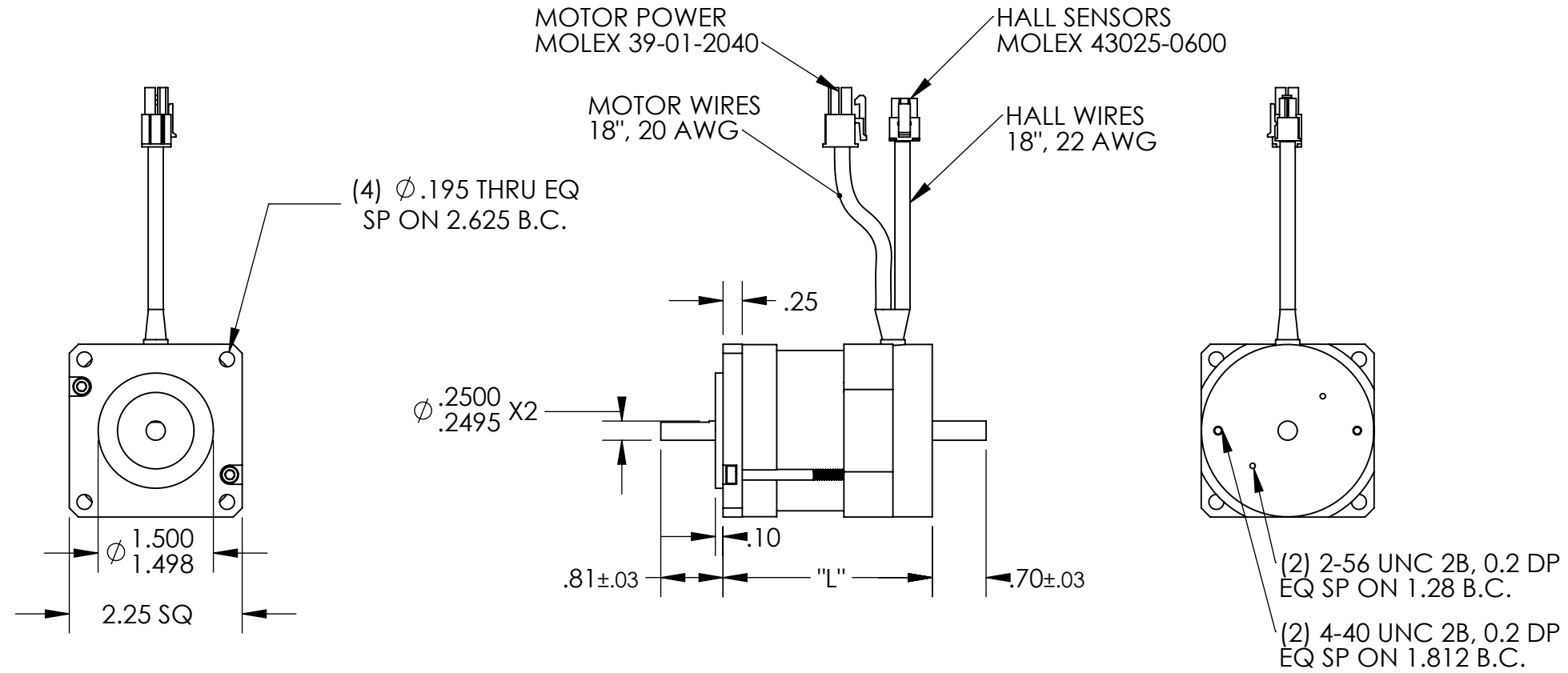


PART NUMBER  
EP23-XX-NXXXXX-NN-XXX

↑ SERIES  
↑ STACK LENGTH  
↑ WINDING LETTER  
↑ ENCODER TYPE (N-NO ENCODER, B-BEARING, M-MODULAR)  
↑ ENCODER RESOLUTION (X1000, X2000, X5000)  
↑ ENC COVER (N-NO COVER, C-COVER)  
↑ CUSTOM BRAKE (N-NO BRAKE, B-BRAKE)

PART REVISION HISTORY

REV.	DESCRIPTION	ECO	DWN	CHKD	DATE



MOTOR PARAMETERS

		EP23-1A	EP23-2A	EP23-3A
MAX TERMINAL VOLTAGE	VDC	170	170	170
RATED SPEED	RPM	6000	6000	6000
RATED TORQUE	Oz-In	50	90	110
PEAK TORQUE	Oz-In	150	270	330
CONTINUOUS CURRENT	AMPS	3.01	4.32	5.87
PEAK CURRENT	AMPS	12.75	18.34	24.9
VOLTAGE CONSTANT, Ke	V/KRPM	11.2	14.0	12.6
TORQUE CONSTANT, Kt	Oz-In/A	15.1	18.9	17.0
RESISTANCE	OHM	2.09	1.16	0.59
INDUCTANCE	mH	1.6	1.07	0.54
MOMENT OF INERTIA	Oz-In-Sec <sup>2</sup>	.0019	.0037	.0055
"L" LENGTH	INCH	2.8	3.8	4.8
WEIGHT	LBS	1.5	2.2	3

MOTOR CONNECTOR

POS	COLOR	VALUE
1	RED	PHASE R
2	WHITE	PHASE S
3	BLUE	PHASE T
4		

HALL CONNECTOR

POS	COLOR	VALUE
1	RED	5 VDC
2	BLACK	GND
3	BROWN	HALL A
4	ORANGE	HALL B
5	YELLOW	HALL C
6		

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**TOLERANCES UNLESS OTHERWISE SPECIFIED (U.O.S.)**

DECIMALS	C'BREAKS	FRAC.	MACH. FIN.
.XX = $\pm$ .01	.010/.020	1/64	125
.XXX = $\pm$ .005	FILLETS	ANGLES	
.XXXX = $\pm$ .0005	.020 MAX	1°	

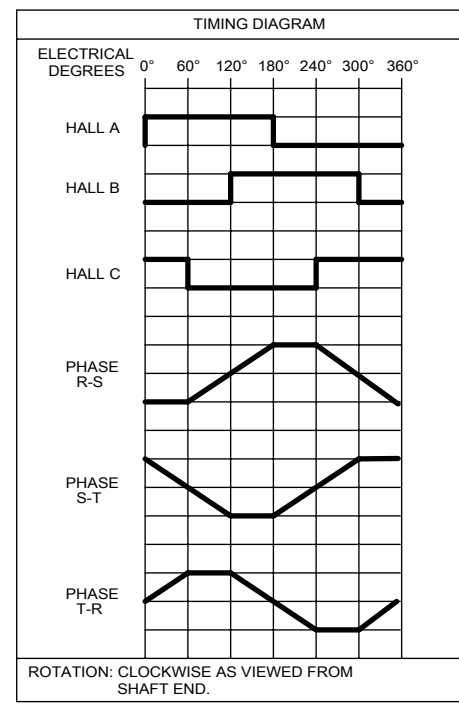
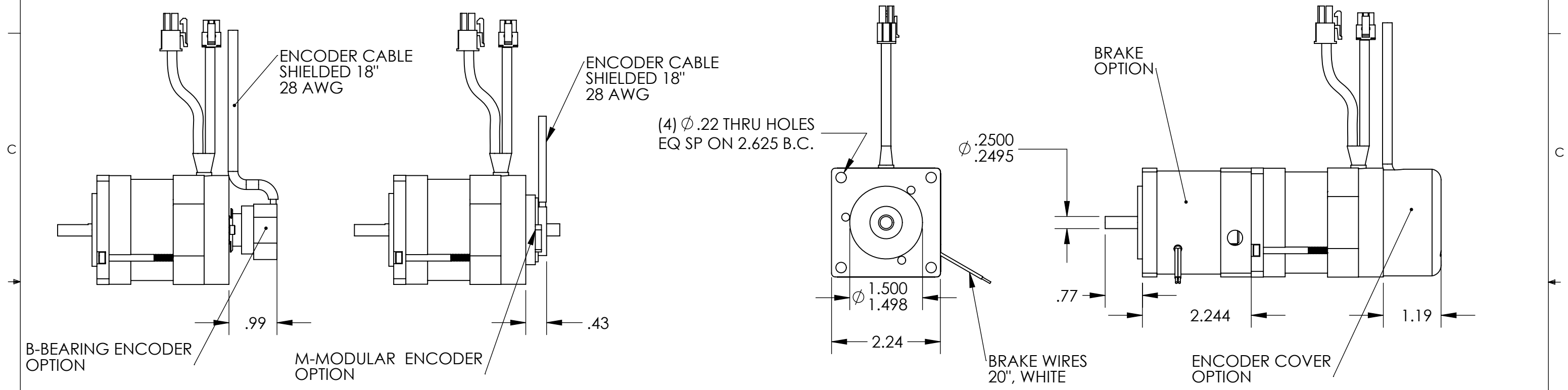
MATERIAL  
FINISH  
DRAWN JPB  
CHECKED TPB  
DATE 06/10/14  
DATE 06/10/14



TITLE: NEMA 23 BRUSHLESS DC MOTOR  
PART NO. EP23  
DWG. NO. R  
SCALE: NONE  
SHEET 1 OF 2  
SIZE B  
THIRD ANGLE

NOTE: Kt AND Ke BASED ON TRAPEZOIDAL DRIVE  
4 POLE DESIGN

PART REVISION HISTORY					
REV.	DESCRIPTION	ECO	DWN	CHKD	DATE



BRAKE	
TYPE	POWER TO RELEASE
VOLTAGE	24 VDC
CURRENT	270 mA
STATIC TORQUE	8.8 IN-LB
RESISTANCE	88 OHM

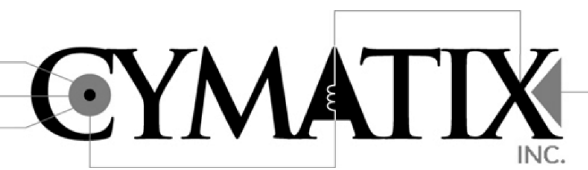
ENCODER WIRING	
COLOR	FUNCTION
RED	5 VDC
BLACK	COMMON
BROWN	CHANNEL A
WHITE	CHANNEL A/
BLUE	CHANNEL B
GREEN	CHANNEL B/
ORANGE	INDEX
YELLOW	INDEX/

ENCODER SPECIFICATIONS	
TYPE	OPTICAL
OUTPUT TYPE	LINE DRIVER
LINE COUNT	1000 LINE
GATED	A / B AT 90 DEGREE
INPUT VOLTAGE	5 VDC +/- 5%
CURRENT	65 mA TYPICAL

STD AVAILABLE  
RESOLUTIONS: 1000, 2000, 5000 LINE

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TOLERANCES UNLESS OTHERWISE SPECIFIED (U.O.S.)			
DECIMALS	C'BREAKS	FRAC.	MACH. FIN.
.XX = ± .01	.010/.020	1/64	125
.XXX = ± .005	FILLETS	ANGLES	1°
.XXXX = ± .0005	.020 MAX		



MATERIAL		FINISH		TITLE: NEMA 23 BRUSHLESS DC MOTOR - ENCODER	
DRAWN	JPB	DATE	06/10/14	SIZE	B
CHECKED	TPB	DATE	06/10/14	PART NO.	EP23
SCALE: NONE		SHEET 2 OF 2		DWG. NO. R	