

BG-Motor

BG 2212

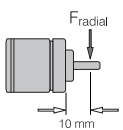


- 1-phase, 1-core internal rotor motor.
- EC technology.
- Dynamically balanced rotor with 4-pole, plastic bonded ferrit magnet.
- Determination of rotor position via Hall sensor.
- Precision ball bearing for long service life and silent running.
- Integrated operating electronics for open loop speed-controlled operation.

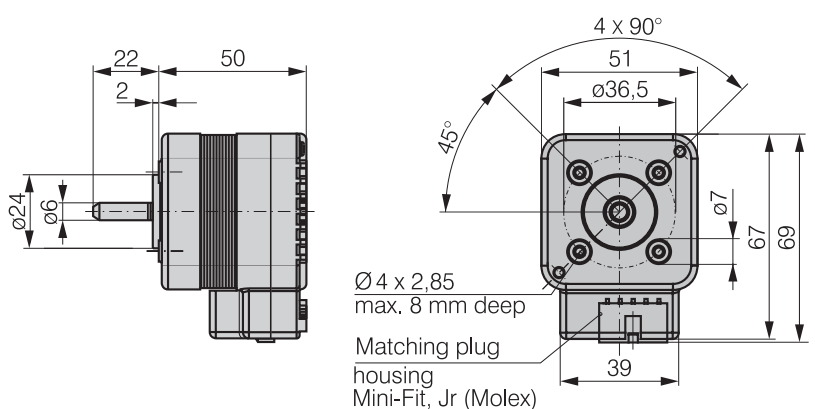
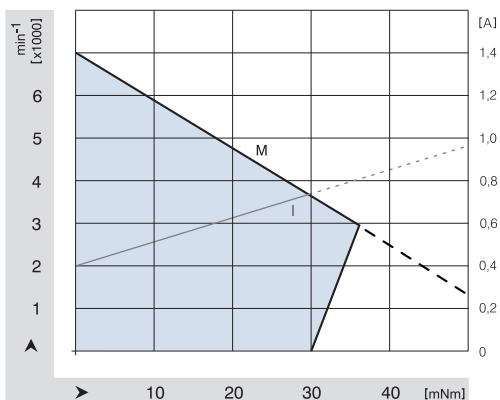
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Nominal Data

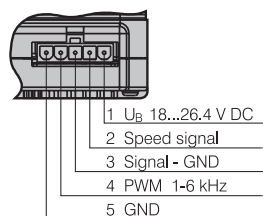
Type	BG 2212	
Nominal voltage (U_{BN})	V DC	24 (18...26.4)
Nominal speed (n_N)	min^{-1}	3 000
Nominal torque (M_N)	mNm	36
Nominal current (I_{BN})	A	0.8
Nominal output power (P_N)	W	11.5
Free-running speed (n_L)	min^{-1}	7 000
Free-running current (I_{BL})	A	0.4
Induced voltage (U_{imax})	$\text{V}/1000\text{min}^{-1}$	4.7
Average starting torque	mNm	26
Max. starting current	A	2.0
Rotor moment of inertia (J_R)	$\text{kgm}^2 \times 10^{-6}$	3.0
Thermal resistance (R_{th})	K/W	9.0
Direction of rotation (of motor shaft)		<=>
Protection class		IP 20
Ambient temperature range (T_U)	°C	0 ... +40
Motor mass (m)	kg	0.3
Order No.		-



F_{axial} 4 N
 L_1 10 mm
 Life expectancy $L_{10} =$
 20 000 h at nominal speed.



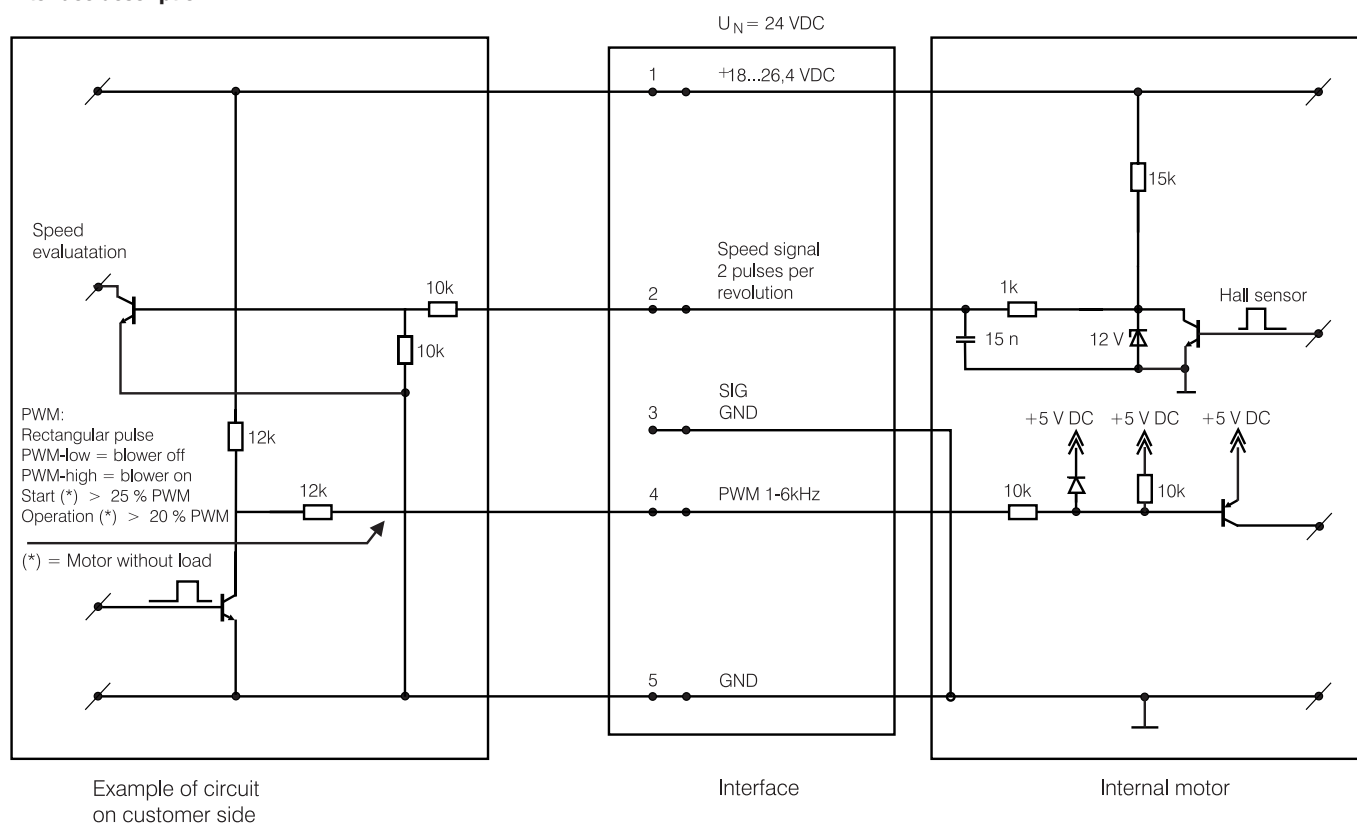
Pin connection



Operating electronics

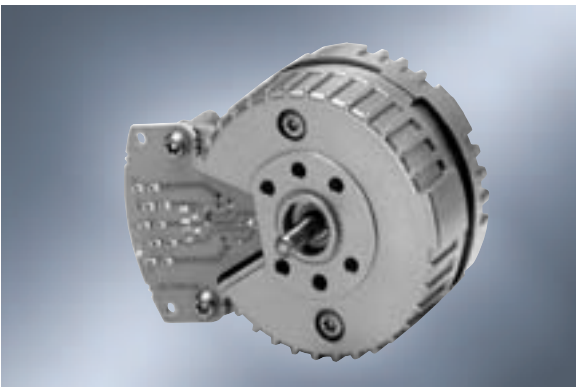
- In motor completely integrated commutation electronics, for speed-controlled operation.
- The power supply and signal interface are via 5 way connector.
- Set value input PWM signal
- Speed ACTUAL value output with 2 pulses per revolution

Interface description



BG-Motor

BG 3612



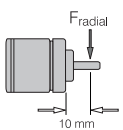
- 1-phase, 1-core internal rotor motor.
- EC technology.
- Dynamically balanced rotor with 4-pole, plastic bonded ferrit magnet.
- Determination of rotor position via Hall sensor.
- Precision ball bearing for long service life and silent running.
- Operating via external operating electronics.

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Nominal Data

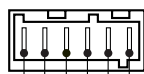
Type BG 3612

		24 V	230 V
Nominal voltage (U_{BN})	V DC	24	230
Nominal speed (n_N)	min^{-1}	4 600	4 600
Nominal torque (M_N)	mNm	80	80
Nominal current (I_{BN})	A	2.4	0.29
Nominal output power (P_N)	W	39	39
Free-running speed (n_L)	min^{-1}	9 000	9 000
Free-running current (I_{BL})	A	1.6	0.17
Induced voltage (U_{imax})	V/1000 min^{-1}	3.3	34.9
Average starting torque	mNm	55	75
Max. starting current	A	4.5	0.8
Rotor moment of inertia (J_R)	$\text{kgm}^2 \times 10^{-6}$	16	16
Thermal resistance (R_{th})	K/W	3.0	3.0
Direction of rotation (of motor shaft)		<=>	<=>
Protection class		IP 00	IP 00
Ambient temperature range (T_U)	°C	0 ... +40	0 ... +40
Motor mass (m)	kg	0.5	0.5
Order No.		-	-



F_{radial} 10 N
 L_1 10 mm
 Life expectancy $L_{10} = 20\,000$ h at nominal speed.

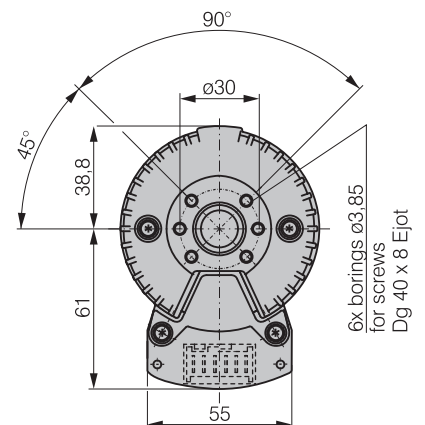
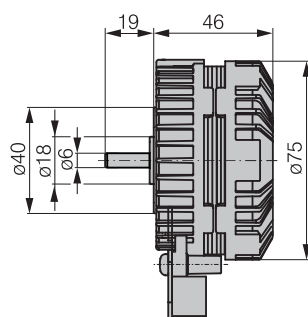
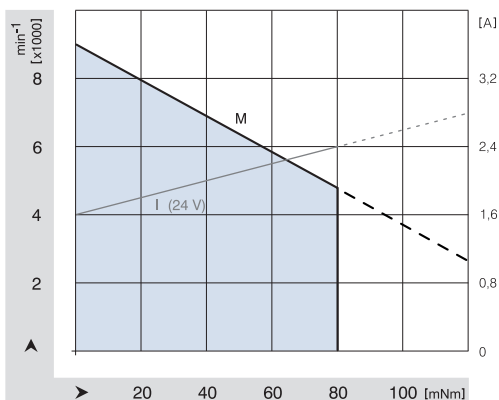
Plug 5- or 6-pole



View from the plug side 6-pole connection
 Matching mating connector (5- or 6-pole) e.g. Lumberg
 3611 05 K31 5-pole; 3611 06 K31 6-pole

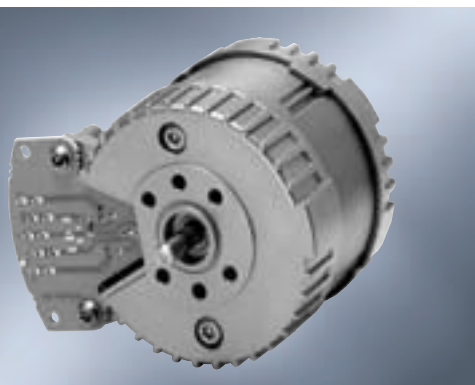
- 1 Motor 2
- 2 S Hall-Signal "out"
- 3 + Hall-Signal VCC
- 4 - Hall-Signal GND
- 5 Motor 1
- 6 PE (optional)

Operating electronics:
 KOM 4-1 / 24 V DC;
 Operating electronic for
 230 V AC on request



BG-Motor

BG 3633

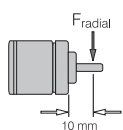


- 1-phase, 1-core internal rotor motor.
- EC technology.
- Dynamically balanced rotor with 4-pole, plastic bonded ferrit magnet.
- Determination of rotor position via Hall sensor.
- Precision ball bearing for long service life and silent running.
- Operating via external operating electronics.

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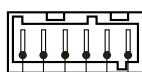
Nominal Data

Type	BG 3633	
Nominal voltage (U_{BN})	V DC	230
Nominal speed (n_N)	min^{-1}	4 400
Nominal torque (M_N)	mNm	150
Nominal current (I_{BN})	A	0.42
Nominal output power (P_N)	W	69
Free-running speed (n_L)	min^{-1}	11 000
Free-running current (I_{BL})	A	0.33
Induced voltage (U_{imax})	$\text{V}/1000\text{min}^{-1}$	48
Average starting torque	mNm	150
Max. starting current	A	1.6
Rotor moment of inertia (J_R)	$\text{kgm}^2 \times 10^{-6}$	37
Thermal resistance (R_{th})	K/W	2.7
Direction of rotation (of motor shaft)		<=>
Protection class		IP 00
Ambient temperature range (T_U)	$^{\circ}\text{C}$	0 ... +40
Motor mass (m)	kg	0.9
Order No.		-



F_{radial} 10 N
 L_1 10 mm
 Life expectancy L_{10} =
 20 000 h at nominal speed.

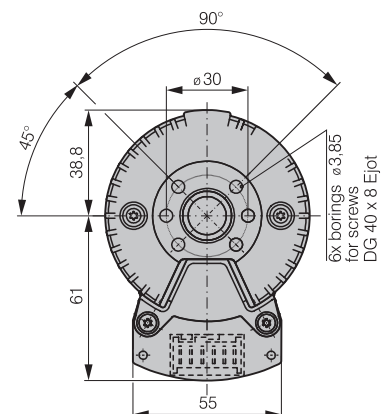
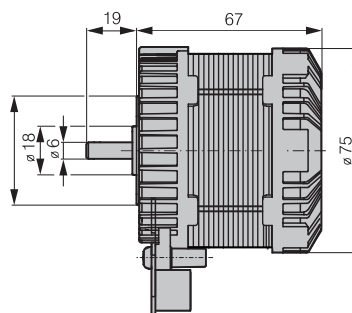
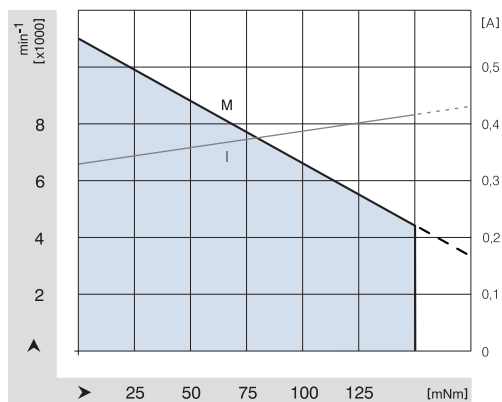
Plug 5- or 6-pole



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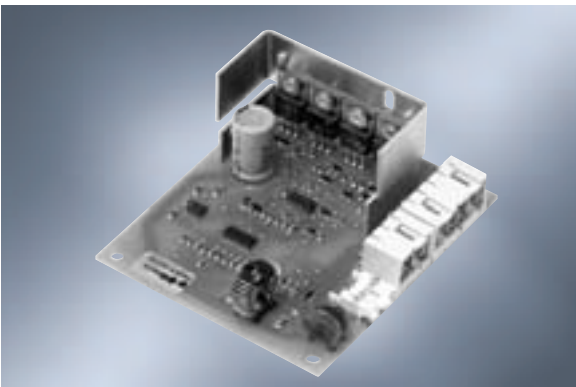
- 1 Motor 2
- 2 S Hall-Signal "out"
- 3 + Hall-Signal VCC
- 4 - Hall-Signal GND
- 5 Motor 1
- 6 \downarrow PE (optional)

Operating electronics:
 Operating electronic for
 230 V AC on request



BG-Motor

Electronics KOM 4-1



- Operating electronics for open loop speed controlled operation of EC motors BG 36, 24 V version.
- Power supply, signal interface and motor connection via 3 separate plugs.
- Version for 230 V AC on request.

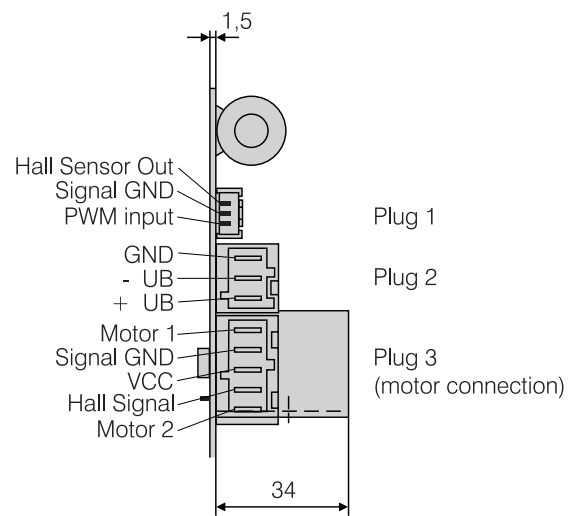
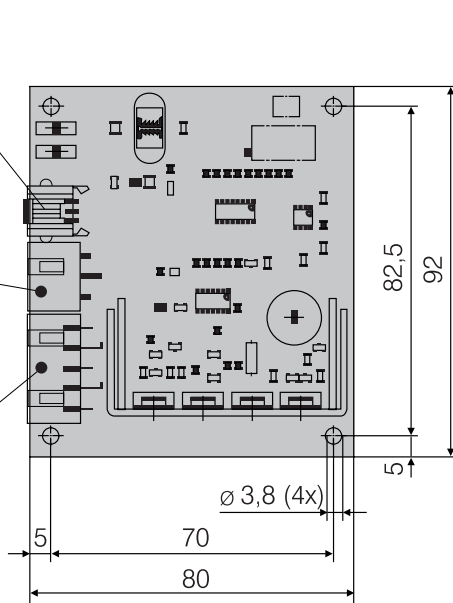
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Pin connection

Plug housing
No. 3853 03 00 02
Lumberg
matching
mating connector:
No. 3820 03 00 02
Lumberg

Plug housing
No. 3642 03 K01
Lumberg
matching
mating connector:
No. 3611 03 K01
Lumberg

Plug housing
No. 3642 05 K30
Lumberg
matching
mating connector:
No. 3611 05 K30
Lumberg



Interface description

