

Product data sheet

Specifications



gearbox straight teeth GBX, Lexium,
80mm, reduction 20:1 , 9arc.min,
120N.m

GBX080020K

**Product availability: Non-Stock - Not normally stocked in
distribution facility**

Main

Range Compatibility	Lexium SD3 Lexium 32 Lexium 32i Lexium 52 Lexium 62 ILM Lexium ILS Lexium 62 Lexium 28
Gear box type	Straight teeth
Product or Component Type	Planetary gearbox
Device short name	GBX
Product compatibility	BMI 2.8 in (70 mm), 2 BMI 2.8 in (70 mm), 3 BMH 2.8 in (70 mm), 1 BMH 2.8 in (70 mm), 2 BMH 2.8 in (70 mm), 3 BSH 2.8 in (70 mm), 1 BSH 2.8 in (70 mm), 2 BSH 2.8 in (70 mm), 3 BRS3 ILS 3.3 in (85 mm), 1 ILS 3.3 in (85 mm), 2 ILS 3.3 in (85 mm), 3 BCH2 3.1 in (80 mm), 1 BCH2 3.1 in (80 mm), 2 SH3 MH3 ILM
Gearbox external diameter	3.1 in (80 mm)
Reduction ratio	20:1

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 100 rpm 86 °F (30 °C)
Mounting position	Any position
Efficiency	96.0 %
Maximum radial force Fr	650 N 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum axial force Fa	1200 N 100 rpm, during 30000 hour at 30°C
moment of inertia	0.455 kg.cm²
Continuous output torque	1062.09 lbf.in (120 N.m) 100 rpm 86 °F (30 °C)
Maximum output torque	1699.3 lbf.in (192 N.m) 100 rpm 86 °F (30 °C)
Product Weight	5.7 lb(US) (2.6 kg)
Input diameter	0.7 in (19.0 mm)
No load running torque	0.9 lbf.in (0.1 N.m)
Reduction ratio	20
Compatibility code	GBX
Internal length	3.5 in (89.5 mm)

Environment

Noise level	60 dB 1 m, no-load
IP Degree of Protection	Shaft output IP54
ambient temperature for operation	-13...194 °F (-25...90 °C)

Ordering and shipping details

Category	US1PC5318283
Discount Schedule	PC53
GTIN	3606480388392
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.2 in (10.6 cm)
Package 1 Width	4.3 in (11.0 cm)
Package 1 Length	7.09 in (18.0 cm)
Package weight(Lbs)	5.289 lb(US) (2.399 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	4
Package 2 Height	11.8 in (30.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	22.313 lb(US) (10.121 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	1 170 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	10 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 159 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
SCIP Number	7c9e597c-8ccc-4daf-95fb-5d67fc70d561
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
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
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again

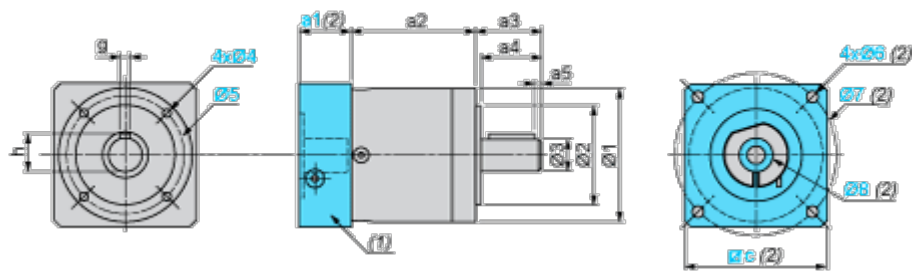


Repack and remanufacture

Circularity Profile	No need of specific recycling operations
Take-back	No

Dimensions Drawings

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	4	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	0.89	0.24	3.15	2.36 h7	0.79 h7	M6 x 0.39	2.76