GBY060012K

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





Main

Range compatibility	Lexium 52 Lexium SD3 Lexium ILA Lexium 32 Lexium 62 Lexium 62 Lexium ILS Lexium ILS 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) BSH (55 mm, 1 motor stacks) BSH (55 mm, 2 motor stacks) BSH (55 mm, 3 motor stacks) BSH (70 mm, 1 motor stacks) BRS3 ILE (66 mm, 1 motor stacks) ILE (66 mm, 2 motor stacks) ILA (57 mm, 1 motor stacks) ILA (57 mm, 1 motor stacks) ILA (57 mm, 2 motor stacks) ILS (57 mm, 2 motor stacks) ILS (57 mm, 2 motor stacks) ILS (57 mm, 3 motor stacks) ILS (57 mm, 3 motor stacks) ILS (57 mm, 3 motor stacks) SH3 MH3 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	92 %
Maximum radial force Fr	340 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 $^{\circ}\text{C}$
Maximum axial force Fa	450 N at 100 rpm, during 30000 hour at 30°C
Moment of inertia	0.238 kg.cm ²
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
Input diameter	14.0 mm

Environment

Noise level	70 dB at 1 m, no-load
IP degree of protection	Shaft output: IP54
Ambient temperature for operation	-2590 °C

Packing Units

PCE
1
9.7 cm
8.0 cm
18.0 cm
1.862 kg
S03
5
30.0 cm
30.0 cm
40.0 cm
10.023 kg

Offer Sustainability

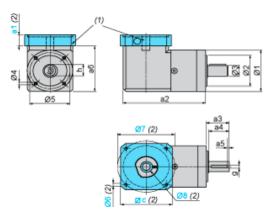
Green Premium product				
REACh Declaration				
Pro-active compliance (Product out of EU RoHS legal scope)				
Yes				
China RoHS Declaration				
€Yes				
Product Environmental Profile				
No need of specific recycling operations				
Yes				

Contractual warranty

Warranty	18 months

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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
124.5	35	30	2.5	16	5	60	40 h7	14 h7	M5 x 8	52	80.3

Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5	a6
4.90	1.38	1.18	0.09	0.63	0.19	2.36	1.57 h7	0.55 h7	M5 x 0.31	2.05	3.16