Dodge Torque-Arm II gear reducer

Build to last in tough heavy-duty applications

Product overview

Since 1949, Dodge Torque-Arm reducers have proven to be highly reliable, heavy-duty products that extend operating life and maximize up time.

- Dodge Torque-Arm II was first developed in 2000
- Applications up to 56,500 Nm (500k in-lb) torque
- Shaft sizes up to 160 mm (7 inch)
- Expanded ratios up to 40:1 reduction
- Conform to ATEX directive 94//9/EC
- 36 month/18 month warranty protection
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Most common applications

Belt conveyor

Screw conveyor

Bucket elevator
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Critical accessories to maximize uptime

1. Modular design: One reducer design for shaft mount and screw conveyor applications helps to minimize inventory
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2. Easy-on, easy-off bushing system to maximize mounting stability for highly reliable performance
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3. Provides consistent alignment and stable center distance between motor and reducer to minimize maintenance of v-belt drive and extend life.
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4. Dodge System 1 can provide packaged solutions for customer projects
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Heavy-duty sealing systems extend reducer life

**Harsh-duty sealing is standard**

- Premium harsh-duty oil seals are a patented labyrinth metal shield and excluder lip auxiliary seal. This sealing system allows for maximum protection to keep lubrication in and contamines out of the gear reducer.
- With 40% higher temperature capacity versus competition, all seals are compatible with both mineral and synthetic lubricant removing any lubrication concerns.
- Optional v-ring seals available for additional protection in extreme environments.
- All gear reducers are **100% inspected** for noise and leaks in the Greenville manufacturing plant.

Optional V-Ring seal kit
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Extreme pressure (EP) lubricant compatible backstop

**Severe duty backstop**

Backstops are used to prevent reverse rotation in high stop/start loads. Its centrifugal lift off design eliminates sprag friction during operation and reduces wear to all components.

Requiring no external lubrication, this backstop is rated to withstand heavy shock loads in the toughest environments.

Customers do not have to worry about lubrication additives – this is the only internal backstop on the market that can handle EP additives in mineral and synthetic oils.
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**Breather options**

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<th>Hydra-Lock breather</th>
<th>Enclosed chamber breather</th>
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<td><img src="image1.png" alt="Filter Breather" /></td>
<td><img src="image2.png" alt="Hydra-Lock Breather" /></td>
<td><img src="image3.png" alt="Enclosed Chamber Breather" /></td>
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- Provided with every gear reducer
- Taller overall height helps to avoid dust build up around opening
- With a filter, screen, and cap there is adequate protection in average operating conditions
- Desiccant material changes color providing visual cues for maintenance to further reducer operating life
- Internal check valve system creates a nearly sealed system
- Filter element captures particles at 3-4 micron absolute providing superior protection
- Totally enclosed metal breather eliminates outside air from entering into system
- Internal bladder expands & contracts to stabilize pressure within gear reducer
- Excellent for portable or folding equipment

Images not shown to scale
**Dodge Torque-Arm II gear reducer**

Two bushing cover designs available – aluminum and ABS

**TAII now drilled and tapped for ABS covers**

TAII reducers are now drilled and tapped to accommodate mounting bushing covers.

These covers will provide a quick, inexpensive assembly to protect employees from rotating equipment.

All TAII sizes 0 through 12, can now accept either ABS polymer or aluminum covers.
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• Order summary with part numbers
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