

Combined Bearings

KAVITSU Group of Companies



The Design

- The design incorporated in KAVITSU combined bearings gives the best resolution of the external load into its components.
- The complete sharing of the radial and axial load is allowed with design of the bearing.
- It is a combination of **main bearing** and **axial bearing** which takes the radial and axial load well in proportion.
- The linear motion is smooth and there is no sliding friction. This leads to low wear and tear of supports / channels and saves power as well. Vibration level is reduced, which in turn decreases the noise level.

The Assembly

- Assembly of bearing is very simple.
- A plate or a shaft can be directly welded on soft axle of bearing and the welded bearing can be inserted in the beam which is then ready for use.

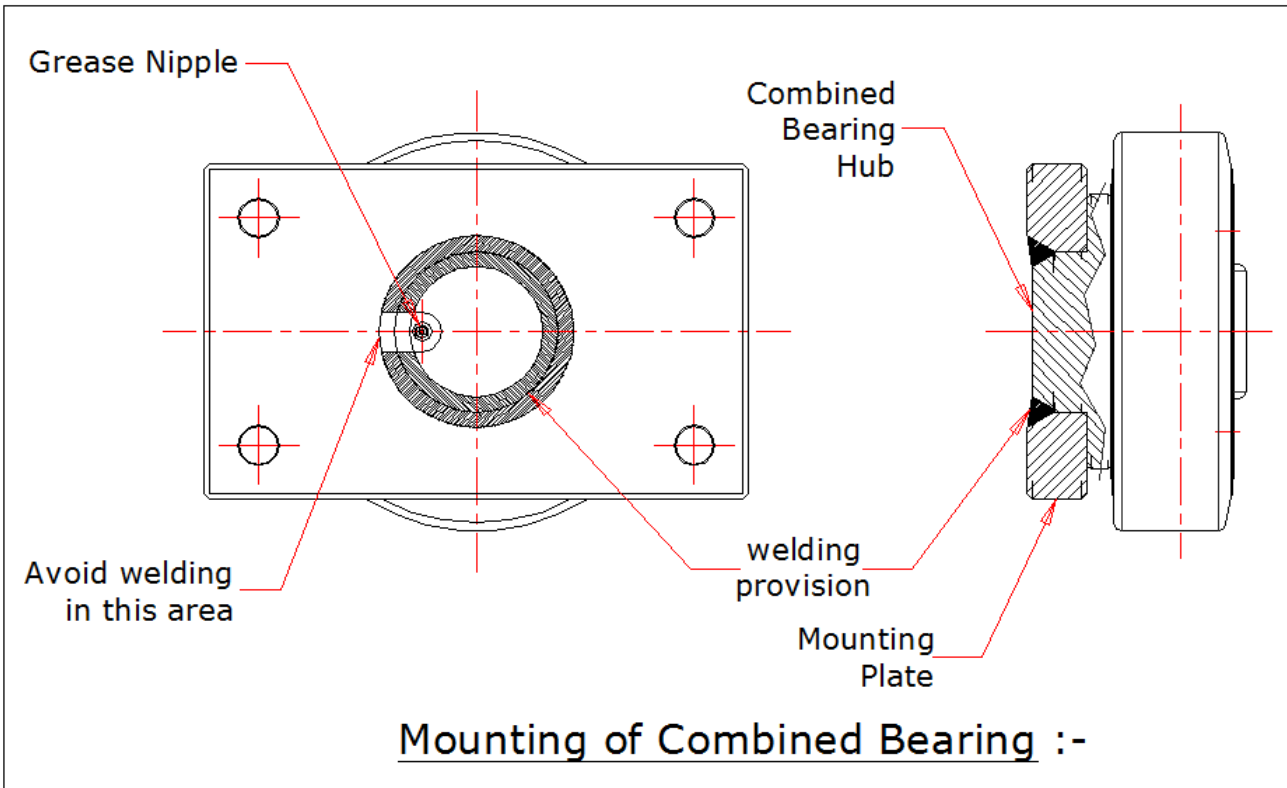
Mounting of Combined Bearing :-

Combined Bearing Hub is made from weldable steel.

The best method is to drill a hole to mounting plate to locate the Combined Bearing Hub diameter and weld from behind.

The chamfer or weld gusset allows the weld to be kept flat.

You do not have to disassemble the bearing to weld into position, just keep the torch or arc away from the hardened steel radial roller and axial roller.



- This system allows the extended life for bearing and the profile, as it minimizes the specific pressure value between bearing and the beam.
- The bearing is filled with lifelong lubricating grease and has a rubber sealing to avoid leakage and to protect it from dust and other foreign particle. Special greasing arrangement is done for applications where environmental conditions are extreme.

Lubrication of Combined Bearing :-

All the standard combined bearing range have a grease nipple for lubrication.

Use bearing grease e.g. Shell Alvania 3 or Mobil SHC-460.

The standard bearings are pre lubricated and can be run without further lubrication.

Initial Grease change interval after 5000 working hours.

For changing the deteriorated grease, disassembled the bearing and clean all components of the bearing properly. Assemble the bearing properly and fill fresh grease. Avoid excessive greasing. Use only one type of grease for lubrication.

Sealing of Combined Bearing :-

All the standard combined bearings are sealed with steel shields.

These seals are very effective and these bearings are in use in a variety of industrial environments



Series:

- The bearings are manufactured in LIGHT series and HEAVY series.
 - Light series bearings comprise of outer diameters from 52 mms to 150 mm and are suitable for use in the channels or I sections accordingly.
 - For heavy duty applications heavy channels or I sections are used and the sizes involved are from 165 to 309 mm as outer diameters.



Property of Kavitsu Group



Light Series combined bearing

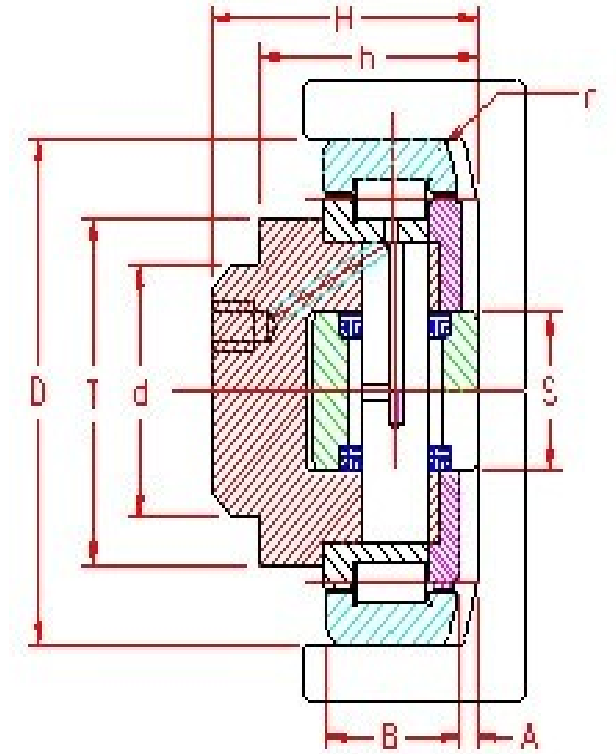
C= Dynamic Load Capacity for radial roller

Co= Static Load Capacity for radial roller

Ca= Dynamic Load Capacity for axial (side) roller

Coa= Static Load Capacity for axial roller

BEARING Model	D	T	d	H	h	B	A	S	r	C kN	Co kN	Ca kN	Coa kN	I.D. Of Radial Brg.
KCB-D-053	52.5	40	30	33	27	17	2	15	2	24	32	7	7	28
KCB-D-054	62	42	30	37.5	30.5	20	2.5	20	3	31	35.5	11.1	11.5	38
KCB-D-055	70.1	48	35	44	36	23	2.5	22	4	45.5	51	14	13	42
KCB-D-056	77.7	54	40	48	36.5	23	3	26	4	48	56.8	18	18	46
KCB-D-057	77.7	53	40	40	29	23	3	26	4	48	56.8	18	18	46
KCB-D-058	88.4	59	45	57	44	30	3.5	26	3	68	72	23	23	50
KCB-D-059	101.2	67	50	46	33	28	3	30	3	73	82	25	27	58
KCB-D-060	107.7	71	55	54	40	31	3	34	5	81	95	31	36	63
KCB-D-061	107.7	71	60	69	55	31	4	34	5	81	95	31	36	63
KCB-D-062	123	80	60	72.3	56	37	5.4	40	5	110	132	43	50	71
KCB-D-063	149	103	60	78.5	58.5	45	5.5	50	3	151	192	68	71	90



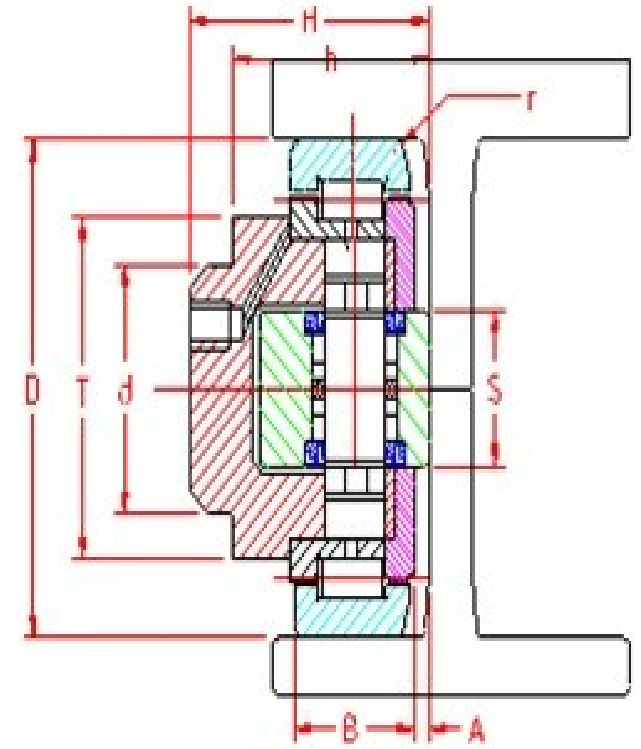
Light Series Combined Bearing



Heavy Series Combined Bearing

Co= Static Load Rating
 C= Dynamic Load Rating
 FC= C section channel
 FM= I section channel

BEARING Model	D	T	d	H	h min-max	B	A	S	r	Radial C Kn	Radial Co kN	Axial C kN	Axial Co kN
KCB-D-089	165	113	80	69	53 - 56	40	5	50 (40)	3	213	388	85 (46)	133 (79)
KCB-D-090	190	124	100	84.5	64.5 - 67.5	48	6.5	60 (40)	4	266	500	100 (46)	180 (79)
KCB-D-091	220	146	110	94.5	74.5 - 77.5	58	6.5	75 (60)	5	326	681	138 (101)	257 (173)
KCB-D-092	250	168	120	102	77 - 80	60	7	75 (60)	5	369	748	138 (101)	257 (173)
KCB-D-093	280	188	150	120	89.5 - 93.5	72	7.5	90 (60)	5	489	1066	182 (101)	488 (173)
KCB-D-094	320	218	140	135	110 - 114	85	10	90	8	642	1370	210	422
KCB-D-095	340	240	140	150	120 - 124	89	10	100	8	735	1600	232	463
KCB-D-096	390	242	170	200	150 - 154	118	10	100	8	1050	2243	232	463

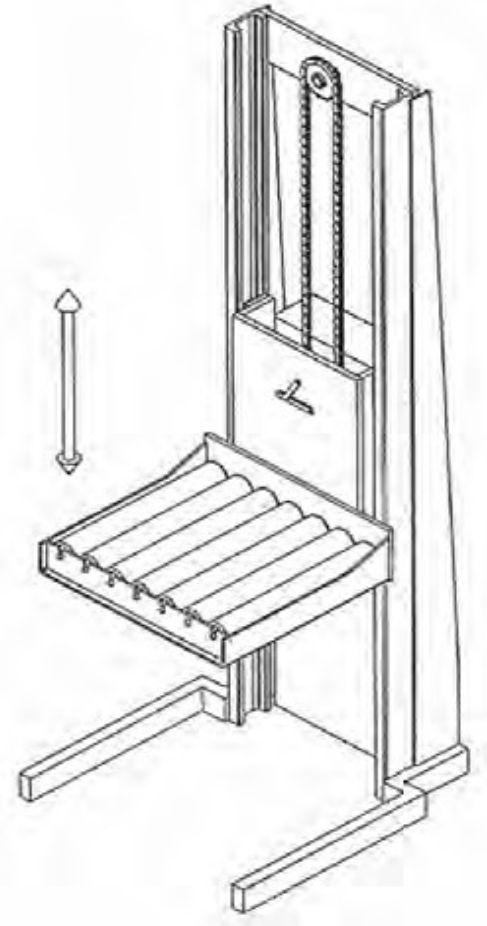


Heavy series combined bearing



Applications

- The main application are in:
 - pallet stackers
 - pallet lifter
 - telescopic fork
 - lift masts
 - tool changer system for heavy moulds for plastic molding machine
 - tool changing systems for various dies
 - lifts systems
 - eccentric lifting tables
 - robot tracks
 - multi axis units
 - heavy load linear systems
 - pallet in feeding station
 - fast picks.



Lifting Mechanism

WARRANTY CARD

WARRANTY CARD ISSUED FOR 'KAVITSU' MAKE COMBINED BEARING WITH BELOW SPECIFICATIONS-

MODEL :
CODE :
MOUNTING TYPE :
MOUNTING ASSESORIES :
LUBRICATION :
LUBRICANT USED :
LUBRICANT QTY. :
SERIAL NO. :

The manufacturer warrants this bearing to be of good material and workmanship & free from defects. Any part which after normal use and service, upon examination are proved to be defective, within one year from the date of supply will be replaced free, provided the unit is installed and maintained as per the instruction given and used for the application for which it is supplied. The warranty does not cover the brought out components. This warranty is limited up to the cost of unit supplied by us.

If the bearing was found open during warranty period , automatically, this warranty stands cancelled & your claim for damage will not be entertained.

DATE –

FOR KAVITSU TRANSMISSIONS PVT. LTD.

PLACE : SATARA

AUTHORISED SIGNATORY

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