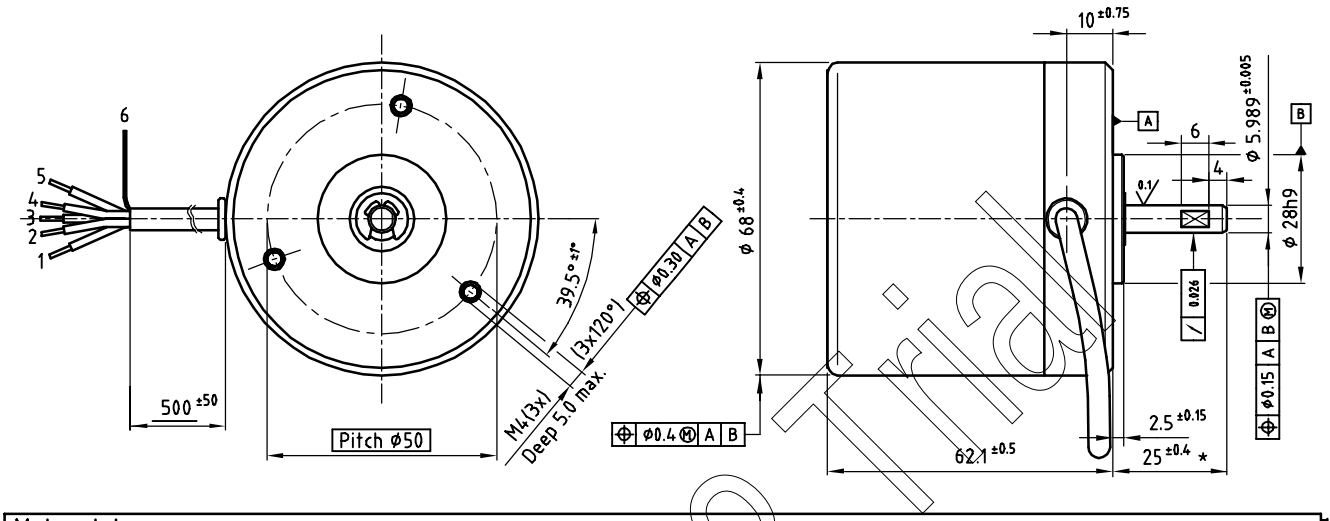
BL58 EB Brushless DC motor 35 Watt

Dimensional drawing



Motor data

Motor order number		
Shaft length 25 mm	4322 016 58001	
Shaft length 20 mm	4322 016 58002	*
Nominal Voltage	[V]	24
No load Speed (V in > 4V)	[rpm]	3650
No load Current (V in > 4V)	[mA]	280
Nominal Current limitation (V in > 4V)	[A]	2.0
Maximum torque	[mNm]	110
Maximum output power	[W]	35
Operating temperature range	[°C]	0 to 90
Thermal resistance from housing to ambient	[K/W]	3.7
Rotor inertia	[kgm^2]	120x10^{-6}
Mass of motor	[g]	550

Maximum radial load 20 mm from mounting front (no axial load towards flange)	[N]	40
Maximum axial load – towards flange (no radial load) – from flange	[N] [N]	18 10

Thermal motor protection :
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

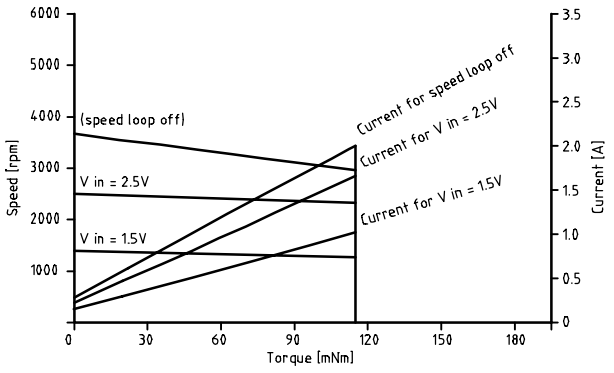
* Shaft 20 mm for combination with gearboxes.

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input : 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage (setpoint) for speed loop Resulting speed approx. 1000 rpm/V V in > 4 V : motor at full speed, speedloop off (open loop)
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +24 V (min. 14 V – max 30 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

- * Square mounting flange
- * Shaft diameter, 7 or 8 mm
- * Speed loop with frequency input
- * Protection class upto IP67DS

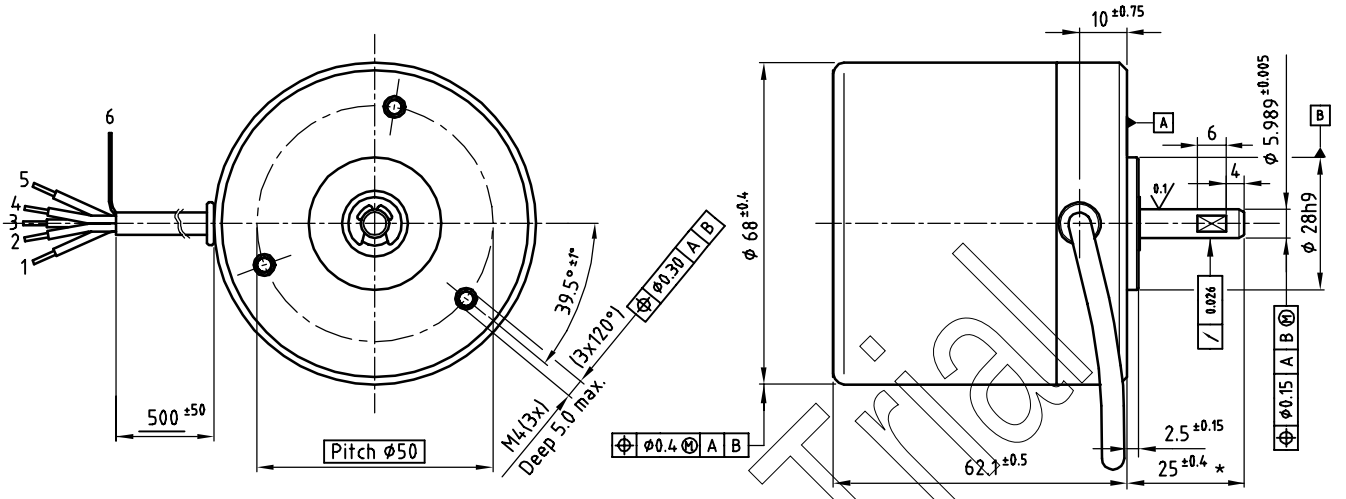
Features

- * Adjustable speed loop
- * Direction control input (forward / reverse)
- * Frequency Generator output (speed sensing)
- * Thermal motor protection
- * Long life (20.000 hours)

PK Chiptrial www.hurnet.com

BL58 EB brake Brushless DC motor 35 Watt

Dimensional drawing



Motor data

Motor order number			
	Shaft length 25 mm	8204 045 07821	
	Shaft length 20 mm	8204 045 07831	*
Nominal Voltage		[V]	24
No load Speed (V in > 5V)		[rpm]	4330
No load Current (V in > 5V)		[mA]	280
Current limitation (V in > 5V)		[A]	3.4
Nominal torque		[mNm]	110
Nominal output power		[W]	35
Operating temperature range		[°C]	0 to 90
Thermal resistance from housing to ambient		[K/W]	3.7
Rotor inertia		[kgm ^{2}]	120x10 $^{-6}$
Mass of motor		[g]	550

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

Thermal motor protection:
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C
For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

* Shaft 20 mm for combination with gearboxes.

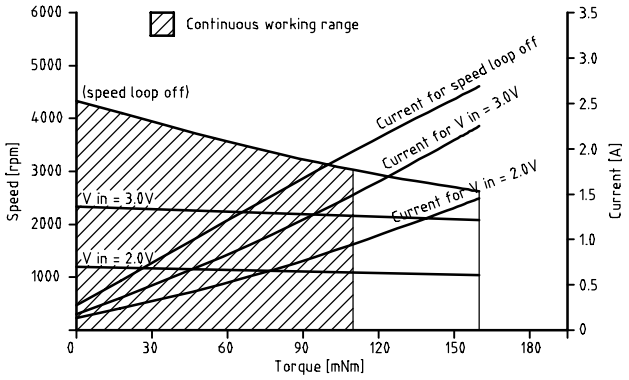
PRELIMINARY SPECIFICATION
Not to be used for new design
Trial version www.nuDrive.com

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage for speed loop and enabling brake function 0 < Vin < 0.5 V Brake active 0.5 < Vin < 0.9 V Motor disabled Vin > 0.9 V, resulting speed approx. 1100 rpm/V
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +24 V (min. 14 V – max 30 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

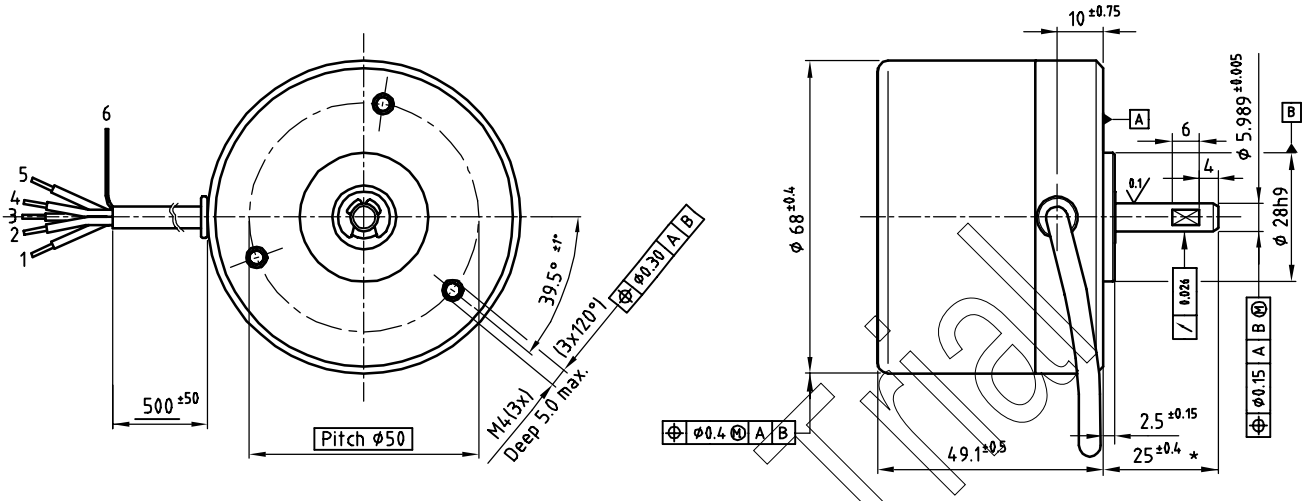
- * Improved speed control accuracy in combination with PWM or frequency input
- * Square mounting flange
- * Shaft diameter, 7 or 8 mm
- * Protection class upto IP67DS

Features

- * Long life (20.000 hours)
- * Low EMI
- * Protection class IP54
- * Thermal motor protection
- * Adjustable speed loop
- * Direction control input
- * Frequency Generator output

BL58 EB compact Brushless DC motor 35 Watt

Dimensional drawing



Motor data

Motor order number		
Shaft length 25 mm	4322 016 58041	
Shaft length 20 mm	4322 016 58042	*
Nominal Voltage	[V]	24
No load Speed (V in > 6V)	[rpm]	6300
No load Current (V in > 6V)	[mA]	250
Nominal Current limitation (V in > 6V)	[A]	2.2
Maximum torque	[mNm]	80
Maximum output power	[W]	35
Operating temperature range	[°C]	0 to 90
Thermal resistance from housing to ambient	[K/W]	4.2
Rotor inertia	[kgm ^{2}]	75x10 $^{-6}$
Mass of motor	[g]	450

Maximum radial load 20 mm from mounting front (no axial load towards flange)	[N]	t.b.d.
Maximum axial load - towards flange (no radial load) - from flange	 [N] [N]	 t.b.d. t.b.d.

Thermal motor protection :
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

* Shaft 20 mm for combination with gearboxes.

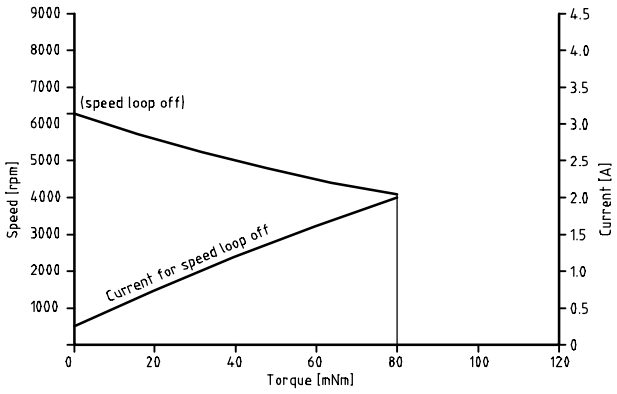
PRELIMINARY SPECIFICATION
Philips Industrial

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input : 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage (setpoint) for speed loop Resulting speed approx. 1000 rpm/V V in > 6 V :motor at full speed, speedloop off (open loop)
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +24 V (min. 14 V – max 30 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

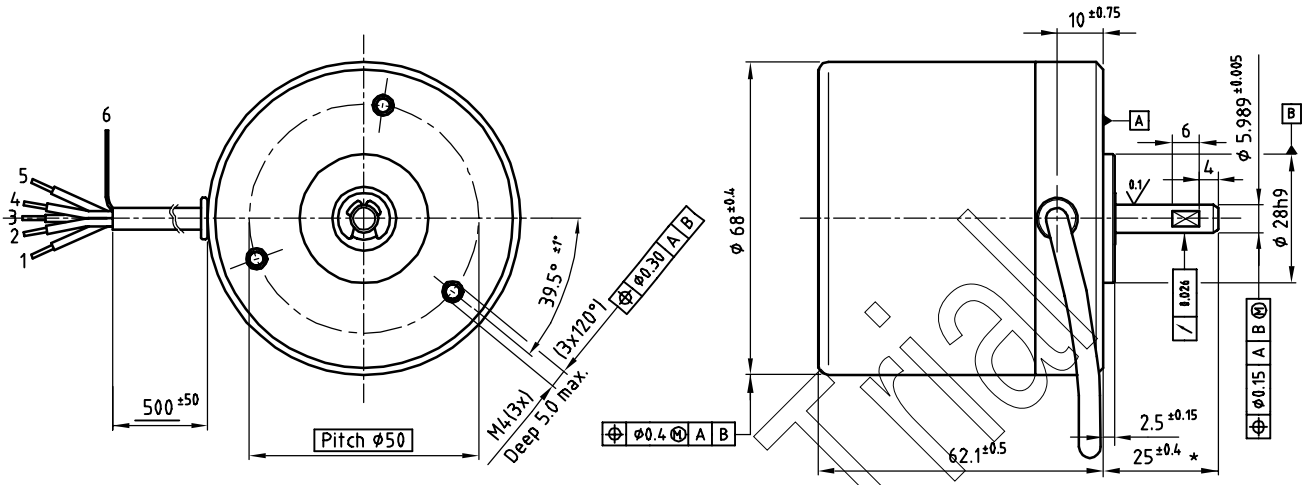
- * Square mounting flange
- * Shaft diameter, 7 or 8 mm
- * Speed loop with frequency input
- * Protection class upto IP67DS

Features

- * Adjustable speed loop
- * Direction control input (forward / reverse)
- * Frequency Generator output (speed sensing)
- * Thermal motor protection
- * Long life (20.000 hours)
- * Low EMI

BL58 EB Brushless DC motor 50 Watt

Dimensional drawing



Motor data

Motor order number			
	Shaft length 25 mm	4322 016 58011	
	Shaft length 20 mm	4322 016 58012	*
Nominal Voltage		[V]	24
No load Speed (V in > 4V)		[rpm]	5050
No load Current (V in > 4V)		[mA]	380
Nominal Current limitation (V in > 4V)		[A]	3.1
Maximum torque		[mNm]	114
Maximum output power		[W]	50
Operating temperature range		[°C]	0 to 90
Thermal resistance from housing to ambient		[K/W]	3.7
Rotor inertia		[kgm²]	120x10⁻⁶
Mass of motor		[g]	550

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

Thermal motor protection:
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

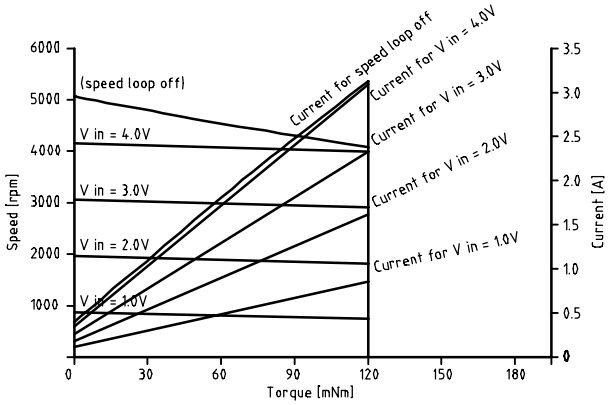
* Shaft 20 mm for combination with gearboxes.

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input : 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage (setpoint) for speed loop Resulting speed approx. 1000 rpm/V V in > 4 V : motor at full speed, speedloop off (open loop)
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +24 V (min. 14 V – max 30 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

- Square mounting flange
- Shaft diameter, 7 or 8 mm
- Speed loop with frequency input
- Protection class upto IP67DS

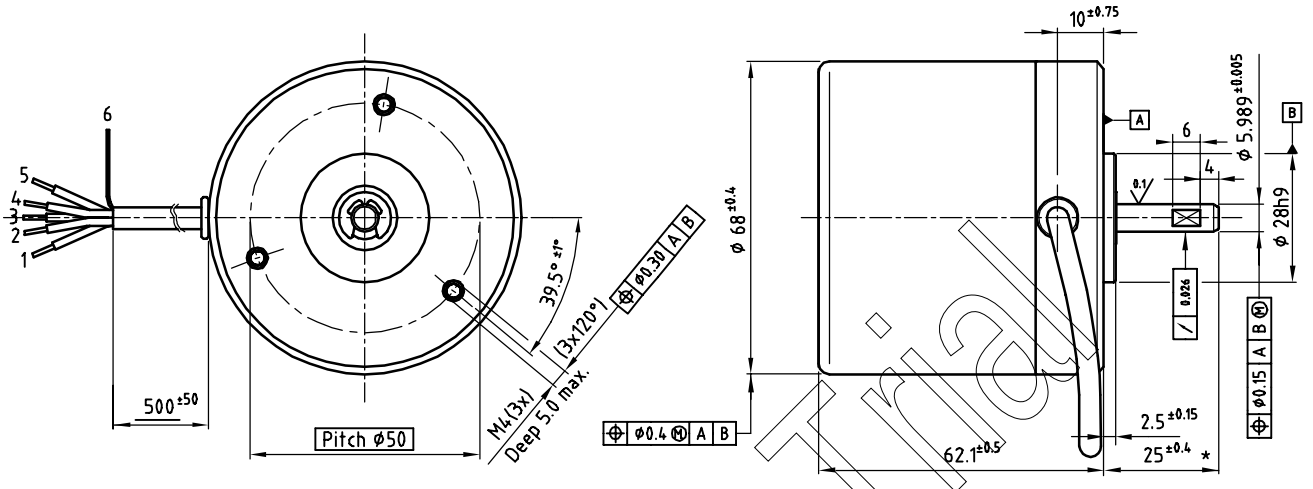
Features

- Adjustable speed loop
- Direction control input (forward / reverse)
- Frequency Generator output (speed sensing)
- Thermal motor protection
- Long life (20.000 hours)

PDF Creator Trial www.nuance.com

BL58 EB high torque Brushless DC motor 50 Watt

Dimensional drawing



Motor data

Motor order number		
Shaft length 25 mm	4322 016 58021	
Shaft length 20 mm	4322 016 58022	*
Nominal Voltage	[V]	24
No load Speed (V in > 4V)	[rpm]	3650
No load Current (V in > 4V)	[mA]	280
Nominal Current limitation (V in > 4V)	[A]	3.0
Maximum torque	[mNm]	170
Maximum output power	[W]	50
Operating temperature range	[°C]	0 to 90
Thermal resistance from housing to ambient	[K/W]	3.7
Rotor inertia	[kgm ^{2}]	120x10 $^{-6}$
Mass of motor	[g]	550

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

Thermal motor protection :
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

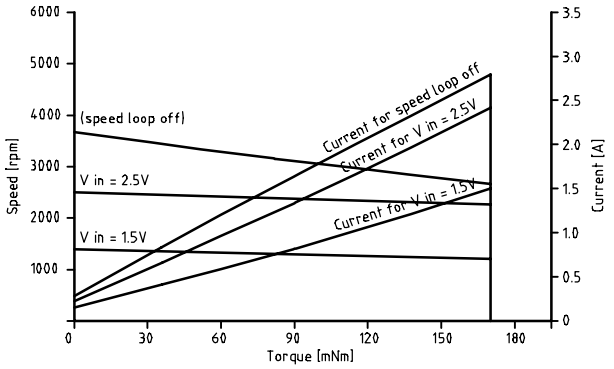
* Shaft 20 mm for combination with gearboxes.

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input : 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage (setpoint) for speed loop Resulting speed approx. 1000 rpm/V V in > 4 V : motor at full speed, speedloop off (open loop)
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +24 V (min. 14 V – max 30 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

* Square mounting flange
* Shaft diameter, 7 or 8 mm
* Speed loop with frequency input
* Protection class upto IP67DS

Features

* Adjustable speed loop
* Direction control input (forward / reverse)
* Frequency Generator output (speed sensing)
* Thermal motor protection
* Long life (20.000 hours)
* Low EMI

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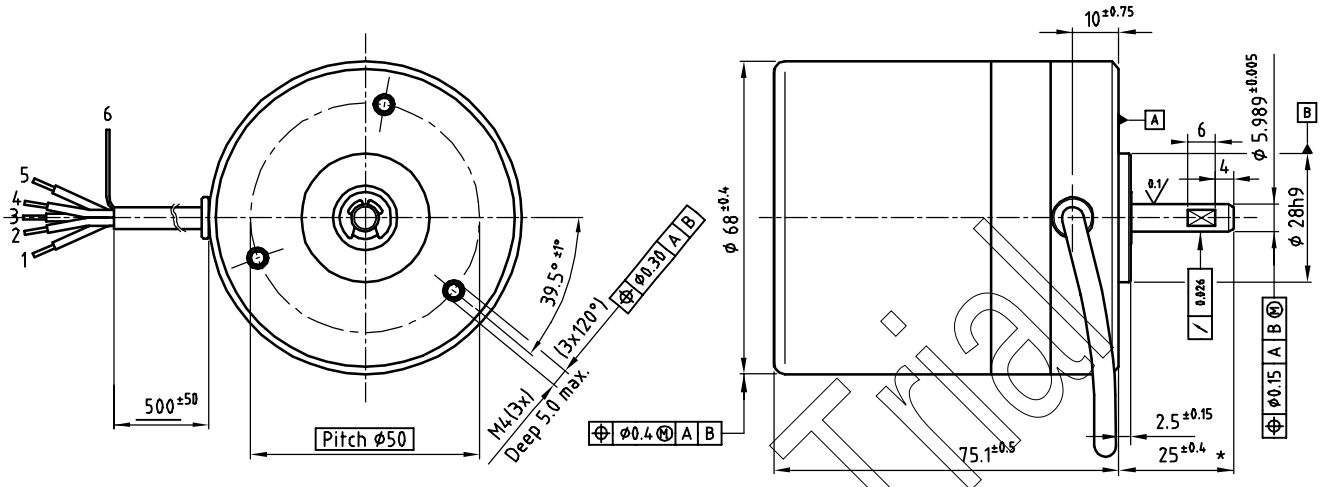
BL58 EB Brushless DC motor 70 Watt

Dimensional drawing



Motor data

Motor order number		
	Shaft length 25 mm	4322 016 58051
	Shaft length 20 mm	4322 016 58052 *

Nominal Voltage	[V]	36
No load Speed (V in > 4V)	[rpm]	4050
No load Current (V in > 4V)	[mA]	220
Nominal Current limitation (V in > 4V)	[A]	3.0
Maximum torque	[mNm]	210
Maximum output power	[W]	70
Operating temperature range	[°C]	0 to 90
Thermal resistance from housing to ambient	[K/W]	3.7
Rotor inertia	[kgm ^{2}]	120x10 $^{-6}$
Mass of motor	[g]	600

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

Thermal motor protection:
Motor shuts down if the motor flange temperature reaches approx. 90°C
Motor restarts if the flange temperature is cooled down to approx. 80°C

For thermal reasons it is advised to mount the motor on a heat conducting frame if high output power is desired.

* Shaft 20 mm for combination with gearboxes

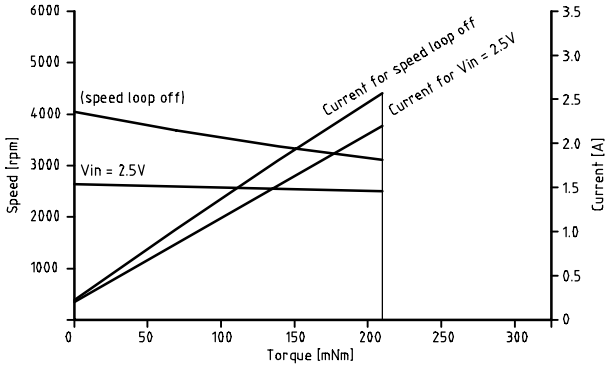
PRELIMINARY SPECIFICATION
Online Trial
www.nuance.com

Electrical Connection

Lead no.	Lead colour	Function	Description
1	brown	FW/RV	Direction control input: 'High' CW, 'Low' CCW (shaftside) (do not leave this lead floating)
2	white	V in	Input voltage (setpoint) for speed loop Resulting speed approx. 1000 rpm/V V in > 4 V : motor at full speed, speedloop off (open loop)
3	green	FG	Frequency generator output, 36 ppr ; R out = 4k Ohm (approx)
4	black	GND	Motor return, ground (0 V)
5	red	Vp	Motor supply voltage +36 V (min. 23 V – max 40 V)
6	bare	shield	Shield for cable and connected to motor housing

		min.	typ.	max.
Lead 1				
input 'high'	[V]	4.1	5	
input 'low'	[V]		0	1.9
abs. max/min. input	[V]			±30
Lead 2				
abs. max./min. input	[V]			±30
Lead 3				
output 'high', not loaded	[V]	4.0	4.5	5.0
output 'low', not loaded	[V]	0	0.1	0.2

Performance curve



Product combinations

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

Options

* Square mounting flange
* Shaft diameter, 7 or 8 mm
* Speed loop with frequency input
* Protection class upto IP67DS

Features

* Adjustable speed loop
* Direction control input (forward / reverse)
* Frequency Generator output (speed sensing)
* Thermal motor protection
* Long life (20.000 hours)
* Low EMI