

BALL BEARING UNITS

SET SCREW TYPE PILLOW BLOCKS CAST HOUSING

UCP2 Shaft Diameter 12 – 90mm B286
1/2 – 3 1/2 inch

SET SCREW TYPE FLANGED UNITS CAST HOUSING

UCF2 Shaft Diameter 12 – 90mm B292
1/2 – 3 1/2 inch

UCFL2 Shaft Diameter 12 – 90mm B298
1/2 – 3 1/2 inch



1. CONSTRUCTION

The NSK bearing unit is a combination of a radial ball bearing, seal, and a housing of high-grade cast iron or pressed steel, which comes in various shapes.

The outer surface of the bearing and the internal surface of the housing are spherical, so that the unit is self-aligning.

The inside construction of the ball bearing for the unit is such that steel balls and retainers of the same type as in series 62 and 63 of the deep groove ball bearing are used. A duplex seal consisting of a combination of an oil-proof synthetic rubber seal and

a slinger is provided on both sides.

Depending on the type, the following methods of fitting to the shaft are employed:

- (1) The inner ring is fastened onto the shaft in two places by set screws.
- (2) The inner ring has a tapered bore and is fitted to the shaft by means of an adapter.
- (3) In the eccentric locking collar system the inner ring is fastened to the shaft by means of eccentrics grooves provided at the side of the inner ring and on the collar.

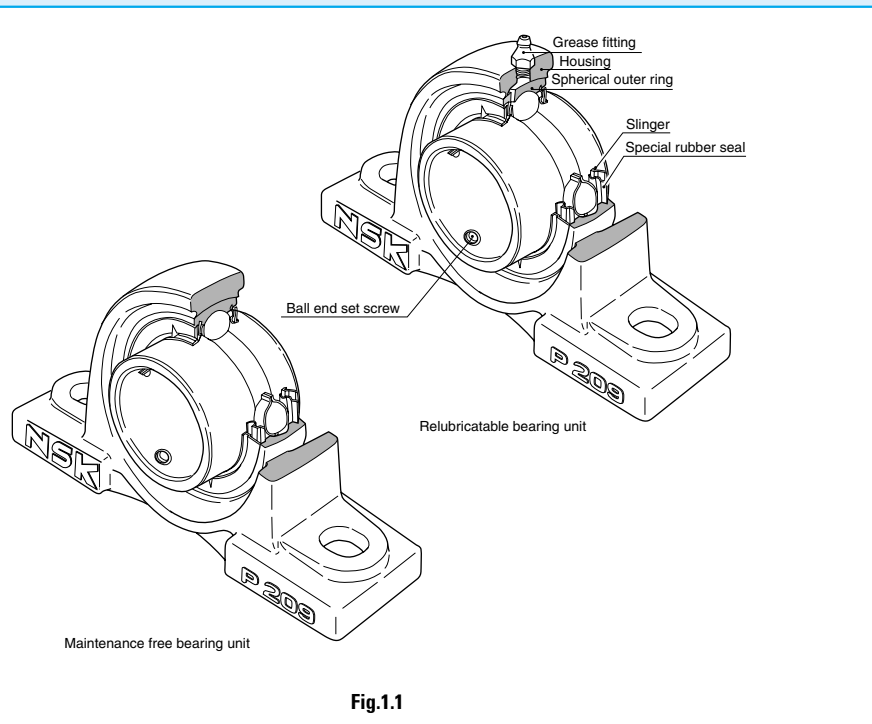


Fig.1.1

2. DESIGN FEATURES AND ADVANTAGES

2.1 MAINTENANCE FREE TYPE

The NSK Maintenance free bearing unit contains a high-grade lithium-based grease, good for use over a long period, which is ideally suited to sealed-type bearing. Also provided is an excellent sealing device, which prevents any leakage of grease or penetration of dust and water from outside.

It is designed so that the rotation of the shaft causes the sealed-in grease to circulate through the inside space, effectively providing maximum lubrication. The lubrication effect is maintained over a long period with no need for replenishment of grease.

To summarize the advantages of the NSK maintenance free bearing unit:

- (1) As an adequate amount of good quality grease is sealed in at the time of manufacture, there is no need for replenishment. This means savings in terms of time and maintenance costs.
- (2) Since there is no need for any regreasing facilities, such as piping, a more compact design is possible.
- (3) The sealed-in design eliminates the possibility of grease leakage, which could lead to stained products.

2.2 RELUBRICATABLE TYPE

The NSK relubricatable type bearing unit has an advantage over other similar, units being so designed as to permit regreasing even in the case of misalignment of 2° to the right or left. The hole through which the grease fitting is mounted usually causes structural weakening of the housing.

However, as a result of extensive testing, in the NSK bearing unit the hole is positioned so as to minimize this adverse effect. In addition, the regreasing groove has been designed to minimize weakening of the housing.

While the NSK maintenance free type bearing unit is satisfactory for use under normal operating conditions in-doors, in the following circumstances it is necessary to use the relubricatable type bearing unit:

- (1) Cases where the temperature of the bearing rises above 100°C , 212°F :
* -Normal temperature of up to 130°C , 266°F heat-resistant bearing units.
- (2) Cases where there is excessive dust, but space does not permit using a bearing unit with a cover.
- (3) Cases where the bearing unit is constantly exposed to splashes of water or any other liquid, but space does not permit using a bearing unit with a cover.
- (4) Cases in which the humidity is very high, and the machine in which the bearing unit is used is run only intermittently.

- (5) Cases involving a heavy load of which the C_r/P_r value is about 10 or below, and the speed is 10 min^{-1} or below, or the movement is oscillatory.
- (6) Cases where the number of revolutions is relatively high and the noise problem has to be considered; for example, when the bearing is used with the fan of an air conditioner.

2.3 SPECIAL SEALING FEATURE

2.3.1 STANDARD BEARING UNITS

The sealing device of the ball bearing for the NSK bearing unit is a combination of a heat-resistant and oil-proof synthetic rubber seal and a slinger of an exclusive design.

The seal, which is fixed in the outer ring, is steel-reinforced, and its lip, in contact with the inner ring, is designed to minimize frictional torque.

The slinger is fixed to the inner ring of the bearing with which it rotates. There is a small clearance between its periphery and the outer ring.

There are triangular protrusions on the outside face of the slinger and, as the bearing rotates, these protrusions on the slinger create a flow of air outward from the bearing. In this way, the slinger acts as a fan which-keeps dust and water away from the bearing.

These two types of seals on both sides of the bearing prevent grease leakage, and foreign matter is prevented from entering the bearing from outside.

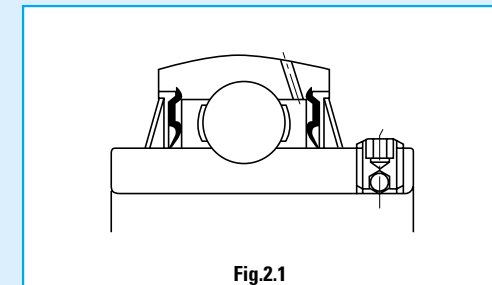


Fig.2.1

2.3.2 BEARING UNITS WITH COVERS

The NSK bearing unit with a cover consists of a standard bearing unit and an outside covering for extra protection against dust. Special consideration has been given to its design with respect to dust-proofing.

Sealing devices are provided in both the bearing and the housing, so that units of this type operate satisfactorily even in such adverse environments as flour mills, steel mills, foundries, galvanizing plants and chemical plants, where excessive dust is produced and/or liquids are used. They are also eminently suitable for outdoor environments where dust and rain are inevitable, and in heavy industrial machinery such as construction and transportation equipment.

The rubber seal of the cover contacts with the shaft by its two lips, as shown in Fig. 2.2 and 2.3. By filling the groove between the two lips with grease, an excellent sealing effect is obtained and, at the same time, the contacting portions of the lips are lubricated. Furthermore, the groove is so designed that when the shaft is inclined the rubber seal can move in the radial direction.

When bearing units are exposed to splashes of water rather than to dust, a drain hole (5 to 8 mm, 0.2 to 0.3 inches in diameter) is provided at the bottom of the cover, and grease should be applied to the side of the bearing itself instead of into the cover.

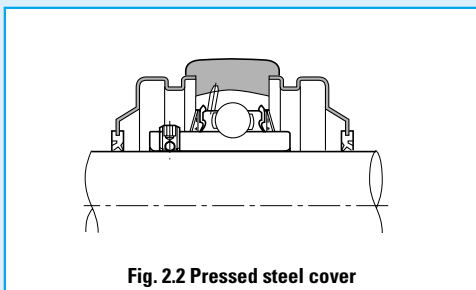


Fig. 2.2 Pressed steel cover

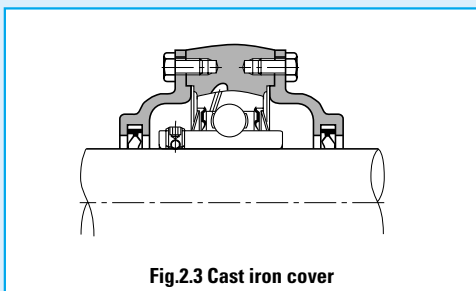


Fig. 2.3 Cast iron cover

2.4 SECURE FITTING

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

2.5 SELF-ALIGNING

With the NSK bearing unit, the outer surface of the ball bearing and the inner surface of the housing are spherical, thus this bearing unit has self-aligning characteristic. Any misalignment of axis that arise from poor workmanship on the shaft or errors in fitting will be properly adjusted.

2.6 HIGHER RATED LOAD CAPACITY

The bearing used in the unit is of the same internal construction as those in bearing series 62 and 63, and is capable of accommodating axial load as well as radial load, or composite load. The rated load capacity of this bearing is considerably higher than that of the corresponding self-aligning ball bearings used for standard plummer blocks

2.7 LIGHT WEIGHT YET STRONG HOUSING

Housings for NSK bearing units come in various shapes. They consist of either high-grade cast iron, one-piece casting, or of precision finished pressed steel, the latter being lighter in weight. In either case, they are practically designed to combine lightness with maximum strength.

2.8 EASY MOUNTING

The NSK bearing unit is an integrated unit consisting of a bearing and a housing.

As the bearing is prelubricated at manufacture with the correct amount of high-grade lithium base, it can be mounted on the shaft just as it is. It is sufficient to carry out a short test run after mounting.

2.9 ACCURATE FITTING OF THE HOUSING

In order to simplify the fitting of the pillow block and flange type bearing units, the housings are provided with a seat for a dowel pin, which may be utilized as needed.

2.10 BEARING REPLACEABILITY

The bearing used in the NSK bearing unit is replaceable. In the event of bearing failure, a new bearing can be fitted to the existing housing.

3. RECOMMENDED TORQUES FOR TIGHTENING SET SCREWS

Table 3.1 Recommended torques for tightening set screws

A) Metric series, applied to metric bore size.

Designation of the bearings of applicable units			Designation of set screws	Tightening torques N·m (max.)
UC201 to UC205	—	—	M 5×0.8 × 7	3.9
UC206	—	UC305 to UC306	M 6×0.75× 8	4.9
UC207	UCX05	—	M 6×0.75× 8	5.8
UC208 to UC210	—	—	M 8×1 ×10	7.8
UC211	UCX06 to UCX08	UC307	M 8×1 ×10	9.8
UC212	UCX09	—	M10×1.25×12	16.6
UC213 to UC215	—	UC308 to UC309	M10×1.25×12	19.6
UC216	UCX10	—	M10×1.25×12	22.5
—	UCX11 to UCX12	—	M10×1.25×12	24.5
UC217 to UC218	UCX13 to UCX15	UC310 to UC314	M12×1.5 ×13	29.4
—	UCX16 to UCX17	—	M12×1.5 ×13	34.3
—	UCX18	UC315 to UC316	M14×1.5 ×15	34.3
—	UCX20	UC317 to UC319	M16×1.5 ×18	53.9
—	—	UC320 to UC324	M18×1.5 ×20	58.8
—	—	UC326 to UC328	M20×1.5 ×25	78.4

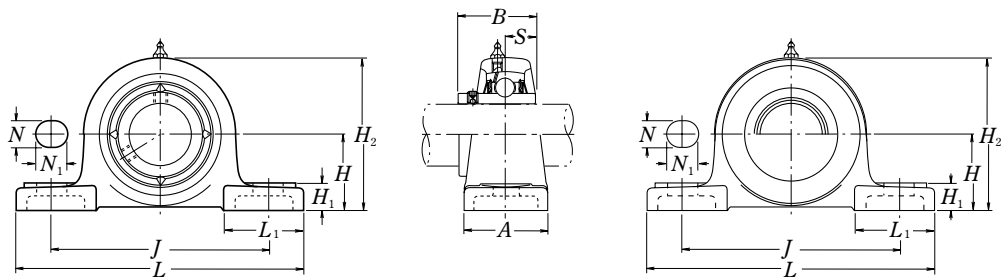
Designation of the bearings of applicable units	Designation of set screws	Tightening torques N·m (max.)
AS201 to 205	M5×0.8 × 7	3.4
AS206	M6×0.75× 8	4.4
AS207	M6×0.75× 8	4.9
AS208	M8×1 ×10	6.8

B) Inch series, applied to inch bore size.

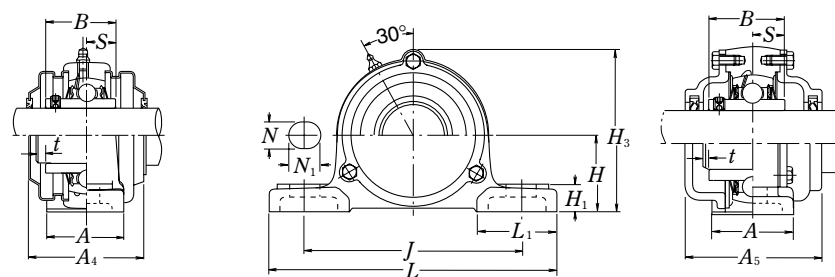
Designation of the bearings for the unit to which torques given are applicable			Designation of set screws	Tightening torques lbf·inch (max.)
UC201 to UC205	—	—	No.10 -32UNF	34
UC206	—	UC305 to UC306	1/4 -28UNF	43
UC207	UCX05	—	1/4 -28UNF	52
UC208 to UC210	—	—	5/16 -24UNF	69
UC211	UCX06 to UCX08	UC307	5/16 -24UNF	86
UC212	UCX09	—	3/8 -24UNF	147
UC213 to UC215	—	UC308 to UC309	3/8 -24UNF	173
UC216	UCX10	—	3/8 -24UNF	199
—	UCX11 to UCX12	—	3/8 -24UNF	216
UC217 to UC218	UCX13 to UCX15	UC310 to UC314	1/2 -20UNF	260
—	UCX16 to UCX17	—	1/2 -20UNF	303
—	UCX18	UC315 to UC316	9/16 -18UNF	303
—	UCX20	UC317 to UC318	5/8 -18UNF	477
—	—	UC320	5/8 -18UNF	520

Designation of the bearings for the unit to which torques given are applicable	Designation of set screws	Tightening torques lbf·inch (max.)
AS201 to 205	No 10-32UNF	30
AS206	1/4 -28UNF	39
AS207	1/4 -28UNF	43
AS208	5/16-24UNF	60

Pillow blocks units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCP...D1
Closed end ZM-UCP...D1



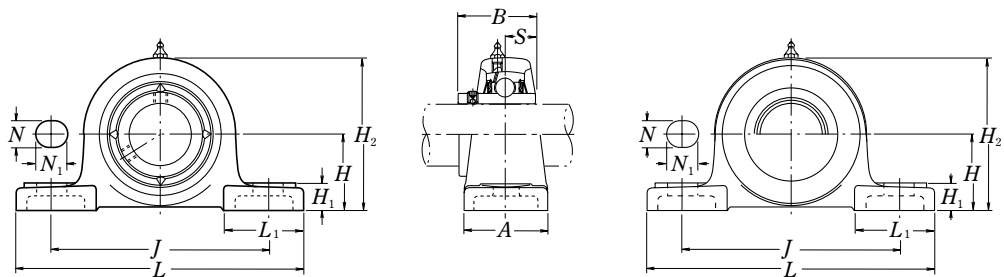
Cast dust cover type
Open end C-UCP...D1
Closed end CM-UCP...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions											Bolt size	Bearing number
		mm inch												
mm inch		H	L	J	A	N	N ₁	H ₁	H ₂	L ₁	B	S	mm inch	
12 1/2	UCP201D1 UCP201-008D1	30.2 1 3/16	127 5	95 3 3/4	38 1 1/2	13 1/2	16 5/8	14 9/16	62 2 7/16	42 1 21/32	31 1.2205	12.7 0.500	M10 3/8	UC201D1 UC201-008D1
15 9/16 5/8	UCP202D1 UCP202-009D1 UCP202-010D1	30.2 1 3/16	127 5	95 3 3/4	38 1 1/2	13 1/2	16 5/8	14 9/16	62 2 7/16	42 1 21/32	31 1.2205	12.7 0.500	M10 3/8	UC202D1 UC202-009D1 UC202-010D1
17 11/16	UCP203D1 UCP203-011D1	30.2 1 3/16	127 5	95 3 3/4	38 1 1/2	13 1/2	16 5/8	14 9/16	62 2 7/16	42 1 21/32	31 1.2205	12.7 0.500	M10 3/8	UC203D1 UC203-011D1
20 3/4	UCP204D1 UCP204-012D1	33.3 1 5/16	127 5	95 3 3/4	38 1 1/2	13 1/2	16 5/8	14 9/16	65 2 9/16	42 1 21/32	31 1.2205	12.7 0.500	M10 3/8	UC204D1 UC204-012D1
25 13/16 7/8 15/16 1	UCP205D1 UCP205-013D1 UCP205-014D1 UCP205-015D1 UCP205-100D1	36.5 1 7/16	140 5 1/2	105 4 1/8	38 1 1/2	13 1/2	16 5/8	15 19/32	71 2 25/32	42 1 21/32	34.1 1.3425	14.3 0.563	M10 3/8	UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1
30 1 1/16 1 1/8 1 3/16 1 1/4	UCP206D1 UCP206-101D1 UCP206-102D1 UCP206-103D1 UCP206-104D1	42.9 1 11/16	165 6 1/2	121 4 3/4	48 1 7/8	17 21/32	20 25/32	17 21/32	83 3 9/32	54 2 1/8	38.1 1.5000	15.9 0.626	M14 1/2	UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1
35 1 1/4 1 5/16 1 3/8 1 7/16	UCP207D1 UCP207-104D1 UCP207-105D1 UCP207-106D1 UCP207-107D1	47.6 1 11/4	167 6 9/16	127 5	48 1 7/8	17 21/32	20 25/32	18 23/32	93 3 21/32	54 2 1/8	42.9 1.6890	17.5 0.689	M14 1/2	UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1
40 1 1/2 1 9/16	UCP208D1 UCP208-108D1 UCP208-109D1	49.2 1 11/2	184 7 1/4	137 5 13/32	54 2 1/8	17 21/32	20 25/32	18 23/32	98 3 27/32	52 2 1/16	49.2 1.9370	19 0.748	M14 1/2	UC208D1 UC208-108D1 UC208-109D1

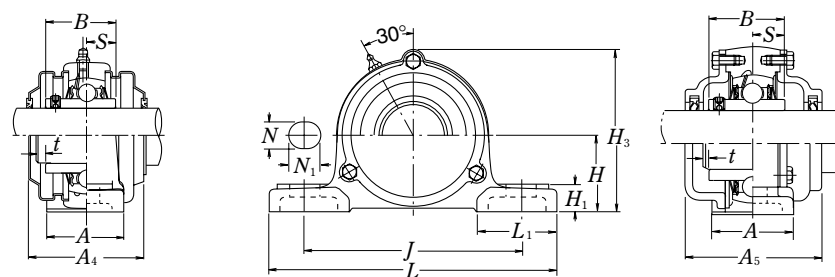
Note (1) These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number (1) pressed steel dust cover type	Unit number (1) cast dust cover type	Nominal dimensions				Mass of unit				
			t max.	A ₄	H ₃	A ₅	kg lb				
									UCP	Z(ZM)	C(CM)
P203D1	Z(ZM)-UCP201D1	C(CM)-UCP201D1	2	45	67	62	0.7	0.7	1.0		
P203D1	Z(ZM)-UCP201-008D1	C(CM)-UCP201-008D1	5/64	1 25/32	2 5/8	2 7/16	1.5	1.5	2.2		
P203D1	Z(ZM)-UCP202D1	C(CM)-UCP202D1	2	45	67	62	0.7	0.7	1.0		
P203D1	Z(ZM)-UCP202-009D1	C(CM)-UCP202-009D1	5/64	1 25/32	2 5/8	2 7/16	1.5	1.5	2.2		
P203D1	Z(ZM)-UCP202-010D1	C(CM)-UCP202-010D1									
P203D1	Z(ZM)-UCP203D1	C(CM)-UCP203D1	2	45	67	62	0.7	0.7	1.0		
P203D1	Z(ZM)-UCP203-011D1	C(CM)-UCP203-011D1	5/64	1 25/32	2 5/8	2 7/16	1.5	1.5	2.2		
P204D1	Z(ZM)-UCP204D1	C(CM)-UCP204D1	2	45	70	62	0.7	0.7	0.9		
P204D1	Z(ZM)-UCP204-012D1	C(CM)-UCP204-012D1	5/64	1 25/32	2 3/4	2 7/16	1.5	1.5	2.0		
P205D1	Z(ZM)-UCP205D1	C(CM)-UCP205D1	2	48	76	70	0.8	0.9	1.1		
P205D1	Z(ZM)-UCP205-013D1	C(CM)-UCP205-013D1									
P205D1	Z(ZM)-UCP205-014D1	C(CM)-UCP205-014D1									
P205D1	Z(ZM)-UCP205-015D1	C(CM)-UCP205-015D1	5/64	1 29/32	3	2 3/4	1.8	2.0	2.4		
P205D1	Z(ZM)-UCP205-100D1	C(CM)-UCP205-100D1									
P206D1	Z(ZM)-UCP206D1	C(CM)-UCP206D1	2	53	88	75	1.4	1.4	1.7		
P206D1	Z(ZM)-UCP206-101D1	C(CM)-UCP206-101D1									
P206D1	Z(ZM)-UCP206-102D1	C(CM)-UCP206-102D1	5/64	2 3/32	3 15/32	2 15/16	3.1	3.1	3.7		
P206D1	Z(ZM)-UCP206-103D1	C(CM)-UCP206-103D1									
P206D1	—	—									
P207D1	Z(ZM)-UCP207D1	C(CM)-UCP207D1	3	60	99	80	1.6	1.7	2.0		
P207D1	Z(ZM)-UCP207-104D1	C(CM)-UCP207-104D1									
P207D1	Z(ZM)-UCP207-105D1	C(CM)-UCP207-105D1	1/8	2 3/8	3 29/32	3 5/32	3.5	3.7	4.4		
P207D1	Z(ZM)-UCP207-106D1	C(CM)-UCP207-106D1									
P207D1	—	—									
P208D1	Z(ZM)-UCP208D1	C(CM)-UCP208D1	3	69	105	90	1.9	2.1	2.7		
P208D1	Z(ZM)-UCP208-108D1	C(CM)-UCP208-108D1	1/8	2 23/32	4 1/8	3 17/32	4.2	4.6	6.0		
P208D1	Z(ZM)-UCP208-109D1	C(CM)-UCP208-109D1									

Pillow blocks units cast housing
Set screw type



Pressed steel dust cover type
Open end **Z-UCP...D1**
Closed end **ZM-UCP...D1**



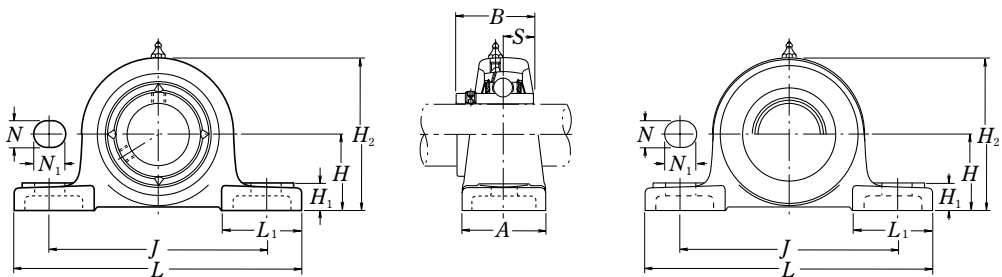
Cast dust cover type
Open end **C-UCP...D1**
Closed end **CM-UCP...D1**

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions											Bolt size	Bearing number
		mm inch												
mm inch		H	L	J	A	N	N ₁	H ₁	H ₂	L ₁	B	S	mm inch	
45 15/8 111/16 13/4	UCP209D1 UCP209-110D1 UCP209-111D1 UCP209-112D1	54 2 1/8	190 7 15/32	146 5 3/4	54 2 1/8	17 21/32	20 25/32	20 25/32	106 4 3/16	60 2 3/8	49.2 1.9370	19 0.748	M14 1/2	UC209D1 UC209-110D1 UC209-111D1 UC209-112D1
50 1 13/16 17/8 115/16 2	UCP210D1 UCP210-113D1 UCP210-114D1 UCP210-115D1 UCP210-200D1	57.2 2 1/4	206 8 1/8	159 6 1/4	60 2 3/8	20 25/32	23 29/32	21 13/16	114 4 1/2	65 2 9/16	51.6 2.0315	19 0.748	M16 5/8	UC210D1 UC210-113D1 UC210-114D1 UC210-115D1 UC210-200D1
55 2 21/16 21/8 23/16	UCP211D1 UCP211-200D1 UCP211-201D1 UCP211-202D1 UCP211-203D1	63.5 2 1/2	219 8 5/8	171 6 23/32	60 2 3/8	20 25/32	23 29/32	23 29/32	126 4 31/32	65 2 9/16	55.6 2.1890	22.2 0.874	M16 5/8	UC211D1 UC211-200D1 UC211-201D1 UC211-202D1 UC211-203D1
60 2 1/4 25/16 23/8 27/16	UCP212D1 UCP212-204D1 UCP212-205D1 UCP212-206D1 UCP212-207D1	69.8 2 3/4	241 9 1/2	184 7 1/4	70 2 3/4	20 25/32	23 29/32	25 31/32	138 5 7/16	70 2 3/4	65.1 2.5630	25.4 1.000	M16 5/8	UC212D1 UC212-204D1 UC212-205D1 UC212-206D1 UC212-207D1
65 2 1/2 29/16	UCP213D1 UCP213-208D1 UCP213-209D1	76.2 3	265 10 7/16	203 8	70 2 3/4	25 31/32	28 13/32	27 11/16	151 5 15/16	77 3 1/32	65.1 2.5630	25.4 1.000	M20 3/4	UC213D1 UC213-208D1 UC213-209D1
70 25/8 211/16 23/4	UCP214D1 UCP214-210D1 UCP214-211D1 UCP214-212D1	79.4 3 1/8	266 10 15/32	210 8 9/32	72 2 27/32	25 31/32	28 13/32	27 11/16	157 6 3/16	77 3 1/32	74.6 2.9370	30.2 1.189	M20 3/4	UC214D1 UC214-210D1 UC214-211D1 UC214-212D1

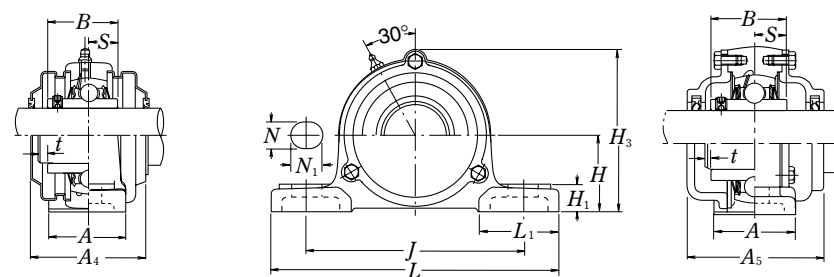
Note ⁽¹⁾ These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number ⁽¹⁾ pressed steel dust cover type	Unit number ⁽¹⁾ cast dust cover type	Nominal dimensions				Mass of unit				
			t max.	mm inch	A ₄	H ₃	A ₅	kg lb			
									UCP	Z(ZM)	C(CM)
P209D1 P209D1 P209D1 P209D1	Z(ZM)-UCP209D1 Z(ZM)-UCP209-110D1 Z(ZM)-UCP209-111D1 Z(ZM)-UCP209-112D1	C(CM)-UCP209D1 C(CM)-UCP209-110D1 C(CM)-UCP209-111D1 C(CM)-UCP209-112D1	3 1/8	69 2 23/32	113 4 7/16	95 3 3/4	2.2 4.9	2.4 5.3	3.1 6.8		
P210D1 P210D1 P210D1 P210D1 P210D1	Z(ZM)-UCP210D1 Z(ZM)-UCP210-113D1 Z(ZM)-UCP210-114D1 Z(ZM)-UCP210-115D1 —	C(CM)-UCP210D1 C(CM)-UCP210-113D1 C(CM)-UCP210-114D1 C(CM)-UCP210-115D1 C(CM)-UCP210-200D1	3 1/8	76 3	119 4 11/16	100 3 15/16	2.7 6.0	2.8 6.2	3.6 7.9		
P211D1 P211D1 P211D1 P211D1 P211D1	Z(ZM)-UCP211D1 Z(ZM)-UCP211-200D1 Z(ZM)-UCP211-201D1 Z(ZM)-UCP211-202D1 Z(ZM)-UCP211-203D1	C(CM)-UCP211D1 C(CM)-UCP211-200D1 C(CM)-UCP211-201D1 C(CM)-UCP211-202D1 C(CM)-UCP211-203D1	4 5/32	77 3 1/32	130 5 1/8	100 3 15/16	3.5 7.7	3.5 7.7	4.4 9.7		
P212D1 P212D1 P212D1 P212D1 P212D1	Z(ZM)-UCP212D1 Z(ZM)-UCP212-204D1 Z(ZM)-UCP212-205D1 Z(ZM)-UCP212-206D1 —	C(CM)-UCP212D1 C(CM)-UCP212-204D1 C(CM)-UCP212-205D1 C(CM)-UCP212-206D1 C(CM)-UCP212-207D1	4 5/32	89 3 1/2	143 5 5/8	115 4 17/32	4.7 10	5.0 11	6.0 13		
P213D1 P213D1 P213D1	Z(ZM)-UCP213D1 Z(ZM)-UCP213-208D1 Z(ZM)-UCP213-209D1	C(CM)-UCP213D1 C(CM)-UCP213-208D1 C(CM)-UCP213-209D1	4 5/32	91 3 19/32	155 6 3/32	120 4 23/32	5.6 12	5.8 13	7.2 16		
P214D1 P214D1 P214D1 P214D1	— — — —	C(CM)-UCP214D1 C(CM)-UCP214-210D1 C(CM)-UCP214-211D1 C(CM)-UCP214-212D1	4 5/32	— —	162 6 3/8	135 5 5/16	6.5 14	—	8.3 18		

Pillow blocks units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCP...D1
Closed end ZM-UCP...D1



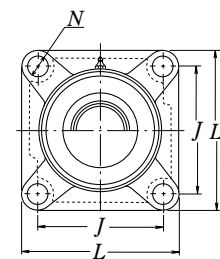
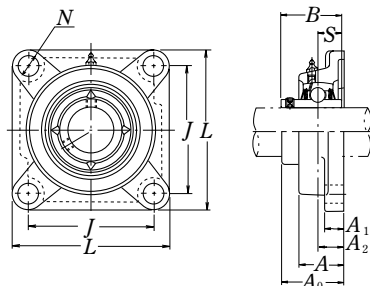
Cast dust cover type
Open end C-UCP...D1
Closed end CM-UCP...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions											Bolt size	Bearing number
		mm inch												
mm inch		H	L	J	A	N	N ₁	H ₁	H ₂	L ₁	B	S	mm inch	
75 2 ¹³ / ₁₆ 27/8 2 ¹⁵ / ₁₆ 3	UCP215D1 UCP215-213D1 UCP215-214D1 UCP215-215D1 UCP215-300D1	82.6 3 ¹ / ₄	275 10 ¹³ / ₁₆	217 8 ¹⁷ / ₃₂	74 2 ²⁹ / ₃₂	25 3 ¹ / ₃₂	28 1 ³ / ₃₂	28 1 ³ / ₃₂	163 6 ¹³ / ₃₂	80 3 ⁵ / ₃₂	77.8 3.0630	33.3 1.311	M20 3/4	UC215D1 UC215-213D1 UC215-214D1 UC215-215D1 UC215-300D1
80 3 ¹ / ₁₆ 3 ¹ / ₈ 3 ³ / ₁₆	UCP216D1 UCP216-301D1 UCP216-302D1 UCP216-303D1	88.9 3 ¹ / ₂	292 11 ¹ / ₂	232 9 ¹ / ₈	78 3 ¹ / ₁₆	25 3 ¹ / ₃₂	28 1 ³ / ₃₂	30 1 ³ / ₁₆	175 6 ⁷ / ₈	85 3 ¹¹ / ₃₂	82.6 3.2520	33.3 1.311	M20 3/4	UC216D1 UC216-301D1 UC216-302D1 UC216-303D1
85 3 ¹ / ₄ 3 ⁵ / ₁₆ 3 ⁷ / ₁₆	UCP217D1 UCP217-304D1 UCP217-305D1 UCP217-307D1	95.2 3 ³ / ₄	310 12 ⁷ / ₃₂	247 9 ²³ / ₃₂	83 3 ⁹ / ₃₂	25 3 ¹ / ₃₂	28 1 ³ / ₃₂	32 1 ¹ / ₄	187 7 ³ / ₈	85 3 ¹¹ / ₃₂	85.7 3.3740	34.1 1.343	M20 3/4	UC217D1 UC217-304D1 UC217-305D1 UC217-307D1
90 3 ¹ / ₂	UCP218D1 UCP218-308D1	101.6 4	327 12 ⁷ / ₈	262 10 ⁵ / ₁₆	88 3 ¹⁵ / ₃₂	27 1 ¹ / ₁₆	30 1 ³ / ₁₆	33 1 ⁵ / ₁₆	200 7 ⁷ / ₈	90 3 ¹⁷ / ₃₂	96 3.7795	39.7 1.563	M22 7/8	UC218D1 UC218-308D1

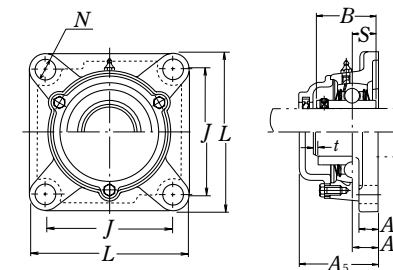
Note ⁽¹⁾ These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number ⁽¹⁾ pressed steel dust cover type	Unit number ⁽¹⁾ cast dust cover type	Nominal dimensions				Mass of unit			
			t max.	A ₄	H ₃	A ₅	kg lb			
								UCP	Z(ZM)	C(CM)
P215D1 P215D1 P215D1 P215D1 P215D1	—	C(CM)-UCP215D1 C(CM)-UCP215-213D1 C(CM)-UCP215-214D1 C(CM)-UCP215-215D1 C(CM)-UCP215-300D1	4 5/32	—	168 6 ⁵ / ₈	135 5 ⁵ / ₁₆	7.2 16	—	9.3 21	
P216D1 P216D1 P216D1 P216D1	—	C(CM)-UCP216D1 C(CM)-UCP216-301D1 C(CM)-UCP216-302D1 C(CM)-UCP216-303D1	4 5/32	—	181 7 ¹ / ₈	145 5 ²³ / ₃₂	8.7 19	—	11 24	
P217D1 P217D1 P217D1 P217D1	—	C(CM)-UCP217D1 C(CM)-UCP217-304D1 C(CM)-UCP217-305D1 C(CM)-UCP217-307D1	5 13/64	—	191 7 ¹⁷ / ₃₂	155 6 ³ / ₃₂	11 24	—	13 29	
P218D1 P218D1	—	C(CM)-UCP218D1 C(CM)-UCP218-308D1	5 13/64	—	204 8 ¹ / ₃₂	165 6 ¹ / ₂	13 29	—	16 35	

Square flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCF...D1
Closed end ZM-UCF...D1



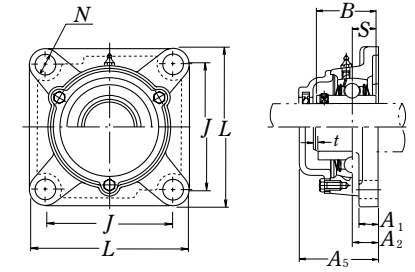
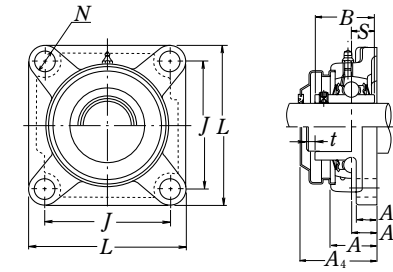
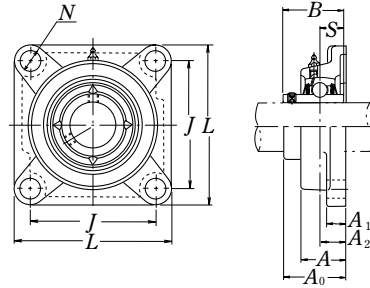
Cast dust cover type
Open end C-UCF...D1
Closed end CM-UCF...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions									Bolt size	Bearing number
		mm inch										
mm inch		L	J	A ₂	A ₁	A	N	A ₀	B	S	mm inch	
12 1/2	UCF201D1 UCF201-008D1	86 3 ³ / ₈	64 2 ³ / ₆₄	15 19/32	11 7/16	25.5 1	12 15/32	33.3 1 ⁵ / ₁₆	31 1.2205	12.7 0.500	M10 3/8	UC201D1 UC201-008D1
15 9/16 5/8	UCF202D1 UCF202-009D1 UCF202-010D1	86 3 ³ / ₈	64 2 ³ / ₆₄	15 19/32	11 7/16	25.5 1	12 15/32	33.3 1 ⁵ / ₁₆	31 1.2205	12.7 0.500	M10 3/8	UC202D1 UC202-009D1 UC202-010D1
17 11/16	UCF203D1 UCF203-011D1	86 3 ³ / ₈	64 2 ³ / ₆₄	15 19/32	11 7/16	25.5 1	12 15/32	33.3 1 ⁵ / ₁₆	31 1.2205	12.7 0.500	M10 3/8	UC203D1 UC203-011D1
20 3/4	UCF204D1 UCF204-012D1	86 3 ³ / ₈	64 2 ³ / ₆₄	15 19/32	11 7/16	25.5 1	12 15/32	33.3 1 ⁵ / ₁₆	31 1.2205	12.7 0.500	M10 3/8	UC204D1 UC204-012D1
25 13/16 7/8 15/16 1	UCF205D1 UCF205-013D1 UCF205-014D1 UCF205-015D1 UCF205-100D1	95 3 ³ / ₄	70 2 ³ / ₄	16 5/8	13 1/2	27 11/16	12 15/32	35.8 1 ¹ / ₃₂	34.1 1.3425	14.3 0.563	M10 3/8	UC205D1 UC205-013D1 UC205-014D1 UC205-015D1 UC205-100D1
30 11/16 11/8 13/16 11/4	UCF206D1 UCF206-101D1 UCF206-102D1 UCF206-103D1 UCF206-104D1	108 4 ¹ / ₄	83 3 ¹ / ₄	18 4 ⁵ / ₆₄	13 1/2	31 17/32	12 15/32	40.2 1 ³ / ₁₆	38.1 1.5000	15.9 0.626	M10 3/8	UC206D1 UC206-101D1 UC206-102D1 UC206-103D1 UC206-104D1
35 11/4 15/16 13/8 17/16	UCF207D1 UCF207-104D1 UCF207-105D1 UCF207-106D1 UCF207-107D1	117 4 ¹ / ₂	92 3 ⁵ / ₈	19 3/4	15 19/32	34 1 ¹ / ₃₂	14 35/64	44.4 13/4	42.9 1.6890	17.5 0.689	M12 7/16	UC207D1 UC207-104D1 UC207-105D1 UC207-106D1 UC207-107D1
40 11/2 19/16	UCF208D1 UCF208-108D1 UCF208-109D1	130 5 ¹ / ₈	102 4 ¹ / ₆₄	21 5 ³ / ₆₄	15 19/32	36 1 ¹ / ₃₂	16 5/8	51.2 2 ¹ / ₆₄	49.2 1.9370	19 0.748	M14 1/2	UC208D1 UC208-108D1 UC208-109D1

Note (1) These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number (1) pressed steel dust cover type	Unit number (1) cast dust cover type	Nominal dimensions			Mass of unit		
			mm inch			kg lb		
			t max.	A ₄	A ₅	UCP	Z(ZM)	C(CM)
F204D1 F204D1	Z(ZM)-UCF201D1 Z(ZM)-UCF201-008D1	C(CM)-UCF201D1 C(CM)-UCF201-008D1	2 5/64	38 1 ¹ / ₂	46 1 ¹³ / ₁₆	0.6 1.3	0.6 1.3	0.8 1.8
F204D1 F204D1 F204D1	Z(ZM)-UCF202D1 Z(ZM)-UCF202-009D1 Z(ZM)-UCF202-010D1	C(CM)-UCF202D1 C(CM)-UCF202-009D1 C(CM)-UCF202-010D1	2 5/64	38 1 ¹ / ₂	46 1 ¹³ / ₁₆	0.6 1.3	0.6 1.3	0.8 1.8
F204D1 F204D1	Z(ZM)-UCF203D1 Z(ZM)-UCF203-011D1	C(CM)-UCF203D1 C(CM)-UCF203-011D1	2 5/64	38 1 ¹ / ₂	46 1 ¹³ / ₁₆	0.6 1.3	0.6 1.3	0.8 1.8
F204D1 F204D1	Z(ZM)-UCF204D1 Z(ZM)-UCF204-012D1	C(CM)-UCF204D1 C(CM)-UCF204-012D1	2 5/64	38 1 ¹ / ₂	46 1 ¹³ / ₁₆	0.6 1.3	0.6 1.3	0.7 1.5
F205D1 F205D1 F205D1 F205D1 F205D1	Z(ZM)-UCF205D1 Z(ZM)-UCF205-013D1 Z(ZM)-UCF205-014D1 Z(ZM)-UCF205-015D1 Z(ZM)-UCF205-100D1	C(CM)-UCF205D1 C(CM)-UCF205-013D1 C(CM)-UCF205-014D1 C(CM)-UCF205-015D1 C(CM)-UCF205-100D1	2 5/64	40 1 ¹ / ₂	51 2	0.8 1.8	0.8 1.8	0.9 2.0
F206D1 F206D1 F206D1 F206D1 F206D1	Z(ZM)-UCF206D1 Z(ZM)-UCF206-101D1 Z(ZM)-UCF206-102D1 Z(ZM)-UCF206-103D1 —	C(CM)-UCF206D1 C(CM)-UCF206-101D1 C(CM)-UCF206-102D1 C(CM)-UCF206-103D1 C(CM)-UCF206-104D1	2 5/64	45 1 ³ / ₄	56 2 ⁷ / ₃₂	1.1 2.4	1.1 2.4	1.3 2.9
F207D1 F207D1 F207D1 F207D1 F207D1	Z(ZM)-UCF207D1 Z(ZM)-UCF207-104D1 Z(ZM)-UCF207-105D1 Z(ZM)-UCF207-106D1 —	C(CM)-UCF207D1 C(CM)-UCF207-104D1 C(CM)-UCF207-105D1 C(CM)-UCF207-106D1 C(CM)-UCF207-107D1	3 1/8	49 1 ¹ / ₈	59 2 ⁵ / ₁₆	1.5 3.3	1.5 3.3	1.8 4.0
F208D1 F208D1 F208D1	Z(ZM)-UCF208D1 Z(ZM)-UCF208-108D1 Z(ZM)-UCF208-109D1	C(CM)-UCF208D1 C(CM)-UCF208-108D1 C(CM)-UCF208-109D1	3 1/8	56 2 ³ / ₁₆	66 2 ¹ / ₃₂	1.7 3.7	1.8 4.0	2.2 4.9

Square flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCF...D1
Closed end ZM-UCF...D1

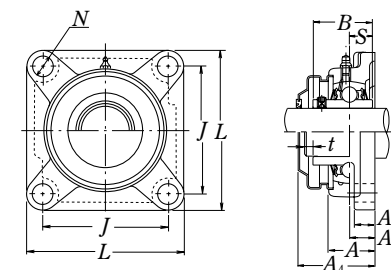
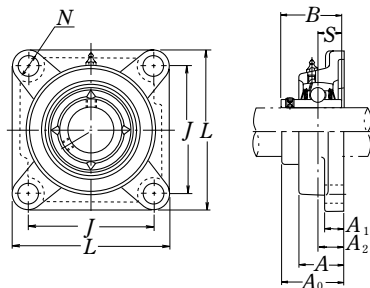
Cast dust cover type
Open end C-UCF...D1
Closed end CM-UCF...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions									Bolt size	Bearing number
		mm inch										
		L	J	A ₂	A ₁	A	N	A ₀	B	S		
mm inch											mm inch	
45	UCF209D1	137	105	22	16	38	16	52.2	49.2	19	M14	UC209D1
15/8	UCF209-110D1											UC209-110D1
111/16	UCF209-111D1	5 ¹³ / ₃₂	4 ⁹ / ₆₄	5 ⁵ / ₆₄	5/8	1 ¹ / ₂	5/8	2 ¹ / ₁₆	1.9370	0.748	1/2	UC209-111D1
13/4	UCF209-112D1											UC209-112D1
50	UCF210D1	143	111	22	16	40	16	54.6	51.6	19	M14	UC210D1
113/16	UCF210-113D1											UC210-113D1
17/8	UCF210-114D1											UC210-114D1
115/16	UCF210-115D1	5 ⁵ / ₈	4 ³ / ₈	5 ⁵ / ₆₄	5/8	1 ⁹ / ₁₆	5/8	2 ⁵ / ₃₂	2.0315	0.748	1/2	UC210-115D1
2	UCF210-200D1											UC210-200D1
55	UCF211D1	162	130	25	18	43	19	58.4	55.6	22.2	M16	UC211D1
2	UCF211-200D1											UC211-200D1
21/16	UCF211-201D1											UC211-201D1
21/8	UCF211-202D1	6 ³ / ₈	5 ¹ / ₈	6 ³ / ₆₄	2 ³ / ₃₂	1 ¹¹ / ₁₆	3/4	2 ¹⁹ / ₆₄	2.1890	0.874	5/8	UC211-202D1
23/16	UCF211-203D1											UC211-203D1
60	UCF212D1	175	143	29	18	48	19	68.7	65.1	25.4	M16	UC212D1
21/4	UCF212-204D1											UC212-204D1
25/16	UCF212-205D1											UC212-205D1
23/8	UCF212-206D1	6 ⁷ / ₈	5 ⁵ / ₈	1 ⁹ / ₆₄	2 ³ / ₃₂	1 ⁷ / ₈	3/4	2 ⁴⁵ / ₆₄	2.5630	1.000	5/8	UC212-206D1
27/16	UCF212-207D1											UC212-207D1
65	UCF213D1	187	149	30	22	50	19	69.7	65.1	25.4	M16	UC213D1
21/2	UCF213-208D1											UC213-208D1
29/16	UCF213-209D1	7 ³ / ₈	5 ⁵⁵ / ₆₄	1 ³ / ₁₆	7/8	1 ³¹ / ₃₂	3/4	2 ³ / ₄	2.5630	1.000	5/8	UC213-209D1
70	UCF214D1	193	152	31	22	54	19	75.4	74.6	30.2	M16	UC214D1
25/8	UCF214-210D1											UC214-210D1
211/16	UCF214-211D1	7 ¹⁹ / ₃₂	5 ⁶³ / ₆₄	1 ⁷ / ₃₂	7/8	2 ¹ / ₈	3/4	2 ³¹ / ₃₂	2.9370	1.189	5/8	UC214-211D1
23/4	UCF214-212D1											UC214-212D1

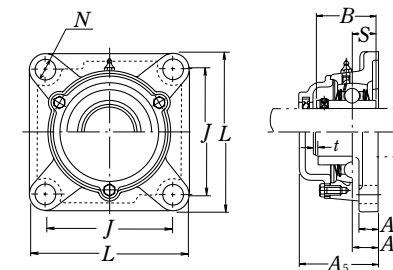
Note (1) These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number (1) pressed steel dust cover type	Unit number (1) cast dust cover type	Nominal dimensions			Mass of unit		
			mm inch			kg lb		
			t max.	A ₄	A ₅	UCF	Z(ZM)	C(CM)
F209D1	Z(ZM)-UCF209D1	C(CM)-UCF209D1	3	57	70	2.1	2.2	2.6
F209D1	Z(ZM)-UCF209-110D1	C(CM)-UCF209-110D1						
F209D1	Z(ZM)-UCF209-111D1	C(CM)-UCF209-111D1	1/8	21/4	23/4	4.6	4.9	5.7
F209D1	Z(ZM)-UCF209-112D1	C(CM)-UCF209-112D1						
F210D1	Z(ZM)-UCF210D1	C(CM)-UCF210D1	3	60	72	2.5	2.5	3.0
F210D1	Z(ZM)-UCF210-113D1	C(CM)-UCF210-113D1						
F210D1	Z(ZM)-UCF210-114D1	C(CM)-UCF210-114D1	1/8	23/8	227/32	5.5	5.5	6.6
F210D1	Z(ZM)-UCF210-115D1	C(CM)-UCF210-115D1						
F210D1	—	C(CM)-UCF210-200D1						
F211D1	Z(ZM)-UCF211D1	C(CM)-UCF211D1	4	64	75	3.3	3.4	4.0
F211D1	Z(ZM)-UCF211-200D1	C(CM)-UCF211-200D1						
F211D1	Z(ZM)-UCF211-201D1	C(CM)-UCF211-201D1	5/32	21/2	215/16	7.3	7.5	8.8
F211D1	Z(ZM)-UCF211-202D1	C(CM)-UCF211-202D1						
F211D1	Z(ZM)-UCF211-203D1	C(CM)-UCF211-203D1						
F212D1	Z(ZM)-UCF212D1	C(CM)-UCF212D1	4	74	86	3.9	4.1	4.8
F212D1	Z(ZM)-UCF212-204D1	C(CM)-UCF212-204D1						
F212D1	Z(ZM)-UCF212-205D1	C(CM)-UCF212-205D1	5/32	229/32	33/8	8.6	9.0	11
F212D1	Z(ZM)-UCF212-206D1	C(CM)-UCF212-206D1						
F212D1	—	C(CM)-UCF212-207D1						
F213D1	Z(ZM)-UCF213D1	C(CM)-UCF213D1	4	76	90	5.5	5.6	6.4
F213D1	Z(ZM)-UCF213-208D1	C(CM)-UCF213-208D1	5/32	3	317/32	12	12	14
F213D1	Z(ZM)-UCF213-209D1	C(CM)-UCF213-209D1						
F214D1	—	C(CM)-UCF214D1	4	—	98	6.3	—	7.4
F214D1	—	C(CM)-UCF214-210D1						
F214D1	—	C(CM)-UCF214-211D1	5/32	—	327/32	14	—	16
F214D1	—	C(CM)-UCF214-212D1						

Square flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCF...D1
Closed end ZM-UCF...D1



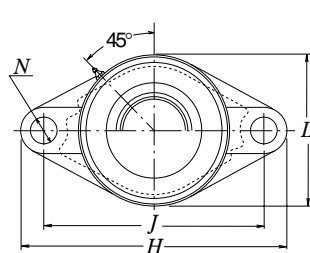
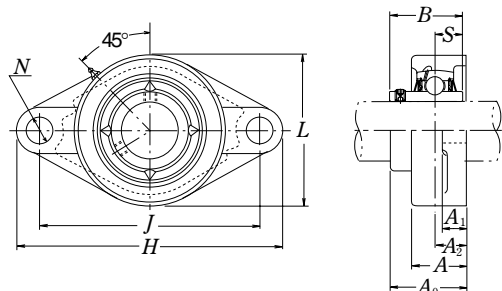
Cast dust cover type
Open end C-UCF...D1
Closed end CM-UCF...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions									Bolt size	Bearing number
		mm inch										
mm inch		L	J	A ₂	A ₁	A	N	A ₀	B	S	mm inch	
75 2 ¹³ / ₁₆	UCF215D1	200	159	34	22	56	19	78.5	77.8	33.3	M16	UC215D1
	UCF215-213D1											UC215-213D1
	UCF215-214D1	77/8	617/64	111/32	7/8	27/32	3/4	33/32	3.0630	1.311	5/8	UC215-214D1
	UCF215-215D1											UC215-215D1
	UCF215-300D1											UC215-300D1
80 3 ¹ / ₁₆	UCF216D1	208	165	34	22	58	23	83.3	82.6	33.3	M20	UC216D1
	UCF216-301D1											UC216-301D1
	UCF216-302D1	8 ³ / ₁₆	61/2	111/32	7/8	29/32	29/32	39/32	3.2520	1.311	3/4	UC216-302D1
	UCF216-303D1											UC216-303D1
85 3 ¹ / ₄	UCF217D1	220	175	36	24	63	23	87.6	85.7	34.1	M20	UC217D1
	UCF217-304D1											UC217-304D1
	UCF217-305D1	8 ²¹ / ₃₂	6 ⁵⁷ / ₆₄	1 ²⁷ / ₆₄	1 ⁵ / ₁₆	2 ¹⁵ / ₃₂	2 ⁹ / ₃₂	3 ²⁹ / ₆₄	3.3740	1.343	3/4	UC217-305D1
	UCF217-307D1											UC217-307D1
90 3 ¹ / ₂	UCF218D1	235	187	40	24	68	23	96.3	96	39.7	M20	UC218D1
	UCF218-308D1	9 ¹ / ₄	7 ²³ / ₆₄	1 ³⁷ / ₆₄	1 ⁵ / ₁₆	2 ¹¹ / ₁₆	2 ⁹ / ₃₂	3 ⁵¹ / ₆₄	3.7795	1.563	3/4	UC218-308D1

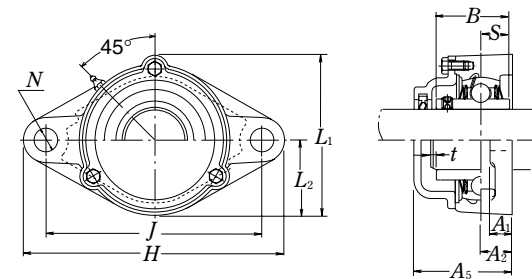
Note ⁽¹⁾ These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number ⁽¹⁾ pressed steel dust cover type	Unit number ⁽¹⁾ cast dust cover type	Nominal dimensions			Mass of unit		
			mm inch			kg lb		
			t max.	A ₄	A ₅	UCF	Z(ZM)	C(CM)
F215D1	—	C(CM)-UCF215D1	4	—	102	6.6	—	7.9
F215D1		C(CM)-UCF215-213D1						
F215D1	—	C(CM)-UCF215-214D1	5/32	—	41/32	15	—	17
F215D1		C(CM)-UCF215-215D1						
F215D1		C(CM)-UCF215-300D1						
F216D1	—	C(CM)-UCF216D1	4	—	106	7.9	—	9.3
F216D1		C(CM)-UCF216-301D1						
F216D1	—	C(CM)-UCF216-302D1	5/32	—	43/16	17	—	21
F216D1		C(CM)-UCF216-303D1						
F217D1	—	C(CM)-UCF217D1	5	—	114	9.8	—	12
F217D1		C(CM)-UCF217-304D1						
F217D1	—	C(CM)-UCF217-305D1	13/64	—	41/2	22	—	26
F217D1		C(CM)-UCF217-307D1						
F218D1	—	C(CM)-UCF218D1	5	—	122	12	—	13
F218D1	—	C(CM)-UCF218-308D1	13/64	—	4 ¹³ / ₁₆	26	—	29

Rhombus flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCFL...D1
Closed end ZM-UCFL...D1



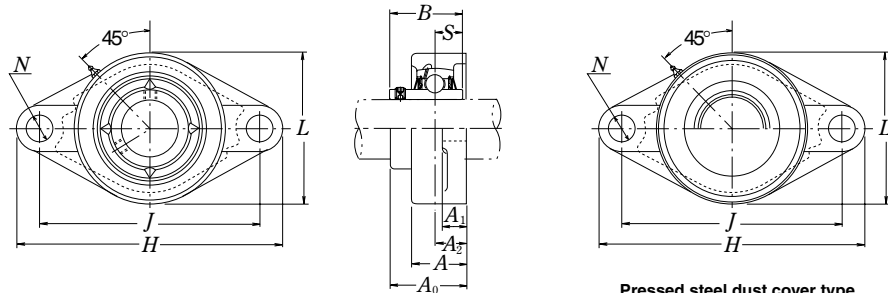
Cast dust cover type
Open end C-UCFL...D1
Closed end CM-UCFL...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions											Bolt size	Bearing number
		mm inch												
		H	J	A ₂	A ₁	A	N	L	A ₀	B	S			
12	UCFL201D1	113	90	15	11	25.5	12	60	33.3	31	12.7	M10	UC201D1	
1/2	UCFL201-008D1	47/16	35/64	19/32	7/16	1	15/32	23/8	15/16	1.2205	0.500	3/8	UC201-008D1	
15	UCFL202D1	113	90	15	11	25.5	12	60	33.3	31	12.7	M10	UC202D1	
9/16	UCFL202-009D1	47/16	35/64	19/32	7/16	1	15/32	23/8	15/16	1.2205	0.500	3/8	UC202-009D1	
5/8	UCFL202-010D1	47/16	35/64	19/32	7/16	1	15/32	23/8	15/16	1.2205	0.500	3/8	UC202-010D1	
17	UCFL203D1	113	90	15	11	25.5	12	60	33.3	31	12.7	M10	UC203D1	
11/16	UCFL203-011D1	47/16	35/64	19/32	7/16	1	15/32	23/8	15/16	1.2205	0.500	3/8	UC203-011D1	
20	UCFL204D1	113	90	15	11	25.5	12	60	33.3	31	12.7	M10	UC204D1	
3/4	UCFL204-012D1	47/16	35/64	19/32	7/16	1	15/32	23/8	15/16	1.2205	0.500	3/8	UC204-012D1	
25	UCFL205D1	130	99	16	13	27	16	68	35.8	34.1	14.3	M14	UC205D1	
13/16	UCFL205-013D1											1/2	UC205-013D1	
7/8	UCFL205-014D1	51/8	357/64	5/8	1/2	11/16	5/8	211/16	113/32	1.3425	0.563	1/2	UC205-014D1	
15/16	UCFL205-015D1											1/2	UC205-015D1	
1	UCFL205-100D1											1/2	UC205-100D1	
30	UCFL206D1	148	117	18	13	31	16	80	40.2	38.1	15.9	M14	UC206D1	
11/16	UCFL206-101D1											1/2	UC206-101D1	
11/8	UCFL206-102D1	513/16	439/64	45/64	1/2	17/32	5/8	35/32	137/64	1.5000	0.626	1/2	UC206-102D1	
13/16	UCFL206-103D1											1/2	UC206-103D1	
11/4	UCFL206-104D1											1/2	UC206-104D1	
35	UCFL207D1	161	130	19	15	34	16	90	44.4	42.9	17.5	M14	UC207D1	
11/4	UCFL207-104D1											1/2	UC207-104D1	
15/16	UCFL207-105D1	611/32	51/8	3/4	19/32	111/32	5/8	317/32	13/4	1.6890	0.689	1/2	UC207-105D1	
13/8	UCFL207-106D1											1/2	UC207-106D1	
17/16	UCFL207-107D1											1/2	UC207-107D1	
40	UCFL208D1	175	144	21	15	36	16	100	51.2	49.2	19	M14	UC208D1	
11/2	UCFL208-108D1	67/8	543/64	53/64	19/32	113/32	5/8	315/16	21/64	1.9370	0.748	1/2	UC208-108D1	
19/16	UCFL208-109D1											1/2	UC208-109D1	

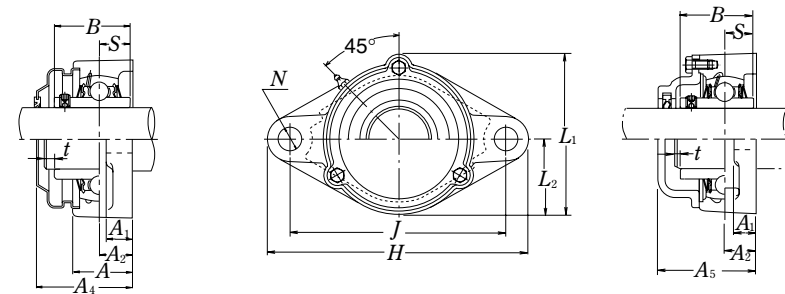
Note (1) These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number (1) pressed steel dust cover type	Unit number (1) cast dust cover type	Nominal dimensions					Mass of unit		
			mm inch					kg lb		
			t max.	A ₄	A ₅	L ₁	L ₂	UCFL	Z(ZM)	C(CM)
FL204D1	Z(ZM)-UCFL201D1	C(CM)-UCFL201D1	2	38	46	67	30	0.5	0.5	0.6
FL204D1	Z(ZM)-UCFL201-008D1	C(CM)-UCFL201-008D1	5/64	11/2	113/16	25/8	13/16	1.1	1.1	1.3
FL204D1	Z(ZM)-UCFL202D1	C(CM)-UCFL202D1	2	38	46	67	30	0.5	0.5	0.6
FL204D1	Z(ZM)-UCFL202-009D1	C(CM)-UCFL202-009D1	5/64	11/2	113/16	25/8	13/16	1.1	1.1	1.3
FL204D1	Z(ZM)-UCFL202-010D1	C(CM)-UCFL202-010D1								
FL204D1	Z(ZM)-UCFL203D1	C(CM)-UCFL203D1	2	38	46	67	30	0.5	0.5	0.6
FL204D1	Z(ZM)-UCFL203-011D1	C(CM)-UCFL203-011D1	5/64	11/2	113/16	25/8	13/16	1.1	1.1	1.3
FL204D1	Z(ZM)-UCFL204D1	C(CM)-UCFL204D1	2	38	46	67	30	0.4	0.4	0.6
FL204D1	Z(ZM)-UCFL204-012D1	C(CM)-UCFL204-012D1	5/64	11/2	113/16	25/8	13/16	0.9	0.9	1.3
FL205D1	Z(ZM)-UCFL205D1	C(CM)-UCFL205D1	2	40	51	74	34	0.6	0.6	0.8
FL205D1	Z(ZM)-UCFL205-013D1	C(CM)-UCFL205-013D1								
FL205D1	Z(ZM)-UCFL205-014D1	C(CM)-UCFL205-014D1	5/64	119/32	2	229/32	111/32	1.3	1.3	1.8
FL205D1	Z(ZM)-UCFL205-015D1	C(CM)-UCFL205-015D1								
FL205D1	Z(ZM)-UCFL205-100D1	C(CM)-UCFL205-100D1								
FL206D1	Z(ZM)-UCFL206D1	C(CM)-UCFL206D1	2	45	56	85	40	0.9	0.9	1.2
FL206D1	Z(ZM)-UCFL206-101D1	C(CM)-UCFL206-101D1								
FL206D1	Z(ZM)-UCFL206-102D1	C(CM)-UCFL206-102D1	5/64	13/4	27/32	311/32	19/16	2.0	2.0	2.6
FL206D1	Z(ZM)-UCFL206-103D1	C(CM)-UCFL206-103D1								
FL206D1	—	—								
FL207D1	Z(ZM)-UCFL207D1	C(CM)-UCFL207D1	3	49	59	97	45	1.2	1.2	1.4
FL207D1	Z(ZM)-UCFL207-104D1	C(CM)-UCFL207-104D1								
FL207D1	Z(ZM)-UCFL207-105D1	C(CM)-UCFL207-105D1	1/8	115/16	25/16	313/16	125/32	2.6	2.6	3.1
FL207D1	Z(ZM)-UCFL207-106D1	C(CM)-UCFL207-106D1								
FL207D1	—	—								
FL208D1	Z(ZM)-UCFL208D1	C(CM)-UCFL208D1	3	56	66	106	50	1.5	1.5	1.9
FL208D1	Z(ZM)-UCFL208-108D1	C(CM)-UCFL208-108D1	1/8	23/16	219/32	43/16	131/32	3.3	3.3	4.2
FL208D1	Z(ZM)-UCFL208-109D1	C(CM)-UCFL208-109D1								

Rhombus flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCFL...D1
Closed end ZM-UCFL...D1



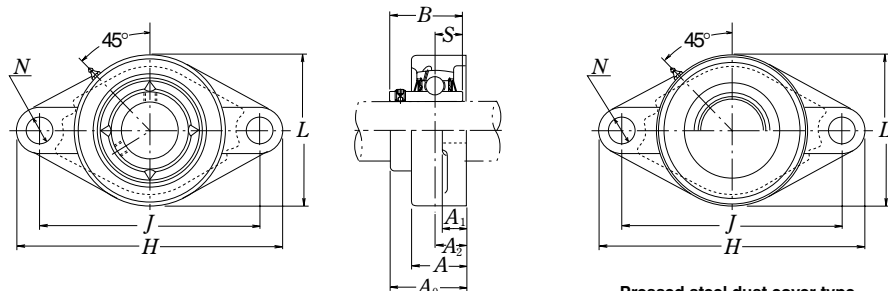
Cast dust cover type
Open end C-UCFL...D1
Closed end CM-UCFL...D1

Shaft dia.	Unit number(1)	Nominal dimensions										Bolt size	Bearing number
		mm inch											
		H	J	A ₂	A ₁	A	N	L	A ₀	B	S		
45 15/8	UCFL209D1 UCFL209-110D1	188	148	22	16	38	19	108	52.2	49.2	19	M16	UC209D1 UC209-110D1
111/16 13/4	UCFL209-111D1 UCFL209-112D1	713/32	553/64	55/64	5/8	11/2	3/4	41/4	21/16	1.9370	0.748	5/8	UC209-111D1 UC209-112D1
50 113/16	UCFL210D1 UCFL210-113D1	197	157	22	16	40	19	115	54.6	51.6	19	M16	UC210D1 UC210-113D1
17/8	UCFL210-114D1	73/4	63/16	55/64	5/8	19/16	3/4	417/32	25/32	2.0315	0.748	5/8	UC210-114D1
115/16	UCFL210-115D1	73/4	63/16	55/64	5/8	19/16	3/4	417/32	25/32	2.0315	0.748	5/8	UC210-115D1
2	UCFL210-200D1	73/4	63/16	55/64	5/8	19/16	3/4	417/32	25/32	2.0315	0.748	5/8	UC210-200D1
55 2	UCFL211D1 UCFL211-200D1	224	184	25	18	43	19	130	58.4	55.6	22.2	M16	UC211D1 UC211-200D1
21/16	UCFL211-201D1	813/16	71/4	63/64	23/32	111/16	3/4	51/8	219/64	2.1890	0.874	5/8	UC211-201D1
21/8	UCFL211-202D1	813/16	71/4	63/64	23/32	111/16	3/4	51/8	219/64	2.1890	0.874	5/8	UC211-202D1
23/16	UCFL211-203D1	813/16	71/4	63/64	23/32	111/16	3/4	51/8	219/64	2.1890	0.874	5/8	UC211-203D1
60 21/4	UCFL212D1 UCFL212-204D1	250	202	29	18	48	23	140	68.7	65.1	25.4	M20	UC212D1 UC212-204D1
25/16	UCFL212-205D1	927/32	761/64	19/64	23/32	17/8	29/32	51/2	245/64	2.5630	1.000	3/4	UC212-205D1
23/8	UCFL212-206D1	927/32	761/64	19/64	23/32	17/8	29/32	51/2	245/64	2.5630	1.000	3/4	UC212-206D1
27/16	UCFL212-207D1	927/32	761/64	19/64	23/32	17/8	29/32	51/2	245/64	2.5630	1.000	3/4	UC212-207D1
65 21/2	UCFL213D1 UCFL213-208D1	258	210	30	22	50	23	155	69.7	65.1	25.4	M20	UC213D1 UC213-208D1
29/16	UCFL213-209D1	105/32	817/64	13/16	7/8	131/32	29/32	63/32	23/4	2.5630	1.000	3/4	UC213-209D1
70 25/8	UCFL214D1 UCFL214-210D1	265	216	31	22	54	23	160	75.4	74.6	30.2	M20	UC214D1 UC214-210D1
211/16	UCFL214-211D1	107/16	81/2	17/32	7/8	21/8	29/32	65/16	231/32	2.9370	1.189	3/4	UC214-211D1
23/4	UCFL214-212D1	107/16	81/2	17/32	7/8	21/8	29/32	65/16	231/32	2.9370	1.189	3/4	UC214-212D1

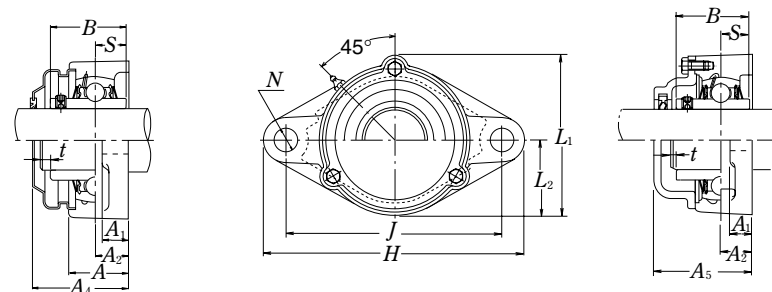
Note (1) These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number (1) pressed steel dust cover type	Unit number (1) cast dust cover type	Nominal dimensions					Mass of unit		
			mm inch					kg lb		
			t max.	A ₄	A ₅	L ₁	L ₂	UCFL	Z(ZM)	C(CM)
FL209D1	Z(ZM)-UCFL209D1	C(CM)-UCFL209D1	3	57	70	113	54	1.8	1.9	2.3
FL209D1	Z(ZM)-UCFL209-110D1	C(CM)-UCFL209-110D1	3	57	70	113	54	1.8	1.9	2.3
FL209D1	Z(ZM)-UCFL209-111D1	C(CM)-UCFL209-111D1	1/8	21/4	23/4	47/16	21/8	4.0	4.2	5.1
FL209D1	Z(ZM)-UCFL209-112D1	C(CM)-UCFL209-112D1	1/8	21/4	23/4	47/16	21/8	4.0	4.2	5.1
FL210D1	Z(ZM)-UCFL210D1	C(CM)-UCFL210D1	3	60	72	120	58	2.0	2.1	2.7
FL210D1	Z(ZM)-UCFL210-113D1	C(CM)-UCFL210-113D1	3	60	72	120	58	2.0	2.1	2.7
FL210D1	Z(ZM)-UCFL210-114D1	C(CM)-UCFL210-114D1	1/8	23/8	227/32	423/32	29/32	4.4	4.6	6.0
FL210D1	Z(ZM)-UCFL210-115D1	C(CM)-UCFL210-115D1	1/8	23/8	227/32	423/32	29/32	4.4	4.6	6.0
FL210D1	—	C(CM)-UCFL210-200D1	—	—	—	—	—	—	—	—
FL211D1	Z(ZM)-UCFL211D1	C(CM)-UCFL211D1	4	64	75	133	65	2.9	3.0	3.4
FL211D1	Z(ZM)-UCFL211-200D1	C(CM)-UCFL211-200D1	4	64	75	133	65	2.9	3.0	3.4
FL211D1	Z(ZM)-UCFL211-201D1	C(CM)-UCFL211-201D1	5/32	21/2	215/16	51/4	29/16	6.4	6.6	7.5
FL211D1	Z(ZM)-UCFL211-202D1	C(CM)-UCFL211-202D1	5/32	21/2	215/16	51/4	29/16	6.4	6.6	7.5
FL211D1	Z(ZM)-UCFL211-203D1	C(CM)-UCFL211-203D1	5/32	21/2	215/16	51/4	29/16	6.4	6.6	7.5
FL212D1	Z(ZM)-UCFL212D1	C(CM)-UCFL212D1	4	74	86	144	70	3.8	4.0	4.6
FL212D1	Z(ZM)-UCFL212-204D1	C(CM)-UCFL212-204D1	4	74	86	144	70	3.8	4.0	4.6
FL212D1	Z(ZM)-UCFL212-205D1	C(CM)-UCFL212-205D1	5/32	229/32	33/8	521/32	23/4	8.4	8.9	10
FL212D1	Z(ZM)-UCFL212-206D1	C(CM)-UCFL212-206D1	5/32	229/32	33/8	521/32	23/4	8.4	8.9	10
FL212D1	—	C(CM)-UCFL212-207D1	—	—	—	—	—	—	—	—
FL213D1	Z(ZM)-UCFL213D1	C(CM)-UCFL213D1	4	76	90	157	78	4.8	4.9	5.8
FL213D1	Z(ZM)-UCFL213-208D1	C(CM)-UCFL213-208D1	5/32	3	317/32	63/16	31/16	11	11	15
FL213D1	Z(ZM)-UCFL213-209D1	C(CM)-UCFL213-209D1	5/32	3	317/32	63/16	31/16	11	11	15
FL214D1	—	C(CM)-UCFL214D1	4	—	98	164	80	5.4	—	7.7
FL214D1	—	C(CM)-UCFL214-210D1	4	—	98	164	80	5.4	—	7.7
FL214D1	—	C(CM)-UCFL214-211D1	5/32	—	327/32	615/32	35/32	12	—	17
FL214D1	—	C(CM)-UCFL214-212D1	5/32	—	327/32	615/32	35/32	12	—	17

Rhombus flanged units cast housing
Set screw type



Pressed steel dust cover type
Open end Z-UCFL...D1
Closed end ZM-UCFL...D1



Cast dust cover type
Open end C-UCFL...D1
Closed end CM-UCFL...D1

Shaft dia.	Unit number ⁽¹⁾	Nominal dimensions											Bolt size	Bearing number
		mm inch												
mm inch		H	J	A ₂	A ₁	A	N	L	A ₀	B	S	mm inch		
75 2 ¹³ / ₁₆ 2 ⁷ / ₈ 2 ¹⁵ / ₁₆ 3	UCFL215D1 UCFL215-213D1 UCFL215-214D1 UCFL215-215D1 UCFL215-300D1	275	225	34	22	56	23	165	78.5	77.8	33.3	M20	UC215D1 UC215-213D1 UC215-214D1 UC215-215D1 UC215-300D1	
80 3 ¹ / ₁₆ 3 ¹ / ₈ 3 ³ / ₁₆	UCFL216D1 UCFL216-301D1 UCFL216-302D1 UCFL216-303D1	290	233	34	22	58	25	180	83.3	82.6	33.3	M22	UC216D1 UC216-301D1 UC216-302D1 UC216-303D1	
85 3 ¹ / ₄ 3 ⁵ / ₁₆ 3 ⁷ / ₁₆	UCFL217D1 UCFL217-304D1 UCFL217-305D1 UCFL217-307D1	305	248	36	24	63	25	190	87.6	85.7	34.1	M22	UC217D1 UC217-304D1 UC217-305D1 UC217-307D1	
90 3 ¹ / ₂	UCFL218D1 UCFL218-308D1	320	265	40	24	68	25	205	96.3	96	39.7	M22	UC218D1 UC218-308D1	

Note ⁽¹⁾ These numbers indicate relubricatable type. If maintenance free type is needed, please order without suffix "D1".

Housing number	Unit number ⁽¹⁾ pressed steel dust cover type	Unit number ⁽¹⁾ cast dust cover type	Nominal dimensions					Mass of unit				
			t max.	A ₄	A ₅	L ₁	L ₂	kg lb				
										UCFL	Z(ZM)	C(CM)
FL215D1 FL215D1 FL215D1 FL215D1 FL215D1	— — — — —	C(CM)-UCFL215D1 C(CM)-UCFL215-213D1 C(CM)-UCFL215-214D1 C(CM)-UCFL215-215D1 C(CM)-UCFL215-300D1	4 5/32	— —	102 4 ¹ / ₃₂	169 6 ²¹ / ₃₂	82 3 ⁷ / ₃₂	6.0 13	— —	7.1 16		
FL216D1 FL216D1 FL216D1 FL216D1	— — — —	C(CM)-UCFL216D1 C(CM)-UCFL216-301D1 C(CM)-UCFL216-302D1 C(CM)-UCFL216-303D1	4 5/32	— —	106 4 ³ / ₁₆	183 7 ⁷ / ₃₂	90 3 ¹⁷ / ₃₂	7.4 16	— —	8.6 19		
FL217D1 FL217D1 FL217D1 FL217D1	— — — —	C(CM)-UCFL217D1 C(CM)-UCFL217-304D1 C(CM)-UCFL217-305D1 C(CM)-UCFL217-307D1	5 1 ³ / ₆₄	— —	114 4 ¹ / ₂	192 7 ⁹ / ₁₆	95 3 ³ / ₄	8.8 19	— —	10 22		
FL218D1 FL218D1	— —	C(CM)-UCFL218D1 C(CM)-UCFL218-308D1	5 1 ³ / ₆₄	— —	122 4 ¹³ / ₁₆	205 8 ¹ / ₁₆	102 4 ¹ / ₃₂	11 24	— —	13 29		