GBY080003K

angular gearbox straight teeth GBY-Ø 80 mm - reduction 3:1<13 arc.min -40 N.m





Main

Product or component type Gear box type Straight teeth Device short name BMI 2.76 in (70 mm), 2 BMI 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BMH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 2 BSH 3.95 in (85 mm), 1 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 3 SH3 MH3 ILM Gearbox external diameter Reduction ratio 3:1	Range compatibility	Lexium 52 Lexium 62 ILM Lexium SD3 Lexium 32 Lexium ILS Lexium 62
Device short name GBY Product compatibility BMI 2.76 in (70 mm), 2 BMI 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BMH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 1 BSH 3.94 in (100 mm), 2 BRS3 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 3 SH3 MH3 ILM Gearbox external diameter 3.15 in (80 mm)	•	Angular planetary gearbox
Product compatibility BMI 2.76 in (70 mm), 2 BMI 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BSH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 1 BSH 3.94 in (100 mm), 2 BRS3 ILS 3.35 in (85 mm), 1 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 3 SH3 MH3 ILM Gearbox external diameter 3.15 in (80 mm)	Gear box type	Straight teeth
BMI 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BMH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 1 BSH 3.94 in (100 mm), 2 BRS3 ILS 3.35 in (85 mm), 1 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 3 SH3 MH3 ILM Gearbox external diameter 3.15 in (80 mm)	Device short name	GBY
diameter	Product compatibility	BMI 2.76 in (70 mm), 3 BMH 2.76 in (70 mm), 3 BSH 2.76 in (70 mm), 3 BSH 3.94 in (100 mm), 1 BMH 3.94 in (100 mm), 2 BSH 3.94 in (100 mm), 1 BSH 3.94 in (100 mm), 2 BRS3 ILS 3.35 in (85 mm), 1 ILS 3.35 in (85 mm), 2 ILS 3.35 in (85 mm), 3 SH3 MH3
Reduction ratio 3:1	ocarbon ontornar	3.15 in (80 mm)
	Reduction ratio	3:1

Complementary

Complementary	
Maximum torsional backlash	13 arc.min
Torsional rigidity	6 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	650 N 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 $^{\circ}\text{C}$
Maximum axial force Fa	1200 N 100 rpm, during 30000 hour at 30°C
Moment of inertia	1.189 kg.cm²
Continuous output torque	40 N.m at 100 rpm at 30 °C
Maximum output torque	64 N.m at 100 rpm at 30 °C
Net Weight	9.70 lb(US) (4.4 kg)

Environment

Noise level	73 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	03606480388712				
Nbr. of units in pkg.	1				
Package weight(Lbs)	8.01 lb(US) (3.63 kg)				
Returnability	No				
Country of origin	DE				

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	4.13 in (10.5 cm)
Package 1 width	3.94 in (10 cm)
Package 1 Length	8.07 in (20.5 cm)

Offer Sustainability

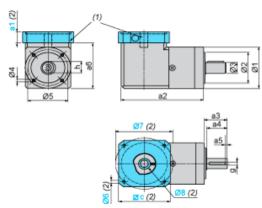
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS
Mercury free	Yes
RoHS exemption information	€Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
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	а6
144	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
5.67	1.57	1.42	0.15	0.88	0.23	315	2.36 h7	0.78 h7	M6 x 0.39	2.76	3.48