# Product datasheet Characteristics

## GBX1600321003F

gearbox with straight teeth GBX- Ø 160 mm-reduction 32:1- < 10arcmin- 800 N.m





Main					
Range compatibility	Lexium 32				
	Lexium 52				
	Lexium 15				
	Lexium 62				
	Lexium 62 ILM				
	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, 3 motor stacks)				
, ,	BMH (100 mm, 3 motor stacks)				
	BMI (100 mm, 3 motor stacks)				
	SH3				
	MH3				
	ILM				
Reduction ratio	32:1				

### Complementary

1	
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 $30^{\circ}\text{C}$

Moment of inertia	6.36 g.cm <sup>2</sup>
Continuous output torque	800 N.m at 100 rpm at 30 °C
Maximum output torque	1280 N.m at 100 rpm at 30 °C
Product weight	22 kg

### Environment

Noise level	70 dB at 1 m, no-load
IP degree of protection	Shaft output: IP54
Ambient temperature for operation	-2590 °C

### Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
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

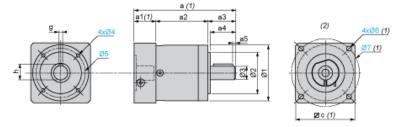
### Contractual warranty

Contraction Warranty							
Warranty	18 months						

## GBX1600321003F

### **Dimensions**





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

а	a1	С	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.

а	a1	С	Ø6	Ø7
12.00	2.53	0.21 x 0.21	M8	4.52