# **Product data sheet**

Specifications





# gearbox straight teeth GBX, Lexium, 120mm, reduction 3:1, 7arc.min, 115N.m

GBX120003K

Product availability: Non-Stock - Not normally stocked in distribution facility

Price\*: 987.66 USD

### Main

| Range Compatibility       | Lexium SD3              |
|---------------------------|-------------------------|
|                           | Lexium 62               |
|                           | Lexium 28               |
|                           | Lexium 32               |
|                           | Lexium 62 ILM           |
|                           | Lexium 52               |
|                           | Lexium 32i              |
| Gear box type             | Straight teeth          |
| Product or Component Type | Planetary gearbox       |
| Device short name         | GBX                     |
| Product compatibility     | BMI 3.9 in (100 mm), 2  |
|                           | BMI 3.9 in (100 mm), 3  |
|                           | BMH 5.5 in (140 mm), 1  |
|                           | BMH 5.5 in (140 mm), 2  |
|                           | BMH 5.5 in (140 mm), 3  |
|                           | BSH 3.9 in (100 mm), 4  |
|                           | BSH 5.5 in (140 mm), 1  |
|                           | BSH 5.5 in (140 mm), 2  |
|                           | BSH 5.5 in (140 mm), 3  |
|                           | BSH 5.5 in (140 mm), 4  |
|                           | BRS3                    |
|                           | BCH2 3.9 in (100 mm), 1 |
|                           | BCH2 3.9 in (100 mm), 2 |
|                           | BCH2 5.1 in (130 mm), 1 |
|                           | BCH2 5.1 in (130 mm), 2 |
|                           | BCH2 5.1 in (130 mm), 3 |
|                           | BCH2 5.1 in (130 mm), 4 |
|                           | SH3                     |
|                           | MH3<br>ILM              |
| Gearbox external diameter | 4.7 in (120 mm)         |
| Reduction ratio           | 3:1                     |

### Complementary

| Maximum torsional backlash | 7 arc.min 12 N.m/arcmin                   |  |  |  |  |  |  |
|----------------------------|---|--|--|--|--|--|--|
| Torsional rigidity         |   |  |  |  |  |  |  |
| Housing Colour             | Black                                     |  |  |  |  |  |  |
| Housing material           | lack anodized aluminium                   |  |  |  |  |  |  |
| Shaft material             | 45  |  |  |  |  |  |  |
| Additional information     | Lubricated for life                       |  |  |  |  |  |  |
| Service life in hours      | 30000 h 100 rpm 86.00000000000 °F (30 °C) |  |  |  |  |  |  |
| Mounting position          | Any position                              |  |  |  |  |  |  |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| Efficiency               | 96 %  1500 N 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C |  |  |  |  |  |
|--------------------------|--|--|--|--|--|--|
| Maximum radial force Fr  |  |  |  |  |  |  |
| Maximum axial force Fa   | 2100 N 100 rpm, during 30000 hour at 30°C  |  |  |  |  |  |
| moment of inertia        | 2.63 kg.cm²  |  |  |  |  |  |
| Continuous output torque | 1017.8 lbf.in (115 N.m) 100 rpm 86.0000000000 °F (30 °C)   |  |  |  |  |  |
| Maximum output torque    | 1628.5 lbf.in (184 N.m) 100 rpm 86.0000000000 °F (30 °C)   |  |  |  |  |  |
| Net Weight               | 13.2 lb(US) (6 kg)   |  |  |  |  |  |
| Input diameter           | 0.9 in (24.0 mm)   |  |  |  |  |  |

### **Environment**

| Noise level                       | 65 dB 1 m, no-load                         |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
| IP Degree of Protection           | Shaft output IP54                          |  |  |  |  |
| ambient temperature for operation | -13.0000000000194.0000000000 °F (-2590 °C) |  |  |  |  |

## Ordering and shipping details

|                   | · · · ·       |  |  |  |  |
|-------------------|---------------|--|--|--|--|
| Category          | US1PC5318283  |  |  |  |  |
| Discount Schedule | PC53          |  |  |  |  |
| GTIN              | 3606480388439 |  |  |  |  |
| Returnability     | No            |  |  |  |  |
| Country of origin | DE            |  |  |  |  |

# **Packing Units**

| Unit Type of Package 1       | PCE                       |
|------------------------------|---------------------------|
| Number of Units in Package 1 | 1                         |
| Package 1 Height             | 4.9 in (12.5 cm)          |
| Package 1 Width              | 4.93 in (12.52 cm)        |
| Package 1 Length             | 7.3 in (18.5 cm)          |
| Package 1 Weight             | 11.753 lb(US) (5.331 kg)  |
| Unit Type of Package 2       | S02                       |
| Number of Units in Package 2 | 2                         |
| Package 2 Height             | 5.9 in (15 cm)            |
| Package 2 Width              | 11.8 in (30 cm)           |
| Package 2 Length             | 15.7 in (40 cm)           |
| Package 2 Weight             | 24.416 lb(US) (11.075 kg) |

## **Contractual warranty**

Warranty 18 months



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**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Transparency RoHS/REACh

### Well-being performance

|          | Mercury Free               |     |
|----------|----------------------------|-----|
| <b>⊘</b> | Rohs Exemption Information | Yes |
| <b>Ø</b> | Pvc Free                   |     |

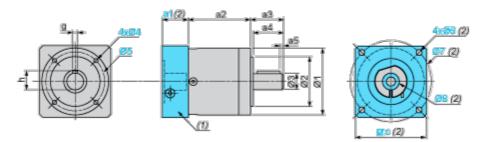
#### **Certifications & Standards**

| Reach Regulation          | REACh Declaration   |  |  |  |  |  |  |
|---------------------------|---|--|--|--|--|--|--|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)  |  |  |  |  |  |  |
| China Rohs Regulation     | China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information.  |  |  |  |  |  |  |
| Environmental Disclosure  | Product Environmental Profile   |  |  |  |  |  |  |
| Circularity Profile       | No need of specific recycling operations  |  |  |  |  |  |  |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |  |  |  |  |  |  |

### GBX120003K

#### **Dimensions Drawings**

#### **Dimensions with Servo Motor Adaptation Kit**



- (1) GBK adaptation kit
- (2) GBK adaptation kit related dimensions a1, c, Ø6, Ø7, Ø8 depend on the gearbox and servo motor combination
- Ø8 shaft end adaptor in case motor shaft diameter is smaller than gearbox input coupling diameter

#### Values in mm

|      |    |    |   |    |   |     | Ø2    |       |          | Ø5  |
|------|----|----|---|----|---|-----|-------|-------|----------|-----|
| 99.5 | 55 | 50 | 5 | 28 | 8 | 115 | 80 h7 | 25 h7 | M10 x 16 | 100 |

#### Values in in.

| a2 | а3 | a4 | a5 | h | a | Ø1 | Ø2 | Ø3      | Ø4         | Ø5   |
|----|----|----|----|---|---|----|----|---------|------------|------|
|    |    |    |    |   | _ |    |    | 0.98 h7 | M10 x 0.63 | 3.94 |