REFERENCE BEARING LIFE ON STOCK PRODUCTS

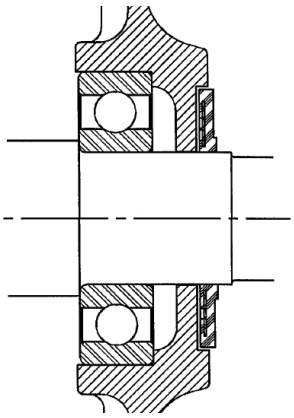
All T frame motors are designed with oversized bearings to add longer life and improve performance. All stock motors come with standard anti-friction bearings either roller or ball. In order to comply with ISO recommendation R281 (L10 life), at least 90% of the bearings would survive after 40,000 hours running based on a direct couple load and without any external thrust. The average life is generally agreed to be at least three times this figure.

Grease lubricated bearings are mounted directly into the bore of the end bracket. Vacuum de-gassed anti-friction bearings are used to assure long life, quiet operation, and have an interference fit on the shaft. The cast iron inner bearing cover positions the outer race and is used as a bearing extractor when dismantling. The grease flinger is locked on the shaft with a set screw. The cast iron outer bearing cover prevents axial movement of the bearing and incorporates a shaft seal as a standard. Grease nipples and grease fittings with pressure relief valve system is provided and allows regreasing while the motor is in operation.

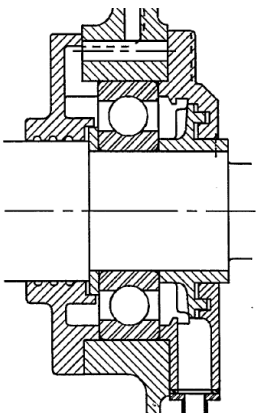
The T frame line of motors are rated with a L10 bearing life. Below is the bearing life we would expect to see based on motor frame size.

FRAME	BELT DRIVE	DIRECT COUPLED	BEARING TYPE
56-180	50,000 HRS	100,000 HRS	SHIELDED
210-286	50,000 HRS	100,000 HRS	
320-360	50,000 HRS	100,000 HRS	OPEN
400-449	50,000 HRS	100,000 HRS	
5000-6800	50,000 HRS	100,000 HRS	

The below is a bearing bracket cross section to aid in understanding the complete system design.



SHIELDED BEARING



OPEN BEARING

(NOTE: All motor applications are subject to an engineering review of bearing L10 life.)

Technical support
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