

Product data sheet

Specifications



angular gearbox straight teeth GBY,
Lexium, 80mm, reduction 12:1,
15arc.min, 120N.m

GBY080012K

Main

| | |
|---------------------------|--|
| Range compatibility | Lexium ILS Lexium 62 ILM Lexium 62 Lexium 32 Lexium 32i Lexium 52 Lexium SD3 |
| Gear box type | Straight teeth |
| Product or component type | Angular planetary gearbox |
| Device short name | GBY |
| Product compatibility | BMI (70 mm, 2 motor stacks) BMI (70 mm, 3 motor stacks) BMH (70 mm, 2 motor stacks) BMH (70 mm, 3 motor stacks) BSH (70 mm, 2 motor stacks) BSH (70 mm, 3 motor stacks) BMH (100 mm, 1 motor stacks) BSH (100 mm, 1 motor stacks) BRS3 ILS (85 mm, 1 motor stacks) ILS (85 mm, 2 motor stacks) ILS (85 mm, 3 motor stacks) SH3 MH3 ILM |
| Gearbox external diameter | 80 mm |
| Reduction ratio | 12:1 |

Complementary

| | |
|----------------------------|--|
| Maximum torsional backlash | 15 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 | 95.0 % |
| Maximum radial force Fr | 650 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C |
| Maximum axial force Fa | 1200 N at 100 rpm, during 30000 hour at 30°C |
| moment of inertia | 1.273 kg.cm ² |

| | |
|--------------------------|-----------------------------|
| 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 | 5 kg |
| Input diameter | 19.0 mm |
| No load running torque | 0.1 N.m |
| Reduction ratio | 12 |
| Compatibility code | GBY |
| Internal length | 161.5 mm |

Environment

| | |
|-----------------------------------|-----------------------|
| Noise level | 73 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 | 11.2 cm |
| Package 1 Width | 9.2 cm |
| Package 1 Length | 22.0 cm |
| Package 1 Weight | 4.119 kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 2 |
| Package 2 Height | 30.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 8.963 kg |

Contractual warranty

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



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

| | |
|----------------------------------|---|
| Total lifecycle Carbon footprint | 1180 |
| Environmental Disclosure | Product Environmental Profile |

Use Better

Materials and Substances

| | |
|--|--|
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| SCIP Number | 7c9e597c-8ccc-4daf-95fb-5d67fc70d561 |
| REACH Regulation | REACH Declaration |
| 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 |
| PVC free | Yes |

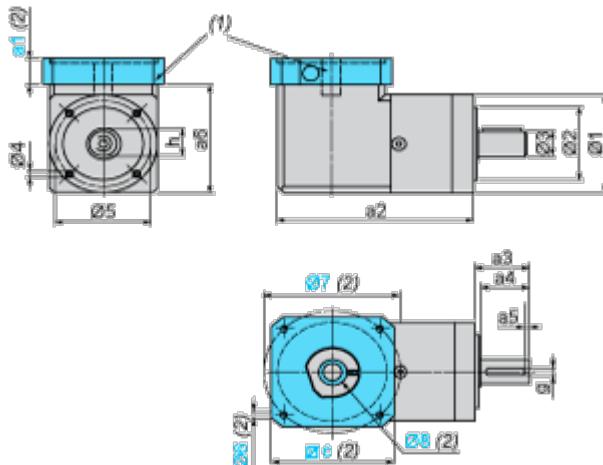
Use Again

Repack and remanufacture

| | |
|---------------------------------|--|
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |

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 | a6 |
|-------|----|----|----|------|---|----|-------|-------|---------|----|------|
| 161.5 | 40 | 36 | 4 | 22.5 | 6 | 80 | 60 h7 | 20 h7 | M6 x 10 | 70 | 88.3 |

Values in in.

| a2 | a3 | a4 | a5 | h | g | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | a6 |
|------|------|------|------|------|------|------|---------|---------|-----------|------|------|
| 6.36 | 1.57 | 1.42 | 0.15 | 0.88 | 0.19 | 3.15 | 2.36 h7 | 0.78 h7 | M6 x 0.39 | 2.76 | 3.48 |