

Product datasheet

Specifications



gearbox with straight teeth GBX- Ã~
160 mm- reduction 15:1- <
10arcmin- 700 N.m

GBX1600151004F

⚠ Discontinued on: 31 Mar 2023

⚠ To be end-of-service on: 31 Mar 2028

⚠ Discontinued

EAN Code: 3389118144804

Main

| | |
|---------------------------|---|
| Range compatibility | Lexium 62 ILM Lexium 15 Lexium 32 Lexium 52 Lexium 62 |
| 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) SH3 MH3 ILM |
| Reduction ratio | 15:1 |

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 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 8000 N at 100 rpm, during 10000 hour at 30°C |
| moment of inertia | 12.35 g.cm² |
| Continuous output torque | 700 N.m at 100 rpm at 30 °C |
| Maximum output torque | 1120 N.m at 100 rpm at 30 °C |

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

| | |
|----------------|-------|
| Product weight | 22 kg |
|----------------|-------|

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

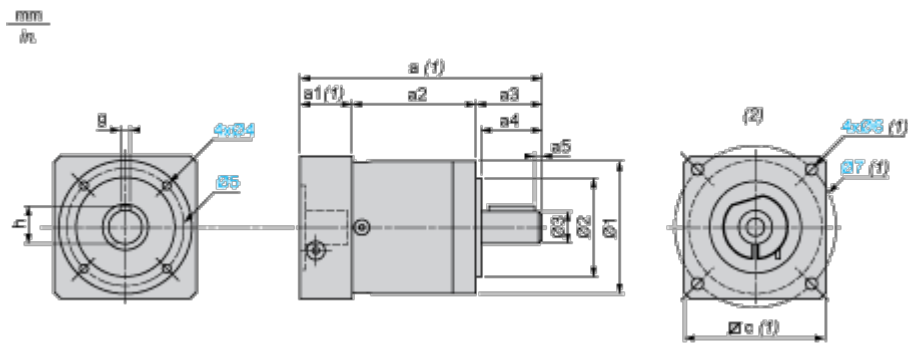
| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 26.0 cm |
| Package 1 Width | 45.0 cm |
| Package 1 Length | 26.0 cm |
| Package 1 Weight | 23.0 kg |

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 |