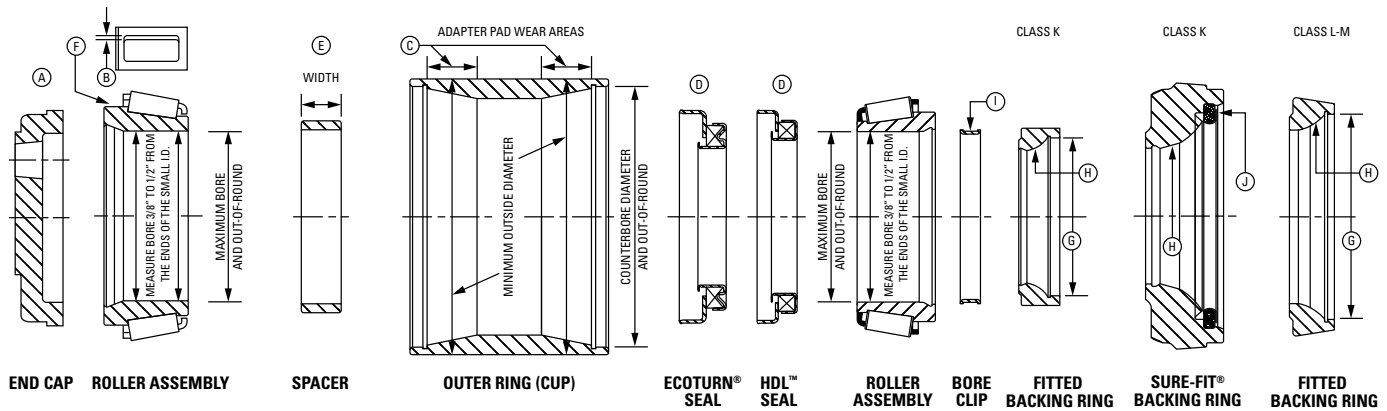


AP-2™ BEARINGS SERVICE LIMITS

AAR Approval Number 27 (No Field Lubrication)



Class and Size	Diameters are Averages						Amount of Grease			
	Roller Assembly		Outer Ring				Fitted Backing Ring	Each Roller Assembly	Around Spacer	Total Quantity
	Maximum Bore	Out-of-Round	Minimum O.D.	Maximum C' bore	Minimum C' bore	Out-of-Round	Maximum C' bore			
in.	in.	in.	in.	in.	in.	in.	oz.	oz.	oz.	
L (6 x 8)	5.6880	0.003	8.6315	8.255	8.245	0.005	7.028	2	4	8
K (6½ x 9)	6.1880	0.003	9.8250	9.380	9.370	0.005	7.528	2	6	10
M (7 x 9)	6.5005	0.003	10.3630	9.780	9.770	0.005	7.528	2	8	12

- A. End cap.** Inspect for cracks, breakage, wear or distortion.
- B. Roller assembly – cage inspection.**

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.

Proper maintenance and handling practices are critical. Always follow installation instructions and maintain proper lubrication.

Place roller assembly on back face (large diameter face) when checking clearances. If the roller pocket of the cage is worn to the extent that a 0.060 in. feeler gage can be inserted between the roller and the cage bridge, the roller assembly should not be returned to service.

- C. Outer ring (cup).** When outer ring shows wear from adapter, the minimum O.D. 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 hairline cracks must be scrapped.
- D. Seal – scrap all used seals.** Seals used in AP-2™ bearing assemblies are a proprietary Timken design. These seals must be replaced only with the appropriate Timken branded seal. Do not mix seal types.

- E. 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 the type of lateral measuring equipment used.

	Power operated	Hand operated
Classes L-K	0.023 in.-0.029 in.	0.020 in.-0.026 in.
Class M	0.025 in.-0.030 in.	0.022 in.-0.027 in.

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.

- F. Cone – fit with seal.** The cone must provide a press fit with the seal.
- G. Backing ring – size (fitted).** Check counterbore.
- H. Backing ring inspection (fitted).** Backing rings bent or distorted, and or with excessive corrosion must be scrapped. Inspect the backing radius in accordance to AAR MSRP Section H-II, Roller Bearing Manual.
- I. Bore clip – scrap all used bore clips.** Bore clips used in AP-2 bearing assemblies are a proprietary Timken design. These clips must be replaced only with appropriate Timken branded clip.
- J. Sure-Fit® backing ring - size (fitted).** See [Sure-Fit assembly service sheet](#) (order number 10479) for additional safety information.

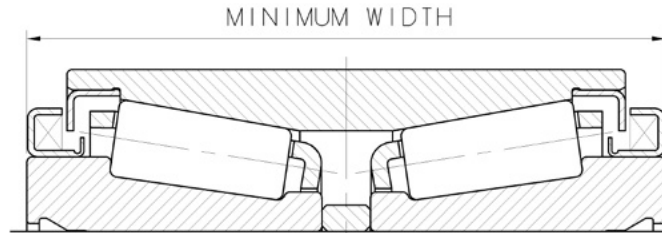
Part Numbers – Bearing Components										
Class and Size	Roller Assembly	Outer Ring (Cup)	Spacer	HDL™ Seal	EcoTurn® Seal	Fitted Backing Ring	Sure-Fit® Backing Ring	End Cap	Locking Plate	Cap Screws
L (6 x 8)	NP891226**	NP379567	NP329204	K156363	–	K154512	–	K154511	K80596	K84354
K (6½ x 9)	NP877824**	NP335917	NP115833	K153401	K163774	K153494	***	K154496	K84324	K84351
K (6½ x 9)	*NP633994**	NP335917	NP115833	K153401	K163774	K162227	***	K154496	K84324	K84351
M (7 x 9)	NP239427	NP540329	NP353018	K154504	–	K154505	–	K154506	K84324	K84351

For additional information on bearings equipped with polymer cages, please reference the specific service limit charts for these bearing assemblies.

* This assembly uses bore clip K162204 for attachment of backing ring to the cone. See letter I on the previous page.

** Polymer cage can be retrofitted at reconditioning.

*** See Sure-Fit® assembly service sheet (order number 10479) for additional safety information.



Minimum bearing assembly overall width after reconditioning or remanufacturing, from cone back face to cone back face (not including backing ring and axle end cap), must be within the following dimensions:

Minimum Width	
Bearing Class	Minimum Width
L (6 x 9)	6.386 in.
K (6½ x 9)	7.102 in.
M (7 x 9)	7.328 in.

NOTE: Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

Visit www.timken.com/markets/rail for additional information.

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