



## Main

|                           |                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range compatibility       | Lexium 62<br>Lexium 32i<br>Lexium 32<br>Lexium ILS<br>Lexium 52<br>Lexium SD3<br>Lexium 62 ILM                                                                                                                                                                                                                                                                                   |
| Gear box type             | Straight teeth                                                                                                                                                                                                                                                                                                                                                                   |
| Product or component type | Angular planetary gearbox                                                                                                                                                                                                                                                                                                                                                        |
| Device short name         | GBY                                                                                                                                                                                                                                                                                                                                                                              |
| Product compatibility     | BMI (70 mm, 2 motor stacks)<br>BMH (70 mm, 1 motor stacks)<br>BMH (70 mm, 2 motor stacks)<br>BMH (70 mm, 3 motor stacks)<br>BSH (70 mm, 1 motor stacks)<br>BSH (70 mm, 2 motor stacks)<br>BMH (100 mm, 1 motor stacks)<br>BSH (100 mm, 1 motor stacks)<br>BRS3<br>ILS (85 mm, 1 motor stacks)<br>ILS (85 mm, 2 motor stacks)<br>ILS (85 mm, 3 motor stacks)<br>SH3<br>MH3<br>ILM |
| Gearbox external diameter | 80 mm                                                                                                                                                                                                                                                                                                                                                                            |
| Reduction ratio           | 20:1                                                                                                                                                                                                                                                                                                                                                                             |

## 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                 | 92 %                                                                                         |
| 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          | 0.859 kg.cm <sup>2</sup>                                                                     |
| 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                                                                                      |

## 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 cm    |
| Package 1 Weight             | 4.118 kg |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 2        |
| Package 2 Height             | 15 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 8.691 kg |
| Unit Type of Package 3       | S03      |
| Number of Units in Package 3 | 2        |
| Package 3 Height             | 30 cm    |
| Package 3 Width              | 30 cm    |
| Package 3 Length             | 40 cm    |
| Package 3 Weight             | 8.949 kg |

## Offer Sustainability

|                            |                                                            |
|----------------------------|------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                      |
| REACH Regulation           | <a href="#">REACH Declaration</a>                          |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free               | Yes                                                        |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                     |
| RoHS exemption information | <a href="#">Yes</a>                                        |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>              |
| Circularity Profile        | No need of specific recycling operations                   |
| PVC free                   | Yes                                                        |

## Contractual warranty

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

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 |