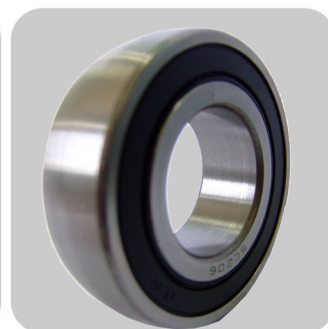
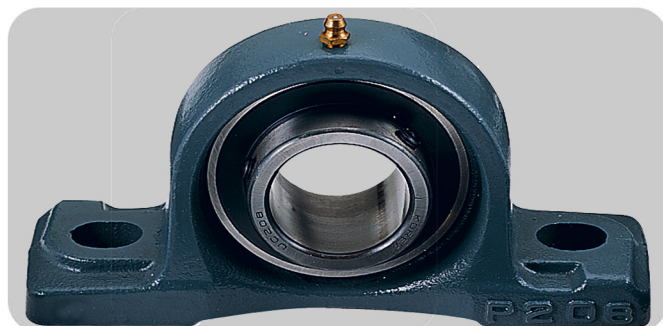
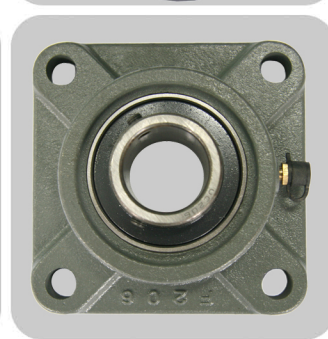




Ball Bearing Units



**POWER
YOUR WORLD**



Wuxi LOTTON Bearing Manufacturing Co., Ltd.



Ball bearing units

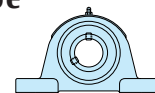
LOTTON Ball bearing units consist of pre-lubricated sealed ball bearings and a housing which varies in shape.

They are capable of aligning themselves efficiently using the spherical fitting surface between the bearing and housing, effectively preventing overloads due to misalignment.

LOTTON ball bearing units are highly accurate and feature excellent load resistance. They are completely sealed, and provided with a relubrication feature.

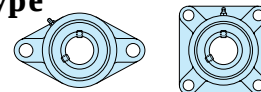
Ball bearing units without a relubrication feature are also available.

Pillow block type



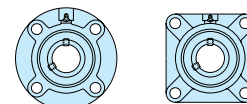
Bore diameter 12 – 140 mm

Flanged type



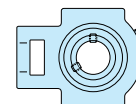
Bore diameter 12 – 140 mm

Flanged type with spigot joint



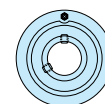
Bore diameter 12 – 140 mm

Take-up type



Bore diameter 12 – 140 mm

Cartridge type



Bore diameter 12 – 65 mm

Light duty units



Bore diameter 12 – 40 mm

"Clean" series (made from light alloy)



Bore diameter 10 – 30 mm

Pressed steel housing units



Bore diameter 12 – 35 mm

Ball bearings for units

Bore diameter 10 – 140 mm



Ball bearing units

Major ball bearing unit types

(1) Cast iron units

	Pillow block type ● UCP 2-X-3 ▲ UKP 2-X-3
	Rhombic-flanged type ● UCFL 2-X-3 ▲ UKFL 2-X-3
	Square-flanged type ● UCF 2-X-3 ▲ UKF 2-X-3
	Round-flanged type with spigot joint ● UCFC 2-X ▲ UKFC 2-X
	Square-flanged type with spigot joint ● UCFS 3 ▲ UKFS 3
	Take-up type ● UCT 2-X-3 ▲ UKT 2-X-3
	Cartridge type ● UCC 2 ▲ UKC 2

Special pillow block type



Thick section pillow block type



Flanged type variations



Hanger type



(2) Light duty units (cast iron)

Pillow block type	Rhombic-flanged type
	
● BLP 2	● BLF 2

(3) "Clean" series units (special light alloy)

Pillow block type	Rhombic-flanged type
	
● UP 0	● UFL 0

(4) Pressed steel housing units

		
● SBPP 2	● SBPFL 2	● SBPF 2

(5) Take-up units with frame

	
● UCTH 2	● UCTL 2 ● UCTU 2-3

(6) Ball bearings for units

	Cylindrical bore type (set screw locking) ● UC 2-X-3 ● SU 0 ● SB 2
	Tapered bore type (adapter locking) ● UK 2-X-3

Notes) This catalogue includes the specifications of major units and bearings which are boxed in the table.

Marks ● : set screw locking, ▲ : adapter locking

Tolerances	• Ball bearings . as specified in JIS B 1558 (Tables 1 and 2). • Housings . as specified in JIS B 1559. the internal spherical diameter tolerance is given in Table 3.
Bearing radial internal clearance	As specified in JIS B 1520 (Table 2-1 on p. A 11). LOTTON provides cylindrical bore bearings with normal radial internal clearance. Tapered bore bearings are provided with a C3 radial internal clearance in consideration of possible inner ring expansion caused by tightening of an adapter.
Recommended fits of inner ring and shaft (indicated by the tolerance class)	• Cylindrical bore bearings . h6, h7, h8, j6 (k6, k7 and m6 when heavy or impact load is to be supported.) • Tapered bore bearings . h8, h9 • High-speed blower bearings (S5) . h5, j5
Rotation speed limits	
Allowable aligning angle	See Table 4.

Ball bearing units

Table 1 Ball bearings for units : inner ring tolerance

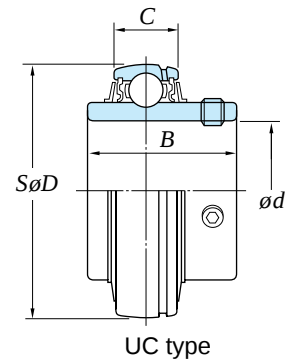
Unit μm

Nominal bore diameter d (mm)		Bore diameter						Single inner (outer) ring width deviation		Radial runout of assembled bearing inner ring
		UC, SU and SB types			Bearings for blower (S5)					
		Single plane mean bore diameter deviation Δd_{mp}	Single radial plane bore diameter variation Vd_p	Single plane mean bore diameter deviation Δd_{mp}	Single radial plane bore diameter variation Vd_p	ΔB_s (ΔC_s)	K_{ia}			
over	up to	upper	lower	max.	upper	lower	max.	upper	lower	max.
10 more	18	+15	0	10	+13	0	6	0	−120	15
18	31.75	+18	0	12	+13	0	6	0	−120	18
31.75	50.8	+21	0	14	+13	0	10	0	−120	20
50.8	80	+24	0	16	+15	0	10	0	−150	25
80	120	+28	0	19	+18	0	14	0	−200	30
120	180	+33	0	22	+23	0	14	0	−250	35

Table 2 Ball bearings for units : outer ring tolerance

Unit μm

Nominal outside diameter D (mm)		Mean outside diameter deviation ΔD_m		Radial runout of assembled bearing outer ring K_{ea}
over	up to	upper	lower	max.
18	30	0	-9	15
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

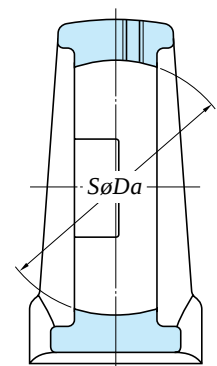


Note) The lower value of mean outside diameter deviation does not apply to the sides of outer rings up to the extent of a quarter of the outer ring width from the side faces.

Table 3 Housing spherical bore diameter tolerance

Unit μm

Nominal spherical bore diameter D_a up to (mm)		Tolerance class H7		Tolerance class J7		Tolerance class K7		All tolerance classes
		Single plane mean spherical bore diameter deviation ΔD_{amp} over		Single plane mean spherical bore diameter deviation ΔD_{amp}		Single plane mean spherical bore diameter deviation ΔD_{amp}		Single radial plane spherical bore diameter variation Vd_p
		upper	lower	upper	lower	upper	lower	max.
18	30	+21	0	+12	-9	+6	-15	8
30	50	+25	0	+14	-11	+7	-18	10
50	80	+30	0	+18	-12	+9	-21	12
80	120	+35	0	+22	-13	+10	-25	14
120	180	+40	0	+26	-14	+12	-28	16
180	250	+46	0	+30	-16	+13	-33	18
250	315	+52	0	+36	-16	+16	-36	20



Remark) LOTTON generally applies class J to housing designs.

Class H and class K and also be applied depending on the application.

Table 4 Rotation speed limits of ball bearing units

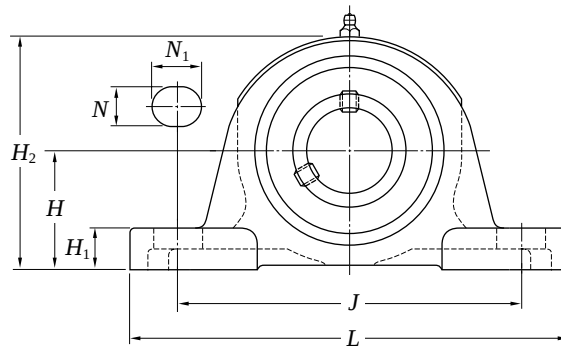
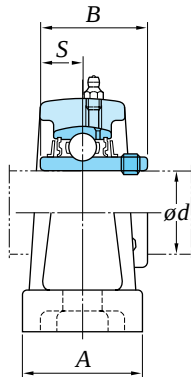
Unit μm

Bore diameter No.	Standard			Triple lip sealed (L3)			For high speed rotation (K3 and S5)			Heat resistant type B (D1K2)
	Diameter series			Diameter series			Diameter series			Diameter series
	2	X	3	2	X	3	2	X	3	2, X, 3
01	5 800			2 300			8 700			3 800
02	5 800			2 300			8 700			3 800
03	5 800			2 300			8 700			3 800
04	5 800			2 300			8 700			3 800
05	5 100	4 300	4 600	2 100	960		7 700	6 400	6 700	3 000
06	4 300	3 700	3 900	960	830		6 400	5 500	5 800	2 500
07	3 700	3 300	3 400	830	750	770	5 500	5 000	5 100	2 100
08	3 300	3 100	3 100	750	690	690	5 000	4 600	4 600	1 900
09	3 100	2 800	2 700	690	640	620	4 600	4 300	4 100	1 700
10	2 800	2 500	2 400	640	570	550	4 300	3 800	3 700	1 500
11	2 500	2 300	2 300	570	520	510	3 800	3 500	3 400	1 400
12	2 300	2 200	2 100	520	490	470	3 500	3 200	3 100	1 300
13	2 200	2 100	1 900	490	460	440	3 200	3 100	2 900	1 200
14	2 100	2 000	1 800	460	440	410	3 100	2 900	2 700	1 100
15	2 000	1 800	1 700	440	410	380	2 900	2 700	2 600	1 000
16	1 800	1 700	1 600	410	380	360	2 700	2 600	2 400	940
17	1 700	1 600	1 500	380	360	340	2 600	2 400	2 300	880
18	1 600	1 500	1 400	360	340	320	2 400	2 300	2 100	830
19		—	1 400		—	310		—	2 000	790
20		1 300	1 300		300	280		2 000	1 900	750
21			1 200			—			1 800	710
22			1 100			250			1 700	680
24			1 100			240			1 600	630
26			1 000			220			1 500	580
28			910			200			1 400	540

- Remarks) 1. Cold-resistant types (D2K2) and heat-resistant types A (D3K2) feature the same level of rotation speed limits as the standard type.
2. Refer to a separate catalog for details of triple lip sealed bearings, high-speed bearings (K3 and S5) and heat-resistant bearings (D1K2 and D3K2).
3. When bearings are fit loosely, rotation speed limits should be compensated for by the fitting coefficient given below.

Bearing type	Fitting coefficient					
	Shaft tolerance class					
	h 5, js 5	h 6	h 7	h 8	h 9	j 6
Standard	—	1	0.8	0.5	0.2	1
Triple lip sealed (L3)	—	—	1	1	0.9	—
For high speed rotation (K3)	—	0.8	0.6	—	—	1
For blower (S5)	1	0.8	0.6	—	—	—
Heat-resistant type B (D1K2)	—	—	1	1	0.7	—

Ball bearing units
pillow block type
UCP (set screw locking)
d 12 – 55 mm



Shaft dia. (mm)	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)	
	<i>d</i>	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>N</i> ₁	<i>B</i>				<i>S</i>	No.	Basic load ratings (kN)		
																<i>C</i> _r		<i>C</i> _{0r}
12	30.2	95	127	38	12	60	13	18	31	12.7	M10	UCP201	P203	UC201	12.8	6.65	0.63	
15	30.2	95	127	38	12	60	13	18	31	12.7	M10	UCP202	P203	UC202	12.8	6.65	0.61	
17	30.2	95	127	38	12	60	13	18	31	12.7	M10	UCP203	P203	UC203	12.8	6.65	0.60	
20	33.3	95	127	38	13	64	13	18	31	12.7	M10	UCP204	P204	UC204	12.8	6.65	0.66	
25	36.5	105	140	38	13	71	13	18	34.1	14.3	M10	UCP205	P205	UC205	14.0	7.85	0.80	
	44.4	119	159	51	16	86	17	25	38.1	15.9	M14	UCPX05	PX05	UCX05	19.5	11.3	1.5	
30	45	132	175	45	16	85	17	20	38	15	M14	UCP305	P305	UC305	20.6	11.3	1.7	
													P206	UC206	19.5	11.3	1.3	
	42.9	121	165	48	15	84	17	21	38.1	15.9	M14	UCP206	PX06	UCX06	25.7	15.4	2.1	
	47.6	127	175	57	17	93	17	25	42.9	17.5	M14	UCPX06	P306	UC306	26.7	15.0	2.2	
35	50	140	180	50	17	95	17	20	43	17	M14	UCP306	P207	UC207	25.7	15.4	1.6	
													PX07	UCX07	29.1	17.8	2.7	
	47.6	127	167	48	16	93	17	21	42.9	17.5	M14	UCP207	P307	UC307	33.4	19.3	3.0	
	54	144	203	57	19	105	17	30	49.2	19	M14	UCPX07	P208	UC208	29.1	17.8	2.0	
40	56	160	210	56	19	107	17	25	48	19	M14	UCP307	PX08	UCX08	32.7	20.3	3.5	
													P308	UC308	40.7	24.0	3.8	
	49.2	137	184	54	17	98	17	21	49.2	19	M14	UCP208	P209	UC209	32.7	20.3	2.2	
	58.7	156	222	67	21	114	20	32	49.2	19	M16	UCPX08	PX09	UCX09	35.1	23.3	3.7	
45	60	170	220	60	19	118	17	27	52	19	M14	UCP308	P309	UC309	48.9	29.5	4.9	
													P210	UC210	35.1	23.3	2.9	
	54	146	190	54	17	106	17	21	49.2	19	M14	UCP209	PX10	UCX10	43.4	29.4	4.6	
	58.7	156	222	67	21	116	20	33	51.6	19	M16	UCPX09	P310	UC310	62.0	38.3	6.6	
50	67	190	245	67	21	132	20	30	57	22	M16	UCP309	P211	UC211	43.4	29.4	3.6	
													PX11	UCX11	52.4	36.2	6.5	
	57.2	159	206	60	19	113	20	22	51.6	19	M16	UCP210	P311	UC311	71.6	45.0	7.9	
	63.5	171	241	73	22	126	20	36	55.6	22.2	M16	UCPX10						
55	75	212	275	75	24	148	20	35	61	22	M16	UCP310						
	63.5	171	219	60	19	125	20	22	55.6	22.2	M16	UCP211						
	69.8	184	260	79	28	139	25	36	65.1	25.4	M20	UCPX11						
80	236	310	80	27	158	20	38	66	25		M16	UCP311						

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF201 – 210, X05 – X09, 305 – 308
PT 1/8211 – 218, X10 – X20, 309 – 328

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(Fore more detailed information, refer to ball bearing for unit specification tables.)

d 60 – 140 mm

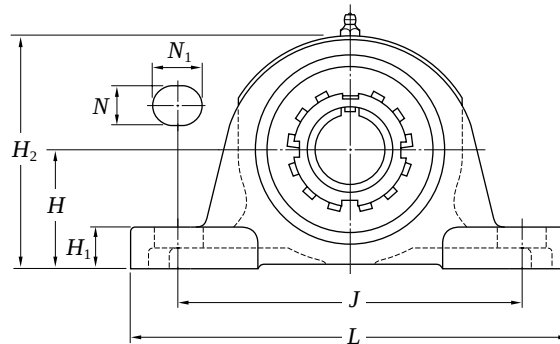
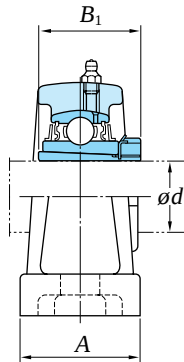
Shaft dia. (mm)	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing Basic load ratings (kN)				(Refer.) Unit Mass (kg)
<i>d</i>	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>N</i> ₁	<i>B</i>	<i>S</i>				No.	<i>C</i> _r	<i>C</i> _{0r}		
60	69.8	184	241	70	22	138	20	25	65.1	25.4	M16	UCP212	P212	UC212	52.4	36.2	4.9	
	76.2	203	286	83	28	152	25	40	65.1	25.4	M20	UCPX12	PX12	UCX12	57.2	40.1	7.7	
	85	250	330	85	29	167	25	38	71	26	M20	UCP312	P312	UC312	81.9	52.2	9.5	
65	76.2	203	265	70	25	150	25	30	65.1	25.4	M20	UCP213	P213	UC213	57.2	40.1	5.9	
	76.2	203	286	83	28	155	25	40	74.6	30.2	M20	UCPX13	PX13	UCX13	62.2	44.1	8.1	
	90	260	340	90	32	176	25	38	75	30	M20	UCP313	P313	UC313	92.7	59.9	10.7	
70	79.4	210	266	72	28	156	25	30	74.6	30.2	M20	UCP214	PX14	UCX14	67.4	48.3	10.2	
	88.9	229	330	89	32	171	27	50	77.8	33.3	M22	UCPX14	P314	UC314	104			
	95	280	360	90	35	186	27	40	78	33	M22	UCP314			68.2		12.4	
75	82.6	217	275	74	28	162	25	30	77.8	33.3	M20	UCP215	P215	UC215	67.4	48.3	7.4	
	88.9	229	330	89	32	175	27	50	82.6	33.3	M22	UCPX15	PX15	UCX15	72.7	53.0	10.8	
	100	290	380	100	35	198	27	40	82	32	M22	UCP315	P315	UC315	113	77.2	14.8	
80	88.9	232	292	78	32	174	25	35	82.6	33.3	M20	UCP216	P216	UC216	72.7	53.0	9.0	
	101.6	283	381	102	34	195	27	58	85.7	34.1	M22	UCPX16	PX16	UCX16	84.0	61.9	15.3	
	106	300	400	110	35	209	27	40	86	34	M22	UCP316	P316	UC316	123	86.7	18.5	
85	95.2	247	310	83	32	185	25	40	85.7	34.1	M20	UCP217	P217	UC217	84.0	61.9	10.8	
	101.6	283	381	102	34	200	27	60	96	39.7	M22	UCPX17	PX17	UCX17	96.1	71.5	16.1	
	112	320	420	110	40	220	33	45	96	40	M27	UCP317	P317	UC317	133	96.8	20.3	
90	101.6	262	327	88	34	198	27	45	96	39.7	M22	UCP218	P218	UC218	96.1	71.5	13.9	
	101.6	283	381	111	38	204	27	60	104	42.9	M22	UCPX18	PX18	UCX18	109	81.9	19.1	
	118	330	430	110	40	234	33	45	96	40	M27	UCP318	P318	UC318	143	107	22.8	
95	125	360	470	120	46	248	36	50	103	41	M30	UCP319	P319	UC319	153	119	29.0	
	127	337	432	121	45	245	33	65	117.5	49.2	M27	UCPX20	PX20	UCX20	133	105	30.4	
	140	380	490	120	46	273	36	50	108	42	M30	UCP320	P320	UC320	173	141	35.1	
110	140	380	490	120	46	278	36	50	112	44	M30	UCP321	P321	UC321	184	153	37.6	
120	150	400	520	140	50	296	40	55	117	46	M33	UCP322	P322	UC322	205	180	44.0	
130	160	450	570	140	50	316	40	55	126	51	M33	UCP324	P324	UC324	207	185	55.4	
140	180	480	600	140	50	355	40	55	135	54	M33	UCP326	P326	UC326	229	214	72.1	
	200	500	620	140	60	393	40	55	145	59	M33	UCP328	P328	UC328	253	246	92.5	

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF201 – 210, X05 – X09, 305 – 308
PT 1/8211 – 218, X10 – X20, 309 – 328

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units
pillow block type
UKP (adapter locking)
d 20 – 60 mm



Shaft dia. (mm) <i>d</i>	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing				(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>N</i> ₁	<i>B</i> ₁				No.	Basic load ratings (kN)			
														<i>C</i> _r	<i>C</i> _{0r}		
20	36.5	105	140	38	13	71	13	18	29	M10	UKP205	P205	UK205	14.0	7.85	0.84	
	44.4	119	159	51	16	86	17	25	35	M14	UKPX05	PX05	UKX05	19.5	11.3	1.5	
	45	132	175	45	16	85	17	20	35	M14	UKP305	P305	UK305	20.6	11.3	1.7	
25	42.9	121	165	48	15	84	17	21	31	M14	UKP206	P206	UK206	19.5	11.3	1.4	
	47.6	127	175	57	17	93	17	25	38	M14	UKPX06	PX06	UKX06	25.7	15.4	2.1	
	50	140	180	50	17	95	17	20	38	M14	UKP306	P306	UK306	26.7	15.0	2.3	
30	47.6	127	167	48	16	93	17	21	35	M14	UKP207	P207	UK207	25.7	15.4	1.7	
	54	144	203	57	19	105	17	30	43	M14	UKPX07	PX07	UKX07	29.1	17.8	2.7	
	56	160	210	56	19	107	17	25	43	M14	UKP307	P307	UK307	33.4	19.3	3.0	
35	49.2	137	184	54	17	98	17	21	36	M14	UKP208	P208	UK208	29.1	17.8	2.0	
	58.7	156	222	67	21	114	20	32	46	M16	UKPX08	PX08	UKX08	32.7	20.3	3.5	
	60	170	220	60	19	118	17	27	46	M14	UKP308	P308	UK308	40.7	24.0	3.8	
40	54	146	190	54	17	106	17	21	39	M14	UKP209	P209	UK209	32.7	20.3	2.3	
	58.7	156	222	67	21	116	20	33	50	M16	UKPX09	PX09	UKX09	35.1	23.3	3.7	
	67	190	245	67	21	132	20	30	50	M16	UKP309	P309	UK309	48.9	29.5	5.0	
45	57.2	159	206	60	19	113	20	22	42	M16	UKP210	P210	UK210	35.1	23.3	3.0	
	63.5	171	241	73	22	126	20	36	55	M16	UKPX10	PX10	UKX10	43.4	29.4	4.6	
	75	212	275	75	24	148	20	35	55	M16	UKP310	P310	UK310	62.0	38.3	6.7	
50	63.5	171	219	60	19	125	20	22	45	M16	UKP211	P211	UK211	43.4	29.4	3.7	
	69.8	184	260	79	28	139	25	36	59	M20	UKPX11	PX11	UKX11	52.4	36.2	6.2	
	80	236	310	80	27	158	20	38	59	M16	UKP311	P311	UK311	71.6	45.0	8.1	
55	69.8	184	241	70	22	138	20	25	47	M16	UKP212	P212	UK212	52.4	36.2	4.8	
	76.2	203	286	83	28	152	25	40	62	M20	UKPX12	PX12	UKX12	57.2	40.1	7.5	
	85	250	330	85	29	167	25	38	62	M20	UKP312	P312	UK312	81.9	52.2	9.4	
60	76.2	203	265	70	25	150	25	30	50	M20	UKP213	P213	UK213	57.2	40.1	5.8	
	76.2	203	286	83	28	155	25	40	65	M20	UKPX13	PX13	UKX13	62.2	44.1	7.8	
	90	260	340	90	32	176	25	38	65	M20	UKP313	P313	UK313	92.7	59.9	10.8	

Remark) Applicable sizes of grease nipples are shown below.

1/4-28UNF	205 – 210, X05 – X09, 305 – 308
PT 1/8	211 – 218, X10 – X20, 309 – 328

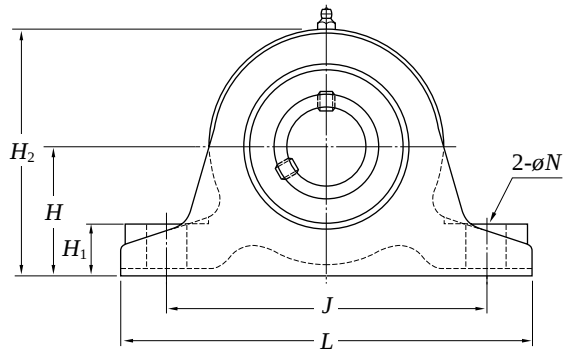
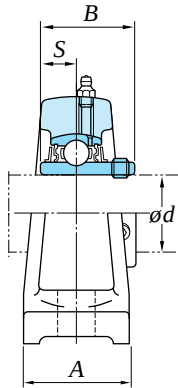
d 65 – 125 mm

Shaft dia. (mm)	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing				(Refer.) Unit Mass (kg)
	<i>d</i>	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>N</i> ₁				<i>B</i> ₁	No.	Basic load ratings (kN)		
															<i>C</i> _r	<i>C</i> _{0r}	
65	82.6	217	275	74	28	162	25	30	55	M20	UKP215	P215	UK215	67.4	48.3	7.5	
	88.9	229	330	89	32	175	27	50	73	M22	UKPX15	PX15	UKX15	72.7	53.0	10.5	
	100	290	380	100	35	198	27	40	73	M22	UKP315	P315	UK315	113	77.2	14.9	
70	88.9	232	292	78	32	174	25	35	59	M20	UKP216	P216	UK216	72.7	53.0	9.2	
	101.6	283	381	102	34	195	27	58	78	M22	UKPX16	PX16	UKX16	84.0	61.9	15.4	
	106	300	400	110	35	209	27	40	78	M22	UKP316	P316	UK316	123	86.7	18.6	
75	95.2	247	310	83	32	185	25	40	63	M20	UKP217	P217	UK217	84.0	61.9	11.0	
	101.6	283	381	102	34	200	27	60	82	M22	UKPX17	PX17	UKX17	96.1	71.5	15.8	
	112	320	420	110	40	220	33	45	82	M27	UKP317	P317	UK317	133	96.8	20.2	
80	101.6	262	327	88	34	198	27	45	65	M22	UKP218	P218	UK218	96.1	71.5	13.8	
	101.6	283	381	111	38	204	27	60	86	M22	UKPX18	PX18	UKX18	109	81.9	18.6	
	118	330	430	110	40	234	33	45	86	M27	UKP318	P318	UK318	143	107	22.8	
85	125	360	470	120	46	248	36	50	90	M30	UKP319	P319	UK319	153	119	29.3	
90	127	337	432	121	45	245	33	65	97	M27	UKPX20	PX20	UKX20	133	105	29.3	
	140	380	490	120	46	273	36	50	97	M30	UKP320	P320	UK320	173	141	34.8	
100	150	400	520	140	50	296	40	55	105	M33	UKP322	P322	UK322	205	180	43.9	
110	160	450	570	140	50	316	40	55	112	M33	UKP324	P324	UK324	207	185	55.7	
115	180	480	600	140	50	355	40	55	121	M33	UKP326	P326	UK326	229	214	71.9	
125	200	500	620	140	60	393	40	55	131	M33	UKP328	P328	UK328	253	246	92.5	

Remark) Applicable sizes of grease nipples are shown below.

1/4-28UNF .	205 – 210, X05 – X09, 305 – 308
PT 1/8 .	211 – 218, X10 – X20, 309 – 328

Ball bearing units
thick section pillow block type
UCIP (set screw locking)
 d 40 – 140 mm



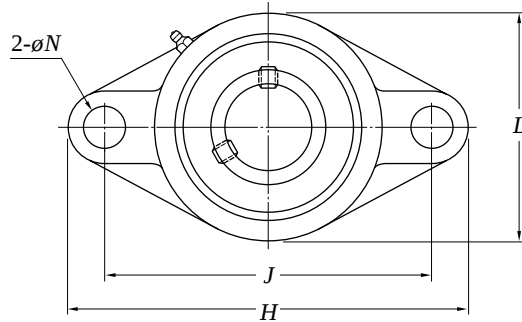
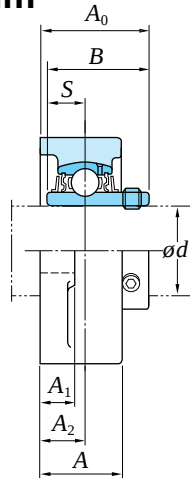
Shaft dia. (mm) <i>d</i>	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>B</i>	<i>S</i>				No.	Basic load ratings (kN)		
														<i>C</i> _r	<i>C</i> _{0r}	
40	60	150	200	60	25	115	19	49.2	19	M16	UCIP208	IP208	UC208	29.1	17.8	3.4
45	70	160	210	60	25	128	19	49.2	19	M16	UCIP209	IP209	UC209	32.7	20.3	3.9
50	70	170	220	60	28	132	19	51.6	19	M16	UCIP210	IP210	UC210	35.1	23.3	4.8
55	80	180	230	60	28	148	19	55.6	22.2	M16	UCIP211	IP211	UC211	43.4	29.4	5.3
60	80	200	260	70	30	155	22	65.1	25.4	M20	UCIP212	IP212	UC212	52.4	36.2	7.2
65	90	220	280	70	30	172	22	65.1	25.4	M20	UCIP213	IP213	UC213	57.2	40.1	8.8
	110	250	310	70	30	208	22	75	30	M20	UCIP313	IP313	UC313	92.7	59.9	13.4
70	110	270	330	75	35	215	25	78	33	M22	UCIP314	IP314	UC314	104	68.2	15.3
75	120	280	340	75	35	230	25	82	32	M22	UCIP315	IP315	UC315	113	77.2	17.6
80	120	290	350	85	40	235	25	86	34	M22	UCIP316	IP316	UC316	123	86.7	20.3
85	130	310	370	85	40	255	25	96	40	M22	UCIP317	IP317	UC317	133	96.8	25.9
90	130	330	400	85	45	260	29	96	40	M27	UCIP318	IP318	UC318	143	107	28.6
95	150	340	410	85	45	285	29	103	41	M27	UCIP319	IP319	UC319	153	119	31.7
100	150	360	430	85	45	295	29	108	42	M27	UCIP320	IP320	UC320	173	141	36.9
110	170	410	490	100	50	335	32	117	46	M30	UCIP322	IP322	UC322	205	180	52.4
120	170	430	510	100	50	345	32	126	51	M30	UCIP324	IP324	UC324	207	185	58.7
130	200	470	550	110	50	390	32	135	54	M30	UCIP326	IP326	UC326	229	214	76.2
140	200	500	590	110	55	400	35	145	59	M33	UCIP328	IP328	UC328	253	246	87.0

Remarks 1) Applicable sizes of grease nipples are shown below.

$\left[\begin{array}{ll} 1/4-28\text{UNF} \dots\dots & 208 - 210 \\ \text{PT } 1/8 \dots\dots\dots & 211 - 213, 313 - 328 \end{array} \right]$

2) Bearings with triple-lip seals are indicated by L3 after the bearing and unit number.
 (For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units
rhombic-flanged type
UCFL (set screw locking)
d 12 – 60 mm



Shaft dia. (mm) <i>d</i>	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing No.		Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₀	<i>N</i>	<i>B</i>	<i>S</i>						<i>C</i> _r	<i>C</i> _{0r}	
12	113	90	60	25.5	11	15	33.3	12	31	12.7	M10	UCFL201	FL204	UC201		12.8	6.65	0.50
15	113	90	60	25.5	11	15	33.3	12	31	12.7	M10	UCFL202	FL204	UC202		12.8	6.65	0.48
17	113	90	60	25.5	11	15	33.3	12	31	12.7	M10	UCFL203	FL204	UC203		12.8	6.65	0.47
20	113	90	60	25.5	11	15	33.3	12	31	12.7	M10	UCFL204	FL204	UC204		12.8	6.65	0.45
25	130	99	68	27	13	16	35.8	16	34.1	14.3	M14	UCFL205	FL205	UC205		14.0	7.85	0.64
30	141	117	83	30	13	18	40.2	12	38.1	15.9	M10	UCFLX05	FLX05	UCX05		19.5	11.3	1.1
	150	113	80	29	13	16	39	19	38	15	M16	UCFL305	FL305	UC305		20.6	11.3	1.1
	148	117	80	31	13	18	40.2	16	38.1	15.9	M14	UCFL206	FL206	UC206		19.5	11.3	0.93
35	156	130	95	34	14	19	44.4	16	42.9	17.5	M14	UCFLX06	FLX06	UCX06		25.7	15.4	1.5
	180	134	90	32	15	18	44	23	43	17	M20	UCFL306	FL306	UC306		26.7	15.0	1.5
	161	130	90	34	14	19	44.4	16	42.9	17.5	M14	UCFL207	FL207	UC207		25.7	15.4	1.2
40	171	144	105	38	14	21	51.2	16	49.2	19	M14	UCFLX07	FLX07	UCX07		29.1	17.8	1.9
	185	141	100	36	16	20	49	23	48	19	M20	UCFL307	FL307	UC307		33.4	19.3	1.8
	175	144	100	36	14	21	51.2	16	49.2	19	M14	UCFL208	FL208	UC208		29.1	17.8	1.6
45	179	148	111	40	14	22	52.2	16	49.2	19	M14	UCFLX08	FLX08	UCX08		32.7	20.3	2.1
	200	158	112	40	17	23	56	23	52	19	M20	UCFL308	FL308	UC308		40.7	24.0	2.5
	188	148	108	38	15	22	52.2	19	49.2	19	M16	UCFL209	FL209	UC209		32.7	20.3	1.9
50	189	157	116	40	14	23	55.6	16	51.6	19	M14	UCFLX09	FLX09	UCX09		35.1	23.3	2.4
	230	177	125	44	18	25	60	25	57	22	M22	UCFL309	FL309	UC309		48.9	29.5	3.5
	197	157	115	40	15	22	54.6	19	51.6	19	M16	UCFL210	FL210	UC210		35.1	23.3	2.2
55	216	184	133	44	20	26	59.4	19	55.6	22.2	M16	UCFLX10	FLX10	UCX10		43.4	29.4	3.8
	240	187	140	48	19	28	67	25	61	22	M22	UCFL310	FL310	UC310		62.0	38.3	4.4
	224	184	130	43	18	25	58.4	19	55.6	22.2	M16	UCFL211	FL211	UC211		43.4	29.4	3.3
60	250	198	150	52	20	30	71	25	66	25	M22	UCFL311	FL311	UC311		71.6	45.0	5.3
	250	202	140	48	18	29	68.7	23	65.1	25.4	M20	UCFL212	FL212	UC212		52.4	36.2	4.2
	270	212	160	56	22	33	78	31	71	26	M27	UCFL312	FL312	UC312		81.9	52.2	6.5

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF	201 – 210, X05 – X09, 305	308
PT 1/8	211 – 218, X10, 309	318

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
 (For more detailed information, refer to ball bearing for unit specification tables.)

d 65 – 90 mm

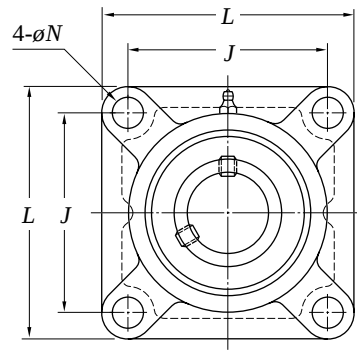
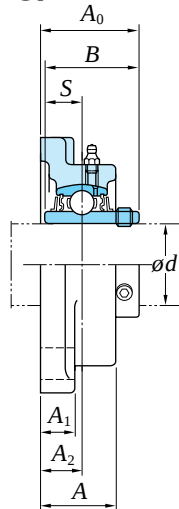
Shaft dia. (mm)	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing No.	Basic load ratings (kN)		(Refer.) Unit Mass (kg)
d	H	J	L	A	A_1	A_2	A_0	N	B	S					C_r	C_{0r}	
65	258	210	155	50	20	30	69.7	23	65.1	25.4	M20	UCFL213	FL213	UC213	57.2	40.1	5.1
	295	240	175	58	25	33	78	31	75	30	M27	UCFL313	FL313	UC313	92.7	59.9	8.5
70	265	216	160	54	20	31	75.4	23	74.6	30.2	M20	UCFL214	FL214	UC214	62.2	44.1	5.7
	315	250	185	61	28	36	81	35	78	33	M30	UCFL314	FL314	UC314	104	68.2	9.7
75	275	225	165	56	20	34	78.5	23	77.8	33.3	M20	UCFL215	FL215	UC215	67.4	48.3	6.4
	320	260	195	66	30	39	89	35	82	32	M30	UCFL315	FL315	UC315	113	77.2	11.3
80	290	233	180	58	20	34	83.3	25	82.6	33.3	M22	UCFL216	FL216	UC216	72.7	53.0	7.8
	355	285	210	68	32	38	90	38	86	34	M33	UCFL316	FL316	UC316	123	86.7	14.4
85	305	248	190	63	22	36	87.6	25	85.7	34.1	M22	UCFL217	FL217	UC217	84.0	61.9	9.8
	370	300	220	74	32	44	100	38	96	40	M33	UCFL317	FL317	UC317	133	96.8	16.0
90	320	265	205	68	23	40	96.3	25	96	39.7	M22	UCFL218	FL218	UC218	96.1	71.5	12.3
	385	315	235	76	36	44	100	38	96	40	M33	UCFL318	FL318	UC318	143	107	19.0

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF	201 – 210, X05 – X09, 305	308
PT 1/8	211 – 218, X10, 309	318

- 2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units
square-flanged type
UCF (set screw locking)
d 12 – 55 mm



Shaft dia. (mm) <i>d</i>	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing No.	Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	<i>J</i>	<i>L</i>	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₀	<i>N</i>	<i>B</i>	<i>S</i>					<i>C</i> _r	<i>C</i> _{0r}	
12	64	86	25.5	11	15	33.3	12	31	12.7	M10	UCF201	F204	UC201	12.8	6.65	0.64
15	64	86	25.5	11	15	33.3	12	31	12.7	M10	UCF202	F204	UC202	12.8	6.65	0.62
17	64	86	25.5	11	15	33.3	12	31	12.7	M10	UCF203	F204	UC203	12.8	6.65	0.61
20	64	86	25.5	11	15	33.3	12	31	12.7	M10	UCF204	F204	UC204	12.8	6.65	0.59
25	70	95	27	13	16	35.8	12	34.1	14.3	M10	UCF205	F205	UC205	14.0	7.85	0.83
	83	108	30	13	18	40.2	12	38.1	15.9	M10	UCFX05	FX05	UCX05	19.5	11.3	1.2
	80	110	29	13	16	39	16	38	15	M14	UCF305	F305	UC305	20.6	11.3	1.3
30	83	108	31	13	18	40.2	12	38.1	15.9	M10	UCF206	FX06	UCX06	25.7	15.4	1.6
	92	117	34	14	19	44.4	16	42.9	17.5	M14	UCFX06	F306	UC306	26.7	15.0	1.9
	95	125	32	15	18	44	16	43	17	M14	UCF306	F207	UC207	25.7	15.4	1.5
35	92	117	34	15	19	44.4	14	42.9	17.5	M12	UCF207	FX07	UCX07	29.1	17.8	2.0
	102	130	38	14	21	51.2	16	49.2	19	M14	UCFX07	F307	UC307	33.4	19.3	2.3
	100	135	36	16	20	49	19	48	19	M16	UCF307	FX08	UCX08	32.7	20.3	2.4
40	102	130	36	15	21	51.2	16	49.2	19	M14	UCF208	F209	UC209	32.7	20.3	2.2
	105	137	40	14	22	52.2	19	49.2	19	M16	UCFX08	FX09	UCX09	35.1	23.3	2.7
	112	150	40	17	23	56	19	52	19	M16	UCF308	F309	UC309	48.9	29.5	4.0
50	105	137	38	16	22	52.2	16	49.2	19	M14	UCF209	F210	UC210	35.1	23.3	2.5
	111	143	40	14	23	55.6	19	51.6	19	M16	UCFX09	FX10	UCX10	43.4	29.4	3.7
	125	160	44	18	25	60	19	57	22	M16	UCF309	F310	UC310	62.0	38.3	5.1
55	111	143	40	16	22	54.6	16	51.6	19	M14	UCF210	FX11	UCX11	52.4	36.2	4.9
	130	162	44	20	26	59.4	19	55.6	22.2	M16	UCFX10	F311	UC311	71.6	45.0	5.6
	132	175	48	19	28	67	23	61	22	M20	UCF310					
	130	162	43	18	25	58.4	19	55.6	22.2	M16	UCF211					
	143	175	49	20	29	68.7	19	65.1	25.4	M16	UCFX11					
	140	185	52	20	30	71	23	66	25	M20	UCF311					

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF	201 – 210, X05 – X09, 305 – 308
PT 1/8	211 – 218, X10 – X20, 309 – 328

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
 (For more detailed information, refer to ball bearing for unit specification tables.)

d 60 – 140 mm

Shaft dia. (mm) d	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing		(Refer.) Unit Mass (kg)
	J	L	A	A_1	A_2	A_0	N	B	S				No.	Basic load ratings (kN) C_r C_{0r}	
60	143	175	48	18	29	68.7	19	65.1	25.4	M16	UCF212	F212	UC212	52.4 36.2	4.2
	149	187	59	21	34	73.7	19	65.1	25.4	M16	UCFX12	FX12	UCX12	57.2 40.1	5.7
	150	195	56	22	33	78	23	71	26	M20	UCF312	F312	UC312	81.9 52.2	6.9
65	149	187	50	22	30	69.7	19	65.1	25.4	M16	UCF213	F213	UC213	57.2 40.1	5.2
	149	187	59	21	34	78.4	19	74.6	30.2	M16	UCFX13	FX13	UCX13	62.2 44.1	6.3
	166	208	58	22	33	78	23	75	30	M20	UCF313	F313	UC313	92.7 59.9	7.8
70	152	193	54	22	31	75.4	19	74.6	30.2	M16	UCF214	F214	UC214	62.2 44.1	5.9
	152	197	60	22	37	81.5	23	77.8	33.3	M20	UCFX14	FX14	UCX14	67.4 48.3	7.0
	178	226	61	25	36	81	25	78	33	M22	UCF314	F314	UC314	104	10.1
75	159	200	56	22	34	78.5	19	77.8	33.3	M16	UCF215	F215	UC215	67.4 48.3	6.4
	152	197	68	24	40	89.3	23	82.6	33.3	M20	UCFX15	FX15	UCX15	72.7 53.0	8.4
	184	236	66	25	39	89	25	82	32	M22	UCF315	F315	UC315	113 77.2	11.6
80	165	208	58	22	34	83.3	23	82.6	33.3	M20	UCF216	F216	UC216	72.7 53.0	7.3
	171	214	70	24	40	91.6	23	85.7	34.1	M20	UCFX16	FX16	UCX16	84.0 61.9	9.4
	196	250	68	27	38	90	31	86	34	M27	UCF316	F316	UC316	123 86.7	12.8
85	175	220	63	24	36	87.6	23	85.7	34.1	M20	UCF217	F217	UC217	84.0 61.9	8.9
	171	214	70	24	40	96.3	23	96	39.7	M20	UCFX17	FX17	UCX17	96.1 71.5	10.8
	204	260	74	27	44	100	31	96	40	M27	UCF317	F317	UC317	133 96.8	15.3
90	187	235	68	25	40	96.3	23	96	39.7	M20	UCF218	F218	UC218	96.1 71.5	11.4
	171	214	76	24	45	106.1	23	104	42.9	M20	UCFX18	FX18	UCX18	109 81.9	11.9
	216	280	76	30	44	100	35	96	40	M30	UCF318	F318	UC318	143 107	18.9
100	228	290	94	30	59	121	35	103	41	M30	UCF319	F319	UC319	153 119	21.6
105	211	268	97	28	59	127.3	31	117.5	49.2	M27	UCFX20	FX20	UCX20	133 105	19.4
	242	310	94	32	59	125	38	108	42	M33	UCF320	F320	UC320	173 141	25.8
110	242	310	94	32	59	127	38	112	44	M33	UCF321	F321	UC321	184 153	30.2
120	266	340	96	35	60	131	41	117	46	M36	UCF322	F322	UC322	205 180	35.3
130	290	370	110	40	65	140	41	126	51	M36	UCF324	F324	UC324	207 185	47.3
140	320	410	115	45	65	146	41	135	54	M36	UCF326	F326	UC326	229 214	65.5
	350	450	125	55	75	161	41	145	59	M36	UCF328	F328	UC328	253 246	93.4

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF201 – 210, X05 – X09, 305 – 308
 PT 1/8211 – 218, X10 – X20, 309 – 328

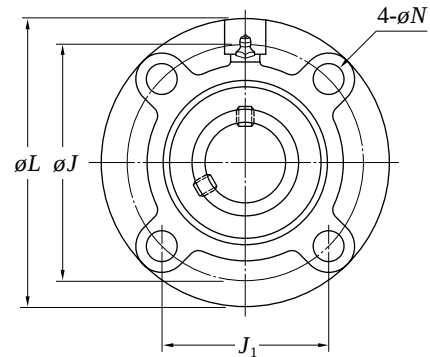
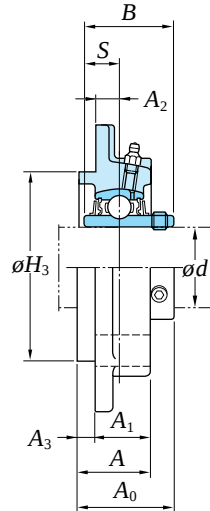
2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
 (For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units

round-falnged type with spigot joint

UCFC (set screw locking)

d 12 – 70 mm



Shaft dia. (mm)	Dimensions (mm)												Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)	
	<i>d</i>	<i>L</i>	<i>J</i>	<i>J</i> ₁	<i>H</i> ₃	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₃	<i>A</i> ₀	<i>N</i>	<i>B</i>				<i>S</i>	No.	Basic load ratings (kN)		
																		<i>C</i> _r		<i>C</i> _{0r}
12	100	78	55.1	62	25.5	20.5	10	5	33.3	12	31	12.7	M10	UCFC201	FC204	UC201	12.8	6.65	0.78	
15	100	78	55.1	62	25.5	20.5	10	5	33.3	12	31	12.7	M10	UCFC202	FC204	UC202	12.8	6.65	0.76	
17	100	78	55.1	62	25.5	20.5	10	5	33.3	12	31	12.7	M10	UCFC203	FC204	UC203	12.8	6.65	0.75	
20	100	78	55.1	62	25.5	20.5	10	5	33.3	12	31	12.7	M10	UCFC204	FC204	UC204	12.8	6.65	0.73	
25	115	90	63.6	70	27	21	10	6	35.8	12	34.1	14.3	M10	UCFC205	FC205	UC205	14.0	7.85	0.95	
	111	92	65	76	30	24	10	6	38.2	9.5	38.1	15.9	M8	UCFCX05	FCX05	UCX05	19.5	11.3	1.2	
30	125	100	70.7	80	31	23	10	8	40.2	12	38.1	15.9	M10	UCFC206	FC206	UC206	19.5	11.3	1.3	
	127	105	74.2	85	32	22.5	8	9.5	42.9	12	42.9	17.5	M10	UCFCX06	FCX06	UCX06	25.7	15.4	1.5	
35	135	110	77.8	90	34	26	11	8	44.4	14	42.9	17.5	M12	UCFC207	FC207	UC207	25.7	15.4	1.7	
	133	111	78.5	92	37	26	9	11	50.2	12	49.2	19	M10	UCFCX07	FCX07	UCX07	29.1	17.8	1.9	
40	145	120	84.8	100	36	26	11	10	51.2	14	49.2	19	M12	UCFC208	FC208	UC208	29.1	17.8	2.0	
	133	111	78.5	92	37	26	9	11	50.2	12	49.2	19	M10	UCFCX08	FCX08	UCX08	32.7	20.3	2.0	
45	160	132	93.3	105	38	26	10	12	52.2	16	49.2	19	M14	UCFC209	FC209	UC209	32.7	20.3	2.6	
	155	130	91.9	108	37	25	8	12	52.6	14	51.6	19	M12	UCFCX09	FCX09	UCX09	35.1	23.3	2.6	
50	165	138	97.6	110	40	28	10	12	54.6	16	51.6	19	M14	UCFC210	FC210	UC210	35.1	23.3	2.9	
	162	136	96.2	118	41	25	7	16	56.4	14	55.6	22.2	M12	UCFCX10	FCX10	UCX10	43.4	29.4	3.2	
55	185	150	106.1	125	43	31	13	12	58.4	19	55.6	22.2	M16	UCFC211	FC211	UC211	43.4	29.4	4.2	
	180	152	107.5	127	48	26	4	22	65.7	16	65.1	25.4	M14	UCFCX11	FCX11	UCX11	52.4	36.2	4.3	
60	195	160	113.1	135	48	36	17	12	68.7	19	65.1	25.4	M16	UCFC212	FC212	UC212	52.4	36.2	5.0	
	194	165	116.7	140	53	33	11	20	70.7	16	65.1	25.4	M14	UCFCX12	FCX12	UCX12	57.2	40.1	5.3	
65	205	170	120.2	145	50	36	16	14	69.7	19	65.1	25.4	M16	UCFC213	FC213	UC213	57.2	40.1	5.6	
	194	165	116.7	140	53	33	11	20	75.4	16	74.6	30.2	M14	UCFCX13	FCX13	UCX13	62.2	44.1	5.7	
70	215	177	125.1	150	54	40	17	14	75.4	19	74.6	30.2	M16	UCFC214	FC214	UC214	62.2	44.1	6.8	
	222	190	134.3	164	56	36	14	20	78.5	19	77.8	33.3	M16	UCFCX14	FCX14	UCX14	67.4	48.3	7.3	

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF .	201 – 210, X05 – X09
PT 1/8 .	211 – 218, X10 – X20

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(For more detailed information, refer to ball bearing for unit specification tables.)

d 75 – 100 mm

Shaft dia. (mm)	Dimensions (mm)												Bolt size	Unit No.	Housing No.	Applicable bearing				(Refer.) Unit Mass (kg)		
	<i>d</i>	<i>L</i>	<i>J</i>	<i>J</i> ₁	<i>H</i> ₃	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₃	<i>A</i> ₀	<i>N</i>	<i>B</i>				<i>S</i>	No.	Basic load ratings (kN)			<i>C</i> _r	<i>C</i> _{0r}
75	220	184	130.1	160	56	40	18	16	78.5	19	77.8	33.3	M16	UCFC215	FC215	UC215	67.4	48.3	7.2			
	222	190	134.3	164	57	35	12	22	83.3	19	82.6	33.3	M16	UCFCX15	FCX15	UCX15	72.7	53.0	8.0			
80	240	200	141.4	170	58	42	18	16	83.3	23	82.6	33.3	M20	UCFC216	FC216	UC216	72.7	53.0	8.7			
	260	219	154.8	186	61	36	10	25	86.6	23	85.7	34.1	M20	UCFCX16	FCX16	UCX16	84.0	61.9	11.3			
85	250	208	147.1	180	63	45	18	18	87.6	23	85.7	34.1	M20	UCFC217	FC217	UC217	84.0	61.9	10.3			
	260	219	154.8	186	61	36	10	25	91.3	23	96	39.7	M20	UCFCX17	FCX17	UCX17	96.1	71.5	12.9			
90	265	220	155.5	190	68	50	22	18	96.3	23	96	39.7	M20	UCFC218	FC218	UC218	96.1	71.5	13.3			
	260	219	154.8	186	71	43	12	28	101.1	23	104	42.9	M20	UCFCX18	FCX18	UCX18	109	81.9	13.5			
100	276	238	168.3	206	94	66	22	28	118.3	23	117.5	49.2	M20	UCFCX20	FCX20	UCX20	133	105	18.2			

Remarks 1) Applicable sizes of grease nipples are shown below.

$\left[\begin{array}{l} 1/4-28\text{UNF} . \quad 201 - 210, \text{X05} - \text{X09} \\ \text{PT } 1/8 \quad \dots\dots\dots 211 - 218, \text{X10} - \text{X20} \end{array} \right]$

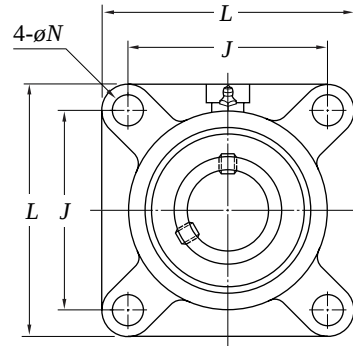
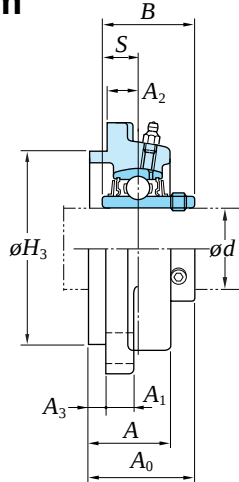
2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units

square-flanged type with spigot joint

UCFS (set screw locking)

d 25 – 140 mm



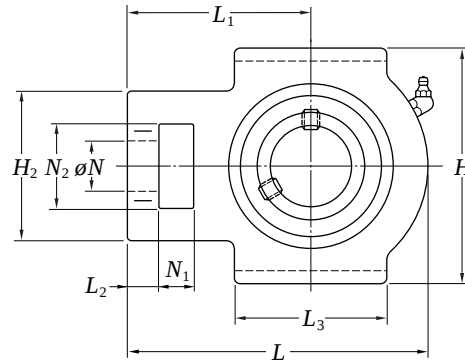
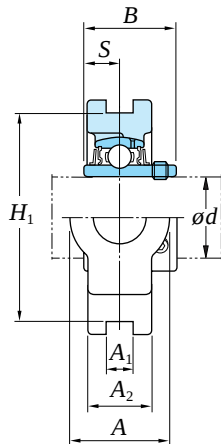
Shaft dia. (mm) <i>d</i>	Dimensions (mm)											Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)
	<i>J</i>	<i>L</i>	<i>H</i> ₃	<i>A</i>											No.	Basic load ratings (kN)		
					<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₃	<i>A</i> ₀	<i>N</i>	<i>B</i>	<i>S</i>					<i>C</i> _r	<i>C</i> _{0r}	
25	80	110	80	29	13	9	7	39	16	38	15	M14	UCFS305	FS305	UC305	20.6	11.3	1.4
30	95	125	90	32	15	10	8	44	16	43	17	M14	UCFS306	FS306	UC306	26.7	15.0	1.9
35	100	135	100	36	16	11	9	49	19	48	19	M16	UCFS307	FS307	UC307	33.4	19.3	2.3
40	112	150	115	40	17	13	10	56	19	52	19	M16	UCFS308	FS308	UC308	40.7	24.0	3.4
45	125	160	125	44	18	14	11	60	19	57	22	M16	UCFS309	FS309	UC309	48.9	29.5	4.4
50	132	175	140	48	19	16	12	67	23	61	22	M20	UCFS310	FS310	UC310	62.0	38.3	5.3
55	140	185	150	52	20	17	13	71	23	66	25	M20	UCFS311	FS311	UC311	71.6	45.0	6.1
60	150	195	160	56	22	19	14	78	23	71	26	M20	UCFS312	FS312	UC312	81.9	52.2	7.4
65	166	208	175	58	22	15	18	78	23	75	30	M20	UCFS313	FS313	UC313	92.7	59.9	8.8
70	178	226	185	61	25	18	18	81	25	78	33	M22	UCFS314	FS314	UC314	104	68.2	11.2
75	184	236	200	66	25	21	18	89	25	82	32	M22	UCFS315	FS315	UC315	113	77.2	13.7
80	196	250	210	68	27	18	20	90	31	86	34	M27	UCFS316	FS316	UC316	123	86.7	15.1
85	204	260	220	74	27	24	20	100	31	96	40	M27	UCFS317	FS317	UC317	133	96.8	17.3
90	216	280	240	76	30	24	20	100	35	96	40	M30	UCFS318	FS318	UC318	143	107	21.3
95	228	290	250	94	30	39	20	121	35	103	41	M30	UCFS319	FS319	UC319	153	119	24.5
100	242	310	260	94	32	39	20	125	38	108	42	M33	UCFS320	FS320	UC320	173	141	29.5
105	242	310	260	94	32	39	20	127	38	112	44	M33	UCFS321	FS321	UC321	184	153	32.7
110	266	340	300	96	35	35	25	131	41	117	46	M36	UCFS322	FS322	UC322	205	180	39.0
120	290	370	330	110	40	35	30	140	41	126	51	M36	UCFS324	FS324	UC324	207	185	50.6
130	320	410	360	115	45	35	30	146	41	135	54	M36	UCFS326	FS326	UC326	229	214	67.7
140	350	450	400	125	55	45	30	161	41	145	59	M36	UCFS328	FS328	UC328	253	246	94.0

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF .	305 – 308
PT 1/8 .	309 – 328

2) Bearings with triple-lip seals are indicated by L3 after the bearing and unit number.
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units
take-up type
UCT (set screw locking)
d 12 – 55 mm



Shaft dia. (mm) <i>d</i>	Dimensions (mm)															Unit No.	Housing No.	Applicable bearing No.		Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>H</i>	<i>H</i>	<i>H</i> ₂	<i>L</i>	<i>L</i> ₁	<i>L</i> ₂	<i>L</i> ₃	<i>N</i>	<i>N</i>	<i>N</i> ₂	<i>B</i>	<i>S</i>					<i>C</i> _r	<i>C</i> _{0r}	
12	32	12	21	89	76	51	94	61	10	51	19	16	32	31	12.7	UCT201	T204	UC201	12.8	6.65		0.81
15	32	12	21	89	76	51	94	61	10	51	19	16	32	31	12.7	UCT202	T204	UC202	12.8	6.65		0.79
17	32	12	21	89	76	51	94	61	10	51	19	16	32	31	12.7	UCT203	T204	UC203	12.8	6.65		0.78
20	32	12	21	89	76	51	94	61	10	51	19	16	32	31	12.7	UCT204	T204	UC204	12.8	6.65		0.76
25	32	12	24	89	76	51	97	62	10	51	19	16	32	34.1	14.3	UCT205	T205	UC205	14.0	7.85		0.84
30	37	12	28	102	89	56	113	70	10	57	22	16	37	38.1	15.9	UCTX05	TX05	UCX05	19.5	11.3		1.4
	36	12	26	89	80	62	122	76	12	65	26	16	36	38	15	UCT305	T305	UC305	20.6	11.3		1.4
																	T206	UC206	19.5	11.3		1.3
35	37	12	28	102	89	56	113	70	10	57	22	16	37	38.1	15.9	UCT206	TX06	UCX06	25.7	15.4		1.7
	37	12	30	102	89	64	129	78	13	64	22	16	37	42.9	17.5	UCTX06	T306	UC306	26.7	15.0		1.8
	41	16	28	100	90	70	137	85	14	74	28	18	41	43	17	UCT306	T207	UC207	25.7	15.4		1.6
40																	TX07	UCX07	29.1	17.8		2.7
	37	12	30	102	89	64	129	78	13	64	22	16	37	42.9	17.5	UCT207	T307	UC307	33.4	19.3		2.3
	49	16	36	114	102	83	144	88	15	83	29	19	49	49.2	19	UCTX07	T208	UC208	29.1	17.8		2.5
45	45	16	32	111	100	75	150	94	15	80	30	20	45	48	19	UCT307	TX08	UCX08	32.7	20.3		2.6
																	T308	UC308	40.7	24.0		3.0
	49	16	33	114	102	83	144	88	16	83	29	19	49	49.2	19	UCT208	T209	UC209	32.7	20.3		2.4
50	49	16	36	117	102	83	144	87	15	83	29	19	49	49.2	19	UCTX08	TX09	UCX09	35.1	23.3		2.9
	50	18	34	124	112	83	162	100	17	89	32	22	50	52	19	UCT308	T309	UC309	48.9	29.5		4.1
																	T210	UC210	35.1	23.3		2.6
55	49	16	35	117	102	83	144	87	16	83	29	19	49	49.2	19	UCT209	TX10	UCX10	43.4	29.4		4.4
	49	16	38	117	102	83	149	90	16	86	29	19	49	51.6	19	UCTX09	T310	UC310	62.0	38.3		4.9
	55	18	38	138	125	90	178	110	18	97	34	24	55	57	22	UCT309	T211	UC211	43.4	29.4		4.0
66																	TX11	UCX11	52.4	36.2		5.3
	49	16	37	117	102	83	149	90	16	86	29	19	49	51.6	19	UCT210	T311	UC311	71.6	45.0		6.1
	64	22	42	146	130	102	171	106	19	95	35	25	64	55.6	22.2	UCTX10						
66	61	20	40	151	140	98	191	117	20	106	37	27	61	61	22	UCT310						
	64	22	38	146	130	102	171	106	19	95	35	25	64	55.6	22.2	UCT211						
	64	22	44	146	130	102	194	119	19	102	35	32	64	65.1	25.4	UCTX11						
	66	22	44	163	150	105	207	127	21	115	39	29	66	66	25	UCT311						

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF	201 – 210, X05 – X09, 305 – 308
PT 1/8	211 – 217, X10 – X17, 309 – 328

- 2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
 (For more detailed information, refer to ball bearing for unit specification tables.)

d 60 – 140 mm

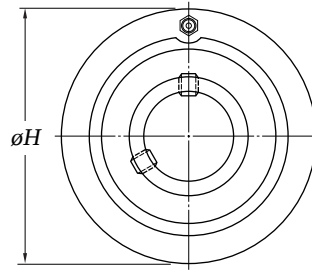
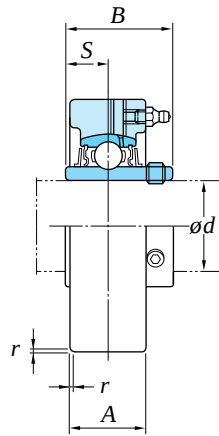
Shaft dia. (mm)	Dimensions (mm)															Unit No.	Housing No.	Applicable bearing		(Refer.) Unit Mass (kg)		
	d	A	A ₁	A ₂	H	H	H ₂	L	L ₁	L ₂	L ₃	N	N	N ₂	B			S	No.		Basic load ratings (kN)	
																					C _r	C _{0r}
60	64	22	42	146	130	102	194	119	19	102	35	32	64	65.1	25.4	UCT212	T212	UC212	52.4	36.2	4.9	
	70	26	48	167	151	111	224	137	21	121	41	32	70	65.1	25.4	UCTX12	TX12	UCX12	57.2	40.1	7.4	
	71	22	46	178	160	113	220	135	23	123	41	31	71	71	26	UCT312	T312	UC312	81.9	52.2	7.6	
65	70	26	44	167	151	111	224	137	21	121	41	32	70	65.1	25.4	UCT213	T213	UC213	57.2	40.1	6.9	
	70	26	48	167	151	111	224	137	21	121	41	32	70	74.6	30.2	UCTX13	TX13	UCX13	62.2	44.1	7.6	
	80	26	50	190	170	116	238	146	25	134	43	32	70	75	30	UCT313	T214	UC214	62.2	44.1	7.0	
70	70	26	46	167	151	111	224	137	21	121	41	32	70	74.6	30.2	UCT214	TX14	UCX14	67.4	48.3	7.9	
	70	26	48	167	151	111	232	140	21	121	41	32	70	77.8	33.3	UCTX14	T314	UC314	104	68.2	11.1	
	90	26	52	202	180	130	252	155	25	140	46	36	85	78	33	UCT314	T215	UC215	67.4	48.3	7.3	
75	70	26	48	167	151	111	232	140	21	121	41	32	70	77.8	33.3	UCT215	TX15	UCX15	72.7	53.0	8.7	
	70	28	48	184	165	111	235	140	21	121	41	32	70	82.6	33.3	UCTX15	T315	UC315	113	77.2	13.0	
	90	26	55	216	192	132	262	160	25	150	46	36	85	82	32	UCT315	T216	UC216	72.7	53.0	8.2	
80	70	26	51	184	165	111	235	140	21	121	41	32	70	82.6	33.3	UCT216	TX16	UCX16	84.0	61.9	11.7	
	73	28	54	198	173	124	260	162	28	157	48	38	73	85.7	34.1	UCTX16	T316	UC316	123	86.7	16.2	
	90	26	60	230	204	150	282	174	28	160	53	42	98	86	34	UCT316	T217	UC217	84.0	61.9	11.0	
85	70	26	51	184	165	111	235	140	21	121	41	32	70	82.6	33.3	UCT216	TX17	UCX17	96.1	71.5	11.7	
	73	28	54	198	173	124	260	162	28	157	48	38	73	85.7	34.1	UCTX16	T317	UC317	133	96.8	19.0	
	102	30	60	230	204	150	282	174	28	160	53	42	98	86	34	UCT316						
90	73	30	54	198	173	124	260	162	29	157	48	38	73	85.7	34.1	UCT217	T318	UC318	143	107	21.6	
	73	28	54	198	173	124	260	162	28	157	48	38	73	96	39.7	UCTX17	T319	UC319	153	119	24.9	
	102	32	64	240	214	152	298	183	30	170	53	42	98	96	40	UCT317						
95	110	32	66	255	228	160	312	192	30	175	57	46	106	96	40	UCT318	T320	UC320	173	141	30.7	
	110	35	72	270	240	165	322	197	31	180	57	46	106	103	41	UCT319	T321	UC321	184	153	36.7	
	120	35	75	290	260	175	345	210	32	200	59	48	115	108	42	UCT320	T322	UC322	205	180	39.7	
100	120	35	75	290	260	175	345	210	32	200	59	48	115	108	42	UCT320	T324	UC324	207	185	54.4	
	120	35	75	290	260	175	345	210	32	200	59	48	115	112	44	UCT321						
	120	35	75	290	260	175	345	210	32	200	59	48	115	112	44	UCT321	T326	UC326	229	214	69.3	
110	130	38	80	320	285	185	385	235	38	215	65	52	125	117	46	UCT322	T328	UC328	253	246	85.1	
	140	45	90	355	320	210	432	267	42	230	70	60	140	126	51	UCT324						
	150	50	100	385	350	220	465	285	45	240	75	65	150	135	54	UCT326						
130	150	50	100	385	350	220	465	285	45	240	75	65	150	135	54	UCT326						
	155	50	100	415	380	230	515	315	50	255	80	70	160	145	59	UCT328						

Remarks 1) Applicable sizes of grease nipples are shown below.

1/4-28UNF201 – 210, X05 – X09, 305 – 308
PT 1/8211 – 217, X10 – X17, 309 – 328

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units
cartridge type
UCC (set screw locking)
 d 12 – 65 mm



Shaft dia. (mm) d	Dimensions (mm)					Unit No.	Housing No.	Applicable bearing No.	Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	H	A	r	B	S				C_r	C_{0r}	
12	72	20	1.5	31	12.7	UCC201	C204	UC201	12.8	6.65	0.52
15	72	20	1.5	31	12.7	UCC202	C204	UC202	12.8	6.65	0.50
17	72	20	1.5	31	12.7	UCC203	C204	UC203	12.8	6.65	0.49
20	72	20	1.5	31	12.7	UCC204	C204	UC204	12.8	6.65	0.47
25	80	22	1.5	34.1	14.3	UCC205	C205	UC205	14.0	7.85	0.64
30	85	27	1.5	38.1	15.9	UCC206	C206	UC206	19.5	11.3	0.81
35	90	28	2	42.9	17.5	UCC207	C207	UC207	25.7	15.4	0.93
40	100	30	2	49.2	19	UCC208	C208	UC208	29.1	17.8	1.2
45	110	31	2	49.2	19	UCC209	C209	UC209	32.7	20.3	1.5
50	120	33	2	51.6	19	UCC210	C210	UC210	35.1	23.3	2.0
55	125	35	2.5	55.6	22.2	UCC211	C211	UC211	43.4	29.4	2.2
60	130	38	2.5	65.1	25.4	UCC212	C212	UC212	52.4	36.2	2.6
65	140	40	2.5	65.1	25.4	UCC213	C213	UC213	57.2	40.1	3.0

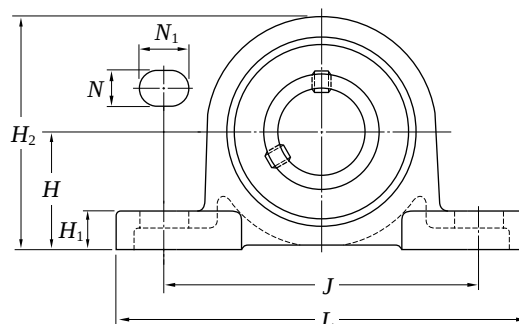
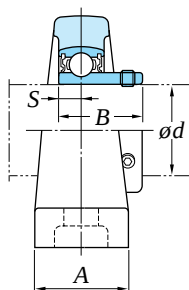
Remarks 1) Applicable sizes of grease nipples are shown below.

(1/4-28UNF . 201 – 213)

2) For bearings with double- or triple-lip seals, unit and bearing number are suffixed by L2 or L3.

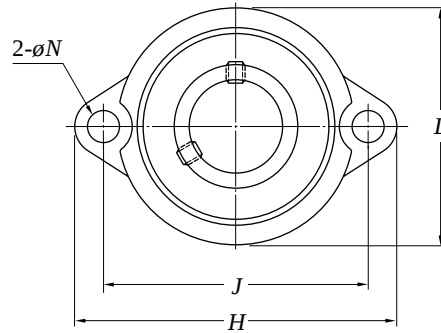
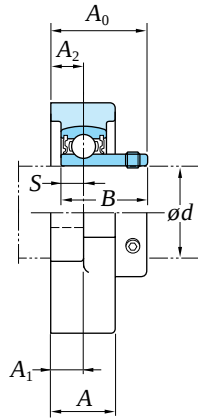
(For more detailed information, refer to ball bearing for unit specification tables.)

Ball bearing units light duty pillow block type BLP (set screw locking) d 12 – 40 mm



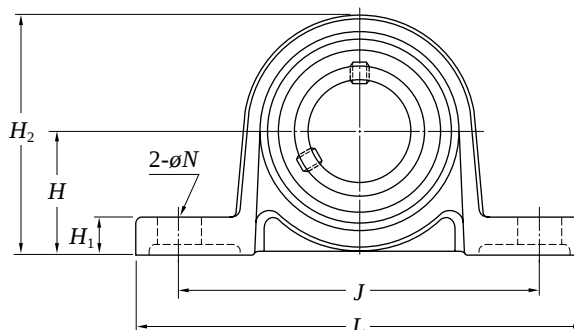
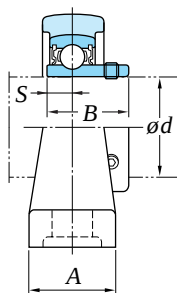
Shaft dia. (mm) <i>d</i>	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>N</i> ₁	<i>B</i>	<i>S</i>				No.	Basic load ratings (kN)		
															<i>C</i> _r	<i>C</i> _{0r}	
12	30.2	87	114	25	12	57	11	16	22	6	M10	BLP201	LP203	SB201	9.55	4.80	0.36
15	30.2	87	114	25	12	57	11	16	22	6	M10	BLP202	LP203	SB202	9.55	4.80	0.36
17	30.2	87	114	25	12	57	11	16	22	6	M10	BLP203	LP203	SB203	9.55	4.80	0.36
20	33.3	97	125	27	13	65	11	16	25	7	M10	BLP204	LP204	SB204	12.8	6.65	0.51
25	36.5	100	130	29	13	71	11	16	27	7.5	M10	BLP205	LP205	SB205	14.0	7.85	0.57
30	42.9	120	156	33	14	83	14	21	30	8	M12	BLP206	LP206	SB206	19.5	11.3	0.69
35	47.6	127	165	35	16	93	14	21	32	8.5	M12	BLP207	LP207	SB207	25.7	15.4	0.94
40	50.8	140	184	37	18	102	14	22	34	9	M12	BLP208	LP208	SB208	29.1	17.8	1.8

Ball bearing units
light duty rhombic-flanged type
BLF (set screw locking)
 d 12 – 35 mm



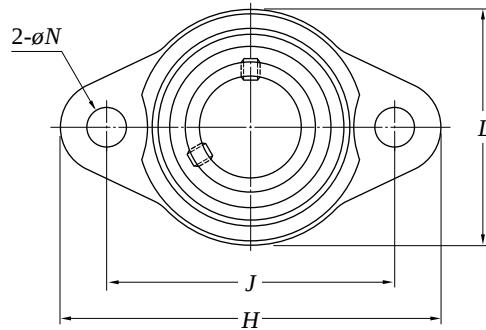
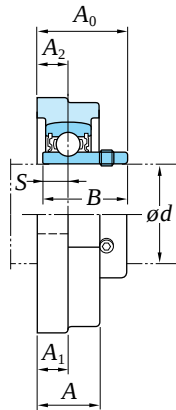
Shaft dia. (mm) d	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing No.	Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	H	J	L	A	A_1	A_2	A_0	N	B	S					C_r	C_{0r}	
12	81	63.5	52	18	9.5	9.5	25.5	8	22	6	M6	BLF201	LF203	SB201	9.55	4.80	0.25
15	81	63.5	52	18	9.5	9.5	25.5	8	22	6	M6	BLF202	LF203	SB202	9.55	4.80	0.25
17	81	63.5	52	18	9.5	9.5	25.5	8	22	6	M6	BLF203	LF203	SB203	9.55	4.80	0.25
20	90	71.5	60	20	11	11	29	10	25	7	M8	BLF204	LF204	SB204	12.8	6.65	0.33
25	95	76	64	20	11	11	30.5	10	27	7.5	M8	BLF205	LF205	SB205	14.0	7.85	0.38
30	113	90.5	76	22.5	12	12	34	12	30	8	M10	BLF206	LF206	SB206	19.5	11.3	0.57
35	122	100	89	24	13	13	36.5	12	32	8.5	M10	BLF207	LF207	SB207	25.7	15.4	0.77

Ball bearing units "clean" series pillow block type UP (set screw locking) d 10 – 30 mm



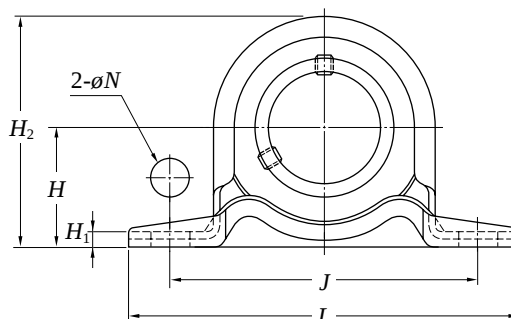
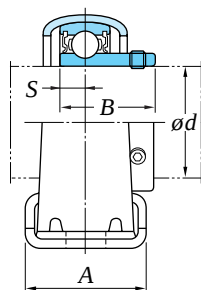
Shaft dia. (mm)	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing				(Refer.) Unit Mass (kg)
	<i>d</i>	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>H</i> ₁	<i>H</i> ₂	<i>N</i>	<i>B</i>				<i>S</i>	No.	Basic load ratings (kN)		
															<i>C</i> _r	<i>C</i> _{0r}	
10	18	53	67	16	6	35	7	15	5	M6	UP000	P000	SU000	4.55	1.95	0.070	
12	19	56	71	16	6	38	7	15	5	M6	UP001	P001	SU001	5.10	2.40	0.090	
15	22	63	80	16	7	43	7	16.5	5.5	M6	UP002	P002	SU002	5.60	2.85	0.110	
17	24	67	85	18	7	47	7	17.5	6	M6	UP003	P003	SU003	6.00	3.25	0.150	
20	28	80	100	20	9	55	10	21	7	M8	UP004	P004	SU004	9.40	5.05	0.230	
25	32	90	112	20	10	62	10	22	7	M8	UP005	P005	SU005	10.1	5.85	0.280	
30	36	106	132	26	11	70	13	24.5	7.5	M10	UP006	P006	SU006	13.2	8.25	0.420	

Ball bearing units
"clean" series rhombic-flanged type
UFL (set screw locking)
 d 10 – 30 mm



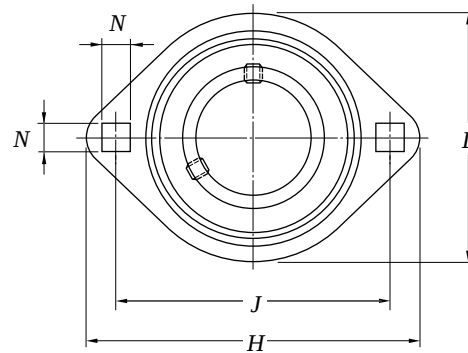
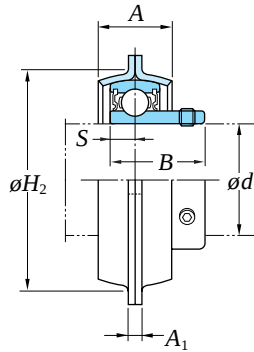
Shaft dia. (mm) <i>d</i>	Dimensions (mm)										Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>A</i> ₁	<i>A</i> ₂	<i>A</i> ₀	<i>N</i>	<i>B</i>	<i>S</i>				No.	Basic load ratings (kN)		
															<i>C</i> _r	<i>C</i> _{0r}	
10	60	45	36	12	6	6	16	7	15	5	M6	UFL000	FL000	SU000	4.55	1.95	0.050
12	63	48	38	12	6	6	16	7	15	5	M6	UFL001	FL001	SU001	5.10	2.40	0.065
15	67	53	42	13	6.5	6.5	17.5	7	16.5	5.5	M6	UFL002	FL002	SU002	5.60	2.85	0.085
17	71	56	46	14	7	7	18.5	7	17.5	6	M6	UFL003	FL003	SU003	6.00	3.25	0.110
20	90	71	55	16	8	8	22	10	21	7	M8	UFL004	FL004	SU004	9.40	5.05	0.180
25	95	75	60	16	8	8	23	10	22	7	M8	UFL005	FL005	SU005	10.1	5.85	0.230
30	112	85	70	18	9	9	26	13	24.5	7.5	M10	UFL006	FL006	SU006	13.2	8.25	0.310

Ball bearing units pressed steel pillow block type SBPP (set screw locking) d 12 – 35 mm



Shaft dia. (mm) d	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing No.	Basic load ratings (kN)		(Refer.) Unit Mass (kg)
	H	J	L	A	H_1	H_2	N	B	S					C_r	C_{0r}	
12	22.2	68	86	25	3.2	43.8	9.5	22	6	M8	SBPP201F	PP203F	SB201	9.55	4.80	0.16
15	22.2	68	86	25	3.2	43.8	9.5	22	6	M8	SBPP202F	PP203F	SB202	9.55	4.80	0.16
17	22.2	68	86	25	3.2	43.8	9.5	22	6	M8	SBPP203F	PP203F	SB203	9.55	4.80	0.16
20	25.4	76	98	32	3.2	50.5	9.5	25	7	M8	SBPP204F	PP204F	SB204	12.8	6.65	0.23
25	28.6	86	108	32	4	56.6	11.5	27	7.5	M10	SBPP205F	PP205F	SB205	14.0	7.85	0.28
30	33.3	95	117	38	4	66.3	11.5	30	8	M10	SBPP206F	PP206F	SB206	19.5	11.3	0.47
35	39.7	106	129	41	4.6	78	11.5	32	8.5	M10	SBPP207F	PP207F	SB207	25.7	15.4	0.67

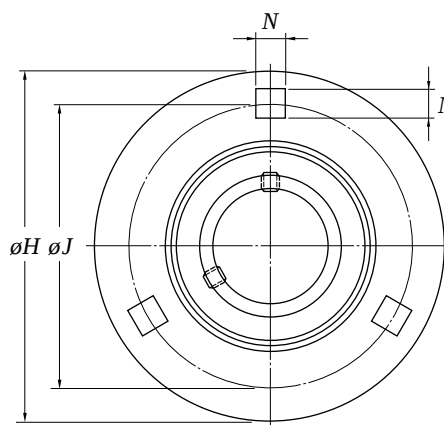
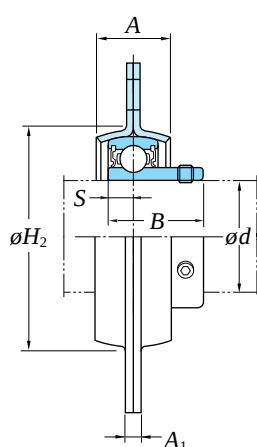
Ball bearing units
pressed steel rhombic-flanged type
SBPFL (set screw locking)
 d 12 – 35 mm



Shaft dia. (mm) <i>d</i>	Dimensions (mm)									Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)
	<i>H</i>	<i>J</i>	<i>L</i>	<i>A</i>	<i>A</i> ₁	<i>N</i>	<i>H</i> ₂ ⁽¹⁾	<i>B</i>	<i>S</i>				No.	Basic load ratings (kN)		
														<i>C</i> _r	<i>C</i> _{0r}	
12	81	63.5	59	14	4	7.1	49	22	6	M6	SBPFL201	PFL203	SB201	9.55	4.80	0.19
15	81	63.5	59	14	4	7.1	49	22	6	M6	SBPFL202	PFL203	SB202	9.55	4.80	0.19
17	81	63.5	59	14	4	7.1	49	22	6	M6	SBPFL203	PFL203	SB203	9.55	4.80	0.19
20	90	71.5	67	16	4	9	55	25	7	M8	SBPFL204	PFL204	SB204	12.8	6.65	0.24
25	95	76	71	18	4	9	60	27	7.5	M8	SBPFL205	PFL205	SB205	14.0	7.85	0.28
30	113	90.5	84	19	5.2	11	71	30	8	M10	SBPFL206	PFL206	SB206	19.5	11.3	0.38
35	122	100	94	22	5.2	11	81	32	8.5	M10	SBPFL207	PFL207	SB207	25.7	15.4	0.66

Note 1) H_2 shows minimum dimension of mounting hole.

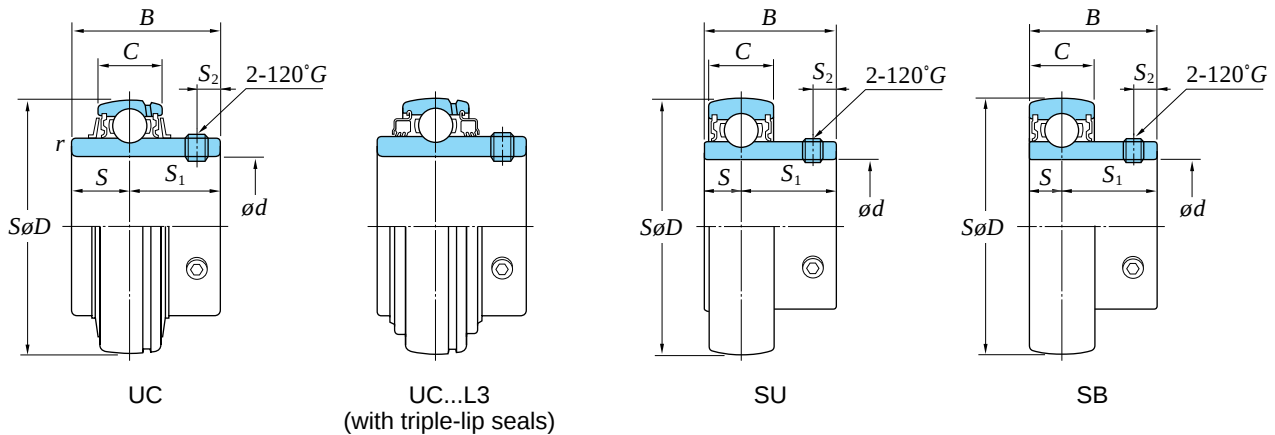
Ball bearing units pressed steel round-flanged type SBPF (set screw locking) d 12 – 35 mm



Shaft dia. (mm)	Dimensions (mm)								Bolt size	Unit No.	Housing No.	Applicable bearing			(Refer.) Unit Mass (kg)	
	<i>d</i>	<i>H</i>	<i>J</i>	<i>A</i>	<i>A</i> ₁	<i>N</i>	<i>H</i> ₂ ⁽¹⁾	<i>B</i>				<i>S</i>	No.	Basic load ratings (kN)		
														<i>C</i> _r		<i>C</i> _{0r}
12	81	63.5	14	4	7.1	49	22	6	M6	SBPF201	PF203	SB201	9.55	4.80	0.27	
15	81	63.5	14	4	7.1	49	22	6	M6	SBPF202	PF203	SB202	9.55	4.80	0.27	
17	81	63.5	14	4	7.1	49	22	6	M6	SBPF203	PF203	SB203	9.55	4.80	0.27	
20	90	71.5	16	4	9	55	25	7	M8	SBPF204	PF204	SB204	12.8	6.65	0.33	
25	95	76	18	4	9	60	27	7.5	M8	SBPF205	PF205	SB205	14.0	7.85	0.38	
30	113	90.5	19	5.2	11	71	30	8	M10	SBPF206	PF206	SB206	19.5	11.3	0.62	
35	122	100	22	5.2	11	81	32	8.5	M10	SBPF207	PF207	SB207	25.7	15.4	0.82	

Note 1) H_2 shows minimum dimension of mounting hole.

Ball bearings for units **cylindrical bore type (set screw locking)** **d 10 – 40 mm**



Shaft dia. (mm) <i>d</i>	Boundary dimensions (mm)				Basic load ratings (kN)		Bearing No.		Dimensions (mm)			Set screw size <i>G</i>	(Refer.) Mass (kg)
	<i>D</i>	<i>B</i>	<i>C</i>	<i>r</i> min.	<i>C_r</i>	<i>C_{0r}</i>	With standard seals	With triple-lip seals	<i>S</i>	<i>S₁</i>	<i>S₂</i>		
10	26	15	8	–	4.55	1.95	SU000	–	5	10	3	M3X0.35	0.024
12	28	15	8	–	5.10	2.40	SU001	–	5	10	3	M3X0.35	0.026
	40	22	12	–	9.55	4.80	SB201	–	6	16	4	M5X0.5	0.10
15	47	31	16	0.6	12.8	6.65	UC201	UC201L2	12.7	18.3	5	M6X0.75	0.21
17	32	16.5	9	–	5.60	2.85	SU002	–	5.5	11	3.3	M4X0.5	0.038
	40	22	12	–	9.55	4.80	SB202	–	6	16	4	M5X0.5	0.10
	47	31	16	0.6	12.8	6.65	UC202	UC202L2	12.7	18.3	5	M6X0.75	0.19
20	35	17.5	10	–	6.00	3.25	SU003	–	6	11.5	3.3	M4X0.5	0.050
	40	22	12	–	9.55	4.80	SB203	–	6	16	4	M5X0.5	0.10
	47	31	16	0.6	12.8	6.65	UC203	UC203L2	12.7	18.3	5	M6X0.75	0.18
25	42	21	12	–	9.40	5.05	SU004	–	7	14	4	M5X0.5	0.080
	47	25	14	–	12.8	6.65	SB204	–	7	18	5	M6X0.75	0.15
	47	31	16	1	12.8	6.65	UC204	UC204L2	12.7	18.3	5	M6X0.75	0.16
	47	22	12	–	10.1	5.85	SU005	–	7	15	4.5	M5X0.5	0.10
	52	27	15	–	14.0	7.85	SB205	–	7.5	19.5	5.5	M6X0.75	0.18
	52	34.1	17	1	14.0	7.85	UC205	UC205L2	14.3	19.8	5.5	M6X0.75	0.20
30	62	38	22	1.1	20.6	11.3	UC305	–	15	23	6	M6X0.75	0.45
	62	38.1	19	1	19.5	11.3	UCX05	UCX05L3	15.9	22.2	6	M6X0.75	0.39
	55	24.5	13	–	13.2	8.25	SU006	–	7.5	17	5.5	M5X0.5	0.15
	62	30	16	–	19.5	11.3	SB206	–	8	22	6	M6X0.75	0.27
	62	38.1	19	1	19.5	11.3	UC206	UC206L3	15.9	22.2	6	M6X0.75	0.32
35	72	42.9	20	1	25.7	15.4	UCX06	UCX06L3	17.5	25.4	6.5	M8X1	0.58
	72	43	24	1.1	26.7	15.0	UC306	–	17	26	6	M6X0.75	0.56
	72	32	17	–	25.7	15.4	SB207	–	8.5	23.5	6	M6X0.75	0.42
	72	42.9	20	1.1	25.7	15.4	UC207	UC207L3	17.5	25.4	6.5	M8X1	0.48
	80	48	26	1.5	33.4	19.3	UC307	UC307L3	19	29	8	M8X1	0.71
40	80	49.2	21	1.1	29.1	17.8	UCX07	UCX07L3	19	30.2	8	M8X1	0.75
	80	34	18	–	29.1	17.8	SB208	–	9	25	8	M8X1	0.60
	80	49.2	21	1.1	29.1	17.8	UC208	UC208L3	19	30.2	8	M8X1	0.64
	85	49.2	22	1.1	32.7	20.3	UCX08	UCX08L3	19	30.2	8	M8X1	0.83
	90	52	28	1.5	40.7	24.0	UC308	UC308L3	19	33	10	M10X1.25	1.00

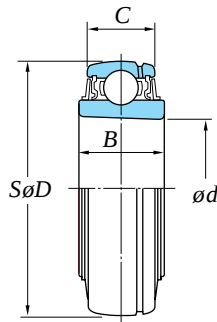
Remark) Bearing in number range from UC201L2 to UC205L2 are double-lip sealed (L2) due to dimensional restriction.

d 45 – 140 mm

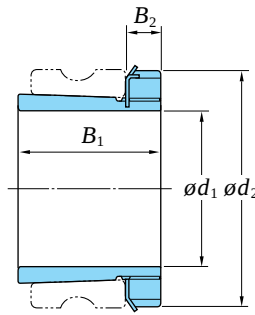
Shaft dia. (mm) d	Boundary dimensions (mm)				Basic load ratings (kN)		Bearing No.		Dimensions (mm)			Set screw size	(Refer.) Mass (kg)
	D	B	C	r min.	C_r	C_{0r}	With standard seals	With triple-lip seals	S	S_1	S_2	G	
45	85	49.2	22	1.1	32.7	20.3	UC209	UC209L3	19	30.2	8	M8X1	0.68
	90	51.6	24	1.1	35.1	23.3	UCX09	UCX09L3	19	32.6	9	M10X1.25	0.95
	100	57	30	1.5	48.9	29.5	UC309	UC309L3	22	35	10	M10X1.25	1.33
50	90	51.6	24	1.1	35.1	23.3	UC210	UC210L3	19	32.6	9	M10X1.25	0.80
	100	55.6	25	1.1	43.4	29.4	UCX10	UCX10L3	22.2	33.4	9	M10X1.25	1.29
	110	61	32	2	62.0	38.3	UC310	UC310L3	22	39	12	M12X1.5	1.69
55	100	55.6	25	1.5	43.4	29.4	UC211	UC211L3	22.2	33.4	9	M10X1.25	1.11
	110	65.1	27	1.5	52.4	36.2	UCX11	UCX11L3	25.4	39.7	10.5	M10X1.25	1.80
	120	66	34	2	71.6	45.0	UC311	UC311L3	25	41	12	M12X1.5	1.90
60	110	65.1	27	1.5	52.4	36.2	UC212	UC212L3	25.4	39.7	10.5	M10X1.25	1.54
	120	65.1	28	1.5	57.2	40.1	UCX12	UCX12L3	25.4	39.7	12	M12X1.5	2.05
	130	71	36	2.1	81.9	52.2	UC312	UC312L3	26	45	12	M12X1.5	2.60
65	120	65.1	28	1.5	57.2	40.1	UC213	UC213L3	25.4	39.7	12	M12X1.5	1.86
	125	74.6	30	1.5	62.2	44.1	UCX13	UCX13L3	30.2	44.4	12	M12X1.5	2.52
	140	75	38	2.1	92.7	59.9	UC313	UC313L3	30	45	12	M12X1.5	3.16
70	125	74.6	30	1.5	62.2	44.1	UC214	UC214L3	30.2	44.4	12	M12X1.5	2.05
	130	77.8	32	1.5	67.4	48.3	UCX14	UCX14L3	33.3	44.5	12	M12X1.5	2.74
	150	78	40	2.1	104	68.2	UC314	UC314L3	33	45	12	M12X1.5	3.90
75	130	77.8	32	1.5	67.4	48.3	UC215	UC215L3	33.3	44.5	12	M12X1.5	2.21
	140	82.6	33	1.5	72.7	53.0	UCX15	UCX15L3	33.3	49.3	14	M12X1.5	3.41
	160	82	42	2.1	113	77.2	UC315	UC315L3	32	50	14	M14X1.5	4.70
80	140	82.6	33	2	72.7	53.0	UC216	UC216L3	33.3	49.3	14	M12X1.5	2.79
	150	85.7	35	2	84.0	61.9	UCX16	UCX16L3	34.1	51.6	14	M12X1.5	3.87
	170	86	44	2.1	123	86.7	UC316	UC316L3	34	52	14	M14X1.5	5.60
85	150	85.7	35	2	84.0	61.9	UC217	UC217L3	34.1	51.6	14	M12X1.5	3.45
	160	96	38	2	96.1	71.5	UCX17	UCX17L3	39.7	56.3	15	M12X1.5	5.05
	180	96	46	3	133	96.8	UC317	UC317L3	40	56	16	M16X1.5	6.90
90	160	96	38	2	96.1	71.5	UC218	UC218L3	39.7	56.3	15	M12X1.5	4.35
	170	104	40	2	109	81.9	UCX18	–	42.9	61.1	16	M14X1.5	6.00
	190	96	48	3	143	107	UC318	UC318L3	40	56	16	M16X1.5	7.87
95	200	103	50	3	153	119	UC319	UC319L3	41	62	18	M16X1.5	8.91
	190	117.5	43	2.1	133	105	UCX20	–	49.2	68.3	18	M16X1.5	8.56
	215	108	54	3	173	141	UC320	UC320L3	42	66	20	M18X1.5	11.2
100	225	112	56	3	184	153	UC321	–	44	68	20	M18X1.5	12.7
	240	117	60	3	205	180	UC322	UC322L3	46	71	20	M18X1.5	15.1
	260	126	64	3	207	185	UC324	UC324L3	51	75	20	M18X1.5	19.0
105	280	135	68	4	229	214	UC326	UC326L3	54	81	20	M20X1.5	23.6
	300	145	72	4	253	246	UC328	UC328L3	59	86	20	M20X1.5	29.4

Ball bearings for units tapered bore type (adapter locking)

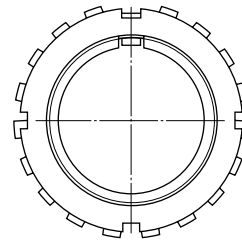
d_1 20 – 65 mm



UK



Adapter assembly



Shaft dia. (mm) d_1	Boundary dimensions (mm)				Basic load ratings (kN)		Bearing No.	(Refer.) Mass (kg)	Applicable adapter assembly					Sleeve No.
	d	D	B	C	C_r	C_{0r}			No.	B_1	B_2	d_2	Mass (kg)	
20	25	52	21	17	14.0	7.85	UK205	0.16	H305X	29	8	38	0.075	A305X
	25	62	23	19	19.5	11.3	UKX05	0.27	H2305X	35	8	38	0.095	A2305X
	25	62	27	22	20.6	11.3	UK305	0.40	H2305X	35	8	38	0.095	A2305X
25	30	62	23	19	19.5	11.3	UK206	0.25	H306X	31	8	45	0.11	A306X
	30	72	26	20	25.7	15.4	UKX06	0.43	H2306X	38	8	45	0.13	A2306X
	30	72	30	24	26.7	15.0	UK306	0.47	H2306X	38	8	45	0.13	A2306X
30	35	72	26	20	25.7	15.4	UK207	0.37	H307X	35	9	52	0.14	A307X
	35	80	27	21	29.1	17.8	UKX07	0.53	H2307X	43	9	52	0.17	A2307X
	35	80	33	26	33.4	19.3	UK307	0.60	H2307X	43	9	52	0.17	A2307X
35	40	80	27	21	29.1	17.8	UK208	0.47	H308X	36	10	58	0.19	A308X
	40	85	29	22	32.7	20.3	UKX08	0.58	H2308X	46	10	58	0.22	A2308X
	40	90	35	28	40.7	24.0	UK308	0.80	H2308X	46	10	58	0.22	A2308X
40	45	85	29	22	32.7	20.3	UK209	0.52	H309X	39	11	65	0.25	A309X
	45	90	29	24	35.1	23.3	UKX09	0.67	H2309X	50	11	65	0.28	A2309X
	45	100	38	30	48.9	29.5	UK309	1.08	H2309X	50	11	65	0.28	A2309X
50	50	90	29	24	35.1	23.3	UK210	0.59	H310X	42	12	70	0.30	A310X
	50	100	31	25	43.4	29.4	UKX10	0.89	H2310X	55	12	70	0.36	A2310X
	50	110	40	32	62.0	38.3	UK310	1.38	H2310X	55	12	70	0.36	A2310X
55	55	100	31	25	43.4	29.4	UK211	0.80	H311X	45	12	75	0.35	A311X
	55	110	33	27	52.4	36.2	UKX11	1.15	H2311X	59	12	75	0.42	A2311X
	55	120	43	34	71.6	45.0	UK311	1.78	H2311X	59	12	75	0.42	A2311X
60	60	110	33	27	52.4	36.2	UK212	1.02	H312X	47	13	80	0.43	A312X
	60	120	36	28	57.2	40.1	UKX12	1.45	H2312X	62	13	80	0.48	A2312X
	60	130	47	36	81.9	52.2	UK312	2.06	H2312X	62	13	80	0.48	A2312X
65	65	120	36	28	57.2	40.1	UK213	1.34	H313X	50	14	85	0.46	A313X
	65	125	40	30	62.2	44.1	UKX13	1.62	H2313X	65	14	85	0.56	A2313X
	65	140	49	38	92.7	59.9	UK313	2.71	H2313X	65	14	85	0.56	A2313X
75	75	130	40	32	67.4	48.3	UK215	1.50	H315X	55	15	98	0.83	A315X
	75	140	42	33	72.7	53.0	UKX15	2.10	H2315X	73	15	98	1.05	A2315X
	75	160	55	42	113	77.2	UK315	3.80	H2315X	73	15	98	1.05	A2315X

d_1 70 – 125 mm

Shaft dia. (mm) d_1	Boundary dimensions (mm)				Basic load ratings (kN)		Bearing No.	(Refer.) Mass (kg)	Applicable adapter assembly					
	d	D	B	C	C_r	C_{0r}			No.	B_1	B_2	d_2	Mass (kg)	Sleeve No.
70	80	140	42	33	72.7	53.0	UK216	1.96	H316X	59	17	105	1.05	A316X
	80	150	44	35	84.0	61.9	UKX16	2.64	H2316X	78	17	105	1.3	A2316X
	80	170	55	44	123	86.7	UK316	4.39	H2316X	78	17	105	1.3	A2316X
75	85	150	44	35	84.0	61.9	UK217	2.42	H317X	63	18	110	1.2	A317X
	85	160	48	38	96.1	71.5	UKX17	3.25	H2317X	82	18	110	1.45	A2317X
	85	180	60	46	133	96.8	UK317	5.30	H2317X	82	18	110	1.45	A2317X
80	90	160	48	38	96.1	71.5	UK218	2.90	H318X	65	18	120	1.4	A318X
	90	170	50	40	109	81.9	UKX18	3.80	H2318X	86	18	120	1.7	A2318X
	90	190	60	48	143	107	UK318	6.20	H2318X	86	18	120	1.7	A2318X
85	95	200	66	50	153	119	UK319	7.31	H2319X	90	19	125	1.95	A2319X
90	100	190	54	43	133	105	UKX20	5.36	H2320X	97	20	130	2.2	A2320X
	100	215	68	54	173	141	UK320	8.70	H2320X	97	20	130	2.2	A2320X
100	110	240	78	60	205	180	UK322	12.2	H2322X	105	21	145	2.75	A2322X
110	120	260	87	64	207	185	UK324	16.1	H2324	112	22	155	3.2	A2324
115	130	280	87	68	229	214	UK326	18.8	H2326	121	23	165	4.6	A2326
125	140	300	97	72	253	246	UK328	23.9	H2328	131	24	180	5.5	A2328



Wuxi Lotton Bearing Manufacturing Co., Ltd

Add: No.198 Industrial Park of Beitang District,
Wuxi City, Jiangsu Province, China.

Tel: +86-510-88232720

Fax: +86-510-88231994

Website: www.lottonbearing.com

Email: sales1@lottonbearing.com

Msn: sales1@lottonbearing.com

Skype: [lotton.bearing1](https://www.skype.com/people/lotton.bearing1)

