Product data sheet Characteristics

GBX060012K

gearbox straight teeth GBX - Ø 60 mm - reduction 12:1 < 12 arc.min - 44 N.m





Main

Range Compatibility	Lexium ILE Lexium ILA Lexium ILS Lexium 62 Lexium 32 Lexium 62 ILM Lexium 28 Lexium 52 Lexium 52 Lexium 52 Lexium 52 Lexium 53
Product or Component Type	Planetary gearbox
Gear box type	Straight teeth
Device short name	GBX
Product compatibility	BMH 2.76 in (70 mm), 1 BMH 2.76 in (70 mm), 2 BSH 2.17 in (55 mm), 1 BSH 2.17 in (55 mm), 2 BSH 2.17 in (55 mm), 3 BSH 2.76 in (70 mm), 1 BSH 2.76 in (70 mm), 1 BSH 2.76 in (70 mm), 2 BRS3 ILE 2.60 in (66 mm), 1 ILE 2.60 in (66 mm), 2 ILA 2.24 in (57 mm), 1 ILA 2.24 in (57 mm), 2 ILS 2.24 in (57 mm), 1 ILS 2.24 in (57 mm), 2 ILS 2.36 in (60 mm), 1 BCH2 2.36 in (60 mm), 1 BCH2 2.36 in (60 mm), 2 SH3 MH3 ILM
Gearbox external diameter	2.36 in (60 mm)
Reduction ratio	12:1

Complementary

Complementary						
Maximum torsional backlash	12 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 100 rpm 86 °F (30 °C)					
Mounting position	Any position					
Efficiency	94 %					
Maximum radial force Fr	340 N 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 $^{\circ}\text{C}$					
Maximum axial force Fa	450 N 100 rpm, during 30000 hour at 30°C					
Moment of inertia	0.127 kg.cm²					
Continuous output torque	389.43 lbf.in (44 N.m) 100 rpm 86 °F (30 °C)					
Maximum output torque	619.55 lbf.in (70 N.m) 100 rpm 86 °F (30 °C)					
Net Weight	2.43 lb(US) (1.1 kg)					
Input diameter	0.55 in (14.0 mm)					

Environment

Noise level	58 dB 1 m, no-load
IP Degree of Protection	Shaft output IP54
Ambient temperature for operation	-13194 °F (-2590 °C)

Ordering and shipping details

Category	18283-NEUGART GEARBOXES
Discount Schedule	PC53
GTIN	3606480388231
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.76 in (7.0 cm)
Package 1 Width	2.76 in (7.0 cm)
Package 1 Length	5.71 in (14.5 cm)
Package 1 Weight	2.24 lb(US) (1.015 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	10
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	23.47 lb(US) (10.648 kg)

Offer Sustainability

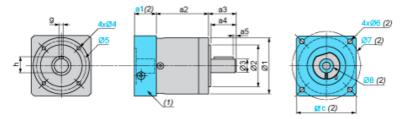
Sustainable offer status	Green Premium product			
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov			
REACh Regulation	☑ REACh Declaration			
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EEU RoHS Declaration			
Mercury free	Yes			
China RoHS Regulation	China RoHS Declaration			
RoHS exemption information				
Environmental Disclosure	Product Environmental Profile			
PVC free	Yes			

Contractual warranty

	,
Warranty	18 months

GBX060012K

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
67.5	35	30	2.5	16	5	60	40 h7	14 h7	M5 x 8	52

Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5
2.66	1.38	1.18	0.10	063	0.19	2.36	1.57 h7	0.55 h7	M5 x 0.31	2.05