GBY120003K

angular gearbox straight teeth GBY-Ø 120 mm - reduction 3:1<11 arc.min -80 N.m





Main

Range compatibility	Lexium 62 Lexium 62 ILM Lexium 32i Lexium 32 Lexium 52
Gear box type	Straight teeth
Product or component type	Angular planetary gearbox
Device short name	GBY
Product compatibility	BMI (100 mm, 2 motor stacks) BMI (100 mm, 3 motor stacks) BMH (100 mm, 3 motor stacks) BSH (100 mm, 3 motor stacks) BMH (140 mm, 1 motor stacks) BSH (100 mm, 4 motor stacks) BSH (140 mm, 1 motor stacks) BSH (140 mm, 1 motor stacks) SH3 MH3 ILM
Gearbox external diameter	120 mm
Reduction ratio	3:1

Complementary

Complementary	
Maximum torsional backlash	11 arc.min
Torsional rigidity	12 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	1500 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C
Maximum axial force Fa	2100 N at 100 rpm, during 30000 hour at 30°C
Moment of inertia	5.75 kg.cm²
Continuous output torque	80 N.m at 100 rpm at 30 °C
Maximum output torque	128 N.m at 100 rpm at 30 °C
Net weight	12 kg
Input diameter	24.0 mm

Environment

Noise level	75 dB at 1 m, no-load
IP degree of protection	Shaft output: IP54
Ambient temperature for operation	-2590 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	25.0 cm
Package 1 Width	22.5 cm
Package 1 Length	31.5 cm
Package 1 Weight	9.762 kg
Unit Type of Package 2	S06
Number of Units in Package 2	5
Package 2 Height	73.5 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	61.81 kg

Offer Sustainability

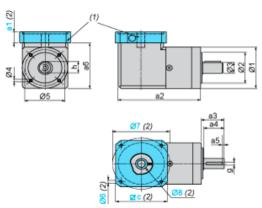
Sustainable offer status	Green Premium product					
REACh Regulation	☑ REACh Declaration					
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)					
Mercury free	Yes					
China RoHS Regulation	☐ China RoHS Declaration					
RoHS exemption information	₫Yes					
Environmental Disclosure	Product Environmental Profile					
Circularity Profile	No need of specific recycling operations					
PVC free	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
194.5	55	50	5	28	8	115	80 h7	25 h7	M10 x 16	100	123.7

Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5	a6
7.66	2.17	1.97	0.197	1.10	0.31	4.53	3.15 h7	0.98 h7	M10 x 0.63	3.94	4.87