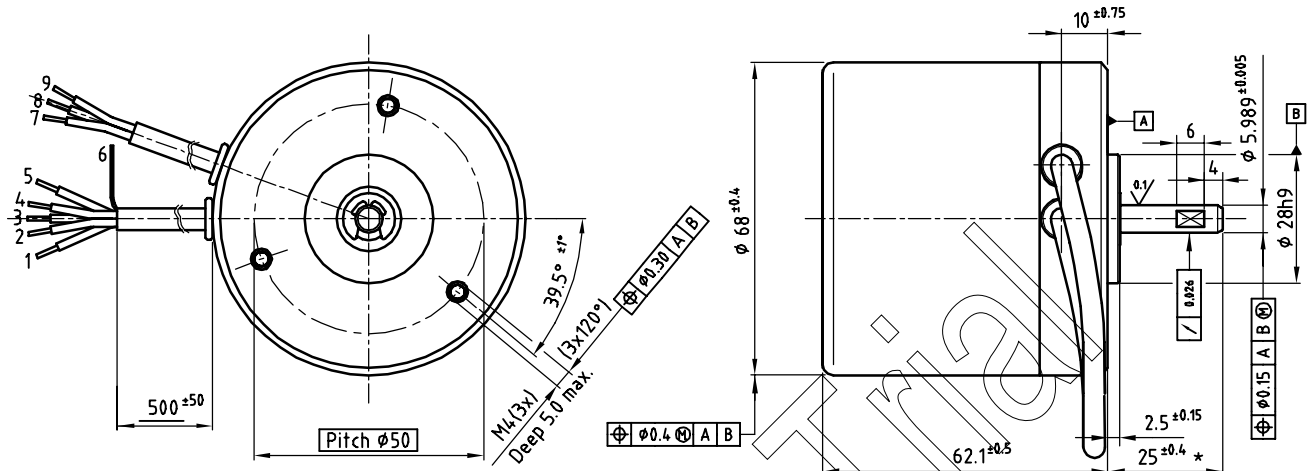


# BL58 EE

# 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 <sub>rms</sub> ]	11.9
Stator resistance between two phases	[Ω]	0.47
Stator inductance between two phases	[mH]	0.6
Rotor inertia	[kgm <sup>2</sup> ]	120 × 10 <sup>-6</sup>
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

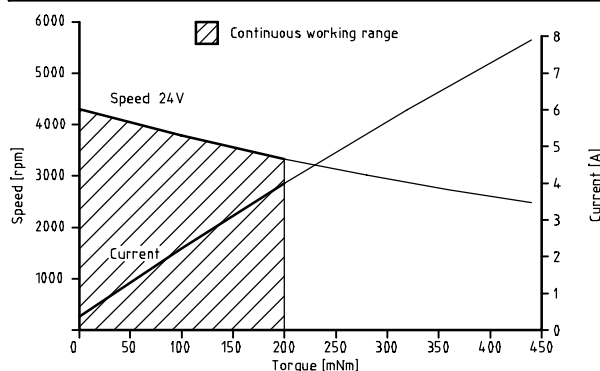
Lead no.	Lead colour	Function	Description
1	red	V <sub>CC</sub>	Supply voltage for Hall sensors
2	white	hall A	
3	green	hall B	
4	brown	hall C	
5	black	GND	Ground for Hall sensors
6	bare	shield	Shield for cable, connected to housing
7	white	phase A	
8	black	phase B	
9	red	phase C	

## 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

## Performance curve



## 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