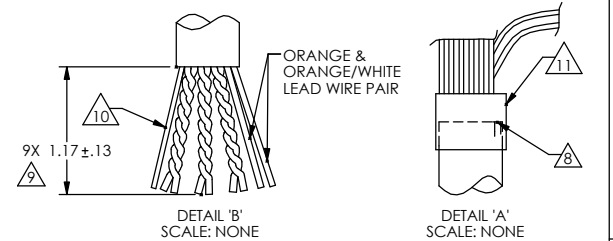


# NOTES:

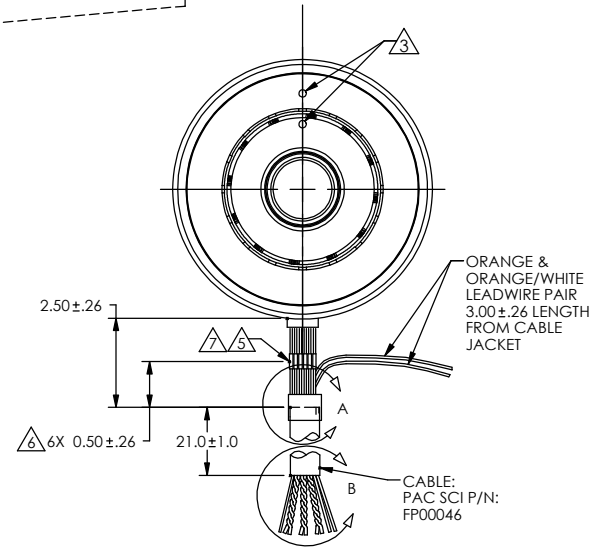
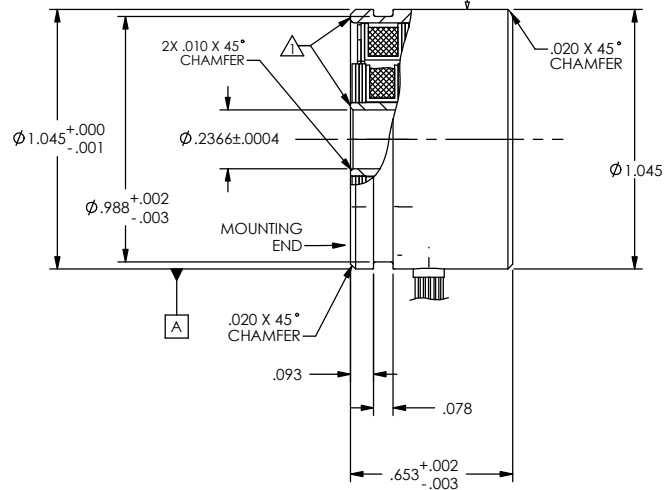
- NOTED SURFACES MUST BE MOUNTED FLUSH  $\pm .005$ .
- CUSTOMER MUST MAINTAIN SHAFT RUNOUT WITH RESPECT TO DATUM A WITHIN  $.003$  T.I.R.
- ELECTRICAL ZERO TO BE MARKED ON ROTOR & STATOR. STATOR MARK TO BE LOCATED  $180 \pm 10^\circ$  FROM LEADWIRE EXIT AS SHOWN.
- ROTOR & STATOR ARE A MATCHED PAIR. DO NOT INTERCHANGE ROTOR OR STATOR BETWEEN RESOLVERS.
- SPLICE BETWEEN RESOLVER LEADS TO CABLE LEADS COMPLETELY INSULATED WITH SHRINK TUBING. TUBING  $.59$  MAX.LENGTH. TUBING MUST BE RATED FOR  $130^\circ\text{C}$  MINIMUM.
- DIMENSION FROM CABLE JACKET TO CENTER OF SOLDER JOINT.
- SPLICES MUST WITHSTAND A 1 LBF PULL-TEST WITHOUT SEPARATION.

- CUT DRAIN WIRE FLUSH WITH JACKET AND COPPER SHIELD.
- OUTER JACKET AND COPPER SHIELD TO BE REMOVED TO DIMENSION SHOWN.
- DRAIN WIRE INSULATED WITH BLACK SHRINK TUBING RATED AT  $85^\circ\text{C}$  MINIMUM.
- $.19 \pm .10$  SHRINK TUBING WITH A WALL THICKNESS OF  $.010$  RATED AT  $130^\circ\text{C}$  MINIMUM CENTERED OVER END OF JACKET.

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	CHECKED
D	D7264	SEE ECO	3/7/06	DDK	DRW
E	07754	SEE ECO	10/20/2006	DDK	DRW
F	100152	SEE ECO	10/17/2013	DRW	MCP



HAROWE  
10BRCX-401-K1C FP00049 S/N: D/C:



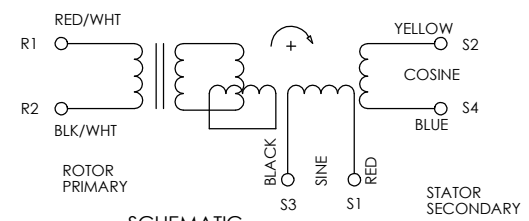
ELECTRICAL & MECHANICAL DATA AT $25^\circ\text{C}$			
VALUES ARE REFERENCE UNLESS OTHERWISE TOLERANCED			
HIPOT TESTING PERFORMED AT 60HZ, 4 SECOND DURATION			
ELEC CYC / MECH CYC	deg/deg		1
EXCITATION FREQUENCY	$\pm 5\%$ kHz		10
INPUT VOLTAGE	$\pm 10\%$ Vrms		7.0
INPUT CURRENT	Max. mA rms		30
INPUT POWER	Watts		.07
IMPEDANCE ZRO	Ohms		276
IMPEDANCE ZRS	Ohms		251
IMPEDANCE ZSO	Ohms		687
IMPEDANCE ZSS	Ohms		625
TRANSFORMATION RATIO	$\pm 10\%$		0.5
DC RESISTANCE (R1-R2)	$\pm 15\%$ Ohms		28
DC RESISTANCE (S1-S3, S2-S4)	$\pm 15\%$ Ohms		91
STATOR RESISTANCE BALANCE	Max. Ohms		3
PK-PK POSITION ERROR	Max. arcminutes		30
PK-PK VELOCITY ERROR	Max. %		-
PHASE SHIFT, OPEN CIRCUIT	degrees		-9
NULL VOLTAGE	Max. mVrms		50
HIPOT, LEADS TO CASE, 500VAC	Max. mA rms		10
HIPOT, INTERPHASE, 250VAC	Max. mA rms		10
TEMPERATURE RANGE	$^\circ\text{C}$		-55 TO 155
ROTOR MOMENT OF INERTIA	lbf-in-sec <sup>2</sup>		$2.16 \times 10^{-6}$
WEIGHT	oz		1.8
CONTINUOUS SPEED	Max. kRPM		20

PHASING EQUATION

INCREASING ANGLE FOR CW ROTATION OF ROTOR FACING MOUNTING END

$$E(S1-S3) = KE(R1-R2) \sin \phi$$

$$E(S2-S4) = KE(R1-R2) \cos \phi$$



SCHEMATIC

THIRD ANGLE PROJECTION

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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIAMETERS: CONCENTRIC $.003$ TIR FACES PERPENDICULAR $-.003$ INTERPRETATION PER ASME Y14.5M-1994		REMOVE ALL BURRS AND BREAK SHARP EDGES $-.005/0.010$ ALL INSIDE CORNERS TO BE $.015$ R MAX UNLESS OTHERWISE SPECIFIED	
FRACTIONS $\pm 1/64$	DECIMALS $\pm .01$	APPROVALS	DATE
ANGLES $\pm 30'$	$\pm .01$	DRAWN	06/25/03
		CHECKED	08/01/03
HEAT TREAT		DESIGN	06/25/03
FINISH		MTG ENG	
		QUAL ENG	

**Harowe**

OUTLINE & PERFORMANCE SPECIFICATION

RESOLVER BRUSHLESS FRAMELESS

SIZE DWG. NO. 10BRCX-401-K1C

SCALE 2:1 SHEET 1 OF 2 CODE IDENT: 58655

# Mouser Electronics

Authorized Distributor

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