# Product data sheet
## Characteristics

# GBY060012K
angular gearbox straight teeth GBY, Lexium, 60mm, reduction 12:1, 18arc.min, 44N.m



## Main

| | |
|---|---|
| Range compatibility | Lexium 52<br>Lexium SD3<br>Lexium ILA<br>Lexium 32<br>Lexium 62<br>Lexium 62 ILM<br>Lexium ILS<br>Lexium ILE |
| Gear box type | Straight teeth |
| Product or component type | Angular planetary gearbox |
| Device short name | GBY |
| Product compatibility | BMH (70 mm, 1 motor stacks)<br>BSH (55 mm, 1 motor stacks)<br>BSH (55 mm, 2 motor stacks)<br>BSH (55 mm, 3 motor stacks)<br>BSH (70 mm, 1 motor stacks)<br>BRS3<br>ILE (66 mm, 1 motor stacks)<br>ILE (66 mm, 2 motor stacks)<br>ILA (57 mm, 1 motor stacks)<br>ILA (57 mm, 2 motor stacks)<br>ILS (57 mm, 1 motor stacks)<br>ILS (57 mm, 2 motor stacks)<br>ILS (57 mm, 3 motor stacks)<br>SH3<br>MH3<br>ILM |
| Gearbox external diameter | 60 Mm |
| Reduction ratio | 12:1 |

## Complementary

| | |
|---|---|
| Maximum torsional backlash | 18 Arc.Min |
| Torsional rigidity | 2.5 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 | 89.0 % |
| Maximum radial force Fr | 340 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C |
| Maximum axial force Fa | 450 N at 100 rpm, during 30000 hour at 30°C |
| Shaft moment of inertia | 0.249 Kg.Cm² |
| Continuous output torque | 44 N.M at 100 rpm at 30 °C |

| | |
|---|---|
| Maximum output torque | 70 N.M at 100 rpm at 30 °C |
| Net weight | 1.9 Kg |
| Internal diameter | 14.0 Mm |
| No load running torque | 0.05 N.M |
| Reduction ratio | 12 |
| Compatibility code | GBY |
| Length | 124.5 Mm |

## Environment

| | |
|---|---|
| Noise level | 70 DB at 1 m, no-load |
| IP degree of protection | Shaft output: IP54 |
| Ambient air temperature for operation | -25…90 °C |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.100 Cm |
| Package 1 Width | 9.600 Cm |
| Package 1 Length | 18.300 Cm |
| Package 1 Weight | 1.800 Kg |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 5 |
| Package 2 Height | 30.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 10.023 Kg |

## Offer Sustainability

| | |
|---|---|
| Total lifecycle Carbon footprint | 1 167 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 7.6600574713 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 8 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.2451436782 |
| Carbon footprint of the distribution phase [A4] | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.0048093068 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 1158.8 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 1 159 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | No |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.1697783764 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.2 kg CO2 eq. |
| Total lifecycle Carbon footprint | 1167 |
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| SCIP Number | 7c9e597c-8ccc-4daf-95fb-5d67fc70d561 |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which |
| PVC free | Yes |
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |

## Contractual warranty

| | |
|---|---|
| Warranty (in months) | 18 |

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|---|---|
| Product Life Status : | Commercialised |