

# Product data sheet

Specifications



angular gearbox straight teeth GBY,  
Lexium, 80mm, reduction 20:1,  
15arc.min, 120N.m

GBY080020K

## Main

Range compatibility	Lexium 62 Lexium 32i Lexium 32 Lexium ILS Lexium 52 Lexium SD3 Lexium 62 ILM
Gear box type	Straight teeth
Product or component type	Angular planetary gearbox
Device short name	GBY
Product compatibility	BMI (70 mm, 2 motor stacks) BMH (70 mm, 1 motor stacks) BMH (70 mm, 2 motor stacks) BMH (70 mm, 3 motor stacks) BSH (70 mm, 1 motor stacks) BSH (70 mm, 2 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) SH3 MH3 ILM
Gearbox external diameter	80 mm
Reduction ratio	20:1

## Complementary

Maximum torsional backlash	15 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	95.0 %
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	1.273 kg.cm <sup>2</sup>

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	5 kg
Input diameter	19.0 mm
No load running torque	0.1 N.m
Reduction ratio	20
Compatibility code	GBY
Internal length	161.5 mm

## Environment

Noise level	73 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	11.2 cm
Package 1 Width	9.2 cm
Package 1 Length	22 cm
Package 1 Weight	4.118 kg
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	8.691 kg
Unit Type of Package 3	S03
Number of Units in Package 3	2
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	8.949 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	1180
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	7c9e597c-8ccc-4daf-95fb-5d67fc70d561
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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 <a href="#">www.P65Warnings.ca.gov</a>
PVC free	Yes

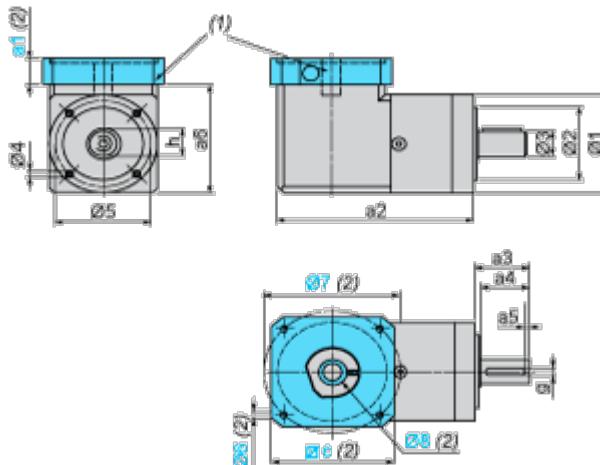
## Use Again

### 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	a6
161.5	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
6.36	1.57	1.42	0.15	0.88	0.19	3.15	2.36 h7	0.78 h7	M6 x 0.39	2.76	3.48