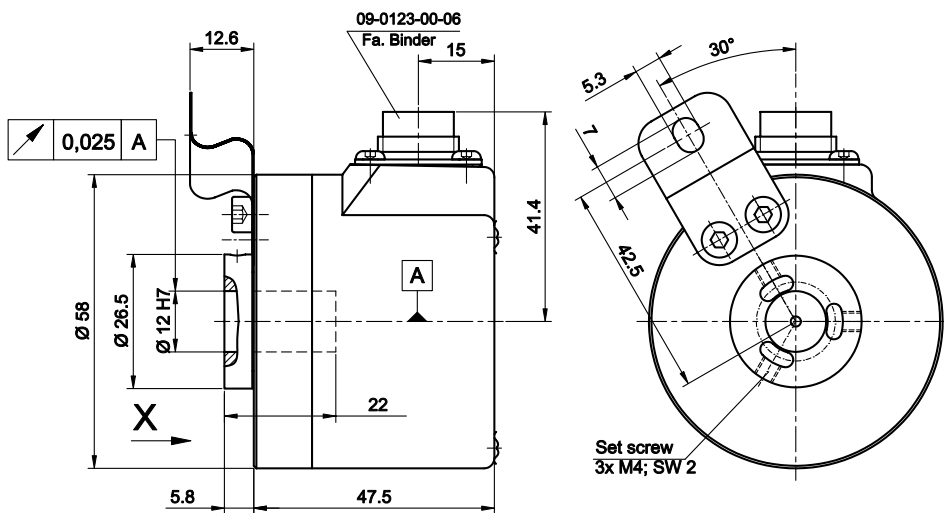
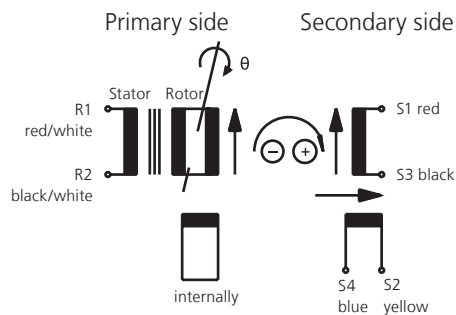




RESOLVER
R 58

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	$0.5 \pm 10\%$	$0.5 \pm 10\%$
Input voltage	7 V	7 V
Input current	58 mA	36 mA
Input frequency	5 kHz	10 kHz
Phase shift	$8^\circ \pm 3^\circ$	$-6^\circ \pm 3^\circ$
Null voltage	max. 30 mV	max. 30 mV
Impedance		
Zro	$75 \Omega + j \cdot 98 \Omega$	$110 \Omega + j \cdot 159 \Omega$
Zrs	$70 \Omega + j \cdot 85 \Omega$	$96 \Omega + j \cdot 150 \Omega$
Zso	$180 \Omega + j \cdot 230 \Omega$	$245 \Omega + j \cdot 400 \Omega$
Zss	$170 \Omega + j \cdot 200 \Omega$	$216 \Omega + j \cdot 370 \Omega$
D.C. resistance		
Rotor	$40 \Omega \pm 10\%$ at 20 °C	$40 \Omega \pm 10\%$ at 20 °C
Stator	$102 \Omega \pm 10\%$ at 20 °C	$102 \Omega \pm 10\%$ at 20 °C
Accuracy	$\pm 6'$	$\pm 10'$
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	5.000 min ⁻¹	5.000 min ⁻¹
Weight rotor/stator	350 g	350 g
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 / Stator	Completely impregnated	Completely impregnated