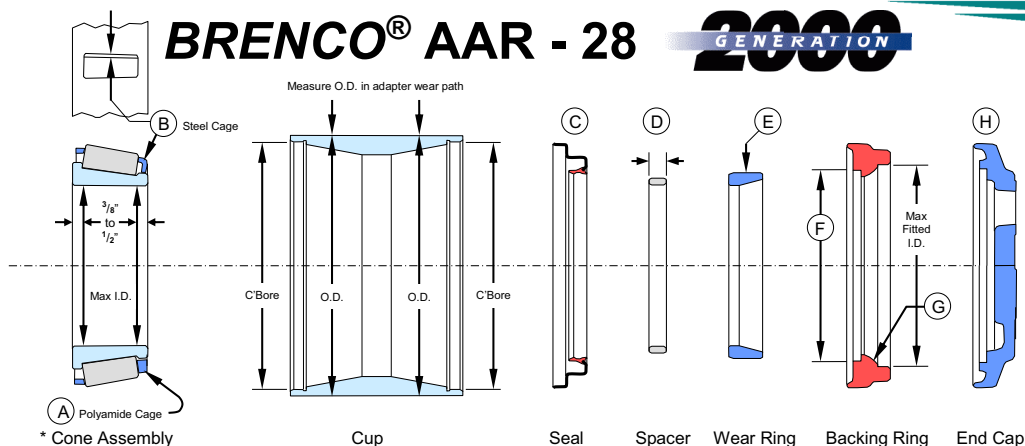


Specifications for Roller Bearing Maintenance

**Amsted Rail**

**BRENCO® AAR - 28**

**GENERATION 2000**



CLASS AND SIZE	DIAMETERS ARE AVERAGES						GREASE WEIGHT			
	CONE ASSEMBLY		CUP			BACKING RING	Each Cone Assembly	Spacer Region	Total ± 1 Ounce	
	Maximum I.D.	Out-of-Round	Minimum O.D.	Maximum C'bore.	Minimum C'bore.	Out-of-Round				Maximum Fitted I.D.
K (6½x9)	6.1880"	0.003"	9.825"	9.380"	9.370"	0.005"	7.528"	5½	1	12
M (7x9)	6.5005"	0.003"	10.363"	9.780"	9.770"	0.005"	7.528"	5½	½	11½

**Notes**

**A. Cage Inspection, Polyamide -**

**NOTICE - DO NOT SPIN - ROLLERS CAN BE DISLODGED AND CAUSE INJURY.**

Do not stress relief. Do not plate cone with cage in place. Wash only with water/detergent solutions at 190° max temp. Visually inspect for damage. Do NOT disassemble cage. Send to Progress Rail.

DO NOT MIX INSPECTION ROLLERS (pre-2003 cages). CHECK ROLLER ORIENTATION WHEN REINSTALLING.

**B. Cage - Inspection, Steel -** Place cone assembly on back face and use feeler gages. Pocket side clearance to be less than 0.060" between roller and cage bridge.

Note: One half of the total amount of grease may be applied to each side of the assembled bearing.

**C. Seal -** No interchangeable seals. Replace with new Brenco seals.

**D. Spacer -** Width selection must provide for proper lateral clearance.

**Class K**

Hand: 0.020" - 0.026"

Power: 0.023" - 0.029"

**Class M**

Hand: 0.022" - 0.027"

Power: 0.025" - 0.030"

**E. Wear Ring -** Wear on O.D. surface (seal lip path) not to exceed 0.005" depth.

**F. Backing Ring, Counterbore -** Provide tight fit on wear ring.

**G. Backing Ring, Fillet Contact -** Fillet area not to be galled or pitted.

**H. End Cap Inspection -** No cracks, breakage, wear, or distortion is allowed.

**I. Poly-Shroud® Slinger (Optional) -** Class K Poly-Shroud® option available. Spacer widths must conform to the following if Poly-Shroud® is present.

Class	Part No	Min.
K	G274E	0.535"

BEARING COMPONENT PART NUMBERS											
CLASS AND SIZE	Cup	Cone Assembly	Spacer	Wear ring	Composite wear ring	Composite wear ring insert	Seal			Backing Ring	End Cap
							Tru-Guard®	ST-212	Efficiency Plus®		
K (6 ½ X 9)	G202 or G202P	HM133444 or G201	G205	G206	G206D	G261	G207K	G207B or G207B-2	G207G or G207G-2	G215	G200
M (7 x 9)	G302P	G301A	G305	G306			n/a	n/a	G307G	G315	G300

All parts of *BRENCO Tapered Roller Bearings* are to be maintained in accordance with the above specifications and in accordance with the requirements of the *Association of American Railroads (AAR)* as described in the AAR Manual of Standards and Recommended Practices (MSRP).

\* The class-K cone assembly is interchangeable with those from AAR Approval #5, 5A class-F bearings.  
**CLASS K CONE ASSEMBLIES MUST BE FROM 1997 PRODUCTION OR LATER.**

**Fig. 3.7.23 Brenco "Generation 2000" roller bearing service limits  
AAR approval No. 28 (page 1 of 2)  
Rule 3.7.2**

**AAR Manual of Standards and Recommended Practices  
Roller Bearing Manual**

S-723

**Specifications for Roller Bearing Maintenance**

**BRENCO® AAR – 28**



**AAR Marking Order of Bearing Components**

For current marking order, reference the AAR Manual of Standards and Recommended Practices. For past marking order, reference the table below.

	AAR Marking Order (past)				
Cone (prior to 7/2010)	BRENCO®	USA	Part Number	Heat Number	Manufacture Date (Month and Last Two Year Digits)
Backing Ring (prior to 8/2012)	BRENCO®	Manufacture Date (Month and Last Two Year Digits)			Part Number
Cup (prior to 8/2012)	BRENCO®	Part Number	USA	Manufacture Date (Month and Last Two Year Digits)	Serial Number
Seal DDL® (prior to 11/2013)	BRENCO®	Part Number	DDL Patent Number	USA	Manufacture Date (Month and Last Two Year Digits)
Seal ST-212 (prior to 11/2013)	BRENCO®	Part Number	ST-212 Patent Number	USA	Manufacture Date (Month and Last Two Year Digits)
Wear Ring (prior to 10/2013)	BRENCO®	USA	Part Number	Manufacture Date (Month and Last Two Year Digits)	
Spacer (prior to 7/2013)	BRENCO®	USA	Part Number	Manufacture Date (Month and Last Two Year Digits)	

\* The class-K cone assembly is interchangeable with those from AAR Approval #5, 5A class-F bearings.  
**CLASS K CONE ASSEMBLIES MUST BE FROM 1997 PRODUCTION OR LATER.**

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**Fig. 3.7.23 Brenco "Generation 2000" roller bearing service limits  
AAR approval No. 28 (page 2 of 2)  
Rule 3.7.2**

IMPLEMENTED 10/12/2021