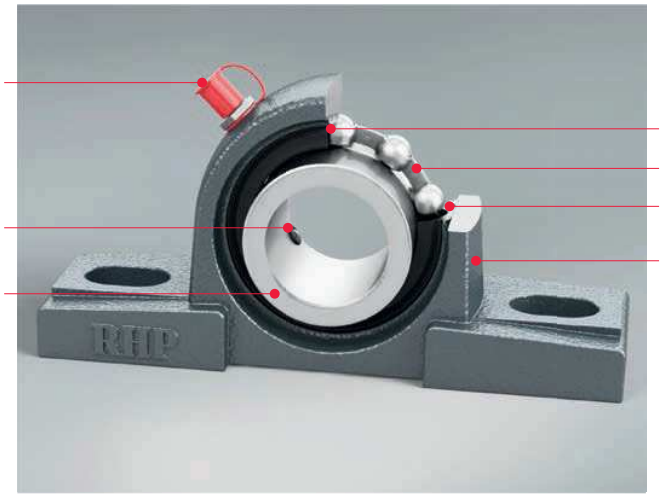
1. Structure of J-Line Bearing Units

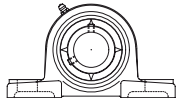


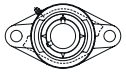
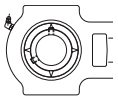
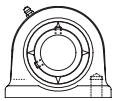
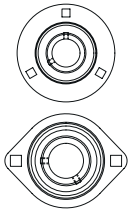
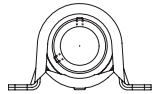
2. Design Features & Advantages

2.1 Combination table

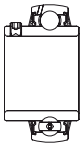
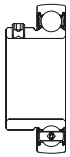
Housing

Bearing

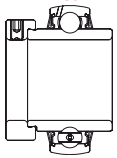
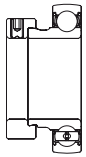


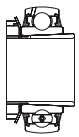
Set Screw type

		Page		Page		Page		Page
	UC2	UCP2	**184**	UCF2	**190**	UCFC2	**196**	UCFL2	**202**
	AS2								

Eccentric locking collar type

	UEL2	UELP2	**186**	UELF2	**192**	UELFC2	**198**	UELFL2	**204**
	AEL2								

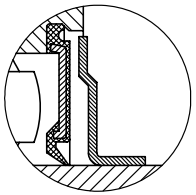
Adapter type

	UK2	UKP2	**188**	UKF2	**194**	UKFC2	**200**	UKFL2	**206**

Page		Page		Page		Page	
UCT2	**208**	UCUP2	**214**				
				ASPF2 ASPFL2	**238** **234**	ASPP2	**230**
UELT2	**210**	UELUP2	**216**				
				AELPF2 AELPFL2	**240** **236**	AELPP2	**232**
UKT2	**212**	UKUP2	**218**				

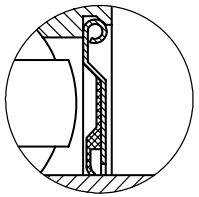
2. Design Features & Advantages

2.2 Sealing



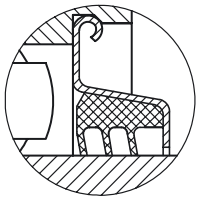
SL type (Standard)
Dual seal

The rubber seal is fixed in a groove in the bore on the inside diameter of the outer ring and the lip contacts the outside diameter of the inner ring.
The separate metal flinger is fixed on the outside diameter of the inner ring leaving a small annualr gap to the bore diameter of the outer ring.
This configuration provides a very effective labyrinth to prevent contamination from entering the inside of the bearing.
(Standard on UC, UEL and UK series)



H type
Metal seal

The rubber seal is bonded to a steel plate that is fixed in a groove in the bore diameter of the outer ring. The rubber seal contacts on the outside diameter of the inner ring and the steel plate also has a small annular gap to the outside diameter of the inner ring.
This configuration provides a robust and effective barrier to prevent contamination from entering the inside of the bearing.
(Standard on AS and AEL series)



L3 type
Triple lip seal

A rubber seal with 3 lips is bonded to a steel plate that is fixed in a groove on the bore diameter of the outer ring. The 3 lips of the rubber seal contact on the outside diameter of the inner ring and the steel plate also has a small annualr gap to the outside diameter of the inner ring.
This configuration provides very effective protection in applications with high levels of contamination.
(Optional on UC and UEL series - available upon request)

2.3 Secure fitting

Fastening the bearing to the shaft is effected by tightening the set screw, situated on the inner ring. This is a unique feature which prevents loosening, even if the bearing is subjected to intense vibrations and shocks.

2.4 Self-aligning

With the J-Line bearing unit, the outer diameter of the bearing and the inner diameter of the housing are spherical, giving the unit self-aligning characteristics to accomodate any initial misalignment of the shaft.

2.5 Easy mounting

The J-Line bearing unit is an integrated unit consisting of a bearing insert and a housing. As the bearing is prelubricated during manufacture with the correct amount of high-grade lithium base grease, it can be mounted on the shaft directly ready for use.

2.6 Bearing replaceability

The bearing insert used in the J-line bearing unit can easily be replaced with a similar product. In the event of insert failure, a new bearing can be fitted into the existing housing.

2.7 Fit of insert in housing

To securely locate the bearing insert in the housing, J-line uses a "J-Fit" dimensional interference between the bearing outside diameter and the bore of the housing, as standard.
In addition, because J-Line is often used in very demanding applications (eg. in agricultural machinery), a pin stop has been added to the UC, UEL and UK series inserts as an additional safety feature to the interference fit. The pin stop prevents rotation of the outer ring, even if the bearing is swiveling inside the housing during use.

3. Tolerances

3.1 Radial Internal Clearance of Insert Bearings

C3 for cylindrical bore bearings and C4 for tapered bore bearings.

3.1.1 Cylindrical bore insert bearings

Bore diameter d (mm)		C3	
over	incl.	min.	max.
10	18	11	25
18	24	13	28
24	30	13	28
30	40	15	33
40	50	18	36
50	65	23	43
65	80	25	51
80	100	30	58
100	120	36	66
120	140	41	81

Unit = 0.001 mm

3.1.2 Tapered bore insert bearings

Bore diameter d (mm)		C4	
over	incl.	min.	max.
10	18	18	33
18	24	20	36
24	30	23	41
30	40	28	46
40	50	30	51
50	65	38	61
65	80	46	71
80	100	53	84
100	120	61	97
120	140	71	114

Unit = 0.001 mm

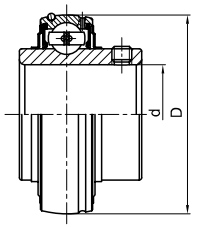
3.2 Dimensional Tolerances of Insert Bearings

3.2.1 Tolerances of outer ring

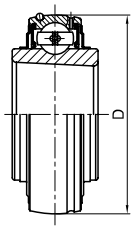
D (mm)		ΔDmp		Kea
over	incl.	max.	min.	max.
30	50	0	-11	20
50	80	0	-13	25
80	120	0	-15	35
120	150	0	-18	40
150	180	0	-25	45
180	250	0	-30	50
250	315	0	-35	60

Unit = 0.001 mm

UC-type



UK-type



D outside diameter of bearing
ΔDmp deviation of mean outside diameter
Kea radial runout of outer ring

3.2.2 Tolerances of inner ring with cylindrical bore

d (mm)		Cylindrical bore insert bearing					Kia
		Bore diameter			ΔBs, ΔCs		
		ΔDmp		Vdp			
over	incl.	max.	min.	max.	min.	min.	max.
10	18	+15	0	10	0	-120	15
18	30	+18	0	12	0	-120	18
30	50	+21	0	14	0	-120	20
50	80	+24	0	16	0	-150	25
80	120	+28	0	19	0	-200	30
120	180	+33	0	22	0	-250	35

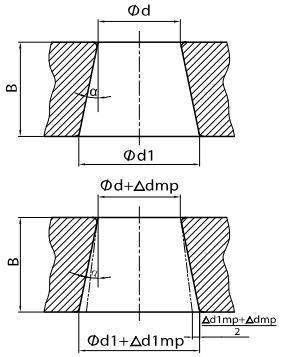
d bore diameter
Δdmp deviation of mean bearing bore diameter in a single plane
Vdp variation of bearing bore diameter in a single radial plane
ΔBs deviation of a single inner ring width
ΔCs deviation of a single outer ring width
Kia radial runout of inner ring

3. Tolerances

3.2.3 Tolerances of inner ring with tapered bore

d (mm)		ΔDmp		Δd1mp-Δdmp		Vdp[1)]
over	incl.	max.	min.	max.	min.	max.
18	30	+33	0	+21	0	13
30	50	+39	0	+25	0	15
50	80	+46	0	+30	0	19
80	120	+54	0	+35	0	25
120	180	+63	0	+40	0	31

Unit = 0.001 mm



1) Applies in any single radial plane of the bore
d bore diameter
d1 diameter at the theoretical large end of a basically tapered bore d1=d + 1/12B
Δdmp deviation of mean bore diameter in a single plane
(for a basically bore, dmp refers to the theoretical small end of the bore)
Δd1mp deviation of mean bore diameter in a single plane at the theoretical
large end of a basically tapered bore
Vdp variation on bore diameter in a single radial plane
B inner ring width
a the taper angle (half the cone angle) is a = 2° 23′ 9.4″ = 2.385 94°= 0.041 643 rad

3.3 Dimensional accuracies of housings

The spherical bore diameter of the J-Line housing follows the J7 tolerance class as shown below in table 3.3.1.

3.3.1 Tolerance of spherical bore diameter of housings

Nominal dimension of spherical bore diameter d (mm)		Housing for interference fit	
		Tolerance class J7	
		D1m	
over	incl.	max.	min.
30	50	+14	-11
50	80	+18	-12
80	120	+22	-13
120	180	+26	-14
180	250	+30	-16
250	315	+36	-16

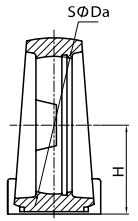
Unit = 0.001 mm

3.3.2 Dimensional accuracies of pillow block-type housings

Tolerance of pillow block center height

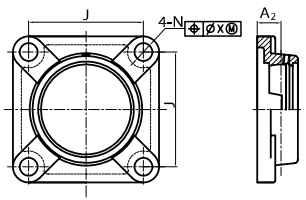
Housing No. P, PA	Tolerance of H
203-210	±150
211-218	±200

Unit = 0.001 mm

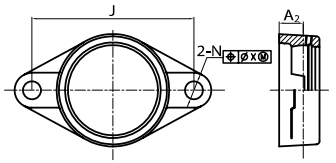


3.3.3 Dimensional accuracies of flange-type housings

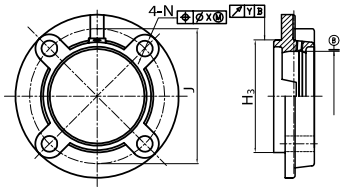
F



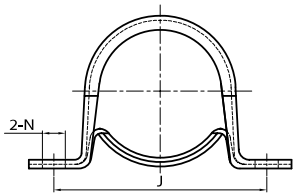
FL



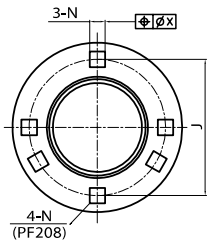
FC



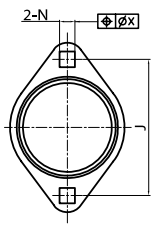
PP



PF



PFL



3. Tolerances

Tolerance of housings

Housing No. F, FL	X ≤	ΔA_2	Housing No. FC	Tolerance of ΔH_3 FC 2 .. max.	Tolerance of ΔH_3 FC 2 .. min.	X ≤	ΔA_2	Y ≤
204	700	±500	204	0	-46	700	±500	200
205			205					
206			206					
207			207		-54			
208			208					
209			209					
210			210					
211	1000	±800	211	0	-63	1000	±800	300
212			212					
213			213					
214			214					
215			215					
216			216					
217			217					
218			218		-72			

Unit = 0.001 mm

Unspecified tolerance of castings

Thickness over	Thickness incl.	Tolerance Δ	Thickness over	Thickness incl.	Tolerance Δ
-	120	±1.5	-	-	-
120	250	±2.0	-	10	±1.5
250	400	±3.0	10	18	±2.0
400	800	±4.0	18	30	±3.0
800	1600	±6.0	30	50	±3.5

Unit = 0.001 mm

Tolerance of pressed steel housings

Housing No.	Δ N	Tolerance of J	Housing No.	Δ N	Tolerance of mounting hole position
PP203-208	±0.5	±0.4	PF203-208 PFL203-208	±0.2	0.4

Unit = 0.001 mm

4. Load Rating and Life

4.1 Bearing life

Even in bearings operating under normal conditions, the surfaces of the raceway and rolling elements are constantly being subjected to repeated compressive stresses which cause flaking of these surfaces to occur. This flaking is due to material fatigue and will eventually cause the bearings to fail. The bearing life of a insert bearing is usually defined in terms of the total number of revolutions a bearing can undergo before flaking.
Some insert bearing failure is caused by seizing, abrasions, cracking, chipping, gnawing, rust etc, which may be caused by improper installation, insufficient or improper lubrication, faulty sealing or inaccurate bearing selection and these must be considered separately from bearing life.

4.1.1 Basic load rating and rated life

Basic load rating includes basic dynamic load rating and basic static load rating. The load applied to the insert bearing operating under a speedy rotating (n> 10 r/min) condition is defined as dynamic load C , while the load applied to the bearing operating under a static or slow oscillating and rotating (n≤ 10 r/min) condition is defined as static load Co.
Insert bearing is a kind of radial ball bearing, mainly take radial force. So, the basic load rating is radial basic dynamic load Cr and radial basic static load Cor.
Basic dynamic load rating Cr: the basic dynamic load rating is an expression of the load capacity of a bearing based on a constant load which the bearing can sustain for one million revolutions.
Basic static load rating Cor: the maximum applied radial load resulting in contact stress occurring at the rolling element and raceway contact points of:

4600MPa for self aligning ball bearing
4200MPa for radial ball bearing
4000MPa for radial roller bearing

The load capacity of the bearing is expressed by the basic dynamic load rating and basic static load rating which is shown in the bearing dimension page.
Life: The life of a rolling bearing is defined as the total number of revolutions which the bearing is capable of enduring before the first evidence of fatigue flaking develops on any one of the rings or rolling elements.
Reliability: The reliability is the percentage of the bearing 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 an 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 revolutions that 90% of the bearings can be expected to complete or exceed.
According to national standard GB/T6391-2003 (equaling to ISO281: 1990) , the basic rating life of radial ball bearing is calculated by following formula:

$$L_{10} = \left(\frac{C_r}{P_r}\right)^3$$

or $$\frac{C_r}{P_r} = L_{10}^{1/3}$$

Where: L_{10}: basic rating life(10^6 r)
C_r: basic dynamic load rating
P_r: equivalent dynamic load

4. Load Rating and Life

Equivalent dynamic load P_r: the equivalent dynamic load 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 insert bearing operating with a constant rotation speed, the basic rating life can be expressed in terms of hours of operation, and is calculated in following formula:

$$L_{10h} = \frac{10^6}{60n}\left(\frac{C_r}{P}\right)^3$$

or $$L_{10h} = \frac{10^6}{60n} L_{10}$$

$$= \frac{16666}{n}\left(\frac{C_r}{P}\right)^3$$

Where: L10h = basic rating life (hours)
n = bearing rotation speed (r/min)
If the bearing operates under indeterminate loads and rotation speed, the following formula should be applied when calculating bearing rating life:

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

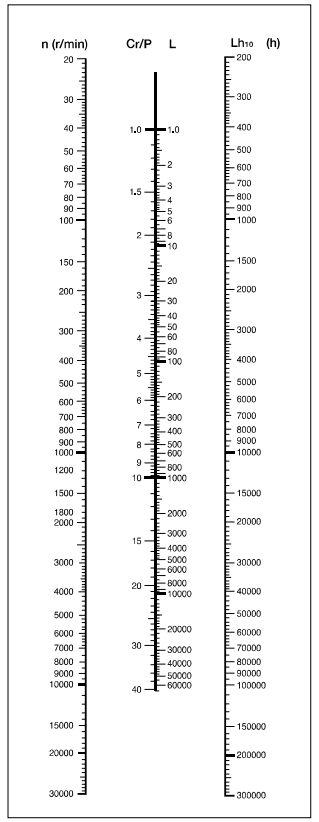
Where: P_m = mean equivalent dynamic load
P = equivalent dynamic load
N = total revolution numbers within one load changing cycle

4.1.2 Calculation method of equivalent dynamic load

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

Where: P = equivalent dynamic load (N) ;
Fr = actual radial load (N)
Fa = actual axial load (N)
X = radial factor
Y = thrust factor

The axial load which insert bearing can carry is determined by the mounting method of the bearings on the shafts.
For the setscrews locking type or eccentric locking collar type bearings, if flexible shafts are applied and the setscrews are tightened enough, the axial load Fa which the bearing can carry must not surpass 20% of the radial load Fr.
For the adapter sleeve locking type bearing, if the nuts are properly lightened, the axial load Fa can be maximum 15% ~ 20% of the radial load Fr.
The values of radial and thrust factors X and Y for insert bearings can be obtained from the following table:



$\frac{F_a}{C_o}$	$\frac{F_a}{F_r} \le e$ P = F_r		C2			N			C3		
			$\frac{F_a}{F_r} > e$		e	$\frac{F_a}{F_r} > e$		e	$\frac{F_a}{F_r} > e$		e
	X	Y	X	Y		X	Y		X	Y	
0.025	1	0	0.56	2.0	0.22	0.46	1.75	0.31	0.44	1.42	0.40
0.040	1	0	0.56	1.8	0.24	0.46	0.62	0.33	0.44	1.36	0.42
0.070	1	0	0.56	1.6	0.27	0.46	1.46	0.36	0.44	1.27	0.44
0.130	1	0	0.56	1.4	0.31	0.46	1.30	0.41	0.44	1.16	0.48
0.250	1	0	0.56	1.2	0.37	0.46	1.14	0.46	0.44	1.05	0.53

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

$P_m = fm \cdot P$

Where: P_m = equivalent dynamic load when considering twist load

f_m = when twist load is big :fm=2

When shocking load is applied, equivalent dynamic load can be calculated by:

$P_d = f_d \cdot P$

Where: P_d = equivalent dynamic load when considering shocking load (N)

f_m = shocking load factor; which is defined as follows:

When no shocking load or minor shocking load is applied:

f_d = 1~1.2

When adequate shocking load is applied:

f_d = 1.2~1.8

4.1.3 Adjusted rating life equation

Normally the basic rating life L 10 can be applied to calculate the bearing rating life, the bearing life is with 90% reliability.

However, in some applications a bearing life over 90% reliability may be required, moreover, the effect of bearing quality and operation conditions are expected to take into consideration when calculating bearing life, the adjusted bearing life L_{nm} (n means failure rate, (100-n) means reliability) meet these requirements.

Bearing life Lnm, is adjusted bearing life under (100-n) % reliability, speicified bearing quality and operation conditions, it can be calculated by:

$L_{nm} = a_1 a_{xyz} L_{10}$

Life adjustment factor for reliability a_1 please refers to following table.

Life adjustment factor for reliability a_1

Reliability	L_{nm}	a_1
90	L_{10m}	1
95	L_{5m}	0.62
96	L_{4m}	0.53
97	L_{3m}	0.44
98	L_{2m}	0.33
99	L_{1m}	0.21

Life adjustment factor axyz include followings:

- material
- lubrication
- environment
- Impurity particle
- Internal stess
- mounting
- bearing load

The bearing life is affected by any of above factors, so all factors must be taken into consideration when selecting bearing to avoid failure. Please refer to national standard GB/T6391-2003 for bearing life calculating method.

4.1.4 Example of insert bearing selection

One ball bearing is to operate at at rotation speed of 800r/min, under only a radial load of Fr = 3000N, with a basic rating life of at least 30000 hours, select the bearing.

Solution 1:

According to formula

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

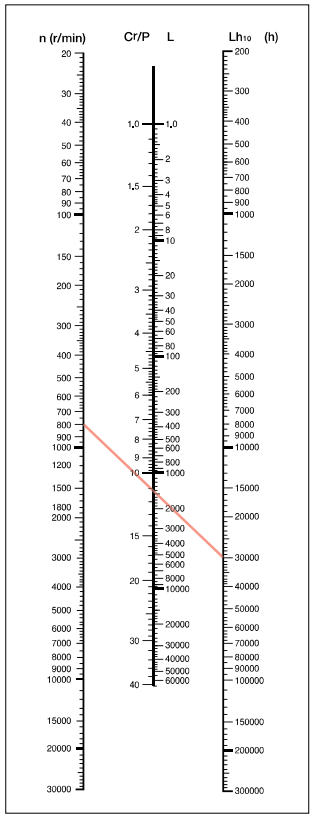
From L_{10h} = 30000 hours, rotation speed = 800r/m,

Under only a radial load, i.e. P = Fr = 3000N,

Therefore, C_r = 33877N.

Solution 2:

By connecting n(800r/m) and the required basic rating life L10h (30000hours) with a straight line on the fig,it can be found that C/P value is 11.3, C/P = 11.3, P = Fr = 3000N, thus the required basic dynamic load rating is C_r = 33900N



4.2 Selection of ball bearing units

As the excellent characteristics of ball bearing unit is recognized, its application fields are always expanded and at present it is used in all aspects of industrial activities in general.

Its expected service life can be extended twice by using the ball bearing unit correctly. On the contrary, inappropriate selection and handling will shorten the expected service life.

Therefore, it is necessary to examine the following items thoroughly, when the ball bearing unit is selected.

1. Size and nature of the working load.
2. Desirable minimum expected service life.
3. Operating speed of the shaft.
4. Bearing number and parallel application arrangement on the shaft in question.
5. Available space for assembling and disassembling work.
6. Appearance at the place to be used.
7. Gas generation and dust condition at the installation place.

8. Ambient temperature at the installation place.
9. Machining precision of the facility, to which the bearing is applied.
10. Maintenance and control, including the lubrication system.

The above items are regarded as the selection conditions, and the items 1,2 and 3 can be examined by the service life calculation of the ball bearing unit.
As to the item 4, such a type as allows the alignment adjustment through the installation modification, must be selected, since the mutual alignment work becomes necessary even in the case of automatic alignment adjusting type, where many sets of bearing can be applied to one shaft.
Regarding the item 5, it must be examined if enough installation space is available or not, in order to know in what manner the installation work can be done.
Item 6 may suggest the necessity of the clean and aesthetic design, depending on the application purpose of the machine involved. For example, such consideration will be needed for the application to the electric appliance or sewing machine.
Items 7 and 8 mean that it must be studied if the gas and chemicals, or high temperature, which are harmful to ball bearing, are existing or not.
As suggested in Item 9, the ball bearing unit must suit to the processing precision of the installation section.
Item 10 covers the maintenance and inspection problem, namely, how easily the maintenance can be done, or if the unit is installed inside the machine where the lubrication can hardly be done or if the lubrication must be and how etc. The optimum selection of bearing unit, right unit for right place, will ensure the full development of performance of ball bearing unit.

4.3 Selection of shafts

The ball bearing unit is provided with hexagonal hollow set screws at two spots located at 120° one side of inner ring. Mounting on the shaft normally adopts loose fit. In this case, the following relationship between the shaft and the inner bore is recommended.

Dimensional accuracy of the shaft to be used in the cylindrical bore insert bearing (Loose fit)

Shaft Diameter (mm)		for lower speed		for medium speed		for rather high speed		for high speed	
		h 9		h 8		h 7		j 6	
over	incl.	max.	min.	max.	min.	max.	min.	max.	min.
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

Unit = 0.001 mm

However, if the ball bearing unit is used at high rotation speed or under heavy load, the shaft fit must adapt a tight fit. The bearing can be also installed to the shaft by use of the adapter assembly. This is convenient method that can be used as the intermediate bearing of relatively long shaft or a slight difference is found at the shaft dimension. In this method, the bearing inner diameter makes 1: 12 taper and the corresponding tapered adapter sleeve is applied, followed by nut tightening:
Therefore, a slight difference in shaft diameter does not cause much trouble.

Dimensional accuracy of the shaft to be used in cylindrical bore insert bearing (Interference fit)

Shaft Diameter (mm)		Deviation of tolerance in shafting							
		for higher speed		for rather heavy load		for highest speed		for heavy load	
		m6		m7		n6		n7	
over	incl.	max.	min.	max.	min.	max.	min.	max.	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

Unit = 0.001 mm

Dimensional accuracy of the shaft to be used in the taper bore insert bearing

Shaft Diameter (mm)		Deviation of tolerance in shafting			
		for short shaft		for long shaft	
		h 9		h 10	
over	incl.	max.	min.	max.	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

Unit = 0.001 mm

4. Load Rating and Life

4.4 Limiting speed

The limiting speed of ball bearing units are mainly determined by the fit between the bearings and the shafts. Normally, clearance fit is used between setscrews type and eccentric collar type bearing units and shafts, then h7 shaft tolerance is selected. h8 or h9 tolerance is applied for light load and slow speed application. And tighter j7 tolerance is applied for heavy load and high speed. The shaft applied to the adapter sleeve bearing is h9 with ITS class tolerances.
The limiting speeds for the ball bearing units with different fits are shown in following table.

d (mm)	200 Series			
	Shaft tolerance			
over	JS7(h9/IT5)	h7	h8	h9
12	6700	5300	3800	1400
15	6700	5300	3800	1400
17	6700	5300	3800	1400
20	6000	4800	3400	1200
25	5600	4000	3000	1000
30	4500	3400	2400	850
35	4000	3000	2000	750
40	3600	2600	1900	670
45	3200	2400	1700	600
50	3000	2200	1600	560
55	2600	2000	1400	500
60	2400	1800	1200	450
65	2200	1700	1100	430
70	2200	1600	1100	400
75	2000	1500	1000	380
80	1900	1400	950	340
85	1800	1300	900	320
90	1700	1200	800	300
95	--	--	--	--
100	--	--	--	--
105	--	--	--	--
110	--	--	--	--
120	--	--	--	--
130	--	--	--	--
140	--	--	--	--

Note: 1. The JS7(h9/IT5) column fit for adapter sleeve type ball bearing units, and the rest j7 -h9 column fit for the setscrews type and eccentric locking collar type ball bearing units.
2. Above table data is reference for SL type dual seal, L3 type triple lip seal products only.

5. Lubrication

5.1 Permissible Speed

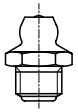
Permissible speed of a insert bearing is expressed normally in terms of dn value (Bearing bore diameter mm x operating speed r.p.m.), although it is influenced by the shape, size, lubricant type and seal device. The permissible speed can be roughly determined by the sliding speed at the friction part of the holding device and rolling body. In the case of ball bearing unit, it is provided with grease sealed by the oil seals and slingers. Accordingly, the friction resistance at seal contact yields also a large influence on the permissible speed.

When such factors are taken into consideration, the permissible speed is given as follows:

Dn ≤ 150,000 [dn=d x n]

Whereas, d: Bearing bore diameter (mm)
n: Operating speed (r.p.m.)

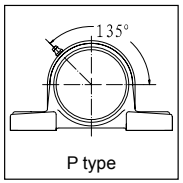
5.2 Type of Grease Nipple



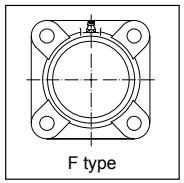
Type A

Housing size	Type of grease nipple
203~210	M6X1
211~215	M8X1
216~218	M10X1

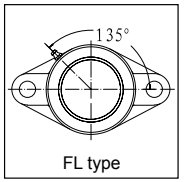
5.3 Locating of Grease Nipple



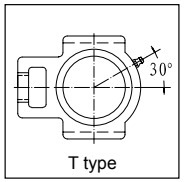
P type



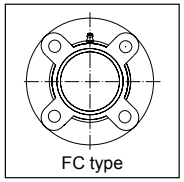
F type



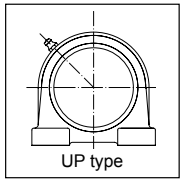
FL type



T type



FC type



UP type

5. Lubrication

5.4 Lubricant Grease

The grease used in J-Line bearing inserts is Shell Gadus S2-V1002, a high quality lithium-based grease.

5.5 Replenishment of Grease

NSK J-Line Bearings are factory charged with the correct amount of grease and do not require a further grease charge when being fitted.
Relubrication is not normally necessary except when operating at extremes of temperature, speed and loading, or where excessive wet or dirty conditions exist.
The relubrication frequency varies with the type and quality of grease used as well as the operating conditions. Therefore, it is difficult to establish a general rule, but under ordinary operating conditions, it is desirable that grease be replenished before one third (⅓) of its calculated life elapses. It is necessary, however, to take into consideration such factors as hardening of grease in the oil hole, making replenishment impossible, or deterioration of grease due to oxidation while the machine is running.
The table shows standard relubrication frequencies. Irrespective of the calculated life of the grease, this list takes into consideration such factors as the rotational speed of the bearings, operating temperatures and environmental conditions, with a view to safety.
The performance of a bearing is greatly influenced by the quantity of grease. In order to avoid overfilling, it is advisable to replenish the grease while the machine is in operation. Continue to insert grease until a little oozes out from beneath the sealing lip on the inner ring for optimum performance.
All standard Self-Lube bearing units have 1/4"-28UNF grease nipples, except for the FC series units which have M5 x 0.8mm pitch grease nipples.

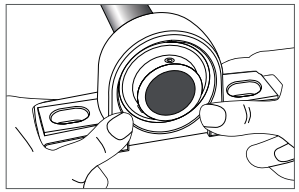
Standard relubrication frequencies

Type of unit	dn Value	Environmental conditions	Operating temp °C, °F		Relubrication frequency	
					Hours	Period
Standard	40000 and below	Ordinary	–15 to +80	+5 to +176	1500 to 3000	6 to 12 mo.
Standard	70000 and below	Ordinary	–15 to +80	+5 to +176	1000 to 2000	3 to 6 mo.
Standard	70000 and below	Ordinary	+80 to +100	+176 to +212	500 to 700	1 mo.
Standard	70000 and below	Very dusty	–15 to +100	+5 to +212	100 to 500	1 wk. to 1 mo.
Standard	70000 and below	Exposed to water splashes	–15 to +100	+5 to +212	30 to 100	1 day to 1 wk.

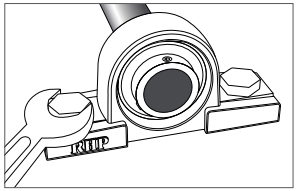
dn = bore diameter (mm) · speed (rpm)

6. Mounting instructions for J-Line bearing units

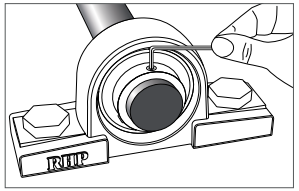
J-Line set screw locking arrangement units



1. Relieve set screws clear of the bore and slide bearing onto the shaft.

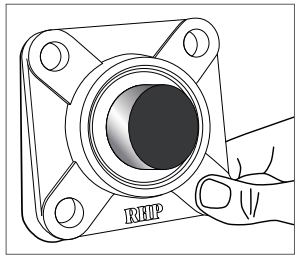


2. Bolt the unit down on to a flat surface but do not over-tighten.

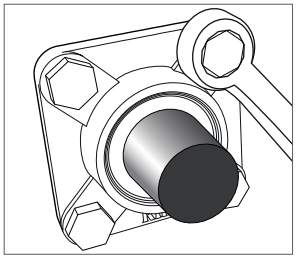


3. Tighten set screws to recommended torque

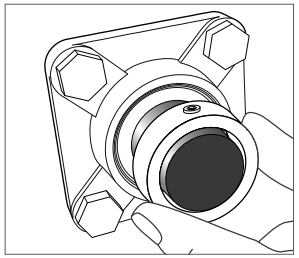
J-Line eccentric collar locking arrangements units



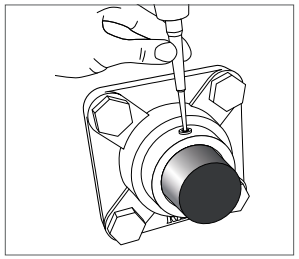
1. Assemble bearing and housing and slide onto the shaft. Do not engage collar.



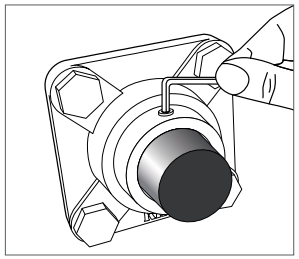
2. Lightly tighten bolts, repeat at other end of shaft and then finally tighten bolts on both sides.



3. Engage the eccentric collar in direction of shaft rotation.

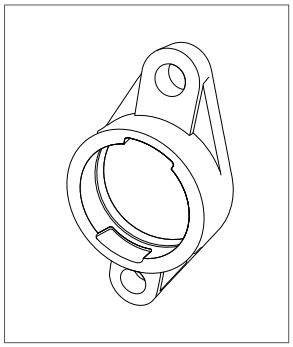


4. Tighten collar with drift pin and small hammer.

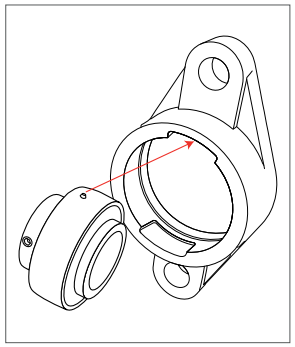


5. Tighten collar set screw to recommended torque.

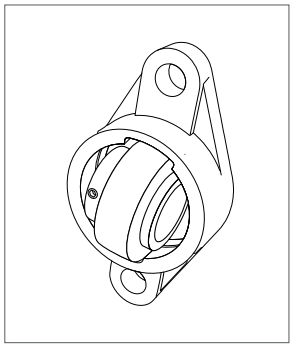
J-Line assembly of insert bearing into housing



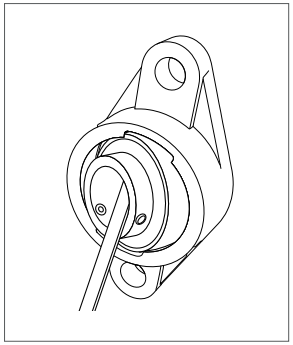
1. Fix empty housing in a vice or similar



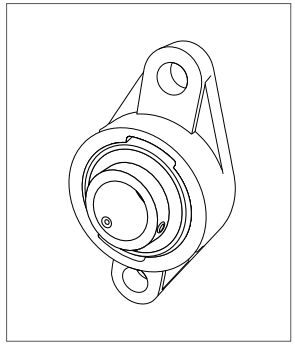
2. Position the Pin Stop of the insert bearing in line with the pocket of the flange



3. Put the insert bearing into the pockets of the flange



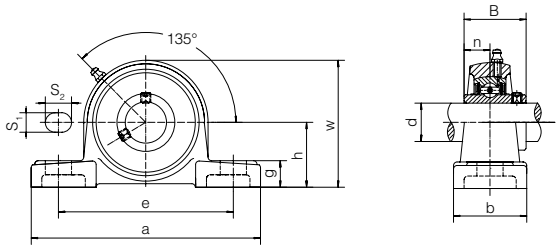
4. Use a rod to turn the bearing into position



5. J-Line bearing unit ready to use


RHP

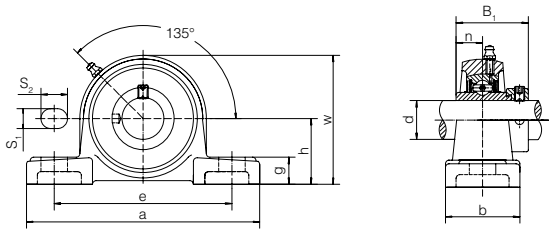
Pillow Block Units
UCP2



Unit number	Dimensions (mm)										
	d	h	a	e	b	S_1	S_2	g	w	B	n
UCP201D1	12	30.2	127	95	38	13	19	14	62	31	12.7
UCP202D1	15	30.2	127	95	38	13	19	14	62	31	12.7
UCP203D1	17	30.2	127	95	38	13	19	14	62	31	12.7
UCP204D1	20	33.3	127	95	38	13	19	14	65	31.0	12.7
UCP205D1	25	36.5	140	105	38	13	19	15	71	34.1	14.3
UCP206D1	30	42.9	160	121	44	17	20	17	84	38.1	15.9
UCP207D1	35	47.6	167	127	48	17	20	18	93	42.9	17.5
UCP208D1	40	49.2	184	137	54	17	20	18	100	49.2	19
UCP209D1	45	54.0	190	146	54	17	20	20	106	49.2	19
UCP210D1	50	57.2	206	159	60	20	23	21	113	51.6	19.0
UCP211D1	55	63.5	219	171	60	20	23	23	125	55.6	22.2
UCP212D1	60	69.8	241	184	70	20	23	25	138	65.1	25.4
UCP213D1	65	76.2	265	203	70	25	28	27	150	65.1	25.4
UCP214D1	70	79.4	266	210	72	25	28	27	156	74.6	30.2
UCP215D1	75	82.6	275	217	74	25	28	28	162	77.8	33.3
UCP216D1	80	88.9	292	232	78	25	28	30	174	82.6	33.3
UCP217D1	85	95.2	310	247	83	25	28	32	185	85.7	34.1
UCP218D1	90	101.6	327	262	88	27	30	33	198	96.0	39.7

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UC201D1	P201D1	0.65
M10	UC202D1	P202D1	0.64
M10	UC203D1	P203D1	0.63
M10	UC204D1	P204D1	0.64
M10	UC205D1	P205D1	0.76
M14	UC206D1	P206D1	1.20
M14	UC207D1	P207D1	1.46
M14	UC208D1	P208D1	1.86
M14	UC209D1	P209D1	2.06
M16	UC210D1	P210D1	2.61
M16	UC211D1	P211D1	3.23
M16	UC212D1	P212D1	4.40
M20	UC213D1	P213D1	5.35
M20	UC214D1	P214D1	5.86
M20	UC215D1	P215D1	6.45
M20	UC216D1	P216D1	7.86
M20	UC217D1	P217D1	9.56
M22	UC218D1	P218D1	11.59

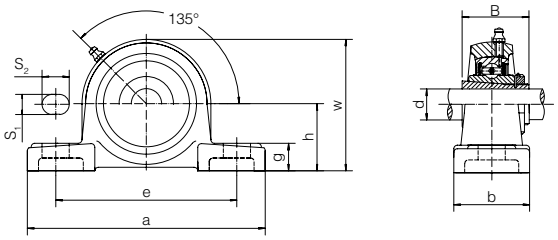
Pillow Block Units
UELP2



Unit number	Dimensions (mm)										
	d	h	a	e	b	S_1	S_2	g	w	B_1	n
UELP204D1	20	33.3	127	95	38	13	19	14	65	43.7	17.1
UELP205D1	25	36.5	140	105	38	13	19	15	71	44.4	17.5
UELP206D1	30	42.9	160	121	44	17	20	17	84	48.4	18.3
UELP207D1	35	47.6	167	127	48	17	20	18	93	51.1	18.8
UELP208D1	40	49.2	184	137	54	17	20	18	100	56.3	21.4
UELP209D1	45	54.0	190	146	54	17	20	20	106	56.3	21
UELP210D1	50	57.2	206	159	60	20	23	21	113	62.7	24.6
UELP211D1	55	63.5	219	171	60	20	23	23	125	71.4	27.8
UELP212D1	60	69.8	241	184	70	20	23	25	138	77.8	31.0
UELP213D1	65	76.2	265	203	70	25	28	27	150	85.7	34.1
UELP214D1	70	79.4	266	210	72	25	28	27	156	85.7	34.1
UELP215D1	75	82.6	275	217	74	25	28	28	162	92.1	37.3

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UEL204D1	P204D1	0.70
M10	UEL205D1	P205D1	0.81
M14	UEL206D1	P206D1	1.27
M14	UEL207D1	P207D1	1.60
M14	UEL208D1	P208D1	1.99
M14	UEL209D1	P209D1	2.19
M16	UEL210D1	P210D1	2.80
M16	UEL211D1	P211D1	3.50
M16	UEL212D1	P212D1	4.76
M20	UEL213D1	P213D1	5.89
M20	UEL214D1	P214D1	6.27
M20	UEL215D1	P215D1	6.93

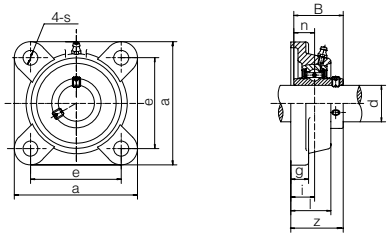
Pillow Block Units
UKP2



Unit number	Dimensions (mm)									
	d	h	a	e	b	S_1	S_2	g	w	B
UKP205D1+H2305	20	36.5	140	105	38	13	19	15	71	35
UKP206D1+H2306	25	42.9	160	121	44	17	20	17	84	38
UKP207D1+H2307	30	47.6	167	127	48	17	20	18	93	43
UKP208D1+H2308	35	49.2	184	137	54	17	20	18	100	46
UKP209D1+H2309	40	54.0	190	146	54	17	20	20	106	50
UKP210D1+H2310	45	57.2	206	159	60	20	23	21	113	55
UKP211D1+H2311	50	63.5	219	171	60	20	23	23	125	59
UKP212D1+H2312	55	69.8	241	184	70	20	23	25	138	62
UKP213D1+H2313	60	76.2	265	203	70	25	28	27	150	65
UKP215D1+H2315	65	82.6	275	217	74	25	28	28	162	73
UKP216D1+H2316	70	88.9	292	232	78	25	28	30	174	78
UKP217D1+H2317	75	95.2	310	247	83	25	28	32	185	82
UKP218D1+H2318	80	101.6	327	262	88	27	30	33	198	86

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UK205D1+H2305	P205D1	0.81
M14	UK206D1+H2306	P206D1	1.26
M14	UK207D1+H2307	P207D1	1.53
M14	UK208D1+H2308	P208D1	1.93
M14	UK209D1+H2309	P209D1	2.18
M16	UK210D1+H2310	P210D1	2.78
M16	UK211D1+H2311	P211D1	3.39
M16	UK212D1+H2312	P212D1	4.52
M20	UK213D1+H2313	P213D1	5.47
M20	UK215D1+H2315	P215D1	6.84
M20	UK216D1+H2316	P216D1	8.29
M20	UK217D1+H2317	P217D1	9.97
M22	UK218D1+H2318	P218D1	11.89

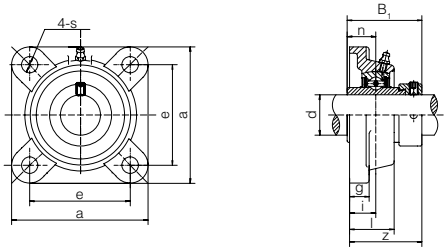
Flange Units (Square)
UCF2



Unit number	Dimensions (mm)									
	d	a	e	i	g	l	S	z	B	n
UCF201D1	12	86	64	15	12	25.5	12	33.3	31	12.7
UCF202D1	15	86	64	15	12	25.5	12	33.3	31	12.7
UCF203D1	17	86	64	15	12	25.5	12	33.3	31	12.7
UCF204D1	20	86	64	15	12	25.5	12	33.3	31	12.7
UCF205D1	25	95	70	16	14	27	12	35.8	34.1	14.3
UCF206D1	30	108	83	18	14	31	12	40.2	38.1	15.9
UCF207D1	35	117	92	19	16	34	14	44.4	42.9	17.5
UCF208D1	40	130	102	21	16	36	16	51.2	49.2	19
UCF209D1	45	137	105	22	18	38	16	52.2	49.2	19
UCF210D1	50	143	111	22	18	40	16	54.6	51.6	19
UCF211D1	55	162	130	25	20	43	19	58.4	55.6	22.2
UCF212D1	60	175	143	29	20	48	19	68.7	65.1	25.4
UCF213D1	65	187	149	30	22	50	19	69.7	65.1	25.4
UCF214D1	70	193	152	31	22	54	19	75.4	74.6	30.2
UCF215D1	75	200	159	34	22	56	19	78.5	77.8	33.3
UCF216D1	80	208	165	34	22	58	23	83.3	82.6	33.3
UCF217D1	85	220	175	36	24	63	23	87.6	85.7	34.1
UCF218D1	90	235	187	40	24	68	23	96.3	96	39.7

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UC201D1	F201D1	0.59
M10	UC202D1	F202D1	0.58
M10	UC203D1	F203D1	0.57
M10	UC204D1	F204D1	0.55
M10	UC205D1	F205D1	0.73
M10	UC206D1	F206D1	1.02
M12	UC207D1	F207D1	1.33
M14	UC208D1	F208D1	1.67
M14	UC209D1	F209D1	2.00
M14	UC210D1	F210D1	2.32
M16	UC211D1	F211D1	3.12
M16	UC212D1	F212D1	3.95
M16	UC213D1	F213D1	4.81
M16	UC214D1	F214D1	5.42
M16	UC215D1	F215D1	5.94
M20	UC216D1	F216D1	6.94
M20	UC217D1	F217D1	8.67
M20	UC218D1	F218D1	10.62

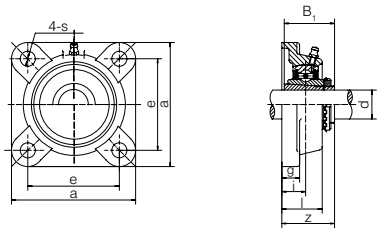
Flange Units (Square)
UELF2



Unit number	Dimensions (mm)									
	d	a	e	i	g	l	S	z	B_1	n
UELF204D1	20	86	64	15	12	25.5	12	41.6	43.7	17.1
UELF205D1	25	95	70	16	14	27	12	42.9	44.4	17.5
UELF206D1	30	108	83	18	14	31	12	48.1	48.4	18.3
UELF207D1	35	117	92	19	16	34	14	51.3	51.1	18.8
UELF208D1	40	130	102	21	16	36	16	55.9	56.3	21.4
UELF209D1	45	137	105	22	18	38	16	56.9	56.3	21.4
UELF210D1	50	143	111	22	18	40	16	60.1	62.7	24.6
UELF211D1	55	162	130	25	20	43	19	68.6	71.4	27.8
UELF212D1	60	175	143	29	20	48	19	75.8	77.8	31
UELF213D1	65	187	149	30	22	50	19	81.6	85.7	34.1
UELF214D1	70	193	152	31	22	54	19	82.6	85.7	34.1
UELF215D1	75	200	159	34	22	56	19	88.8	92.1	37.3

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UEL204D1	F204D1	0.60
M10	UEL205D1	F205D1	0.79
M10	UEL206D1	F206D1	1.10
M12	UEL207D1	F207D1	1.47
M14	UEL208D1	F208D1	1.80
M14	UEL209D1	F209D1	2.13
M14	UEL210D1	F210D1	2.51
M16	UEL211D1	F211D1	3.39
M16	UEL212D1	F212D1	4.27
M16	UEL213D1	F213D1	5.35
M16	UEL214D1	F214D1	5.84
M16	UEL215D1	F215D1	6.43

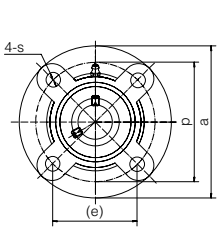
Flange Units (Square)
UKF2

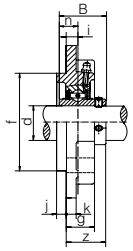


Unit number	Dimensions (mm)								
	d	a	e	i	g	l	s	z	B_1
UKF205D1+H2305	20	95	70	16	14	27	12	35.5	35
UKF206D1+H2306	25	108	83	18	14	31	12	39	38
UKF207D1+H2307	30	117	92	19	16	34	14	42.5	43
UKF208D1+H2308	35	130	102	21	16	36	16	46.5	46
UKF209D1+H2309	40	137	105	22	18	38	16	48.5	50
UKF210D1+H2310	45	143	111	22	18	40	16	50	55
UKF211D1+H2311	50	162	130	25	20	43	19	54.5	59
UKF212D1+H2312	55	175	143	29	20	48	19	61	62
UKF213D1+H2313	60	187	149	30	22	50	19	64	65
UKF215D1+H2315	65	200	159	34	22	56	19	71	73
UKF216D1+H2316	70	208	165	34	22	58	23	73.5	78
UKF217D1+H2317	75	220	175	36	24	63	23	77	82
UKF218D1+H2318	80	235	187	40	24	68	23	81.5	86

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UK205D1+H2305	F205D1	0.78
M10	UK206D1+H2306	F206D1	1.09
M12	UK207D1+H2307	F207D1	1.41
M14	UK208D1+H2308	F208D1	1.74
M14	UK209D1+H2309	F209D1	2.12
M14	UK210D1+H2310	F210D1	2.49
M16	UK211D1+H2311	F211D1	3.28
M16	UK212D1+H2312	F212D1	4.03
M16	UK213D1+H2313	F213D1	4.93
M16	UK215D1+H2315	F215D1	6.33
M20	UK216D1+H2316	F216D1	7.37
M20	UK217D1+H2317	F217D1	9.09
M20	UK218D1+H2318	F218D1	10.91

Flange Cartridge Units
UCFC2

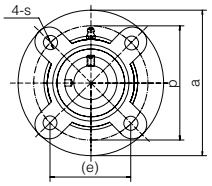


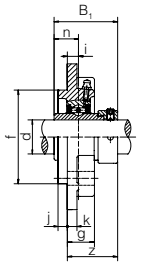


Unit number	Dimensions (mm)												
	d	a	p	e	i	s	j	k	g	f	z	B	n
UCFC201D1	12	100	78	55.1	10	12	5	7	20.5	62	28.3	31.0	12.7
UCFC202D1	15	100	78	55.1	10	12	5	7	20.5	62	28.3	31.0	12.7
UCFC203D1	17	100	78	55.1	10	12	5	7	20.5	62	28.3	31.0	12.7
UCFC204D1	20	100	78	55.1	10	12	5	7	20.5	62	28.3	31.0	12.7
UCFC205D1	25	115	90	63.6	10	12	6	7	21	70	29.8	34.1	14.3
UCFC206D1	30	125	100	70.7	10	12	8	8	23	80	32.2	38.1	15.9
UCFC207D1	35	135	110	77.8	11	14	8	9	26	90	36.4	42.9	17.5
UCFC208D1	40	145	120	84.8	11	14	10	9	26	100	41.2	49.2	19.0
UCFC209D1	45	160	132	93.3	10	16	12	14	26	105	40.2	49.2	19.0
UCFC210D1	50	165	138	97.6	10	16	12	14	28	110	42.6	51.6	19.0
UCFC211D1	55	185	150	106.1	13	19	12	15	31	125	46.4	55.6	22.2
UCFC212D1	60	195	160	113.1	17	19	12	15	36	135	56.7	65.1	25.4
UCFC213D1	65	205	170	120.2	16	19	14	15	36	145	55.7	65.1	25.4
UCFC214D1	70	215	177	125.1	17	19	14	18	40	150	61.4	74.6	30.2
UCFC215D1	75	220	184	130.1	18	19	16	18	40	160	62.5	77.8	33.3
UCFC216D1	80	240	200	141.4	18	23	16	18	42	170	67.3	82.6	33.3
UCFC217D1	85	250	208	147.1	18	23	18	20	45	180	69.6	85.7	34.1
UCFC218D1	90	265	220	155.5	22	23	18	20	50	190	78.3	96.0	39.7

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UC201D1	FC201D1	0.70
M10	UC202D1	FC202D1	0.69
M10	UC203D1	FC203D1	0.68
M10	UC204D1	FC204D1	0.66
M10	UC205D1	FC205D1	0.89
M10	UC206D1	FC206D1	1.18
M12	UC207D1	FC207D1	1.53
M12	UC208D1	FC208D1	1.85
M14	UC209D1	FC209D1	2.53
M14	UC210D1	FC210D1	2.78
M16	UC211D1	FC211D1	3.86
M16	UC212D1	FC212D1	4.69
M16	UC213D1	FC213D1	5.30
M16	UC214D1	FC214D1	6.46
M16	UC215D1	FC215D1	6.86
M20	UC216D1	FC216D1	8.47
M20	UC217D1	FC217D1	10.18
M20	UC218D1	FC218D1	12.24

Flange Cartridge Units
UELFC2

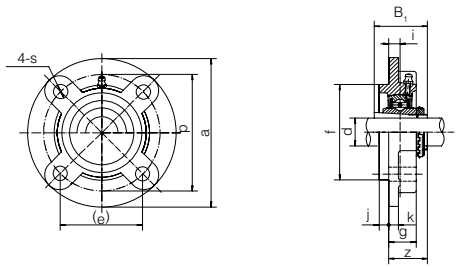




Unit number	Dimensions (mm)												
	d	a	p	e	i	s	j	k	g	f	z	B_1	n
UELFC204D1	20	100	78	55.1	10	12	5	7	20.5	62	36.6	43.7	17.1
UELFC205D1	25	115	90	63.6	10	12	6	7	21	70	36.9	44.4	17.5
UELFC206D1	30	125	100	70.7	10	12	8	8	23	80	40.1	48.4	18.3
UELFC207D1	35	135	110	77.8	11	14	8	9	26	90	43.3	51.1	18.8
UELFC208D1	40	145	120	84.8	11	14	10	9	26	100	45.9	56.3	21.4
UELFC209D1	45	160	132	93.3	10	16	12	14	26	105	44.9	56.3	21.4
UELFC210D1	50	165	138	97.6	10	16	12	14	28	110	48.1	62.7	24.6
UELFC211D1	55	185	150	106.1	13	19	12	15	31	125	56.6	71.4	27.8
UELFC212D1	60	195	160	113.1	17	19	12	15	36	135	63.8	77.8	31.0
UELFC213D1	65	205	170	120.2	16	19	14	15	36	145	67.6	85.7	34.1
UELFC214D1	70	215	177	125.1	17	19	14	18	40	150	68.6	85.7	34.1
UELFC215D1	75	220	184	130.1	18	19	16	18	40	160	72.8	92.1	37.3

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UEL204D1	FC204D1	0.72
M10	UEL205D1	FC205D1	0.94
M10	UEL206D1	FC206D1	1.25
M12	UEL207D1	FC207D1	1.67
M12	UEL208D1	FC208D1	1.98
M14	UEL209D1	FC209D1	2.66
M14	UEL210D1	FC210D1	2.97
M16	UEL211D1	FC211D1	4.13
M16	UEL212D1	FC212D1	5.01
M16	UEL213D1	FC213D1	5.84
M16	UEL214D1	FC214D1	6.87
M16	UEL215D1	FC215D1	7.34

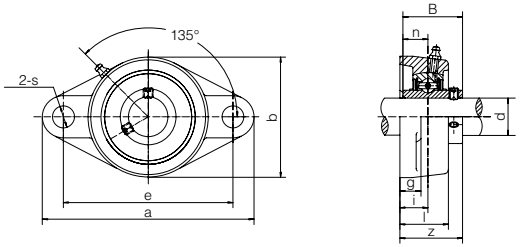
Flange Cartridge Units
UKFC2



Unit number	Dimensions (mm)											
	d	a	p	e	i	s	j	k	g	f	z	B_1
UKFC205D1+H2305	20	115	90	63.6	10	12	6	7	21	70	29.5	35
UKFC206D1+H2306	25	125	100	70.7	10	12	8	8	23	80	31	38
UKFC207D1+H2307	30	135	110	77.8	11	14	8	9	26	90	33.5	43
UKFC208D1+H2308	35	145	120	84.8	11	14	10	9	26	100	35.5	46
UKFC209D1+H2309	40	160	132	93.3	10	16	12	14	26	105	36	50
UKFC210D1+H2310	45	165	138	97.6	10	16	12	14	28	110	37.5	55
UKFC211D1+H2311	50	185	150	106.1	13	19	12	15	31	125	41.5	59
UKFC212D1+H2312	55	195	160	113.1	17	19	12	15	36	135	48	62
UKFC213D1+H2313	60	205	170	120.2	16	19	14	15	36	145	49	65
UKFC215D1+H2315	65	220	184	130.1	18	19	16	18	40	160	53.5	73
UKFC216D1+H2316	70	240	200	141.4	18	23	16	18	42	170	57	78
UKFC217D1+H2317	75	250	208	147.1	18	23	18	20	45	180	59	82
UKFC218D1+H2318	80	265	220.0	155.5	22	23	18	20	50	190	64.5	86

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UK205D1+H2305	FC205D1	0.93
M10	UK206D1+H2306	FC206D1	1.24
M12	UK207D1+H2307	FC207D1	1.60
M12	UK208D1+H2308	FC208D1	1.92
M14	UK209D1+H2309	FC209D1	2.65
M14	UK210D1+H2310	FC210D1	2.96
M16	UK211D1+H2311	FC211D1	4.02
M16	UK212D1+H2312	FC212D1	4.77
M16	UK213D1+H2313	FC213D1	5.41
M16	UK215D1+H2315	FC215D1	7.25
M20	UK216D1+H2316	FC216D1	8.90
M20	UK217D1+H2317	FC217D1	10.60
M20	UK218D1+H2318	FC218D1	12.54

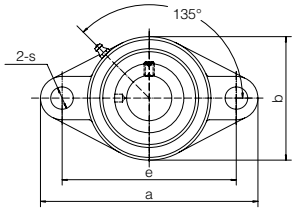
Flange Cartridge Units (Oval)
UCFL2

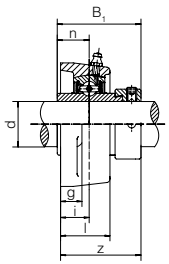


Unit number	Dimensions (mm)										
	d	a	e	i	g	l	s	b	z	B	n
UCFL201D1	12	113	90	15	11	25.5	12	60	33.3	31.0	12.7
UCFL202D1	15	113	90	15	11	25.5	12	60	33.3	31.0	12.7
UCFL203D1	17	113	90	15	11	25.5	12	60	33.3	31.0	12.7
UCFL204D1	20	113	90	15	11	25.5	12	60	33.3	31.0	12.7
UCFL205D1	25	130	99	16	13	27	16	68	35.8	34.1	14.3
UCFL206D1	30	148	117	18	13	31	16	80	40.2	38.1	15.9
UCFL207D1	35	161	130	19	14	34	16	90	44.4	42.9	17.5
UCFL208D1	40	175	144	21	14	36	16	100	51.2	49.2	19.0
UCFL209D1	45	188	148	22	15	38	19	108	52.2	49.2	19.0
UCFL210D1	50	197	157	22	15	40	19	115	54.6	51.6	19.0
UCFL211D1	55	224	184	25	18	43	19	130	58.4	55.6	22.2
UCFL212D1	60	250	202	29	18	48	23	140	68.7	65.1	25.4
UCFL213D1	65	258	210	30	22	50	23	155	69.7	65.1	25.4
UCFL214D1	70	265	216	31	22	54	23	160	75.4	74.6	30.2
UCFL215D1	75	275	225	34	22	56	23	165	78.5	77.8	33.3
UCFL216D1	80	290	233	34	22	58	25	180	83.3	82.6	33.3
UCFL217D1	85	305	248	36	24	63	25	190	87.5	85.7	34.1
UCFL218D1	90	320	265	40	24	68	25	205	96.3	96.0	39.7

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UC201D1	FL201D1	0.45
M10	UC202D1	FL202D1	0.44
M10	UC203D1	FL203D1	0.43
M10	UC204D1	FL204D1	0.40
M14	UC205D1	FL205D1	0.58
M14	UC206D1	FL206D1	0.83
M14	UC207D1	FL207D1	1.10
M14	UC208D1	FL208D1	1.42
M16	UC209D1	FL209D1	1.75
M16	UC210D1	FL210D1	2.02
M16	UC211D1	FL211D1	2.79
M20	UC212D1	FL212D1	3.65
M20	UC213D1	FL213D1	4.56
M20	UC214D1	FL214D1	5.12
M20	UC215D1	FL215D1	5.64
M22	UC216D1	FL216D1	6.91
M22	UC217D1	FL217D1	8.27
M22	UC218D1	FL218D1	10.13

Flange Cartridge Units (Oval)
UELFL2

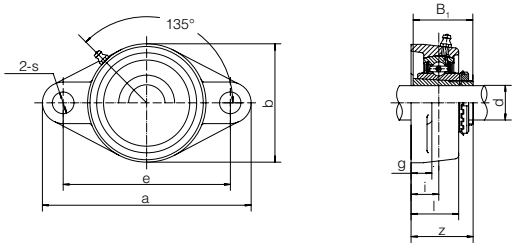




Unit number	Dimensions (mm)										
	d	a	e	i	g	l	s	b	z	B_1	n
UELFL204D1	20	113	90	15	11	25.5	12	60	41.6	43.7	17.1
UELFL205D1	25	130	99	16	13	27	16	68	42.9	44.4	17.5
UELFL206D1	30	148	117	18	13	31	16	80	48.1	48.4	18.3
UELFL207D1	35	161	130	19	14	34	16	90	51.3	51.1	18.8
UELFL208D1	40	175	144.0	21	14	36	16	100	55.9	56.3	21.4
UELFL209D1	45	188	148	22	15	38	19	108	56.9	56.3	21.4
UELFL210D1	50	197	157	22	15	40	19	115	60.1	62.7	24.6
UELFL211D1	55	224	184	25	18	43	19	130	68.6	71.4	27.8
UELFL212D1	60	250	202	29	18	48	23	140	75.8	77.8	31
UELFL213D1	65	258	210	30	22	50	23	155	81.6	85.7	34.1
UELFL214D1	70	265	216	31	22	54	23	160	82.6	85.7	34.1
UELFL215D1	75	275	225	34	22	56	23	165	88.8	92.1	37.3

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UEL204D1	FL204D1	0.46
M14	UEL205D1	FL205D1	0.63
M14	UEL206D1	FL206D1	0.90
M14	UEL207D1	FL207D1	1.24
M14	UEL208D1	FL208D1	1.56
M16	UEL209D1	FL209D1	1.88
M16	UEL210D1	FL210D1	2.21
M16	UEL211D1	FL211D1	3.06
M20	UEL212D1	FL212D1	3.97
M20	UEL213D1	FL213D1	5.10
M20	UEL214D1	FL214D1	5.53
M20	UEL215D1	FL215D1	6.09

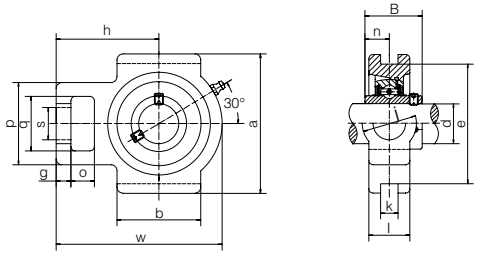
Flange Cartridge Units (Oval)
UKFL2



Unit number	Dimensions (mm)									
	d	a	e	i	g	l	s	b	z	B_1
UKFL205D1+H2305	20	130	99	16	13	27	16	68	35.5	35
UKFL206D1+H2306	25	148	117	18	13	31	16	80	39	38
UKFL207D1+H2307	30	161	130	19	14	34	16	90	42.5	43
UKFL208D1+H2308	35	175	144	21	14	36	16	100	46.5	46
UKFL209D1+H2309	40	188	148	22	15	38	19	108	48.5	50
UKFL210D1+H2310	45	197	157	22	15	40	19	115	50	55
UKFL211D1+H2311	50	224	184	25	18	43	19	130	54.5	59
UKFL212D1+H2312	55	250	202	29	18	48	23	140	61	62
UKFL213D1+H2313	60	258	210	30	22	50	23	155	64	65
UKFL215D1+H2315	65	275	225	34	22	56	23	165	71	73
UKFL216D1+H2316	70	290	233	34	22	58	25	180	73.5	78
UKFL217D1+H2317	75	305	248	36	24	63	25	190	77	82
UKFL218D1+H2318	80	320	265	40	24	68	25	205	81.5	86

Bolt size mm	Bearing number	Housing number	Weight kg
M14	UK205D1+H2305	FL205D1	0.63
M14	UK206D1+H2306	FL206D1	0.89
M14	UK207D1+H2307	FL207D1	1.17
M14	UK208D1+H2308	FL208D1	1.49
M16	UK209D1+H2309	FL209D1	1.87
M16	UK210D1+H2310	FL210D1	2.19
M16	UK211D1+H2311	FL211D1	2.95
M20	UK212D1+H2312	FL212D1	3.73
M20	UK213D1+H2313	FL213D1	4.67
M20	UK215D1+H2315	FL215D1	6.00
M22	UK216D1+H2316	FL216D1	7.34
M22	UK217D1+H2317	FL217D1	8.68
M22	UK218D1+H2318	FL218D1	10.43

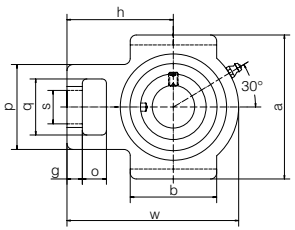
Take-up Units
UCT2

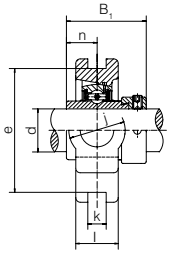


Unit number	Dimensions (mm)															
	d	o	g	p	q	s	b	k	e	a	w	j	l	h	B	n
UCT201D1	12	16	10	51	32	19	51	12	76	89	94	32	21	61	31	12.7
UCT202D1	15	16	10	51	32	19	51	12	76	89	94	32	21	61	31	12.7
UCT203D1	17	16	10	51	32	19	51	12	76	89	94	32	21	61	31	12.7
UCT204D1	20	16	10	51	32	19	51	12	76	89	94	32	21	61	31	12.7
UCT205D1	25	16	10	51	32	19	51	12	76	89	97	32	24	62	34.1	14.3
UCT206D1	30	16	10	56	37	22	57	12	89	102	113	37	28	70	38.1	15.9
UCT207D1	35	16	13	64	37	22	64	12	89	102	129	37	30	78	42.9	17.5
UCT208D1	40	19	16	83	49	29	83	16	102	114	144	49	33	89	49.2	19
UCT209D1	45	19	16	83	49	29	83	16	102	117	144	49	35	87	49.2	19
UCT210D1	50	19	16	83	49	29	86	16	102	117	149	49	37	90	51.6	19
UCT211D1	55	25	19	102	64	35	95	22	130	146	171	64	38	106	55.6	22.2
UCT212D1	60	32	19	102	64	35	102	22	130	146	194	64	42	119	65.1	25.4
UCT213D1	65	32	21	111	70	41	121	26	151	167	224	70	44	137	65.1	25.4
UCT214D1	70	32	21	111	70	41	121	26	151	167	224	70	46	137	74.6	30.2
UCT215D1	75	32	21	111	70	41	121	26	151	167	232	70	48	140	77.8	33.3
UCT216D1	80	32	21	111	70	41	121	26	165	184	235	70	51	140	82.6	33.3
UCT217D1	85	38	29	124	73	48	157	30	173	198	260	73	54	162	85.7	34.1

Bearing number	Housing number	Weight kg
UC201D1	T201D1	0.77
UC202D1	T202D1	0.76
UC203D1	T203D1	0.75
UC204D1	T204D1	0.73
UC205D1	T205D1	0.80
UC206D1	T206D1	1.22
UC207D1	T207D1	1.57
UC208D1	T208D1	2.31
UC209D1	T209D1	2.34
UC210D1	T210D1	2.47
UC211D1	T211D1	3.74
UC212D1	T212D1	4.58
UC213D1	T213D1	6.60
UC214D1	T214D1	6.74
UC215D1	T215D1	7.19
UC216D1	T216D1	8.08
UC217D1	T217D1	10.66

Take-up Units
UELT2

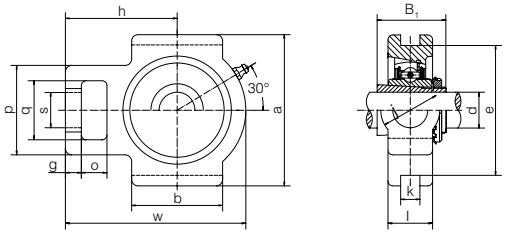




Unit number	Dimensions (mm)															
	d	o	g	p	q	s	b	k	e	a	w	j	l	h	B_1	n
UELT204D1	20	16	10	51	32	19	51	12	76	89	94	32	21	61	43.7	17.1
UELT205D1	25	16	10	51	32	19	51	12	76	89	97	32	24	62	44.4	17.5
UELT206D1	30	16	10	56	37	22	57	12	89	102	113	37	28	70	48.4	18.3
UELT207D1	35	16	13	64	37	22	64	12	89	102	129	37	30	78	51.1	18.8
UELT208D1	40	19	16	83	49	29	83	16	102	114	144	49	33	89	56.3	21.4
UELT209D1	45	19	16	83	49	29	83	16	102	117	144	49	35	87	56.3	21.4
UELT210D1	50	19	16	83	49	29	86	16	102	117	149	49	37	90	62.7	24.6
UELT211D1	55	25	19	102	64	35	95	22	130	146	171	64	38	106	71.4	27.8
UELT212D1	60	32	19	102	64	35	102	22	130	146	194	64	42	119	77.8	31
UELT213D1	65	32	21	111	70	41	121	26	151	167	224	70	44	137	85.7	34.1
UELT214D1	70	32	21	111	70	41	121	26	151	167	224	70	46	137	85.7	34.1
UELT215D1	75	32	21	111	70	41	121	26	151	167	232	70	48	140	92.1	37.3

Bearing number	Housing number	Weight kg
UEL204D1	T204D1	0.78
UEL205D1	T205D1	0.86
UEL206D1	T206D1	1.29
UEL207D1	T207D1	1.70
UEL208D1	T208D1	2.45
UEL209D1	T209D1	2.47
UEL210D1	T210D1	2.66
UEL211D1	T211D1	4.01
UEL212D1	T212D1	4.90
UEL213D1	T213D1	7.14
UEL214D1	T214D1	7.15
UEL215D1	T215D1	7.67

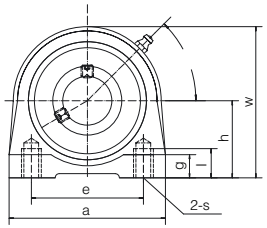
Take-up Units
UKT2

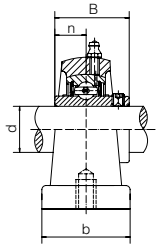


Unit number	Dimensions (mm)														
	d	o	g	p	q	s	b	k	e	a	w	j	l	h	B_1
UKT205D1+H2305	20	16	10	51	32	19	51	12	76	89	97	32	24	62	35
UKT206D1+H2306	25	16	10	56	37	22	57	12	89	102	113	37	28	70	38
UKT207D1+H2307	30	16	13	64	37	22	64	12	89	102	129	37	30	78	43
UKT208D1+H2308	35	19	16	83	49	29	83	16	102	114	144	49	33	89	46
UKT209D1+H2309	40	19	16	83	49	29	83	16	102	117	144	49	35	87	50
UKT210D1+H2310	45	19	16	83	49	29	86	16	102	117	149	49	37	90	55
UKT211D1+H2311	50	25	19	102	64	35	95	22	130	146	171	64	38	106	59
UKT212D1+H2312	55	32	19	102	64	35	102	22	130	146	194	64	42	119	62
UKT213D1+H2313	60	32	21	111	70	41	121	26	151	167	224	70	44	137	65
UKT215D1+H2315	65	32	21	111	70	41	121	26	151	167	232	70	48	140	73
UKT216D1+H2316	70	32	21	111	70	41	121	26	165	184	235	70	51	140	78
UKT217D1+H2317	75	38	29	124	73	48	157	30	173	198	260	73	54	162	82

Bearing number	Housing number	Weight kg
UK205D1+H2305	T205D1	0.86
UK206D1+H2306	T206D1	1.26
UK207D1+H2307	T207D1	2.50
UK208D1+H2308	T208D1	2.50
UK209D1+H2309	T209D1	2.51
UK210D1+H2310	T210D1	2.60
UK211D1+H2311	T211D1	4.26
UK212D1+H2312	T212D1	5.02
UK213D1+H2313	T213D1	6.56
UK215D1+H2315	T215D1	7.52
UK216D1+H2316	T216D1	8.56
UK217D1+H2317	T217D1	11.38

Pillow Block Units
UCUP2

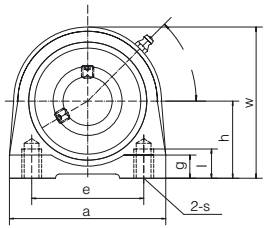


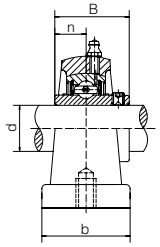


Unit number	Dimensions (mm)										
	d	h	a	e	b	s	g	l	w	B	n
UCUP201D1	12	30.2	76	52	40	M10	11	15	62	31	12.7
UCUP202D1	15	30.2	76	52	40	M10	11	15	62	31	12.7
UCUP203D1	17	30.2	76	52	40	M10	11	15	62	31	12.7
UCUP204D1	20	30.2	76	52	40	M10	11	15	62	31	12.7
UCUP205D1	25	36.5	84	56	38	M10	12	15	72	34.1	14.3
UCUP206D1	30	42.9	94	66	50	M14	12	18	84	38.1	15.9
UCUP207D1	35	47.6	110	80	55	M14	13	20	95	42.9	17.5
UCUP208D1	40	49.2	116	84	58	M14	13	20	100	49.2	19
UCUP209D1	45	54.2	120	90	60	M14	13	25	108	49.2	19
UCUP210D1	50	57.2	130	94	64	M16	14	25	116	51.6	19
UCUP211D1	55	63.5	140	104	66	M16	14	25	125	55.6	22.2
UCUP212D1	60	69.9	150	114	68	M16	15	25	138	65.1	25.4

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UC201D1	UP201D1	0.63
M10	UC202D1	UP202D1	0.62
M10	UC203D1	UP203D1	0.61
M10	UC204D1	UP204D1	0.59
M10	UC205D1	UP205D1	0.76
M14	UC206D1	UP206D1	1.12
M14	UC207D1	UP207D1	1.55
M14	UC208D1	UP208D1	1.80
M14	UC209D1	UP209D1	2.05
M16	UC210D1	UP210D1	2.56
M16	UC211D1	UP211D1	3.14
M16	UC212D1	UP212D1	4.12

Pillow Block Units
UELUP2

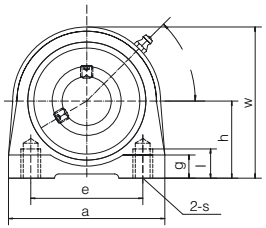


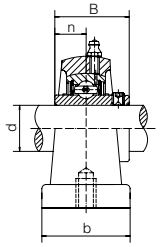


Unit number	Dimensions (mm)										
	d	h	a	e	b	s	g	l	w	B	n
UELUP204D1	20	30.2	76	52	40	M10	11	15	62	43.7	17.1
UELUP205D1	25	36.5	84	56	38	M10	12	15	72	44.4	17.5
UELUP206D1	30	42.9	94	66	50	M14	12	18	84	48.4	18.3
UELUP207D1	35	47.6	110	80	55	M14	13	20	95	51.1	18.8
UELUP208D1	40	49.2	116	84	58	M14	13	20	100	56.3	21.4
UELUP209D1	45	54.2	120	90	60	M14	13	25	108	56.3	21.4
UELUP210D1	50	57.2	130	94	64	M16	14	25	116	62.7	24.6
UELUP211D1	55	63.5	140	104	66	M16	14	25	125	71.4	27.8
UELUP212D1	60	69.9	150	114	68	M16	15	25	138	77.8	31.0

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UEL204D1	UP204D1	0.64
M10	UEL205D1	UP205D1	0.81
M14	UEL206D1	UP206D1	1.19
M14	UEL207D1	UP207D1	1.68
M14	UEL208D1	UP208D1	1.93
M14	UEL209D1	UP209D1	2.18
M16	UEL210D1	UP210D1	2.75
M16	UEL211D1	UP211D1	3.41
M16	UEL212D1	UP212D1	4.44

Pillow Block Units
UKUP2

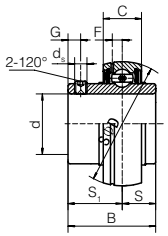




Unit number	Dimensions (mm)									
	d	h	a	e	b	s	g	l	w	B
UKUP205D1+H2305	20	36.5	84	56	38	M10	12	15	72	35
UKUP206D1+H2306	25	42.9	94	66	50	M14	12	18	84	38
UKUP207D1+H2307	30	47.6	110	80	55	M14	13	20	95	43
UKUP208D1+H2308	35	49.2	116	84	58	M14	13	20	100	46
UKUP209D1+H2309	40	54.2	120	90	60	M14	13	25	108	50
UKUP210D1+H2310	45	57.2	130	94	64	M16	14	25	116	55
UKUP211D1+H2311	50	63.5	140	104	66	M16	14	25	125	59
UKUP212D1+H2312	55	69.9	150	114	68	M16	15	25	138	62

Bolt size mm	Bearing number	Housing number	Weight kg
M10	UK205D1+H2305	UP205D1	0.80
M14	UK206D1+H2306	UP206D1	1.18
M14	UK207D1+H2307	UP207D1	1.62
M14	UK208D1+H2308	UP208D1	1.87
M14	UK209D1+H2309	UP209D1	2.17
M16	UK210D1+H2310	UP210D1	2.73
M16	UK211D1+H2311	UP211D1	3.30
M16	UK212D1+H2312	UP212D1	4.20

Ball Bearings
UC2

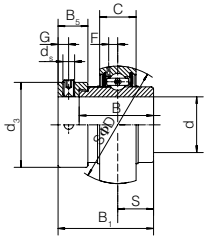


SL Dual seal
(Standard)

Unit number	Dimensions (mm)								
	d	D	B	C	S	S_1	G	D_s	F
UC201D1	12	47	31	17	12.7	18.3	4.8	M6x1	4.3
UC202D1	15	47	31	17	12.7	18.3	4.8	M6x1	4.3
UC203D1	17	47	31	17	12.7	18.3	4.8	M6x1	4.3
UC204D1	20	47	31	17	12.7	18.3	4.8	M6x1	4.3
UC205D1	25	52	34.1	17	14.3	19.8	5	M6x1	4.3
UC206D1	30	62	38.1	19	15.9	22.2	5	M6x1	5.2
UC207D1	35	72	42.9	20	17.5	25.4	7	M8x1	5.7
UC208D1	40	80	49.2	21	19	30.2	8	M8x1	6.2
UC209D1	45	85	49.2	22	19	30.2	8	M8x1	6.6
UC210D1	50	90	51.6	24	19	32.6	10	M10x1	6.5
UC211D1	55	100	55.6	25	22.2	33.4	10	M10x1	7.1
UC212D1	60	110	65.1	27	25.4	39.7	10	M10x1	7.9
UC213D1	65	120	65.1	28	25.4	39.7	10	M10x1	8.0
UC214D1	70	125	74.6	29	30.2	44.4	12	M12x1.5	8.3
UC215D1	75	130	77.8	30	33.3	44.5	12	M12x1.5	8.6
UC216D1	80	140	82.6	32	33.3	49.3	12	M12x1.5	9.0
UC217D1	85	150	85.7	34	34.1	51.6	12	M12x1.5	9.8
UC218D1	90	160	96	36	39.7	56.3	12	M12x1.5	10.8

Dynamic load ratings N C_r	Static load ratings N C_{or}	Weight kg
12800	6600	0.20
12800	6600	0.19
12800	6600	0.18
12800	6600	0.16
14000	7850	0.19
19450	11250	0.30
25700	15200	0.45
29500	18100	0.60
32700	20900	0.65
35000	23200	0.75
43300	29200	0.99
477000	32800	1.32
57200	40000	1.70
62100	44800	1.94
66200	49300	2.16
72600	53300	2.65
83300	63700	3.29
96000	71100	4.04

Ball Bearings
UEL2

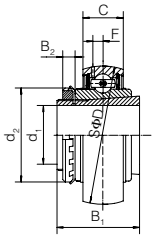


SL Dual seal
(Standard)

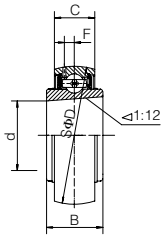
Unit number	Dimensions (mm)										
	d	D	B_1	B	C	S	d_s	G	B_5	d_3	F
UEL204D1	20	47	43.7	34.2	17	17.1	M6x1	4.8	13.5	33.3	3.4
UEL205D1	25	52	44.4	34.9	17	17.5	M6x1	4.8	13.5	38.1	4.3
UEL206D1	30	62	48.4	36.5	19	18.3	M8x1	6	15.9	44.5	5.2
UEL207D1	35	72	51.1	37.6	20	18.8	M8x1	6.8	17.5	55.6	5.7
UEL208D1	40	80	56.3	42.8	21	21.4	M8x1	6.8	18.3	60.3	6.2
UEL209D1	45	85	56.3	42.8	22	21.4	M8x1	6.8	18.3	63.5	6.6
UEL210D1	50	90	62.7	49.2	24	24.6	M8x1	6.8	18.3	69.9	6.5
UEL211D1	55	100	71.4	55.5	25	27.8	M10x1	8	20.7	76.2	7.1
UEL212D1	60	110	77.8	61.9	27	31	M10x1	8	22.3	84.2	7.9
UEL213D1	65	120	85.7	68.6	28	34.1	M10x1	8.5	23.5	92	8.0
UEL214D1	70	125	85.7	68.6	29	34.1	M10x1	8.5	23.5	97	8.3
UEL215D1	75	130	92.1	75	30	37.3	M10x1	8.5	23.5	102	8.6

Dynamic load ratings N C_r	Static load ratings N C_{or}	Weight kg
12800	6600	0.21
14000	7850	0.25
19450	11250	0.37
25700	15200	0.58
29500	18100	0.73
32700	20900	0.78
35000	23200	0.94
43300	29200	1.26
47700	32800	1.71
57200	40000	2.24
62100	44800	2.35
66200	49300	2.64

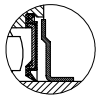
Ball Bearings
UK2



UK2+H



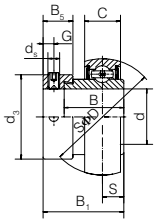
UK2


SL Dual seal
(Standard)

Unit number	Dimensions (mm)								
	d_1	d	D	B	C	B_1	B_2	d_2	F
UK205D1+H2305	20	25	52	23	17	35	8	38	4.3
UK206D1+H2306	25	30	62	26	19	38	8	45	5.2
UK207D1+H2307	30	35	72	29	20	43	9	52	5.7
UK208D1+H2308	35	40	80	31	21	46	10	58	6.2
UK209D1+H2309	40	45	85	31	22	50	11	65	6.6
UK210D1+H2310	45	50	90	32	24	55	12	70	6.5
UK211D1+H2311	50	55	100	35	25	59	12	75	7.1
UK212D1+H2312	55	60	110	38	27	62	13	80	7.9
UK213D1+H2313	60	65	120	40	28	65	14	85	8.0
UK215D1+H2315	65	75	130	44	30	73	15	98	8.6
UK216D1+H2316	70	80	140	45	32	78	17	105	9
UK217D1+H2317	75	85	150	46	34	82	18	110	9.8
UK218D1+H2318	80	90	160	47	36	86	18	120	10.8

Dynamic load ratings N C_r	Static load ratings N C_{or}	Weight kg
14000	7850	0.24
19450	11250	0.36
25700	15200	0.52
29500	18100	0.67
32700	20900	0.77
35000	23200	0.92
43300	29200	1.15
47700	32800	1.47
57200	40000	1.81
66200	49300	2.55
72600	53300	3.08
83300	63700	3.70
96000	71100	4.34

Ball Bearings
AEL2



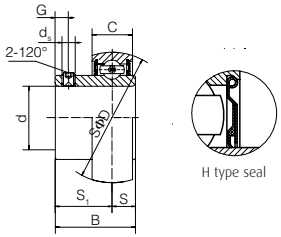
AEL2


H type seal

Unit number	Dimensions (mm)									
	d	D	B_1	B	C	S	d_s	G	B5	d_3
AEL201D1	12	40	28.6	19.1	12	6.5	M6X1	4.8	13.5	28.6
AEL202D1	15	40	28.6	19.1	12	6.5	M6X1	4.8	13.5	28.6
AEL203D1	17	40	28.6	19.1	12	6.5	M6X1	4.8	13.5	28.6
AEL204D1	20	47	31.0	21.5	14	7.5	M6X1	4.8	13.5	33.3
AEL205D1	25	52	31	21.5	15	7.5	M6X1	4.8	13.5	38.1
AEL206D1	30	62	35.7	23.8	16	9.0	M8X1	6	15.9	44.5
AEL207D1	35	72	38.9	25.4	17	9.5	M8X1	6.8	17.5	55.6
AEL208D1	40	80	43.7	30.2	18	11.0	M8X1	6.8	18.3	60.3
AEL209D1	45	85	43.7	30.2	19	11.0	M8X1	6.8	18.3	63.5
AEL210D1	50	90	43.7	30.2	20	11.0	M8X1	6.8	18.3	69.9
AEL211D1	55	100	48.4	32.5	21	12.0	M10X1	8	20.7	76.2
AEL212D1	60	110	53.1	37.2	22	13.5	M10X1	8	22.3	84.2

Dynamic load ratings N C_r	Static load ratings N C_{or}	Weight kg
7360	4480	0.14
7360	4480	0.12
7360	4480	0.11
12800	6600	0.17
14000	7850	0.20
19450	11250	0.30
25700	15200	0.48
29500	18100	0.63
32700	20900	0.66
35000	23200	0.75
43300	29200	1.00
47700	32800	1.34

Ball Bearings
AS2



AS2

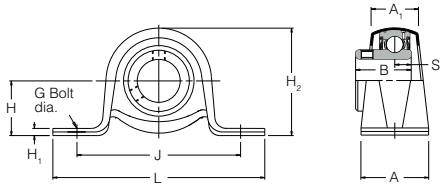
H type seal

Unit number	Dimensions (mm)							
	d	D	B	C	S	S_1	d_s	G
AS201D1	12	40	22.0	12	6.0	16.0	M5X0.8	4.5
AS202D1	15	40	22	12	6.0	16.0	M5X0.8	4.5
AS203D1	17	40	22.0	12	6.0	16.0	M5X0.8	4.5
AS204D1	20	47	25.0	14	7.0	18.0	M6X1	4.5
AS205D1	25	52	27	15	7.5	19.5	M6X1	5.5
AS206D1	30	62	30	16	8.0	22.0	M6X1	6
AS207D1	35	72	32	17	8.5	23.5	M8X1	6.5
AS208D1	40	80	34	18	9.0	25.0	M8X1	7
AS209D1	45	85	41.2	19	10.2	31.0	M8X1	8.2
AS210D1	50	90	43.5	20	10.9	32.6	M10X1	9.2

Dynamic load ratings N C_r	Static load ratings N C_{or}	Weight kg
7360	4480	0.11
7360	4480	0.10
7360	4480	0.09
12800	6600	0.14
14000	7850	0.17
19450	11250	0.26
25700	15200	0.38
29500	18100	0.48
32700	20900	0.57
35000	23200	0.65

Pressed steel pillow block units (zinc plated housings)

ASPP2



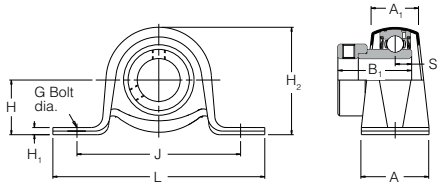
ASPP2

Unit number	Dimensions (mm)										
	Shaft diameter	L	H	H_1	H_2	J	G	A	A_1	B	S
ASPP201	12	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	22	6.0
ASPP202	15	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	22	6.0
ASPP203	17	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	22	6.0
ASPP204	20	98.4	25.4	2.4	49.9	76.0	8	31.7	21.6	25	7.0
ASPP205	25	108.0	28.6	2.8	55.8	86.0	10	31.7	21.6	27	7.5
ASPP206	30	117.5	33.3	3.6	65.7	95.0	10	37.5	25.5	30	8.0
ASPP207	35	128.6	39.7	4.4	77.5	106.0	10	41.0	28.4	32	8.5

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AS201	**PP203**	1330	3000	0.2
AS202	**PP203**	1330	3000	0.2
AS203	**PP203**	1330	3000	0.2
AS204	**PP204**	1570	3000	0.2
AS205	**PP205**	1780	2500	0.3
AS206	**PP206**	2670	2500	0.5
AS207	**PP207**	3560	2000	0.9

Pressed steel pillow block units (zinc plated housings)

AELPP2

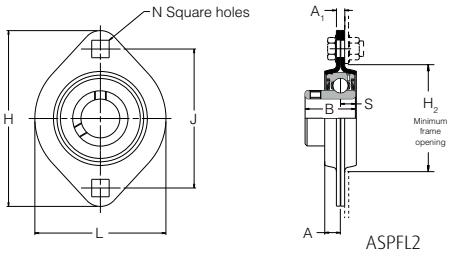


Unit number	Dimensions (mm)										
	Shaft diameter	L	H	H_1	H_2	J	G	A	A_1	B_1	S
AELPP201	12	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	28.6	6.5
AELPP202	15	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	28.6	6.5
AELPP203	17	85.7	22.2	2.4	43.2	68.0	8	25.4	15.9	28.6	6.5
AELPP204	20	98.4	25.4	2.4	49.9	76.0	8	31.7	21.6	31.0	7.5
AELPP205	25	108.0	28.6	2.8	55.8	86.0	10	31.7	21.6	31	7.5
AELPP206	30	117.5	33.3	3.6	65.7	95.0	10	37.5	25.5	35.7	9.0
AELPP207	35	128.6	39.7	4.4	77.5	106.0	10	41.0	28.4	38.9	9.5

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AEL201	**PP203**	1330	3000	0.2
AEL202	**PP203**	1330	3000	0.2
AEL203	**PP203**	1330	3000	0.2
AEL204	**PP204**	1570	3000	0.2
AEL205	**PP205**	1780	2500	0.3
AEL206	**PP206**	2670	2500	0.5
AEL207	**PP207**	3560	2000	0.9

Pressed steel flange bearing units (zinc plated housings)

ASPFL2



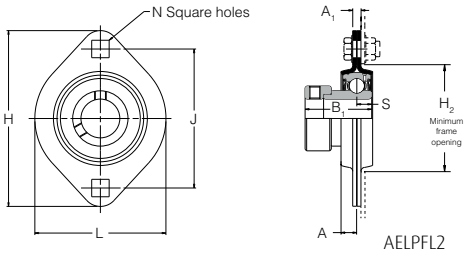
ASPFL2

Unit number	Dimensions (mm)									
	Shaft diameter	L	H	H_2	J	N	A	A_1	B	S
ASPFL201	12	58.7	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPFL202	15	58.7	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPFL203	17	58.7	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPFL204	20	66.7	90.5	55.0	71.5	8.7	7.7	4.0	25	7.0
ASPFL205	25	71.0	95.3	60.0	76.0	8.7	8.7	4.0	27	7.5
ASPFL206	30	84.1	112.7	71.0	90.5	10.5	9.0	5.0	30	8.0
ASPFL207	35	93.6	122.6	81.0	100.0	10.5	10.0	5.0	32	8.5

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AS201	**PFL203**	2670	3000	0.2
AS202	**PFL203**	2670	3000	0.2
AS203	**PFL203**	2670	3000	0.2
AS204	**PFL204**	3110	3000	0.3
AS205	**PFL205**	3560	2500	0.3
AS206	**PFL206**	4890	2500	0.5
AS207	**PFL207**	6250	2000	0.7

Pressed steel flange bearing units (zinc plated housings)

AELPFL2



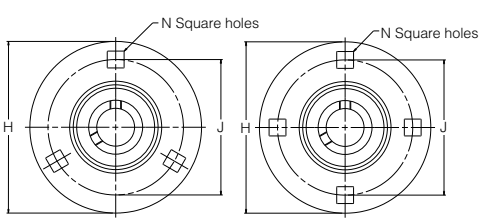
AELPFL2

Unit number	Dimensions (mm)									
	Shaft diameter	L	H	H_2	J	N	A	A_1	B_1	S
AELPFL201	12	58.7	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPFL202	15	58.7	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPFL203	17	58.7	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPFL204	20	66.7	90.5	55.0	71.5	8.7	7.7	4.0	31.0	7.5
AELPFL205	25	71.0	95.3	60.0	76.0	8.7	8.7	4.0	31	7.5
AELPFL206	30	84.1	112.7	71.0	90.5	10.5	9.0	5.0	35.7	9.0
AELPFL207	35	93.6	122.6	81.0	100.0	10.5	10.0	5.0	38.9	9.5

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AEL201	**PFL203**	2670	3000	0.2
AEL202	**PFL203**	2670	3000	0.2
AEL203	**PFL203**	2670	3000	0.2
AEL204	**PFL204**	3110	3000	0.3
AEL205	**PFL205**	3560	2500	0.3
AEL206	**PFL206**	4890	2500	0.5
AEL207	**PFL207**	6250	2000	0.7

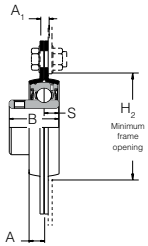
Pressed steel flange bearing units (zinc plated housings)

ASPF2



ASPF201 - ASPF207

ASPF208 - ASPF210



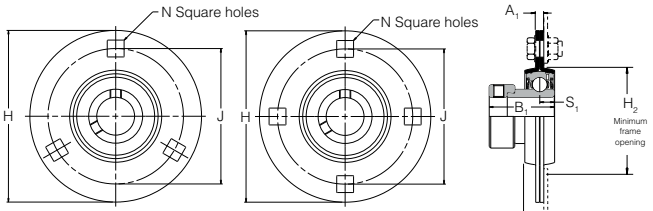
ASPF2

Unit number	Dimensions (mm)								
	Shaft diameter	H	H_2	J	N	A	A_1	B	S
ASPF201	12	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPF202	15	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPF203	17	81.0	49.0	63.5	7.1	6.7	4.0	22	6.0
ASPF204	20	90.5	55.0	71.5	8.7	7.7	4.0	25	7.0
ASPF205	25	95.2	60.0	76.0	8.7	8.7	4.0	27	7.5
ASPF206	30	112.7	71.0	90.5	10.5	9.0	5.0	30	8.0
ASPF207	35	122.2	81.0	100.0	10.5	10.0	5.0	32	8.5
ASPF208	40	147.8	91.0	119.0	13.5	10.0	7.0	34	9.0
ASPF209	45	149.2	97.0	120.5	13.5	10.0	7.0	41.2	10.2
ASPF210	50	155.6	102.0	127.0	13.5	10.5	8.0	43.5	10.9

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AS201	**PF203**	2670	3000	0.2
AS202	**PF203**	2670	3000	0.2
AS203	**PF203**	2670	3000	0.2
AS204	**PF204**	3110	3000	0.3
AS205	**PF205**	3560	2500	0.4
AS206	**PF206**	4890	2500	0.7
AS207	**PF207**	6250	2000	0.9
AS208	**PF208**	7550	2000	1.5
AS209	**PF209**	7550	2000	1.6
AS210	**PF210**	8450	1500	1.8

Pressed steel flange bearing units (zinc plated housings)

AELPF2



AELPF201 - AELPF207 AELPF208 -AELPF210

Unit number	Dimensions (mm)								
	Shaft diameter	H	H2	J	N	A	A1	B1	S
AELPF201	12	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPF202	15	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPF203	17	81.0	49.0	63.5	7.1	6.7	4.0	28.6	6.5
AELPF204	20	90.5	55.0	71.5	8.7	7.7	4.0	31.0	7.5
AELPF205	25	95.2	60.0	76.0	8.7	8.7	4.0	31.0	7.5
AELPF206	30	112.7	71.0	90.5	10.5	9.0	5.0	35.7	9.0
AELPF207	35	122.2	81.0	100.0	10.5	10.0	5.0	38.9	9.5
AELPF208	40	147.8	91.0	119.0	13.5	10.0	7.0	43.7	11.0
AELPF209	45	149.2	97.0	120.5	13.5	10.0	7.0	43.7	11.0
AELPF210	50	155.6	102.0	127.0	13.5	10.5	8.0	43.7	11.0

Bearing number	Housing number	Max. radial housing load	Rec. max. speed	Mass (approx.)
		N	min^{-1}	kg
AEL201	**PF203**	2670	3000	0.2
AEL202	**PF203**	2670	3000	0.2
AEL203	**PF203**	2670	3000	0.2
AEL204	**PF204**	3110	3000	0.3
AEL205	**PF205**	3560	2500	0.4
AEL206	**PF206**	4890	2500	0.7
AEL207	**PF207**	6250	2000	0.9
AEL208	**PF208**	7550	2000	1.5
AEL209	**PF209**	7550	2000	1.6
AEL210	**PF210**	8450	1500	1.8