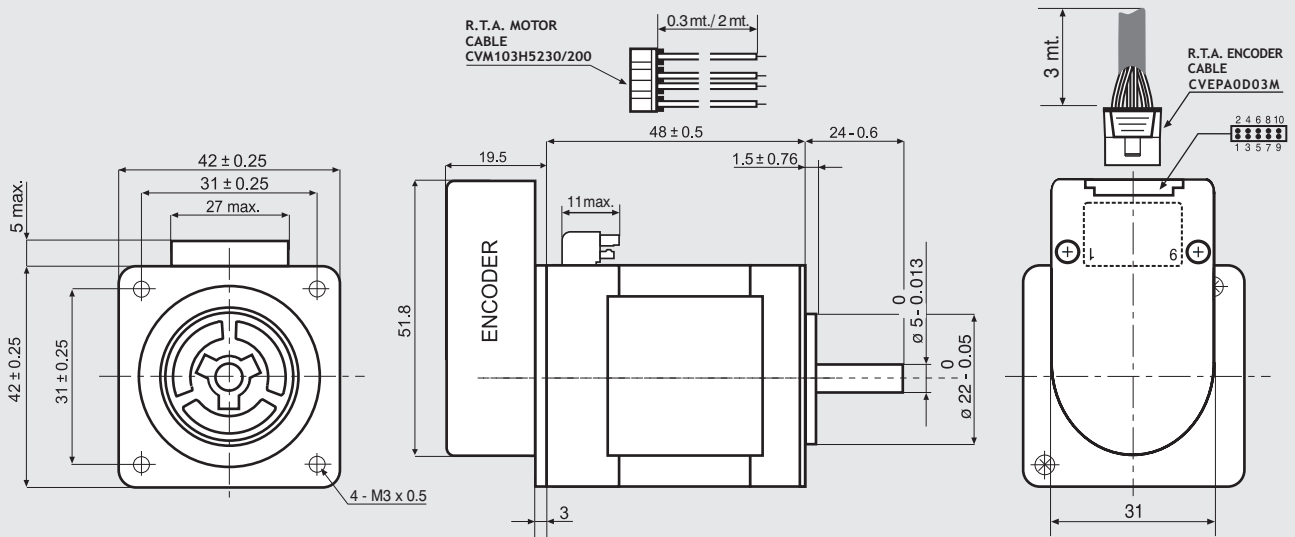


# EM 1H2H-04D0

## Dimensions (Unit:mm)



## SANYO DENKI MOTOR FEATURES

MODEL	EM 1H2H-04D0	
SANYO DENKI MOTOR CODE	103-H5210-4512	
BASIC STEP ANGLE	1.8° ± 0.09°	
BIPOLAR PARALLEL CURRENT	(Amp)	2.0
RESISTANCE	(Ohm)	1.25
INDUCTANCE	(mH)	2.4
BIPOLAR HOLDING TORQUE	(Ncm)	51
ROTOR INERTIA	(Kgm <sup>2</sup> × 10 <sup>-7</sup> )	74
THEORETICAL ACCELERATION	(rad × sec. <sup>-2</sup> )	69000
BACK E.M.F.	(V/Krpm)	14
MASS	(Kg)	0.35
LEADS CODE	V	

103-H5210-4512 MOTOR NEEDS CVM103H5230 OR CVM103H52200 R.T.A. CABLES. CONTACT R.T.A. FOR FURTHER DETAILS.

## ENCODER FEATURES

POWER SUPPLY VOLTAGE	(Volt)	5 V <sub>DC</sub> ± 5%
CURRENT CONSUMPTION	(mAmp)	50
HIGH LEVEL OUTPUT	(Volt)	3.5 (TIP) - 2.4 (MIN) (I <sub>MAX</sub> =10 mA)
LOW LEVEL OUTPUT	(Volt)	0.2 (TIP) - 0.4 (MAX) (I <sub>MAX</sub> =10 mA)
OUTPUT SIGNAL	Differential (SINGLE ENDED version available)	
RESOLUTION	400 cycles per revolution (500 & 1000 CPR version available)	
MAXIMUM FREQUENCY	(KHz)	100
INDEX VERSION	Available upon request	

ENCODER NEEDS CVEPA0D03M R.T.A. CABLE. CONTACT R.T.A. FOR FURTHER DETAILS.

ENCODER PIN-OUTS																									
	<table border="1"> <thead> <tr> <th>PIN</th> <th>DESCRIPTION</th> <th>PIN</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NO CONNECTION</td> <td>6</td> <td>CHANNEL A+</td> </tr> <tr> <td>2</td> <td>+ DC (5 V)</td> <td>7</td> <td>CHANNEL B-</td> </tr> <tr> <td>3</td> <td>GROUND</td> <td>8</td> <td>CHANNEL B+</td> </tr> <tr> <td>4</td> <td>NO CONNECTION</td> <td>9</td> <td>NO CONNECTION</td> </tr> <tr> <td>5</td> <td>CHANNEL A-</td> <td>10</td> <td>NO CONNECTION</td> </tr> </tbody> </table>	PIN	DESCRIPTION	PIN	DESCRIPTION	1	NO CONNECTION	6	CHANNEL A+	2	+ DC (5 V)	7	CHANNEL B-	3	GROUND	8	CHANNEL B+	4	NO CONNECTION	9	NO CONNECTION	5	CHANNEL A-	10	NO CONNECTION
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