

# SOLID LINEAR ROTARY BEARINGS

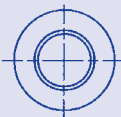
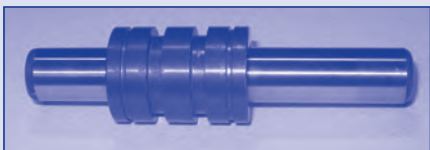
**1/4" TO 1"  
BORES**

**A**

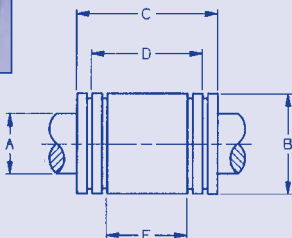
## CLOSED – OPEN

Made to thrive and survive in the presence of contaminants

PLEASE REFER TO INDEX FOR MOUNTING ACCESSORIES.



CLOSED SERIES



CONCENTRICITY: .0010 MAX. TIR

### DESIGN FEATURES

- Heavy-walled aluminum body for size stability under shock loads and severe loading conditions.
- Vibration absorbing Frelon® Liner.
- Frelon® liner concentric with ground O.D. within .001 T.I.R.
- Liner rejects grit, foreign materials - no need for friction generating shaft wipers.
- Maintenance free and self-lubricating.
- Made to carry greater loads (often 8 to 10 times greater) than anti-friction bearings to assure longer service life, less wear.
- Are precision-made to aircraft quality standards and tolerances and yet are competitively priced for industrial applications.
- Will not rust. Suitable in oils or water-soluble cutting fluids.
- Temperature range -400° F to +500° F.

## SEE PAGE 56A FOR SHAFTING

SHAFTING: Operates best when used with hardened and ground material, see Section A. May be used with soft shaft materials. Please consult Nordex for details.

**Material:** Outer Body - Aluminum Anodized  
Inner Wall - Frelon ( a compound of TEFLON ® )

### ADVANTAGES LOW FRICTION

The coefficient of friction remains constant over the life of the bearing. These frictional forces compensate for the inertia forces present in high speed designs such as carriage printer heads.

### MISALIGNMENT

Each bearing has an external o-ring groove which can be fitted with an o-ring to compensate for housing misalignment up to .007".

### CONTAMINATION

Particles which enter the bearing will simply become absorbed by the liner, reducing shaft damage.

### PREVENTS BEARING SEIZURE

As the operating temperature increases, the I.D. of the bearing will grow at a slightly faster rate than the O.D. of the shafting. This special engineered feature prevents bearing seizure over a wide range of operating conditions.

### HEAT DISSIPATION

The thin Frelon® liner allows heat to be dissipated through the aluminum shell to the mounting blocks.

### WITHSTANDS SHOCK LOADS

Shock loads have no effect on this bearing. With ball bearings, the loads are concentrated in such a small area that shock loading damages both the bearings and the shaft.

Catalog No.	Catalog No.	A +.0010 -.0000	B +.0000 -.0010	C +.000 -.015	Housing Bore +.0005 -.0000
Closed	Open				
ABX-Q1-3	ABX-R1-3	.187	.375	.562	.375
ABX-Q1-4	ABX-R1-4	.250	.500	.750	.500
ABX-Q1-6	ABX-R1-6	.375	.625	.875	.625
ABX-Q1-8	ABX-R1-8	.500	.875	1.250	.875
ABX-Q1-10	ABX-R1-10	.625	1.125	1.500	1.125
ABX-Q1-12	ABX-R1-12	.750	1.250	1.625	1.250
ABX-Q1-16	ABX-R1-16	1.000	1.5625	2.250	1.5625

Catalog No.	D	D Tolerance	E	E Tolerance	F	*Max Speed Ft/Min (Lubricated)	*Max. Load Lbs.
-3	.375		NA	±.005	1/8		110
-4	.437		.125	±.010	3/16		300
-6	.562	±.010	.187	±.010	1/4	400	510
-8	.875		.250	±.010	5/16		975
-10	1.000		.312	±.010	3/8		1470
-12	1.062	±.015	.312	±.010	7/16	400	1905
-16	1.625		.500	±.010	9/16		3525

Seals on one or both ends and larger sizes available on request. Retention hole provided to keep bearing from rotating. \* -4 thru -10 have centrally located groove.

\*RATINGS ACHIEVED WHEN BEARINGS ARE USED IN CONJUNCTION WITH HARDENED AND GROUND SHAFTING, SEE SECTION A.

Teflon® A registered trademark of E.I. DuPont

**NORDEX**

(800) 243-0986 In CT: (203) 775-4877 info@nordex.com

**80A**