

FLANGED SERIES : FNL & I-1200 BEARING HOUSINGS

There are following series of Flanged Bearing Housings:

A). FNL Series Flanged Bearing Housing:-

Suitable for self-aligned Ball Bearing and Spherical Roller Bearing on an adapter sleeve. e.g. 1205K/2205K to 1222K/2222CCK

In the FNL Series Flanged Housings, two designs depend on the sizes of shafts.

- (1) The smaller size flange housings, with a shaft diameter range 20 to 60 mm, have a **Triangular Flange**.
- (2) Other is the larger size flange housings, with shaft diameter ranging 65 to 100 mm, have a **Square Flange**.

B). I-1200 Flanged Bearing Housing:-

(suitable for self-aligned Ball Bearing with extended inner ring, e.g. Bearing 11204E to 11212E)

I-1200 Flange Housing is designed with a triangular flange only, has a shaft diameter range of 20 to 60 mm.

TECHNICAL DETAIL AND PRODUCT FEATURE

- The Flange Housing is one-piece solid housing. A cover is provided in housing which has suitable steps to locate bearing as required. The Flange Housing is supplied with a cover for through shaft. For shaft end design End Cover is also provided upon request.
- The Flange Housing is simple in construction, easy to mount and easy to align.
- The Flange Housing are designed for grease lubrication. A suitable grease nipple is provided for relubrication. A felt seal is used in a flange-bearing housing.

FLANGED SERIES : FNL & I-1200 BEARING HOUSINGS



TECHNICAL DETAIL AND PRODUCT FEATURE

- For Flange Housing the permissible radial loads are dependent on the bearing or the attachment bolts.
- As far as axial loads are concerned, the direction of the load is the determining factor. If the load acts towards the flange, the axial load carrying capacity of the bearing is the deciding factor, whereas if the load is in the opposite direction, the permissible loads on the cover bolts are the limiting factor. Hence, the flange housings are provided with 8.8-graded bolts for fixing.

- For Flange Bearing Housing felt seal is available
- Various dimensional series are available in Flange Housings:
 - FNL SERIES (Triangular/Square Flange): suitable for bearing series 1200K.
 - FNL SERIES (Triangular/Square Flange): suitable for bearing series 2200K.
 - FNL SERIES (Triangular/Square Flange): suitable for bearing series 22200CCK.
 - I 1200 SERIES (Triangular Flange): suitable for bearing series 11200 E.
- Material for Flange Bearing Housings:- Graded Cast Iron: Gr FG 260 (IS 210)



I-1200 Series

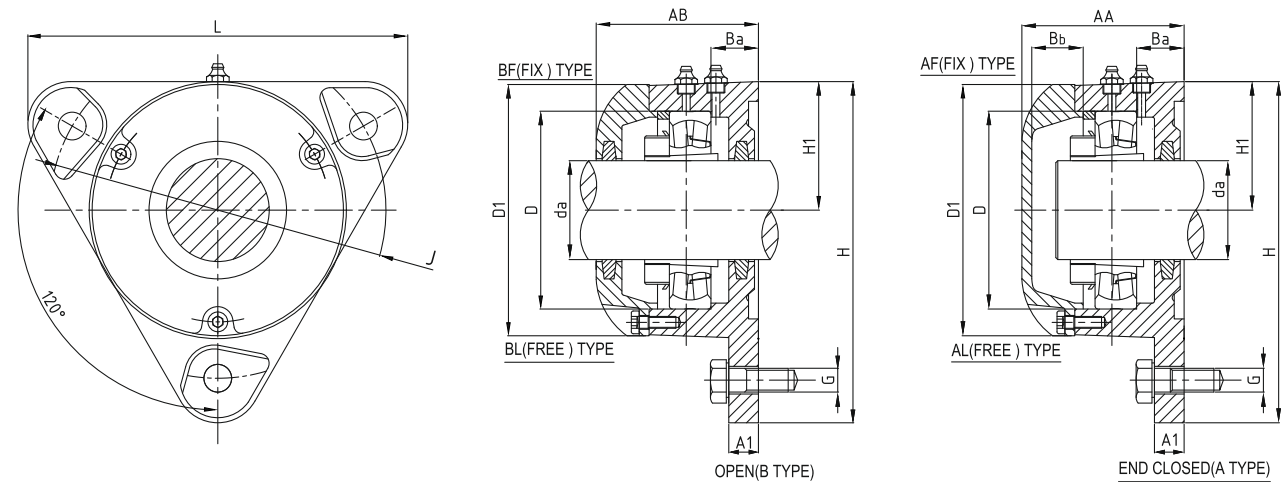


FNL Triangular Flange

FNL Square Flange

FNL TRIANGULAR FLANGED

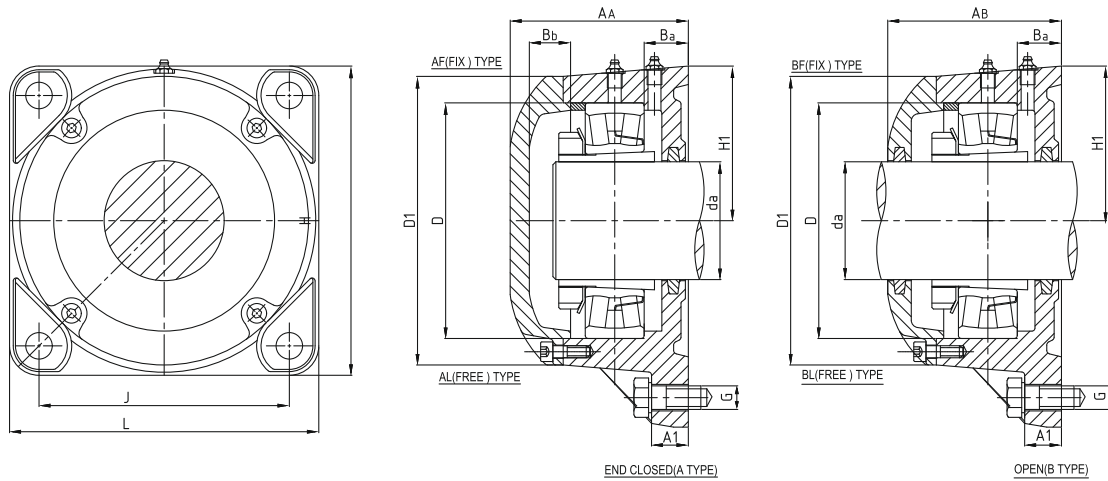
(Bearing Housings)
For Bearings with Adapter Sleeves



Bearing Housing Designation	Shaft Dia	Housing Dimension in MM												Approx Weight Kg.	Bearing No.	Sleeve	Locating Ring	Felt Strip No.
	da	AA	AB	A1	Ba	Bb	D1	H	H1	J	L	G	D					
FNL 505	20	57	56.5	10	15	15	74	100	38	96	110	10	52	1.1	1205 EK 2205 EK 22205 EK C 2205 K	H 205 H 305 H 305 H 305 E	1 FRB 5/52 1 FRB 2/52 1 FRB 2/25 1 FRB 2/52	FS 110
FNL 506	25	60.5	60	12	16	15	86	117	44	116	130	10	62	1.6	1206 EK 2226 EK 22206 EK C 2206 K	H 206 H 306 H 306 H 306 E	1 FRB 6/62 1 FRB 2/62 1 FRB 2/62 1 FRB 2/62	FS 190
FNL 507	30	64.5	64	12	16	17	95	130	48.5	130	145	12	72	2	1207 EK 2207 EK 22207 EK C 2207 K	H 207 H 307 H 307 H 307 E	1 FRB 8/72 1 FRB 2/72 1 FRB 2/72 1 FRB 2/72	FS 190
FNL 508	35	67	66	12	17	18	105	143	54	140	160	12	80	2.4	1208 EK 2208 EK 22208 EK C 2208 K	H 208 H 308 H 308 H 308 E	1 FRB 7/80 1 FRB 2/80 1 FRB 2/80 1 FRB 2/80	FS 190
FNL 509	40	72	70.5	12	19	19	113	160	60	160	179	12	85	3.2	1209 EK 2209 EK 22209 EK C 2209 K	H 209 H 309 H 309 H 309 E	1 FRB 6/85 1 FRB 2/85 1 FRB 2/85 1 FRB 2/85	FS 190
FNL 510	45	77	75	15	22	21	118	160	60	160	179	12	90	3.5	1210 EK 2210 EK 22210 EK C 2210 K	H 210 H 310 H 310 H 310 E	1 FRB 5/90 1 FRB 2/90 1 FRB 2/90 1 FRB 2/90	FS 190
FNL 511	50	84	82	15	24	23	127	172.5	65	170	192	12	100	4.3	1211 EK 2211 EK 22211 EK C 2211 K	H 211 H 311 H 311 H 311 E	1 FRB 6/100 1 FRB 2/100 1 FRB 2/100 1 FRB 2/100	FS 260
FNL 512	55	85	83	15	23	22	142	189	72	180	210	12	110	5.2	1212 EK 2212 EK 22212 EK C 2212 K	H 212 H 312 H 312 H 312 E	1 FRB 8/110 1 FRB 2/110 1 FRB 2/110 1 FRB 2/110	FS 260
FNL 513	60	88	89	15	22	24	152	203	78	190	225	12	120	6.3	1213 EK 2213 EK 22213 EK C 2213 K	H 213 H 313 H 313 H 313 E	1 FRB 10/120 1 FRB 2/120 1 FRB 2/120 1 FRB 2/120	FS 260

FNL SQURE FLANGED

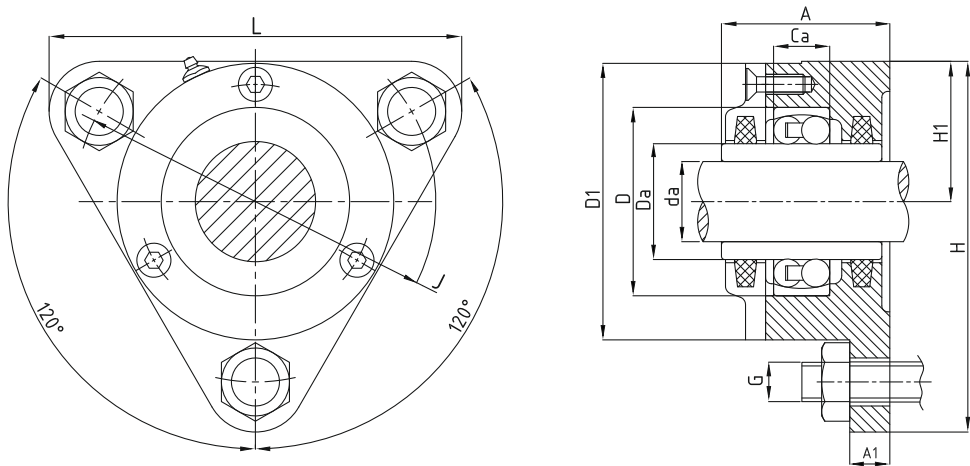
(Bearing Housings)
For Bearings with Adapter Sleeves



Bearing Housing Designation	Shaft Dia	Housing Dimension in MM												Approx Weight Kg.	Bearing No.	Sleeve	Locating Ring	Felt Strip No.
	da	AA	AB	A1	Ba	Bb	D1	H	H1	J	L	G	D					
FNL 515	65	106	104	25	30	24	16	190	95	152	190	168	130	10	1215 K 2215 EK 22215 EK C 2215 K	H 215 H 315 H 315 H 315 E	2 FRB 8/130 1 FRB 10/130 1 FRB 10/130 1 FRB 10/130	FS 260
FNL 516	70	113	110	25	31	27	175	196	98	152	196	16	140	10.5	1216 K 2216 EK 22216 EK C 2216 K	H 216 H 316 H 316 H 316 E	2 FRB 8.5/140 1 FRB 10/140 1 FRB 10/140 1 FRB 10/140	FS 330
FNL 517	75	117.5	115	25	31	27	188	210	105	170	210	16	150	12.5	1217 K 2217 K 22217 EK C 2217 K	H 217 H 317 H 317 H 317 E	2 FRB 9/150 1 FRB 10/150 1 FRB 10/150 1 FRB 10/150	FS 330
FNL 518	80	121	118	25	30	28	196	210	105	170	210	16	160	12	1218 K 2218 K 22218 EK C 2218 K	H 218 H 318 H 318 H 318 E	2 FRB 10/160 1 FRB 10/160 1 FRB 10/160 1 FRB 10/160	FS 330
FNL 520	90	130	127	30	30	31	224	250	125	198	250	20	180	19	1220 K 2220 KM 22220 EK C 2220 K	H 220 H 320 H 320 H 320 E	2 FRB 11/180 1 FRB 10/180 1 FRB 10/180 1 FRB 10/180	FS 370
FNL 522	100	140	137	30	30	33	244	270	135	219	270	20	200	23.5	1222 K 2222 KM 22222 EK C 2222 K	H 222 H 322 H 322 H 322 E	2 FRB 12.5/200 1 FRB 10/200 1 FRB 10/200 1 FRB 10/200	FS 460

I-1200(00) TRIANGULAR FLANGED

(Bearing Housings)
For Self Aligning Ball Bearings with Extended Inner Ring



Plummer Block Designation	Shaft Dia da	Housing Dimension in MM											Appropriate Bearing No.	Felt Strip	Approx Weight Kg.
		A	A1	Da	D1	H	H1	J	L	G	Ca	D			
I - 120013 E	20	42	10	28.9	69	92.5	35	90	105	10	14	47	11204 E	FS 180	0.80
I - 120014	25	46	10	33.3	75	100	38	96	110	10	15	52	11205 E	FS 180	1.00
I - 120015	30	50	12	40.1	86	117	44	116	130	10	16	62	11206 E	FS 180	1.40
I - 120016 E	35	54	12	47	97	130	48.5	130	145	12	17	72	11207E	FS 180	1.80
I - 120017	40	60	12	54	108	143	54	140	160	12	18	80	11208 E	FS 300	2.30
I - 120018	45	62	12	57.7	113	160	60	160	180	12	19	85	11209 E	FS 300	3.30
I - 120019 E	50	63	15	61.7	118	160	60	160	180	12	20	90	11210 E	FS 300	3.60
I - 120021	60	67	15	78	142	189	72	180	210	12	22	110	11212 E	FS 300	4.20

TROUBLESHOOTING GUIDE



SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Overheating	Shaft Creep/Slipping	Check Shaft near Bearing Seat
	Rubbing	Check for Shoulder Rubbing Against Guards, etc.
	Over Lubrication	Use Less Lubricant
	No Lubrication	Add Lubricant
	First Run after Relubrication	Stop System to Let it Cool then Restart
	Misalignment	Properly align Bearings
	Excessive Load	Select a Bearing with Adequate Load Capacity
		Decrease Load on the Bearing
	Excessive Speeds	Select a Bearing with Adequate Speed Rating
		Decrease Shaft Speed
	Ambient Heat	Move Bearing away from Heat Sources
	Noise: High Pitch	Misalignment
	Noise: Low Pitch	Dented Raceways
Noise: Rattle or Chatter	Improper Shaft Fit	Use Proper Shaft Size
		Use Proper Bearing Size
	Contaminated Bearing	Purge with Grease
	Loose Parts	Replace Bearing
		Check Machinery for Loose Bolts/that Bolts Fit
Vibration	Out of Balance Components	Balance all Machine Parts
	Loose Parts	Check Machinery for Loose Bolts
	Improper Shaft Fit	Use Proper Shaft Size
		Use Proper Bearing Size
	Bent Shaft	Replace or Straighten the Shaft
	Dented Raceways	Replace Bearing. Use Proper Installation Methods
Binding Shaft	Bent Shaft	Replace or Straighten the Shaft
	Contaminated Bearing	Purge with Grease
		Replace Bearing
	Misalignment	Properly align Bearings
Wearing of Inner Ring	Interference	Check Clearance of all Rotating Parts
	Improper Shaft Finish	Repair or Replace the Shaft Having Better Finish

INCH/MILLIMETRES CONVERSION TABLE

Inch.	Millimetre
9/64	0.141
5/32	0.156
11/64	0.172
3/16	0.188
13/64	0.203
7/32	0.219
15/64	0.234
1/4	0.250
17/64	0.266
9/32	0.281
19/64	0.297
5/16	0.313
21/64	0.328
11/32	0.344
23/64	0.359
3/8	0.375
25/64	0.391
13/32	0.406
27/64	0.422
7/16	0.438
29/64	0.453
15/32	0.469
31/64	0.484
1/2	0.50

Inch.	Millimetre
41/64	0.641
21/32	0.656
43/64	0.672
11/16	0.688
45/64	0.703
23/32	0.719
47/64	0.734
3/4	0.750
49/64	0.766
25/32	0.781
51/64	0.797
13/16	0.813
53/64	0.828
27/32	0.844
55/64	0.859
7/8	0.875
57/64	0.891
29/32	0.906
59/64	0.922
15/16	0.938
61/64	0.953
31/32	0.969
63/64	0.984
1"	1.000

OUR ACHIEVEMENTS



Bearing Housing Suitable for Mining Industry.

- Weight : 3.2 Ton
Shaft Dai. : 530mm
Bore Dia. : 920mm
- Axial Bearing Housing of various sizes Form 100mm to 280mm dia. Shaft used in power plants.
- Single piece bearing housings for wagon tippler suitable for 460mm shaft.
- Oil lubricated bearing housing SOFN 256 Suitable for 280mm Dia. shaft.

