

Product data sheet

Specifications



gearbox straight teeth GBX, Lexium,
80mm, reduction 3:1 , 7arc.min,
85N.m

GBX080003K

Main

Range compatibility	Lexium 32 Lexium SD3 Lexium 62 Lexium ILS Lexium 62 ILM Lexium 52 Lexium 32i Lexium 28
Gear box type	Straight teeth
Product or component type	Planetary gearbox
Device short name	GBX
Product compatibility	BMI (70 mm, 2 motor stacks) BMI (70 mm, 3 motor stacks) BMH (100 mm, 1 motor stacks) BMH (100 mm, 2 motor stacks) BMH (100 mm, 3 motor stacks) BSH (100 mm, 1 motor stacks) BSH (100 mm, 2 motor stacks) BSH (100 mm, 3 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 ILM
Gearbox external diameter	80 mm
Reduction ratio	3:1

Complementary

Maximum torsional backlash	7 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 at 100 rpm at 30 °C
Mounting position	Any position
Efficiency	97.0 %
Maximum radial force Fr	650 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C

Maximum axial force Fa	1200 N at 100 rpm, during 30000 hour at 30°C
moment of inertia	0.37 kg.cm ²
Continuous output torque	85 N.m at 100 rpm at 30 °C
Maximum output torque	136 N.m at 100 rpm at 30 °C
Net weight	2.1 kg
Input diameter	19.0 mm
No load running torque	0.1 N.m
Reduction ratio	3
Compatibility code	GBX
Internal length	72.0 mm

Environment

Noise level	60 dB at 1 m, no-load
IP degree of protection	Shaft output: IP54
ambient temperature for operation	-25...90 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	10.7 cm
Package 1 Length	16.5 cm
Package 1 Weight	1.914 kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.065 kg

Contractual warranty

Warranty	18 months
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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 1168

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard No

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 7c9e597c-8ccc-4daf-95fb-5d67fc70d561

REACH Regulation [REACH Declaration](#)

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 Again

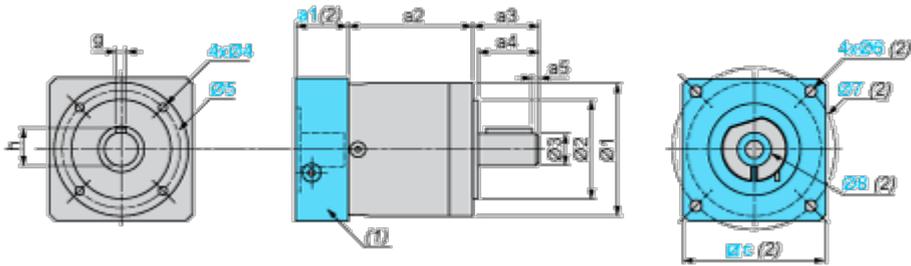
Repack and remanufacture

End of life manual availability 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
72	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
2.83	1.57	1.42	0.16	0.89	0.24	3.15	2.36 h7	0.79 h7	M6 x 0.39	2.76