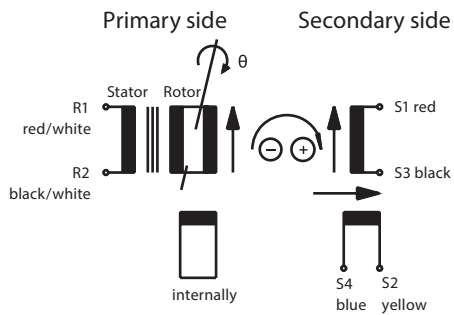




RESOLVE R
R 58

FACTS

- Shaft Ø: max. 12 mm
- Hollow shaft Ø: max. 17 mm
- Outer Ø: 58 mm
- Operation temp.: -20 °C ... +80 °C
- Perm. Speed: 6.000 min⁻¹
- Accuracy: ± 4' / ± 6' / ± 10'
- Accuracy ripple: 1' max.
- Rotor and stator completely impregnated
- 1/2/3/4 pole pairs



Input: $E(R1-R2) = E \cdot \sin(\cos)$

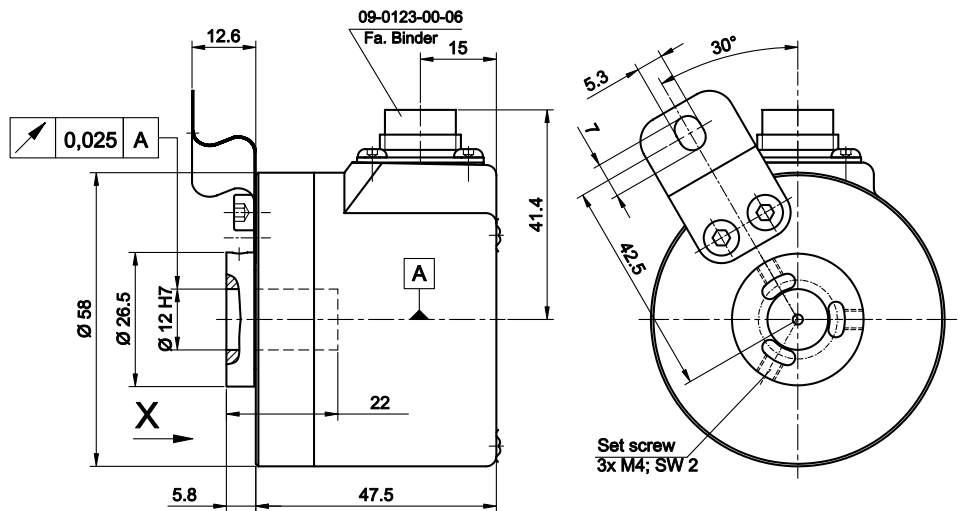
Output: $E(S1-S3) = TR \cdot E(R1-R2) \cdot \cos \theta$

$E(S2-S4) = TR \cdot E(R1-R2) \cdot \sin \theta$

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	58 mA	36 mA
Input frequency	5 kHz	10 kHz
Phase shift	8° ± 3°	-6° ± 3°
Null voltage	max. 30 mV	max. 30 mV
Impedance		
Zro	75 Ω + j · 98 Ω	110 Ω + j · 159 Ω
Zrs	70 Ω + j · 85 Ω	96 Ω + j · 150 Ω
Zso	180 Ω + j · 230 Ω	245 Ω + j · 400 Ω
Zss	170 Ω + j · 200 Ω	216 Ω + j · 370 Ω
D.C. resistance		
Rotor	40 Ω ± 10% at 20 °C	40 Ω ± 10% at 20 °C
Stator	102 Ω ± 10% at 20 °C	102 Ω ± 10% at 20 °C
Accuracy		
Accuracy	± 6'	± 10'
Accuracy ripple	max. 1'	max. 1'
Operating temperature		
Operating temperature	-55 °C ... +155 °C (-67 °F ... +311 °F)	-55 °C ... -155 °C (-67 °F ... +311 °F)
Max. permissible speed		
Max. permissible speed	5.000 min ⁻¹	5.000 min ⁻¹
Weight rotor/stator		
Weight rotor/stator	350 g	350 g
Hi-pot housing/winding		
Hi-pot housing/winding	min. 500 V _{AC}	min. 500 V _{AC}
Hi-pot winding/winding		
Hi-pot winding/winding	min. 250 V _{AC}	min. 250 V _{AC}
Rotor / Stator		
Rotor / Stator	Completely impregnated	Completely impregnated