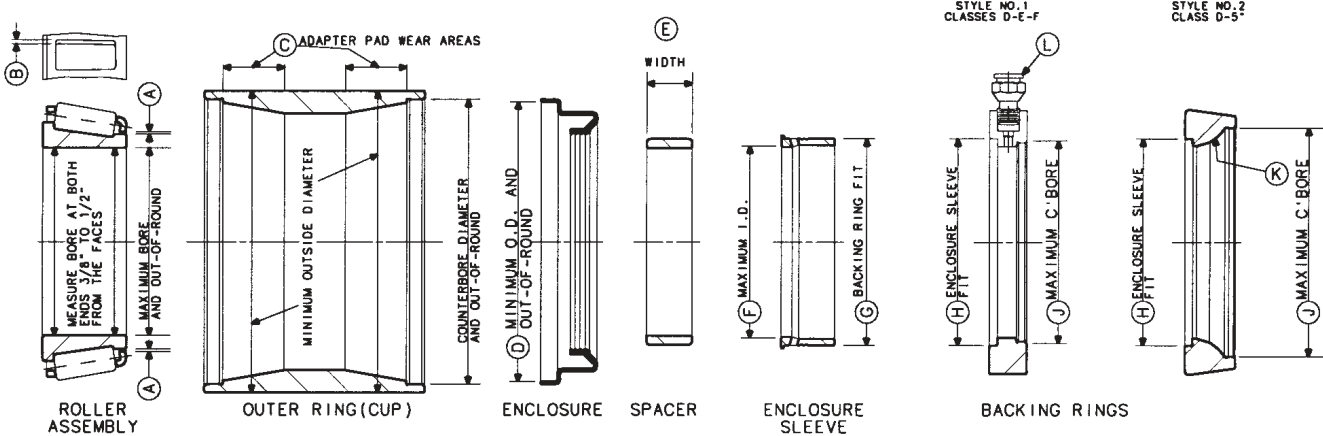


APTMROLLER BEARINGS
SERVICE LIMITS
Transit Cars Labyrinth Enclosures



Class and Size	Roller Assembly		Outer Ring				Enclosure		Enclosure Sleeve	Backing Ring	Each Roller Assembly	Around Spacer	Total Quantity
	+Maximum Bore	Out-Of-Round	Minimum OD	Maximum C' bore	Minimum C' bore	Out-Of-Round	Minimum OD	Out-Of-Round	Maximum ID	Maximum C' bore			
D (51/2 X 10)	5.1890"	0.003"	8.1775"	7.7540"	7.7450"	0.005"	7.7570"	0.015"	5.1890"	5.5300"	4	8	16
D-5"	5.0015"	0.003"	8.1775"	7.7540"	7.7450"	0.005"	7.7570"	0.015"	5.0020"	6.2100"	4	8	16
D-Short Cup	5.1890"	0.003"	8.2527"	7.7540"	7.7450"	0.005"	7.7570"	0.015"	5.1890"	--	4	4	12
E (6 X 11)	5.6890"	0.003"	8.6775"	8.2540"	8.2450"	0.005"	8.2570"	0.015"	5.6885"	Δ5.9370"	4	8	16
F (61/2 X 12)	6.1890"	0.003"	9.9275"	9.3790"	9.3700"	0.005"	9.3820"	0.015"	6.1880"	7.1855"	6	12	24
F-Short Cup	6.1890"	0.003"	9.8275"	9.3790"	9.3700"	0.005"	9.3820"	0.015"	6.1880"	--	8	4	20

+NOTE: ONE HALF OF TOTAL AMOUNT OF GREASE MAY BE APPLIED TO EACH SIDE OF ASSEMBLED BEARING (BEFORE ENCLOSURES ARE APPLIED).
 *These are AAR limits – Customer may specify reduced limits.
 Style 1 also – 6.030"

A. Roller assembly – cage inspection. If the roller pocket of the cage is worn to the extent that a 0.060" feeler gage can be inserted between the roller and the cage bridge, the roller assembly should not be returned to service.

! WARNING

Failure to observe the following warnings could create risk of death or serious injury.

Never spin a cone assembly.
The rollers may be forcefully expelled, creating a risk of bodily harm.

Do not install on the inboard side (adjacent to the backing ring) of any bearing assembly, any Timken Axle Saver™ Seal Wear Ring's P/N K151590 or P/N K153392 with date code before 08 03. Installation at this position may result in galling of the axle when the bearing is pressed onto the journal, which can cause fracture of the axle in service.

B. Outer ring (cup). When outer ring shows wear from adapter, the minimum OD is to be measured in the adapter pad wear areas. If the outer ring is distorted in the area of the counterbore, a close visual inspection of the inside and outside surfaces is required. Outer rings that have hair line cracks must be scrapped.

C. Enclosure. Minimum OD to be measured. The entire circumference of the major OD should be checked with a square. Out-of-round -.005" to +0.010" (0.015") based on major OD minimum plus 0.001". See sheet A-43147. NOTE: Sheet metal flinger, if used, should be checked for bent condition.

D. Spacer width – bench lateral. A spacer must be selected or the spacer may be ground to provide the bearing bench lateral play specified below for type of lateral measuring equipment used:

	Power operated	Hand operated
Classes D-E-F	0.023" - 0.029"	0.020" - 0.026"

Where close coordination is maintained between the bearing repair facility and the bearing mounting facility, the bearing bench lateral may be set to limits necessary to provide satisfactory mounted bearing lateral.

- E. Enclosure Sleeve – Bore.** The enclosure sleeve bore must have a tight fit on the axle.
 - F. Enclosure Sleeve – Fit In Backing Ring.** The enclosure sleeve must have a tight fit in the backing ring counterbore. Enclosure sleeve may be .0015" out-of-round maximum.
 - G. Backing ring – Fit on the enclosure sleeve.** The counterbore of the backing ring must have a tight fit on the enclosure sleeve. AAR Roller Bearing Manual permits salvage of backing rings with oversize counterbores. See A-24389 for suggested procedure.
Backing ring – Size and radius Bent or distorted backing rings must be scrapped.
 - H.** Check maximum c' bore.
 - J.** Check bore radius for excessive corrosion. Light pitting and rusting is acceptable. (Style 2)
 - K. Lubricant Fittings - When used.** Check lubricant fittings to see that they are properly applied and in place, and not damaged or clogged. Damaged fittings should be replaced.
- NOTE:** Contact The Timken Company for information on bearing parts that are not shown.

Part Numbers-Bearing Components

Class and Size	Roller Assembly	Outer Ring (Cup)	Spacer
D (51/2 x 10)	HM127446	HM127415XD	HM127446XA
D-5"	HM127440	HM127415XD	HM127440XB
D-SHORT CUP	HM127446	HM127417XD	HM127446XB
E (6 x 11)	HM129848	HM129814XD	HM129848XA
F (61/2 x 12)	HM133444	HM133416XD	HM133444XA
F-SHORT CUP	HM133444	HM133413XD	NP115833

See also service limit chart for Transit Cars – Rubbing Type Seals.

For additional information, contact your Timken sales representative at 1-800-964-2626 or 1-800-368-4401, or visit www.timken.com/rail.

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