

# Product datasheet

Specifications



gearbox with straight teeth GBX- Ø  
160 mm- reduction 25:1- <  
10arcmin- 700 N.m

GBX1600251002F

⚠ Discontinued on: 31 Mar 2023

⚠ To be end-of-service on: 31 Mar 2028

⚠ To be discontinued

## Main

Range compatibility	Lexium 15 Lexium 52 Lexium 62 ILM Lexium 62 Lexium 32 Lexium 32i
product or component type	Planetary gearbox
Gear box type	Straight teeth
Device short name	GBX
Gearbox external diameter	160 mm
Product compatibility	BSH (100 mm, 2 motor stacks) BMH (100 mm, 2 motor stacks) BMI (100 mm, 2 motor stacks) SH3 MH3 ILM
Reduction ratio	25:1

## Complementary

Maximum torsional backlash	10 arc.min
Torsional rigidity	41 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	94 %
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	5.81 g.cm <sup>2</sup>
Continuous output torque	700 N.m at 100 rpm at 30 °C

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 output torque	1120 N.m at 100 rpm at 30 °C
net weight	22 kg

## Environment

Noise level	70 dB at 1 m, no-load
IP degree of protection	Shaft output: IP54
ambient temperature for operation	-25...90 °C

## Packing Units

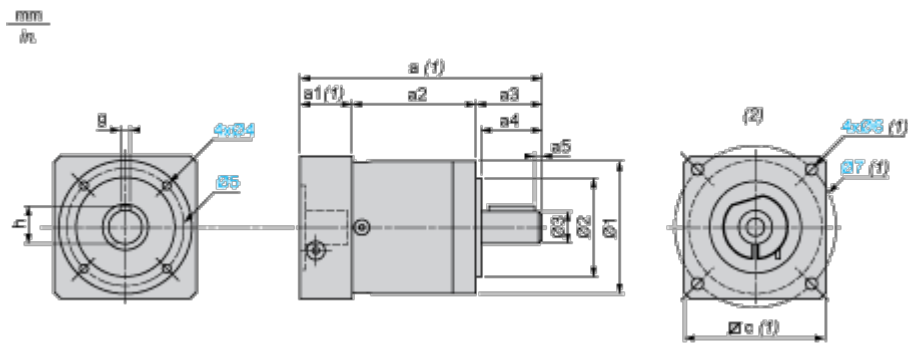
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	45.0 cm
Package 1 Length	26.0 cm
Package 1 Weight	23.0 kg

## Contractual warranty

Warranty	18 months
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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
153.5	87	80	8	43	12	160	130 h7	40 h7	M12 x 20	145

Dimensions in mm

a	a1	c	Ø6	Ø7
305	64.5	140 x 140	M8	115

Dimensions in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4 oblong	Ø5
6.04	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
12.00	2.53	0.21 x 0.21	M8	4.52