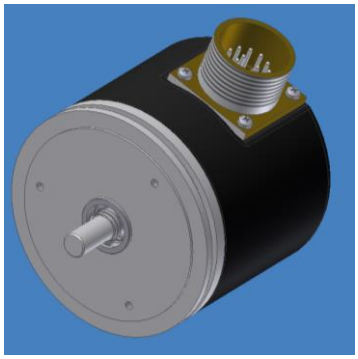
Kunde / Customer	**Wayne Trail Technologies Inc.**
Vertretung / Agency	MICRONOR USA

Bestelltext / How to order	9000.08.002 (Formerly FB-TD5126)
Type	**Dual Geared Resolver Unit**
Bauvorschrift / Date sheet	TD 9000.08.002
Micron Reference	36-315-060-7710

Dual Geared Resolver unit with MIL 17 pin



Input ratio (Shaft to resolver 1)

Shaft to Master Resolver (Z 30/Z120 (Modul 0.3))	**R1** = +1 : -4
Shaft to Vernier Resolver (Z 75/Z75 (Modul 0.3))	**R2** = +1 : -1

Resolver R1 (Size 11 / ø 27)

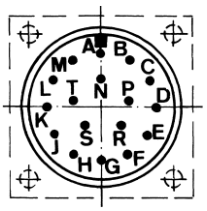
Harowe Nr. **ONLY**	11BRCT-300-F10A/10 or 11BRCT-300-F58A/5 or 11BRCT-300-F95A/5
Type	Control Transformer (Stator is primary)
Speed	2
Frequency (Hz)	2500
Transformation Ratio (Vout/Vin)	0.5

Resolver R2 (Size 11 / ø 27)

Harowe Nr. **ONLY**.	11BRW-300-F95A ONLY
Type	Control Transformer (Stator is Primary)
Speed	1
Frequency (Hz)	2500
Transformation Ratio (Vout/Vin)	0.5

Housing

Protection	IP 64
Gears	All Gears are zero Backlash



Recepticle

Type	MS 3102 A20-29P (17 Pin) MIL

Electrical connection

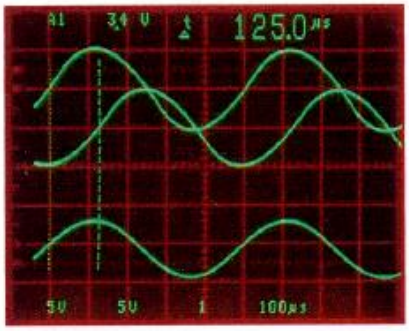
Harowe Wire color	Function	Designator **R1**	**PIN-Nr.**	**AMCI Wire color**	Function	Designator **R2**	**PIN-Nr.**
Red/White	OUT+	Rotor R1	**A**	Red/White	OUT+	Rotor R1	**J**
Yellow/White	OUT-	Rotor R2	**B**	Yellow/White	OUT-	Rotor R2	**K**
			C				**L**
Red	COS+	Stator S1	**D**	Red	COS+	Stator S1	**M**
Yellow	SIN+	Stator S2	**E**	Yellow	SIN+	Stator S2	**N**
Black	COS-	Stator S3	**F**	Black	COS-	Stator S3	**P**
Blue	SIN-	Stator S4	**G**	Blue	SIN-	Stator S4	**R**

Resolver Litzen paarweise verdrill ! Rot- Weiss + Gelb- Weiss (Pri.) / Rot + Schwarz (Cos.) / Gelb + Blau (Sin.)
Resolver nachträglich einzeln justierbar (Befestigung über Spannpratzen)

Resolver Adjustment

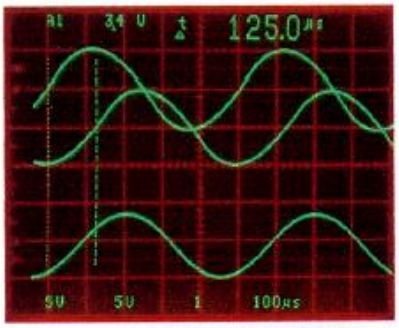
The original MICRON unit was tested and found that the fine resolver is has a +80° phase shift when the coarse resolver is 0°.

Zero degree alignment is defined when there is no phase shift of the output referenced to the excitation voltage to the sine winding S1.



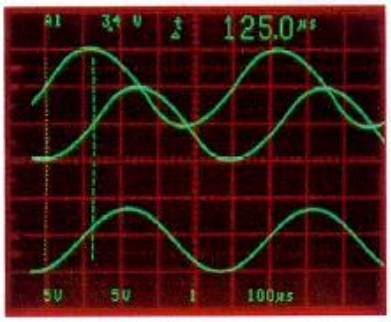
MICRON Reference Unit
Top trace is Sin
Middle trace is Cosine

Bottom trace is coarse output with shaft aligned at zero. Zero phase shift from sin input



MICRON Reference Unit
Top trace is Sin
Middle trace is Cosine

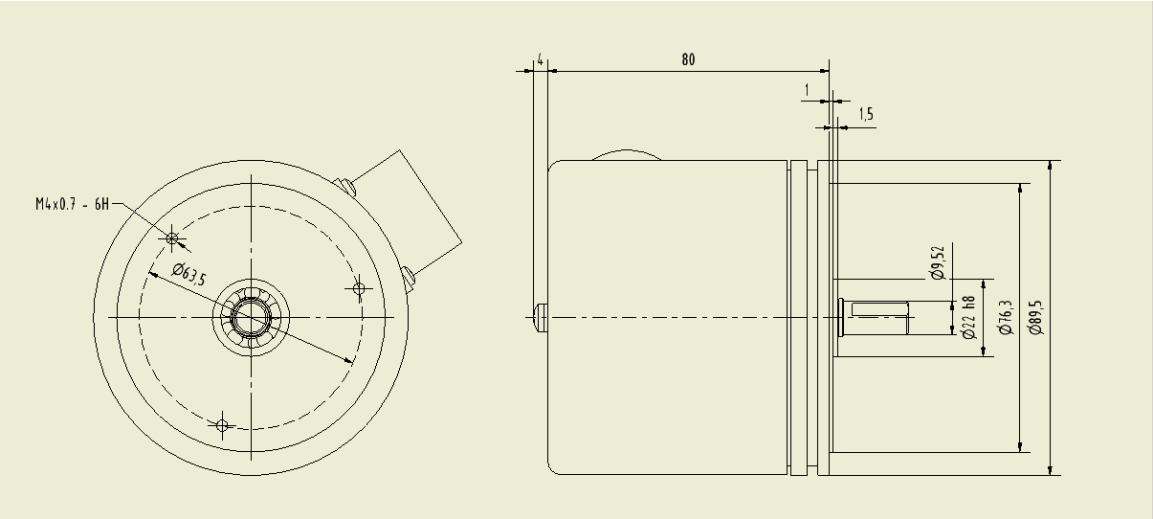
Bottom trace is fine output with shaft aligned at zero. Coarse has Zero phase shift from sin input.
We observe an approximate +80° phase shift



MICRONOR Unit aligned exactly same way as reference unit.

Bottom trace is the output of the fine resolver when coarse is at zero.

Reference Drawing



External Label

Position Transducer **App.Nr. M-XXXXXX**
R1=1:4 R2=1:1 PER TD9000.08.002 B
Replaces Micron 36-315-060-7710

Micronor P/N 9000.08.002
US +1-805-389-6600 or sales@micronor.com
CH +41-44-843-4020 or sales@micronor.ch