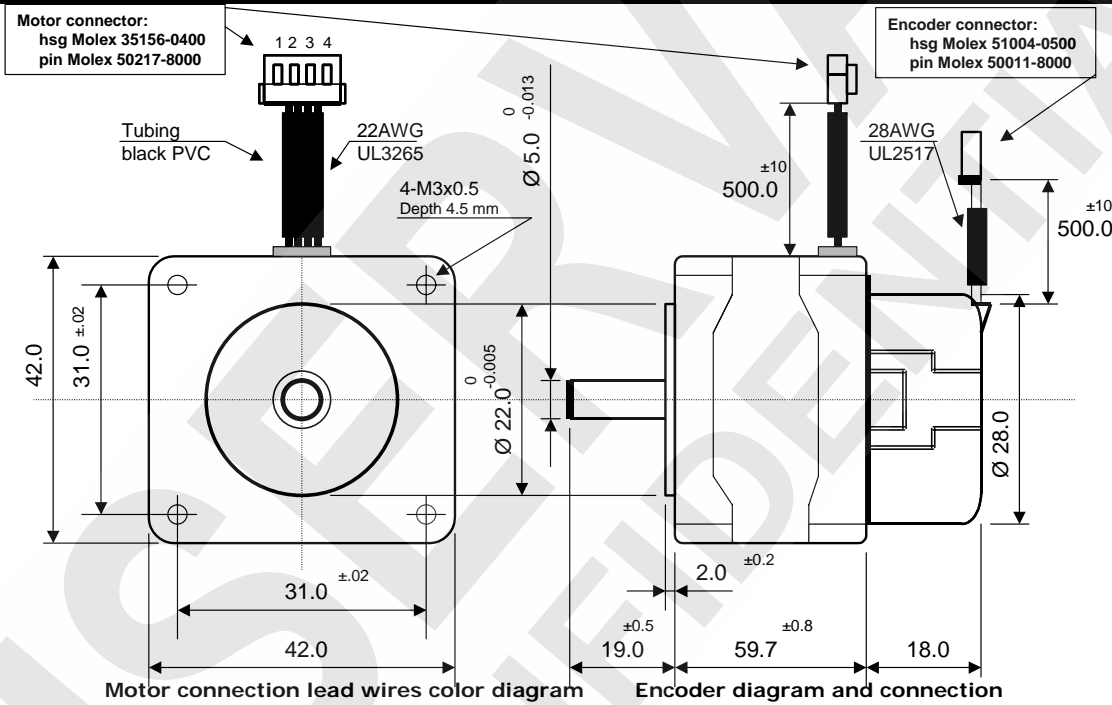
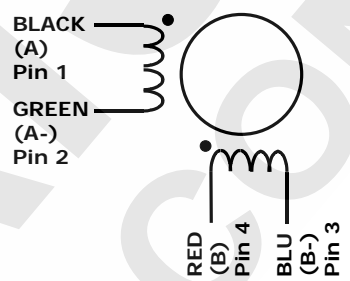


Motor Size	<b>1.7" - 42.0 mm square flange</b>	Step Angle	<b>1.8° ±5%</b>
Front Shaft	<b>19.0 mm length - Ø 5.0 mm</b>	Rear Shaft	<b>6.00 mm length - Ø 5.00 mm</b>
# of Lead Wires	<b># 4 Lead wires</b>	Lead Wires Length	<b>500 mm ±10 with tube and custom connector as drawing</b>
Rated Voltage	<b>3.22 Volts</b>	Rated Current	<b>2.80 Amps/phase</b>
Resistance	<b>1.15 ohm ±10%</b>	Inductance	<b>2.20 mH ±20%</b>
Winding	<b>Bipolar parallel</b>	Holding Torque	<b>0.86 Nm min.</b>
Rotor inertia	<b>128 g.cm.<sup>2</sup></b>	Insulation class	<b>Class B, 130° C</b>
Ambient temperature	<b>-20° ~ +40° C</b>	Temperature rise	<b>80K max</b>
Shaft thrust load	<b>10 N</b>	Shaft radial load	<b>21 N (at front shaft end)</b>
Encoder resolution	<b>1000 ppr</b>	Encoder Max rpm	<b>6000 rpm</b>
Encoder signals	<b>A+, A-, B+, B-, Z+, Z-</b>	Encoder connection	<b>Single ended - 4.5 ~ 5.5 V</b>
Encoder current	<b>100 mA</b>	Encoder Frequency	<b>300 kHz</b>
Encoder out voltage	<b>2.4 V 'H' min - 0.4 V 'L' max</b>	Encoder out current	<b>20 mA</b>



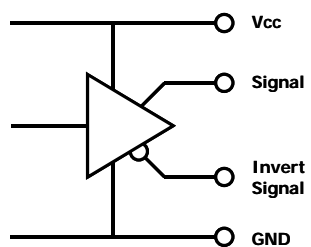
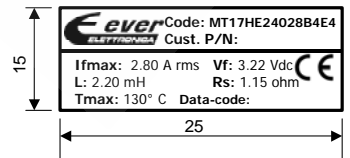
Motor connection lead wires color diagram

Encoder diagram and connection



**Motor Labelling**

Label type: alluminum adhesive label



Lead wires color	Signal	Pinout
RED	Vcc	5
BLACK	GND	4
WHITE	A+	1
GREEN	B+	2
YELLOW	Z+	3

	Motor specification: STM01160-00b	Date: January, 14th 2016	Customer approval: _____
	Motor code: MT17HE24028B4E4		Customer code: _____