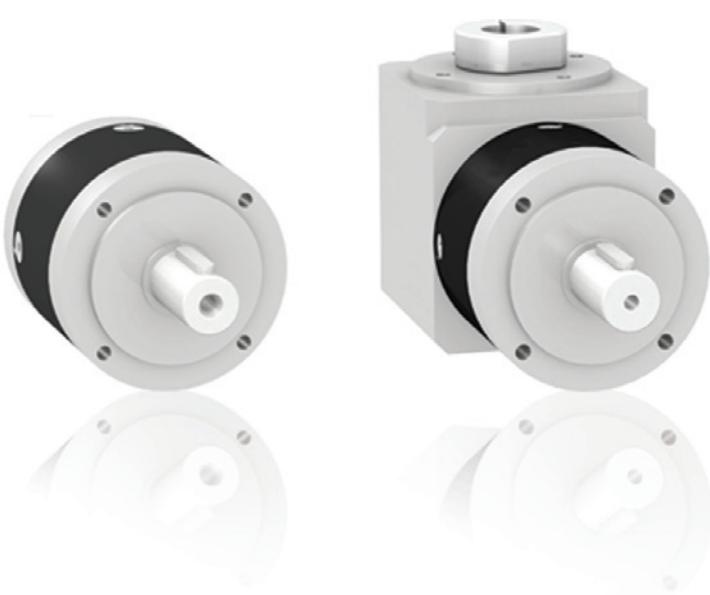


GBX and GBY Planetary gearboxes

For Lexium servo motors,
and Lexium integrated drives

Catalog

June 2016



Schneider
 **Electric**

How can you fit a 6000-page catalog in your pocket?

Schneider Electric provides you with the complete set of industrial automation catalogs all on a handy USB key for PC or in an application for tablets



Digi-Cat, a handy USB key for PC



- > Convenient to carry
- > Always up-to-date
- > Environmentally friendly
- > Easy-to-share format

The screenshot shows a software interface titled "Catalogs EN" with a sidebar labeled "Library v1.0". The main content area displays a tree view of industrial automation components, such as Pushbuttons, Switches, Pilot Lights & Joysticks, Boxes, Cabling & Interfaces, Signaling Units, HMI (Terminals and Industrial PC), Sensors & RFID System, Motor Protection Relays, Motor Starters, Drives & Soft Starters, Motion, Interface, Measurement & Control Relays, PAC, PLC & other Controllers, and Industrial Communication.

Contact your local representative to get your own Digi-Cat



e-Library, the app for tablets

If you have an iPad®:

- > Go to the App Store and search for e-Library
- > or scan the QR code



If you have an Android tablet:

- > Go to the Google Play Store™ and search for eLibrary
- > or scan the QR code



The screenshot shows a mobile application interface titled "Autune SIM" with a sidebar. The main content area displays a tree view of industrial automation components, such as HMI (terminals and industrial PC), Industrial communication, Interface, Measurement & Control Relays, Motion & Drives, Motor Starters, PAC, PLC & other Controllers, Power supplies & transformers, and Pushbuttons, Switches, Pilot Lights, Control stations & Joysticks.

General contents

GBX and GBY Planetary gearboxes

For Lexium servo motors and Lexium integrated drives

■ Presentation	page 2
■ GBX planetary gearboxes	
□ References	page 3
□ Combinations: GBX planetary gearboxes/	
- /BSH Servo motors	page 4
- /BMH Servo motors	page 4
- /SH3 Servo motors	page 4
- /MH3 Servo motors.....	page 4
- /Lexium 62 ILM integrated drives.....	page 5
■ GBY planetary gearboxes	
□ References	page 6
□ Combinations: GBY planetary gearboxes/	
- /BSH Servo motors	page 6
- /BMH Servo motors	page 6
- /SH3 Servo motors	page 7
- /MH3 Servo motors.....	page 7
- /Lexium 62 ILM integrated drives.....	page 7
■ GBK adaptation kit for GBX / GBY planetary gearbox	
□ References	page 8
□ Combinations: GBK adaptation kit/	
- /BSH Servo motors	page 8
- /BMH Servo motors	page 8
- /SH3 Servo motors	page 9
- /MH3 Servo motors.....	page 9
- /Lexium 62 ILM integrated drives	page 9
■ Product reference index	page 10

GBX and GBY Planetary gearboxes

For Lexium servo motors and Lexium integrated drives

PF080936



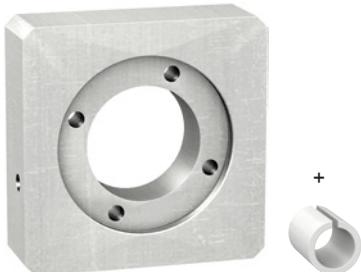
GBX planetary gearbox

PF080937



GBY angular planetary gearbox

PF080938



GBK adaptation kit

PF105616



GBX160 planetary gearbox

Presentation

Motion control often requires the use of gearboxes to adapt speeds and torques, while providing the precision demanded by the application.

Schneider Electric has chosen to use **GBX** planetary gearboxes and **GBY** angular planetary gearboxes for their Lexium servo motors.

The combination of Lexium servo motors with the most suitable planetary gearboxes makes them very easy to mount and sand up.

The gearboxes are designed for applications that are not susceptible to mechanical backlash. They have a keyed shaft, are lubricated for life, and conform to IP 54 degree of protection.

- Available in 4 sizes (GBX60, GBX80, GBX120 and GBX160), planetary gearboxes are offered with 15 reduction ratios (3:1...100:1).
- GBY angular planetary gearboxes are available in 3 sizes (GBY60, GBY80, and GBY120), available with 7 reduction ratios (3:1...40:1).

The tables on the following pages show the most suitable combinations of servo motor and GBX or GBY planetary gearbox. For other combinations or additional information on planetary gearbox characteristics, please refer to the servo motor data sheets on our web site, www.schneider-electric.com or contact your local sales office.

A GBK adaptation kit is available for mounting the Lexium servo motors with GBX60/GBX80/GBX120 or GBY60/GBY80/GBY120 planetary gearboxes.

The GBX160 planetary gearbox includes an integrated adaptation kit as standard equipment. The adaptation kit includes:

- An adaptation plate
- A shaft end adaptation, depending on the servo motor / planetary gearbox combination
- Accessories for mounting the plate on the planetary gearbox
- Accessories for mounting the servo motor

References

GBX and GBY Planetary gearboxes

For Lexium servo motors and Lexium integrated drives

GBX Planetary gearboxes

References

Size	Reduction ratio	Reference	Weight kg/lb
GBX60	3:1, 4:1, 5:1, 8:1 and 10:1	GBX060•••K	0.900/1.984
	9:1, 12:1, 15:1, 16:1, 20:1, 25:1, 32:1 and 40:1	GBX060•••K	1.000/2.205
	60:1	GBX060•••K	1.300/2.866
GBX80	3:1, 4:1, 5:1, 8:1 and 10:1	GBX080•••K	2.100/4.630
	9:1, 12:1, 15:1, 16:1, 20:1, 25:1, 32:1 and 40:1	GBX080•••K	2.600/5.732
	60:1	GBX080•••K	3.000/6.800
GBX120	3:1, 4:1, 5:1, 8:1 and 10:1	GBX120•••K	6.000/13.228
	9:1, 12:1, 15:1, 16:1, 20:1, 25:1, 32:1 and 40:1	GBX120•••K	8.000/17.637
	60:1, 80:1 and 100:1	GBX120•••K	10.000/22.046



GBX planetary gearbox

PF08036

To order a GBX060/80/120 planetary gearbox, complete each reference above as follows

	GBX	•••	•••	K	
Size (Casing diameter)	60 mm/ 2.36 in.	060			
	80 mm/ 3.15 in.	080			
	120 mm/ 4.72 in.	120			
Reduction ratio	3:1		003		
	4:1		004		
	5:1		005		
	8:1		008		
	9:1		009		
	10:1		010		
	12:1		012		
	15:1		015		
	16:1		016		
	20:1		020		
	25:1		025		
	32:1		032		
	40:1		040		
	60:1		060		
	80:1		080		
	100:1		100		
Mounting with GBK adaptation kit				K	



GBX160 planetary gearbox

PF105616

To order a GBX160 planetary gearbox, complete each reference above as follows

	GBX	•••	•••	•••	•	F
Size (Casing diameter)	160 mm/ 6.30 in.	160				
Reduction ratio	8:1 and 12:1...40:1		008...040 (as in the table above)			
Associated servo motors	Type			100 140		
	Motor				1 2 3 4	
						F
Integrated servo motor adaptation						

Lexium 62 ILM integrated drive / GBX planetary gearbox combinations

Lexium 62 ILM integrated drives	Reduction ratio													
	3:1, 4:1	5:1	8:1	9:1	10:1	12:1	15:1, 16:1	20:1	25:1	32:1	40:1	60:1	80:1	100:1
ILM0701	GBX060	GBX060	GBX060	GBX060	GBX060	GBX060	GBX080	GBX080	GBX080	GBX080	GBX080	GBX120	GBX120	GBX120
ILM0702	GBX060	GBX060	GBX080	GBX060	GBX060	GBX060	GBX080	GBX080	GBX080	GBX120	GBX120	GBX120	GBX120	GBX120
ILM0703	GBX060	GBX060	GBX080	GBX060	GBX080	GBX080	GBX080	GBX080	GBX120	GBX120	GBX120	GBX120	GBX120	GBX120
ILM1001	GBX080	GBX080	GBX080	GBX080	GBX080	GBX080	GBX080	GBX080	GBX120	GBX120	GBX120	—	—	—
ILM1002	GBX080	GBX080	GBX120	GBX080	GBX080	GBX080	GBX120	GBX120	GBX160	GBX160	GBX160	—	—	—
ILM1003	GBX080	GBX080	GBX120	GBX080	GBX120	GBX120	GBX120	GBX120	GBX160	GBX160	GBX160	—	—	—
ILM1401	GBX120	GBX120	GBX120	GBX120	—	GBX120	GBX160	GBX160	GBX160	GBX160	GBX160	—	—	—
ILM1402	GBX120	GBX120	GBX160	—	—	GBX160	GBX160	GBX160	GBX160	GBX160	GBX160	—	—	—
ILM1403	GBX120	GBX120	GBX160	—	—	GBX160	GBX160	GBX160	GBX160	GBX160	GBX160	—	—	—

GBX••• For these combinations, please verify that the application will not exceed the maximum gearbox output torque; contact your local sales office.



PF080937
GBY angular planetary gearbox

References		Reduction ratio	Reference	Weight kg/lb
Size				
GBY60	3:1, 4:1, 5:1 and 8:1	GBY060•••K	1.700/3.748	
	12:1, 20:1 and 40:1			1.900/4.189
GBY80	3:1, 4:1, 5:1 and 8:1	GBY080•••K	4.400/9.700	
	12:1, 20:1, 25:1 and 40:1			5.000/11.023
GBY120	3:1, 4:1, 5:1 and 8:1	GBY120•••K	12.000/26.455	
	12:1, 20:1 and 40:1			14.000/30.865

To order a GBY angular planetary gearbox, complete each reference above as follows				
	GBY	•••	•••	K
Size (Casing diameter)	60 mm/ 2.36 in.	060		
	80 mm/ 3.15 in.	080		
	120 mm/ 4.72 in.	120		
Reduction ratio	3:1		003	
	4:1		004	
	5:1		005	
	8:1		008	
	12:1		012	
	20:1		020	
	25:1		025	
	40:1		040	
	Mounting with GBK adaptation kit			

Lexium servo motor / GBY gearbox combinations

BSH Servo motors	Reduction ratio							
	3:1	4:1	5:1	8:1	12:1	20:1	25:1	40:1
BSH0551	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	GBY060
BSH0552	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	-
BSH0553	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	-
BSH0701	GBY060	GBY060	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080
BSH0702	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080	GBY080	GBY120
BSH0703	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY120
BSH1001	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	-	GBY120
BSH1002	GBY080	GBY080	GBY080	GBY120	GBY080	GBY120	-	-
BSH1003	GBY120	GBY120	GBY120	GBY120	GBY120	GBY120	-	-
BSH1004	GBY120	GBY120	GBY120	-	GBY120	-	-	-
BSH1401	GBY120	GBY120	GBY120	GBY120	GBY120	-	-	-
BMH Servo motors	Reduction ratio							
	3:1	4:1	5:1	8:1	12:1	20:1	25:1	40:1
BMH0701	GBY060	GBY060	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080
BMH0702	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080	GBY080	GBY120
BMH0703	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY120
BMH1001	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	-	GBY120
BMH1002	GBY080	GBY080	GBY080	GBY120	GBY080	GBY120	-	-
BMH1003	GBY120	GBY120	GBY120	GBY120	GBY120	GBY120	-	-
BMH1401	GBY120	GBY120	GBY120	GBY120	GBY120	-	-	-

GBY••• For these combinations, please verify that the application will not exceed the maximum gearbox output torque; contact your local sales office.

Lexium servo motor / GBY gearbox combinations

SH3 Servo motors	Reduction ratio							
	3:1	4:1	5:1	8:1	12:1	20:1	25:1	40:1
SH30551	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	GBY060
SH30552	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	-
SH30553	GBY060	GBY060	GBY060	GBY060	GBY060	GBY060	-	-
SH30701	GBY060	GBY060	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080
SH30702	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080	GBY080	GBY120
SH30703	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY120
SH31001	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	-	GBY120
SH31002	GBY080	GBY080	GBY080	GBY120	GBY080	GBY120	-	-
SH31003	GBY120	GBY120	GBY120	GBY120	GBY120	GBY120	-	-
SH31004	GBY120	GBY120	GBY120	-	GBY120	-	-	-
SH31401	GBY120	GBY120	GBY120	GBY120	GBY120	-	-	-
MH3 Servo motors	Reduction ratio							
	3:1	4:1	5:1	8:1	12:1	20:1	25:1	40:1
MH30701	GBY060	GBY060	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080
MH30702	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080	GBY080	GBY120
MH30703	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY120
MH31001	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	-	GBY120
MH31002	GBY080	GBY080	GBY080	GBY120	GBY080	GBY120	-	-
MH31003	GBY120	GBY120	GBY120	GBY120	GBY120	GBY120	-	-
MH31401	GBY120	GBY120	GBY120	GBY120	GBY120	-	-	-

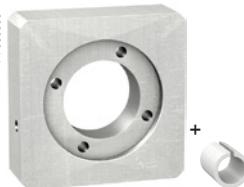
Lexium 62 ILM integrated drive / GBY gearbox combinations

Lexium 62 ILM integrated drives	Reduction ratio							
	3:1	4:1	5:1	8:1	12:1	20:1	25:1	40:1
ILM0701	GBY060	GBY060	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080
ILM0702	GBY060	GBY060	GBY060	GBY080	GBY080	GBY080	GBY080	GBY120
ILM0703	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	GBY120
ILM1001	GBY080	GBY080	GBY080	GBY080	GBY080	GBY080	-	GBY120
ILM1002	GBY080	GBY080	GBY080	GBY120	GBY080	GBY120	-	-
ILM1003	GBY120	GBY120	GBY120	GBY120	GBY120	GBY120	-	-
ILM1401	GBY120	GBY120	GBY120	GBY120	GBY120	-	-	-

GBY***

For these combinations, please verify that the application will not exceed the maximum gearbox output torque; contact your local sales office.

PF080938



Kit d'adaptation GBK

References

To order a GBK adaptation kit, complete each reference as follows

	GBK	•••	•••	•	F
Size of GBX or GBY planetary gearbox (Casing diameter)	60 mm/ 2.36 in.	060			
	80 mm/ 3.15 in.	080			
	120 mm/ 4.72 in.	120			
Associated servo motor/ integrated drive	BSH055 / SH3055	055			
	BSH070 / BMH070 / SH3070 / MH3070 / ILM070	070			
	BSH100 / BMH100 / SH3100 / MH3100 / ILM100	100			
	BSH140 / BMH140 / SH3140 / MH3140 / ILM140	140			
Compatibility	All types of motor		0		
	1 or 2-stack motors		2		
	1, 2, or 3-stack motors		3		
	4-stack motor		4		
Servo motor adaptation					F

GBK adaptation kit / Lexium servo motor combinations

Adaptation kit	BSH servo motors															
	0551•	0552•	0553•	0701•	0702•	0703•	1001•	1002•	1003•	1004•	1401•	1402•	1403•	1404•		
GBK0600550F				-	-	-	-	-	-	-	-	-	-	-	-	
GBK0600702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK0600703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK0800702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK0800703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK0801003F	-	-	-	-	-						-	-	-	-	-	
GBK1200702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK1200703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK1201003F	-	-	-	-	-						-	-	-	-	-	
GBK1201004F	-	-	-	-	-		-	-	-		-	-	-	-	-	
GBK1201400F	-	-	-	-	-		-	-	-	-						
Adaptation kit	BMH servo motors															
	0551•	0552•	0553•	0701•	0702•	0703•	1001•	1002•	1003•	1004•	1401•	1402•	1403•	1404•		
GBK0600702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK0600703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK0800702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK0800703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK0801003F	-	-	-	-	-						-	-	-	-	-	
GBK1200702F	-	-	-			-	-	-	-	-	-	-	-	-	-	
GBK1200703F	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
GBK1201003F	-	-	-	-	-						-	-	-	-	-	
GBK1201400F	-	-	-	-	-		-	-	-	-						

	Compatible
-	Incompatible

(1) Weight of adaptation kit:

- GBK060•••F: 0.200 kg / 0.441 lb
- GBK080•••F: 0.450 kg / 0.992 lb
- GBK120•••F: 0.650 kg / 1.433 lb

GBK adaptation kit / servo motor combination

Adaptation kit	SH3 servo motors													
	0551•	0552•	0553•	0701•	0702•	0703•	1001•	1002•	1003•	1004•	1401•	1402•	1403•	1404•
GBK0600550F				-	-	-	-	-	-	-	-	-	-	-
GBK0600702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK0600703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0800702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK0800703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0801003F	-	-	-	-	-	-				-	-	-	-	-
GBK1200702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK1200703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK1201003F	-	-	-	-	-	-				-	-	-	-	-
GBK1201004F	-	-	-	-	-	-	-	-	-		-	-	-	-
GBK1201400F	-	-	-	-	-	-	-	-	-	-				
Adaptation kit	MH3 servo motors													
	0551•	0552•	0553•	0701•	0702•	0703•	1001•	1002•	1003•	1004•	1401•	1402•	1403•	1404•
GBK0600702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK0600703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0800702F	-	-	-				-	-	-	-	-	-	-	-
GBK0800703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0801003F	-	-	-	-	-	-				-	-	-	-	-
GBK1200702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK1200703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK1201003F	-	-	-	-	-	-				-	-	-	-	-
GBK1201400F	-	-	-	-	-	-	-	-	-	-				-
Adaptation kit	Lexium 62 ILM integrated drives													
	0551•	0552•	0553•	0701•	0702•	0703•	1001•	1002•	1003•	1004•	1401•	1402•	1403•	1404•
GBK0600702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK0600703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0800702F	-	-	-				-	-	-	-	-	-	-	-
GBK0800703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK0801003F	-	-	-	-	-	-				-	-	-	-	-
GBK1200702F	-	-	-			-	-	-	-	-	-	-	-	-
GBK1200703F	-	-	-	-	-		-	-	-	-	-	-	-	-
GBK1201003F	-	-	-	-	-	-				-	-	-	-	-
GBK1201400F	-	-	-	-	-	-	-	-	-	-				-

 Compatible
 Incompatible

(1) Weight of adaptation kit:

- GBK060•••F: 0.200 kg / 0.441 lb
- GBK080•••F: 0.450 kg / 0.992 lb
- GBK120•••F: 0.650 kg / 1.433 lb

G	
GBX060•••K	3
GBX080•••K	3
GBX120•••K	3
GBX160•••••F	3
GBY060•••K	6
GBY080•••K	6
GBY120•••K	6

The Next Generation



www.schneider-electric.com/msx

Schneider Electric Industries SAS

Head Office
35, rue Joseph Monier
F-92500 Rueil-Malmaison
France

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design: Schneider Electric
Photos: Schneider Electric