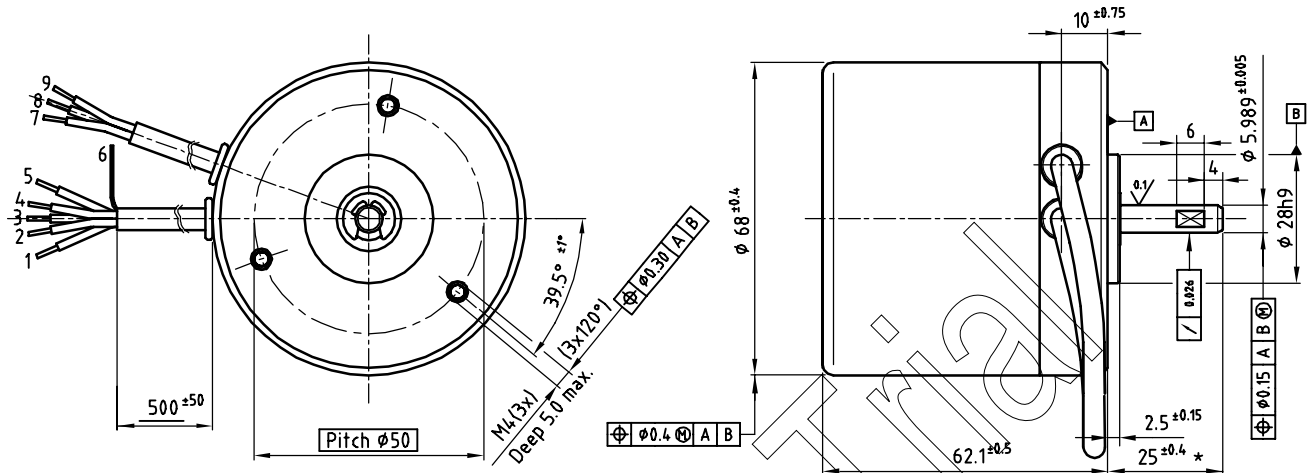


BL58 EE

Brushless DC motor

70 Watt

Dimensional drawing



Motor data

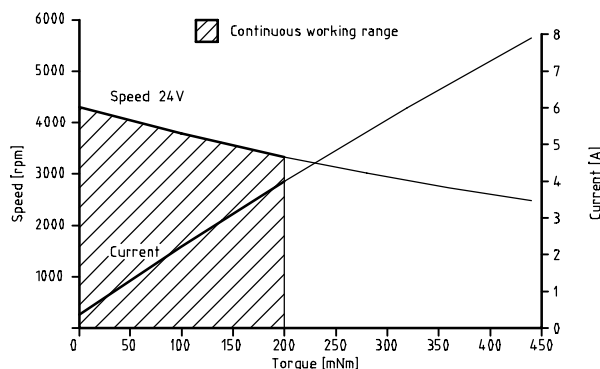
Motor order number	Shaft length 25 mm	4322 016 58801
	Shaft length 20 mm	4322 016 58802 *
Nominal voltage	[V]	24
Nominal torque	[mNm]	200
Nominal speed	[rpm]	3300
No load speed	[rpm]	4400
Torque constant	[mNm/A]	58
EMF between any two phases at 3000 rpm	[V _{rms}]	11.9
Stator resistance between two phases	[Ω]	0.47
Stator inductance between two phases	[mH]	0.6
Rotor inertia	[kgm ²]	120x10 ⁻⁶
Max. winding temperature	[°C]	120
Thermal resistance from winding to housing	[K/W]	1.5
Thermal resistance from housing to ambient	[K/W]	3.7

* Shaft 20 mm for combination with gearboxes.

Electrical connection

Lead no.	Lead colour	Function	Description
1	red	Vcc	Supply voltage for Hall sensors
2	white	hall A	
3	green	hall B	
4	braun	hall C	
5	black	GND	Ground for Hall sensors
6	bare	shield	Shield for cable, connected to housing
7	white	phase A	
8	black	phase B	
9	red	phase C	

Performance curve



General data

Maximum radial load 20 mm from mounting front (no axial load towards flange)	[N]	40
Maximum axial load - towards flange (no radial load)	[N]	18
- from flange	[N]	10
Mass of motor	[g]	550

Brushless DC motor with laminated 9 coil stator and 12 pole rotor
Coil configuration: 3 phases, Y connected
For thermal reasons it is advised to mount the motor on a heat conducting frame if high performance is desired

Product combinations

- * Gearbox S64A
- * Gearbox S69A
- * Gearbox P50A
- * Gearbox P59A

Options

- * Square mounting flange
- * Shaft diameter, 7 or 8 mm
- * Protection class upto IP67DS

Features

- * Long life (20.000 hours)
- * Protection class IP54