

# Product data sheet

## Characteristics

# GBY080003K

angular gearbox straight teeth GBY-Ø 80 mm -  
reduction 3:1<13 arc.min -40 N.m



### Main

Range compatibility	Lexium ILS Lexium SD3 Lexium 32 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	ILM MH3 SH3 ILS (85 mm, 3 motor stacks) ILS (85 mm, 2 motor stacks) ILS (85 mm, 1 motor stacks) BRS3 BSH (100 mm, 2 motor stacks) BSH (100 mm, 1 motor stacks) BMH (100 mm, 2 motor stacks) BMH (100 mm, 1 motor stacks) BSH (70 mm, 3 motor stacks) BMH (70 mm, 3 motor stacks) BMI (70 mm, 3 motor stacks) BMI (70 mm, 2 motor stacks)
Gearbox external diameter	80 mm
Reduction ratio	3:1

### Complementary

Torsional backlash	< 13 arc.min
Torsional rigidity	6 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	94 %
Maximum radial force Fr	650 N at 100 rpm, force applied at mid-distance from output shaft during 30000 hour at 30 °C
Maximum axial force Fa	1200 N at 100 rpm, during 30000 hour at 30°C
Moment of inertia	1.189 kg.cm <sup>2</sup>
Continuous output torque	40 N.m at 100 rpm at 30 °C
Maximum output torque	64 N.m at 100 rpm at 30 °C
Product weight	4.4 kg

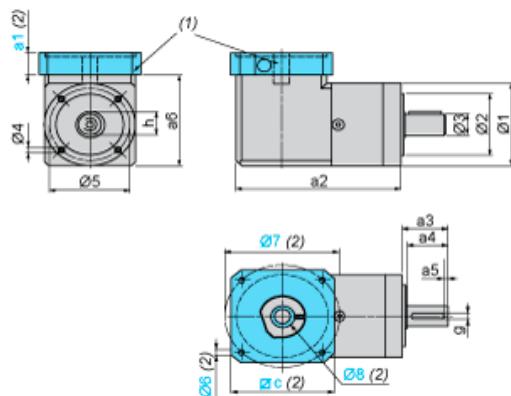
### Environment

Noise level	73 dB at 1 m, no-load
IP degree of protection	IP54 on shaft output
Ambient temperature for operation	-25...90 °C

## Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 1129 -  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

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
144	40	36	4	22.5	6	80	60 h7	20 h7	M6 x 10	70	88.3

Values in in.

a2	a3	a4	a5	h	g	Ø1	Ø2	Ø3	Ø4	Ø5	a6
5.67	1.57	1.42	0.15	0.88	0.23	3.15	2.36 h7	0.78 h7	M6 x 0.39	2.76	3.48