# Product datasheet Characteristics

# GBX1600251402F

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



IVIAIII				
Range compatibility	Lexium 62 Lexium 62 ILM Lexium 32 Lexium 52 Lexium 15			
Product or component type	Planetary gearbox			
Gear box type	Straight teeth			
Device short name	GBX			
Gearbox external diameter	160 mm			
Product compatibility	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
Maximum output torque	1120 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

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		

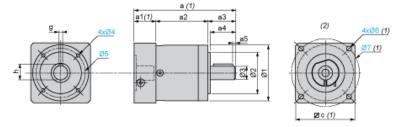
### Contractual warranty

Warranty	18 months					

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### **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	M10	165

### 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	M10	6.49