DuraLube™

Self-Lubricated Spherical Plain Bearings

NEWL From RBC — The Leader in Spherical Plain Bearing Innovation



Advanced Technology

RBC's DuraLube[™] self-lubricating spherical plain bearings provide long life in demanding applications. Grease-free operation is accomplished through the use of a durable PTFE liner system that reduces friction between the spherical surfaces of the inner ring and outer ring. This proprietary liner system was developed for rigorous industrial applications, and has proven successful time and time again.

Standard DuraLube sizes available through 3" ID.

Applications

Self-lubricating bearings are being utilized in skid steer, tele-handler, off-road forklift, and wheel loader applications primarily on the cylinders, as well as pivot points of such equipment. The benefits of using these bearings include improved field reliability and lowered warranty costs. DuraLube has also reduced the cost of ownership by eliminating the need for zerk fittings, and costs associated with greasing and maintaining the bearings.

Eliminate Grease Lubrication

Ordinary spherical plain bearings require internal grease lubrication. To ensure effective operation and long life, this grease supply should be replenished at regular intervals. Relubrication is an added expense and not always reliably performed. Problems often arise during lubrication including accessibility, dirt obscured grease fittings, and infrequent preventive maintenance. DuraLube spherical plain bearings do not require grease, which eliminates these types of concerns.



Typical DuraLube Application – Self-lubricated bearings used on hydraulic cylinder rod eyes for tele-handlers.



RBC Division

www.rbcbearings.com 800.390.3300

DuraLube™

Load Ratings and Wear

The dynamic load is the load applied while the bearing is in motion. Dynamic loading directly effects the bearing wear rate. In the mid-ranges of dynamic loading (5,000 to 10,000 psi), the relationship of load to wear is linear. For example, doubling the load will double the wear. Dynamic loading over 10,000 psi will produce a higher ratio of wear to load, and dynamic loading under 5,000 psi will produce a lower ratio of wear to load. The graph shows typical wear curves for our DuraLube liner system at several different dynamic loads.



Guidelines for Use

- These are dry lubricant bearings and should not receive additional lubrication. This will minimize entrapment of abrasive dirt and grit.
- DuraLube bearings are dimensionally interchangeable with standard steel-on-steel spherical plain bearings.
- Required running clearance is developed through initial compression of the self-lubricated liner material.

LOAD CAPACITY				
Nominal ID	DuraLube Dynamic Load	Steel on Steel Dynamic Load	DuraLube Static Load	Steel on Steel Static Load
0.750	10,862	5,300	16,024	21,200
0.875	14,524	7,200	21,787	28,800
1.000	18,968	9,400	28,453	37,700
1.250	29,602	14,700	44,403	58,800
1.375	35,148	17,400	52,722	69,800
1.500	42,669	21,200	64,004	84,800
1.750	58,074	28,800	87,112	115,400
2.000	75,900	37,700	113,850	150,900



RBC Division 400 Sullivan Way West Trenton, NJ 08628 609.882.5050 (phone) 609.882.5533 (fax) 800.390.3300 (customer service) www.rbcbearings.com

Authorized RBC Distributor