

# Product datasheet

Specifications



gearbox with straight teeth GBX- A~  
160 mm- reduction 20:1- <  
10arcmin- 800 N.m

GBX1600201004F

! Discontinued - Service only

! Discontinued on: Jun 15, 2023

! To be end-of-service on: Mar 31, 2028

## Main

|                           |   |
|---------------------------|---|
| Range compatibility       | Lexium 15<br>Lexium 62<br>Lexium 32<br>Lexium 52<br>Lexium 62 ILM |
| Product or component type | Planetary gearbox   |
| Gear box type             | Straight teeth  |
| Device short name         | GBX   |
| Gearbox external diameter | 160 mm  |
| Product compatibility     | BSH (100 mm, 4 motor stacks)<br>SH3<br>MH3<br>ILM                 |
| Reduction ratio           | 20:1  |

## Complementary

|                            |  |
|----------------------------|--|
| Maximum torsional backlash | 10 arc.min   |
| Torsional rigidity         | 41 N.m/arcmin  |
| Housing colour             | Black  |
| Housing material           | Black anodized aluminium   |
| Shaft material             | C 45   |
| Additional information     | Lubricated for life  |
| Service life in hours      | 30000 h at 100 rpm at 30 °C  |
| Efficiency                 | 94 %   |
| mounting position          | Any position   |
| Maximum radial force Fr    | 4200 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C<br>6000 N at 100 rpm, force applied at mid-distance from output shaft during 10000 hour at 30 °C |
| Maximum axial force Fa     | 6000 N at 100 rpm, during 30000 hour at 30°C<br>8000 N at 100 rpm, during 10000 hour at 30°C   |
| moment of inertia          | 6.64 g.cm²   |
| Continuous output torque   | 800 N.m at 100 rpm at 30 °C  |
| Maximum output torque      | 1280 N.m at 100 rpm at 30 °C   |
| Product weight             | 22 kg  |

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

## Environment

|                                   |                       |
|-----------------------------------|-----------------------|
| Noise level                       | 70 dB at 1 m, no-load |
| IP degree of protection           | Shaft output: IP54    |
| ambient temperature for operation | -25...90 °C           |

## Packing Units

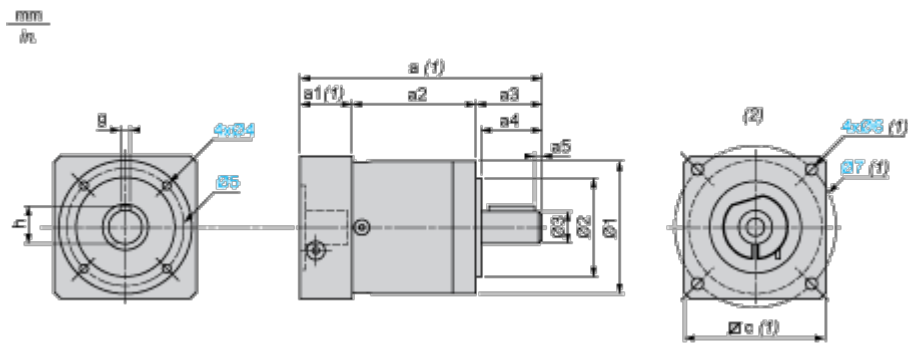
|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 26.0 cm |
| Package 1 Width              | 45.0 cm |
| Package 1 Length             | 26.0 cm |
| Package 1 Weight             | 23.0 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions Drawings

Dimensions



- (1) Dimensions a, a1, c, Ø6 and Ø7 depend on the planetary gearbox/servo motor combination
- (2) Servo motor assembly

Dimensions in mm

| a2    | a3 | a4 | a5 | h  | g  | Ø1  | Ø2     | Ø3    | Ø4 (oblong) | Ø5  |
|-------|----|----|----|----|----|-----|--------|-------|-------------|-----|
| 153.5 | 87 | 80 | 8  | 43 | 12 | 160 | 130 h7 | 40 h7 | M12 x 20    | 145 |

Dimensions in mm

| a   | a1   | c         | Ø6 | Ø7  |
|-----|------|-----------|----|-----|
| 305 | 64.5 | 140 x 140 | M8 | 115 |

Dimensions in in.

| a2   | a3   | a4   | a5   | h    | g    | Ø1   | Ø2      | Ø3      | Ø4 oblong  | Ø5   |
|------|------|------|------|------|------|------|---------|---------|------------|------|
| 6.04 | 3.42 | 3.14 | 0.31 | 1.69 | 0.47 | 6.29 | 5.12 h7 | 1.57 h7 | M12 x 0.79 | 5.70 |

Dimensions in in.

| a     | a1   | c           | Ø6 | Ø7   |
|-------|------|-------------|----|------|
| 12.00 | 2.53 | 0.21 x 0.21 | M8 | 4.52 |