

MR-5609

Pancake Resolver

The **MR-5609** is a high accuracy Pancake Resolver, which was designed, developed and produced for military as well as high-end industrial applications (see examples below). The Pancake Resolver converts mechanical position into an electrical signal. It can also, if combined with a servo-amplifier and an electro-mechanical or hydraulic drive, translate electrical signals into angular position.



Applications:

- Radars, Missile guidance, night vision pods, stabilized platforms, ball-screw / robotics positioning, remote video control, optical measurement, medical equipment (MRI, CT scanners) and wherever angle is measured.

Specifications

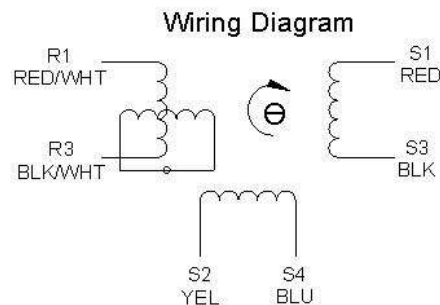
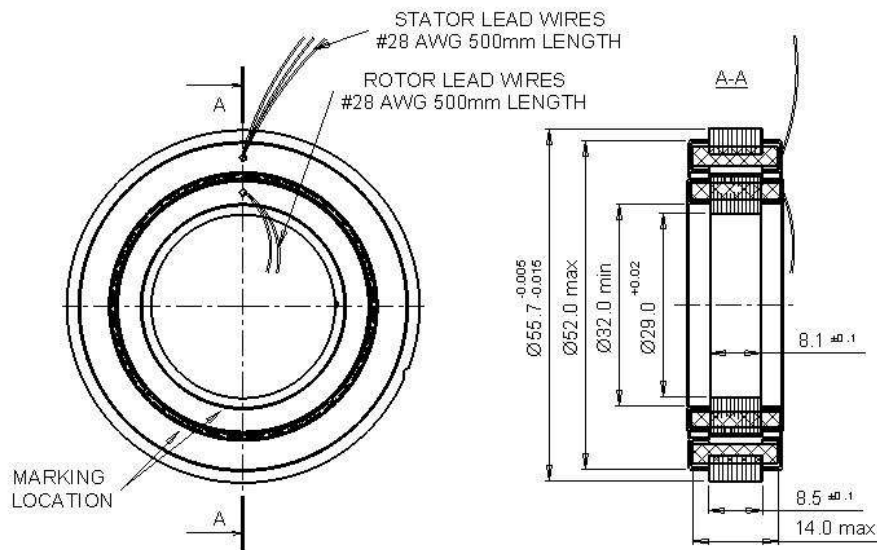
Parameters	Units	Values	Tolerances
Input voltage (Rotor primary)	VAC	26	± 10%
Frequency	kHz	2.5	± 25%
Angular range	deg.	360°	-
Transformation ratio	-	0.5	±10%
Phase shift	deg.	25	max
Null voltage	mV	30	max
Accuracy	arc-min	±8	Peak-to-Peak
Primary current	mA	70	max
Resolver speed	-	x1	-
Weight	gr.	140	max
Temperature Range	C°	-60 to 120	-

Resolvers - Pancake Type

MR-5609 (continued)

Drawing

'Sheet1' Sheet is active



Phase Equation

$$E_{S1-S3} = K E_{R1-R3} \cos \theta$$

$$E_{S2-S4} = K E_{R1-R3} \sin \theta$$

Where K - transformation ratio,
 θ - measured angle, deg.

All dimensions are in mm

Direction of Rotation

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

For Additional Information

To learn more about the MR-9814 Pancake Resolver or other MTC products, contact MTC on **+972 4 998 7772** or email marketing@mtcind.com