

Product data sheet

Specifications



gearbox straight teeth GBX, Lexium,
80mm, reduction 20:1 , 9arc.min,
120N.m

GBX080020K

Main

| | |
|---------------------------|--|
| Range Compatibility | Lexium SD3 Lexium 32 Lexium 32i Lexium 52 Lexium 62 ILM Lexium ILS Lexium 62 Lexium 28 |
| Product Or Component Type | Planetary gearbox |
| Gear Box Type | Straight teeth |
| Device Short Name | GBX |
| Product Compatibility | BMI (70 mm, 2 motor stacks) BMI (70 mm, 3 motor stacks) BMH (70 mm, 1 motor stacks) BMH (70 mm, 2 motor stacks) BMH (70 mm, 3 motor stacks) BSH (70 mm, 1 motor stacks) BSH (70 mm, 2 motor stacks) BSH (70 mm, 3 motor stacks) BRS3 ILS (85 mm, 1 motor stacks) ILS (85 mm, 2 motor stacks) ILS (85 mm, 3 motor stacks) BCH2 (80 mm, 1 motor stacks) BCH2 (80 mm, 2 motor stacks) SH3 MH3 ILM |
| Gearbox External Diameter | 80 mm |
| Reduction Ratio | 20:1 |

Complementary

| | |
|----------------------------|--|
| Maximum Torsional Backlash | 9 arc.min |
| Torsional Rigidity | 6.5 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 |
| Mounting Position | Any position |
| Efficiency | 94 % |
| Maximum Radial Force Fr | 650 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour 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

| | |
|--------------------------|--|
| Maximum Axial Force Fa | 1200 N at 100 rpm, during 30000 hour at 30°C |
| Moment Of Inertia | 0.44 kg.cm² |
| Continuous Output Torque | 120 N.m at 100 rpm at 30 °C |
| Maximum Output Torque | 192 N.m at 100 rpm at 30 °C |
| Net Weight | 2.6 kg |
| Input Diameter | 19.0 mm |

Environment

| | |
|-----------------------------------|-----------------------|
| Noise Level | 60 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 | 10.6 cm |
| Package 1 Width | 11.0 cm |
| Package 1 Length | 18.0 cm |
| Package 1 Weight | 2.399 kg |
| Unit Type Of Package 2 | S03 |
| Number Of Units In Package 2 | 4 |
| Package 2 Height | 30.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 10.121 kg |

Contractual warranty

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

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

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

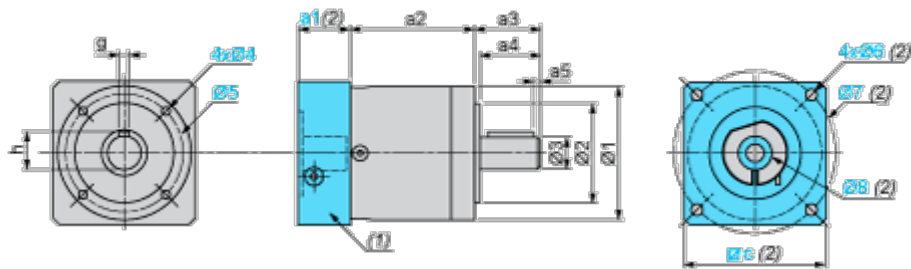
✓ Pvc Free

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 |

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

| a2 | a3 | a4 | a5 | h | g | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 |
|------|----|----|----|------|---|----|-------|-------|---------|----|
| 89.5 | 40 | 36 | 4 | 22.5 | 6 | 80 | 60 h7 | 20 h7 | M6 x 10 | 70 |

Values in in.

| a2 | a3 | a4 | a5 | h | g | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 |
|------|------|------|------|------|------|------|---------|---------|-----------|------|
| 3.52 | 1.57 | 1.42 | 0.16 | 0.89 | 0.24 | 3.15 | 2.36 h7 | 0.79 h7 | M6 x 0.39 | 2.76 |