



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 57 square - 225 mNm continuous with Hall effect sensors 45 W nominal at 24 V and 2000 rpm Part number 80140510



- High power motors (up to 95 W continuous at 24 VDC)
- Suitable for voltages between 6 and 75 VDC
- Ideal for applications where the control electronics have to be off centre due to the high ambient temperature
- Temperature probe built into the motor

### Part numbers

Type	Type	References
80140510 45 W nominal at 24 V and 2000 rpm	801405	Without option

### Specifications

#### General characteristics

Max. speed (rpm)	10000
Torque peak in (mNm)	500*
Maximum continuous torque (mNm)	225**
Motor constant (mNm/W <sup>1/2</sup> )	57
Electrical time constant (ms)	2,2
Mechanical time constant (ms)	1,5
Energy losses at peak torque (W)	77
Torque/speed factor - zero impedance (mNm/ (rad/s) )	3,2
Rotor inertia (gcm <sup>2</sup> )	50
Thermal resistance (°C/W)	5,7
Max. coil temperature (°C)	120
Integrated temperature sensor	Yes***
Number of phases	3 (delta config)
Number of poles	4
Ambient operating temperature (°C)	-40 →70
Dielectric strength at 500 V DC (MΩ)	1000
Service life (h)	20000
Output ball bearing	Yes
Weight (g)	900
Length (mm)	73
Protection index	IP54

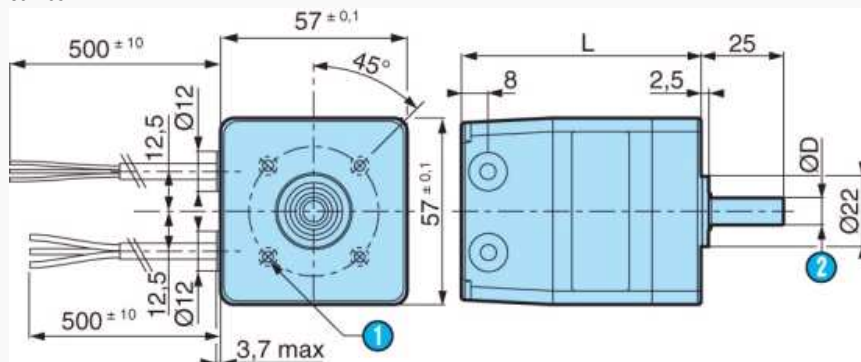
#### Comments

##### Standard winding

Phase-to-phase resistance (Ω)	1,72 ±12,5 %
Voltage at peak torque (V)	11,5
Current at peak torque (A)	6,7
Torque constant (mNm/A)	74,5 ±10 %
Back EMF constant (V/ (rad/s) )	0,0745
Back EMF constant (V/Krpm)	7,8 ±10 %
Inductance (mH)	3,8 ±30 %

### Dimensions (mm)

801405

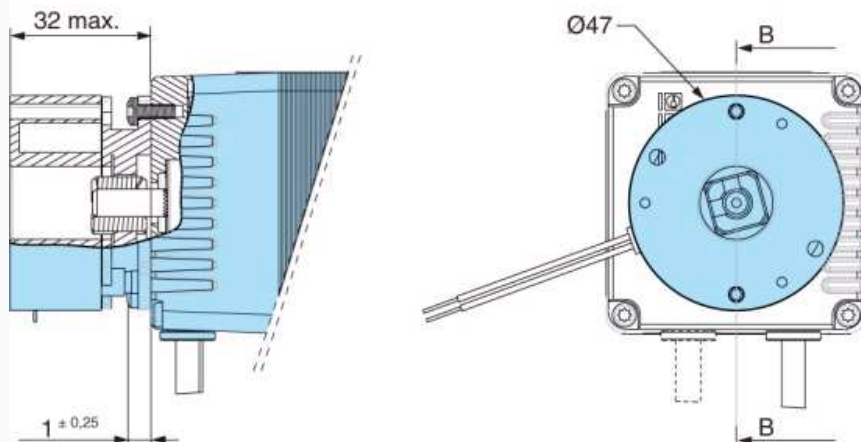


N°	Legend
①	4 holes M5 over $\varnothing$ 40 mm - depth of thread : 4.5 mm - depth of hole 6.6 mm
②	D : $\varnothing$ 6 - 0.010 - 0.020 mm
	L : 73.2 mm max.

### Dimensions (mm)

#### Holding brake - 80140518

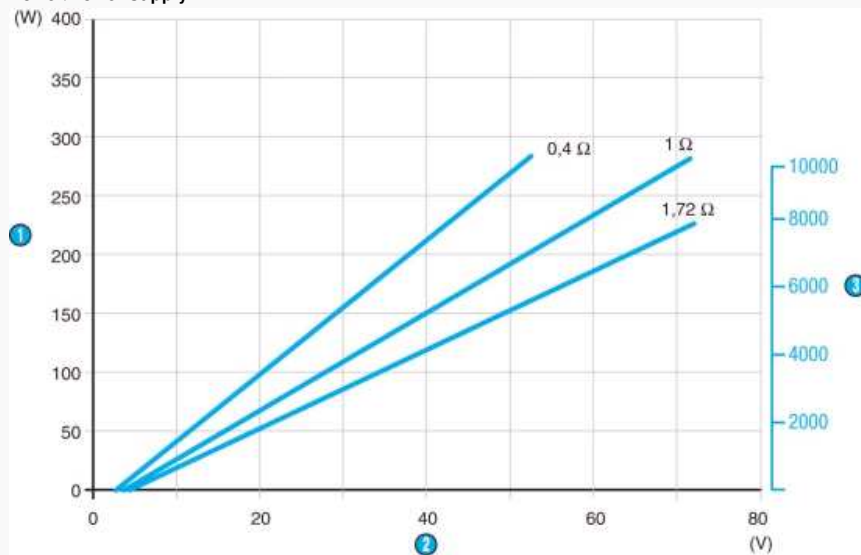
B-B



Holding brake : At power switch off - 0.5 Nm - 7 W - 24 V  $\pm$  10% Weight : 250 g - AWG26 leads - 400 mm

### Curves

#### Power/Power supply




N°	Legend
①	Nominal power
②	Supply voltage
③	Speeds (rpm)

### Connections

Forward

Hall			①		
1	2	3	1	2	3
1	0	0	0V	+V $\equiv$	-
1	1	0	0V	-	+V $\equiv$
0	1	0	-	0V	+V $\equiv$
0	1	1	+V $\equiv$	0V	-
0	0	1	+V $\equiv$	-	0V
1	0	1	-	+V $\equiv$	0V




N°	Legend
①	Winding

## Connections

## Reverse

Hall			①		
1	2	3	1	2	3
1	0	0	+V $\equiv$	0V	-
1	0	1	-	0V	+V $\equiv$
0	0	1	0V	-	+V $\equiv$
0	1	1	0V	+V $\equiv$	-
0	1	0	-	+V $\equiv$	0V
1	1	0	+V $\equiv$	-	0V



N°	Legend
①	Winding

## Connections

Part number 801405

Wire colour	Connection name	Wire gauge (AWG)
Black	Winding 1	<b>20</b>
Brown	Winding 2	<b>20</b>
Red	Winding 3	<b>20</b>
Red	+ Hall power supply	<b>24</b>
Black	- Hall power supply (return)	<b>24</b>
Yellow	Sonde temp.	<b>24</b>
Orange	Hall 1	<b>24</b>
Brown	Hall 2	<b>24</b>
Green	Hall 3	<b>24</b>

Hall effect : Voltage range : 4.5 24 VDC Max. current : 20 mA Type of output : NPN open collector Not protected against connection errors

#### Other information

For other standard windings visit [www.crouzet.com](http://www.crouzet.com)

#### Precautions for use

Not protected against connection errors

#### Product adaptations



- Special shafts
- Lead length
- A single cable instead of two
- C12 connector built in
- 200, 500, 1000 points/revolution encoder
- Shorter motor