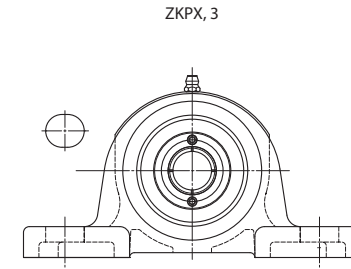
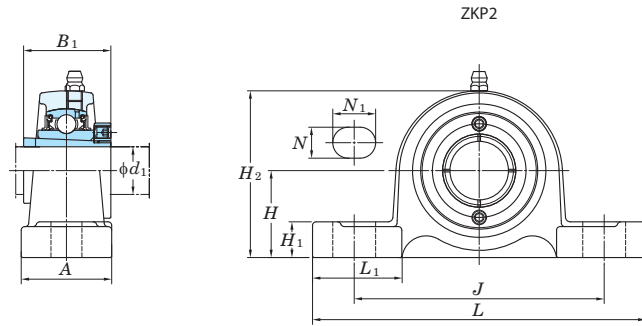


**FYH**

# **Z** LOCK<sup>®</sup> SLEEVE **ZK Series**

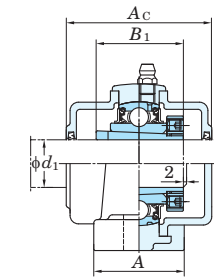
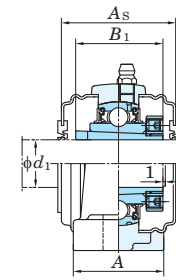


**ZKP**  
**Tapered bore (with adapter)**  
 $d_1$  20 ~ 40 mm



With Pressed Steel Cover

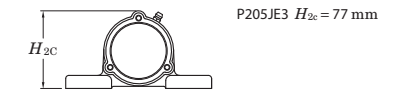
With Cast Iron Cover



Variations of tolerance of distance from mounting bottom to center of spherical bore ( $\Delta H_b$ )

Housing No.		Unit No.	Unit: mm
P205~P210	PX05~PX10	P305~P310	±0.15
P211~P212	PX11~PX12	P311~P312	±0.2

Forms and dimensions of  $H_{2c}$  of P205JE3 (housing with cast iron cover) are shown below.

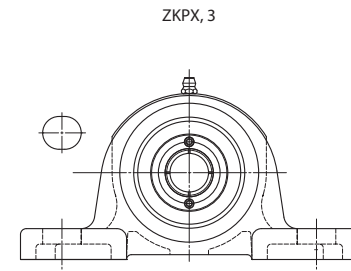
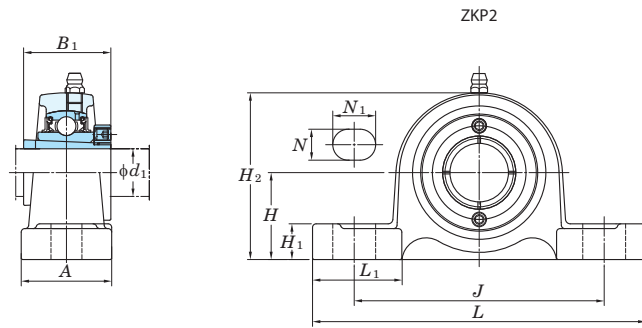


Shaft Dia. mm inch	Dimensions											Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN			Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover				
	inch mm												Unit No.	Housing No.	Bearing No.		Unit No.	Dimension			Mass	Unit No.	Dimension		Mass				
$d_1$	H	L	A	J	N	N <sub>1</sub>	H <sub>1</sub>	H <sub>2</sub>	L <sub>1</sub>	B <sub>1</sub>								Open Type	One Side Closed Type	mm	inch	kg	Open Type	One Side Closed Type	mm	inch	kg		
20	3/4	1 7/16	5 1/2	1 1/2	4 1/8	1/2	23/32	5/8	2 3/4	1 1/2	1 15/32	3/8	ZKP205-12 ZKP205	P205	ZK205-12 ZK205	0.84	14.0	7.85	13.9	-	-	-	-	-	-	-	-	-	
	3/4	1 3/4	6 1/4	2	4 11/16	21/32	31/32	5/8	3 3/8	1 27/32	1 15/32	1/2	ZKPX05-12 ZKPX05	PX05	ZKX05-12 ZKX05	1.5	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	
	3/4	1 49/64	6 7/8	1 3/4	5 3/16	21/32	25/32	5/8	3 11/32	2 5/32	1 15/32	1/2	ZKP305-12 ZKP305	P305	ZK305-12 ZK305	1.7	21.2	10.9	12.6	-	-	-	-	-	-	-	-	-	
25	7/8	1 11/16	6 1/2	1 7/8	4 3/4	21/32	13/16	21/32	3 5/16	1 7/8	1 9/16	1/2	ZKP206-14 ZKP206-15 ZKP206	P206	ZK206-14 ZK206-15 ZK206	1.4	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-
	1	1 7/8	6 7/8	2 1/4	5	21/32	31/32	21/32	3 21/32	2 5/32	1 9/16	1/2	ZKPX06-14 ZKPX06-15 ZKPX06	PX06	ZKX06-14 ZKX06-15 ZKX06	2.1	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-
	1	1 31/32	7 3/32	1 31/32	5 1/2	21/32	25/32	21/32	3 3/4	2 3/32	1 9/16	1/2	ZKP306-14 ZKP306-15 ZKP306	P306	ZK306-14 ZK306-15 ZK306	2.3	26.7	15.0	13.3	-	-	-	-	-	-	-	-	-	-
30	1 1/8	1 7/8	6 9/16	1 7/8	5	21/32	13/16	23/32	3 3/4	1 27/32	1 47/64	1/2	ZKP207-18 ZKP207	P207	ZK207-18 ZK207	1.7	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	
	1 3/16	2 1/8	8	2 1/4	5 21/31	21/32	1 3/16	3/4	4 1/8	2 17/32	1 47/64	1/2	ZKPX07-18 ZKPX07	PX07	ZKX07-18 ZKX07	2.7	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-
	1 3/16	2 13/64	8 9/32	2 7/32	6 5/16	21/32	31/32	3/4	4 7/32	2 9/16	1 47/64	1/2	ZKP307-18 ZKP307	P307	ZK307-18 ZK307	3.0	33.4	19.3	13.2	-	-	-	-	-	-	-	-	-	
35	1 1/4	1 15/16	7 1/4	2 1/8	5 13/32	21/32	13/16	23/32	3 27/32	2 3/32	1 55/64	1/2	ZKP208-20 ZKP208-22 ZKP208	P208	ZK208-20 ZK208-22 ZK208	2.0	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	
	1 3/8	2 5/16	8 3/4	2 5/8	6 5/32	25/32	1 1/4	13/16	4 1/2	2 25/32	1 55/64	5/8	ZKPX08-20 ZKPX08-22 ZKPX08	PX08	ZKX08-20 ZKX08-22 ZKX08	3.5	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	
	1 3/8	2 23/64	8 21/32	2 3/8	6 11/16	21/32	1 1/16	3/4	4 21/32	2 9/16	1 55/64	1/2	ZKP308-20 ZKP308-22 ZKP308	P308	ZK308-20 ZK308-22 ZK308	3.8	40.7	24.0	13.2	-	-	-	-	-	-	-	-	-	
40	1 7/16	2 1/8	7 15/32	2 1/8	5 3/4	21/32	13/16	25/32	4 3/16	2 5/32	1 15/16	1/2	ZKP209-23 ZKP209-24 ZKP209	P209	ZK209-23 ZK209-24 ZK209	2.3	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	
	1 1/2	2 5/16	8 3/4	2 5/8	6 5/32	25/32	1 5/16	13/16	4 9/16	2 25/32	1 15/16	5/8	ZKPX09-23 ZKPX09-24 ZKPX09	PX09	ZKX09-23 ZKX09-24 ZKX09	3.7	35.1	23.3	14.4	-	-	-	-	-	-	-	-	-	
	1 1/2	2 41/64	9 21/32	2 5/8	7 15/32	25/32	1 3/16	13/16	5 3/16	2 15/16	1 15/16	5/8	ZKP309-23 ZKP309-24 ZKP309	P309	ZK309-23 ZK309-24 ZK309	5.0	48.9	29.5	13.3	-	-	-	-	-	-	-	-	-	

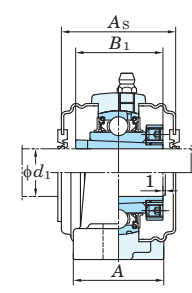
- Remarks 1. In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.  
 2. Part No. of applicable grease fittings are shown below.  
 A-1/4-28UNF.....205~210, X05~X09, 305~308  
 A-R1/8.....211~212, X10~X12, 309~312  
 3. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
 (Example of Part No. : ZK206)

4. As for the triple seal type seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
 (Example of Part No. : ZKP206JL3)  
 5. For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.  
 6. Representative examples of the forms of housing are indicated.  
 7. Housings of nodular graphite cast iron are also available.

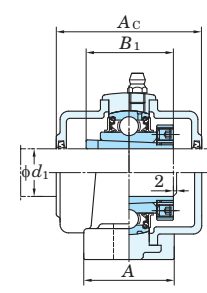
**ZKP**  
Tapered bore (with adapter)  
 $d_1$  45 ~ 55 mm



With Pressed Steel Cover



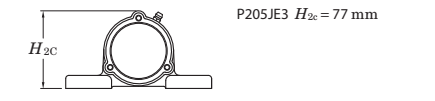
With Cast Iron Cover



Variations of tolerance of distance from mounting bottom to center of spherical bore ( $\Delta H_b$ )

Housing No.	$\Delta H_b$
P205~P210	$\pm 0.15$
P211~P212	$\pm 0.2$

Forms and dimensions of  $H_{2c}$  of P205JE3 (housing with cast iron cover) are shown below.

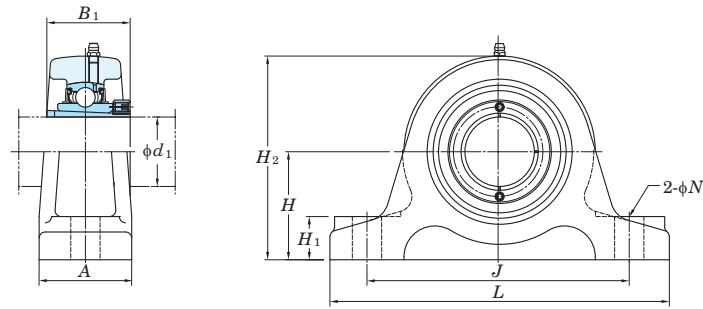


Shaft Dia. mm inch	Dimensions inch mm										Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover															
	$d_1$	H	L	A	J	N	$N_1$	$H_1$	$H_2$	$L_1$		$B_1$	Unit No.	Housing No.		Bearing No.	Open Type		One Side Closed Type	Dimension mm inch	Mass kg	Open Type	One Side Closed Type	Dimension mm inch	Mass kg													
45 1 5/8 1 11/16 1 3/4	1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP210-26 ZKP210-27 ZKP210-28 ZKP210	P210	ZK210-26 ZK210-27 ZK210-28 ZK210	3.0	35.1	23.3	14.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX10-26 ZKPX10-27 ZKPX10-28 ZKPX10	PX10	ZKX10-26 ZKX10-27 ZKX10-28 ZKX10	4.6	43.4	29.4	14.4	-	-	-	-	-	-	-	-	-	-	-	-
	1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP310-26 ZKP310-27 ZKP310-28 ZKP310	P310	ZK310-26 ZK310-27 ZK310-28 ZK310	6.7	62.0	38.3	13.2	-	-	-	-	-
	1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP211-30 ZKP211-31 ZKP211 ZKP211-32	P211	ZK211-30 ZK211-31 ZK211 ZK211-32	3.7	43.4	29.4	14.4															ZKP210C	ZKP210CD	74.0	2 29/32	3.0
	1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX11-30 ZKPX11-31 ZKPX11 ZKPX11-32	PX11	ZKX11-30 ZKX11-31 ZKX11 ZKX11-32	4.6	43.4	29.4	14.4								-	-	-	-	-
	1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP311-30 ZKP311-31 ZKP311 ZKP311-32	P311	ZK311-30 ZK311-31 ZK311 ZK311-32	6.7	62.0	38.3	13.2	-	-	-	-	-
	1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP211-30 ZKP211-31 ZKP211 ZKP211-32	P211	ZK211-30 ZK211-31 ZK211 ZK211-32	3.7	43.4	29.4	14.4															-	-	-	-	-
	1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX11-30 ZKPX11-31 ZKPX11 ZKPX11-32	PX11	ZKX11-30 ZKX11-31 ZKX11 ZKX11-32	4.6	43.4	29.4	14.4								ZKP211C	ZKP211CD	76.0	3	3.7
	1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP311-30 ZKP311-31 ZKP311 ZKP311-32	P311	ZK311-30 ZK311-31 ZK311 ZK311-32	6.7	62.0	38.3	13.2	-	-	-	-	-
1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP212-34 ZKP212	P212	ZK212-34 ZK212	4.8	52.4	36.2	14.4	-															-	-	-	-	-
1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX12-34 ZKPX12	PX12	ZKX12-34 ZKX12	7.5	57.2	40.1	14.4	ZKP212C								ZKP212CD	89	3 1/2	4.8	ZKP212FC
1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP312-34 ZKP312	P312	ZK312-34 ZK312	9.4	81.9	52.2	13.2	-	-	-	-	-	-
1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP212-34 ZKP212	P212	ZK212-34 ZK212	4.8	52.4	36.2	14.4															-	-	-	-	-	-
1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX12-34 ZKPX12	PX12	ZKX12-34 ZKX12	7.5	57.2	40.1	14.4								ZKP212C	ZKP212CD	89	3 1/2	7.5	ZKP212FC
1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP312-34 ZKP312	P312	ZK312-34 ZK312	9.4	81.9	52.2	13.2	-	-	-	-	-	-
1 5/8	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	13/16	4 7/16	2 3/8	2 1/8	5/8	ZKP212-34 ZKP212	P212	ZK212-34 ZK212	4.8	52.4	36.2	14.4															-	-	-	-	-	-
1 11/16	2 1/2	9 1/2	2 7/8	6 23/32	25/32	1 13/32	7/8	4 31/32	3	2 1/8	5/8								ZKPX12-34 ZKPX12	PX12	ZKX12-34 ZKX12	7.5	57.2	40.1	14.4								ZKP212C	ZKP212CD	89	3 1/2	7.5	ZKP212FC
1 3/4	2 5/8	10 1/2	3 1/8	7 1/4	25/32	1 1/2	1 1/16	5 1/16	3 15/32	2 1/8	5/8															ZKP312-34 ZKP312	P312	ZK312-34 ZK312	9.4	81.9	52.2	13.2	-	-	-	-	-	-

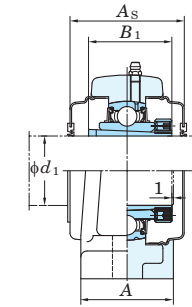
- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.  
2. Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09, 305~308  
A-R1/8.....211~212, X10~X12, 309~312
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No.: ZK206)

- As for the triple seal type seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No.: ZKP206JL3)
- For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
- Representative examples of the forms of housing are indicated.
- Housings of nodular graphite cast iron are also available.

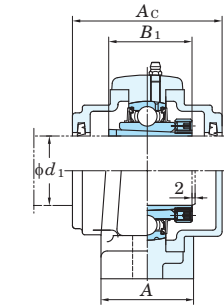
**ZKIP**  
**Tapered bore (with adapter)**  
 $d_1$  35 ~ 55 mm



With Pressed Steel Cover



With Cast Iron Cover



Variations of tolerance of distance from mounting bottom to center of spherical bore ( $\Delta H_s$ ) and variations of distance between centers of bolt holes ( $\Delta J_s$ ) and Variations of tolerance of bolt hole diameter ( $\Delta N_s$ )

Housing No.	$\Delta H_s$	$\Delta J_s$	$\Delta N_s$
IP208~IP210	$\pm 0.15$	$\pm 0.5$	$\pm 0.2$
IP211~IP212	$\pm 0.2$	$\pm 0.7$	

Unit: mm

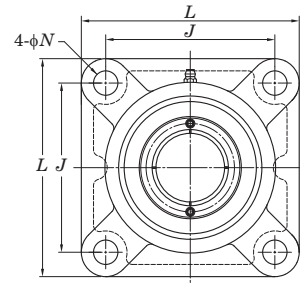
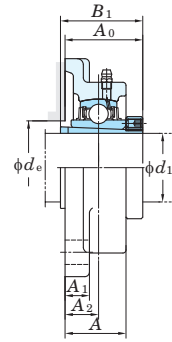
Shaft Dia. mm inch $d_1$	Dimensions inch mm									Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover			
	H	L	A	J	N	H <sub>1</sub>	H <sub>2</sub>	B <sub>1</sub>	Unit No.		Housing No.	Bearing No.	Unit No.		Dimension mm inch	Mass kg		Unit No.	Dimension mm inch	Mass kg					
35 1 1/4 1 3/8	2 23/64	7 7/8	2 3/8	5 29/32	3/4	31/32	4 17/32	1 55/64	5/8	ZKIP208-20 ZKIP208-22 ZKIP208	IP208	ZK208-20 ZK208-22 ZK208	3.5	29.1	17.8	14.0	—	—	—	—	—	—	—	—	
	60	200	60	150	19	25	115	47	M16								ZKIP208C	ZKIP208CD	69	2 23/32	3.5	ZKIP208FC	ZKIP208FCD	86	3 3/8
40 1 7/16 1 1/2	2 3/4	8 9/32	2 3/8	6 19/64	3/4	31/32	5 1/32	1 15/16	5/8	ZKIP209-23 ZKIP209-24 ZKIP209	IP209	ZK209-23 ZK209-24 ZK209	4.0	34.1	21.3	14.0	—	—	—	—	—	—	—	—	
	70	210	60	160	19	25	128	49	M16								ZKIP209C	ZKIP209CD	69	2 23/32	4.0	ZKIP209FC	ZKIP209FCD	88	3 15/32
45 1 5/8 1 11/16 1 3/4	2 3/4	8 21/32	2 3/8	6 11/16	3/4	1 3/32	5 3/16	2 1/8	5/8	ZKIP210-26 ZKIP210-27 ZKIP210-28 ZKIP210	IP210	ZK210-26 ZK210-27 ZK210-28 ZK210	4.8	35.1	23.3	14.4	—	—	—	—	—	—	—	—	
	70	220	60	170	19	28	132	54	M16								ZKIP210C	ZKIP210CD	74	2 29/32	4.8	ZKIP210FC	ZKIP210FCD	97	3 13/16
50 1 7/8 1 15/16 2	3 5/32	9 1/16	2 3/8	7 3/32	3/4	1 3/32	5 13/16	2 13/32	5/8	ZKIP211-30 ZKIP211-31 ZKIP211 ZKIP211-32	IP211	ZK211-30 ZK211-31 ZK211 ZK211-32	5.3	43.4	29.4	14.4	—	—	—	—	—	—	—	—	
	80	230	60	180	19	28	148	61	M16								ZKIP211C	ZKIP211CD	76	3	5.3	ZKIP211FC	ZKIP211FCD	99	3 29/32
55 2 1/8	3 3/32	10 1/4	2 3/4	7 7/8	7/8	1 3/16	6 3/32	2 39/64	3/4	ZKIP212-34 ZKIP212	IP212	ZK212-34 ZK212	7.1	52.4	36.2	14.4	—	—	—	—	—	—	—	—	
	80	260	70	200	22	30	155	66	M20								ZKIP212C	ZKIP212CD	89	3 1/2	7.1	ZKIP212FC	ZKIP212FCD	114	4 1/2

- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
 A-1/4-28UNF.....208~210  
 A-R1/8.....211~212
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
 (Example of Part No. : ZK208)

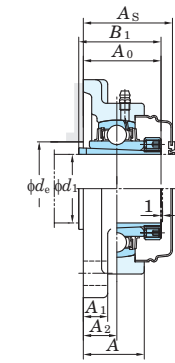
- As for the triple seal type product, suffix code L3 follows the Part No. of unit or bearing.  
 (Example of Part No. : ZKIP208JL3)
- For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
- Housings of nodular graphite cast iron are also available.



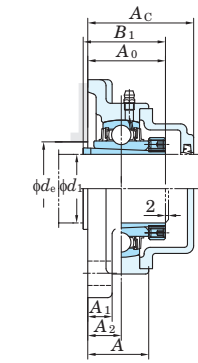
**ZKF**  
Tapered bore (with adapter)  
 $d_1$  20 ~ 40 mm



With Pressed Steel Cover



With Cast Iron Cover



Variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2s}$ ) and tolerance of position of bolt hole (X)

Housing No.			$\Delta A_{2s}$	X
F205~F210	FX05~FX10	F305~F310	$\pm 0.5$	0.7
F211~F212	FX11~FX12	F311~F312	$\pm 0.8$	1

Variations of tolerance of bolt hole diameter ( $\Delta N_s$ )

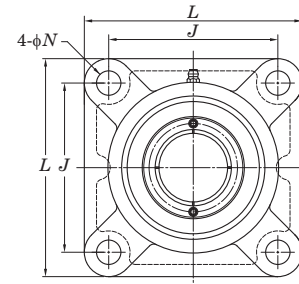
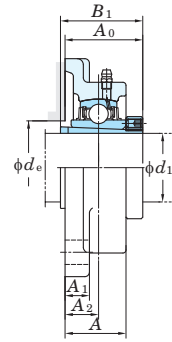
Housing No.			$\Delta N_s$
F205~F212	FX05~FX12	F305~F312	$\pm 0.2$

Shaft Dia. mm inch	Dimensions										Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN			Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover				
	$d_1$	L	A	J	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>0</sub>	B <sub>1</sub>	d <sub>e</sub>		Unit No.	Housing No.	Bearing No.		Cr	C <sub>0r</sub>	Open Type		One Side Closed Type	Dimension mm inch	Mass kg	Open Type	One Side Closed Type	Dimension mm inch	Mass kg		
20 3/4	3 3/4	1 1/16	2 3/4	15/32	1/2	5/8	1 3/8	1 15/32	1 3/16	3/8	ZKF205-12 ZKF205	F205	ZK205-12 ZK205	0.87	14.0	7.85	13.9	-	-	-	-	-	-	-				
	95	27	70	12	13	16	35	37	30	M10	ZKFX05-12 ZKFX05	FX05	ZKX05-12 ZKX05	1.2	19.5	11.3	13.9	ZKF205C	ZKF205D	40.5	1 19/32	0.87	ZKF205FC	ZKF205FD	49	1 15/16	1.1	
	108	30	83	12	13	18	38.5	37	30	M10	ZKF305-12 ZKF305	F305	ZK305-12 ZK305	1.4	21.2	10.9	12.6	ZKFX05C	ZKFX05D	44.5	1 3/4	1.2	-	-	-	-	-	
25 1	4 11/32	1 5/32	3 5/32	5/8	1/2	5/8	1 7/16	1 15/32	-	1/2	ZKF206-14 ZKF206-15 ZKF206 ZKF206-16	F206	ZK206-14 ZK206-15 ZK206 ZK206-16	1.3	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-	-
	110	29	80	16	13	16	36.5	37	-	M14	ZKFX06-14 ZKFX06-15 ZKFX06 ZKFX06-16	FX06	ZKX06-14 ZKX06-15 ZKX06 ZKX06-16	1.6	25.7	15.4	13.9	ZKF206C	ZKF206D	44.5	1 3/4	1.3	ZKF206FC	ZKF206FD	53.0	2 3/32	1.6	
	125	32	95	16	15	18	40	40	-	M14	ZKF306-14 ZKF306-15 ZKF306 ZKF306-16	F306	ZK306-14 ZK306-15 ZK306 ZK306-16	1.9	26.7	15.0	13.3	-	-	-	-	-	-	-	-	-	-	-
30 1 1/8	4 19/32	1 11/32	3 5/8	35/64	19/32	3/4	1 5/8	1 47/64	1 5/8	7/16	ZKF207-18 ZKF207 ZKF207-19	F207	ZK207-18 ZK207 ZK207-19	1.6	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-	-
	117	34	92	14	15	19	41	44	41	M12	ZKFX07-18 ZKFX07 ZKFX07-19	FX07	ZKX07-18 ZKX07 ZKX07-19	2.0	29.1	17.8	14.0	ZKF207C	ZKF207D	49	1 15/16	1.6	ZKF207FC	ZKF207FD	58	2 9/32	2.0	
	130	38	102	16	14	21	45	44	41	M14	ZKF307-18 ZKF307 ZKF307-19	F307	ZK307-18 ZK307 ZK307-19	2.3	33.4	19.3	13.2	-	-	-	-	-	-	-	-	-	-	-
35 1 1/4	5 5/16	1 13/32	3 15/16	3/4	5/8	25/32	1 23/32	1 47/64	-	5/8	ZKF208-20 ZKF208-22 ZKF208	F208	ZK208-20 ZK208-22 ZK208	1.9	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-	-
	135	36	100	19	16	20	43.5	44	-	M16	ZKFX08-20 ZKFX08-22 ZKFX08	FX08	ZKX08-20 ZKX08-22 ZKX08	2.3	34.1	21.3	14.0	ZKF208C	ZKF208D	55.5	2 3/16	1.9	ZKF208FC	ZKF208FD	64	2 17/32	2.3	
	150	40	112	19	17	23	48.5	47	-	M16	ZKF308-20 ZKF308-22 ZKF308	F308	ZK308-20 ZK308-22 ZK308	3.1	40.7	24.0	13.2	-	-	-	-	-	-	-	-	-	-	-
40 1 7/16	5 13/32	1 1/2	4 9/64	5/8	5/8	55/64	1 7/8	1 15/16	2 1/16	1/2	ZKF209-23 ZKF209-24 ZKF209	F209	ZK209-23 ZK209-24 ZK209	2.3	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	-	-
	137	38	105	16	16	22	48	49	52	M14	ZKFX09-23 ZKFX09-24 ZKFX09	FX09	ZKX09-23 ZKX09-24 ZKX09	2.7	35.1	23.3	14.4	ZKF209C	ZKF209D	56.5	2 7/32	2.3	ZKF209FC	ZKF209FD	66	2 19/32	2.8	
	143	40	111	19	14	23	49	49	52	M16	ZKF309-23 ZKF309-24 ZKF309	F309	ZK309-23 ZK309-24 ZK309	4.1	48.9	29.5	13.3	-	-	-	-	-	-	-	-	-	-	-
40 1 1/2	6 5/16	1 23/32	4 59/64	3/4	23/32	63/64	2 1/16	1 15/16	-	5/8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	160	44	125	19	18	25	52	49	-	M16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

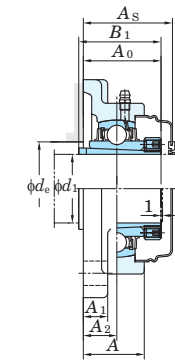
Remarks 1. In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.  
2. Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09, 305~308  
A-R1/8.....211~212, X10~X12, 309~312  
3. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No. : ZK206)

4. As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No. : ZKF206JL3)  
5. For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.  
6. Housings of nodular graphite cast iron are also available.

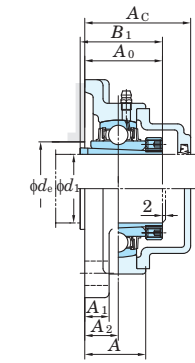
**ZKF**  
Tapered bore (with adapter)  
 $d_1$  45 ~ 55 mm



With Pressed Steel Cover



With Cast Iron Cover



Variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2s}$ ) and tolerance of position of bolt hole (X)

Housing No.			$\Delta A_{2s}$	X
F205~F210	FX05~FX10	F305~F310	$\pm 0.5$	0.7
F211~F212	FX11~FX12	F311~F312	$\pm 0.8$	1

Variations of tolerance of bolt hole diameter ( $\Delta N_s$ )

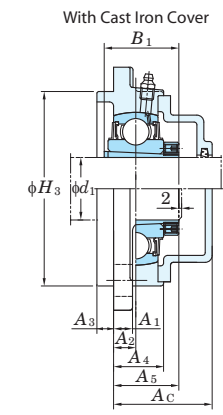
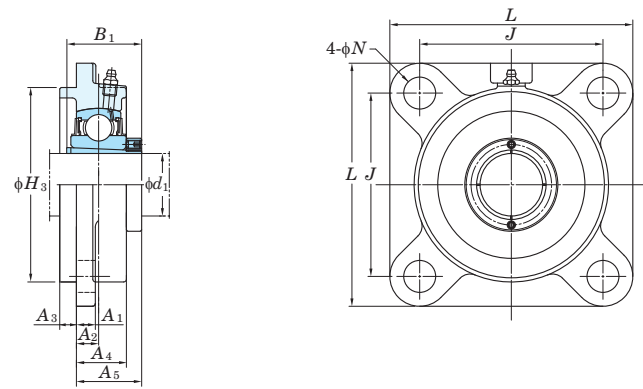
Housing No.			$\Delta N_s$
F205~F212	FX05~FX12	F305~F312	$\pm 0.2$

Shaft Dia. mm inch	Dimensions										Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover					
	$d_1$	L	A	J	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>0</sub>	B <sub>1</sub>	$d_e$		Unit No.	Housing No.	Bearing No.		C <sub>r</sub>	C <sub>0r</sub>		Unit No.	Dimension mm inch	Mass kg	Unit No.	Dimension mm inch	Mass kg				
45 1 5/8 1 11/16 1 3/4	1 5/8 1 11/16 1 3/4	5 5/8	1 9/16	4 3/8	5/8	5/8	55/64	2 1/64	2 1/8	2 9/32	1/2	F210	ZK210-26 ZK210-27 ZK210-28 ZK210	2.6	35.1	23.3	14.4	ZKF210C	ZKF210D	59.0	2 5/16	2.6	ZKF210FC	ZKF210FD	70.5	2 25/32	3.1	
		6 3/8	1 23/32	5 1/8	3/4	25/32	1 1/32	2 1/4	2 1/8	2 9/32	5/8	FX10	ZKX10-26 ZKX10-27 ZKX10-28 ZKX10	3.6	43.4	29.4	14.4	ZKFX10C	ZKFX10D	64.0	2 17/32	3.6						
		6 7/8	1 7/8	5 13/64	29/32	3/4	1 7/64	2 21/64	2 1/8	-	3/4	F310	ZK310-26 ZK310-27 ZK310-28 ZK310	5.1	62.0	38.3	13.2						ZKF310C	ZKF310D	83.0	3 9/32	5.9	
	50 1 7/8 1 15/16 2	1 7/8 1 15/16 2	6 3/8	1 11/16	5 1/8	3/4	23/32	63/64	2 13/64	2 13/32	2 17/32	5/8	F211	ZK211-30 ZK211-31 ZK211 ZK211-32	3.5	43.4	29.4	14.4	ZKF211C	ZKF211D	63.0	2 15/32	3.5	ZKF211FC	ZKF211FD	74.5	2 15/16	4.1
			6 7/8	1 15/16	5 5/8	3/4	25/32	1 9/64	2 1/2	2 13/32	2 17/32	5/8	FX11	ZKX11-30 ZKX11-31 ZKX11 ZKX11-32	4.6	52.4	36.2	14.4	ZKFX11C	ZKFX11D	73.5	2 29/32	4.6					
			7 9/32	2 1/16	5 33/64	29/32	25/32	1 3/16	2 15/32	2 13/32	-	3/4	F311	ZK311-30 ZK311-31 ZK311 ZK311-32	5.9	71.6	45.0	13.2						ZKF311C	ZKF311D	87.0	3 7/16	6.8
	55 2 1/8	2 1/8	6 7/8	1 7/8	5 5/8	3/4	23/32	1 9/64	2 15/32	2 39/64	2 23/32	5/8	F212	ZK212-34 ZK212	4.1	52.4	36.2	14.4	ZKF212C	ZKF212D	73.5	2 29/32	4.1	ZKF212FC	ZKF212FD	86	3 3/8	4.9
			7 3/8	2 5/16	5 55/64	3/4	13/16	1 11/32	2 13/16	2 39/64	2 23/32	5/8	FX12	ZKX12-34 ZKX12	5.5	57.2	40.1	14.4	ZKFX12C	ZKFX12D	78.5	3 3/32	5.5					
			7 11/16	2 7/32	5 29/32	29/32	7/8	1 19/64	2 25/32	2 39/64	-	3/4	F312	ZK312-34 ZK312	6.8	81.9	52.2	13.2						ZKF312C	ZKF312D	95	3 3/4	8

- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09, 305~308  
A-R1/8.....211~212, X10~X12, 309~312
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No.: ZK206)

- As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No.: ZKF206JL3)
- For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
- Housings of nodular graphite cast iron are also available.

**ZKFS**  
Tapered bore (with adapter)  
 $d_1$  20 ~ 55 mm



Variations of tolerance of spigot joint outside diameter ( $\Delta H_{3s}$ ), variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2s}$ ), tolerance of position of bolt hole (X), and tolerance of circumferential runout of spigot joint (Y)

Housing No.	$\Delta H_{3s}$	$\Delta A_{2s}$	Unit: mm	
			X	Y
FS305	0 -0.046	±0.5	0.7	0.2
FS306~FS308	0 -0.054			
FS309~FS310	0	±0.8	1	0.3
FS311~FS312	-0.063			

Variations of tolerance of bolt hole diameter ( $\Delta N_s$ )

Housing No.	Unit: mm
FS305~FS312	±0.2

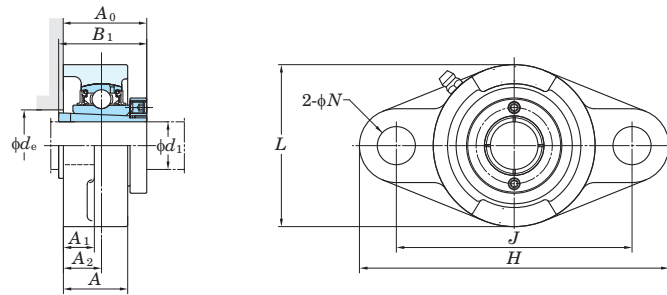
Shaft Dia. mm inch $d_1$	Dimensions inch mm											Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor $f_0$	With Cast Iron Cover			
	L	H <sub>3</sub>	J	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	A <sub>5</sub>	B <sub>1</sub>	Unit No.		Housing No.	Bearing No.	Unit No. Open Type		Unit No. Closed Type	Dimension mm inch A <sub>c</sub>		Mass kg			
20 $\frac{3}{4}$	4 <sup>11</sup> / <sub>32</sub>	3.1496	3 <sup>5</sup> / <sub>32</sub>	5/8	1/2	23/64	9/32	7/8	1 <sup>5</sup> / <sub>32</sub>	1 <sup>15</sup> / <sub>32</sub>	1/2	ZKFS305-12 ZKFS305	FS305	ZK305-12 ZK305	-	-	-	-	-	-			
	110	80	80	16	13	9	7	22	29.5	37	M14			ZKFS305C	ZKFS305D	47	1 <sup>27</sup> / <sub>32</sub>	1.7					
25 $\frac{7}{8}$ $\frac{15}{16}$	4 <sup>29</sup> / <sub>32</sub>	3.5433	3 <sup>47</sup> / <sub>64</sub>	5/8	19/32	25/64	5/16	15/16	1 <sup>17</sup> / <sub>64</sub>	1 <sup>9</sup> / <sub>16</sub>	1/2	ZKFS306-14 ZKFS306-15 ZKFS306 ZKFS306-16	FS306	ZK306-14 ZK306-15 ZK306 ZK306-16	-	-	-	-	-	-			
	125	90	95	16	15	10	8	24	32	40	M14			ZKFS306C	ZKFS306D	51	2	2.2					
30 $1 \frac{1}{8}$ $1 \frac{3}{16}$	5 <sup>5</sup> / <sub>16</sub>	3.9370	3 <sup>15</sup> / <sub>16</sub>	3/4	5/8	7/16	23/64	1 <sup>1</sup> / <sub>16</sub>	1 <sup>23</sup> / <sub>64</sub>	1 <sup>47</sup> / <sub>64</sub>	5/8	ZKFS307-18 ZKFS307 ZKFS307-19	FS307	ZK307-18 ZK307 ZK307-19	-	-	-	-	-	-			
	135	100	100	19	16	11	9	27	34.5	44	M16			ZKFS307C	ZKFS307D	55	2 <sup>5</sup> / <sub>32</sub>	2.9					
35 $1 \frac{1}{4}$ $1 \frac{3}{8}$	5 <sup>29</sup> / <sub>32</sub>	4.5276	4 <sup>13</sup> / <sub>32</sub>	3/4	21/32	33/64	25/64	1 <sup>3</sup> / <sub>16</sub>	1 <sup>33</sup> / <sub>64</sub>	1 <sup>55</sup> / <sub>64</sub>	5/8	ZKFS308-20 ZKFS308-22 ZKFS308	FS308	ZK308-20 ZK308-22 ZK308	-	-	-	-	-	-			
	150	115	112	19	17	13	10	30	38.5	47	M16			ZKFS308C	ZKFS308D	61	2 <sup>13</sup> / <sub>32</sub>	3.9					
40 $1 \frac{7}{16}$ $1 \frac{1}{2}$	6 <sup>5</sup> / <sub>16</sub>	4.9213	4 <sup>59</sup> / <sub>64</sub>	3/4	23/32	35/64	7/16	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	1 <sup>15</sup> / <sub>16</sub>	5/8	ZKFS309-23 ZKFS309-24 ZKFS309	FS309	ZK309-23 ZK309-24 ZK309	-	-	-	-	-	-			
	160	125	125	19	18	14	11	33	41	49	M16			ZKFS309C	ZKFS309D	65	2 <sup>9</sup> / <sub>16</sub>	5.0					
45 $1 \frac{5}{8}$ $1 \frac{11}{16}$ $1 \frac{3}{4}$	6 <sup>7</sup> / <sub>8</sub>	5.5118	5 <sup>13</sup> / <sub>64</sub>	29/32	3/4	5/8	15/32	1 <sup>13</sup> / <sub>32</sub>	1 <sup>55</sup> / <sub>64</sub>	2 <sup>1</sup> / <sub>8</sub>	3/4	ZKFS310-26 ZKFS310-27 ZKFS310-28 ZKFS310	FS310	ZK310-26 ZK310-27 ZK310-28 ZK310	-	-	-	-	-	-			
	175	140	132	23	19	16	12	36	47	54	M20			ZKFS310C	ZKFS310D	71	2 <sup>25</sup> / <sub>32</sub>	6.1					
50 $1 \frac{7}{8}$ $1 \frac{15}{16}$ 2	7 <sup>9</sup> / <sub>32</sub>	5.9055	5 <sup>33</sup> / <sub>64</sub>	29/32	25/32	43/64	33/64	1 <sup>17</sup> / <sub>32</sub>	1 <sup>61</sup> / <sub>64</sub>	2 <sup>13</sup> / <sub>32</sub>	3/4	ZKFS311-30 ZKFS311-31 ZKFS311 ZKFS311-32	FS311	ZK311-30 ZK311-31 ZK311 ZK311-32	-	-	-	-	-	-			
	185	150	140	23	20	17	13	39	49.5	61	M20			ZKFS311C	ZKFS311D	74	2 <sup>29</sup> / <sub>32</sub>	7.2					
55 $2 \frac{1}{8}$	7 <sup>11</sup> / <sub>16</sub>	6.2992	5 <sup>29</sup> / <sub>32</sub>	29/32	7/8	3/4	35/64	1 <sup>21</sup> / <sub>32</sub>	2 <sup>7</sup> / <sub>32</sub>	2 <sup>39</sup> / <sub>64</sub>	3/4	ZKFS312-34 ZKFS312	FS312	ZK312-34 ZK312	-	-	-	-	-	-			
	195	160	150	23	22	19	14	42	56.5	66	M20			ZKFS312C	ZKFS312D	81	3 <sup>3</sup> / <sub>16</sub>	8.5					

Remarks 1. In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.  
2. Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....305~308  
A-R1/8.....309~312  
3. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No.: ZK306)

4. As for the triple seal type product, suffix code L3 follows the Part No. of unit or bearing.  
(Example of Part No.: ZKFS306JL3)  
5. For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.  
6. Representative examples of the forms of housing are indicated.  
7. Housings of nodular graphite cast iron are also available.

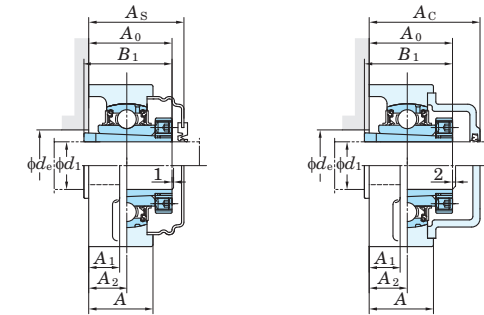
**2-Bolt Flange Units**

**ZKFL**  
Tapered bore (with adapter)  
 $d_1$  20 ~ 40 mm



With Pressed Steel Cover

With Cast Iron Cover

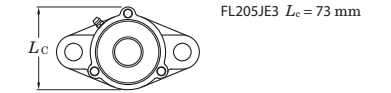


Variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2a}$ ) and tolerance of position of bolt hole (X)

Housing No.			$\Delta A_{2a}$	X	Unit: mm
FL205~FL210	FLX05~FLX10	FL305~FL310	$\pm 0.5$	0.7	
FL211~FL212		FL311~FL312	$\pm 0.8$	1	

Housing No.			$\Delta N_b$	Unit: mm
FL205~FL212	FLX05~FLX10	FL305~FL311	$\pm 0.2$	
		FL311~FL312	$\pm 0.3$	

Forms and dimensions of  $L_c$  of FL205JE3 (housing with cast iron cover) are shown below.

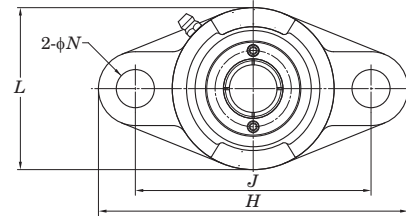
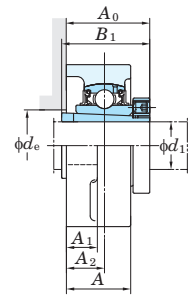


Shaft Dia. mm inch	Dimensions inch mm											Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN			Factor $f_0$	With Pressed Steel Cover				With Cast Iron Cover							
	$d_1$	H	L	A	J	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>0</sub>	B <sub>1</sub>	$d_e$		Unit No.	Housing No.	Bearing No.		C <sub>r</sub>	C <sub>0r</sub>	Unit No.		Dimension mm inch	Mass kg	Unit No.	Dimension mm inch	Mass kg							
20	3/4	5 1/8	2 11/16	1 1/16	3 57/64	5/8	1/2	5/8	1 3/8	1 15/32	1 3/16	1/2	ZKFL205-12 ZKFL205	FL205	ZK205-12 ZK205	0.68	14.0	7.85	13.9	-	-	-	-	-	-	-	-	-	-	-	-	
	3/4	5 9/16	3 9/32	1 3/16	4 39/64	15/32	1/2	45/64	1 33/64	1 15/32	1 3/16	3/8	ZKFLX05-12 ZKFLX05	FLX05	ZKX05-12 ZKX05	1.0	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-	-	-	
	3/4	5 29/32	3 5/32	1 5/32	4 29/64	3/4	1/2	5/8	1 7/6	1 15/32	-	5/8	ZKFL305-12 ZKFL305	FL305	ZK305-12 ZK305	1.1	21.2	10.9	12.6	-	-	-	-	-	-	-	-	-	-	-	-	
25	7/8	5 13/16	3 5/32	1 7/32	4 39/64	5/8	1/2	45/64	1 33/64	1 9/16	1 13/32	3/8	ZKFL206-14 ZKFL206-15 ZKFL206	FL206	ZK206-14 ZK206-15 ZK206	1.0	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	1	6 5/32	3 3/4	1 11/32	5 1/8	5/8	9/16	3/4	1 5/8	1 9/16	1 13/32	3/8	ZKFLX06-14 ZKFLX06-15 ZKFLX06	FLX06	ZKX06-14 ZKX06-15 ZKX06	1.5	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	1	7 3/32	3 17/32	1 1/4	5 9/32	29/32	19/32	45/64	1 9/16	1 9/16	-	3/4	ZKFL306-14 ZKFL306-15 ZKFL306	FL306	ZK306-14 ZK306-15 ZK306	1.5	26.7	15.0	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-
30	1 1/8	6 11/32	3 17/32	1 11/32	5 1/8	5/8	9/16	3/4	1 5/8	1 47/64	1 5/8	3/8	ZKFL207-18 ZKFL207	FL207	ZK207-18 ZK207	1.3	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-	-	-	
	1 3/16	6 23/32	4 1/8	1 1/2	5 43/64	5/8	9/16	53/64	1 25/32	1 47/64	1 5/8	3/8	ZKFLX07-18 ZKFLX07	FLX07	ZKX07-18 ZKX07	1.8	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 3/16	7 9/32	3 15/16	1 13/32	5 35/64	29/32	5/8	25/32	1 23/32	1 47/64	-	3/4	ZKFL307-18 ZKFL307	FL307	ZK307-18 ZK307	1.9	33.4	19.3	13.2	-	-	-	-	-	-	-	-	-	-	-	-	
35	1 1/4	6 7/8	3 15/16	1 13/32	5 43/64	5/8	9/16	53/64	1 13/16	1 55/64	1 13/16	3/8	ZKFL208-20 ZKFL208-22 ZKFL208	FL208	ZK208-20 ZK208-22 ZK208	1.6	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 3/8	7 1/16	4 3/8	1 9/16	5 53/64	5/8	9/16	55/64	1 7/8	1 55/64	1 13/16	3/8	ZKFLX08-20 ZKFLX08-22 ZKFLX08	FLX08	ZKX08-20 ZKX08-22 ZKX08	2.1	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/4	7 7/8	4 13/32	1 9/16	6 7/32	29/32	21/32	29/32	1 29/32	1 55/64	-	3/4	ZKFL308-20 ZKFL308-22 ZKFL308	FL308	ZK308-20 ZK308-22 ZK308	2.5	40.7	24.0	13.2	-	-	-	-	-	-	-	-	-	-	-	-	
40	1 7/16	7 13/32	4 1/4	1 1/2	5 53/64	3/4	19/32	55/64	1 7/8	1 15/16	2 1/16	5/8	ZKFL209-23 ZKFL209-24 ZKFL209	FL209	ZK209-23 ZK209-24 ZK209	2.0	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	-	-	-	
	1 1/2	7 13/32	4 1/4	1 1/2	5 53/64	3/4	19/32	55/64	1 7/8	1 15/16	2 1/16	5/8	ZKFLX09-23 ZKFLX09-24 ZKFLX09	FLX09	ZKX09-23 ZKX09-24 ZKX09	2.5	35.1	23.3	14.4	-	-	-	-	-	-	-	-	-	-	-	-	
	1 7/16	9 1/16	4 29/32	1 23/32	6 31/32	63/64	23/32	63/64	2 3/64	1 15/16	-	7/8	ZKFL309-23 ZKFL309-24 ZKFL309	FL309	ZK309-23 ZK309-24 ZK309	3.6	48.9	29.5	13.3	-	-	-	-	-	-	-	-	-	-	-		

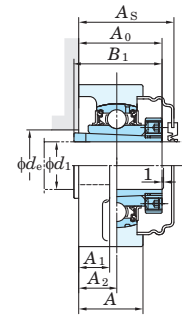
- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09, 305~308  
A-R1/8.....211~212, X10, 309~312
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No. : ZK206)
  - As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No. : ZKFL206JL3)
  - For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
  - Housings of nodular graphite cast iron are also available.



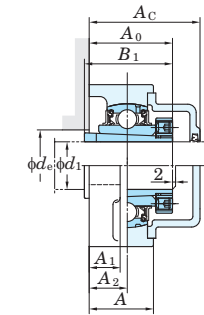
**ZKFL**  
Tapered bore (with adapter)  
 $d_1$  45 ~ 55 mm



With Pressed Steel Cover



With Cast Iron Cover

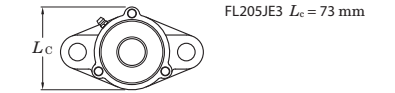


Variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2s}$ ) and tolerance of position of bolt hole (X)

Housing No.			$\Delta A_{2s}$	X
FL205~FL210	FLX05~FLX10	FL305~FL310	$\pm 0.5$	0.7
FL211~FL212		FL311~FL312	$\pm 0.8$	1

Housing No.			$\Delta N_s$
FL205~FL212	FLX05~FLX10	FL305~FL311	$\pm 0.2$
		FL311~FL312	$\pm 0.3$

Forms and dimensions of  $L_c$  of FL205JE3 (housing with cast iron cover) are shown below.

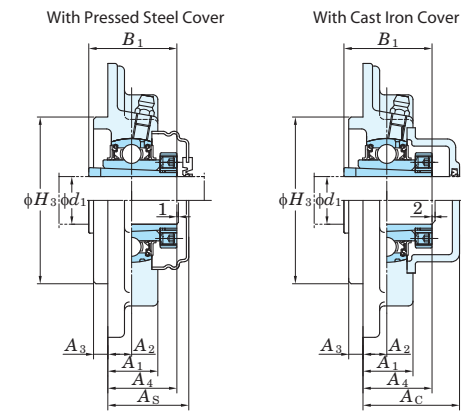
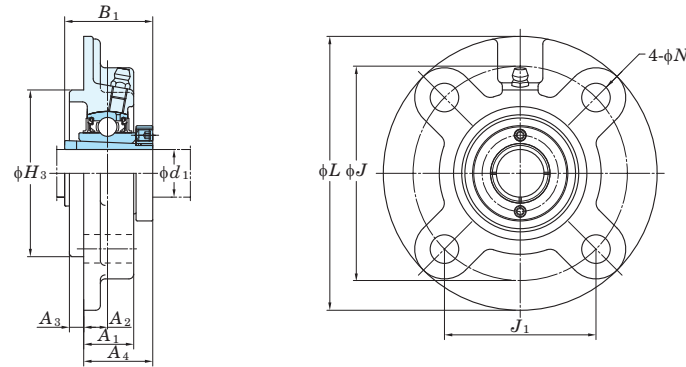


Shaft Dia. mm inch	Dimensions inch mm											Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor $f_0$	With Pressed Steel Cover			With Cast Iron Cover		
	$d_1$	H	L	A	J	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>0</sub>	B <sub>1</sub>	d <sub>e</sub>		Unit No.	Housing No.	Bearing No.		C <sub>r</sub>	C <sub>0r</sub>		Unit No. Open Type Closed Type	Dimension mm inch A <sub>s</sub>	Mass kg	Unit No. Open Type Closed Type	Dimension mm inch A <sub>c</sub>	Mass kg
45 1 5/8 1 11/16 1 3/4	197	115	40	157	19	15	22	51	54	58	M16	ZKFL210-26 ZKFL210-27 ZKFL210-28 ZKFL210	FL210	ZK210-26 ZK210-27 ZK210-28 ZK210	2.3	35.1 23.3	14.4	- - - - - - ZKFL210C ZKFL210D	- - - - - - 59 2 5/16	2.3	ZKFL210FC ZKFL210FD	70.5 2 25/32	2.8		
	216	133	44	184	19	20	26	57	54	58	M16	ZKFLX10-26 ZKFLX10-27 ZKFLX10-28 ZKFLX10	FLX10	ZKX10-26 ZKX10-27 ZKX10-28 ZKX10	3.7	43.4 29.4	14.4	- - - - - - ZKFLX10C ZKFLX10D	- - - - - - 64 2 17/32	3.7	- - - - - - - -	- - - - - - - -	- - - - - - - -		
	240	140	48	187	25	19	28	59	54	-	M22	ZKFL310-26 ZKFL310-27 ZKFL310-28 ZKFL310	FL310	ZK310-26 ZK310-27 ZK310-28 ZK310	4.4	62.0 38.3	13.2	- - - - - - - -	- - - - - - - -	-	ZKFL310C ZKFL310D	83 3 9/32	5.2		
	50 1 7/8 1 15/16 2	224	130	43	184	19	18	25	56	61	64	M16	ZKFL211-30 ZKFL211-31 ZKFL211	FL211	ZK211-30 ZK211-31 ZK211	3.3	43.4 29.4	14.4	- - - - ZKFL211C ZKFL211D	- - - - 63 2 15/32	3.3	ZKFL211FC ZKFL211FD	74.5 2 15/16	3.9	
		250	150	52	198	25	20	30	62.5	61	-	M22	ZKFL311-30 ZKFL311-31 ZKFL311	FL311	ZK311-30 ZK311-31 ZK311	5.6	71.6 45.0	13.2	- - - - - -	- - - - - -	-	ZKFL311C ZKFL311D	87 3 7/16	6.5	
		270	160	56	212	31	22	33	70.5	66	-	M27	ZKFL311-32 ZKFL311-31 ZKFL311	FL311	ZK311-30 ZK311-31 ZK311	5.6	71.6 45.0	13.2	- - - - - -	- - - - - -	-	ZKFL311C ZKFL311D	87 3 7/16	6.5	
	55 2 1/8 2 7/8	250	140	48	202	23	18	29	66.5	66	69	M20	ZKFL212-34 ZKFL212	FL212	ZK212-34 ZK212	4.1	52.4 36.2	14.4	- - ZKFL212C ZKFL212D	- - 73.5 2 29/32	4.1	ZKFL212FC ZKFL212FD	86 3 3/8	4.9	
		270	160	56	212	31	22	33	70.5	66	-	M27	ZKFL312-34 ZKFL312	FL312	ZK312-34 ZK312	6.9	81.9 52.2	13.2	- - - -	- - - -	-	ZKFL312C ZKFL312D	95 3 3/8	8.1	

- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09, 305~308  
A-R1/8.....211~212, X10, 309~312
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No. : ZK206)

- As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No. : ZKFL206JL3)
- For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
- Housings of nodular graphite cast iron are also available.

**ZKFC**  
Tapered bore (with adapter)  
d<sub>1</sub> 20 ~ 55 mm



Variations of tolerance of spigot joint outside diameter ( $\Delta H_{3a}$ ), variations of tolerance of distance from mounting surface to center of spherical bore ( $\Delta A_{2a}$ ), tolerance of position of bolt hole (X), and tolerance of circumferential runout of spigot joint (Y)

Housing No.		$\Delta H_{3a}$	$\Delta A_{2a}$	X	Y
FC205~FC206	FCX05	0 -0.046	±0.5	0.7	0.2
FC207~FC210	FCX06~FCX10	0 -0.054	±0.5	0.7	0.2
FC210~FC212	FCX11~FCX12	0 -0.063	±0.8	1	0.3

Variations of tolerance of bolt hole diameter ( $\Delta N_s$ )

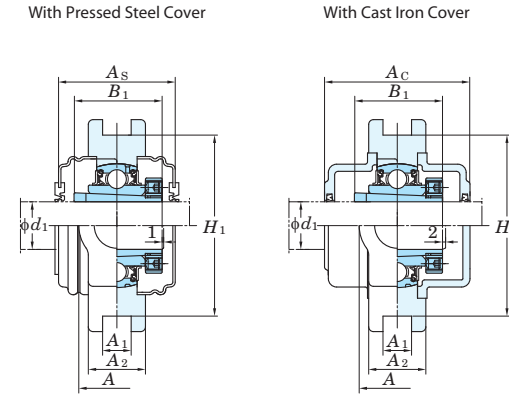
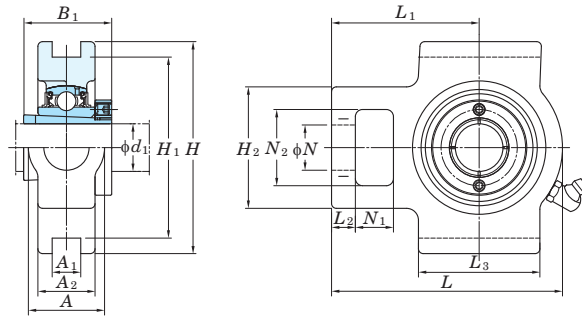
Housing No.	$\Delta N_s$
FC204~FC212   FCX05~FCX12	±0.2

Shaft Dia. mm inch d <sub>1</sub>	Dimensions inch mm											Bolt Size inch mm	Standard			Mass kg	Basic Load Ratings kN		Factor f <sub>0</sub>	With Pressed Steel Cover			With Cast Iron Cover							
	L	H <sub>3</sub>	J	J <sub>1</sub>	N	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	B <sub>1</sub>	Unit No.		Housing No.	Bearing No.	Unit No. Open Type		Unit No. Closed Type	Dimension mm inch A <sub>b</sub>		Mass kg	Unit No. Open Type	Unit No. Closed Type	Dimension mm inch A <sub>c</sub>	Mass kg						
20 3/4	4 17/32	2.7559	3 35/64	2 1/2	15/32	13/16	25/64	15/64	1 5/32	1 15/32	3/8	ZKFC205-12 ZKFC205	FC205	ZK205-12 ZK205	-	-	0.99	14.0	7.85	13.9	ZKFC205C	ZKFC205D	34.5	1 11/32	0.99	ZKFC205FC	ZKFC205FD	43	1 21/32	1.2
	4 3/8	2.9921	3 5/8	2 9/16	3/8	15/16	25/64	15/64	1 13/64	1 15/32	5/16	ZKFCX05-12 ZKFCX05	FCX05	ZKX05-12 ZKX05	-	-	1.2	19.5	11.3	13.9	ZKFCX05C	ZKFCX05D	36.5	1 7/16	1.2	-	-	-	-	-
25 7/8 15/16 1	4 29/32	3.1496	3 15/16	2 25/32	15/32	29/32	25/64	5/16	1 13/64	1 9/16	3/8	ZKFC206-14 ZKFC206-15 ZKFC206	FC206	ZK206-14 ZK206-15 ZK206	-	-	1.3	19.5	11.3	13.9	ZKFC206C	ZKFC206D	36.5	1 7/16	1.3	ZKFC206FC	ZKFC206FD	45	1 25/32	1.6
	5	3.3465	4 9/64	2 59/64	15/32	7/8	5/16	3/8	1 3/16	1 9/16	3/8	ZKFCX06-14 ZKFCX06-15 ZKFCX06	FCX06	ZKX06-14 ZKX06-15 ZKX06	-	-	1.5	25.7	15.4	13.9	ZKFCX06C	ZKFCX06D	38	1 1/2	1.5	-	-	-	-	-
	1	127	85	105	74.2	12	22.5	8	9.5	30	40	M10	ZKFC206-16 ZKFC206-17 ZKFC206	FC206	ZK206-16 ZK206-17 ZK206	-	-	1.3	19.5	11.3	13.9	ZKFC206C	ZKFC206D	36.5	1 7/16	1.3	ZKFC206FC	ZKFC206FD	45	1 25/32
30 1 1/8 1 3/16	5 5/16	3.5433	4 21/64	3 1/16	35/64	1 1/32	7/16	5/16	1 5/16	1 47/64	7/16	ZKFC207-18 ZKFC207	FC207	ZK207-18 ZK207	-	-	1.7	25.7	15.4	13.9	ZKFC207C	ZKFC207D	41	1 5/8	1.7	ZKFC207FC	ZKFC207FD	50	1 31/32	2.1
	5 1/4	3.6220	4 3/8	3 3/32	15/32	1 1/32	23/64	7/16	1 5/16	1 47/64	3/8	ZKFCX07-18 ZKFCX07	FCX07	ZKX07-18 ZKX07	-	-	1.9	29.1	17.8	14.0	ZKFCX07C	ZKFCX07D	43.5	1 23/32	1.9	-	-	-	-	-
	1 3/16	133	92	111	78.5	12	26	9	11	33	44	M10	ZKFC207-19 ZKFC207	FC207	ZK207-19 ZK207	-	-	1.7	25.7	15.4	13.9	ZKFC207C	ZKFC207D	41	1 5/8	1.7	ZKFC207FC	ZKFC207FD	50	1 31/32
35 1 1/4 1 3/8	5 23/32	3.9370	4 23/32	3 11/32	35/64	1 1/32	7/16	25/64	1 13/32	1 55/64	7/16	ZKFC208-20 ZKFC208-22 ZKFC208	FC208	ZK208-20 ZK208-22 ZK208	-	-	2.0	29.1	17.8	14.0	ZKFC208C	ZKFC208D	45.5	1 25/32	2.0	ZKFC208FC	ZKFC208FD	54	2 1/8	2.4
	5 1/4	3.6220	4 3/8	3 3/32	15/32	1 1/32	23/64	7/16	1 3/8	1 55/64	3/8	ZKFCX08-20 ZKFCX08-22 ZKFCX08	FCX08	ZKX08-20 ZKX08-22 ZKX08	-	-	1.9	34.1	21.3	14.0	ZKFCX08C	ZKFCX08D	43.5	1 23/32	1.9	-	-	-	-	-
	1 3/8	133	92	111	78.5	12	26	9	11	35	47	M10	ZKFC208-20 ZKFC208-22 ZKFC208	FC208	ZK208-20 ZK208-22 ZK208	-	-	2.0	29.1	17.8	14.0	ZKFC208C	ZKFC208D	45.5	1 25/32	2.0	ZKFC208FC	ZKFC208FD	54	2 1/8
40 1 7/16 1 1/2	6 5/16	4.1339	5 13/64	3 43/64	5/8	1 1/32	25/64	15/32	1 13/32	1 15/16	1/2	ZKFC209-23 ZKFC209-24 ZKFC209	FC209	ZK209-23 ZK209-24 ZK209	-	-	2.7	34.1	21.3	14.0	ZKFC209C	ZKFC209D	44.5	1 3/4	2.7	ZKFC209FC	ZKFC209FD	54	2 1/8	3.2
	6 3/32	4.2520	5 1/8	3 5/8	35/64	31/32	5/16	15/32	1 11/32	1 15/16	7/16	ZKFCX09-23 ZKFCX09-24 ZKFCX09	FCX09	ZKX09-23 ZKX09-24 ZKX09	-	-	2.6	35.1	23.3	14.4	ZKFCX09C	ZKFCX09D	45	1 25/32	2.6	-	-	-	-	-
	1 1/2	155	108	130	91.9	14	25	8	12	34	49	M12	ZKFC209-23 ZKFC209-24 ZKFC209	FC209	ZK209-23 ZK209-24 ZK209	-	-	2.7	34.1	21.3	14.0	ZKFC209C	ZKFC209D	44.5	1 3/4	2.7	ZKFC209FC	ZKFC209FD	54	2 1/8
45 1 5/8 1 11/16 1 3/4	6 1/2	4.3307	5 7/16	3 27/32	5/8	1 3/32	25/64	15/32	1 17/32	2 1/8	1/2	ZKFC210-26 ZKFC210-27 ZKFC210-28 ZKFC210	FC210	ZK210-26 ZK210-27 ZK210-28 ZK210	-	-	3.0	35.1	23.3	14.4	ZKFC210C	ZKFC210D	47	1 27/32	3.0	ZKFC210FC	ZKFC210FD	58.5	2 5/16	3.5
	6 3/8	4.6457	5 23/64	3 25/32	35/64	31/32	9/32	5/8	1 1/2	2 1/8	7/16	ZKFCX10-26 ZKFCX10-27 ZKFCX10-28 ZKFCX10	FCX10	ZKX10-26 ZKX10-27 ZKX10-28 ZKX10	-	-	3.1	43.4	29.4	14.4	ZKFCX10C	ZKFCX10D	45	1 25/32	3.1	-	-	-	-	-
	1 3/4	162	118	136	96.2	14	25	7	16	38	54	M12	ZKFC210-26 ZKFC210-27 ZKFC210-28 ZKFC210	FC210	ZK210-26 ZK210-27 ZK210-28 ZK210	-	-	3.0	35.1	23.3	14.4	ZKFC210C	ZKFC210D	47	1 27/32	3.0	ZKFC210FC	ZKFC210FD	58.5	2 5/16
50 1 7/8 1 15/16 2 1 7/8 1 15/16 2	7 9/32	4.9213	5 29/32	4 11/64	3/4	1 7/32	33/64	15/32	1 23/32	2 13/32	5/8	ZKFC211-30 ZKFC211-31 ZKFC211	FC211	ZK211-30 ZK211-31 ZK211	-	-	4.3	43.4	29.4	14.4	ZKFC211C	ZKFC211D	51	2	4.3	ZKFC211FC	ZKFC211FD	62.5	2 15/32	4.9
	7 3/32	5	5 63/64	4 15/64	5/8	1 1/32	5/32	55/64	1 33/64	2 13/32	1/2	ZKFCX11-30 ZKFCX11-31 ZKFCX11	FCX11	ZKX11-30 ZKX11-31 ZKX11	-	-	4.0	52.4	36.2	14.4	ZKFCX11C	ZKFCX11D	48.5	1 29/32	4.0	-	-	-	-	-
	2	180	127	152	107.5	16	26	4	22	38.5	61	M14	ZKFC211-30 ZKFC211-31 ZKFC211	FC211	ZK211-30 ZK211-31 ZK211	-	-	4.3	43.4	29.4	14.4	ZKFC211C	ZKFC211D	51	2	4.3	ZKFC211FC	ZKFC211FD	62.5	2 15/32
55 2 1/8 2 1/8	7 11/16	5.3150	6 19/64	4 29/64	3/4	1 13/32	43/64	15/32	2 9/64	2 39/64	5/8	ZKFC212-34 ZKFC212	FC212	ZK212-34 ZK212	-	-	4.9	52.4	36.2	14.4	ZKFC212C	ZKFC212D	61.5	2 13/32	4.9	ZKFC212FC	ZKFC212FD	74	2 29/32	5.7
	7 5/8	5.5118	6 1/2	4 19/32	5/8	1 5/16	7/16	25/32	1 29/32	2 39/64	1/2	ZKFCX12-34 ZKFCX12	FCX12	ZKX12-34 ZKX12	-	-	5.1	57.2	40.1	14.4	ZKFCX12C	ZKFCX12D	55.5	2 3/16	5.1	-	-	-	-	-

- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
A-1/4-28UNF.....205~210, X05~X09  
A-R1/8.....211~212, X10~X12
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No.: ZK206)
  - As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No.: ZKFC206JL3)
  - For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
  - Housings of nodular graphite cast iron are also available.

Take-Up Units

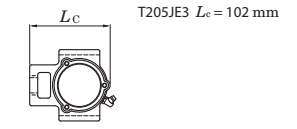
ZKT  
Tapered bore (with adapter)  
d<sub>1</sub> 20 ~ 40 mm



Variations of tolerance of groove width ( $\Delta A_{1s}$ ), variations of tolerance of distance between both grooves ( $\Delta H_{1s}$ ), and tolerance of symmetry of both groove sides (X)

Housing No.			$\Delta A_{1s}$	$\Delta H_{1s}$	X
T205~T210	TX05~TX10	T305~T310	+0.2 0	0 -0.5	0.5
T211~T212	TX11~TX12	T311~T312	+0.2 0	0 -0.8	0.6

Forms and dimensions of L<sub>c</sub> of T205JE3 (housing with cast iron cover) are shown below.

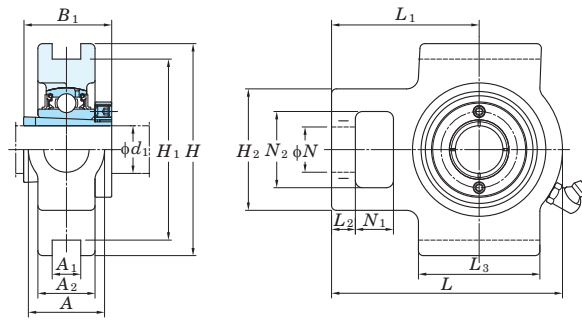


Shaft Dia. mm inch d <sub>1</sub>	Dimensions inch mm															Standard Unit No.	Housing No.	Bearing No.	Mass kg	Basic Load Ratings kN			Factor f <sub>0</sub>	With Pressed Steel Cover				With Cast Iron Cover								
	A	A <sub>1</sub>	A <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	N	N <sub>1</sub>	N <sub>2</sub>	B <sub>1</sub>	Unit No.					Dimension mm inch	Mass kg	Unit No.		Dimension mm inch	Mass kg											
20	3/4	1 1/4	15/32	15/16	3 1/2	2 63/64	2	3 13/16	2 7/16	13/32	2	3/4	5/8	1 1/4	1 15/32	ZKT205-12 ZKT205	T205	ZK205-12 ZK205	0.88	14.0	7.85	13.9	-	-	-	-	-	-	-	-	-					
	3/4	1 15/32	15/32	1 3/32	4 1/32	3 1/2	2 7/32	4 7/16	2 3/4	13/32	2 1/4	7/8	5/8	1 15/32	1 15/32	ZKT205-12 ZKT205	TX05	ZKX05-12 ZKX05	1.3	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-	-			
	3/4	1 13/32	15/32	1 1/32	3 1/2	3 5/32	2 7/16	4 13/16	3	15/32	2 9/16	1 1/32	5/8	1 13/32	1 15/32	ZKT305-12 ZKT305	T305	ZK305-12 ZK305	1.5	21.2	10.9	12.6	-	-	-	-	-	-	-	-	-	-	-	-		
25	7/8	1 15/32	15/32	1 3/32	4 1/32	3 1/2	2 7/32	4 7/16	2 3/4	13/32	2 1/4	7/8	5/8	1 15/32	1 9/16	ZKT206-14 ZKT206-15 ZKT206	T206	ZK206-14 ZK206-15 ZK206	1.3	19.5	11.3	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1	1 15/32	15/32	1 3/16	4 1/32	3 1/2	2 17/32	5 3/32	3 1/16	1/2	2 17/32	7/8	5/8	1 15/32	1 9/16	ZKT206-14 ZKT206-15 ZKT206	TX06	ZKX06-14 ZKX06-15 ZKX06	1.7	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1	1 5/8	5/8	1 3/32	3 15/16	3 5/64	2 3/4	5 13/32	3 11/32	9/16	2 29/32	1 3/32	23/32	1 5/8	1 9/16	ZKT306-14 ZKT306-15 ZKT306	T306	ZK306-14 ZK306-15 ZK306	1.9	26.7	15.0	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	1 1/8	1 15/32	15/32	1 3/16	4 1/32	3 1/2	2 17/32	5 3/32	3 1/16	1/2	2 17/32	7/8	5/8	1 15/32	1 47/64	ZKT207-18 ZKT207 ZKT207-19	T207	ZK207-18 ZK207 ZK207-19	1.7	25.7	15.4	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1 1/8	1 15/16	5/8	1 13/32	4 1/2	4 1/64	3 9/32	5 21/32	3 15/32	19/32	3 9/32	1 5/32	3/4	1 15/16	1 47/64	ZKT207-18 ZKT207 ZKT207-19	TX07	ZKX07-18 ZKX07 ZKX07-19	2.6	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/8	1 25/32	5/8	1 1/4	4 3/8	3 15/16	2 15/16	5 29/32	3 11/16	19/32	3 5/32	1 3/16	25/32	1 25/32	1 47/64	ZKT307-18 ZKT307 ZKT307-19	T307	ZK307-18 ZK307 ZK307-19	2.4	33.4	19.3	13.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	1 1/4	1 15/16	5/8	1 5/16	4 1/2	4 1/64	3 9/32	5 21/32	3 15/32	5/8	3 9/32	1 5/32	3/4	1 15/16	1 55/64	ZKT208-20 ZKT208-22 ZKT208	T208	ZK208-20 ZK208-22 ZK208	2.5	29.1	17.8	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1 1/4	1 15/16	5/8	1 13/32	4 19/32	4 1/64	3 9/32	5 21/32	3 7/16	19/32	3 9/32	1 5/32	3/4	1 15/16	1 55/64	ZKT208-20 ZKT208-22 ZKT208	TX08	ZKX08-20 ZKX08-22 ZKX08	2.6	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/4	1 31/32	45/64	1 11/32	4 7/8	4 13/32	3 9/32	6 3/8	3 15/16	21/32	3 1/2	1 1/4	7/8	1 31/32	1 55/64	ZKT308-20 ZKT308-22 ZKT308	T308	ZK308-20 ZK308-22 ZK308	3.0	40.7	24.0	13.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	1 7/16	1 15/16	5/8	1 3/8	4 19/32	4 1/64	3 9/32	5 21/32	3 7/16	5/8	3 9/32	1 5/32	3/4	1 15/16	1 15/16	ZKT209-23 ZKT209-24 ZKT209	T209	ZK209-23 ZK209-24 ZK209	2.5	34.1	21.3	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 7/16	1 15/16	5/8	1 1/2	4 19/32	4 1/64	3 9/32	5 7/8	3 17/32	5/8	3 3/8	1 5/32	3/4	1 15/16	1 15/16	ZKT209-23 ZKT209-24 ZKT209	TX09	ZKX09-23 ZKX09-24 ZKX09	2.9	35.1	23.3	14.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 7/16	2 5/32	45/64	1 1/2	5 7/16	4 59/64	3 17/32	7	4 11/32	23/32	3 13/16	1 11/32	15/16	2 5/32	1 15/16	ZKT309-23 ZKT309-24 ZKT309	T309	ZK309-23 ZK309-24 ZK309	4.2	48.9	29.5	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	

- Remarks 1. In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.  
 2. Part No. of applicable grease fittings are shown below.  
 B-1/4-28UNF.....205~210, X05~X09, 305~308  
 B-R1/8.....211~212, X10~X12, 309~312  
 3. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
 (Example of Part No.: ZK206)

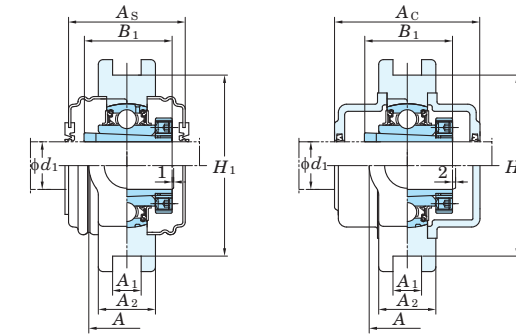
4. As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
 (Example of Part No.: ZKT206JL3)  
 5. For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.  
 6. Housings of nodular graphite cast iron are also available.

**ZKT**  
Tapered bore (with adapter)  
 $d_1$  45 ~ 55 mm



With Pressed Steel Cover

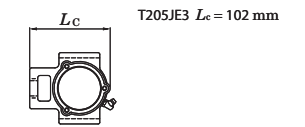
With Cast Iron Cover



Variations of tolerance of groove width ( $\Delta A_{1s}$ ), variations of tolerance of distance between both grooves ( $\Delta H_{1s}$ ), and tolerance of symmetry of both groove sides (X)

Housing No.			$\Delta A_{1s}$	$\Delta H_{1s}$	X
T205~T210	TX05~TX10	T305~T310	+0.2 0	0 -0.5	0.5
T211~T212	TX11~TX12	T311~T312	+0.2 0	0 -0.8	0.6

Forms and dimensions of  $L_c$  of T205JE3 (housing with cast iron cover) are shown below.



Shaft Dia. mm inch $d_1$	Dimensions inch mm														Unit No.	Standard Housing No.	Bearing No.	Mass kg	Basic Load Ratings kN $C_r$ $C_{0r}$	Factor $f_0$	With Pressed Steel Cover			With Cast Iron Cover			
	A	A <sub>1</sub>	A <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	N	N <sub>1</sub>	N <sub>2</sub>	B <sub>1</sub>							Unit No.	Dimension mm inch $A_s$	Mass kg	Unit No.	Dimension mm inch $A_c$	Mass kg	
45 1 5/8 1 11/16 1 3/4	1 15/16	5/8	1 15/32	4 19/32	4 1/4	3 9/32	5 7/8	3 17/32	5/8	3 3/8	1 5/32	3/4	1 15/16	2 1/8	ZKT210-26 ZKT210-27 ZKT210-28 ZKT210	T210	ZK210-26 ZK210-27 ZK210-28 ZK210	2.7	35.1 23.3	14.4	- - - ZKT210C ZKT210CD	- - - 74.0 2 29/32	2.7	ZKT210FC ZKT210FCD	97.0 3 13/16	3.8	
	1 11/16	55/64	1 21/32	5 3/4	5 1/8	4 1/32	6 23/32	4 3/16	3/4	3 3/4	1 3/8	31/32	2 17/32	2 1/8	ZKTX10-26 ZKTX10-27 ZKTX10-28 ZKTX10	TX10	ZKX10-26 ZKX10-27 ZKX10-28 ZKX10	4.4	43.4 29.4	14.4	- - - ZKTX10C ZKTX10CD	- - - 76.0 3	4.4	- - - -	- - - -	- - - -	
	1 3/4	25/32	1 9/16	5 15/16	5 33/64	3 27/32	7 17/32	4 19/32	25/32	4 3/16	1 15/32	1 1/16	2 13/32	2 1/8	ZKT310-26 ZKT310-27 ZKT310-28 ZKT310	T310	ZK310-26 ZK310-27 ZK310-28 ZK310	5.0	62.0 38.3	13.2	- - - -	- - - -	- - - -	ZKT310C ZKT310CD	110.0 4 11/32	6.7	
	1 7/8	55/64	1 1/2	5 3/4	5 1/8	4 1/32	6 23/32	4 3/16	3/4	3 3/4	1 3/8	31/32	2 17/32	2 13/32	ZKT211-30 ZKT211-31 ZKT211	T211	ZK211-30 ZK211-31 ZK211	4.1	43.4 29.4	14.4	ZKT211C ZKT211CD	76.0 3	4.1	ZKT211FC ZKT211FCD	99.0 3 29/32	5.4	
	2	55/64	1 23/32	5 3/4	5 1/8	4 1/32	7 5/8	4 11/16	3/4	4 1/32	1 3/8	1 1/4	2 17/32	2 13/32	ZKTX11-30 ZKTX11-31 ZKTX11	TX11	ZKX11-30 ZKX11-31 ZKX11	5.1	52.4 36.2	14.4	ZKTX11C ZKTX11CD	89.0 3 1/2	5.1	- - -	- - -	- - -	
	1 15/16	2 19/32	55/64	1 23/32	6 13/32	5 29/32	4 1/8	8 5/32	5	13/16	4 17/32	1 17/32	1 5/32	2 19/32	2 13/32	ZKT311-30 ZKT311-31 ZKT311	T311	ZK311-30 ZK311-31 ZK311	6.4	71.6 45.0	13.2	- - -	- - -	- - -	ZKT311C ZKT311CD	114.0 4 1/2	8.3
	2	2 19/32	55/64	1 23/32	6 13/32	5 29/32	4 1/8	8 5/32	5	13/16	4 17/32	1 17/32	1 5/32	2 19/32	2 13/32	ZKT311-32	-	-	-	-	-	-	-	-	-		
	2 1/8	2 17/32	55/64	1 21/32	5 3/4	5 1/8	4 1/32	7 5/8	4 11/16	3/4	4 1/32	1 3/8	1 1/4	2 17/32	2 39/64	ZKT212-34 ZKT212	T212	ZK212-34 ZK212	4.8	52.4 36.2	14.4	ZKT212C ZKT212CD	89 3 1/2	4.8	ZKT212FC ZKT212FCD	114 4 1/2	6.3
	2 1/8	2 3/4	1 1/32	1 7/8	6 9/16	5 15/16	4 3/8	8 13/16	5 13/32	13/16	4 3/4	1 5/8	1 1/4	2 3/4	2 39/64	ZKTX12-34 ZKTX12	TX12	ZKX12-34 ZKX12	7.3	57.2 40.1	14.4	ZKTX12C ZKTX12CD	89 3 1/2	7.3	- -	- -	- -
2 1/8	2 25/32	55/64	1 13/16	7	6 19/64	4 7/16	8 21/32	5 5/16	29/32	4 27/32	1 5/8	1 7/32	2 25/32	2 39/64	ZKT312-34 ZKT312	T312	ZK312-34 ZK312	7.5	81.9 52.2	13.2	- -	- -	- -	ZKT312C ZKT312CD	124 4 1/2	9.9	

- Remarks
- In Part No. of unit and units with covers, fitting codes follow bore diameter numbers.
  - Part No. of applicable grease fittings are shown below.  
B-1/4-28UNF.....205~210, X05~X09, 305~308  
B-R1/8.....211~212, X10~X12, 309~312
  - In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK.  
(Example of Part No. : ZK206)

- As for the triple seal type product (205 is the double seal type product), suffix code L3 (or L2) follows the Part No. of unit or bearing.  
(Example of Part No. : ZKT206JL3)
- For the dimensions and forms of applicable bearings and adapters, see the dimensional tables of ball bearing for unit and adapter.
- Housings of nodular graphite cast iron are also available.

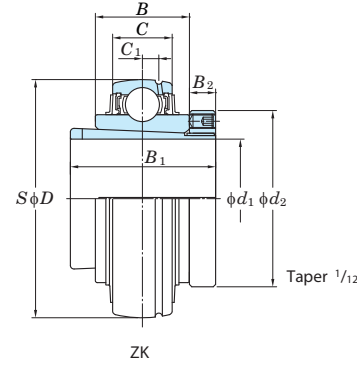


Ball Bearing Inserts

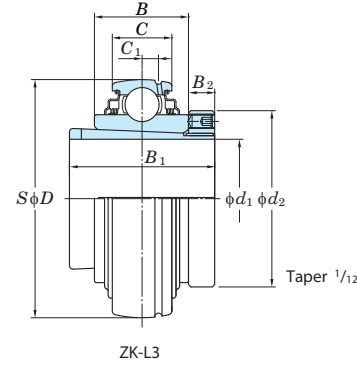
ZK  
Tapered bore (with adapter)  
d<sub>1</sub> 20 ~ 40 mm



ZK



ZK

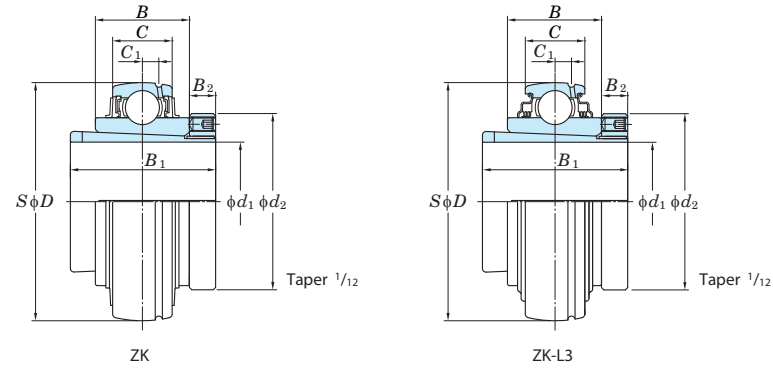


ZK-L3

Shaft Dia. mm inch	Dimensions inch mm									Basic Load Ratings kN		Factor f <sub>0</sub>	Bearing No.		Mass kg		Adapter No.
	d <sub>1</sub>	d	D	B	B <sub>1</sub>	B <sub>2</sub>	d <sub>2</sub>	C	C <sub>1</sub>	C <sub>r</sub>	C <sub>0r</sub>		Standard	L3 Type	Standard	L3 Type	
20 3/4	0.984 25	2.047 52	0.945 24	1.457 37	0.276 7	1.575 40	0.669 17	0.197 5	14.0	7.85	13.9	ZK205-12 ZK205	ZK205-12L2 ZK205L2	0.270	0.290	ZKE05 ZK05	
	0.984 25	2.441 62	1.063 27	1.457 37	0.276 7	1.575 40	0.748 19	0.197 5	19.5	11.3	13.9	ZKX05-12 ZKX05	- -	0.380	-	ZKE05 ZK05	
	0.984 25	2.441 62	1.063 27	1.457 37	0.276 7	1.575 40	0.866 22	0.236 6	21.2	10.9	12.6	ZK305-12 ZK305	- -	0.510	-	ZKE05 ZK05	
25 7/8 15/16	1.181 30	2.441 62	1.063 27	1.575 40	0.276 7	1.772 45	0.748 19	0.197 5	19.5	11.3	13.9	ZK206-14 ZK206-15 ZK206 ZK206-16	ZK206-14L3 ZK206-15L3 ZK206L3 ZK206-16L3	0.38	0.42	ZKS06 ZKA06 ZK06 ZKE06	
	1.181 30	2.835 72	1.181 30	1.575 40	0.276 7	1.772 45	0.787 20	0.217 5.5	25.7	15.4	13.9	ZKX06-14 ZKX06-15 ZKX06 ZKX06-16	- - - -	0.56	-	ZKS06 ZKA06 ZK06 ZKE06	
	1.181 30	2.835 72	1.181 30	1.575 40	0.276 7	1.772 45	0.945 24	0.256 6.5	26.7	15.0	13.3	ZK306-14 ZK306-15 ZK306 ZK306-16	- - - -	0.60	-	ZKS06 ZKA06 ZK06 ZKE06	
30 1 1/8 1 3/16	1.378 35	2.835 72	1.181 30	1.732 44	0.276 7	1.969 50	0.787 20	0.217 5.5	25.7	15.4	13.9	ZK207-18 ZK207 ZK207-19	ZK207-18L3 ZK207L3 ZK207-19L3	0.54	0.60	ZKS07 ZK07 ZKA07	
	1.378 35	3.150 80	1.339 34	1.732 44	0.276 7	1.969 50	0.827 21	0.236 6	29.1	17.8	14.0	ZKX07-18 ZKX07 ZKX07-19	- - -	0.70	-	ZKS07 ZK07 ZKA07	
	1.378 35	3.150 80	1.299 33	1.732 44	0.276 7	1.969 50	1.024 26	0.295 7.5	33.4	19.3	13.2	ZK307-18 ZK307 ZK307-19	ZK307-18L3 ZK307L3 ZK307-19L3	0.77	0.77	ZKS07 ZK07 ZKA07	
35 1 1/4 1 3/8	1.575 40	3.150 80	1.339 34	1.850 47	0.315 8	2.244 57	0.827 21	0.236 6	29.1	17.8	14.0	ZK208-20 ZK208-22 ZK208	ZK208-20L3 ZK208-22L3 ZK208L3	0.69	0.80	ZKE08 ZKS08 ZK08	
	1.575 40	3.346 85	1.417 36	1.850 47	0.315 8	2.244 57	0.866 22	0.236 6	34.1	21.3	14.0	ZKX08-20 ZKX08-22 ZKX08	- - -	0.80	-	ZKE08 ZKS08 ZK08	
	1.575 40	3.543 90	1.378 35	1.850 47	0.315 8	2.244 57	1.102 28	0.315 8	40.7	24.0	13.2	ZK308-20 ZK308-22 ZK308	ZK308-20L3 ZK308-22L3 ZK308L3	1.02	1.02	ZKE08 ZKS08 ZK08	
40 1 7/16 1 1/2	1.772 45	3.346 85	1.417 36	1.929 49	0.315 8	2.441 62	0.866 22	0.236 6	34.1	21.3	14.0	ZK209-23 ZK209-24 ZK209	ZK209-23L3 ZK209-24L3 ZK209L3	0.77	0.90	ZKA09 ZKE09 ZK09	
	1.772 45	3.543 90	1.417 36	1.929 49	0.315 8	2.441 62	0.945 24	0.236 6	35.1	23.3	14.4	ZKX09-23 ZKX09-24 ZKX09	- - -	0.92	-	ZKA09 ZKE09 ZK09	
	1.772 45	3.937 100	1.496 38	1.929 49	0.315 8	2.441 62	1.181 30	0.335 8.5	48.9	29.5	13.3	ZK309-23 ZK309-24 ZK309	ZK309-23L3 ZK309-24L3 ZK309L3	1.33	1.33	ZKA09 ZKE09 ZK09	

Remarks 1. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK  
(Example of Part No. : ZK206=UK206+ZK06)  
2. UK205 is the double seal type product (L2).  
3. Inch bore diameter series adapters are also available (see the dimensional tables of adapters).

**ZK**  
Tapered bore (with adapter)  
 $d_1$  45 ~ 55 mm

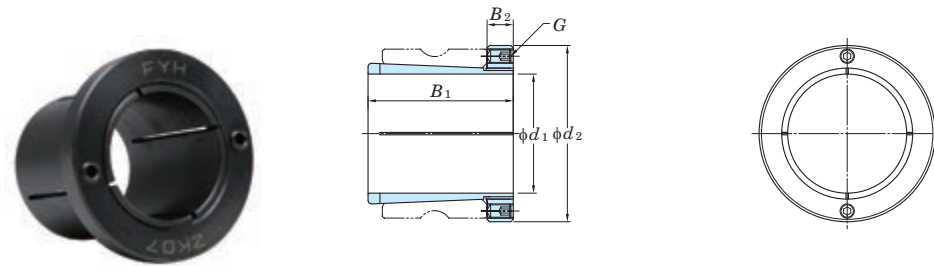


Shaft Dia. mm inch	Dimensions inch mm									Basic Load Ratings kN		Factor $f_0$	Bearing No.		Mass kg		Adapter No.			
	$d_1$	$d$	$D$	$B$	$B_1$	$B_2$	$d_2$	$C$	$C_1$	$C_r$	$C_{0r}$		Standard	L3 Type	Standard	L3 Type				
45 1 5/8 1 11/16 1 3/4	1 5/8	1.969	3.543	1.417	2.126	0.433	2.638	0.945	0.236	35.1	23.3	14.4	ZK210-26	ZK210-26L3	0.92	0.98	ZKS10 ZKA10 ZKE10 ZK10			
	1 11/16	1.969	3.937	1.575	2.126	0.433	2.638	0.984	0.276				ZKX10-26	-				1.22	-	ZKS10 ZKA10 ZKE10 ZK10
	1 3/4	1.969	4.331	1.575	2.126	0.433	2.638	1.260	0.354				ZK310-26	ZK310-26L3						
	1 5/8	2.165	3.937	1.575	2.402	0.433	2.913	0.984	0.276	43.4	29.4	14.4	ZK211-30	ZK211-30L3	1.22	1.51	ZKS11 ZKA11 ZK11 ZKE11			
	1 11/16	2.165	4.331	1.850	2.402	0.433	2.913	1.063	0.295				ZKX11-30	-				1.57	-	ZKS11 ZKA11 ZK11 ZKE11
	1 3/4	2.165	4.724	1.693	2.402	0.433	2.913	1.339	0.394				ZK311-30	ZK311-30L3						
	2	2.362	4.331	1.850	2.598	0.551	3.346	1.063	0.295	52.4	36.2	14.4	ZK212-34	ZK212-34L3	1.630	2.020	ZKS12 ZK12			
	2	2.362	4.724	1.850	2.598	0.551	3.346	1.102	0.295				ZKX12-34	-				2.060	-	ZKS12 ZK12
	2	2.362	5.118	1.850	2.598	0.551	3.346	1.417	0.453				ZK312-34	ZK312-34L3						
2	2.362	5.118	1.850	2.598	0.551	3.346	1.417	0.453	81.9	52.2	13.2	ZK312	ZK312L3							

Remarks 1. In Part No. of bearing with adapters, turn UK in the Part No. shown in the dimensional tables to ZK (Example of Part No. : ZK206=UK206+ZK06)  
2. UK205 is the double seal type product (L2).  
3. Inch bore diameter series adapters are also available (see the dimensional tables of adapters).

ZK

$d_1$  20 ~ 55 mm



mm	Shaft Dia. $d_1$				Dimensions			Adapter No.				Sleeve No.				Lock Nut No.	Set Screw $G$	Mass							
	(ZK)	(ZKE)	(ZKS)	(ZKA)	inch	mm	$B_1$	$B_2$	$d_2$	(ZK)	(ZKE)	(ZKS)	(ZKA)	(ZK)	(ZKE)			(ZKS)	(ZKA)	mm	(ZK)	(ZKE)	(ZKS)	(ZKA)	kg
20	-	-	-	-	1.457	0.276	1.575	ZK05	-	-	-	-	AZ05	-	-	-	-	AK05	M5x0.5x6	0.11	-	-	-	-	
	$\frac{3}{4}$	-	-	-	37	7	40	-	ZKE05	-	-	-	-	AZE05	-	-	-	AK05	M5x0.5x6	-	0.119	-	-	-	
25	-	-	-	-	1.575	0.276	1.772	ZK06	-	-	-	-	AZ06	-	-	-	-	AK06	M5x0.5x6	0.13	-	-	-	-	
	1	-	-	-	40	7	45	-	ZKE06	-	-	-	-	AZE06	-	-	-	AK06	M5x0.5x6	-	0.125	-	-	-	
	-	$\frac{7}{8}$	-	-	-	-	-	-	-	ZKS06	-	-	-	-	-	AZS06	-	-	AK06	M5x0.5x6	-	-	0.16	-	
	-	-	$\frac{15}{16}$	-	-	-	-	-	-	-	-	ZKA06	-	-	-	-	-	AK06	M5x0.5x6	-	-	-	-	0.15	
30	-	-	-	-	1.732	0.276	1.969	ZK07	-	-	-	-	AZ07	-	-	-	-	AK07	M5x0.5x6	0.17	-	-	-	-	
	-	$1\frac{1}{8}$	-	-	44	7	50	-	-	-	ZKS07	-	-	-	-	-	AZS07	-	-	-	-	0.20	-		
	-	-	$1\frac{3}{16}$	-	-	-	-	-	-	-	-	ZKA07	-	-	-	-	-	AK07	M5x0.5x6	-	-	-	-	0.17	
35	-	-	-	-	1.850	0.315	2.244	ZK08	-	-	-	-	AZ08	-	-	-	-	AK08	M6x0.75x7	0.22	-	-	-	-	
	$1\frac{1}{4}$	-	-	-	47	8	57	-	ZKE08	-	-	-	-	AZE08	-	-	-	AK08	M6x0.75x7	-	0.29	-	-	-	
	-	$1\frac{3}{8}$	-	-	-	-	-	-	-	-	ZKS08	-	-	-	-	-	AZS08	-	-	AK08	M6x0.75x7	-	-	0.22	-
40	-	-	-	-	1.929	0.3158	2.441	ZK09	-	-	-	-	AZ09	-	-	-	-	AK09	M6x0.75x7	0.25	-	-	-	-	
	$1\frac{1}{2}$	-	-	-	49	8	62	-	ZKE09	-	-	-	-	AZE09	-	-	-	AK09	M6x0.75x7	-	0.30	-	-	-	
	-	-	$1\frac{7}{16}$	-	-	-	-	-	-	-	-	ZKA09	-	-	-	-	-	AK09	M6x0.75x7	-	-	-	-	0.33	
45	-	-	-	-	2.126	0.433	2.638	ZK10	-	-	-	-	AZ10	-	-	-	-	AK10	M6x0.75x10	0.33	-	-	-	-	
	$1\frac{3}{4}$	-	-	-	54	11	67	-	ZKE10	-	-	-	-	AZE10	-	-	-	AK10	M6x0.75x10	-	0.35	-	-	-	
	-	$1\frac{5}{8}$	-	-	-	-	-	-	-	-	ZKS10	-	-	-	-	-	AZS10	-	-	AK10	M6x0.75x10	-	-	0.43	-
	-	-	$1\frac{11}{16}$	-	-	-	-	-	-	-	-	ZKA10	-	-	-	-	-	AK10	M6x0.75x10	-	-	-	-	0.40	
50	-	-	-	-	2.402	0.433	2.913	ZK11	-	-	-	-	AZ11	-	-	-	-	AK11	M6x0.75x10	0.42	-	-	-	-	
	-	$1\frac{7}{8}$	-	-	61	11	74	-	ZKE11	-	-	-	-	AZE11	-	-	-	AK11	M6x0.75x10	-	0.40	-	-	-	
	-	-	$1\frac{15}{16}$	-	-	-	-	-	-	-	ZKS11	-	-	-	-	-	AZS11	-	-	AK11	M6x0.75x10	-	-	0.5	-
	-	-	-	-	2.598	0.551	3.346	ZK12	-	-	-	-	AZ12	-	-	-	-	AK12	M8x1x12	0.61	-	-	-	-	
55	-	$2\frac{1}{8}$	-	66	14	85	-	-	-	ZKS12	-	-	-	-	-	-	AZS12	-	-	-	-	-	0.66		

FYH has reinvented the adaptor sleeve.



This is the ball bearing version of our patented revolutionary locking system, Z LOCK. The new series is called ZK and utilizes a tapered bore UK insert with our original Z LOCK sleeve instead of a traditional adaptor sleeve. The units are pre-assembled at the factory and are ready to use straight out of the box unlike traditional units that have separate inserts and adaptor sleeves. The installation of ZK units is extraordinary. ZK uses one key to tighten just two set screws by hand. ZK requires no torque charts and does not affect the inner clearance of the bearing at all.



Tighten the set screws by hand. Tightening the set screws creates extreme holding power over traditional adaptor sleeves without any change to the bearing clearance.



A traditional UK unit requires many tools to be assembled. You must tighten the lock nut using a torque wrench and following a torque tightening chart. Over tightening of the adaptor creates smaller clearance which can affect bearing life.

# Z LOCK® SLEEVE



**FYH**

**FYH INC.**  
 2306 Hirao Miharaku Sakai Osaka 587-0022 JAPAN  
 TEL: 072-361-3750 FAX: 072-361-4173 E-mail: info@fyhbearings.com

**FYH USA INC.**  
 13201 FYH Drive, Huntley Illinois 60142 USA  
 TEL: 847-487-9111 FAX: 847-487-9222 E-mail: sales@fyhusa.com





**FYH**