GBX080012K

gearbox straight teeth GBX, Lexium, 80mm, reduction 12:1, 9arc.min, 120N.m





Main

Range compatibility Lexium 62 ILM Lexium 32 Lexium 62 Lexium 62 Lexium 52 Lexium 5D3 Lexium ILS Product or component type Planetary gearbox Product compatibility BMI (70 mm, 2 motor stacks) BMI (70 mm, 3 motor stacks) BMI (70 mm, 3 motor stacks) BMI (70 mm, 3 motor stacks) BMI (70 mm, 1 motor stacks) BMI (100 mm, 1 motor stacks) BSH (100 mm, 1 motor stacks) BCH2 (85 mm, 2 motor stacks) ILS (85 mm, 2 motor stacks) BCH2 (80 mm, 1 motor stacks) BCH2 (80 mm, 1 motor stacks) BCH2 (80 mm, 1 motor stacks) BCH2 (80 mm, 2 motor stacks) BCH3 MH3 ILM Gearbox external		
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Gearbox external 80 mm	Product compatibility	BMI (70 mm, 3 motor stacks) BMH (70 mm, 3 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) BCH2 (80 mm, 1 motor stacks) BCH2 (80 mm, 2 motor stacks) SH3 MH3
diameter		80 mm
Reduction ratio 12:1	Reduction ratio	12:1

Complementary

Maximum torsional backlash	9 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	94 %
Maximum radial force Fr	650 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 $^{\circ}\text{C}$
Maximum axial force Fa	1200 N at 100 rpm, during 30000 hour at 30°C
Moment of inertia	0.72 kg.cm²
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	2.6 kg
Input diameter	19.0 mm

Environment

Noise level	60 dB at 1 m, no-load				
IP degree of protection	Shaft output: IP54				
Ambient temperature for operation	-2590 °C				

Packing Units

1 18.000 cm		
18.000 cm		
10.500 cm		
10.600 cm		
2.386 kg		
S03		
4		
30.000 cm		
30.000 cm		
40.000 cm		
10.087 kg		

Offer Sustainability

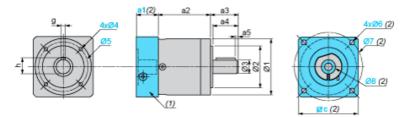
Sustainable offer status	Green Premium product				
REACh Regulation	☑ REACh Declaration				
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)				
Mercury free	Yes				
China RoHS Regulation	☑ China RoHS Declaration				
RoHS exemption information	₫Yes				
Environmental Disclosure	Product Environmental Profile				
Circularity Profile	No need of specific recycling operations				
PVC free	Yes				

Contractual warranty

Warranty	18 months

GBX080012K

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
89.5	40	36		22.5	6	80	60 h7	20 h7	M6 x 10	70

Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5
3.52	1.57	1.42	0.16	089	0.24	3.15	2.36 h7	0.79 h7	M6 x 0.39	2.76