



HOUSED RESOLVER

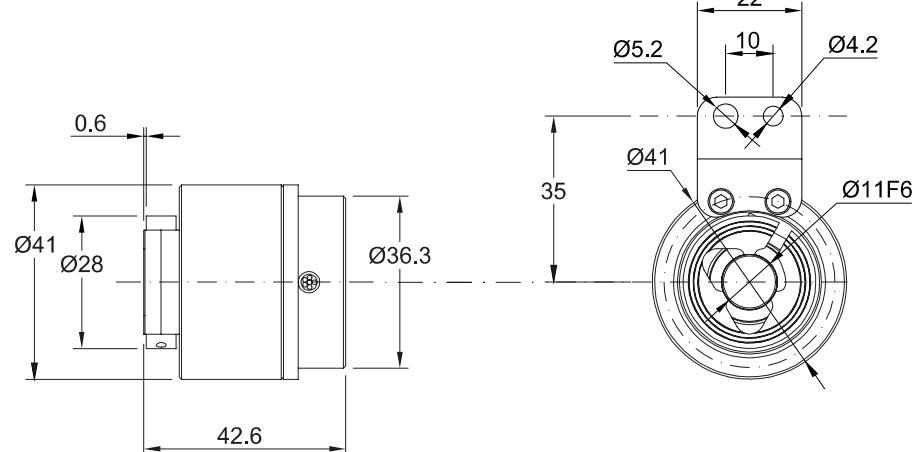
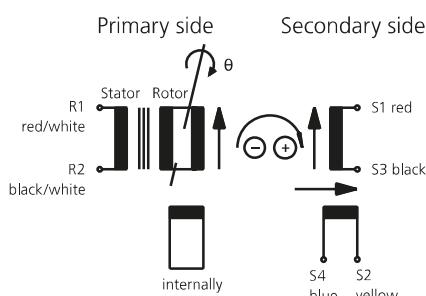
R36

FACTS

- Outer Ø: 36 mm
- Hollow Shaft Ø: max. 11 mm
- Shaft: on request
- Length: 42,6 mm



OPERATING PRINCIPLE



$$\text{Input: } E(R1-R2) = E \cdot \sin(\omega \cdot t)$$

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

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

TR = Transformation ratio

Positive counting direction:

Rotor cw as viewed (X →)

ELECTRICAL DATA

Type	R36
Pole Pairs	1
Transformation Ratio	0,5 ±10%
Input Voltage	7 V
Input Current	65 mA 7 V & 5 kHz
Phase Shift	13° ±3° 7 V & 5 kHz
Accuracy	± 10'/20' spread ± 4/6' on request
Null Voltage	≤ 30 mV
Operating Temperature	-40 °C ... +100 °C
R1-R2 DC Resistance at room temperature	37 Ohm ± 10%
S1-S3/S2-S4 DC Resistance at room temperature	102 Ohm ± 10%
Max. Permissible Speed	≤ 5.000 rpm
Shock	≤ 1.000 m/s² (11 ms)
Vibration	≤ 500 m/s² 10...500 Hz
High Pot Test Voltage Housing/Winding	≤ 500 VAC 50 Hz & 3 s
High Pot Test Voltage Winding/Winding	≤ 250 VAC 50 Hz & 3 s
Rotor / Stator	completely impregnated
Lead Length	AWG 28 min. 300 mm