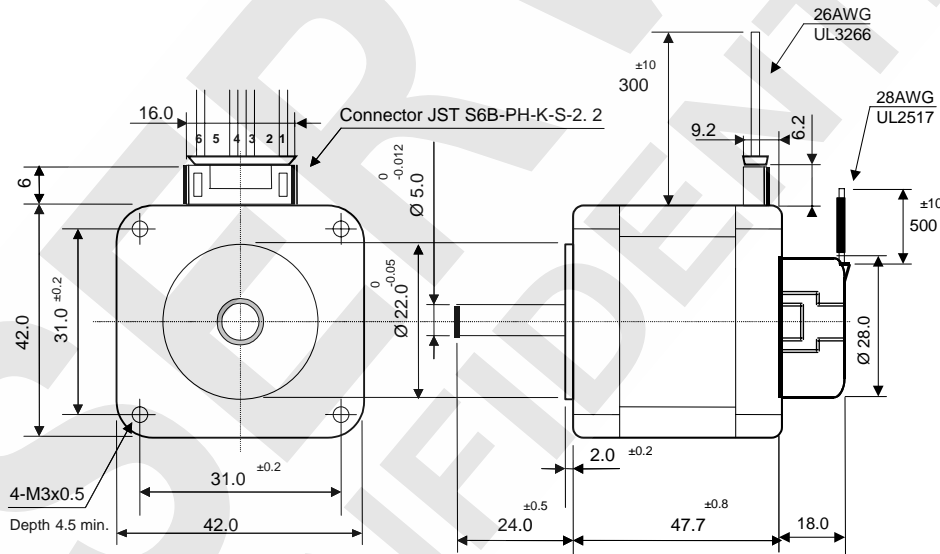
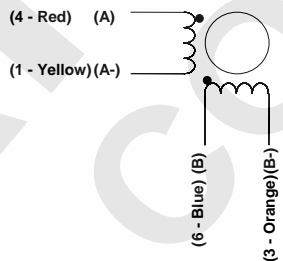


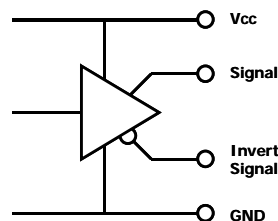
Motor size	<b>1.7" flange – 42 mm square</b>	Step Angle	<b>1.8° ±5%</b>
Front Shaft	<b>24.00 mm length – Ø 5.00 mm</b>	Rear Shaft	<b>6.0 mm length – Ø 5.0 mm</b>
# of lead wires	<b># 4 lead wires</b>	Lead Wire Length	<b>300 mm ±10 with connector on board</b>
Rated Voltage	<b>2.20 Volt</b>	Rated Current	<b>2.00 A</b>
Resistance	<b>1.10 ohm ±10%</b>	Inductance	<b>2.00 mH ±20%</b>
Winding	<b>Bipolar parallel</b>	Holding Torque	<b>0.52 Nm min.</b>
Rotor Inertia	<b>82 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 Supply voltage	<b>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>
Pullout Torque	Driver		
	Input Voltage		Current
	Mode		
	Torque	<b>4200 g.cm 2.0 A/phase and 3200 g.cm 1.5 A/phase @ 1000 steps/s 3650 g.cm 2.0 A/phase and 2950 g.cm 1.5 A/phase @ 2000 steps/s 2800 g.cm 2.0 A/phase and 2550 g.cm 1.5 A/phase @ 3000 steps/s</b>	



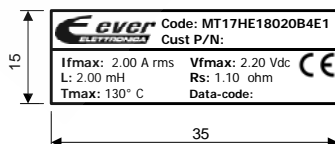
Wiring diagram



Encoder diagram and connection



Motor Labelling



Lead wires color	Pin	Signal
RED	1	Vcc
BLACK	2	GND
WHITE	3	A+
WHITE/BLACK	4	A-
GREEN	5	B+
GREEN/BLACK	6	B-
YELLOW	7	Z+
YELLOW/BLACK	8	Z-
SHIELD	9	GND