

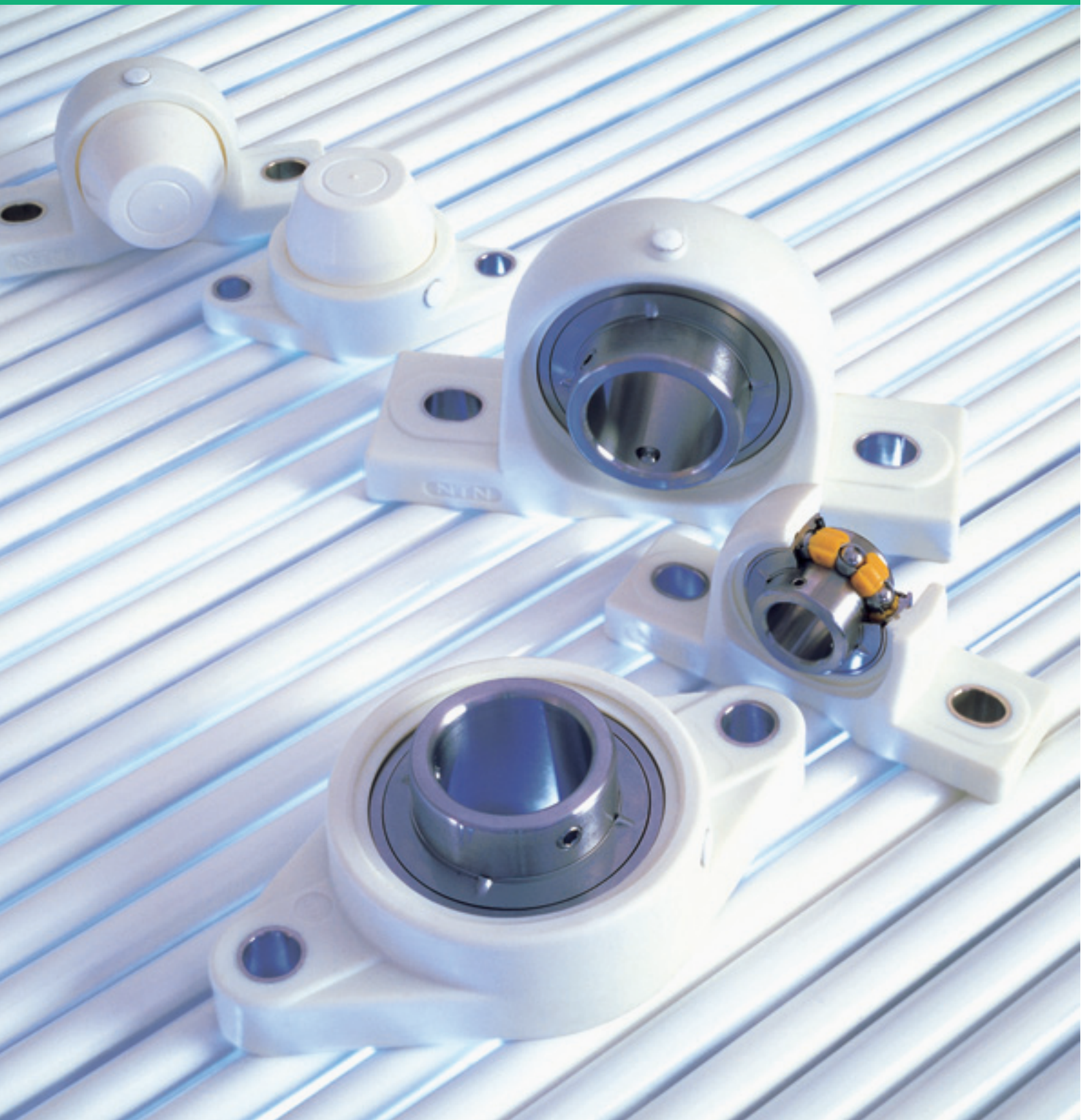
For New Technology Network

NTN[®]

NTNcorporation

Bearing Units Plastic Housing Series

CAT. No. 3904-III / E



The NTN plastic series ensures a clean operating environment.

1. Features

Guards against corrosion

NTN bearing units in the plastic series feature ball bearings inserted into housings made of plastics that provide superior resistance to corrosion as compared to standard series cast iron units. This series is especially useful in a wide variety of applications because of the nonmagnetic and rust free properties of the housing.

Maintains a clean operating environment

The solid grease lubricant in the ball bearing, solely developed by **NTN**, reduces leakage from the bearing, significantly reducing environmental pollution. Also, the housing will not stain, nor is there paint to peel and contaminate the environment.

Low torque characteristics

The standard solid grease type for these ball bearing units is spot-pack which places the lubricant on the bearing cage. Torque consumption capabilities of spot-pack bearings is low due to reduced whip resistance in comparison to standard grease lubricated ball bearings.

Light weight

Weight is reduced more than 30% to 60% over standard series units.

Water resistant

The glass filled polyester housing not only reduces corrosion but offers better water resistance.

2. Materials

Parts		Materials
Bearing	Raceways	Martensite stainless steel (equivalent to SUS440C)
	Rolling element	Martensite stainless steel (SUS440C)
	Slinger, Cage	Austenite stainless steel (SUS304)
	Rubber seal	Nitryl rubber
	Set screw(W shape screw head)	Martensite stainless steel (SUS410)
Bearing housing	Housing	Glass reinforced Polyester (VALOX 420)*
	Sleeve for set bolt	Austenite stainless steel (SUS 304)
	Nut for grease nipple	Austenite stainless steel (SUS 304)
Dust cover		Polypropylene
Plug		Polyethylene

※VALOX is a trade mark of General Electric Company

3. Recommended operating temperature and allowable speed

Bearings with solid grease are recommended to operate under -20 to +80°C. However, operating temperature should be below +60°C when bearing is operated with continuous use.

dn value: 12×10^4

(dn = bore diameter in mm $\times$ speed in min^{-1})

Remarks: The recommended operating temperature range and allowable speed is applied to all bearings with solid grease. Contact **NTN** when your application exceeds these recommendations. For standard grease, the maximum recommended temperature for plastic units is 80°C to prevent creeping between bearing outer ring and housing bore.

4. Compatibility and Handling

Basically, the plastic housing series is compatible with standard cast iron series units when setting, however, the nominal setting bolt diameter may differ from the standard series. The housing should be handled carefully and may be damaged if dropped on hard surfaces or hit with metal hammers. An electrostatic charge may be generated in certain operating conditions, making it inadvisable for use when flammable or explosive conditions may occur. The unit may be regreased using the plug on the housing, however relubrication is not recommended when unit ball bearings are packed with solid grease.

5. Applications

Bearings with solid grease are suitable for applications requiring a clean operating environment such as: food processing and packaging machinery, chemical processing machines, etc.

6. Option

When a stainless steel insert bearing is not required, a standard steel insert bearing can applied. In that case a relubricable type will be provided. Contact **NTN** for additional information.

■ Recommended tightening torque for set screw

Unit: N·m/lbf·inch

Bearing number (F-UC)	Designation of set screws (W shape screw head)		Tightening torques (Max)	
	Metric series	Inch series	N·m	lbf·inch
204, 205	M5×0.8	No.10-32UNF	3.9	34
206	M6×0.75	1/4-28UNF	4.9	43
207	M6×0.75	1/4-28UNF	5.8	52
208	M8×1	5/16-24UNF	7.8	69

Tighten the two set screws uniformly using the torque listed in this table. Over tightening the set screw may cause the inner ring to crack.

■ Recommended tightening torque for setting bolt

Unit: N·m/lbf·inch

Housing number	Nominal bolt dia.		Tightening torques (Max.)	
	Metric series	Inch series	N·m	lbf·inch
PR204D1	M10	3/8	17.7	156
PR205D1			24.5	217
PR206D1	M12	7/16	29.4	260
PR207D1			35.3	312
PR208D1			45.1	399
FLR204D1	M10	3/8	17.7	156
FLR205D1			24.5	217
FLR206D1			29.4	260
FLR207D1	M12	7/16	35.3	312
FLR208D1			40.2	356

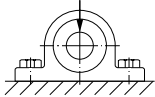
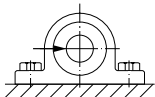
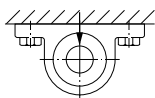
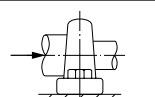
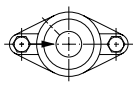
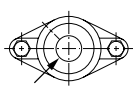
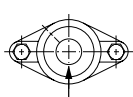
Over tightening the setting bolt may deform the plastic housing. Use the tightening torque guideline listed in this table.

NTN recommends the use of a washer between the bolt and housing base. If a washer is not used, damage to the base could occur.

■ Plastic housing static strength

The table below indicates the static strength of plastic housings at room temperature (23.5°C). The static strength of plastic housings varies by operating temperature, housing type and load direction and must be factored into the selection process. NTN recommends using safety equipment should the housing become damaged or broken, creating a dangerous working environment.

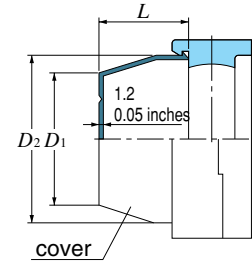
Unit: N/lbf

Type of housing	Direction of load	Static strength of housing				
		Nominal number				
		204	205	206	207	208
PR	Downward 	16,600	19,600	2,830	38,300	44,500
		3,730	4,410	6,370	8,620	10,000
	Horizontal 	7,000	7,400	8,600	10,300	12,100
		1,570	1,680	1,940	2,310	2,710
	Upward 	5,600	5,800	6,000	6,600	11,100
		1,260	1,300	1,340	1,480	2,490
	Axial direction 	3,000	3,200	4,000	5,700	8,500
		680	730	900	1,280	1,920
FLR	Horizontal 	5,600	8,000	10,800	13,800	17,300
		1,260	1,810	2,430	3,110	3,880
	45 degrees upward 	6,600	8,400	10,300	12,200	14,000
		1,480	1,900	2,310	2,730	3,150
	Upward 	7,400	7,600	8,500	10,700	15,100
		1,680	1,720	1,920	2,400	3,400

■ Dimensions for dust cover

Unit: mm/ inch

Cover number	Dimensions					
	D_1		D_2		L	
RM-204	36	$1 \frac{13}{32}$	50	$1 \frac{31}{32}$	29.5	$1 \frac{5}{32}$
RM-205	41	$1 \frac{5}{8}$	55	$2 \frac{5}{32}$	31.0	$1 \frac{7}{32}$
RM-206	50	$1 \frac{31}{32}$	64	$2 \frac{17}{32}$	35.0	$1 \frac{3}{8}$
RM-207	60	$2 \frac{3}{8}$	74	$2 \frac{15}{16}$	38.0	$1 \frac{1}{2}$
RM-208	68	$2 \frac{11}{16}$	84	$3 \frac{5}{16}$	40.0	$1 \frac{9}{16}$



■ Water and chemical resistance of housing (VALOX 420®)

Among engineering plastics, VALOX has better water absorption characteristics (0.06% at 23°C over 24 hours) and better dimensional stability. VALOX is made of crystallized polymer and while not affected by organic solvents, is affected by alkaline, making it important to consider the operating environment. The table demonstrates VALOX's chemical resistance when soaked in solvent at 30 or 90 days.

	Chemicals	Temperature ℃	Deterioration ratio ¹⁾ %			Chemicals	Temperature ℃	Deterioration ratio ¹⁾ %	
			Number of days soaked					Number of days soaked	
			30 days	90 days				30 days	90 days
Acid	Hydrochloric acid, 10%	23	89	85	Organic solven	Ethyl alcohol	23	99	96
	Sulfuric acid, 36%	23	97	97		Methyl alcohol	23	91	82
		60	84	60		Isopropyl alcohol	23	100	100
	Acetic acid 10%	23	88	88		Acetone	23	86	74
Alkaline	Potassium hydroacid, 5%	23	88	10		Methyl Ethyl Keton	23	90	80
	Sodium hydroacid, 10%	23	※	※		Ethyl acetate	23	96	86
	Ammonia hydroacid, 10%	23	96	87		Methylene chloride	23	54	54
Oil	Motor oil	23	100	100		Sodium	ethylene grycole	23	100
	Brake oil	23	100	100	Zinc chrolide 10%		23	97	94
	Gasoline (Regular)	23	100	100	Calcium chrolide 10%		23	98	98
		60	93	90	Sodium chrolide 5%		23	97	97

Remarks 1) Deterioration (%) is the strength after test divided by the strength before test.

The ※ symbol indicates that results could not be measured as the test piece dissolved.

Remarks 2) The values listed in the table are not guaranteed as they are the result of soaking without operating stresses on the sample. Because this strength data is general, it does not apply under all operating conditions. Actual housing strength will vary depending on the type and concentration of liquid, temperature, load, etc.

Remarks 3) Technical data provided by General Electric Company.

■ Anti-Corrosion capability

NTN recommends ratings of ◎ to ○ for optimum corrosion resistance. ◎ ← excellent → poor

Materials	Condition	Atmosphere		Water		Acid		
		Dry	Wet	Natural water	Sodium water	Nitric acid	Sulfuric acid	Hydrochloric acid
Martensite stainless steel	SUS440C, SUS410	○	△	△	▲	▲	×	×
Austenite stainless steel	SUS304, SCS13	◎	◎	◎	○	◎	○	△
Polyester plastics	VALOX 420	◎	◎	◎	◎	▲	○	○
Polypropylene, polyethylene		◎	◎	◎	◎	○	○	○
High carbon steel	SUJ2	△	▲	▲	×	×	×	×
Carbon steel, Cast iron		▲	×	×	×	×	×	×

Remarks: This data is obtained by observation of the surface conditions of materials.

Note that these anti-corrosion capabilities are altered by anti-corrosion surface treatment.

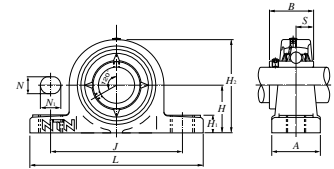
Not recommended for use in liquid.

Pillow type bearing unit F-UCPR2 series

Cylindrical bore, set screw type

Shaft dia. mm inch	Unit number	Nominal dimensions										Bolt size	Bearing number	Housing number	Mass of unit (Ref.) kg lb
		mm					inch								
		H	L	J	A	N	N ₁	H ₁	H ₂	B	S				
20 3/4	F-UCPR204/LP03 F-UCPR204-012/LP03	33.3 1 5/16	127 5	95 3 3/4	38 1 1/2	11 7/16	14 9/16	14.2 9/16	65 2 9/16	31 1.2205	12.7 0.500	M10 3/8	F-UC204D1/LP03 F-UC204-012D1/LP03	PR204D1 PR204D1	0.3 0.7
25 1 3/16 7/8 15/16 1	F-UCPR205/LP03 F-UCPR205-013/LP03 F-UCPR205-014/LP03 F-UCPR205-015/LP03 F-UCPR205-100/LP03	36.5 1 7/16	140 5 1/2	105 4 1/8	38 1 1/2	11 7/16	14 9/16	14.5 9/16	71 2 25/32	34.1 1.3425	14.3 0.563	M10 3/8	F-UC205D1/LP03 F-UC205-013D1/LP03 F-UC205-014D1/LP03 F-UC205-015D1/LP03 F-UC205-100D1/LP03	PR205D1 PR205D1	0.3 0.7
30 1 1/16 1 1/8 1 3/16 1 1/4	F-UCPR206/LP03 F-UCPR206-101/LP03 F-UCPR206-102/LP03 F-UCPR206-103/LP03 F-UCPR206-104/LP03	42.9 1 11/16	162 6 3/8	119 4 11/16	46 1 13/16	14 9/16	18 23/32	17.8 1 1/16	83 3 9/32	38.1 1.5000	15.9 0.626	M12 7/16	F-UC206D1/LP03 F-UC206-101D1/LP03 F-UC206-102D1/LP03 F-UC206-103D1/LP03 F-UC206-104D1/LP03	PR206D1 PR206D1	0.5 1.1
35 1 1/4 1 5/16 1 3/8 1 7/16	F-UCPR207/LP03 F-UCPR207-104/LP03 F-UCPR207-105/LP03 F-UCPR207-106/LP03 F-UCPR207-107/LP03	47.6 1 7/8	167 6 9/16	127 5	48 1 7/8	14 9/16	18 23/32	18 23/32	94 3 11/16	42.9 1.6890	17.5 0.689	M12 7/16	F-UC207D1/LP03 F-UC207-104D1/LP03 F-UC207-105D1/LP03 F-UC207-106D1/LP03 F-UC207-107D1/LP03	PR207D1 PR207D1	0.7 1.5
40 1 1/2 1 9/16	F-UCPR208/LP03 F-UCPR208-108/LP03 F-UCPR208-109/LP03	49.2 1 15/16	184 7 1/4	137 5 13/32	54 2 1/8	14 9/16	18 23/32	19.5 25/32	98 3 27/32	49.2 1.9370	19 0.748	M12 7/16	F-UC208D1/LP03 F-UC208-108D1/LP03 F-UC208-109D1/LP03	PR208D1 PR208D1	1.0 2.2

Stainless bearing with solid grease + glass fiber reinforced plastic housing.

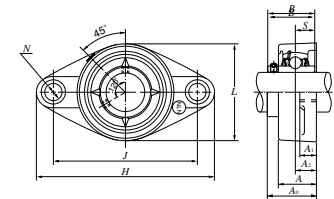


Rhombus flange type bearing unit F-UCFLR2 series

Cylindrical bore, set screw type

Shaft dia. mm inch	Unit number	Nominal dimensions										Bolt size	Bearing number	Housing number	Mass of unit (Ref.) kg lb
		mm					inch								
		H	J	A ₂	A ₁	A	N	L	A ₀	B	S				
20 3/4	F-UCFLR204/LP03	113	90	15.4	11.4	26.5	11	64	33.7	31	12.7	M10	F-UC204D1/LP03	FLR204D1	0.3
	F-UCFLR204-012/LP03	4 7/16	3 35/64	19/32	7/16	1 1/32	7/16	2 17/32	1 21/64	1.2205	0.500	3/8	F-UC204-012D1/LP03	FLR204D1	0.7
25 1 3/16 7/8 15/16 1	F-UCFLR205/LP03	130	99	17	13.5	29.1	11	68	36.8	34.1	14.3	M10	F-UC205D1/LP03	FLR205D1	0.3
	F-UCFLR205-013/LP03							13					F-UC205-013D1/LP03		
	F-UCFLR205-014/LP03							36.8					F-UC205-014D1/LP03		
	F-UCFLR205-015/LP03	5 1/8	3 57/64	21/32	17/32	1 5/32	7/16	2 11/16	1 29/64	1.3425	0.563	3/8	F-UC205-015D1/LP03	FLR205D1	0.7
	F-UCFLR205-100/LP03												F-UC205-100D1/LP03		
30 1 1/16 1 1/8 1 3/16 1 1/4	F-UCFLR206/LP03	148	117	19	13.3	30.5	11	80	41.2	38.1	15.9	M10	F-UC206D1/LP03	FLR206D1	0.5
	F-UCFLR206-101/LP03												F-UC206-101D1/LP03		
	F-UCFLR206-102/LP03												F-UC206-102D1/LP03		
	F-UCFLR206-103/LP03	5 13/16	4 39/64	3/4	17/32	1 3/16	7/16	3 5/32	1 5/8	1.5000	0.626	3/8	F-UC206-103D1/LP03	FLR206D1	1.1
	F-UCFLR206-104/LP03												F-UC206-104D1/LP03		
35 1 1/4 1 5/16 1 3/8 1 7/16	F-UCFLRM207/LP03	163	130	18	16.1	32.8	13	90	43.4	42.9	17.5	M12	F-UC207D1/LP03	FLR207D1	0.7
	F-UCFLR207-104/LP03												F-UC207-104D1/LP03		
	F-UCFLR207-105/LP03												F-UC207-105D1/LP03		
	F-UCFLR207-106/LP03	6 13/32	5 1/8	23/32	5/8	1 9/32	1/2	3 17/32	1 45/64	1.6890	0.689	7/16	F-UC207-106D1/LP03	FLR207D1	1.5
	F-UCFLR207-107/LP03												F-UC207-107D1/LP03		
40 1 1/2 1 9/16	F-UCFLR208/LP03	175	144	21.5	20	37.5	14	100	51.7	49.2	19	M12	F-UC208D1/LP03	FLR208D1	0.9
	F-UCFLR208-108/LP03	6 7/8	5 43/64	27/32	25/32	1 15/32	9/16	3 15/16	2 1/32	1.9370	0.748	7/16	F-UC208-108D1/LP03	FLR208D1	2.0
	F-UCFLR208-109/LP03												F-UC208-109D1/LP03		

Stainless bearing with solid grease + glass fiber reinforced plastic housing

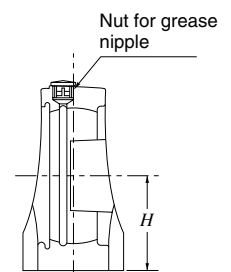
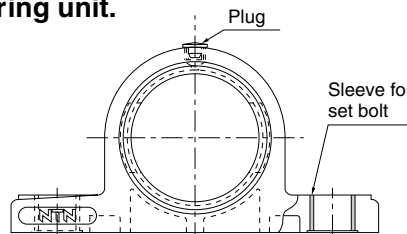


Housing tolerances

1. Center height tolerances for pillow type bearing unit.

Unit: mm/inch

Housing part number	H deviation	DH _s
PR204D1	±0.25 ±0.010	
PR205D1		
PR206D1		
PR207D1		
PR208D1		

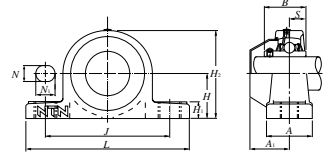


Pillow type bearing unit F-RM-UCPR2 series

Cylindrical bore, set screw type

Shaft dia. mm inch	Unit number	Nominal dimensions											Bolt size	Bearing number	Housing number	Mass of unit (Ref.) kg lb
		H	L	J	A	N	N ₁	H ₁	H ₂	A ₁	B	S				
20 3/4	F-RM-UCPR204/LP03 F-RM-UCPR204-012/LP03	33.3 1 5/16	127 5	95 3 3/4	38 1 1/2	11 7/16	14 9/16	14.2 9/16	65 2 5/16	39 1 17/32	31 1.2205	12.7 0.500	M10 3/8	F-UC204D1/LP03 F-UC204-012D1/LP03	PR204D1 PR204D1	0.3 0.7
25 13/16 7/8 15/16 1	F-RM-UCPR205/LP03 F-RM-UCPR205-013/LP03 F-RM-UCPR205-014/LP03 F-RM-UCPR205-015/LP03 F-RM-UCPR205-100/LP03	36.5 1 7/16	140 5 1/2	105 4 1/8	38 1 1/2	11 7/16	14 9/16	14.5 9/16	71 2 25/32	40 1 9/16	34.1 1.3425	14.3 0.563	M10 3/8	F-UC205D1/LP03 F-UC205-013D1/LP03 F-UC205-014D1/LP03 F-UC205-015D1/LP03 F-UC205-100D1/LP03	PR205D1 PR205D1	0.3 0.7
30 1 1/16 1 1/8 1 3/16 1 1/4	F-RM-UCPR206/LP03 F-RM-UCPR206-101/LP03 F-RM-UCPR206-102/LP03 F-RM-UCPR206-103/LP03 F-RM-UCPR206-104/LP03	42.9 1 11/16	162 6 3/8	119 4 11/16	46 1 13/16	14 9/16	18 23/32	17.8 1 1/16	83 3 3/32	46 1 13/16	38.1 1.5000	15.9 0.626	M12 7/16	F-UC206D1/LP03 F-UC206-101D1/LP03 F-UC206-102D1/LP03 F-UC206-103D1/LP03 F-UC206-104D1/LP03	PR206D1 PR206D1	0.5 1.1
35 1 1/4 1 3/8 1 3/8 1 1/16	F-RM-UCPR207/LP03 F-RM-UCPR207-104/LP03 F-RM-UCPR207-105/LP03 F-RM-UCPR207-106/LP03 F-RM-UCPR207-107/LP03	47.6 1 7/8	167 6 9/16	127 5	48 1 7/8	14 9/16	18 23/32	18 23/32	94 3 11/16	49 1 15/16	42.9 1.6890	17.5 0.689	M12 7/16	F-UC207D1/LP03 F-UC207-104D1/LP03 F-UC207-105D1/LP03 F-UC207-106D1/LP03 F-UC207-107D1/LP03	PR207D1 PR207D1	0.7 1.5
40 1 1/2 1 5/16	F-RM-UCPR208/LP03 F-RM-UCPR208-108/LP03 F-RM-UCPR208-109/LP03	49.2 1 15/16	184 7 1/4	137 5 13/32	54 2 1/8	14 9/16	18 23/32	19.5 25/32	98 3 27/32	52 2 1/16	49.2 1.9370	19 0.748	M12 7/16	F-UC208D1/LP03 F-UC208-108D1/LP03 F-UC208-109D1/LP03	PR208D1 PR208D1	1.0 2.2

Stainless bearing
with solid grease
+
glass fiber reinforced
plastic housing

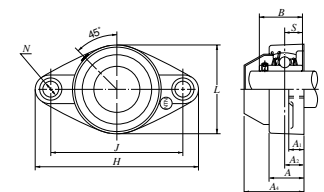


Rhombus Flange type bearing unit F-RM-UCFLR2 series

Cylindrical bore, set screw type

Shaft dia. mm inch	Unit number	Nominal dimensions											Bolt size	Bearing number	Housing number	Mass of unit (Ref.) kg lb
		H	J	A ₂	A ₁	A	N	L	A ₀	A ₄	B	S				
20 3/4	F-RM-UCFLR204/LP03 F-RM-UCFLR204-012/LP03	113 4 7/16	90 3 39/64	15.4 19/32	11.4 7/16	26.5 1 1/32	11 7/16	64 2 17/32	33.7 1 21/64	53 2 1/8	31 1.2205	12.7 0.500	M10 3/8	F-UC204D1/LP03 F-UC204-012D1/LP03	FLR204D1 FLR204D1	0.3 0.7
25 13/16 7/8 15/16 1	F-RM-UCFLR205/LP03 F-RM-UCFLR205-013/LP03 F-RM-UCFLR205-014/LP03 F-RM-UCFLR205-015/LP03 F-RM-UCFLR205-100/LP03	130 5 1/8	99 3 57/64	17 21/32	13.5 17/32	29.1 1 5/32	11 7/16	68 2 11/16	36.8 1 29/64	57 2 1/4	34.1 1.3425	14.3 0.563	M10 3/8	F-UC205D1/LP03 F-UC205-013D1/LP03 F-UC205-014D1/LP03 F-UC205-015D1/LP03 F-UC205-100D1/LP03	FLR205D1 FLR205D1	0.3 0.7
30 1 1/16 1 1/8 1 3/16 1 1/4	F-RM-UCFLR206/LP03 F-RM-UCFLR206-101/LP03 F-RM-UCFLR206-102/LP03 F-RM-UCFLR206-103/LP03 F-RM-UCFLR206-104/LP03	148 5 13/16	117 4 39/64	19 3/4	13.3 17/32	30.5 1 3/16	11 7/16	80 3 5/32	41.2 1 5/8	64 2 17/32	38.1 1.5000	15.9 0.626	M10 3/8	F-UC206D1/LP03 F-UC206-101D1/LP03 F-UC206-102D1/LP03 F-UC206-103D1/LP03 F-UC206-104D1/LP03	FLR206D1 FLR206D1	0.5 1.1
35 1 1/4 1 3/8 1 3/8 1 1/16	F-RM-UCFLR207/LP03 F-RM-UCFLR207-104/LP03 F-RM-UCFLR207-105/LP03 F-RM-UCFLR207-106/LP03 F-RM-UCFLR207-107/LP03	163 6 13/32	130 5 1/8	18 23/32	16.1 5/8	32.8 1 9/32	13 1/2	90 3 17/32	43.4 1 45/64	67 2 5/8	42.9 1.6890	17.5 0.689	M12 7/16	F-UC207D1/LP03 F-UC207-104D1/LP03 F-UC207-105D1/LP03 F-UC207-106D1/LP03 F-UC207-107D1/LP03	FLR207D1 FLR207D1	0.7 1.5
40 1 1/2 1 5/16	F-RM-UCFLR208/LP03 F-RM-UCFLR208-108/LP03 F-RM-UCFLR208-109/LP03	175 6 7/8	144 5 43/64	21.5 27/32	20 25/32	37.5 1 15/32	14 9/16	100 3 15/16	51.7 2 3/32	74 2 15/16	49.2 1.9370	19 0.748	M12 7/16	F-UC208D1/LP03 F-UC208-108D1/LP03 F-UC208-109D1/LP03	FLR208D1 FLR208D1	0.9 2.0

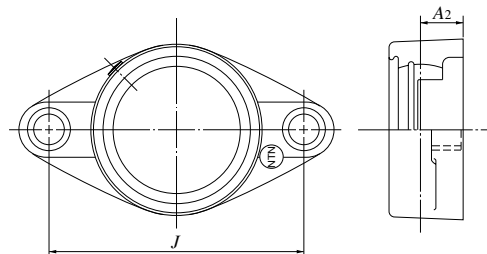
Stainless bearing
with solid grease
+
glass fiber reinforced
plastic housing



Housing tolerances

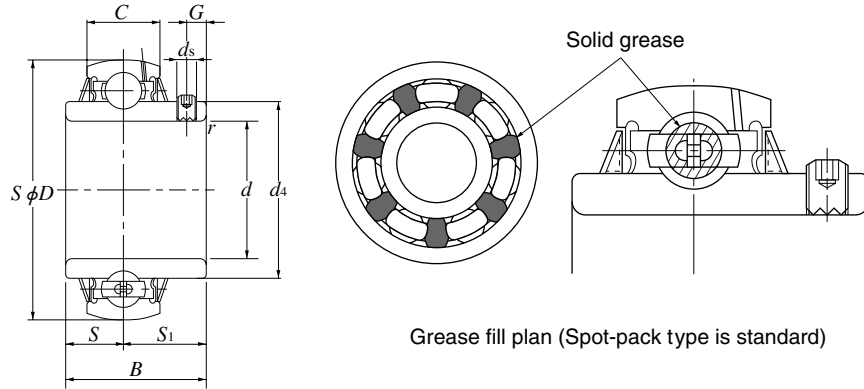
2. Tolerances for rhombus flange type housing. Unit: mm/inch

Housing number	A ₂ deviation ΔA ₂	Tolerances for mounting bolt holes
FLR204D1	±0.7 ±0.028	±0.5 ±0.020
FLR205D1		
FLR206D1		
FLR207D1		
FLR208D1		



Stainless insert bearing

Cylindrical bore, set screw type with solid grease



Shaft dia. mm inch	Bearing number	Nominal dimensions										Basic load rating		Mass (Ref.) kg lb
		d	D	B	C	r's min	S	S ₁	G	d _s	d _s	N dynamic C _r	lbf static C _{or}	
20 3/4	F-UC204D1/LP03 F-UC204-012D1/LP03	20 0.7500	47 1.8504	31 1.2205	17 0.6693	1 0.039	12.7 0.500	18.3 0.720	4.5 0.177	M5×0.8 No.10-32UNF	29.6 1.1654	9 900 2 220	6 650 1 500	0.17 0.39
25 1 1/16 7/8 1 5/16 1	F-UC205D1/LP03 F-UC205-013D1/LP03 F-UC205-014D1/LP03 F-UC205-015D1/LP03 F-UC205-100D1/LP03	25 0.8125 0.8750 0.9375 1.0000	52 2.0472	34.1 1.3425	17 0.6693	1 0.039	14.3 0.563	19.8 0.780	5 0.197	M5×0.8 No.10-32UNF	33.9 1.3346	10 800 2 430	7 850 1 770	0.20 0.53 0.51 0.46 0.44
30 1 1/16 1 1/8 1 3/16 1 1/4	F-UC206D1/LP03 F-UC206-101D1/LP03 F-UC206-102D1/LP03 F-UC206-103D1/LP03 F-UC206-104D1/LP03	30 1.0625 1.1250 1.1875 1.2500	62 2.4409	38.1 1.5000	19 0.7480	1 0.039	15.9 0.626	22.2 0.874	5 0.197	M6×0.75 1/4-28UNF	40.8 1.6063	15 000 3 350	11 300 2 540	0.33 0.82 0.77 0.73 0.66
35 1 1/4 1 5/16 1 3/8 1 7/16	F-UC207D1/LP03 F-UC207-104D1/LP03 F-UC207-105D1/LP03 F-UC207-106D1/LP03 F-UC207-107D1/LP03	35 1.2500 1.3125 1.3750 1.4375	72 2.8346	42.9 1.6890	20 0.7874	1.5 0.059	17.5 0.689	25.4 1.000	6 0.236	M6×0.75 1/4-28UNF	46.8 1.8425	19 700 4 450	15 300 3 450	0.49 1.21 1.15 1.08 1.01
40 1 1/2 1 9/16	F-UC208D1/LP03 F-UC208-108D1/LP03 F-UC208-109D1/LP03	40 1.5000 1.5625	80 3.1496	49.2 1.9370	21 0.8268	1.5 0.059	19 0.748	30.2 1.189	8 0.315	M8×1 5/16-24UNF	53 2.0866	22 400 5 050	17 800 4 000	0.65 1.52 1.46

Note) Insert bearings can be supplied with USDA qualified food grade grease. The resulting grease suffix is "L596". Ex. F-UC204 D1/L596.

Grease name	Allowable temp. range.	Applications	Note
CALTEX FM Grease EP2	-20~+80°C	Food processing and general machines.	H-1 standard grease qualified by USDA.

Unit ball bearing tolerances (JIS B 1558)

1. Inner ring tolerances.

Unit: $\mu\text{m}/0.0001\text{ inch}$

Nominal bore diameter <i>d</i>				Bore diameter			Width		Radial runout (ref.)
				Δd_{mp} Deviations		ΔV_{dp} Variations	ΔB_s Deviations (ref.)		
over		incl.		high	low	max.	high	low	
mm	inch	mm	inch	high	low	max.	high	low	
18	0.7087	31.750	1.2500	+18	0	12	0	−120	
				+ 7	0	5	0	− 47	
31.750	1.2500	50.800	2.0000	+21	0	14	0	−120	
				+ 8	0	6	0	− 47	

Δd_{mp} : Mean bore diameter deviation. ΔV_{dp} : Bore diameter variation.

ΔB_s : Inner ring width deviation.

2. Outer ring tolerances.

Unit: $\mu\text{m}/0.0001\text{ inch}$

Nominal outside diameter <i>D</i>				ΔD_m Deviations		Radial runout (ref.)
over		incl.				
mm	inch	mm	inch	high	low	
30	1.1811	50	1.9685	0	—11	20
				0	— 4	8
50	1.9685	80	3.1496	0	—13	25
				0	— 5	10

ΔD_m : Mean outside diameter deviation.

The low deviation of outside diameter ΔD_m dose not apply within the distance of 1/4 the width of the outer ring from the side.

Attaching the dust cover

- Insert the edge of the dust cover in the housing's groove.
- Insert the other side of the dust cover in the opposite housing groove either by hand or with assistance of a plastic/rubber mallet/hammer.
- To remove the dust cover, pry the edge from the housing groove using a screw driver or similar tool.

* Note: frequent mounting/dismounting of the dust cover may damage the edge of the housing and is not recommended.

