

# gearbox straight teeth GBX - Ø 120 mm - reduction 3:1 < 7 arc.min - 115 N.m

GBX120003K

EAN Code: 3606480388439

#### Main

Range compatibility	Lexium SD3
	Lexium 62
	Lexium 28
	Lexium 32
	Lexium 62 ILM
	Lexium 52
	Lexium 32i
Gear box type	Straight teeth
Product or component type	Planetary gearbox
Device short name	GBX
Product compatibility	BMI (100 mm, 2 motor stacks)
	BMI (100 mm, 3 motor stacks)
	BMH (140 mm, 1 motor stacks)
	BMH (140 mm, 2 motor stacks)
	BMH (140 mm, 3 motor stacks)
	BSH (100 mm, 4 motor stacks)
	BSH (140 mm, 1 motor stacks)
	BSH (140 mm, 2 motor stacks)
	BSH (140 mm, 3 motor stacks)
	BSH (140 mm, 4 motor stacks)
	BRS3
	BCH2 (100 mm, 1 motor stacks)
	BCH2 (100 mm, 2 motor stacks)
	BCH2 (130 mm, 1 motor stacks)
	BCH2 (130 mm, 2 motor stacks)
	BCH2 (130 mm, 3 motor stacks)
	BCH2 (130 mm, 4 motor stacks)
	SH3
	MH3
	ILM
Gearbox external diameter	120 mm
Reduction ratio	3:1

## **Complementary**

Maximum torsional backlash	7 arc.min				
Torsional rigidity	12 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	97.0 %				

Maximum radial force Fr	1500 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 $^{\circ}\text{C}$					
Maximum axial force Fa	2100 N at 100 rpm, during 30000 hour at 30°C					
moment of inertia	2.63 kg.cm²					
Continuous output torque	115 N.m at 100 rpm at 30 °C					
Maximum output torque	184 N.m at 100 rpm at 30 °C					
Net weight	6 kg					
Input diameter	24.0 mm					
No load running torque	0.3 N.m					
Reduction ratio	3					
Compatibility code	GBX					
Internal length	99.5 mm					

## **Environment**

Noise level	65 dB at 1 m, no-load				
IP degree of protection	Shaft output: IP54				
ambient temperature for operation	-2590 °C				

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.000 cm
Package 1 Width	13.000 cm
Package 1 Length	18.000 cm
Package 1 Weight	5.365 kg
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	10.990 kg
Unit Type of Package 3	P06
Number of Units in Package 3	32
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	183.840 kg

# **Logistical informations**

Country of origin

# **Contractual warranty**

Warranty

18 months



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						
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	1184					
Environmental Disclosure	Product Environmental Profile					

#### **Use Better**

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	7c9e597c-8ccc-4daf-95fb-5d67fc70d561
REACh Regulation	REACh Declaration
PVC free	Yes

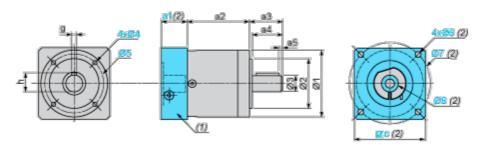
#### Use Again

○ Repack and remanufacture					
Circularity Profile	No need of specific recycling operations				
Take-back	No				

## GBX120003K

#### **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	а3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5
99.5	55	50	5	28	8	115	80 h7	25 h7	M10 x 16	100

#### Values in in

values III III.										
a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5
3.92	2.17	1.97	0.19	1.10	0.31	4.53	3.15 h7	0.98 h7	M10 x 0.63	3.94