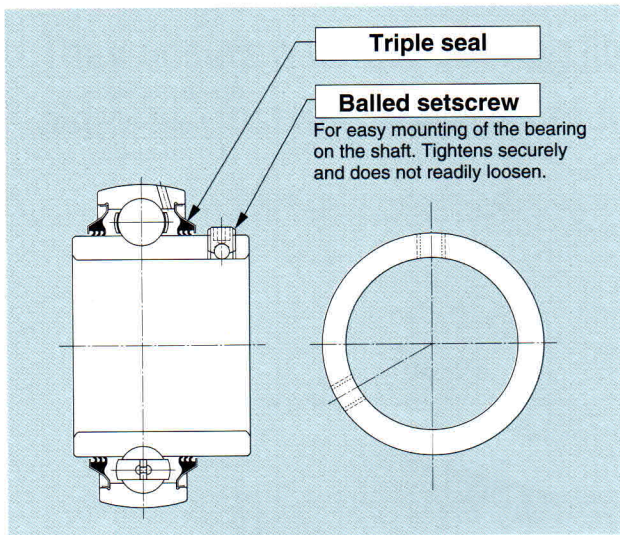
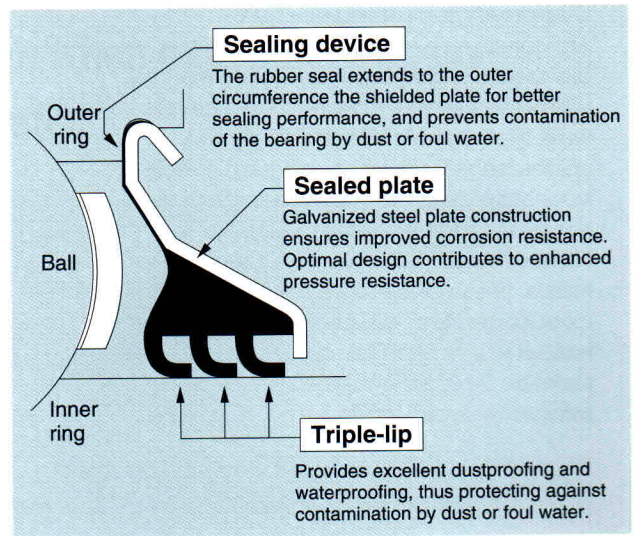


Construction



Triple-sealed bearing



Triple-seal

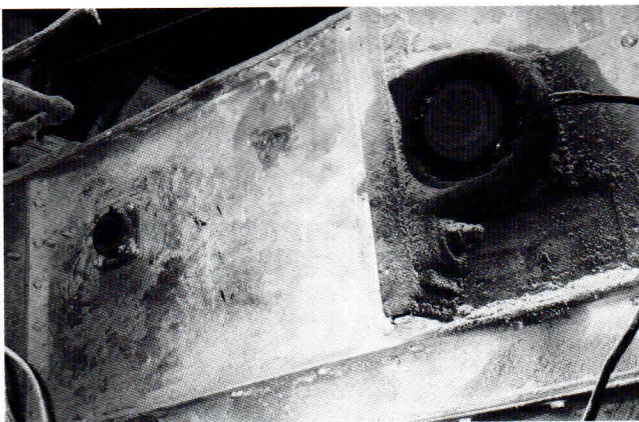
Allowable Operating Temperature Range and Speed

The triple-sealed bearing can be used in a temperature range of -15°C to 100°C.

Allowable dn value: 36,000 [dn =bearing bore diameter d (mm) x operating speed n (rpm)]

Typical Applications

Triple-sealed bearing units are suitable for machinery used in locations subjected to splashes of foul water and heavy dust, including machinery used in steel-making, casting, garbage disposal, waterworks and sewage treatment, car washers, laundry washing, food processing, fish processing, construction, transportation, agriculture, textiles, and dyeing.



Sample application :

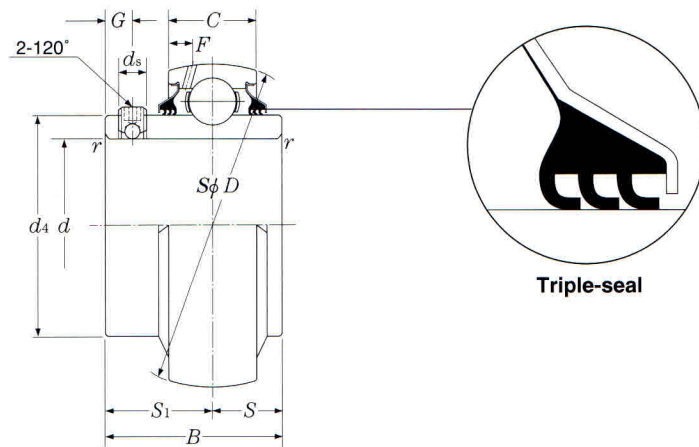
A pillow unit (right) and a square flange unit (left) are used in a conveyor unit operating in an environment with heavy airborne dust.

Special Specifications

The standard prelubrication for bearings in this series is Li-mineral grease. Contact NSK Engineering for optional bearings lubricated with Solid Grease (heat-solidified grease) or food-grade grease, or for bearings made of stainless steel.

Triple-sealed ball bearings for Ball bearing unit Type UC2...LLJ

Cylindrical bore with setscrew



Shaft dia. mm inch.	Bearing number	Nominal dimensions											basic load ratings		mass kg lb
		d	D	B	C	r _s min.	mm S	inch. S ₁	G	d _s	d ₄	F	N dynamic C _r	lbf static C _{or}	
12 1/2	UC201D1LLJ UC201-008D1LLJ	12 0.5000	47 1.8504	31 1.2205	17 0.6693	0.6 0.024	12.7 0.500	18.3 0.720	4.5 0.177	M5×0.8 No.10-32UNF	29.6 1.1654	4.7 0.185	12 800 2 890	6 650 1 500	0.21 0.46
15 9/16 5/8	UC202D1LLJ UC202-009D1LLJ UC202-010D1LLJ	15 0.5625 0.6250	47 1.8504	31 1.2205	17 0.6693	0.6 0.024	12.7 0.500	18.3 0.720	4.5 0.177	M5×0.8 No.10-32UNF	29.6 1.1654	4.7 0.185	12 800 2 890	6 650 1 500	0.20 0.44 0.42
17 11/16	UC203D1LLJ UC203-011D1LLJ	17 0.6875	47 1.8504	31 1.2205	17 0.6693	0.6 0.024	12.7 0.500	18.3 0.720	4.5 0.177	M5×0.8 No.10-32UNF	29.6 1.1654	4.7 0.185	12 800 2 890	6 650 1 500	0.18 0.39
20 3/4	UC204D1LLJ UC204-012D1LLJ	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	4.7 0.185	12 800 2 890	6 650 1 500	0.17 0.39
25 13/16 7/8 15/16 1	UC205D1LLJ UC205-013D1LLJ UC205-014D1LLJ UC205-015D1LLJ UC205-100D1LLJ	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	4.5 0.177	14 000 3 150	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	UC206D1LLJ UC206-101D1LLJ UC206-102D1LLJ UC206-103D1LLJ UC206-104D1LLJ	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	4.6 0.181	19 500 4 400	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	UC207D1LLJ UC207-104D1LLJ UC207-105D1LLJ UC207-106D1LLJ UC207-107D1LLJ	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	4.6 0.181	25 700 5 750	15 300 3 450	0.49 1.21 1.15 1.08 1.01
40 1 1/2 1 9/16	UC208D1LLJ UC208-108D1LLJ UC208-109D1LLJ	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	4.5 0.177	29 100 6 550	17 800 4 000	0.65 1.52 1.46
45 1 5/8 1 11/16 1 3/4	UC209D1LLJ UC209-110D1LLJ UC209-111D1LLJ UC209-112D1LLJ	45 1.6250 1.6875 1.7500	85 3.3465	49.2 1.9370	22 0.8661	1.5 0.059	19 0.748	30.2 1.189	8 0.315	M8×1 5/16-24UNF	57.5 2.2638	4.9 0.193	32 500 7 350	20 400 4 600	0.70 1.76 1.68 1.57
50 1 13/16 1 7/8 1 15/16 2	UC210D1LLJ UC210-113D1LLJ UC210-114D1LLJ UC210-115D1LLJ UC210-200D1LLJ	50 1.8125 1.8750 1.9375 2.0000	90 3.5433	51.6 2.0315	24 0.9449	1.5 0.059	19 0.748	32.6 1.283	9 0.354	M8×1 5/16-24UNF	62.4 2.4567	5.9 0.232	35 000 7 900	23 200 5 200	0.80 2.03 1.92 1.81 1.69

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

② Minimum allowable dimension for chamfer dimension r.

Note:

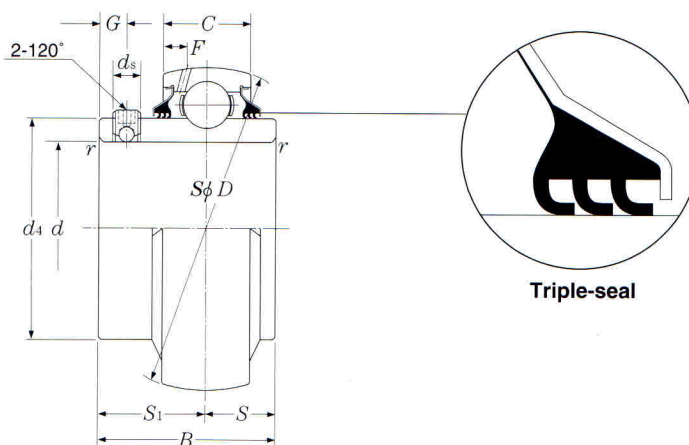
1) For shaft tolerances, see the Ball Bearing Units catalog.

2) The precision of ball bearings is as specified in JIS B 1558 "Ball bearings for rolling bearing units."

3) Contact NSK Engineering for information on tapered bore ball bearings or ball bearings with bores in English measurements.

Triple-sealed ball bearings for Ball bearing unit Type UC2...LLJ

Cylindrical bore with setscrew



Shaft dia. mm inch.	Bearing number	Nominal dimensions											basic load ratings		mass kg lb
		d	D	B	C	r _s min.	mm S	inch. S ₁	G	d _s	d ₁	F	N dynamic C _r	lbf static C _{0r}	
55 2	UC211D1LLJ	55	100	55.6	25	2	22.2	33.4	9	M8×1	69	6.0	43 500	29 200	1.08
2 1/16	UC211-200D1LLJ	2.0000													2.71
2 1/8	UC211-201D1LLJ	2.0625	3.9370	2.1890	0.9843	0.079	0.874	1.315	0.354	5/16-24UNF	2.7165	0.236	9 750	6 550	2.60
2 1/8	UC211-202D1LLJ	2.1250													2.46
2 3/16	UC211-203D1LLJ	2.1875													2.34
60 2 1/4	UC212D1LLJ	60	110	65.1	27	2	25.4	39.7	10	M10×1.25	77	6.2	52 500	36 000	1.53
2 1/4	UC212-204D1LLJ	2.2500													3.66
2 5/16	UC212-205D1LLJ	2.3125	4.3307	2.5630	1.0630	0.079	1.000	1.563	0.394	3/8-24UNF	3.0315	0.244	11 800	8 150	3.50
2 5/8	UC212-206D1LLJ	2.3750													3.33
2 7/16	UC212-207D1LLJ	2.4375													3.17
65 2 1/2	UC213D1LLJ	65	120	65.1	32	2	25.4	39.7	10	M10×1.25	82.5	8.7	57 500	40 000	1.85
2 1/2	UC213-208D1LLJ	2.5000	4.7244	2.5630	1.2598	0.079	1.000	1.563	0.394	3/8-24UNF	3.2480	0.343	12 900	9 000	4.26
2 9/16	UC213-209D1LLJ	2.5625													4.09
70 2 5/8	UC214D1LLJ	70	125	74.6	33	2	30.2	44.4	12	M10×1.25	87	8.8	62 000	44 000	2.10
2 5/8	UC214-210D1LLJ	2.6250													5.09
2 11/16	UC214-211D1LLJ	2.6875	4.9213	2.9370	1.2992	0.079	1.189	1.748	0.472	3/8-24UNF	3.4252	0.346	14 000	9 900	4.87
2 3/4	UC214-212D1LLJ	2.7500													4.65
75 2 13/16	UC215D1LLJ	75	130	77.8	34	2	33.3	44.5	12	M10×1.25	93	9.0	66 000	49 500	2.35
2 13/16	UC215-213D1LLJ	2.8125													5.73
2 7/8	UC215-214D1LLJ	2.8750	5.1181	3.0630	1.3386	0.079	1.311	1.752	0.472	3/8-24UNF	3.6614	0.354	14 900	11 100	5.49
2 15/16	UC215-215D1LLJ	2.9375													5.25
3	UC215-300D1LLJ	3.0000													4.98
80 3 1/16	UC216D1LLJ	80	140	82.6	35	2.5	33.3	49.3	12	M10×1.25	98.1	9.5	72 500	53 000	2.80
3 1/16	UC216-301D1LLJ	3.0625													6.57
3 1/8	UC216-302D1LLJ	3.1250	5.5118	3.2520	1.3780	0.098	1.311	1.941	0.472	3/8-24UNF	3.8622	0.374	16 300	11 900	6.28
3 3/16	UC216-303D1LLJ	3.1875													6.00
85 3 1/4	UC217D1LLJ	85	150	85.7	36	2.5	34.1	51.6	12	M12×1.5	106.4	10.1	83 500	64 000	3.37
3 1/4	UC217-304D1LLJ	3.2500													7.92
3 5/16	UC217-305D1LLJ	3.3125	5.9055	3.3740	1.4173	0.098	1.343	2.031	0.472	1/2-20UNF	4.1890	0.398	18 700	14 300	7.60
3 7/16	UC217-307D1LLJ	3.4375													6.97
90 3 1/2	UC218D1LLJ	90	160	96	37	2.5	39.7	56.3	12	M12×1.5	111.6	9.8	96 000	71 500	4.36
3 1/2	UC218-308D1LLJ	3.5000	6.2992	3.7795	1.4570	0.098	1.563	2.217	0.472	1/2-20UNF	4.3937	0.386	21 600	16 100	9.88

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

② Minimum allowable dimension for chamfer dimension r.

Note:

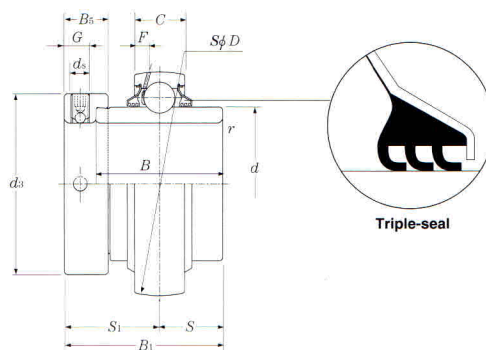
1) For shaft tolerances, see the Ball Bearing Units catalog.

2) The precision of ball bearings is as specified in JIS B 1558 "Ball bearings for rolling bearing units."

3) Contact NSK Engineering for information on tapered bore ball bearings or ball bearings with bores in English measurements.

Triple-sealed ball bearings for Ball bearing unit Type REL2...LLJ

Cylindrical bore with eccentric locking collar



Shaft dia. mm inch	Bearing number	Nominal dimensions													basic load ratings		mass kg lb
		d	D	B ₁	B	C	r _s min.	S	S ₁	G	d _s	d ₃	B ₅	F	N dynamic C _r	lbf static C _{or}	
20 3/4	REL204D1LLJ REL204-012D1LLJ	20 0.7500	47 1.8504	43.7 1.720	34.2 1.3465	15 0.5906	1 0.039	17.1 0.673	26.6 1.047	4.8 0.189	M6×0.75 1/4-28UNF	33 1.299	13.5 0.531	3.2 0.126	12 800 2 890	6 650 1 500	0.22 0.43
25 13/16 7/8 15/16 1	REL205D1LLJ REL205-013D1LLJ REL205-014D1LLJ REL205-015D1LLJ REL205-100D1LLJ	25 0.8125 0.8750 0.9375 1.0000	52 2.0472	44.4 1.748	34.9 1.3740	15 0.5906	1 0.039	17.45 0.687	26.9 1.059	4.8 0.189	M6×0.75 1/4-28UNF	38 1.496	13.5 0.531	3.5 0.138	14 000 3 150	7 850 1 770	0.26 0.59 0.56 0.53 0.49
30 1 1/16 1 1/8 13/16 1 1/4	REL206D1LLJ REL206-101D1LLJ REL206-102D1LLJ REL206-103D1LLJ REL206-104D1LLJ	30 1.0625 1.1250 1.1875 1.2500	62 2.4409	48.4 1.906	36.5 1.4370	18 0.7087	1 0.039	18.25 0.720	30.1 1.185	6 0.236	M8×1 5/16-24UNF	44.5 1.752	15.9 0.626	4.1 0.161	19 500 4 400	11 300 2 540	0.44 0.92 0.87 0.82 0.78
35 1 1/4 1 5/16 1 3/8 1 7/16	REL207D1LLJ REL207-104D1LLJ REL207-105D1LLJ REL207-106D1LLJ REL207-107D1LLJ	35 1.2500 1.3125 1.3750 1.4375	72 2.8346	51.1 2.012	37.6 1.4803	19 0.7480	1.5 0.059	18.8 0.740	32.3 1.272	6.8 0.268	M10×1.25 3/8-24UNF	55.5 2.185	17.5 0.689	4.1 0.161	25 700 5 750	15 300 3 450	0.58 1.41 1.36 1.31 1.24
40 1 1/2 1 9/16	REL208D1LLJ REL208-108D1LLJ REL208-109D1LLJ	40 1.5000 1.5625	80 3.1496	56.3 2.217	42.8 1.6850	22 0.8661	1.5 0.059	21.4 0.843	34.9 1.374	6.8 0.268	M10×1.25 3/8-24UNF	60 2.362	18.3 0.720	4.5 0.177	29 100 6 550	17 800 4 000	0.78 1.88 1.80
45 1 7/8 1 11/16 1 3/4	REL209D1LLJ REL209-110D1LLJ REL209-111D1LLJ REL209-112D1LLJ	45 1.6250 1.6875 1.7500	85 3.3465	56.3 2.217	42.8 1.6850	22 0.8661	1.5 0.059	21.4 0.843	34.9 1.374	6.8 0.268	M10×1.25 3/8-24UNF	63.5 2.500	18.3 0.720	4.9 0.193	32 500 7 350	20 400 4 600	0.83 2.01 1.93 1.84
50 1 11/16 1 7/8 1 15/16 2	REL210D1LLJ REL210-113D1LLJ REL210-114D1LLJ REL210-115D1LLJ REL210-200D1LLJ	50 1.8125 1.8750 1.9375 2.0000	90 3.5433	62.7 2.469	49.2 1.9370	22 0.8661	1.5 0.059	24.6 0.969	38.1 1.500	6.8 0.268	M10×1.25 3/8-24UNF	69.5 2.736	18.3 0.720	4.3 0.169	35 000 7 900	23 200 5 200	0.96 2.42 2.32 2.21 2.05
55 2 2 1/16 2 1/8 2 3/16	REL211D1LLJ REL211-200D1LLJ REL211-201D1LLJ REL211-202D1LLJ REL211-203D1LLJ	55 2.0000 2.0625 2.1250 2.1875	100 3.9370	71.4 2.811	55.5 2.1850	24 0.9449	2 0.079	27.8 1.094	43.6 1.717	8 0.315	M10×1.25 3/8-24UNF	76 2.992	20.7 0.815	4.6 0.181	43 500 9 750	29 200 6 550	1.29 3.21 3.05 2.95 2.83
60 2 1/4 2 5/16 2 3/8 2 7/16	REL212D1LLJ REL212-204D1LLJ REL212-205D1LLJ REL212-206D1LLJ REL212-207D1LLJ	60 2.2500 2.3125 2.3750 2.4375	110 4.3307	77.8 3.063	61.9 2.4370	27 1.0630	2 0.079	31 1.220	46.8 1.843	8 0.315	M10×1.25 3/8-24UNF	84 3.307	22.3 0.878	6.2 0.245	52 500 11 800	36 000 8 150	1.83 4.29 4.13 3.96 3.79
65 2 1/2 2 9/16	REL213D1LLJ REL213-208D1LLJ REL213-209D1LLJ	65 2.5000 2.5625	120 4.7244	85.7 3.374	68.3 2.6890	27 1.0630	2 0.079	34.2 1.346	51.5 2.028	8.7 0.343	M10×1.25 3/8-24UNF	97 3.819	23.8 0.937	6.2 0.245	57 500 12 900	40 000 9 000	2.46 5.43 5.26
70 2 5/8 2 11/16 2 3/4	REL214D1LLJ REL214-210D1LLJ REL214-211D1LLJ REL214-212D1LLJ	70 2.6250 2.6875 2.7500	125 4.9213	85.7 3.374	68.3 2.6890	28 1.1024	2 0.079	34.2 1.346	51.5 2.028	8.7 0.343	M10×1.25 3/8-24UNF	97 3.819	23.8 0.937	6.6 0.260	62 000 14 000	44 000 9 900	2.45 5.63 5.41 5.14
75 2 13/16 2 7/8 2 15/16 3	REL215D1LLJ REL215-213D1LLJ REL215-214D1LLJ REL215-215D1LLJ REL215-300D1LLJ	75 2.8125 2.8750 2.9375 3.0000	130 5.1181	92.0 3.622	74.6 2.9370	29 1.1417	2 0.079	37.3 1.469	54.7 2.154	8.7 0.343	M10×1.25 3/8-24UNF	102 4.016	23.8 0.937	6.5 0.256	66 000 14 900	49 500 11 100	2.66 6.35 6.11 5.87 5.56

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

② Minimum allowable dimension for chamfer dimension r.

Note: 1) For shaft tolerances, see Ball Bearing Units catalog.

2) UEL series (UEL204~UEL215) are also available with eccentric locking collars.