

SKF ball bearing units – UC range

Japanese Industrial Standards (JIS) compliant ball bearing units



Solid design, solid benefits

To meet industry's demands for improved protection against contaminant ingress, better shaft balance and locking strength, we have an extensive range of ball bearing units – the UC range: UC 200, UK 200, UCX and UC 300.

These bearing units offer optimized protection against contaminants as well as better resistance against washdowns. In addition, the units are available for a wide range of purposes covering normal, medium and heavy-duty applications.

Easy to order, easy to replace

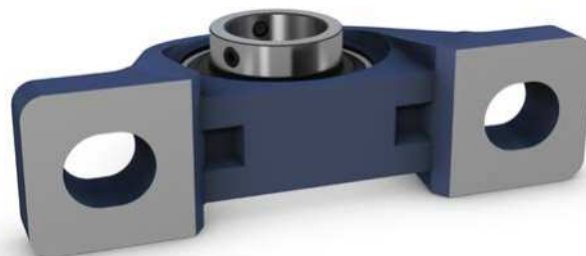
You want a solution that makes your life easy – a solution with interchangeable boundary dimensions, housing configurations and part numbers. The UC range ball bearing units achieve this and more. It's compatible with Japanese Industrial Standards, JIS, housings available today on the market. No modification of your machine is needed. The dimensions meet most of the current UC designated bearing unit fitting requirements. And whatever product you need, with SKF you know it will be easy to obtain, straightforward to install and manufactured to SKF quality levels.

Robust locking systems

One of the most frequent causes for ball bearing unit failures in high-speed applications is shaft imbalance and vibration loosening the locking system. To prevent that, SKF ball bearing units come with one of two robust locking systems. The UK 200 series has a locking system with set (grub) screws, and the UK series uses an adapter sleeve system.

The set screw method enables very easy mounting and dismounting, even if space is limited. This locking method is typically used in applications where the shaft alternates the direction of rotation. A test of the axial holding power of the set screw showed that the SKF locking system performed better than our competitors' equivalent offers (see **diagram 1**).

The adapter sleeve method allows a concentric locking of the ball bearing units on the shaft and is appropriate for alternating as well as constant direction of rotation.

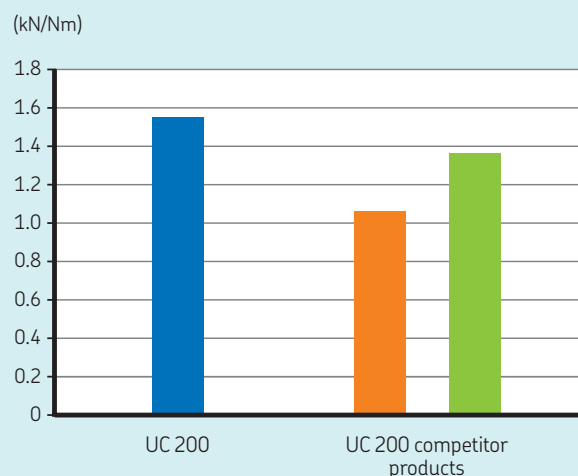


Solid design for increased cleanliness

The solid base design provides a smooth surface to avoid harbouring of contaminants, especially in contaminated conveyor operating environments. The solid design also limits the risk of dirt collecting underneath the housing support and improves resistance to vibration.

Diagram 1

Axial holding force versus screw tightening torque*



* Test on set (grub) screw locking system.

Based on typical SKF test specification, individual result may vary depending on the application conditions.

Your benefits at a glance

SKF understands machine and plant productivity and the need to deliver high rotating equipment performance. The UC range has been designed to provide reliable performance as well as reduce machine downtime. It includes specific features and performance that can make the difference in your equipment:

- Full range assortment, interchangeable with JIS housings
- 120° set (grub) screw angle for the 200 series – better balance at high speed and less deformation when locking
- 62° set screw angle for the UCX and 300 series – better holding power for high peak load and low speed
- Adapter sleeve for 200 series – allows concentric locking of the ball bearing unit
- Robust design reducing contaminant ingress and vibration
- Enhanced washdown resistance

Some of the main applications

The UC range of SKF ball bearings has a wide range of uses. Some common applications are:

- Material handling conveyors
- Agriculture machinery
- Food & beverage machinery
- Packaging equipment
- Fitness equipment
- Air handling

Other industries

The versatility of the UC range also makes it suitable for applications in:

- Textile machinery
- Construction machinery
- Escalators
- Metal industry



Normal duty range – UC 200

Better balance with a 120° locking screw angle

Bearing units of the 200 series are designed with a 120° set (grub) screw angle locking system to operate reliably in applications where good shaft balance is needed and where systemic vibration is a characteristic application condition.

A set screw angle of 120° not only improves balance at high speed, but also reduces deformation of the bearing when locking. For distribution of the forces acting on the shaft see **figure 2**.

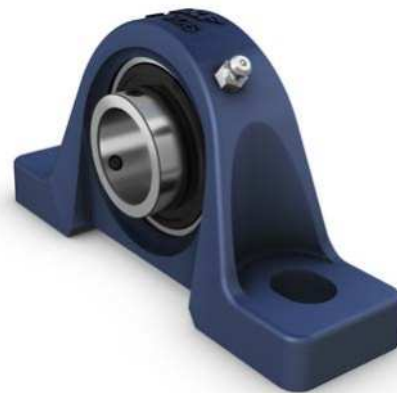
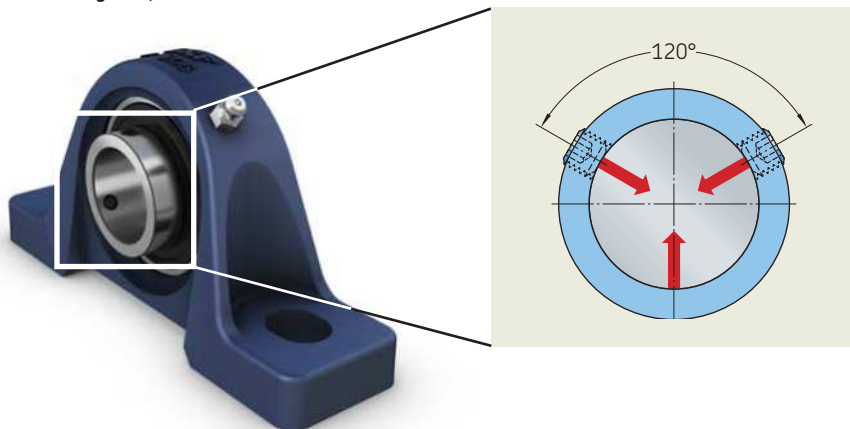


Fig. 2

UC bearing unit, 200 series



Valid up to bore diameter 65 mm. For larger diameter shaft applications with potential lower rotational speed and higher load, the ball bearing unit features a set (grub) screw angle of 62°. See figure 3.

End covers

To help comply with health and safety regulations, UCX, UC and UK 200 series with flanged and take-up housings are available with hydrophobic polypropylene end covers.



NOTE: End covers are not included with the SKF ball bearing units and must be ordered separately.

Adapter sleeve range – UK 200

For concentric locking of ball bearing units on the shaft

The UK 200 series features all the UC 200 characteristics apart from the adapter sleeve locking system, commonly used for locating bearings with a tapered bore onto a cylindrical seat.

Compared to the set (grub) screw locking system, this method allows a concentric locking of the ball bearing units on the shaft and is appropriate for alternating as well as constant direction of rotation.



NOTE: Adapter sleeves are not included with the SKF ball bearing units and must be ordered separately.

Medium duty range – UCX

Higher load carrying capacity than UC 200

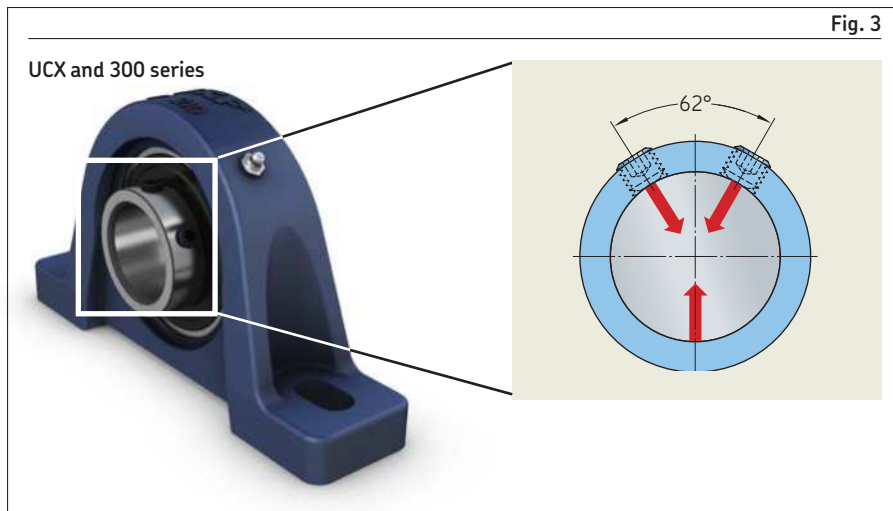
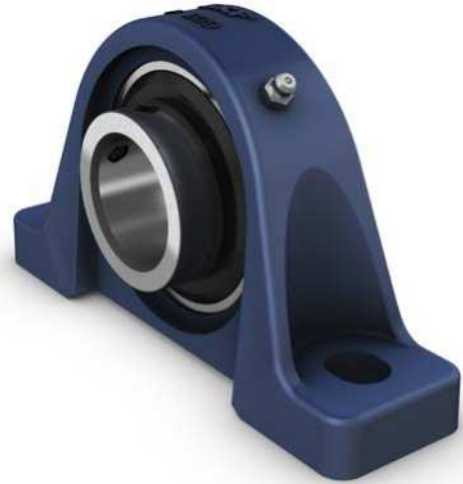
The UCX medium duty product range is based on UC 200 bearing inserts. The main difference is that UCX bearing units have thicker inner rings bringing greater load carrying capacity compared to the normal UC 200 range.

High holding power with 62° locking screws angle

Due to its use in applications with high load capacity and low speed, the UCX range has a 62° set (grub) screw angle. For distribution of the forces acting on the shaft see **figure 3**.

End covers

The UCX medium duty bearing units are available with hydrophobic polypropylene end covers, see **page 4**.



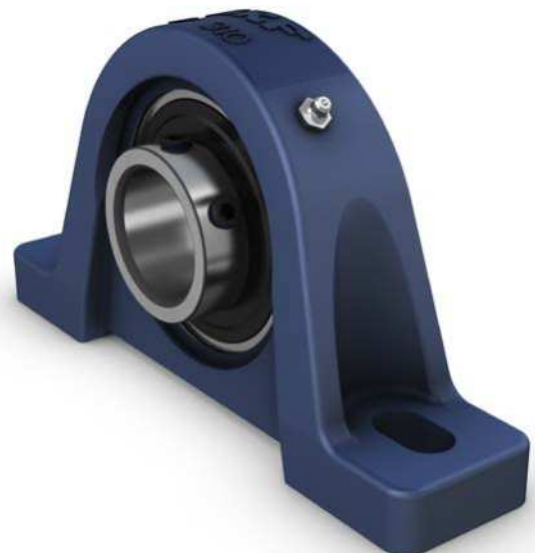
Heavy duty range – UC 300

High load carrying capacity for heavy-duty applications

The UC 300 range is based on the deep groove ball bearing 63 series giving this series the highest carrying capacity among the three ranges. As such, it can withstand a greater application load compared to the UC 200 and UCX range.

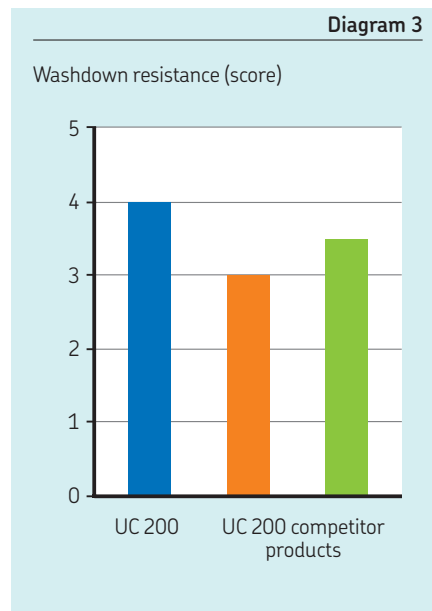
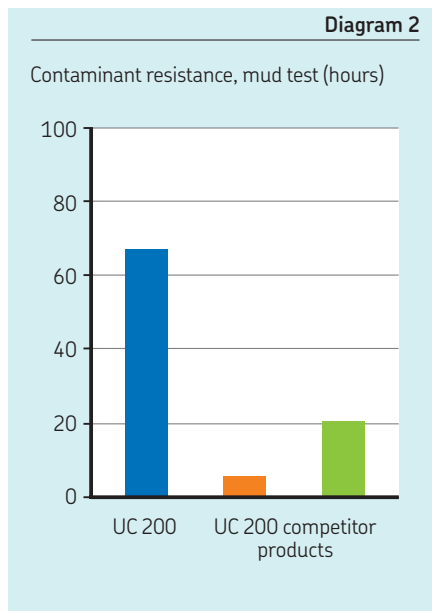
Great holding power with 62° locking screws angle

Since the 300 series is mostly used in applications with high peak loads and low rotational speeds, the range features a 62° set (grub) screw angle. For distribution of the forces acting on the shaft see **figure 3**.



Field proven sealings

The sealing system is based on field proven sealing experience and consists of an integral single-lip inner seal and an external flinger fitted on the inner ring. This additional barrier acting as a deflector, together with the seal, improves bearing protection against the ingress of contaminants. Comparative tests of contaminant and washdown resistance show that SKF units perform better than comparable competitor products (see **diagrams 2 and 3**).



Based on typical SKF test specification, individual result may vary depending on the application conditions.

SKF high-quality grease

Poor lubrication accounts for over 36% of premature bearing failures. In fact, most low speed applications fail due to lubrication related issues, not necessarily due to bearing fatigue. Provided that recommended maintenance intervals are followed, SKF high-quality grease helps bearings achieve expected service life as the SKF lubricants are designed to perform under real operating conditions (**table 1**).

Table 1

Lubricating greases	
Technical specification	Grease fills in standard ball bearings standard ball bearing units
Thickener	Lithium-calcium soap
Base oil	Mineral oil
Colour	Yellowish brown
Temperature range [°C] (continuous operation)	–30 to +120 ¹⁾
Kinematic viscosity [mm ² /s]	190 (at +40°C) 15 (at +100°C)
Consistency (to NLGI scale)	2
Other	Long life grease

¹⁾ The temperature range for reliable operation in accordance with the SKF traffic light concept is between 10 and 120 °C.
Find more information about [SKF traffic light concept on skf.com](https://www.skf.com/traffic-light-concept).

Designations

The complete designation for the SKF ball bearing units – UC range consists of:

- Prefixes, identifying ball bearing housing type
- Figures, identifying the size
- Suffixes, identifying design and variants

More details about the basic designations and the supplementary designations can be obtained from the table **Designation system**.

Designation system

Examples:	UCFL 204/H	UC	FL	2	04	/H
	UCP 316	UC	P	3	16	
	UCFX09	UC	F	X	09	
	UKT 212 K/H	UK	T	2	12	K/H

Bearing series

UC	Insert bearing with set (grub) screws
UK	Insert bearing with a tapered bore and adapter sleeve ¹⁾

Housing type

P	Plummer block unit
F	Flanged unit, square 4-bolt flange
FL	Flanged unit, oval 2-bolt flange
FC	Flanged unit, round 4-bolt flange
T	Take-up unit for linear motion
FB	Flanged unit, 3-bolt bracket flange
PA	Short base plummer block unit

Dimension series

2	Normal duty series
X	Medium duty series
3	Heavy duty series

Bore diameter

	For metric shaft
04	20 mm
to	to
18	90 mm

Suffixes

K	Without adapter sleeve
/H	Higher contamination resistance compared to standard and also specifically for UC, higher stability and better load balance than standard with 120° set (grub) screw angle instead of 62°.

¹⁾ Order adapter sleeve separately.

Technical specifications

Dimensions and tolerances	Ball bearings UC type according to ISO 9628 Ball bearings UK type according to JIS B 1558, with tapered bore 1:12 Adapter sleeve for UK type H23 series according to ISO 2982-1 Housings according to JIS B 1559		
Bearing radial internal clearance	Ball bearings UC type with cylindrical bore according to Group N (CN) ISO 9628 Ball bearings UK type with tapered bore according to Group 3 (C3) ISO 9628		
Recommended fits and shaft tolerances	Ball bearings UC type with cylindrical bore: • for $P > 0,05 C$ and/or high speeds $\rightarrow h6$ • for $0,035 C < P \leq 0,05 C \rightarrow h7$ • for $0,02 C < P \leq 0,035 C$ and/or low speeds $\rightarrow h8$ • simple bearing arrangements or $P \leq 0,02 C \rightarrow h9 - h11$ Ball bearings UK type with tapered bore: • for all loads and speeds $\rightarrow h9/IT5$		
Rotation limiting speed	See product tables enclosed		
Permissible misalignment	Up to 5° when relubrication is not required Up to 2° when relubrication is required		
Lubrication and maintenance	Standard grease characteristics, please refer to table 1 Bearing relubrication is not required if: • loads and speeds are moderate • vibration does not occur • operating temperatures are between 40 and 55°C		
Cages (ball centred)	Normal duty range – UC 200	Up to size 213 Size 214 and above	Snap-type glass fibre reinforced PA66 cage Ribbon-type stamped steel cage
	Adapter sleeve range – UK 200	All sizes	Snap-type glass fibre reinforced PA66 cage
	Medium duty range – UCX	Up to size 09 Size 10 and above	Snap-type glass fibre reinforced PA66 cage Ribbon-type stamped steel cage
	Heavy duty range – UC 300	All sizes	Ribbon-type stamped steel cage

SKF's global distribution network – always close to you

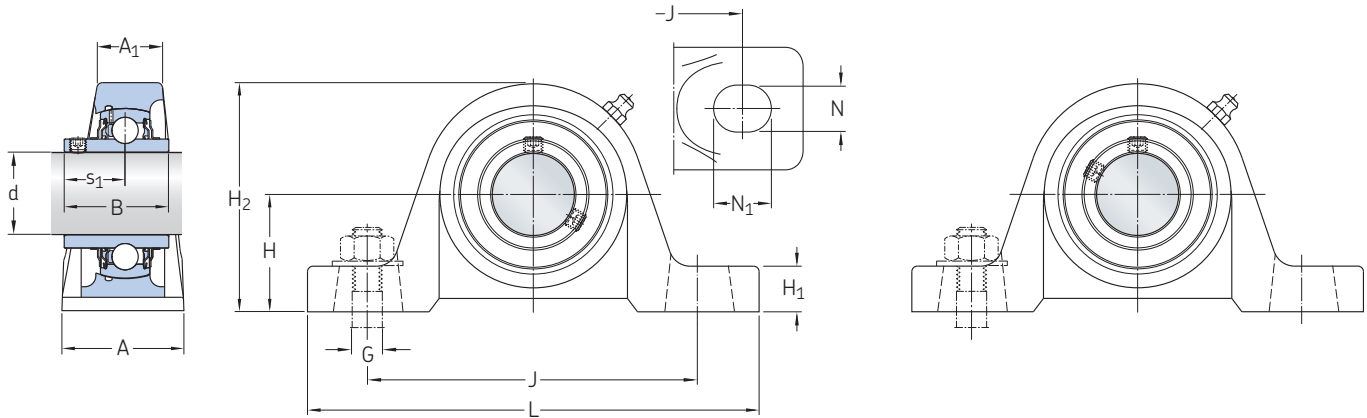
Finding replacement parts can sometimes be a challenge. SKF is well positioned to bring you the right support and the right parts, no matter where your application is based. We have 17,000 distribution locations in over 130 countries around the globe, which, together with our distribution partners, help us achieve industry leading product availability.

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1.1 Plummer block ball bearing units, set screw locking, metric shafts

d 20 – 70 mm



UCP 204/H to UCP 213/H

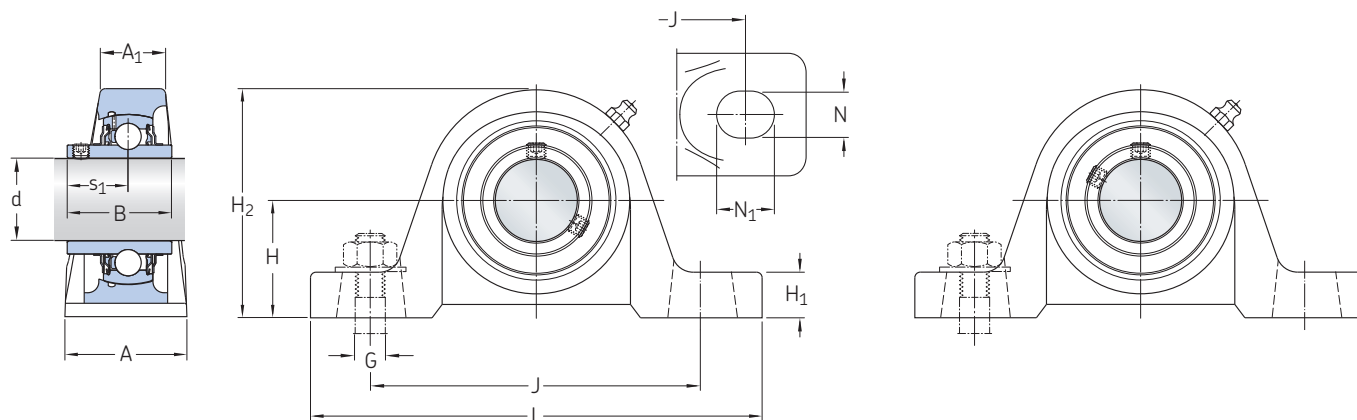
UCP 214 to UCP 218
UCP 305 to UCP 320
UCPX05 to UCPX17

Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed with shaft tolerance h6	Mass	Designations
d	H	J	C	C ₀	P _u			
mm			kN		kN	r/min	kg	–
20	33.3	95	12.7	6.55	0.28	6 500	0.6	UCP 204/H
25	36.5	105	14	7.8	0.335	5 850	0.76	UCP 205/H
	42.9	121	19.5	11.4	0.48	5 000	1.25	UCPX05
	45	132.5	22.5	11.6	0.49	6 600	1.7	UCP 305
30	42.9	121	19.5	11.2	0.475	5 000	1.2	UCP 206/H
	47.6	127	25.5	15.3	0.655	4 300	1.6	UCPX06
	50	140	26.5	15	0.64	5 300	2.15	UCP 306
35	47.6	127	25.5	15.3	0.655	4 300	1.5	UCP 207/H
	49.2	137	32.5	20	0.85	3 750	2.15	UCPX07
	56	160.5	33.2	19.3	0.815	4 700	3	UCP 307
40	49.2	137	30.7	19	0.8	3 750	2	UCP 208/H
	54	146	32.5	20.4	0.865	3 400	2.35	UCPX08
	60	170.5	41	24	1.02	4 200	3.6	UCP 308
45	54	146	33.2	21.6	0.915	3 400	2.2	UCP 209/H
	57.2	159	35.1	23.2	0.98	3 300	2.85	UCPX09
	67	190	52.7	32	1.34	3 750	5.05	UCP 309
50	57.2	159	35.1	23.2	0.98	3 300	2.7	UCP 210/H
	63.5	171	43.6	29	1.25	3 000	3.8	UCPX10
	75	212.5	61.8	38	1.6	3 400	6.45	UCP 310
55	63.5	171	43.6	29	1.25	3 000	3.55	UCP 211/H
	69.8	184	52.7	36	1.53	2 700	4.9	UCPX11
	80	236.5	71.5	45	1.9	3 100	7.8	UCP 311
60	69.8	184	52.7	36	1.53	2 700	4.55	UCP 212/H
	76.2	203	57.2	40	1.7	2 350	6.5	UCPX12
	85	250.5	81.9	52	2.2	2 900	9.65	UCP 312
65	76.2	203	57.2	40	1.7	2 350	6.25	UCP 213/H
	79.4	210	62.4	44	1.86	2 250	7.2	UCPX13
	90	260.5	92.3	60	2.5	2 650	11.3	UCP 313
70	79.4	210	62.4	44	1.86	2 250	6.9	UCP 214
	82.6	217	66.3	49	2.04	2 100	7.6	UCPX14
	95	280.5	104	68	2.75	2 500	13.7	UCP 314

Dimensions										
d	A	A ₁	B	H ₁	H ₂	L	N	N ₁	G	s ₁
mm										
20	34	23	31	13.5	64.5	127	13	18	10	18.3
25	38	23	34.1	16	70.5	139.5	13	18	10	19.8
	45	27	38.1	16.5	83.5	165	17	21	14	22.2
	45	30	38	18	90	176	17	19.5	14	23
30	45	27	38.1	16.5	83.5	165	17	21	14	22.2
	46	28	42.9	18.5	93.5	166.5	17	21	14	25.4
	47	32	43	21	100	182	17	19	14	26
35	46	28	42.9	18.5	93.5	166.5	17	21	14	25.4
	49	30	49.2	20.5	101	184	17	21	14	30.2
	54	36	48	23	111.5	209	17	24.5	14	29
40	49	30	49.2	20.5	101	184	17	21	14	30.2
	51	31	49.2	19	108	189.5	17	21	14	30.2
	57	38	52	25	119.5	221	17	26.5	14	33
45	51	31	49.2	19	108	189.5	17	21	14	30.2
	56	32	51.6	19	116	206.5	20	22	16	32.6
	63	42	57	25	136	247	20	29	16	35
50	56	32	51.6	19	116	206.5	20	22	16	32.6
	59	36	55.6	22	126	219	20	22	16	33.4
	65	43	61	25	152	275	20	34.5	16	39
55	59	36	55.6	22	126	219	20	22	16	33.4
	62	37	65.1	22	141.5	239.5	20	25	16	39.7
	68	45	66	25	162	302	20	37.5	16	41
60	62	37	65.1	22	141.5	239.5	20	25	16	39.7
	72	35	65.1	25.5	153.5	265	25	30	20	39.7
	72	48	71	35	171	321	24	36.5	20	45
65	72	35	68.3	25.5	153.5	265	25	30	20	42.9
	72	41	74.6	28	159.5	266	25	30	20	44.4
	76	51	75	35	182	331	24	36.5	20	45
70	72	41	74.6	28	159.5	266	25	30	20	44.4
	73	42	77.8	25.5	164	271.5	25	30	20	44.5
	82	55	78	40	192	358	27	39.5	22	45

1.1 Plummer block ball bearing units, set screw locking, metric shafts

d 75 – 100 mm



UCP 204/H to UCP 213/H

UCP 214 to UCP 218
UCP 305 to UCP 320
UCPX05 to UCPX17

Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations
d	H	J	C	C ₀	P _u	with shaft tolerance h6		
mm			kN		kN	r/min	kg	–
75	82.6	217	66.3	49	2.04	2 100	7.3	UCP 215
	88.9	232	71.5	54	2.2	1 900	9.8	UCPX15
	100	290.5	114	76.5	3	2 300	15.5	UCP 315
80	88.9	232	71.5	54	2.2	1 900	9.45	UCP 216
	95.2	247	83.2	64	2.5	1 800	12	UCPX16
	106	300.5	124	86.5	3.25	2 150	18.2	UCP 316
85	95.2	247	83.2	64	2.5	1 800	11.6	UCP 217
	101.6	262	95.6	72	2.7	1 600	14.6	UCPX17
	112	320.5	133	96.5	3.55	2 050	21.4	UCP 317
90	101.6	262	95.6	72	2.7	1 600	14.1	UCP 218
	118	330.5	143	108	3.8	1 950	23.7	UCP 318
95	125	360.5	153	118	4.15	1 850	29	UCP 319
100	140	380.5	174	140	4.75	1 700	36.7	UCP 320

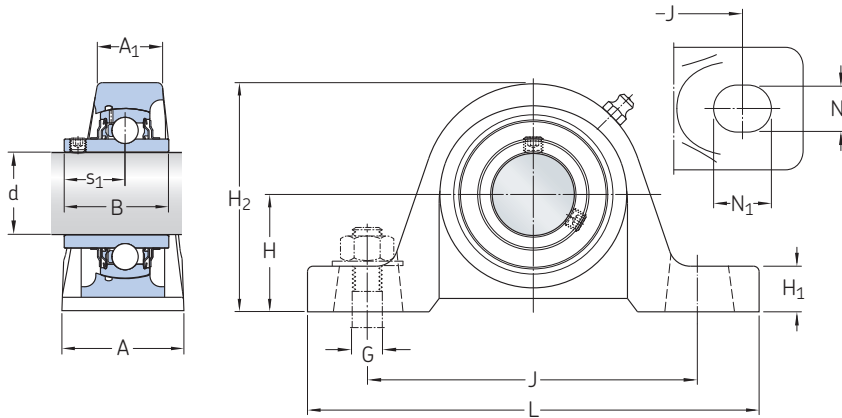
Dimensions

d	A	A ₁	B	H ₁	H ₂	L	N	N ₁	G	s ₁
mm										
75	73	42	77.8	25.5	164	271.5	25	30	20	44.5
	78	45	82.6	32.5	176	292	25	35	20	49.3
	86	58	82	40	202	368	27	39.5	22	50
80	78	45	82.6	32.5	176	292	25	35	20	49.3
	83	48	85.7	34.5	189	310.5	25	35	20	51.6
	93	62	86	40	215	378	27	39.5	22	52
85	83	48	85.7	34.5	189	310.5	25	35	20	51.6
	88	51	96	36.5	202.5	327	27	40	22	56.3
	94	63	96	47	227	411	33	44.5	27	56
90	88	51	96	36.5	202.5	327	27	40	22	56.3
	96	64	96	50	239	421	33	44.5	27	56
95	101	67	103	52	253	462	36	49.5	30	62
100	107	71	108	55	283	482	36	49.5	30	66

1.2 Plummer block ball bearing units, set screw locking, inch shafts

d $\frac{3}{4}$ – 4 in.

19,05 – 101,6 mm



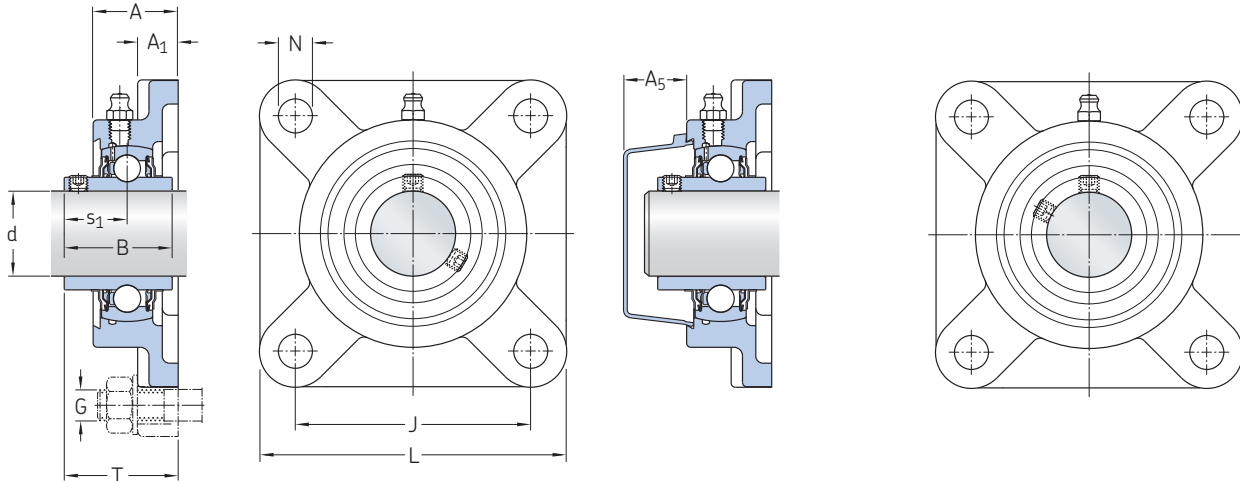
Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed with shaft tolerance h6	Mass	Designations
d	H	J	C dynamic	C ₀ static	P _u			
in./mm	mm		kN		kN	r/min	kg	–
$\frac{3}{4}$ 19.05	33.3	95	12.7	6.7	0.285	6 500	0.6	UCP 204-12
$\frac{7}{8}$ 22.225	36.5	105	14	7.8	0.335	5 850	0.79	UCP 205-14
$\frac{15}{16}$ 23.812	36.5	105	14	7.8	0.335	5 850	0.77	UCP 205-15
1 25.4	36.5	105	14	7.8	0.335	5 850	0.76	UCP 205-16
1 $\frac{1}{8}$ 28.575	42.9	121	19.5	11.4	0.48	5 000	1.2	UCP 206-18
1 $\frac{3}{16}$ 30.162	42.9	121	19.5	11.4	0.48	5 000	1.2	UCP 206-19
1 $\frac{1}{4}$ 31.75	47.6	127	25.5	15.3	0.655	4 300	1.55	UCP 207-20
1 $\frac{3}{8}$ 34.925	47.6	127	25.5	15.3	0.655	4 300	1.5	UCP 207-22
1 $\frac{7}{16}$ 36.512	47.6	127	25.5	15.3	0.655	4 300	1.5	UCP 207-23
1 $\frac{1}{2}$ 38.1	49.2	137	32.5	20	0.85	3 750	2.05	UCP 208-24
1 $\frac{3}{4}$ 44.45	54	146	32.5	20.4	0.865	3 400	2.25	UCP 209-28
2 50.8	63.5	171	43.6	29	1.25	3 000	3.75	UCP 211-32
2 $\frac{1}{4}$ 57.15	69.8	184	52.7	36	1.53	2 700	4.8	UCP 212-36
2 $\frac{1}{2}$ 63.5	76.2	203	57.2	40	1.7	2 350	6.35	UCP 213-40
3 76.2	100	290	114	76.5	3	2 300	15.4	UCP 315-48
4 101.6	140	380	174	140	4.75	1 700	36.4	UCP 320-64

Dimensions

d	A	A ₁	B	H ₁	H ₂	L	N	N ₁	G	s ₁
in./mm	mm									
3/4 19.05	34	21	31	13.5	64.5	127	13	18	10	18.3
7/8 22.225	38	22	34	16	70.5	139.5	13	18	10	19.7
15/16 23.812	38	22	34	16	70.5	139.5	13	18	10	19.7
1 25.4	38	22	34	16	70.5	139.5	13	18	10	14.3
1 1/8 28.575	45	24	38.1	16.5	83.5	165	17	21	14	22.2
1 3/16 30.162	45	24	38.1	16.5	83.5	165	17	21	14	22.2
1 1/4 31.75	46	27	42.9	18.5	93.5	166.5	17	21	14	25.4
1 3/8 34.925	46	27	42.9	18.5	93.5	166.5	17	21	14	25.4
1 7/16 36.512	46	27	42.9	18.5	93.5	166.5	17	21	14	25.4
1 1/2 38.1	49	29	49.2	20.5	101	184	17	21	14	30.2
1 3/4 44.45	51	29	49.2	19	108	189.5	17	21	14	30.2
2 50.8	59	35	55.6	22	126	219	20	22	16	33.4
2 1/4 57.15	62	36	65.1	22	141.5	239.5	20	25	16	39.7
2 1/2 63.5	72	35	65.1	25.5	153.5	265	25	30	20	39.7
3 76.2	86	57.6	82	40	202.7	368	27	39.5	22	50
4 101.6	107	71.4	108	55	283.7	482	36	49.5	30	66

1.3 Square flanged ball bearing units, set screw locking, metric shafts

d 20 – 70 mm



UCF 204/H to UCF 213/H

UCF 214 to UCF 218
UCF 305 to UCF 320
UCFX05 to UCFX17

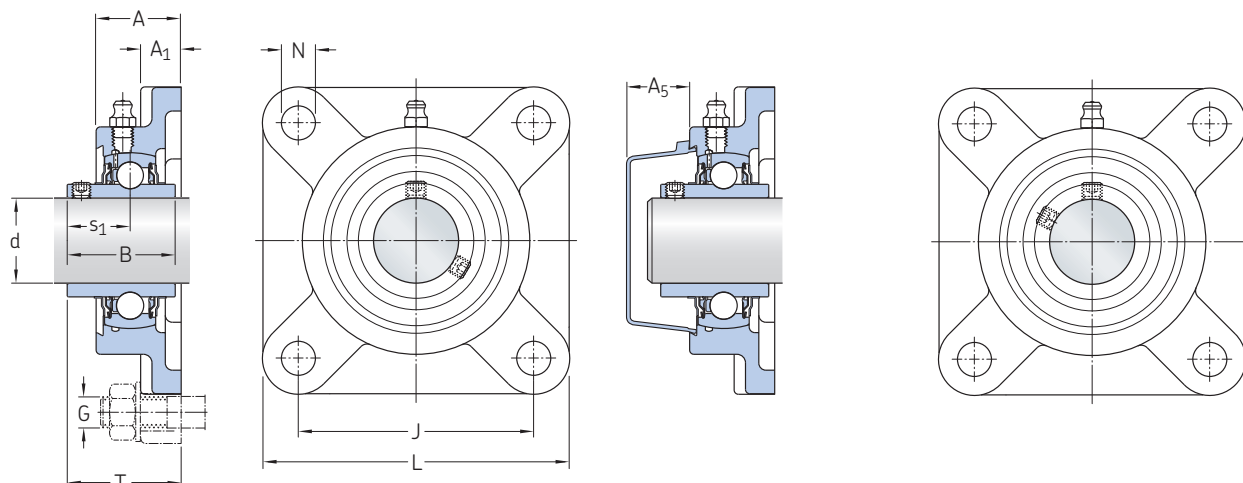
Principal dimensions		Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	J	dynamic	static	P_u	with shaft tolerance h6		Ball bearing unit	
mm		C	C_0	kN	r/min	kg	–	
20	64	12.7	6.55	0.28	6 500	0.53	UCF 204/H	ECY 204
25	70	14	7.8	0.335	5 850	0.72	UCF 205/H	ECY 205
	83	19.5	11.4	0.48	5 000	1.1	UCFX05	ECY 206
	80	22.5	11.6	0.49	6 600	1.25	UCF 305	–
30	83	19.5	11.2	0.475	5 000	1.05	UCF 206/H	ECY 206
	92	25.5	15.3	0.655	4 300	1.45	UCFX06	ECY 207
	95	26.5	15	0.64	5 300	1.75	UCF 306	–
35	92	25.5	15.3	0.655	4 300	1.35	UCF 207/H	ECY 207
	102	32.5	20	0.85	3 750	1.95	UCFX07	ECY 208
	100	33.2	19.3	0.815	4 700	2.1	UCF 307	–
40	102	30.7	19	0.8	3 750	1.8	UCF 208/H	ECY 208
	105	32.5	20.4	0.865	3 400	2.2	UCFX08	ECY 209
	112	41	24	1.02	4 200	3	UCF 308	–
45	105	33.2	21.6	0.915	3 400	2.1	UCF 209/H	ECY 209
	111	35.1	23.2	0.98	3 300	2.55	UCFX09	ECY 210
	125	52.7	32	1.34	3 750	3.8	UCF 309	–
50	111	35.1	23.2	0.98	3 300	2.4	UCF 210/H	ECY 210
	130	43.6	29	1.25	3 000	3.65	UCFX10	ECY 211
	132	61.8	38	1.6	3 400	5.05	UCF 310	–
55	130	43.6	29	1.25	3 000	3.4	UCF 211/H	ECY 211
	143	52.7	36	1.53	2 700	4.35	UCFX11	ECY 212
	140	71.5	45	1.9	3 100	5.5	UCF 311	–
60	143	52.7	36	1.53	2 700	4.05	UCF 212/H	ECY 212
	149	57.2	40	1.7	2 350	5.6	UCFX12	ECY 213
	150	81.9	52	2.2	2 900	7	UCF 312	–
65	149	57.2	40	1.7	2 350	5.35	UCF 213/H	ECY 213
	152	62.4	44	1.86	2 250	6.25	UCFX13	ECY 214
	166	92.3	60	2.5	2 650	8.6	UCF 313	–
70	152	62.4	44	1.86	2 250	5.95	UCF 214	ECY 214
	159	66.3	49	2.04	2 100	6.55	UCFX14	ECY 215
	178	104	68	2.75	2 500	10.6	UCF 314	–

Dimensions

d	A	A ₁	A ₅	B	L	N	G	s ₁	T
mm									
20	25.5	11	20.5	31	86	12	10	18.3	33.3
25	27	13	20.5	34.1	95	12	10	19.8	35.8
	30	14	22.5	38.1	108	12	10	22.2	40.2
	31	14	–	38	112	16	14	23	39
30	30	14	22.5	38.1	108	12	10	22.2	40.2
	32	15	24.5	42.9	118	14	12	25.4	44.4
	34	16	–	43	127	16	14	26	44
35	32	15	24.5	42.9	118	14	12	25.4	44.4
	35.5	15	26	49.2	130	16	14	30.2	51.2
	38	17	–	48	137	19	16	29	49
40	35.5	15	26	49.2	130	16	14	30.2	51.2
	38	16	26.5	49.2	137	16	14	30.2	52.2
	42	18	–	52	149	19	16	33	56
45	38	16	26.5	49.2	137	16	14	30.2	52.2
	39.5	16	33	51.6	143	16	14	32.6	54.6
	46	19	–	57	162	19	16	35	60
50	39.5	16	33	51.6	143	16	14	32.6	54.6
	43	18	37.5	55.6	162	19	16	33.4	58.4
	49.5	20	–	61	175	23	20	39	67
55	43	18	37.5	55.6	162	19	16	33.4	58.4
	47.5	18	39	65.1	175	19	16	39.7	68.7
	53	21	–	66	175	23	20	41	71
60	47.5	18	39	65.1	175	19	16	39.7	68.7
	50	22	39	65.1	187	19	16	39.7	69.7
	57.5	23	–	71	193	23	20	45	78
65	50	22	39	68.3	187	19	16	42.9	72.9
	54	22	41.5	74.6	193	19	16	44.4	75.4
	59	23	–	75	209	23	20	45	78
70	54	22	41.5	74.6	193	19	16	44.4	75.4
	56.5	22	41.5	77.8	200	19	16	44.5	78.5
	63	26	–	78	223	25	22	45	81

1.3 Square flanged ball bearing units, set screw locking, metric shafts

d 75 – 100 mm



UCF 204/H to UCF 213/H

UCF 214 to UCF 218
UCF 305 to UCF 320
UCFX05 to UCFX17

Principal dimensions		Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	J	dynamic	static		with shaft tolerance h6		Ball bearing unit	
mm		C	C ₀	P _u	r/min	kg	–	
75	159	66.3	49	2.04	2 100	6.2	UCF 215	ECY 215
	165	71.5	54	2.2	1 900	7.75	UCFX15	–
	184	114	76.5	3	2 300	11.6	UCF 315	–
80	165	71.5	54	2.2	1 900	7.35	UCF 216	–
	175	83.2	64	2.5	1 800	9.8	UCFX16	–
	196	124	86.5	3.25	2 150	15.4	UCF 316	–
85	175	83.2	64	2.5	1 800	9.35	UCF 217	–
	187	95.6	72	2.7	1 600	12	UCFX17	–
	204	133	96.5	3.55	2 050	17.2	UCF 317	–
90	187	95.6	72	2.7	1 600	11.5	UCF 218	–
	216	143	108	3.8	1 950	18.8	UCF 318	–
95	228	153	118	4.15	1 850	23.1	UCF 319	–
100	242	174	140	4.75	1 700	29.8	UCF 320	–

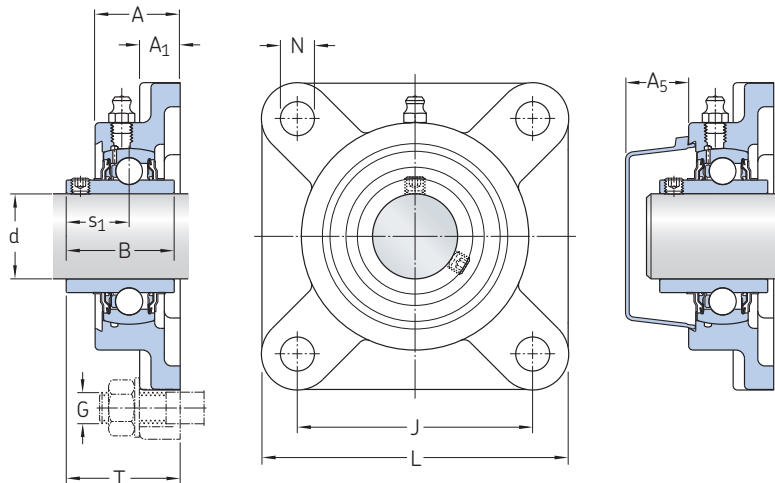
Dimensions

d	A	A ₁	A ₅	B	L	N	G	s ₁	T
mm									
75	56.5	22	41.5	77.8	200	19	16	44.5	78.3
	58	22	41.5	82.6	208	23	20	49.3	83.3
	68	26	–	82	229	25	22	50	89
80	58	22	41.5	82.6	208	23	20	49.3	83.3
	62.5	24	43	85.7	220	23	20	51.6	87.6
	68.5	28	–	86	252	31	28	52	90
85	62.5	24	43	85.7	220	23	20	51.6	87.6
	68.5	25	45.5	96	235	23	20	56.3	96.3
	75	28	–	96	261	31	27	56	100
90	68.5	25	45.5	96	235	23	20	56.3	96
	76	31	–	96	279	35	29	56	100
	92.5	31	–	103	291	35	30	62	121
100	94.5	33	–	108	312	38	33	66	125

1.4 Square flanged ball bearing units, set screw locking, inch shafts

d $\frac{3}{4}$ – 4 in.

19,05 – 101,6 mm



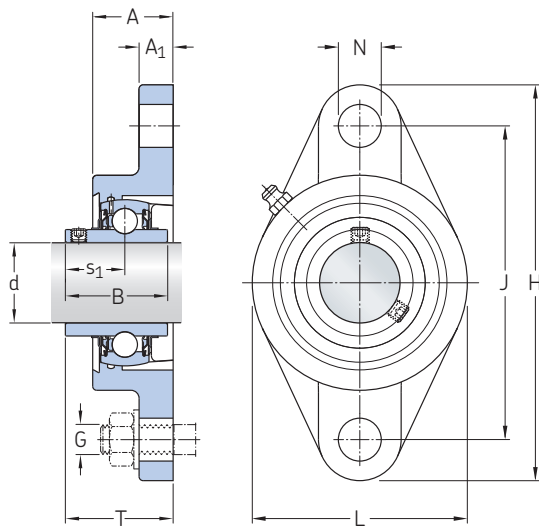
Principal dimensions		Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	J	dynamic	static	P_u	with shaft tolerance h6		Ball bearing unit	
in./mm	mm	C	C_0	kN	r/min	kg	–	
$\frac{3}{4}$ 19.05	64	12.7	6.7	0.285	6 500	0.53	UCF 204-12	ECY 204
$\frac{7}{8}$ 22.225	70	14	7.8	0.335	5 850	0.74	UCF 205-14	ECY 205
$\frac{15}{16}$ 23.812	70	14	7.8	0.335	5 850	0.73	UCF 205-15	ECY 205
1 25.4	70	14	7.8	0.335	5 850	0.71	UCF 205-16	ECY 205
1 $\frac{1}{8}$ 28.575	83	19.5	11.4	0.48	5 000	1.05	UCF 206-18	ECY 206
1 $\frac{3}{16}$ 30.162	83	19.5	11.4	0.48	5 000	1.05	UCF 206-19	ECY 206
1 $\frac{1}{4}$ 31.75	92	25.5	15.3	0.655	4 300	1.4	UCF 207-20	ECY 207
1 $\frac{3}{8}$ 34.925	92	25.5	15.3	0.655	4 300	1.35	UCF 207-22	ECY 207
1 $\frac{7}{16}$ 36.512	92	25.5	15.3	0.655	4 300	1.3	UCF 207-23	ECY 207
1 $\frac{1}{2}$ 38.1	102	32.5	20	0.85	3 750	1.85	UCF 208-24	ECY 208
1 $\frac{3}{4}$ 44.45	105	32.5	20.4	0.865	3 400	2.1	UCF 209-28	ECY 209
2 50.8	130	43.6	29	1.25	3 000	3.6	UCF 211-32	ECY 211
2 $\frac{1}{4}$ 57.15	143	52.7	36	1.53	2 700	4.25	UCF 212-36	ECY 212
2 $\frac{1}{2}$ 63.5	149	57.2	40	1.7	2 350	5.4	UCF 213-40	ECY 213
3 76.2	184	114	76.5	3	2 300	11.6	UCF 315-48	–
4 101.6	242	174	140	4.75	1 700	29.5	UCF 320-64	–

Dimensions

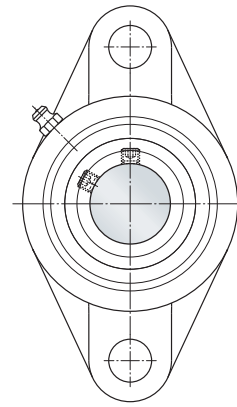
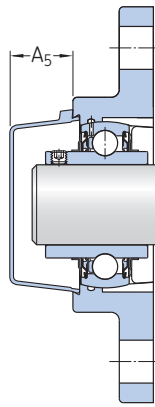
d	A	A ₁	A ₅	B	L	N	G	s ₁	T
in./mm	mm								
3/4 19.05	25.5	11	20.5	31	86	12	10	18.3	33.3
7/8 22.225	27	13	20.5	34	95	12	10	19.7	35.7
15/16 23.812	27	13	20.5	34	95	12	10	19.7	35.7
1 25.4	27	13	20.5	34	95	12	10	14.3	35.7
1 1/8 28.575	30	14	22.5	38.1	108	12	10	22.2	40.2
1 3/16 30.162	30	14	22.5	38.1	108	12	10	22.2	40.2
1 1/4 31.75	32	15	24.5	42.9	118	14	12	25.4	44.4
1 3/8 34.925	32	15	24.5	42.9	118	14	12	25.4	44.4
1 7/16 36.512	32	15	24.5	42.9	118	14	12	25.4	44.4
1 1/2 38.1	35.5	15	26	49.2	130	16	14	30.2	51.2
1 3/4 44.45	38	16	26.5	49.2	137	16	14	30.2	52.2
2 50.8	43	18	37.5	55.6	162	19	16	33.4	58.4
2 1/4 57.15	47.5	18	39	65.1	175	19	16	39.7	68.7
2 1/2 63.5	50	22	39	65.1	187	19	16	39.7	69.7
3 76.2	68	26	–	82	229	25	22	50	89
4 101.6	94.5	33	–	108	312	38	33	66	125

1.5 Oval flanged ball bearing units, set screw locking

d 20 – 90 mm



UCFL 204/H to UCFL 213/H



UCFL 214 to UCFL 218
UCFLX05 to UCFLX17

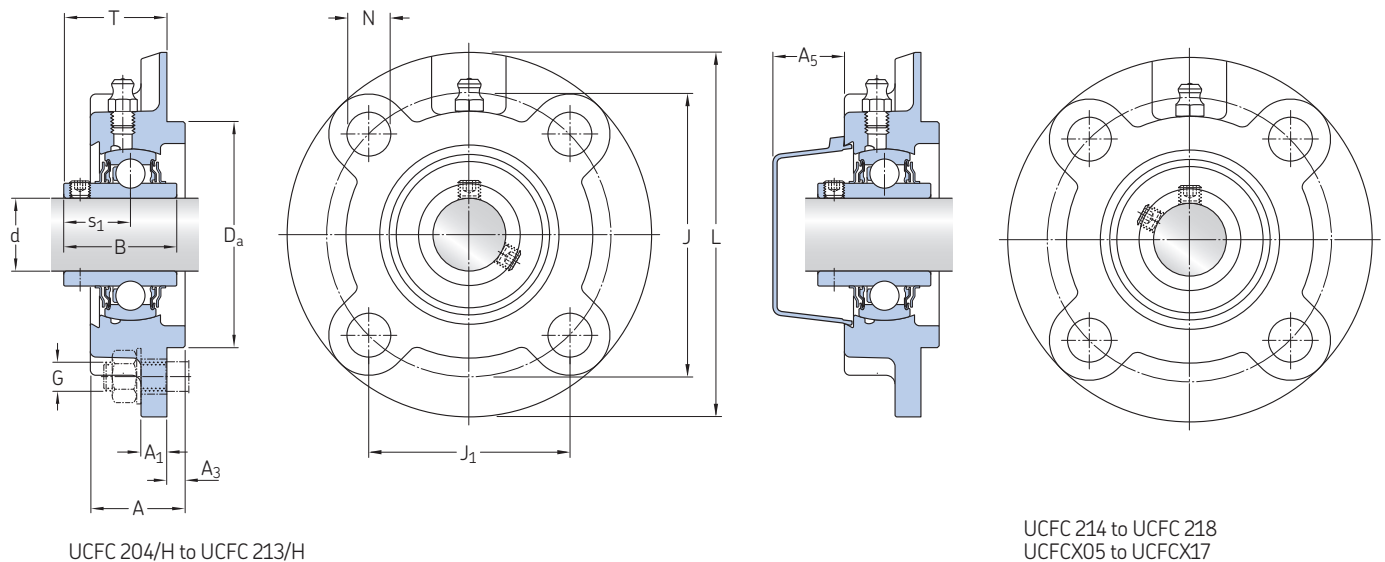
Principal dimensions		Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	J	dynamic	static	P_u	with shaft tolerance h6		Ball bearing unit	
mm		C	C_0	kN	r/min	kg	–	
20	90	12.7	6.55	0.28	6 500	0.44	UCFL 204/H	ECY 204
25	99	14	7.8	0.335	5 850	0.61	UCFL 205/H	ECY 205
	117	19.5	11.4	0.48	5 000	0.96	UCFLX05	ECY 206
30	117	19.5	11.2	0.475	5 000	0.9	UCFL 206/H	ECY 206
	130	25.5	15.3	0.655	4 300	1.25	UCFLX06	ECY 207
35	130	25.5	15.3	0.655	4 300	1.15	UCFL 207/H	ECY 207
	144	32.5	20	0.85	3 750	1.65	UCFLX07	ECY 208
40	144	30.7	19	0.8	3 750	1.5	UCFL 208/H	ECY 208
	148	32.5	20.4	0.865	3 400	1.95	UCFLX08	ECY 209
45	148	33.2	21.6	0.915	3 400	1.8	UCFL 209/H	ECY 209
	157	35.1	23.2	0.98	3 300	2.3	UCFLX09	ECY 210
50	157	35.1	23.2	0.98	3 300	2.2	UCFL 210/H	ECY 210
	184	43.6	29	1.25	3 000	3.3	UCFLX10	ECY 211
55	184	43.6	29	1.25	3 000	3.05	UCFL 211/H	ECY 211
	202	52.7	36	1.53	2 700	4.2	UCFLX11	ECY 212
60	202	52.7	36	1.53	2 700	3.85	UCFL 212/H	ECY 212
	210	57.2	40	1.7	2 350	5.1	UCFLX12	ECY 213
65	210	57.2	40	1.7	2 350	4.85	UCFL 213/H	ECY 213
	216	62.4	44	1.86	2 250	5.75	UCFLX13	ECY 214
70	216	62.4	44	1.86	2 250	5.45	UCFL 214	ECY 214
	225	66.3	49	2.04	2 100	6.3	UCFLX14	ECY 215
75	225	66.3	49	2.04	2 100	5.95	UCFL 215	ECY 215
	233	71.5	54	2.2	1 900	7.85	UCFLX15	–
80	233	71.5	54	2.2	1 900	7.5	UCFL 216	–
	248	83.2	64	2.5	1 800	9.2	UCFLX16	–
85	248	83.2	64	2.5	1 800	8.75	UCFL 217	–
	265	95.6	72	2.7	1 600	11.8	UCFLX17	–
90	265	95.6	72	2.7	1 600	11.3	UCFL 218	–

Dimensions

d	A	A ₁	A ₅	B	H	L	N	G	s ₁	T
mm										
20	25.5	11	20.5	31	113	60	12	10	18.3	33.3
25	27	13	20.5	34.1	130	68	16	14	19.8	35.8
	30	13	22.5	38.1	147.5	80	16	14	22.2	40.2
30	30	13	22.5	38.1	147.5	80	16	14	22.2	40.2
	32	14	24.5	42.9	161	90	16	14	25.4	44.4
35	32	14	24.5	42.9	161	90	16	14	25.4	44.4
	34	14	26	49.2	174.5	100	16	14	30.2	51.2
40	34	14	26	49.2	174.5	100	16	14	30.2	51.2
	35	15	26.5	49.2	188	108	19	16	30.2	52.2
45	35	15	26.5	49.2	188	108	19	16	30.2	51.2
	39	15	33	51.6	197	115	19	16	32.6	54.6
50	39	15	33	51.6	197	115	19	16	32.6	53.6
	41.5	18	37.5	55.6	224	130	19	16	33.4	58.4
55	41.5	18	37.5	55.6	224	130	19	16	33.4	58.4
	45	18	39	65.1	250	140	23	20	39.7	68.7
60	45	18	39	65.1	250	140	23	20	39.7	68.7
	47	20	39	65.1	258	155	23	20	39.7	69.7
65	47	20	39	68.3	258	155	23	20	42.9	72.9
	50	20	41.5	74.6	265	160	23	20	44.4	75.4
70	50	20	41.5	74.6	265	160	23	20	44.4	75.4
	54	20	41.5	77.8	275	164	23	20	44.5	78.5
75	54	20	41.5	77.8	275	164	23	20	44.5	78.5
	56	20	41.5	82.6	290	180	25	22	49.3	83.3
80	56	20	41.5	82.6	290	180	25	22	49.3	83.3
	60	22	43	85.7	305	190	25	22	51.6	87.6
85	60	22	43	85.7	305	190	25	22	51.6	87.6
	68	23	45.5	96	320	205	25	22	56.3	96.3
90	68	23	45.5	96	320	205	25	22	56.3	96.3

1.6 Round flanged ball bearing units, set screw locking

d 20 – 90 mm



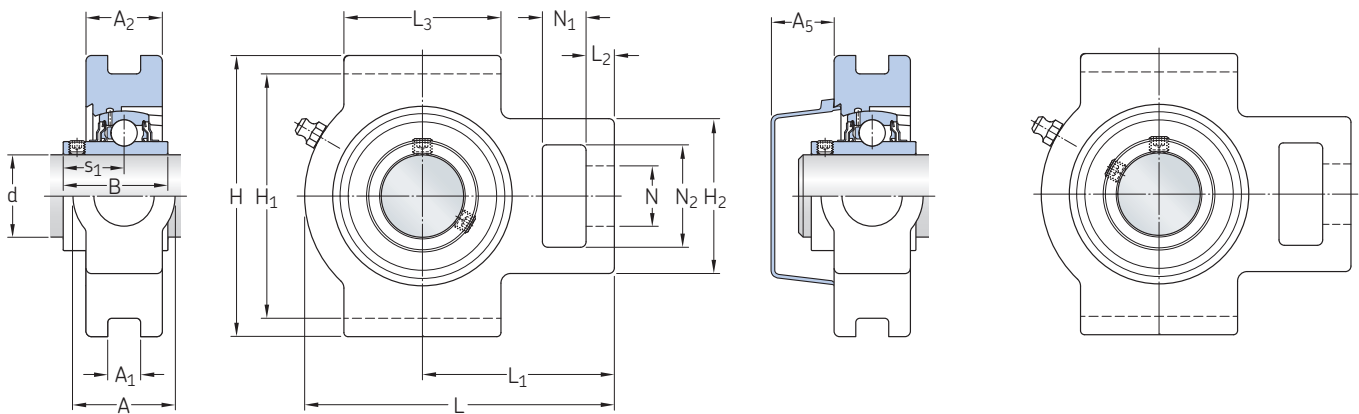
Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	Da	J	J ₁	C	C ₀	P _u	with shaft tolerance h6	kg	Ball bearing unit	
h8									–	
mm				kN		kN	r/min			
20	62	78	55.2	12.7	6.55	0.28	6 500	0.71	UCFC 204/H	ECY 204
25	70	90	63.6	14	7.8	0.335	5 850	1	UCFC 205/H	ECY 205
	80	100	70.7	19.5	11.4	0.48	5 000	1.35	UCFCX05	ECY 206
30	80	100	70.7	19.5	11.2	0.475	5 000	1.3	UCFC 206/H	ECY 206
	90	110	77.8	25.5	15.3	0.655	4 300	1.7	UCFCX06	ECY 207
35	90	110	77.8	25.5	15.3	0.655	4 300	1.6	UCFC 207/H	ECY 207
	100	120	84.9	32.5	20	0.85	3 750	2.15	UCFCX07	ECY 208
40	100	120	84.9	30.7	19	0.8	3 750	2	UCFC 208/H	ECY 208
	105	132	93.3	32.5	20.4	0.865	3 400	2.7	UCFCX08	ECY 209
45	105	132	93.3	33.2	21.6	0.915	3 400	2.7	UCFC 209/H	ECY 209
	110	138	97.6	35.1	23.2	0.98	3 300	3.05	UCFCX09	ECY 210
50	110	138	97.6	35.1	23.2	0.98	3 300	2.9	UCFC 210/H	ECY 210
	125	150	106.1	43.6	29	1.25	3 000	4.3	UCFCX10	ECY 211
55	125	150	106.1	43.6	29	1.25	3 000	4.1	UCFC 211/H	ECY 211
	135	160	113.1	52.7	36	1.53	2 700	5.25	UCFCX11	ECY 212
60	135	160	113.1	52.7	36	1.53	2 700	4.95	UCFC 212/H	ECY 212
	145	170	120.2	57.2	40	1.7	2 350	5.9	UCFCX12	ECY 213
65	145	170	120.2	57.2	40	1.7	2 350	5.65	UCFC 213/H	ECY 213
	150	177	125.2	62.4	44	1.86	2 250	7.15	UCFCX13	ECY 214
70	150	177	125.2	62.4	44	1.86	2 250	6.85	UCFC 214	ECY 214
	160	184	130.1	66.3	49	2.04	2 100	7.7	UCFCX14	ECY 215
75	160	184	130.1	66.3	49	2.04	2 100	7.35	UCFC 215	ECY 215
	170	200	141.4	71.5	54	2.2	1 900	9.5	UCFCX15	–
80	170	200	141.4	71.5	54	2.2	1 900	9.1	UCFC 216	–
	180	208	147.1	83.2	64	2.5	1 800	10.8	UCFCX16	–
85	180	208	147.1	83.2	64	2.5	1 800	10.4	UCFC 217	–
	190	220	155.6	95.6	72	2.7	1 600	13.3	UCFCX17	–
90	190	220	155.6	95.6	72	2.7	1 600	12.8	UCFC 218	–

Dimensions

d	A	A ₁	A ₃	A ₅	B	L	N	G	s ₁	T
mm										
20	26	7	5	20.5	31	100	12	10	18.3	28.3
25	27.5	7	6	20.5	34.1	115	12	10	19.8	29.8
	30	8	8	22.5	38.1	125	12	10	22.2	32.2
30	30	8	8	22.5	38.1	125	12	10	22.2	32.2
	32	9	8	24.5	42.9	135	14	12	25.4	36.4
35	32	9	8	24.5	42.9	135	14	12	25.4	36.4
	35.5	9	10	26	49.2	145	14	12	30.2	41.2
40	35.5	9	10	26	49.2	145	14	12	30.2	41.2
	37.5	14	12	26.5	49.2	160	16	14	30.2	40.2
45	37.5	14	12	26.5	49.2	160	16	14	30.2	40.2
	39	14	12	33	51.6	165	16	14	32.6	42.6
50	39	14	12	33	51.6	165	16	14	32.6	42.6
	43	15	12	37.5	55.6	185	19	16	33.4	46.4
55	43	15	12	37.5	55.6	185	19	16	33.4	46.4
	47.5	15	12	39	65.1	195	19	16	39.7	56.7
60	47.5	15	12	39	65.1	195	19	16	39.7	56.7
	50	15	14	39	65.1	205	19	16	39.7	55.7
65	50	15	14	39	68.3	205	19	16	42.9	58.9
	54	10	14	41.5	74.6	215	19	16	44.4	61.4
70	54	10	14	41.5	74.6	215	19	16	44.4	61.4
	56	10	16	41.5	77.8	220	19	16	44.5	62.5
75	56	10	16	41.5	77.8	220	19	16	44.5	62.5
	58	10	16	41.5	82.6	240	23	20	49.3	67.3
80	58	10	16	41.5	82.6	240	23	20	49.3	67.3
	62.5	10	18	43	85.7	250	23	20	51.6	69.6
85	62.5	10	18	43	85.7	250	23	20	51.6	69.6
	68.5	20	18	45.5	96	265	23	20	56.3	78.3
90	68.5	20	18	45.5	96	265	23	20	56.3	78.3

1.7 Take-up ball bearing units, set screw locking

d 20 – 85 mm



UCT 204/H to UCT 213/H

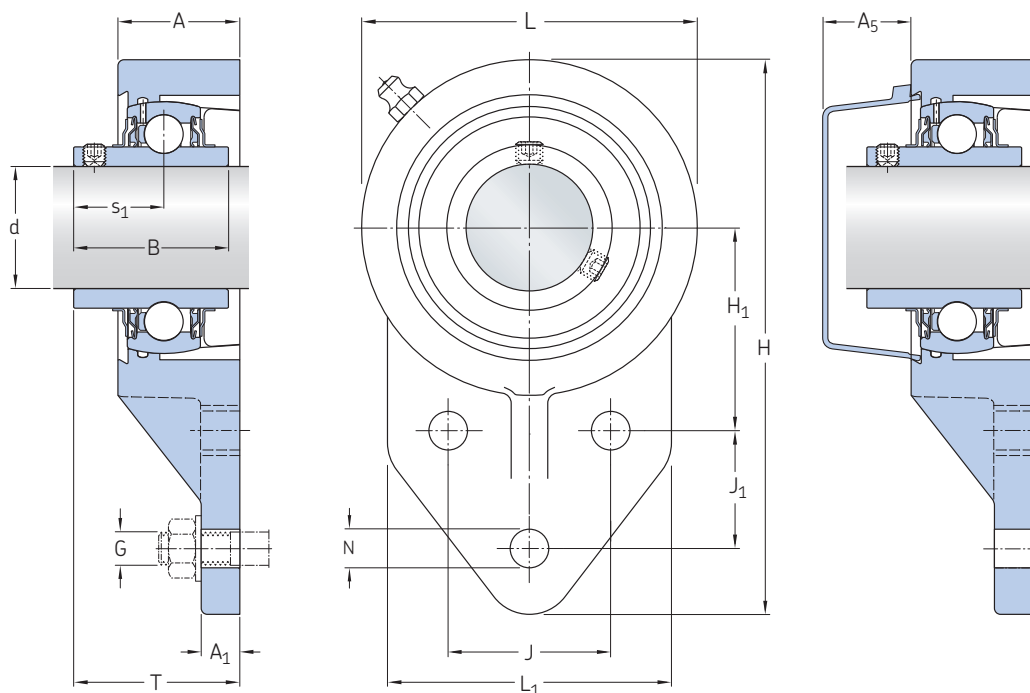
UCT 214 to UCT 217
UCTX05 to UCTX16

Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Associated end cover
d	H ₁	A ₁	N	C	C ₀	P _u	with shaft tolerance h6	kg	Ball bearing unit	
mm				kN		kN	r/min		–	
20	76	12	19	12.7	6.55	0.28	6 500	0.7	UCT 204/H	ECY 204
25	76	12	19	14	7.8	0.335	5 850	0.79	UCT 205/H	ECY 205
	89	12	22	19.5	11.4	0.48	5 000	1.3	UCTX05	ECY 206
30	89	12	22	19.5	11.2	0.475	5 000	1.25	UCT 206/H	ECY 206
	89	12	22	25.5	15.3	0.655	4 300	1.7	UCTX06	ECY 207
35	89	12	22	25.5	15.3	0.655	4 300	1.6	UCT 207/H	ECY 207
	102	16	29	32.5	20	0.85	3 750	2.45	UCTX07	ECY 208
40	102	16	29	30.7	19	0.8	3 750	2.35	UCT 208/H	ECY 208
	102	16	29	32.5	20.4	0.865	3 400	2.45	UCTX08	ECY 209
45	102	16	29	33.2	21.6	0.915	3 400	2.35	UCT 209/H	ECY 209
	102	16	29	35.1	23.2	0.98	3 300	2.65	UCTX09	ECY 210
50	102	16	29	35.1	23.2	0.98	3 300	2.5	UCT 210/H	ECY 210
	130	22	35	43.6	29	1.25	3 000	4.05	UCTX10	ECY 211
55	130	22	35	43.6	29	1.25	3 000	3.85	UCT 211/H	ECY 211
	130	22	35	52.7	36	1.53	2 700	5	UCTX11	ECY 212
60	130	22	35	52.7	36	1.53	2 700	4.7	UCT 212/H	ECY 212
	151	26	41	57.2	40	1.7	2 350	6.95	UCTX12	ECY 213
65	151	26	41	57.2	40	1.7	2 350	6.7	UCT 213/H	ECY 213
	151	26	41	62.4	44	1.86	2 250	7.2	UCTX13	ECY 214
70	151	26	41	62.4	44	1.86	2 250	6.9	UCT 214	ECY 214
	151	26	41	66.3	49	2.04	2 100	7.55	UCTX14	ECY 215
75	151	26	41	66.3	49	2.04	2 100	7.2	UCT 215	ECY 215
	165	26	41	71.5	54	2.2	1 900	8.65	UCTX15	–
80	165	26	41	71.5	54	2.2	1 900	8.3	UCT 216	–
	173	30	48	83.2	64	2.5	1 800	11.2	UCTX16	–
85	173	30	48	83.2	64	2.5	1 800	10.8	UCT 217	–

Dimensions													
d	A	A ₂	A ₅	B	H	H ₂	L	L ₁	L ₂	L ₃	N ₁	N ₂	s ₁
mm													
20	32	21	20.5	31	89	51	94	61	10	51	16	32	18.3
25	32	24	20.5	34.1	89	51	97	62	10	51	16	32	19.8
	37	28	22.5	38.1	102	56	113	70	10	57	16	37.5	22.2
30	37	28	22.5	38.1	102	56	113	70	10	57	16	37.5	22.2
	37	30	24.5	42.9	102	64	129	78	13	64	16	37.5	25.4
35	37	30	24.5	42.9	102	64	129	78	13	64	16	37.5	25.4
	49	33	26	49.2	114	83	145	88	16	83	19	49	30.2
40	49	33	26	49.2	114	83	145	88	16	83	19	49	30.2
	49	35	26.5	49.2	117	83	145	87	16	83	21	51	30.2
45	49	35	26.5	49.2	117	83	145	87	16	83	21	51	30.2
	49	37	33	51.6	117	83	148	90	16	86	19	49	32.6
50	49	37	33	51.6	117	83	148	90	16	86	19	49	32.6
	64	38	37.5	55.6	146	102	172	106	19	95	25	64.5	33.4
55	64	38	37.5	55.6	146	102	172	106	19	95	25	64.5	33.4
	64	42	39	65.1	146	102	194	119	19	102	32	64.5	39.7
60	64	42	39	65.1	146	102	194	119	19	102	32	64.5	39.7
	70	44	39	65.1	167	111	225	137	21	121	32	70	39.7
65	70	44	39	68.3	167	111	225	137	21	121	32	70	42.9
	70	46	41.5	74.6	167	111	225	137	21	121	32	70	44.4
70	70	46	41.5	74.6	167	111	225	137	21	121	32	70	44.4
	70	48	41.5	77.8	167	111	232	140	21	121	32	70	44.5
75	70	48	41.5	77.8	167	111	232	140	21	121	32	70	44.5
	70	51	41.5	82.6	184	111	235	140	21	121	32	70	49.3
80	70	51	41.5	82.6	184	111	235	140	21	121	32	70	49.3
	73	54	43	85.7	198	124	260	162	29	157	38	73	51.6
85	73	54	43	85.7	198	124	260	162	29	157	38	73	51.6

1.8 3-bolt bracket flanged ball bearing units, set screw locking

d 20 – 45 mm



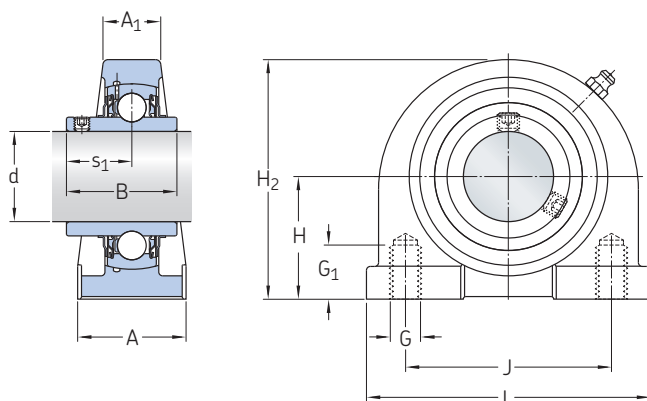
Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	
d	H ₁	J	J ₁	C	C ₀	P _u	with shaft tolerance h6	kg	Ball bearing unit	Associated end cover
mm				kN		kN	r/min		–	
20	42	32	27	12.7	6.7	0.285	6 700	0.59	UCFB 204/H	ECY 204
25	45	34	27	14	7.8	0.335	7 000	0.72	UCFB 205/H	ECY 205
30	50	40	29	19.5	11.2	0.475	5 000	1.05	UCFB 206/H	ECY 206
35	55	46	32	25.5	15.3	0.655	4 300	1.4	UCFB 207/H	ECY 207
40	60	50	41	30.7	19	0.8	3 750	1.8	UCFB 208/H	ECY 208
45	65	54	43	33.2	21.6	0.915	3 400	2.15	UCFB 209/H	ECY 209

Dimensions

d	A	A ₁	A ₅	B	H	L	L ₁	N	G	s ₁	T
mm											
20	25.5	8	20.5	31	112	64	64	9.5	8	18.3	31.8
25	27	10	20.5	34.1	118	70	66	9.5	8	19.8	34.7
30	30	10	22.5	38.1	137	83	70	9.5	8	22.2	40.9
35	33.5	13	24.5	42.9	144	90	83	9.5	8	25.4	44.4
40	35.5	16	26	49.2	164	100	78	11	10	30.2	51.2
45	37	18	26.5	49.2	176	106	80	11	10	30.2	50.2

1.9 Short base plummer block ball bearing units, set screw locking

d 20 – 50 mm



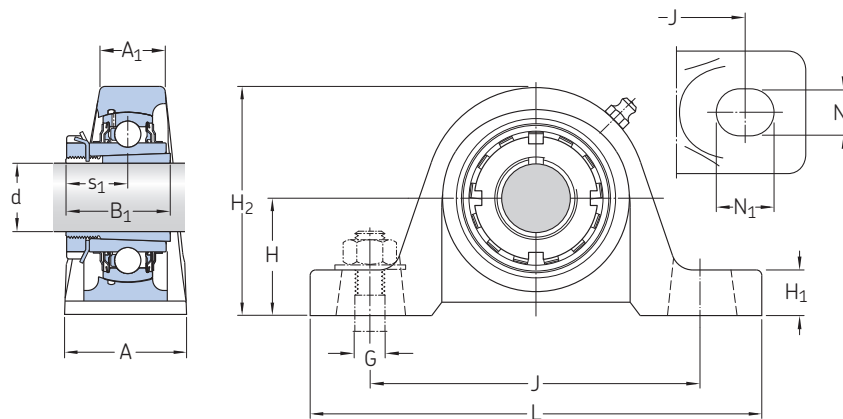
Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed with shaft tolerance h6	Mass	Designations
d	H	J	C	C ₀	P _u			
mm			kN		kN	r/min	kg	–
20	30.2	52	12.7	6.55	0.28	8 500	0.54	UCPA 204/H
25	36.5	56	14	7.8	0.335	7 000	0.76	UCPA 205/H
30	42.8	66	19.5	11.2	0.475	6 300	0.99	UCPA 206/H
35	47.6	80	25.5	15.3	0.655	4 300	1.45	UCPA 207/H
40	49.2	84	30.7	19	0.8	3 750	1.65	UCPA 208/H
45	54.2	90	33.2	21.6	0.915	3 400	1.85	UCPA 209/H
50	57.2	94	35.1	23.2	0.98	3 300	2.25	UCPA 210/H

Dimensions

d	A	A ₁	B	H ₂	L	G	G ₁	s ₁
mm						–	mm	
20	34	18	31	62	76	M10	13	18.3
25	40	21	34.1	73	84	M10	13	19.8
30	39	19	38.1	84	93.5	M14	18	22.2
35	42	22	42.9	93	110.5	M14	20	25.4
40	45	27	49.2	98	116	M14	20	30.2
45	45	26	49.2	106	120	M14	25	30.2
50	51	27	51.6	113	130	M16	25	32.6

2.1 Plummer block ball bearing units, adapter locking

d 20 – 80 mm



Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Adapter sleeve ¹⁾
d	H	J	dynamic	static	P _u	with shaft tolerance h6		Ball bearing unit	
mm			C	C ₀	kN	r/min	kg	–	
20	36.5	105	14	7.8	0.335	5 850	0.72	UKP 205 K/H	H 2305
25	42.9	121	19.5	11.2	0.475	5 000	1.15	UKP 206 K/H	H 2306
30	47.6	127	25.5	15.3	0.655	4 300	1.4	UKP 207 K/H	H 2307
35	49.2	137	30.7	19	0.8	3 750	1.9	UKP 208 K/H	H 2308
40	54	146	33.2	21.6	0.915	3 400	2.1	UKP 209 K/H	H 2309
45	57.2	159	35.1	23.2	0.98	3 300	2.55	UKP 210 K/H	H 2310
50	63.5	171	43.6	29	1.25	3 000	3.35	UKP 211 K/H	H 2311
55	69.8	184	52.7	36	1.53	2 700	4.2	UKP 212 K/H	H 2312
60	76.2	203	57.2	40	1.7	2 350	5.8	UKP 213 K/H	H 2313
65	82.6	217	66.3	49	2.04	2 100	6.65	UKP 215 K	H 2315
70	88.9	232	72.8	53	2.160	2 400	8.45	UKP 216 K	H 2316
75	95.2	247	83.2	64	2.5	1 750	10.7	UKP 217 K	H 2317
80	101.6	262	95.6	72	2.7	1 600	12.9	UKP 218 K	H 2318

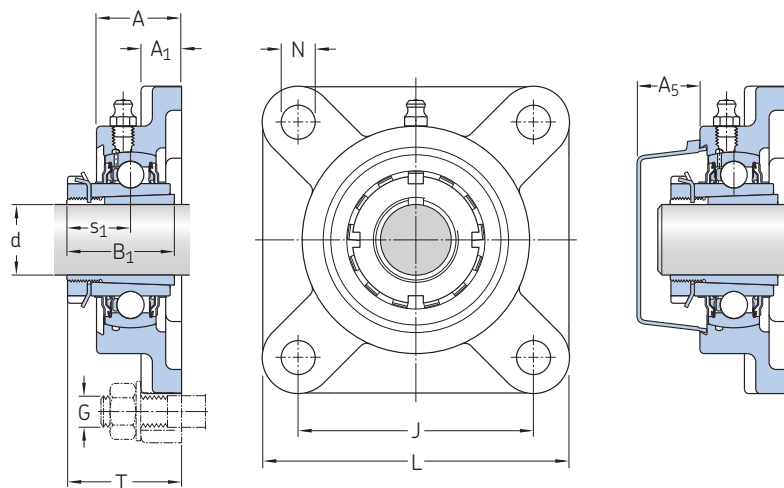
¹⁾ Order adapter sleeve separately.

Dimensions										
d	A	A ₁	B ₁	H ₁	H ₂	L	N	N ₁	G	s ₁ ²⁾
mm										
20	38	23	35	16	70.5	139.5	13	18	10	20.5
25	45	27	38	16.5	83.5	165	17	21	14	22.5
30	46	28	43	18.5	93.5	166.5	17	21	14	24.8
35	49	30	46	20.5	101	184	17	21	14	27.5
40	51	31	50	19	108	189.5	17	21	14	29
45	56	32	55	19	116	206.5	20	22	16	31.1
50	59	36	59	22	126	219	20	22	16	32.5
55	62	37	62	22	141.5	239.5	20	25	16	33.8
60	72	35	65	25.5	153.5	265	25	30	20	35.3
65	73	42	60	25.5	164	271.5	25	30	20	38.4
70	78	45	78	32.5	176	292	25	35	20	41.8
75	83	48	82	34.5	189	310.5	25	35	20	44
80	88	51	86	36.5	202.5	327	27	40	22	46.7

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.2 Square flanged ball bearing units, adapter locking

d 20 – 80 mm



Principal dimensions		Basic load ratings dynamic static		Fatigue load limit	Limiting speed with shaft tolerance h6	Mass	Designations Ball bearing unit	Adapter sleeve ¹⁾	Associated end cover
d	J	C	C ₀	P _u					
mm		kN		kN	r/min	kg	–		
20	70	14	7.8	0.335	5 850	0.68	UKF 205 K/H	H 2305	ECY 205
25	83	19.5	11.2	0.475	5 000	1	UKF 206 K/H	H 2306	ECY 206
30	92	25.5	15.3	0.655	4 300	1.25	UKF 207 K/H	H 2307	ECY 207
35	102	30.7	19	0.8	3 750	1.7	UKF 208 K/H	H 2308	ECY 208
40	105	33.2	21.6	0.915	3 400	1.95	UKF 209 K/H	H 2309	ECY 209
45	111	35.1	23.2	0.98	3 300	2.25	UKF 210 K/H	H 2310	ECY 210
50	130	43.6	29	1.25	3 000	3.2	UKF 211 K/H	H 2311	ECY 211
55	143	52.7	36	1.53	2 700	3.7	UKF 212 K/H	H 2312	ECY 212
60	149	57.2	40	1.7	2 350	4.9	UKF 213 K/H	H 2313	ECY 213
65	159	66.3	49	2.04	2 100	5.6	UKF 215 K	H 2315	ECY 215
70	165	72.8	53	2.16	2 400	6.35	UKF 216 K	H 2316	–
75	175	83.2	64	2.5	1 750	8.45	UKF 217 K	H 2317	–
80	187	95.6	72	2.7	1 600	10.3	UKF 218 K	H 2318	–

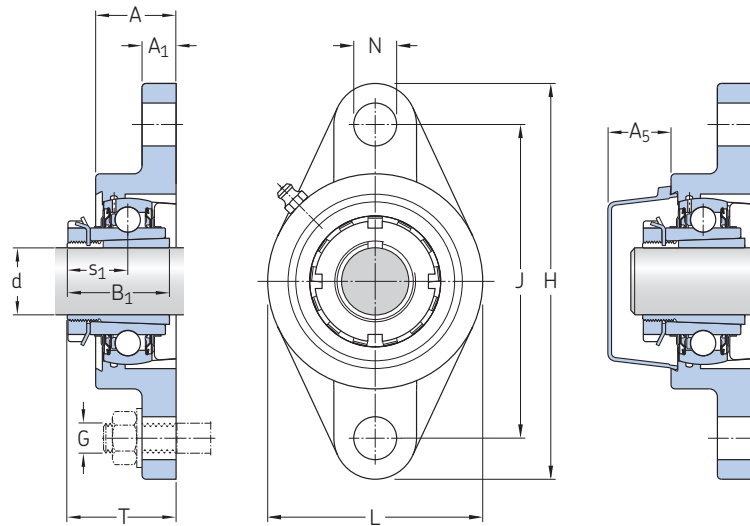
¹⁾ Order adapter sleeve separately.

Dimensions									
d	A	A ₁	A ₅	B ₁	L	N	G	s ₁ ²⁾	T
mm									
20	27	13	20.5	35	95	12	10	20.5	28
25	30	14	22.5	38	108	12	10	22.5	32
30	32	15	24.5	43	118	14	12	24.8	34.3
35	35.5	15	26	46	130	16	14	27.5	38
40	38	16	26.5	50	137	16	14	29	39.5
45	39.5	16	33	55	143	16	14	31.1	40.5
50	43	18	37.5	59	162	19	16	32.5	45
55	47.5	18	39	62	175	19	16	33.8	50.3
60	50	22	39	65	187	19	16	35.3	51.8
65	56.5	22	41.5	60	200	19	16	38.4	57.9
70	58	22	41.5	78	208	23	20	41.8	57.9
75	62.5	24	43	82	220	23	20	44	62.2
80	68.5	25	45.5	86	235	23	20	46.7	68.9

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.3 Oval flanged ball bearing units, adapter locking

d 20 – 60 mm



Principal dimensions		Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Adapter sleeve ¹⁾	Associated end cover
d	J	C	C ₀	P _u	with shaft tolerance h6		Ball bearing unit		
mm		kN		kN	r/min	kg	–		
20	99	14	7.8	0.335	5 850	0.67	UKFL 205 K/H	H 2305	ECY 205
25	117	19.5	11.2	0.475	5 000	0.97	UKFL 206 K/H	H 2306	ECY 206
30	130	25.5	15.3	0.655	4 300	1.25	UKFL 207 K/H	H 2307	ECY 207
35	144	30.7	19	0.8	3 750	1.6	UKFL 208 K/H	H 2308	ECY 208
40	148	33.2	21.6	0.915	3 400	2	UKFL 209 K/H	H 2309	ECY 209
45	157	35.1	23.2	0.98	3 300	2.4	UKFL 210 K/H	H 2310	ECY 210
50	184	43.6	29	1.25	3 000	3.3	UKFL 211 K/H	H 2311	ECY 211
55	202	52.7	36	1.53	2 700	4	UKFL 212 K/H	H 2312	ECY 212
60	210	57.2	40	1.7	2 350	5	UKFL 213 K/H	H 2313	ECY 213

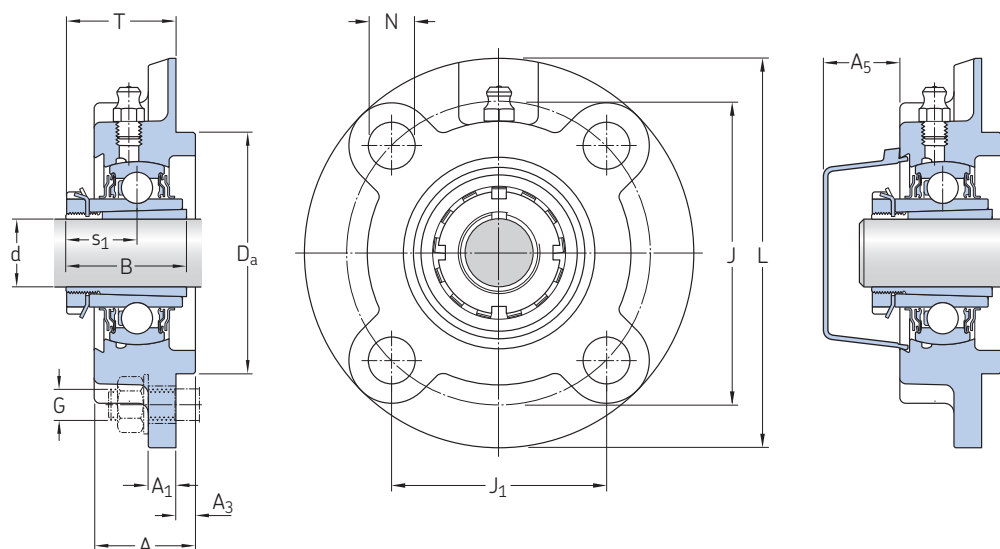
¹⁾ Order adapter sleeve separately.

Dimensions										
d	A	A ₁	A ₅	B ₁	H	L	N	G	s ₁ ²⁾	T
mm										
20	27	13	20.5	35	130	68	16	14	20.5	36.5
25	30	13	22.5	38	147.5	80	16	14	22.5	40.5
30	32	14	24.5	43	161	90	16	14	24.8	43.8
35	34	14	26	46	174.5	100	16	14	27.5	48.5
40	35	15	26.5	50	188	108	19	16	29	51
45	39	15	33	55	197	115	19	16	31.1	53.1
50	41.5	18	37.5	59	224	130	19	16	32.5	57.5
55	45	18	39	62	250	140	23	20	33.8	62.8
60	47	20	39	65	258	155	23	20	35.3	65.3

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.4 Round flanged ball bearing units, adapter locking

d 20 – 60 mm



Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Adapter sleeve ¹⁾	Associated end cover
d	D _a	J	J ₁	C	C ₀	P _u	with shaft tolerance h6		Ball bearing unit		
h8											
mm				kN		kN	r/min	kg	–		
20	70	90	63.6	14	7.8	0.335	5 850	1.05	UKFC 205 K/H	H 2305	ECY 205
25	80	100	70.7	19.5	11.2	0.475	5 000	1.35	UKFC 206 K/H	H 2306	ECY 206
30	90	110	77.8	25.5	15.3	0.655	4 300	1.7	UKFC 207 K/H	H 2307	ECY 207
35	100	120	84.9	30.7	19	0.8	3 750	2.15	UKFC 208 K/H	H 2308	ECY 208
40	105	132	93.3	33.2	21.6	0.915	3 400	2.9	UKFC 209 K/H	H 2309	ECY 209
45	110	138	97.6	35.1	23.2	0.98	3 300	3.1	UKFC 210 K/H	H 2310	ECY 210
50	125	150	106.1	43.6	29	1.25	3 000	4.3	UKFC 211 K/H	H 2311	ECY 211
55	135	160	113.1	52.7	36	1.53	2 700	5.1	UKFC 212 K/H	H 2312	ECY 212
60	145	170	120.2	57.2	40	1.7	2 350	5.75	UKFC 213 K/H	H 2313	ECY 213

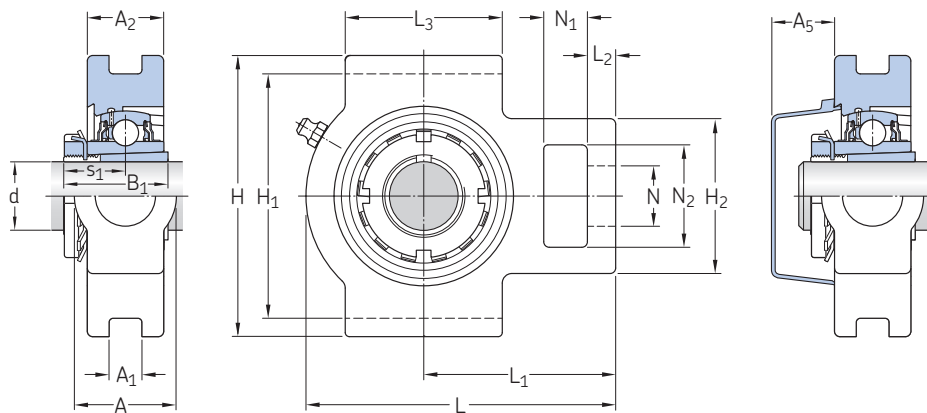
¹⁾ Order adapter sleeve separately.

Dimensions										
d	A	A ₁	A ₃	A ₅	B ₁	L	N	G	s ₁ ²⁾	T
mm										
20	27.5	7	6	20.5	35	115	12	10	20.5	30.5
25	30	8	8	22.5	38	125	12	10	22.5	32.5
30	32	9	8	24.5	43	135	14	12	24.8	35.8
35	35.5	9	10	26	46	145	14	12	27.5	38.5
40	37.5	14	12	26.5	50	160	16	14	29	39
45	39	14	12	33	55	165	16	14	31.1	41.1
50	43	15	12	37.5	59	185	19	16	32.5	45.5
55	47.5	15	12	39	62	195	19	16	33.8	50.8
60	50	15	14	39	65	205	19	16	35.3	51.3

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.5 Take-up ball bearing units, adapter locking

d 20 – 60 mm



Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Adapter sleeve ¹⁾	Associated end cover
d	H ₁	A ₁	N	C	C ₀	P _u	with shaft tolerance h6	kg	Ball bearing unit		
mm				kN		kN	r/min		–		
20	76	12	19	14	7.8	0.335	5 850	0.84	UKT 205 K/H	H 2305	ECY 205
25	89	12	22	19.5	11.2	0.475	5 000	1.3	UKT 206 K/H	H 2306	ECY 206
30	89	12	22	25.5	15.3	0.655	4 300	1.7	UKT 207 K/H	H 2307	ECY 207
35	102	16	29	30.7	19	0.8	3 750	2.45	UKT 208 K/H	H 2308	ECY 208
40	102	16	29	33.2	21.6	0.915	3 400	2.5	UKT 209 K/H	H 2309	ECY 209
45	102	16	29	35.1	23.2	0.98	3 300	2.7	UKT 210 K/H	H 2310	ECY 210
50	130	22	35	43.6	29	1.25	3 000	4.05	UKT 211 K/H	H 2311	ECY 211
55	130	22	35	52.7	36	1.53	2 700	4.8	UKT 212 K/H	H 2312	ECY 212
60	151	26	41	57.2	40	1.7	2 350	6.8	UKT 213 K/H	H 2313	ECY 213

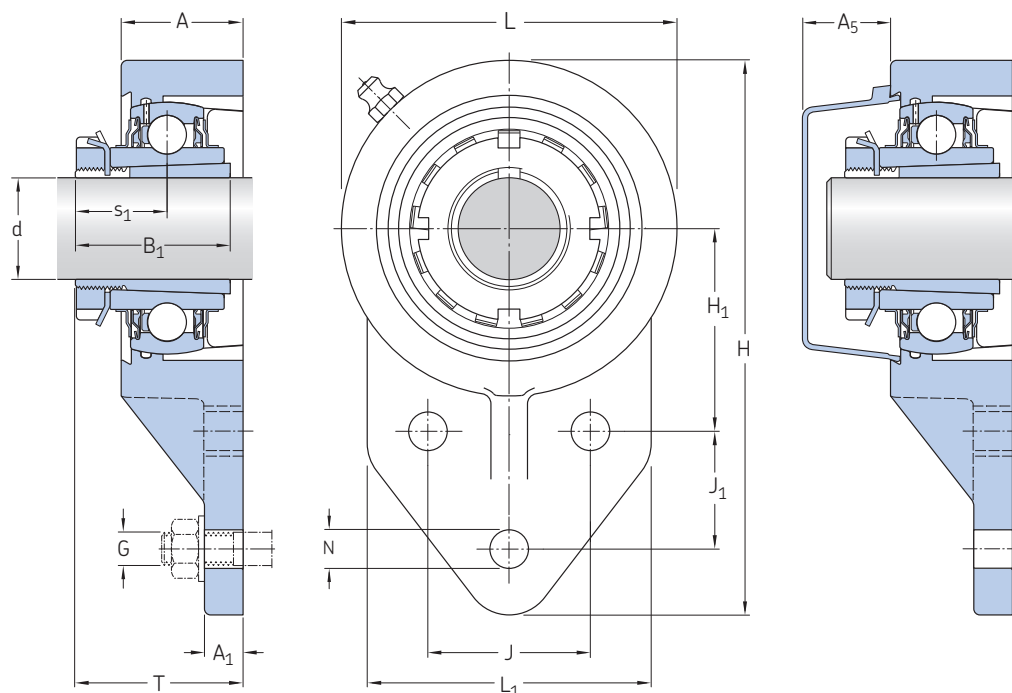
¹⁾ Order adapter sleeve separately.

Dimensions													
d	A	A ₂	A ₅	B ₁	H	H ₂	L	L ₁	L ₂	L ₃	N ₁	N ₂	s ₁ ²⁾
mm													
20	32	24	20.5	35	89	51	97	62	10	51	16	32	20.5
25	37	28	22.5	38	102	56	113	70	10	57	16	37.5	22.5
30	37	30	24.5	43	102	64	129	78	13	64	16	37.5	24.8
35	49	33	26	46	114	83	145	88	16	83	19	49	27.5
40	49	35	26.5	50	117	83	145	87	16	83	21	51	29
45	49	37	33	55	117	83	148	90	16	86	19	49	31.1
50	64	38	37.5	59	146	102	172	106	19	95	25	64.5	32.5
55	64	42	39	62	146	102	194	119	19	102	32	64.5	33.8
60	70	44	39	65	167	111	225	137	21	121	32	70	35.3

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.6 3-bolt bracket flanged ball bearing units, adapter locking

d 20 – 40 mm



Principal dimensions				Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	Adapter sleeve ¹⁾	Associated end cover
d	H ₁	J	J ₁	C	C ₀	P _u	with shaft tolerance h6	kg	Ball bearing unit		
mm				kN		kN	r/min		–		
20	45	34	27	14	7.8	0.335	5 850	0.69	UKFB 205 K/H	H 2305	ECY 205
25	50	40	29	19.5	11.2	0.475	5 000	1.1	UKFB 206 K/H	H 2306	ECY 206
30	55	46	32	25.5	15.3	0.655	4 300	1.5	UKFB 207 K/H	H 2307	ECY 207
35	60	50	41	30.7	19	0.8	3 750	1.95	UKFB 208 K/H	H 2308	ECY 208
40	65	54	43	33.2	21.6	0.915	3 400	2.3	UKFB 209 K/H	H 2309	ECY 209

¹⁾ Order adapter sleeve separately.

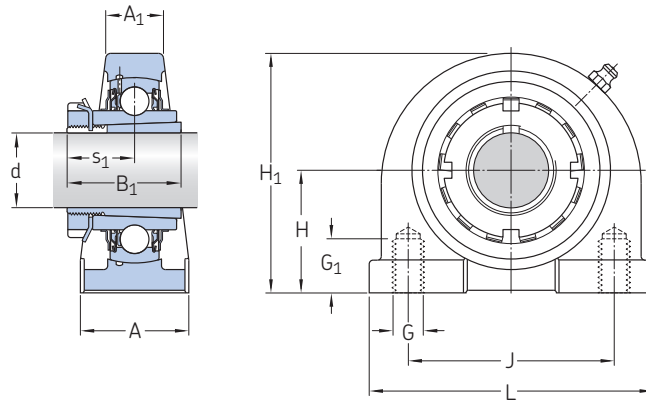
Dimensions

d	A	A ₁	A ₅	B ₁	H	L	L ₁	N	G	s ₁ ²⁾	T
mm											
20	27	10	20.5	35	118	70	66	9.5	8	12	34.7
25	30	10	22.5	38	137	83	70	9.5	8	22.5	41.2
30	33.5	13	24.5	43	144	90	83	9.5	8	24.8	43.8
35	35.5	16	26	46	164	100	78	11	10	27.5	48.5
40	37	18	26.5	50	176	106	80	11	10	29	49

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

2.7 Short base plummer block ball bearing units, adapter locking

d 20 – 45 mm



Principal dimensions			Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designations	
d	H	J	dynamic	static	P_u	with shaft tolerance h6		Ball bearing unit	Adapter sleeve ¹⁾
mm			C	C_0	kN	r/min	kg	–	
20	36.5	56	14	7.8	0.335	5 850	0.82	UKPA 205 K/H	H 2305
25	42.8	66	19.5	11.2	0.475	5 000	1.05	UKPA 206 K/H	H 2306
30	47.6	80	25.5	15.3	0.655	4 300	1.5	UKPA 207 K/H	H 2307
35	49.2	84	30.7	19	0.8	3 750	1.75	UKPA 208 K/H	H 2308
40	54.2	90	33.2	21.6	0.915	3 400	2	UKPA 209 K/H	H 2309
45	57.2	94	35.1	23.2	0.98	3 300	2.45	UKPA 210 K/H	H 2310

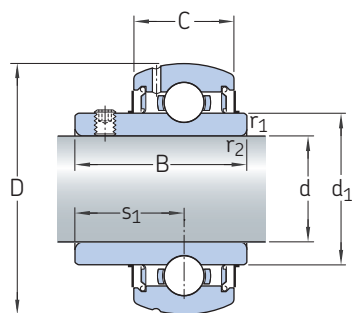
¹⁾ Order adapter sleeve separately.

Dimensions								
d	A	A ₁	B ₁	H ₁	L	G	G ₁	s ₁ ²⁾
mm						–	mm	
20	40	21	35	73	84	M10	13	12
25	39	19	38	84	93.5	M12	18	14
30	42	22	43	93	110.5	M14	20	24.8
35	45	27	46	98	116	M14	20	27.5
40	45	26	50	106	120	M14	25	29
45	51	27	55	113	130	M16	25	31.1

²⁾ Values for s₁ are valid before the sleeve is driven into the bearing bore (sleeve and inner ring at starting position).

3.1 Insert bearings with set screws, metric shafts

d 25 – 100 mm

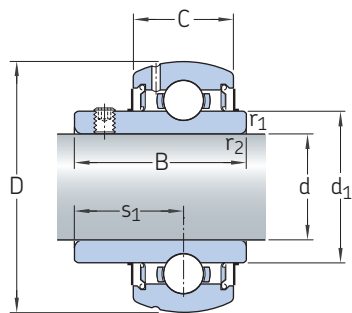


Dimensions							Basic load ratings		Fatigue load limit	Limiting speed	Mass	Designation
d	D	B	C	d ₁	s ₁	r _{1,2} min.	C	C ₀	P _u	with shaft tolerance h6	kg	–
mm							kN		kN	r/min		
25	62	38.1	18	39.8	22.2	1.5	19.5	11.4	0.48	5 000	0.36	UCX05
	62	38	20	36	23	2	22.5	11.6	0.49	6 600	0.34	UC 305
30	72	42.9	19	46.8	25.4	2	25.5	15.3	0.655	4 300	0.54	UCX06
	72	43	21	44.8	26	2	26.5	15	0.64	5 300	0.54	UC 306
35	80	49.2	22	52.5	30.2	2	32.5	20	0.85	3 750	0.72	UCX07
	80	48	23	50.4	29	2.5	33.2	19.3	0.815	4 700	0.71	UC 307
40	85	49.2	22	57.3	30.2	2	32.5	20.4	0.865	3 400	0.8	UCX08
	90	52	25	56.5	33	2.5	41	24	1.02	4 200	0.96	UC 308
45	90	51.6	22	62.1	32.6	2	35.1	23.2	0.98	3 300	0.9	UCX09
	100	57	29	63	35	2.5	52.7	32	1.34	3 750	1.3	UC 309
50	100	55.6	25	70	33.4	2.5	43.6	29	1.25	3 000	1.25	UCX10
	110	61	30	69.1	39	3	61.8	38	1.6	3 400	1.65	UC 310
55	110	65.1	27	77	39.7	2.5	52.7	36	1.53	2 700	1.7	UCX11
	120	66	32	76.1	41	3	71.5	45	1.9	3 100	2.1	UC 311
60	120	65.1	27	82.1	39.7	2.5	57.2	40	1.7	2 350	2	UCX12
	130	71	35	81.7	45	3.5	81.9	52	2.2	2 900	2.65	UC 312
65	125	74.6	29	87	44.4	2.5	62.4	44	1.86	2 250	2.35	UCX13
	140	75	38	88.2	45	3.5	92.3	60	2.5	2 650	3.25	UC 313
70	130	77.8	30	91.5	44.5	2.5	66.3	49	2.04	2 100	2.55	UCX14
	150	78	39	94.8	45	3.5	104	68	2.75	2 500	3.85	UC 314
75	140	82.6	32	98.5	49.3	3	71.5	54	2.2	1 900	3.2	UCX15
	160	82	43	101.3	50	3.5	114	76.5	3	2 300	4.65	UC 315
80	150	85.7	34	105	51.6	3	83.2	64	2.5	1 800	3.8	UCX16
	170	86	44	107.9	52	3.5	124	86.5	3.25	2 150	5.45	UC 316
85	160	96	36	111.5	56.3	3	95.6	72	2.7	1 600	4.75	UCX17
	180	96	46	114.4	56	4	133	96.5	3.55	2 050	6.65	UC 317
90	190	96	48	121	56	4	143	108	3.8	1 950	7.5	UC 318
95	200	103	50	127.1	62	4	153	118	4.15	1 850	8.8	UC 319
100	215	108	54	135.5	66	4.5	174	140	4.75	1 700	10.9	UC 320

3.2 Insert bearings with set screws, inch shafts

d 3 – 4 in.

76,2 – 101,6 mm



Dimensions							Basic load ratings		Fatigue load limit	Limiting speed with shaft tolerance h6	Mass	Designation
d	D	B	C	d ₁	s ₁	r _{1,2} min.	C	C ₀	P _u			
in/mm							kN		kN	r/min	kg	–
3 76.2	160	82	43	101.3	50	3.5	114	76.5	3	2 300	4.55	UC 315-48
4 101.6	215	108	54	135.5	66	4.5	174	140	4.75	1 700	10.7	UC 320-64



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