00 SERIES LIGHT DUTY SPLIT ROLLER BEARINGS

Ideal for Low Radial Loads and High Speeds
Easier and More Cost Effective Maintenance
Uses approximatley 80% less power than a double row spherical.*

The 00 Series Bearing Range

This range of products are designed to complement existing Cooper product ranges by providing a solution to those applications where the load capacity of the 01 Series is not required. This could prevent roller skidding and premature failure.

The 00 Series have been designed based on the load ratings of the 6300 series of deep groove ball bearings that are commonly used on high speed, lightly loaded applications such as fans and low speed highly loaded applications such as mixers.

 For a 1800rpm fan with a five inch shaft, this saves your customer about \$840 per year in power costs



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Smaller - But Beautifully Formed!

The 00 Series uses a thinner profile bearing. Because of the thin sections of the race components, it is not possible to manufacture all the bore sizes normally associated with a certain group size. The table below shows the bore sizes available. For the same reason, the smallest group size that can be manufactured is the 3-inch group. All 00 Series bearings use ATL seals except the 00B 300 Group where a special ATL seal is required.

The 00 Series will use a moulded nylon 4/6 cage which is supported by machined surfaces on the clamping rings. The light cage and small race sections enable a higher maximum speed (up to 450,000 mm dn) than that of the standard 01 Series. Provided with a standard S1 spherical fit between the pedestal and cartridge, the 00 Series is ideal for high speed applications

Lubrication

To operate at maximum speeds, special attention must be paid to the lubrication. Standard EP2 grease will generate too much heat and a much lighter mineral oil or synthetic oil should be used.



Pedestal Loads

The maximum safe radial load for a pedestal casting is based on the bearing static rating C_{OP} . The full C_{OP} rating can be applied if the angle of the load falls within the shaded area of the diagram shown.

If the load falls outside the shaded area or is greater than C_{Or} , please consult our technical department.

When considering suitability of pedestal castings, the resultant effective radial load must be used. The effective radial load is the resultant of net loads and appropriate dynamic factors, excluding speed and life factors.





LIGHT DUTY 00 SERIES - TECHNICAL SPECIFICATIONS* Group Shaft Diameters C(kN) Pedestal Ca(kN) Maximum Size Imperial Metric Speed Reference 2-15/16" 300 75mm 94 7.0 6000 P03

307	3-7/16"		145	12.3	5200	P04
400	3-15/16".4"	100mm	193	18.3	4500	P05
408	4-7/16". 4-1/2"	110mm	281	22.2	4000	P06
500	4-15/16".5"	120mm130mm	281	23.8	3600	P07
508	5-7/16" 5-1/2"	140mm	332	30.5	3300	P08
600	6"	150mm	397	31.4	3000	P09

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