Multispeed Pancake Resolver

DMR-26-03

Multispeed Pancake Resolver

The high accuracy multispeed (X16) pancake resolver was designed, developed and produced for military as well as special industrial applications. Transformation ratio can vary according to customer specifications.

Specifications

Motor Data

Parameters	Units	Values	Tolerances
Input Voltage	V(rms)	4.4	± 5%
Frequency	kHz	2	± 1.5%
DC resistance: **Rotor** **Stator**	 Ohm Ohm	 295 315	 ± 35% ± 35%
Rotor Impedance Zro- with stator open circuited	Ohm	350 + j820	R± 35%
Stator Impedance Zss- with rotor short circuited	Ohm	410 +j1210	X ±25%
Transformation ratio at RT and 10MΩ/ 20pF output load	-	0.45	± 10%
Phase shift	deg	0 ÷ 7.5	-
Null Voltage:	mV	20	max
Accuracy	arc sec	± 20	-
Primary current	mA	2.9	Max
Resolver Speed	-	X16	-
Weight	Gr.	167	± 5

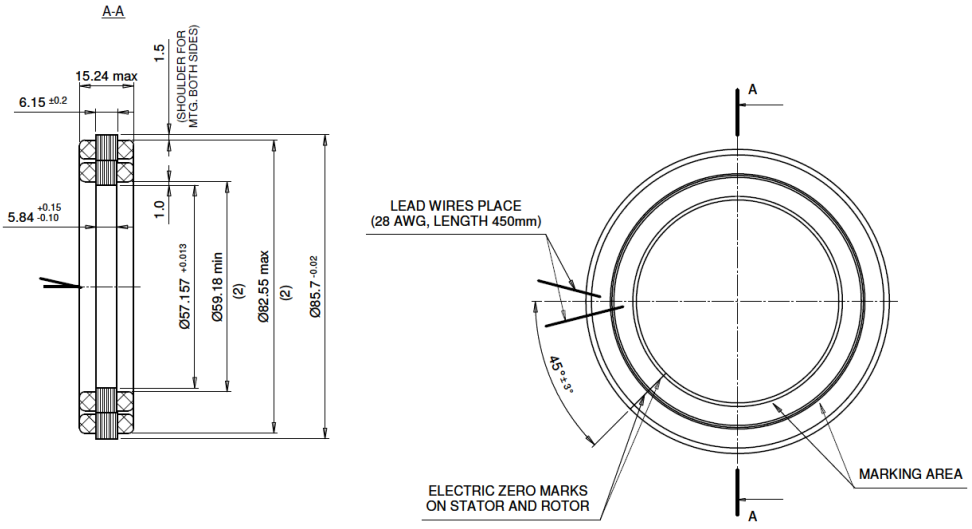
Doc. # 301277 Rev. A (01/2015)

MTC Industries & Research Carmiel Ltd
PO Box 232, Karmiel 2161102, Israel
Tel: +972 4 998 7772
www.mtcind.com

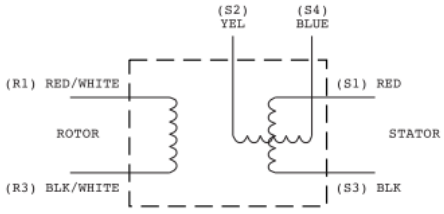
Multispeed Pancake Resolver

DMR-26-03

Multispeed Pancake Resolver



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.

For Additional Information

To learn more about the MDC-26 DC Brush Motor Control Manifold or other MTC products, contact MTC on **+972 4 998 7772** or email **marketing@mtcind.com**

Doc. # 301277 Rev. A (01/2015)

MTC Industries & Research Carmiel Ltd
PO Box 232, Karmiel 2161102, Israel
Tel: +972 4 998 7772
www.mtcind.com