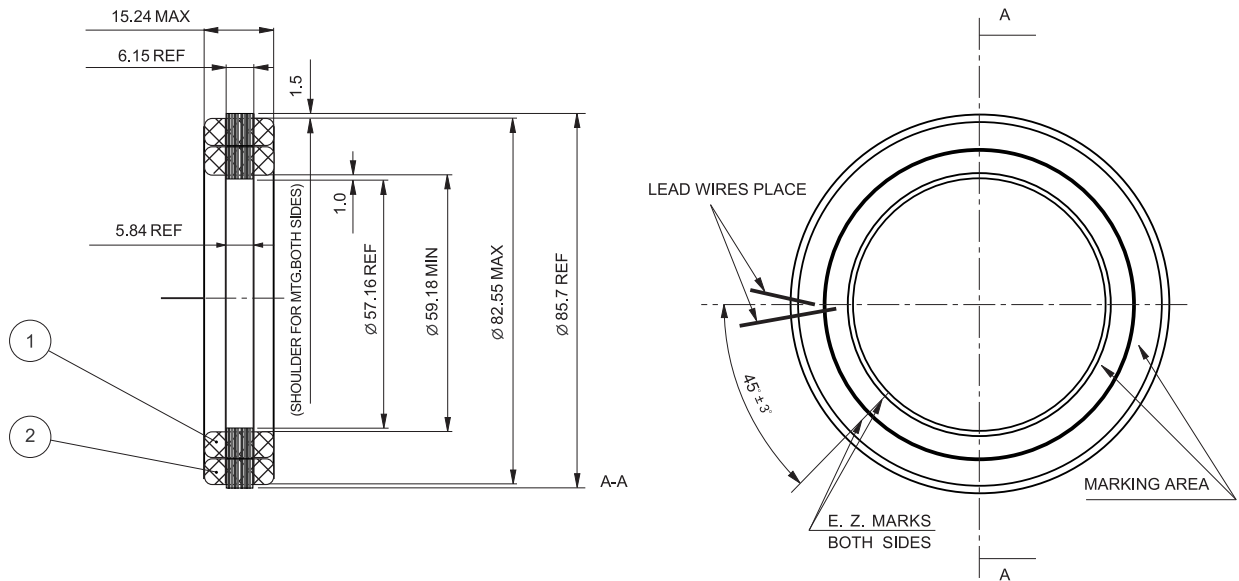
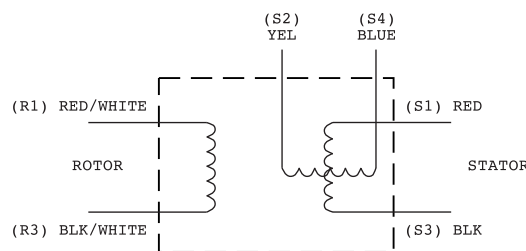


Multispeed Pancake Resolver

This high accuracy multispeed pancake resolver was designed, developed and produced for military as well as special industrial applications. It can be made more compact than an optical encoder, and exhibits much higher signal-to-noise ratio than an inductosyn. Transformation ratio can vary according to customer specifications.



Wiring Diagram



Phase Equations:

$$E (S1S3) = TR * [E (R1R3) * \cos (16 * \theta)]$$

$$E (S2S4) = TR * [E (R1R3) * \sin (16 * \theta)]$$

where: TR - transformation ratio

θ - measured angle, deg.

Direction of rotation

θ is positive for a CCW rotation of the rotor as viewed from the rotor lead wires exit side.

Specification

Parameter	Unit	Value	Tolerance
Input Voltage	V (rms)	4.4	± 5%
Frequency	kHz	2	± 1.5%
DC resistance :			
- rotor	Ohm	295	± 35%
- stator	Ohm	315	± 35%
Rotor Impedance Z_{ro} - with stator open circuited	Ohm	$350 + j820$	R ± 35%
Stator Impedance Z_{ss} - with rotor short circuited	Ohm	$410 + j1210$	X ± 25%
Transformation ratio at RT and 10 MΩ / 20 pF output load	-	0.45	10%
Phase shift	deg	$0 \div 7.5$	-
Null Voltage	mV	20	max
Accuracy	arc sec	± 20	-
Primary current	mA	2.9	max
Resolver speed	-	x16	-
Weight	gr	160	± 5%