

# Helical **bevel** Gear **Reducers**

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**MOTOVARIO**<sup>®</sup>

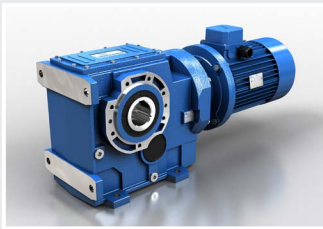
HEART OF MOTION

a **TECO Group** company

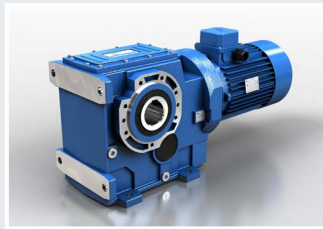
# Features



The technological content of B-Series gear reducers allows for an **extraordinary performance/lifespan ratio**. These highly versatile gear units are successfully used in a vast number of industrial and civil applications. B-Series units offer **excellent value for money** and **output torque/weight ratio**, especially considering that they need very limited servicing. The units are available in cast iron (sizes 063 to 163) or aluminium (sizes A42 to A73) casing.



**B-PB**  
Fitted for motor coupling  
- Coupling with flexible coupling



**CB**  
With compact motor



**IB**  
With input shaft

## CAST IRON

### Sizes:

**060-080-100-125-140-150-160**

- Casing with feet FC, flange SC and universal UC
- Gearing 3 reduction stages
- Gleason spiral bevel gear pairs with run-in profile, mounted as second reduction stage for a higher resistance
- High-strength casings optimized with FEM analysis and input and output flanges of grey cast-iron G200 to ensure top level performances and high reliability
- Excellent mechanical strength
- Gears hardened and tempered with shaved or ground profile
- Load capacity calculated and verified according to ISO 6336 and AGMA 2001
- Painted with RAL 5010 blue epoxy-polyester powder according to DIN 1843
- ATEX versions available 2GD/3GD



**BA**  
Fitted for motor coupling



**CBA**  
With compact motor



**IBA**  
With input shaft

## ALUMINIUM

### Sizes:

**A40-A50-A70**

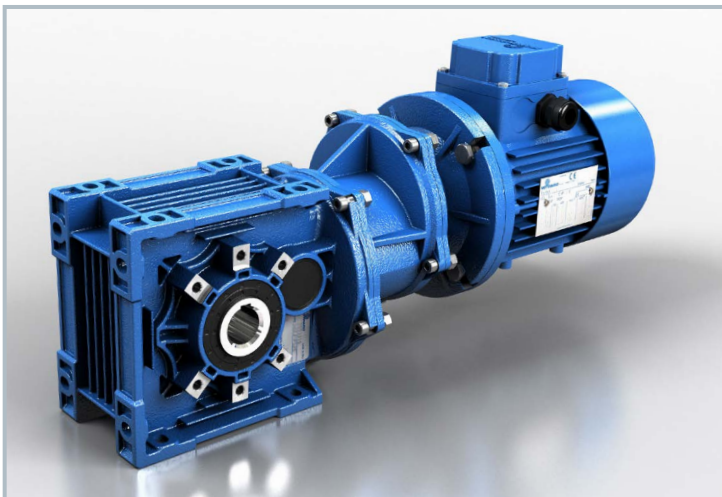
- Universal casing
- Gearing with 2 and 3 reduction stages
- Hypoid bevel gears for size A40 and A50, gleason bevel gear pairs for size A70, all with run-in profile
- Casing in die-cast aluminium alloy
- Excellent mechanical strength while being and particularly lightweight
- Gears hardened and tempered with shaved or ground profile
- Load capacity calculated and verified according to ISO 6336 and AGMA 2001
- Painted with RAL 5010 blue epoxy-polyester powder according to DIN 1843
- ATEX version available 3GD

# Range



|      | Ø [mm]  | Output Torque $M_2$ [Nm] | Ratio |        |
|------|---------|--------------------------|-------|--------|
|      |         |                          | Min   | Max    |
| B063 | 35 - 40 | 600                      | 5,71  | 157,42 |
| B083 | 40 - 45 | 850                      | 7,81  | 144,77 |
| B103 | 50      | 1.800                    | 8,13  | 165,25 |
| B123 | 60      | 3.500                    | 7,97  | 180,40 |
| B143 | 70      | 5.000                    | 10,84 | 187,24 |
| B153 | 80 - 90 | 8.000                    | 10,49 | 165,42 |
| B163 | 100     | 13.000                   | 8,89  | 154,83 |

- Power from 0,18 up to 90 kW with three phase 4 pole motors
- Reduction ratios between 5,71 and 187,24
- Torque max 13.000 Nm
- Admissible radial loads max 80.000 N



|      | Ø [mm]  | Output Torque $M_2$ [Nm] | Ratio |        |
|------|---------|--------------------------|-------|--------|
|      |         |                          | Min   | Max    |
| BA40 | 20      | 120                      | 7,62  | 78,17  |
| BA50 | 25 - 28 | 220                      | 7,91  | 342,65 |
| BA70 | 30 - 35 | 450                      | 8,36  | 442,76 |

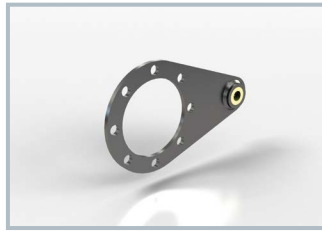
- Power from 0,12 kW up to 4,8 kW with three phase 4 pole motors
- Reduction ratios between 7,62 and 442,76
- Torque max 450 Nm
- Admissible radial loads max 10.000 N



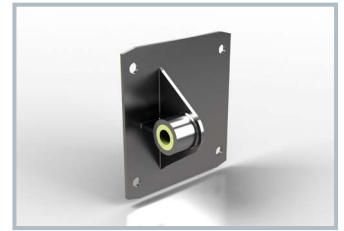
# Accessories



## TorqueArm



Available for the sizes:  
063 - 083 - 103 - 123  
A40 - A50 - A70



Available for the sizes:  
143 - 153 - 163

## ShrinkDisk



## SolidOutputShaft



Single Output Shaft

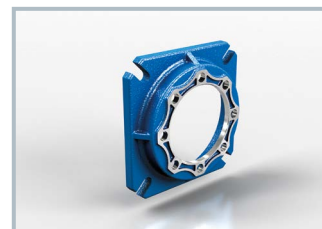


Double Output Shaft

## OtherAccessories

**BackstopDevice**  
**ProtectionCoverkit**  
**ReinforcedOutput**

## OutputFlange



FA



FB - FC - FD

|      | FA | FB | FC | FD |
|------|----|----|----|----|
| B063 | •  | •  | •  | /  |
| B083 | •  | •  | •  | /  |
| B103 | •  | •  | •  | /  |
| B123 | •  | •  | •  | /  |
| B143 | /  | •  | /  | /  |
| B153 | /  | •  | •  | /  |
| B163 | /  | •  | /  | /  |
| BA40 | •  | •  | •  | •  |
| BA50 | •  | •  | •  | •  |
| BA70 | •  | •  | /  | /  |

• Available  
/ Not available

# Versions



**B... SC**  
Flange Mounting



**B... FC**  
Foot Mounting



**B... UC**  
Foot/Flange Mounting

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Different versions are available with hollow output shafts and single/double solid output shafts.

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**BA.. 2 Stages**  
Foot/Flange Mounting



**BA.. 3 Stages**  
Foot/Flange Mounting

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Different versions are available with hollow output shafts.  
Single/double solid output shafts are only available for the BA70.

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# WORLDWIDE



## Subsidiaries

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**France**

**Spain**

**United Kingdom**

**Denmark**

**USA**

**China**

**India**



**Italy**

**Australia**

**Benelux**

**Bulgaria**

**China**

**Finland**

**France**

**India**

**Ireland**

**Israel**

**Lithuania**

**Malaysia**

**Netherlands**

**Poland**

**Portugal**

**South Korea**

**Spain**

**Sweden**

**Thailand**

**Turkey**

**United Kingdom**

**Ukraine**

**USA**

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