



SELECTION

Type C

Type C Bearing

The capacity of the Type C bearing is designed to handle loads normally imposed on the shaft. However, due to the assembly method and method of fastening the bearing to the shaft, there are necessary clearances between the sleeve and the shaft except at the two ends. Consequently, under heavy loads a flexing and stressing of the sleeve will take place as the shaft rotates. For this reason, the Radial Load Ratings shown in Table 1 are based on the sleeve capacity under maximum clearance conditions rather than on the capacity of the roller bearings themselves.

Sleeve capacity being independent of speed, the table gives maximum recommended bearing loads at all allowable speeds

and is based on the use of shafting tolerances from Table 18 on page B20-14.

Type C bearings are primarily utilized on radial load applications. They have ample thrust capacity for use as the locating bearing normally encountered with this type service. If heavy thrust loads are involved, Application Engineering should be contacted for a review of the application. The maximum thrust load should not exceed Type C pillow block limits shown in Table 3.

Since these ratings are considerably less than the base bearing ratings, the resulting life expectancy is, for all practical purposes, contingent only on proper lubrication.

Table 1: Type C Radial Load Ratings

Shaft Size Inches	Radial Load Rating (Lbs.) *	Max. RPM	Shaft Size Inches	Radial Load Rating (Lbs.) *	Max. RPM
1-3/16 - 1-7/16	725	3000	2-1/2 - 2-15/16	3000	1750
1-1/2 - 1-3/4	1000	3000	3 - 3-7/16	4000	1500
1-15/16	1350	2500	3-1/2 - 4	5500	1250
2 - 2-1/4	1700	2500	4-7/16 - 4-1/2	6500	1000
2-3/8 - 2-7/16	2100	2000	4-15/16 - 5	7500	750

* More than 100,000 L₁₀ hours life at Max. RPM listed.

Table 2: Type C Expansion Capability, Inches

Shaft Size, Inches	Type C		
	2-Bolt Pillow Block	4-Bolt Pillow Block	Flange
1-3/16 - 1-7/16	3/16	--	3/16
1-1/2 - 1-3/4	5/8	--	1/4
1-15/16	5/8	--	1/4
2 - 2-1/4	5/8	--	1/4
2-3/8 - 2-7/16	5/8	5/8	1/4
2-1/2 - 2-15/16	3/4	5/8	5/8
3 - 3-7/16	3/4	3/4	1/4
3-1/2 - 4	--	3/4	1/4
4-7/16 - 4-1/2	--	3/4	5/8
4-15/16 - 5	--	3/4	5/8

Table 3: Type C Pillow Block Permissible Thrust Load

Shaft Size, Inches	Thrust loads, lbs		Shaft Size, Inches	Thrust loads, lbs	
	2-Bolt	4-Bolt		2-Bolt	4-Bolt
1-3/16 - 1-7/16	3000	--	2-1/2 - 2-15/16	6900	9300
1-1/2 - 1-3/4	3150	--	3 - 3-7/16	5700	12000
1-15/16	5000	--	3-1/2 - 4	--	12000
2 - 2-3/16	5000	--	4-7/16 - 4-1/2	--	12000
2-3/8 - 2-7/16	7300	10000	4-15/16 - 5	--	16500

* The limits in above apply to pillow blocks. For thrust loads larger than listed or heavy thrust loading on other style housings, contact DODGE Engineering for recommendation.

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