

**Small Bore MT Series
50mm – 170mm**



Small bore MT bearings improve your design and lower manufacturing costs of manipulators, articulating arms, lift-assists, and balancers.

If you develop and manufacture ergonomic lift-assist devices, work positioners, and articulating arms, there's a Kaydon bearing that can increase your design flexibility. It's a bolt-up bearing in popular compact sizes, and it eliminates the limitations imposed by traditional king post configurations so only one bearing is required in your assembly instead of two.

Engineered especially for manipulators and jib cranes, Kaydon's small bore MT Series bearings are available in bore sizes from 50mm to 170mm. This series also incorporates a sealing system designed for minimal friction and contamination exposure. This compact, pre-engineered

bearing package is designed to simplify your overall design, saving weight and space.

How the small bore MT Series bearing gives you a better design for less.

Conventional bearings used in manipulators and articulating arms are complex and costly because they are usually mounted in the traditional "king post" design. Kaydon simplifies the design process with a single bearing installation that provides exceptional radial, thrust, and moment load handling, and features pre-engineered bolt holes for convenient assembly. There are fewer parts and less weight, so the bearing assembly requires less space. As shown in Figure A, the shaft itself placed a constraint on how much weight (moment load) the equipment could handle. Small Bore MT series bearings (Figure B) let you reconfigure for more efficient designs, providing even greater moment load capacities. Eliminating the solid king post-style shaft also lets you route other components, such as electrical, air, and hydraulic lines through a larger center hole, thus allowing greater design flexibility.

Figure A: old design

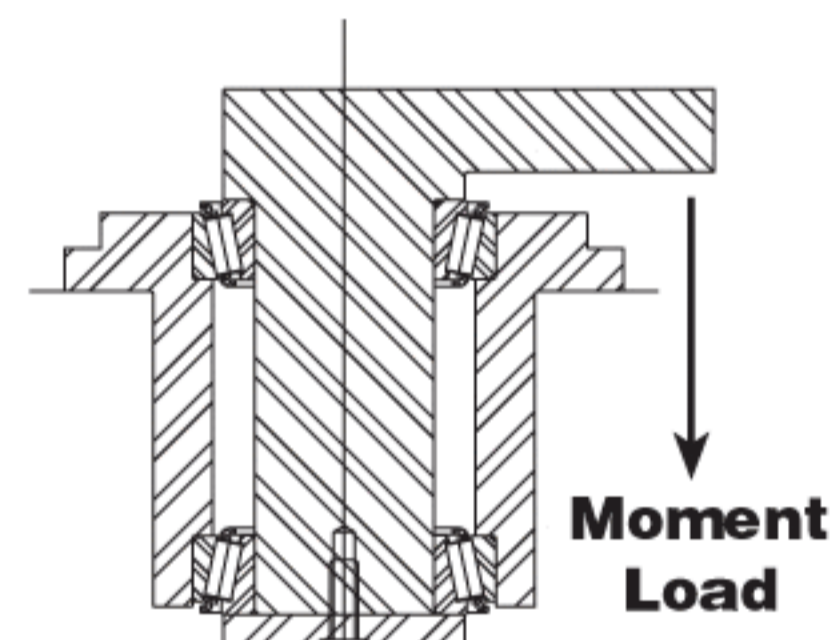


Figure B: better Kaydon design

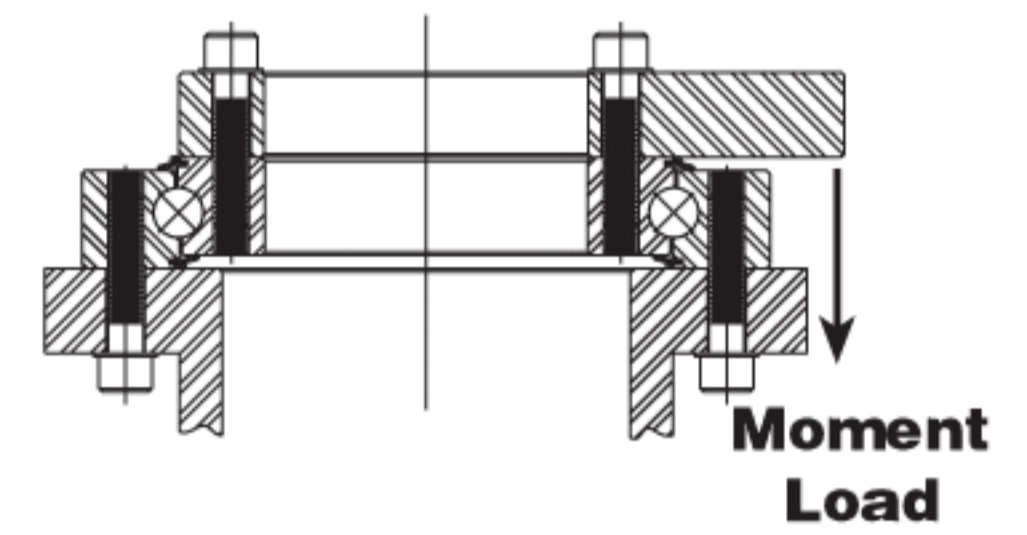
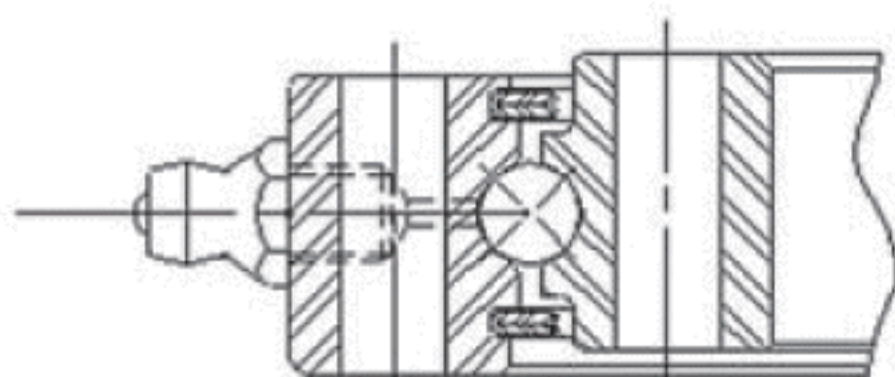


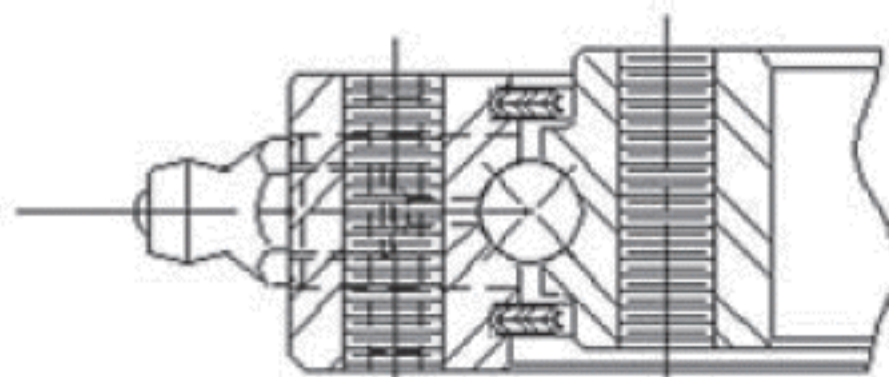
Table 1A — Non-geared Small Bore MT Series

Kaydon P/N	Ref. No.	Outline Dimensions (inches)				Mounting holes					Approx. Wt. (lbs.)	Ref. moment load rating ft-lbs.
		O.D.	I.D.	W	TO/TI	BCO (inches)	BCI (inches)	NO. HOLES		Hole Dia. HI/HO		
								INNER	OUTER			
MTO-050	T02-003P03	4.331	1.968	0.787	0.728	3.818	2.48	8	8	6.6MM	2	830
MTO-050T	T02-003P04	4.331	1.968	0.787	0.728	3.818	2.48	8	8	M6	2	830
MTO-065	T02-004P05	5.315	2.559	0.866	0.787	4.724	3.149	8	8	9MM	4	1,330
MTO-065T	T02-004P06	5.315	2.559	0.866	0.787	4.724	3.149	8	8	M8	4	1,330
MTO-122	T04-007P06	8.898	4.803	1.339	1.142	8.189	5.512	12	12	9MM	13	5,020
MTO-122T	T04-007P07	8.898	4.803	1.339	1.142	8.189	5.512	12	12	M8	13	5,020
MTO-143	T04-008P06	9.803	5.630	1.339	1.142	8.937	6.496	12	12	11MM	15	8,950
MTO-143T	T04-008P07	9.803	5.630	1.339	1.142	8.937	6.496	12	12	M10	15	8,950
MTO-170	T06-009P05	12.205	6.693	1.811	1.614	11.024	7.874	12	12	13MM	33	16,520
MTO-170T	T06-009P06	12.205	6.693	1.811	1.614	11.024	7.874	12	12	M12	33	16,520

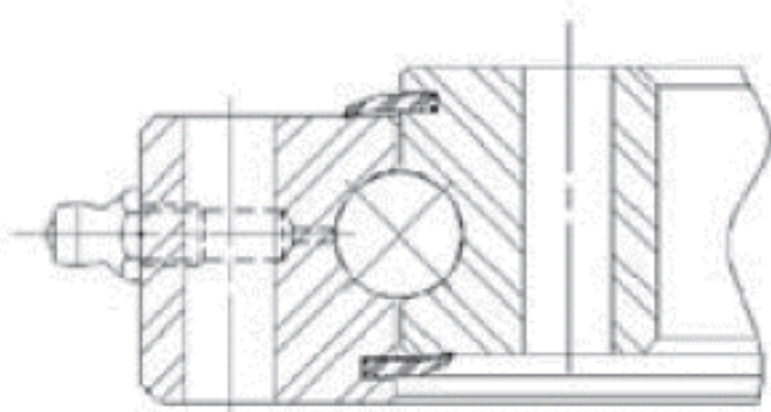
Note: Bearings with the suffix "T" in the model number have tapped holes. See Kaydon Catalog 390 for further details on mounting and bolt tensioning considerations.



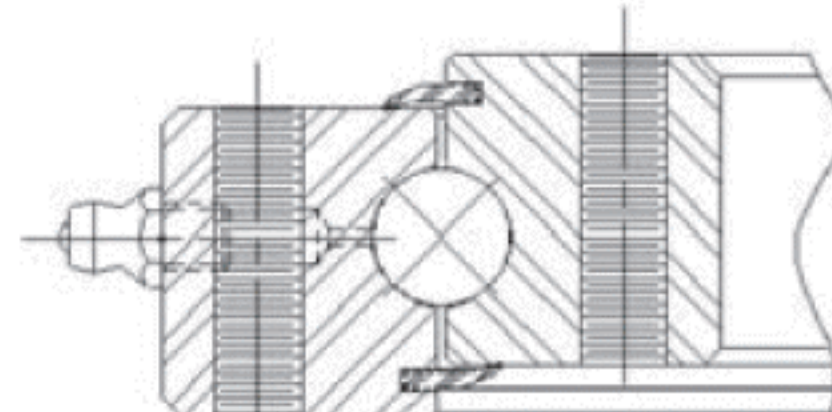
MTO-050, MTO-065



MTO-050T, MTO-065T



MTO-122, MTO-143, MTO-170



MTO-122T, MTO-143T, MTO-170T

