

# Product datasheet

Specifications



gearbox with straight teeth GBX-  
A~ 160 mm- reduction 8:1- <  
6arcmin- 450 N.m

GBX1600081403F

## Main

Range compatibility	Lexium 62 ILM Lexium 15 Lexium 52 Lexium 32 Lexium 62
product or component type	Planetary gearbox
Gear box type	Straight teeth
Device short name	GBX
Gearbox external diameter	160 mm
Product compatibility	BSH (140 mm, 3 motor stacks) BMH (140 mm, 3 motor stacks) SH3 MH3 ILM
Reduction ratio	8:1

## Complementary

Maximum torsional backlash	6 arc.min
Torsional rigidity	38 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
Efficiency	96 %
Mounting position	Any position
Maximum radial force Fr	4200 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C 6000 N at 100 rpm, force applied at mid-distance from output shaft during 10000 hour at 30 °C
Maximum axial force Fa	6000 N at 100 rpm, during 30000 hour at 30°C 8000 N at 100 rpm, during 10000 hour at 30°C
moment of inertia	4.63 g.cm <sup>2</sup>
Continuous output torque	450 N.m at 100 rpm at 30 °C
Maximum output torque	720 N.m at 100 rpm at 30 °C
net weight	18 kg

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

## Environment

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Noise level 70 dB at 1 m, no-load

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IP degree of protection Shaft output: IP54

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ambient temperature for operation -25...90 °C

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## Packing Units

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Unit Type of Package 1 PCE

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Number of Units in Package 1 1

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Package 1 Height 26.0 cm

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Package 1 Width 45.0 cm

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Package 1 Length 26.0 cm

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Package 1 Weight 19.0 kg

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## Contractual warranty

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Warranty 18 months

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

 Mercury Free

 RoHS Exemption Information Yes

 Pvc Free

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope)

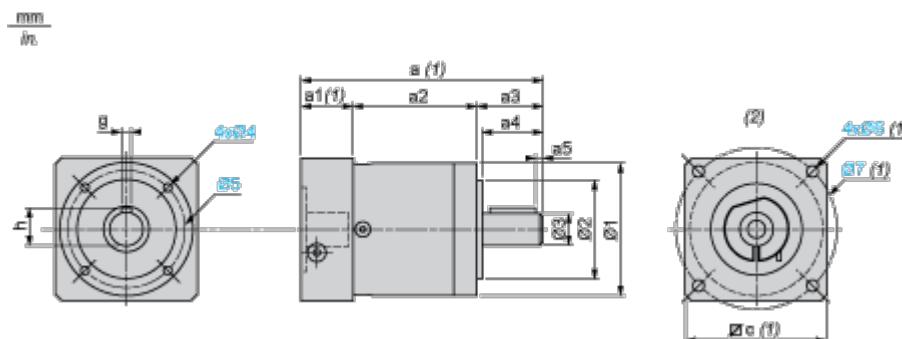
China RoHS Regulation [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

Circularity Profile No need of specific recycling operations

## Dimensions Drawings

## Dimensions



(1) Dimensions a, a1, c, Ø6 and Ø7 depend on the planetary gearbox/servo motor combination  
 (2) Servo motor assembly

Dimensions in mm

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4 (oblong)	Ø5
104	87	80	8	43	12	160	130 h7	40 h7	M12 x 20	145

Dimensions in mm

a	a1	c	Ø6	Ø7
255.5	64.5	140 x 140	M10	165

Dimensions in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4 oblong	Ø5
4.09	3.42	3.14	0.31	1.69	0.47	6.29	5.12 h7	1.57 h7	M12 x 0.79	5.70

Dimensions in in.

a	a1	c	Ø6	Ø7
10.05	2.53	0.21 x 0.21	M10	6.49