

BEARING SOLUTIONS
FOR HYDRAULIC SYSTEMS

FAG

T7FC Tapered Roller Bearings



Take an interactive
look at the product!



SCHAEFFLER

X-LIFE – PROVEN TO BE BETTER

Outstanding power density in hydraulic systems



Application

The tapered roller bearing is the central bearing position in applications such as axial piston motors, and has to support the highest possible radial and axial loads in small spaces. T7FC tapered roller bearings in X-life quality, which have optimized friction characteristics, are used here.

Challenges

- High rigidity
- Narrow axial guidance
- Low weight
- Good level of efficiency

Functional advantages

- Significantly longer rating life (70 %)
- 20% higher dynamic load rating
- More economical bearing supports due to downsizing
- Reduced friction, heat, and noise
- Longer maintenance intervals

Product benefits

- Longer operating life with the same loads
- Higher load carrying capacity with the same operating life
- New design approaches (e.g. downsizing)



X-LIFE – PROVEN TO BE BETTER

		Measure			
		Premium material / heat treatment	Improved geometry	Optimized surfaces	Higher dimensional and running accuracy
Customer benefits	Reduced mixed friction	✓		✓	✓
	Lower levels of contamination	✓			
	Reduced friction		✓	✓	✓
	Downsizing – more compact design	✓	✓	✓	✓
	Reduced noise generation		✓	✓	✓
	Improved grease lubrication			✓	
	Lower operating temperature		✓	✓	✓
	Longer rating life	✓	✓	✓	✓
	No running-in required		✓	✓	✓

X-life gives you a broader range of design possibilities to choose from:



If the load and design envelope are unchanged, X-life bearings have a longer rating and operating life. In this case, longer intervals are possible between maintenance operations.



Conversely, an X-life bearing with the same design envelope and the same rating life can support higher loads.



Where both the rating life and the load are unchanged, the use of X-life bearings results in greater power density, optimization of the design envelope, and a reduction in weight.

Schaeffler Technologies AG & Co. KG

Industriestrasse 1 – 3
91074 Herzogenaurach
Germany

Internet www.schaeffler.com/X-life
E-Mail X-life@schaeffler.com

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Issued: 2015, March

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