

## The Worlds Leading Shaft Mounted Reducer Biological Disc Wastewater Solution

The Baldor•Dodge® BioDisc reducer has provided the wastewater industry a proven, reliable, heavy duty solution for over 35 years. With features such as corrosion resistant paint, bushings, and tie rods, along with harsh duty breathers and seals, this product offers unmatched performance and superior reliability. Based on the rugged Baldor•Dodge Torque-Arm® design that has 65 years of dependability and more than 2 million units in service throughout the world, the Baldor•Dodge BioDisc reducer is the standard of the wastewater treatment industry.



### Heavy Duty Solution

- American Gear Manufacturers Association rated design
- Dual Power Path offers superior torque transmission
- All heavy duty tapered roller bearing design with a 5hp Class 2, bearing L-10 life of at least 100,000 hrs
- Harsh duty paint and seals for wastewater environments
- Additional v-ring flinger seal on input shaft
- Baldor•Dodge Hydra-Lock breather system helps keep moisture out of gearbox
- Twin tapered bushings and tie rod are corrosion resistant
- Works as either a 5hp class 2 or 7.5hp class 1 offering
- 1.5 rpm output speed to run biological disc designs using 1200rpm motors

### Installed Cost Savings

- Reduced maintenance requirements
- Simplified ordering, v-belt drive kit is ONE part number and includes all necessary sheaves, bushings, and belts

### Flexible Drive Design

- Reducer has a universal, flippable design

### Patented Twin Taper Bushing® systems

- Twin Tapered Bushing system eliminates fretting corrosion and reducer wobble and can be installed with standard hand tools

### Proven Performance

- Rugged, high efficiency, case carburized helical gearing

### Easy Selection

- Part numbered product
- One Easy Class 1 & 2 pre-selected v-belt drive



# Harsh Duty Features

## Breathers

### 1. Standard Baldor•Dodge Hydra-Lock® hybrid desiccant breather

- Built in standpipe
- 3 micron filter media
- Desiccant material changes color when hydrated, highly visible
- Check valve system only breathes under pressure or vacuum
- Perfect for humid environments such as port duty and wastewater treatment



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### 2. Optional Fully Enclosed canister breather

- Allows no outside air
- Expansion chamber absorbs pressure from gearbox

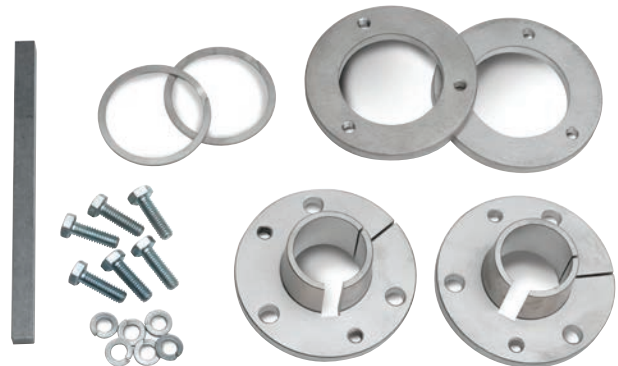
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## Bushings

### Standard Harsh Duty Bushing Kit

- TDNC Bushings, backing plates, snap rings, Zinc fasteners
- Corrosion resistant
- Ensures easy removal after years of service
- Designed for harsh environments such as wastewater treatment



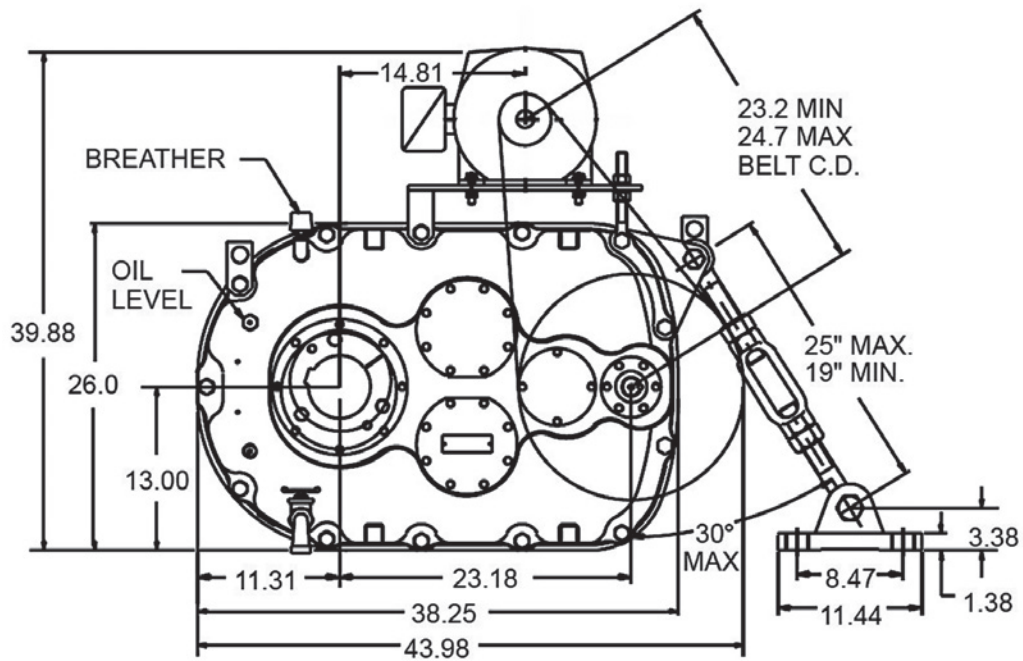
## Tie Rod

### Standard Zinc coated tie rod kit

- Zinc Rod Ends, turnbuckles, nuts, painted attachment hardware
- Corrosion resistant
- Ensures easy adjustment after years of service
- Designed for harsh environments such as wastewater treatment



# BioDisc Dimensions



|   | Part Number |
|---|-------------|
| <b>5 HP Class 2.0 Service Factor Reducer</b>  |             |
| BioDisc Drive Gearbox and accessories*  | 259168      |
| BioDisc V-Drive Kit**   | BIO DR KIT  |
| 188D Universal Belt Guard   | 963763      |
| Baldor 5HP, 1200 rpm, NEMA Premium Efficient, severe duty, XEX, 210 Frame, TEFC Motor   | ECP3768T    |
| <b>7.5 HP Class 1.0 Service Factor Reducer</b>  |             |
| BioDisc Drive Gearbox and accessories*  | 259168      |
| BioDisc V-Drive Kit**   | BIO DR KIT  |
| 188D Universal Belt Guard   | 963763      |
| Baldor 7.5HP, 1200 rpm, NEMA Premium Efficient, severe duty, XEX, 250 Frame, TEFC Motor | ECP2276T    |

\* Includes Gearbox, Bushings, Motor Mount, Tie Rod, and Breather

\*\* Includes bushings, sheaves and belt for 5HP and 7.5HP motors



# The Industry's Most Preferred

As cities and towns continue to grow, the demand for Water and Wastewater capacity as well as the cost of energy will continue to increase. System optimization will be required to:

- Meet the Increased Demand
- Reduce overall operating costs
- Meet New EPA Regulations

The Water/Wastewater Industry faces situations where significant investments are needed. To minimize the impact of overall increased operating cost...rural, municipal and industrial companies need to strive to improve the overall efficiency while increasing plant reliability. Baldor has the industry experience, technical capability, tools, products, and solutions to:

- Improve Energy Efficiency
- Optimize Pumping Systems
- Improve Overall Plant Reliability

With the support of the Baldor Water/Wastewater Industry Engineering and Applications Solutions Team, Baldor offers a full line of field proven, performance driven and premium

energy efficient electrical and mechanical value solutions specifically designed for the Water/Wastewater Industry. From high performance motors and variable speed drives to power transmission products, including bearings and gearing products, Baldor•Reliance, ABB, Baldor•Dodge, and Maska solutions can help improve the efficiency and performance of your application.

Baldor is dedicated to meeting the customers' needs with proven Water/Wastewater Industry expertise, problem solving products, Water/Wastewater Industry Value solutions, as well as local sales and technical support. Baldor's field support personnel are supported by the Baldor Industry Solutions engineering and application team which consists of dedicated industry specific personnel to support the customers' application needs.

At Baldor, there is a strong focus on the specific needs of the customer in each industry we serve, ensuring that our Industry Application Solutions maximize uptime and productivity while providing the lowest total cost of ownership (TCO).

| WASTEWATER TREATMENT PROCESS       |   |  |                     |                            |                  |                                  |                  |          |
|------------------------------------|---|--|---------------------|----------------------------|------------------|----------------------------------|------------------|----------|
| Process Application / Equipment    | Bearings  | Couplings  | Reducers            |                            |                  |                                  |                  | System-1 |
|                                    | Mounted Set Screw & Set Screw<br>Medium Duty Ball Bearings Mounted<br>Spherical & Tapered Roller Bearings | Flexible Metallic (Grid-Lign)<br>Rigid (Taper-Lock, Ribbed)<br>Elastomeric (Para-Flex, D-Flex) | Vertical Gear Motor | MagnaGear / Maxum Reducers | Quantis Reducers | Torque Arm (MTA, TA II) Reducers | BioDisc Reducers |          |
| Lift Station Pumps                 | ✓   | ✓  | ✓                   | ✓                          |                  |                                  |                  | ✓        |
| Screw Pumps                        | ✓   | ✓  |                     | ✓                          |                  | ✓                                |                  | ✓        |
| Transfer Pumps                     | ✓   | ✓  |                     |                            |                  |                                  |                  | ✓        |
| Vertical Pumps                     |   | ✓  | ✓                   | ✓                          | ✓                |                                  |                  | ✓        |
| Screening                          | ✓   | ✓  |                     | ✓                          | ✓                | ✓                                |                  | ✓        |
| Mixers                             | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Grease & Grit Removal              | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Primary Clarifier                  | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Aeration (RBC, Disc)               | ✓   | ✓  |                     |                            |                  | ✓                                | ✓                | ✓        |
| Activated Sludge Processing        | ✓   | ✓  |                     |                            |                  |                                  |                  | ✓        |
| Secondary Clarifier                | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Flocculation                       | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Disc Filtration                    | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Tertiary Processing                | ✓   | ✓  |                     |                            |                  |                                  |                  | ✓        |
| Disinfection                       | ✓   | ✓  |                     |                            |                  |                                  |                  | ✓        |
| Sludge Digestion                   | ✓   | ✓  |                     |                            |                  |                                  |                  | ✓        |
| Conveying/Solids Handling          | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |
| Dry Sludge Finishing/ Filter Press | ✓   | ✓  |                     |                            | ✓                | ✓                                |                  | ✓        |



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