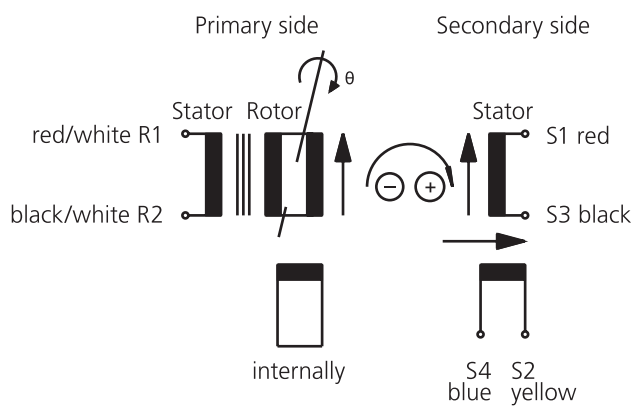




RESOLVER
RE 10

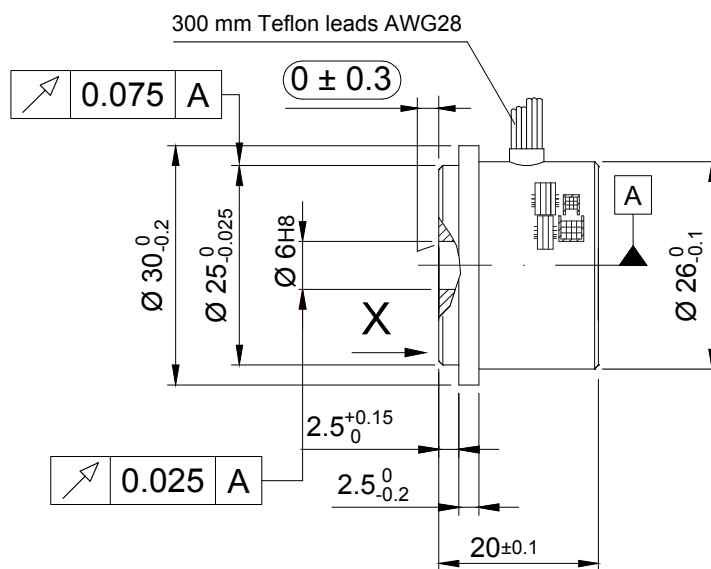
FACTS

- Hollow shaft Ø: max. 6 mm
- Outer Ø: 26 mm
- Length: 20 mm



Input: $E(R1-R2) = E \cdot \sin(\cos)$
 Output: $E(S1-S3) = TR \cdot E(R1-R2) \cdot \cos \theta$
 $E(S2-S4) = TR \cdot E(R1-R2) \cdot \sin \theta$
 TR = Transformation ratio

Positive counting direction: Rotor cw as viewed (X →)



SELECTION GUIDE FOR ELECTRICAL DATA

Primary side	R1 - R2	R1 - R2
Pole Pairs	1	1
Transformation ratio	0,5 ± 10%	0,5 ± 10%
Input voltage	7 V	7 V
Input current	65 mA	35 mA
Input frequency	5 kHz	10 kHz
Phase shift	9° ± 3°	-2° ± 3°
Null voltage	max. 30 mV	max. 30 mV
Impedance		
Zro	53 Ω + j · 105 Ω	85 Ω + j · 175 Ω
Zrs	52 Ω + j · 85 Ω	70 Ω + j · 150 Ω
Zso	78 Ω + j · 126 Ω	115 Ω + j · 235 Ω
Zss	75 Ω + j · 100 Ω	90 Ω + j · 195 Ω
D.C. resistance		
Rotor	22 Ohm ± 10% at 20 °C	22 Ohm ± 10% at 20 °C
Stator	77 Ohm ± 10% at 20 °C	77 Ohm ± 10% at 20 °C
Accuracy	± 10'	± 10'
Accuracy ripple	max. 1'	max. 1'
Operating temperature	-55 °C ... +155 °C (-67 °F ... +311 °F)	-55 °C ... +155 °C (-67 °F ... +311 °F)
Max. permissible speed	20.000 min ⁻¹	20.000 min ⁻¹
Shock (11ms)	< = 1.000 m/s ²	< = 1.000 m/s ²
Vibration (10 to 500 Hz)	< = 500 m/s ²	< = 500 m/s ²
Hi-pot housing/winding	min. 500 V _{AC}	min. 500 V _{AC}
Hi-pot winding/winding	min. 250 V _{AC}	min. 250 V _{AC}
Rotor	Completely impregnated	Completely impregnated
Stator	Windings impregnated	Windings impregnated