# Product data sheet Characteristics

# GBY120040K

angular gearbox straight teeth GBY-Ø 120 mm - reduction 40:1<13 arc.min -230 N.m





### Main

Range compatibility	Lexium 32 Lexium 32i Lexium 62 ILM Lexium 52 Lexium 62				
Product or component type	Angular planetary gearbox				
Gear box type	Straight teeth				
Device short name	GBY				
Product compatibility	BMI (70 mm, 2 motor stacks) BMH (70 mm, 2 motor stacks) BSH (70 mm, 2 motor stacks) BSH (100 mm, 1 motor stacks) SH3 MH3 ILM				
Gearbox external diameter	120 mm				
Reduction ratio	40:1				

## Complementary

Torsional backlash	< 13 arc.min					
Torsional rigidity	13 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	92 %					
Maximum radial force Fr	1500 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C					
Maximum axial force Fa	2100 N at 100 rpm, during 30000 hour at 30°C					
Moment of inertia	2.84 kg.cm²					
Continuous output torque	230 N.m at 100 rpm at 30 °C					
Maximum output torque	368 N.m at 100 rpm at 30 °C					
Product weight	14 kg					

### Environment

Noise level	75 dB at 1 m, no-load
IP degree of protection	IP54 on shaft output
Ambient temperature for operation	-2590 °C

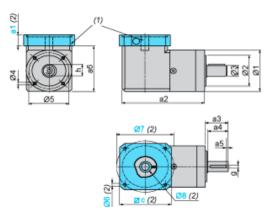
## Offer Sustainability

Sustainable offer status	Green Premium product				
RoHS (date code: YYWW)	Compliant - since 0912 - Schneider Electric declaration of conformity				
REACh	Reference not containing SVHC above the threshold				
Product environmental profile	Available				
Product end of life instructions	Need no specific recycling operations				



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## 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	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5	a6
221.5	55	50	5	28	8	115	80 h7	25 h7	M10 x 16	100	123.7

### Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5	a6
8.72	2.17	1.97	0.197	1.10	0.31	4.53	3.15 h7	0.98 h7	M10 x 0.63	3.94	4.87