

# Baldor•Dodge Type E-Xtra And The E-Family of Roller Bearings

BALDOR•DODGE®



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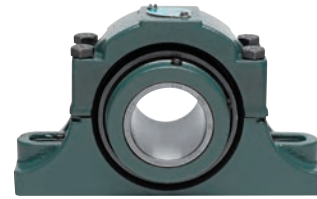
# Baldor's Dodge Type E Family

## A History of Excellence

The Double Interlock, the first bearing in the Dodge Type E Family, was introduced in 1938. However, this was not the first mounted roller product in the Dodge product line. In 1923, the Type C bearing was introduced as a problem solver for tough industrial applications in a growing industrial economy. The industry at the time required a better sealing system and increased misalignment capabilities.

Dodge brand products met the needs of the industry in 1923 and has continued to provide innovative solutions for tough industrial environments to present day.

2011 will mark the launch of the new enhanced Type E-Xtra with the most advanced mounted bearing sealing system on the market today coupled with American made bearings that yield a 13 -14% increase in ratings over the previous design.



**2012-Baldor's New Dodge Type EXL Roller Bearing**



**2011-Baldor's New Dodge Type E-Xtra**



**1979-Introduction of the TAF Mounted Roller Bearing**

**1965-Type K Bearing Launched**

**1943-Dodge Type E-Xtra Bearing Introduced**

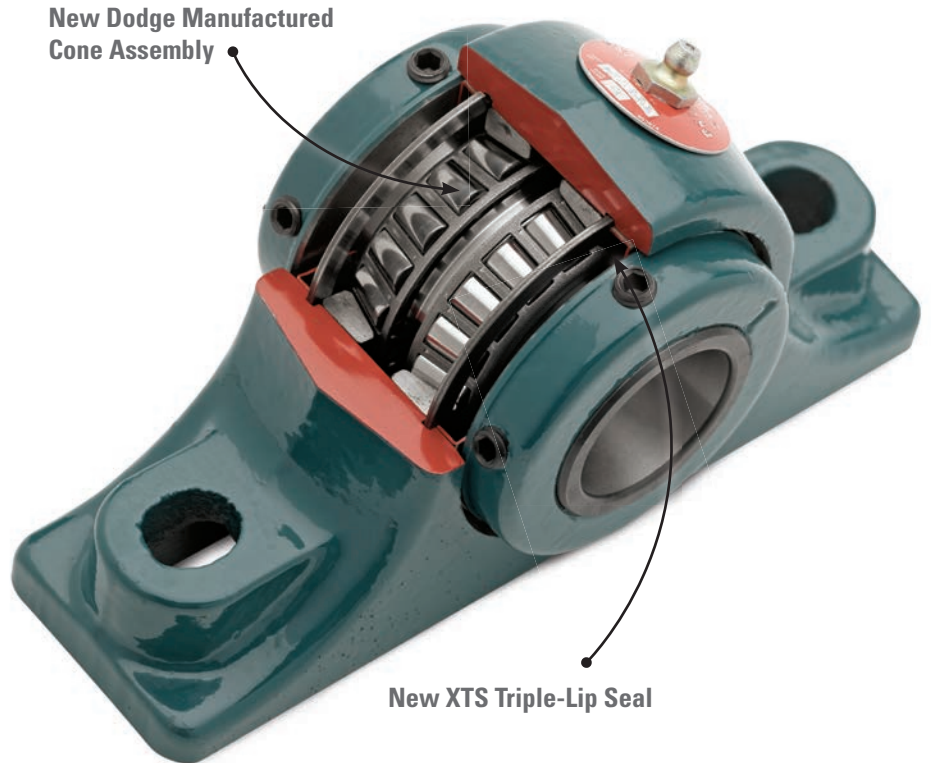
**1938-Introduction of Dodge Double Interlock Bearing**

# The New Dodge Type E-Xtra

## The Legacy Continues

### All Type E-Xtra Bearings Share Common Features That Ensure Greater Reliability

- Dodge manufactured, high-capacity tapered roller bearing inserts allow for combination radial and thrust loads.
- Highest load ratings in the industry achieved by world class design and manufacturing.
- Exclusive Baldor •Dodge “XTS” triple-lip seal protects against contamination in dusty or wet environments.
- The “XTS Plus” sealing system incorporates the Baldor •Dodge E-Tect seal kit to provide extra protection above and beyond the standard XTS triple-lip seal for extremely wet or dirty environments.
- Oversized dual Springlok collars act as flingers for added protection.
- Bearings are preassembled, prelubricated and factory adjusted for easy installation and increased productivity.
- Quality through-hardened rollers and races offer excellent load handling.
- Carburized inner ring absorbs shocks and resists crack propagation.
- Variety of configurations allows maximum application flexibility.



### Type E-Xtra Offering

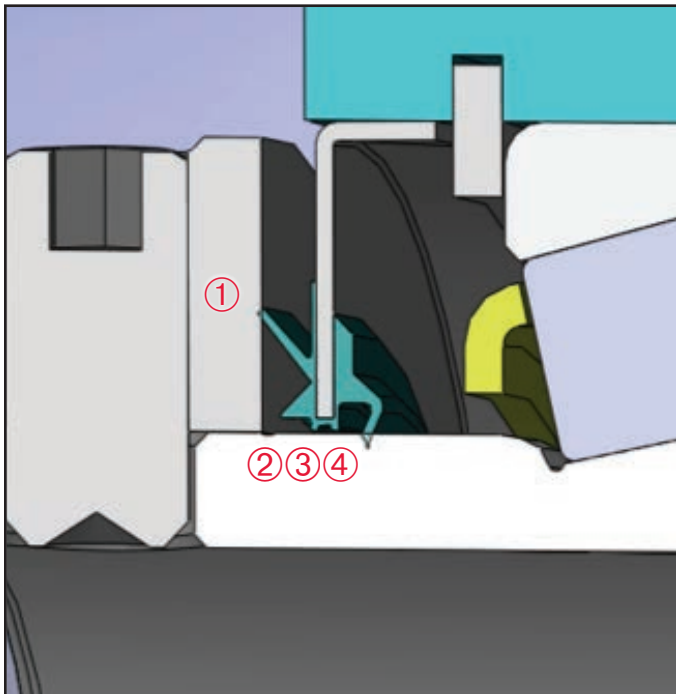
- Two and four-bolt pillow blocks from 1-3/16” to 7” and 35mm through 180mm
- Flanges from 1-3/16” through 4-1/2” and 35mm through 115mm
- Piloted flanges from 1-3/16” through 5” and 35mm through 125mm
- Top angle take-ups from 1-3/4” through 4” and 45mm through 100mm
- Wide slot take-ups from 1-3/8” through 3” and 35mm through 75mm

# The New Standard

## Xtra Tough Sealing

### Importance of Sealing:

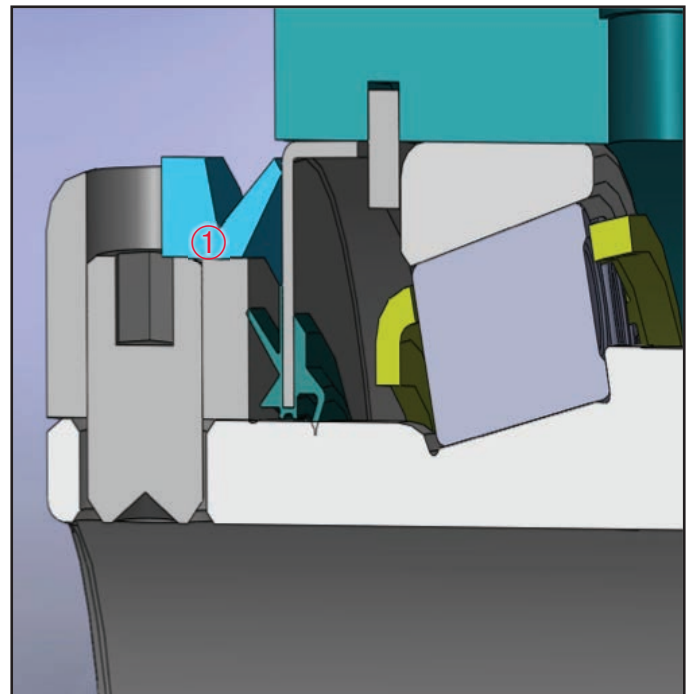
- 40% of mounted bearing failures in the industry involve liquid or solid contamination or lack of adequate lubrication
- Obstructs contaminant entry
- Retains essential lubrication
- Increased life equals decreased downtime



### XTS Sealing System

Standard on all Baldor•Dodge Type E-Xtra, TAF, Double Interlock and Type K Bearings

1. Collar-riding seal lip provides the first level of defense against contaminants
2. Trash guard protects inner seals
3. Primary contact seal protects internal components and helps retain grease
4. Contact seal for grease retention and secondary trash guard for increased protection



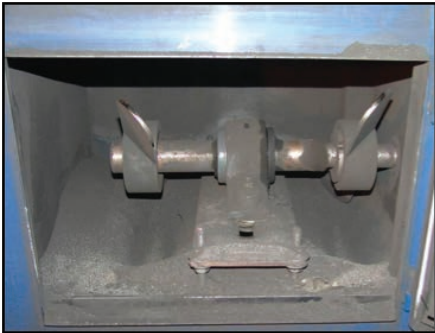
### XTS-Plus Sealing System

Add an E-Tect Seal Kit for additional protection

1. Optional E-Tect Seal Kit for Additional Protection

# Seal Testing

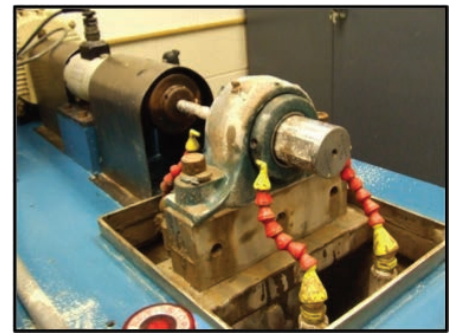
## Real World Applications



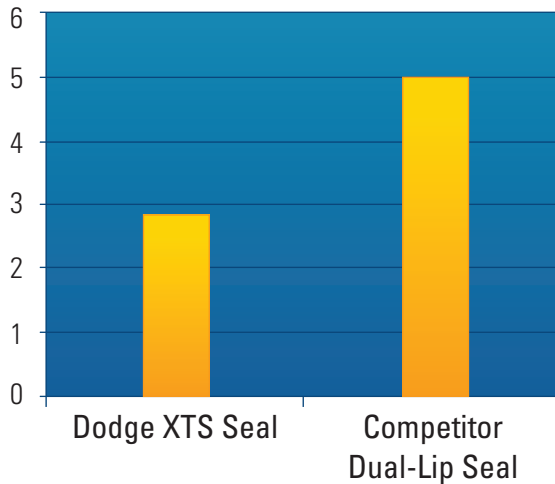
Dust box testing simulates an extremely dusty or dirty environment you might find in industries such as aggregate, mining and cement. The Baldor•Dodge XTS seal showed significantly less lubrication contamination compared to competitor's products.



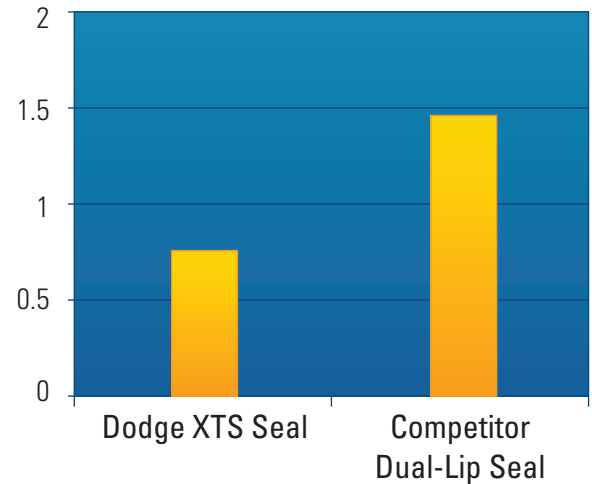
Water and slurry ingress testing simulates operating conditions found in wet environments that would be present in industries such as food processing, lumber and paper.



### Slurry Ingress Test



### Water Ingress Test

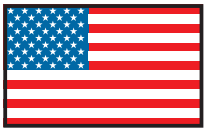


The Dodge XTS Seal is on average Two Times More Effective than Competitor's Dual-Lip Seal During Actual Ingress Testing. Better sealing yields longer life and less downtime.

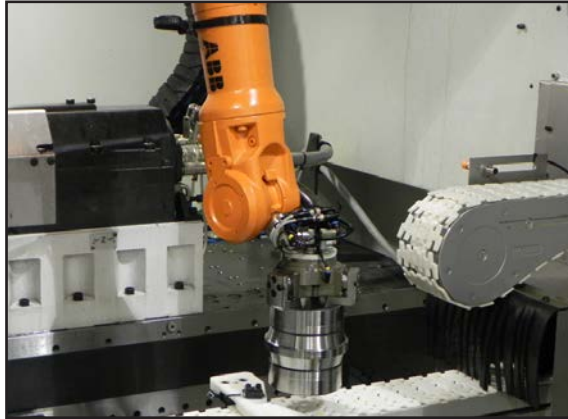
# Baldor•Dodge Manufacturing



Manufactured  
Cone Assembly



MADE IN THE USA

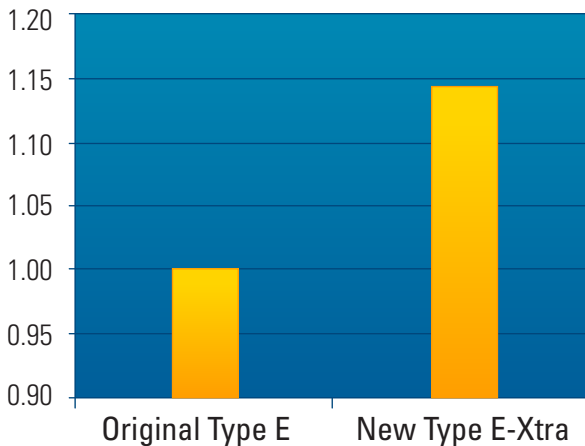


Baldor•Dodge Bearing Manufacturing Marion, NC

In 1996 the state of the art Marion, NC facility was opened. Today this facility manufactures all of the Baldor•Dodge roller bearing family of products including the new Type E-Xtra. In 2009, Baldor began making Dodge tapered bearing inserts for the Type E family of products. 2009 marks a milestone in Baldor•Dodge engineering and manufacturing excellence by producing the highest quality tapered bearing products in the world. Lab testing has proven that the Dodge manufactured tapered insert has a 13-14% ratings increase over the previously supplied insert. This is yet another innovation that was added to increase the life of the product and value to customers.

## Quality Manufacturing Equals Longer Life

### Load Testing-Laboratory Results



Dodge brand manufactured bearings have 13-14% higher load ratings which yield 60% greater Life

### Material

- Super-Clean Steel
- Highest Quality Available

### Manufacturing

- Assembly Cleanliness
- Cone Roundness
- Concentricity Race to Race

### Overall Quality

- Noise and Vibration Testing
- Life Test for all Sizes

# Split-Housed Taper Roller Bearings

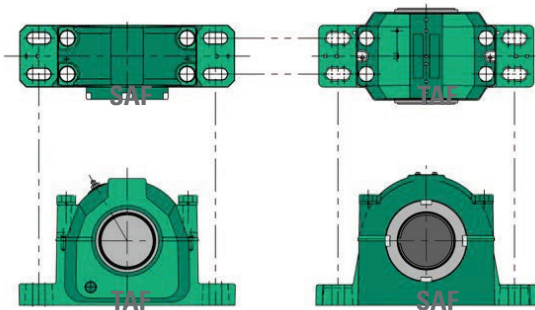


## TAF Bearing:

- Cost-saving alternative to SAF spherical bearings
- Self aligning, factory assembled, adjusted and lubricated
- Up to 5° static misalignment
- XTS Seal
- Offered in both non-expansion and expansion assemblies

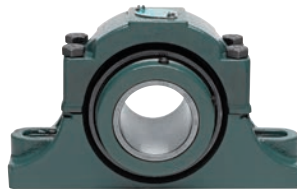
## TAF vs SAF Products:

- Dimensionally the same as SAF
- Setscrews allow for quicker installation
- Better misalignment capability
- Higher load ratings/thrust capacity
- Sealed inner unit reduces chance of contamination



## Double Interlock:

- Split Housing
- Replaceable inner unit for application versatility
- Static misalignment capability
- XTS Seal
- Offered in both non-expansion and expansion assemblies



## Type EXL Tapered Roller Bearing

- Split-cap, ductile iron housing
- Type E mounting dimensions
- XTS triple-lip seal
- 4° misalignment capability
- Expansion and non-expansion

Inner unit acts like ball and socket to provide up to 5° of misalignment and expansion capability



## Type K:

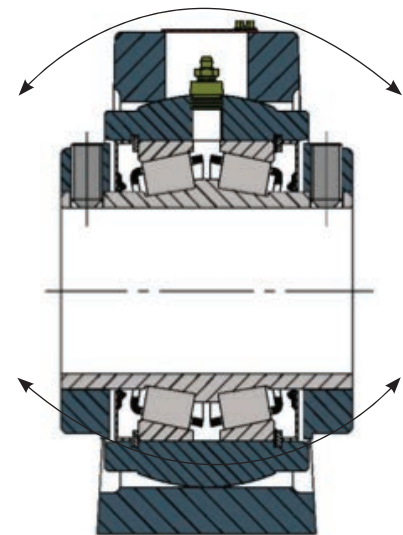
- Single locking collar to reduce length through bore
- Great for applications with limited space
- Same general features as Double Interlock
- XTS Seal
- Offered in both non-expansion and expansion assemblies

## Application Problem:

Misalignment/Expansion Capability

## Solution:

Dodge TAF, Type K and Double Interlock





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P.O. Box 2400, Fort Smith, AR 72902-2400 U.S.A., Ph: (1) 479.646.4711, Fax (1) 479.648.5792, International Fax (1) 479.648.5895

**Baldor - Dodge**

6040 Ponders Court, Greenville, SC 29615-4617 U.S.A., Ph: (1) 864.297.4800, Fax: (1) 864.281.2433

[www.baldor.com](http://www.baldor.com)