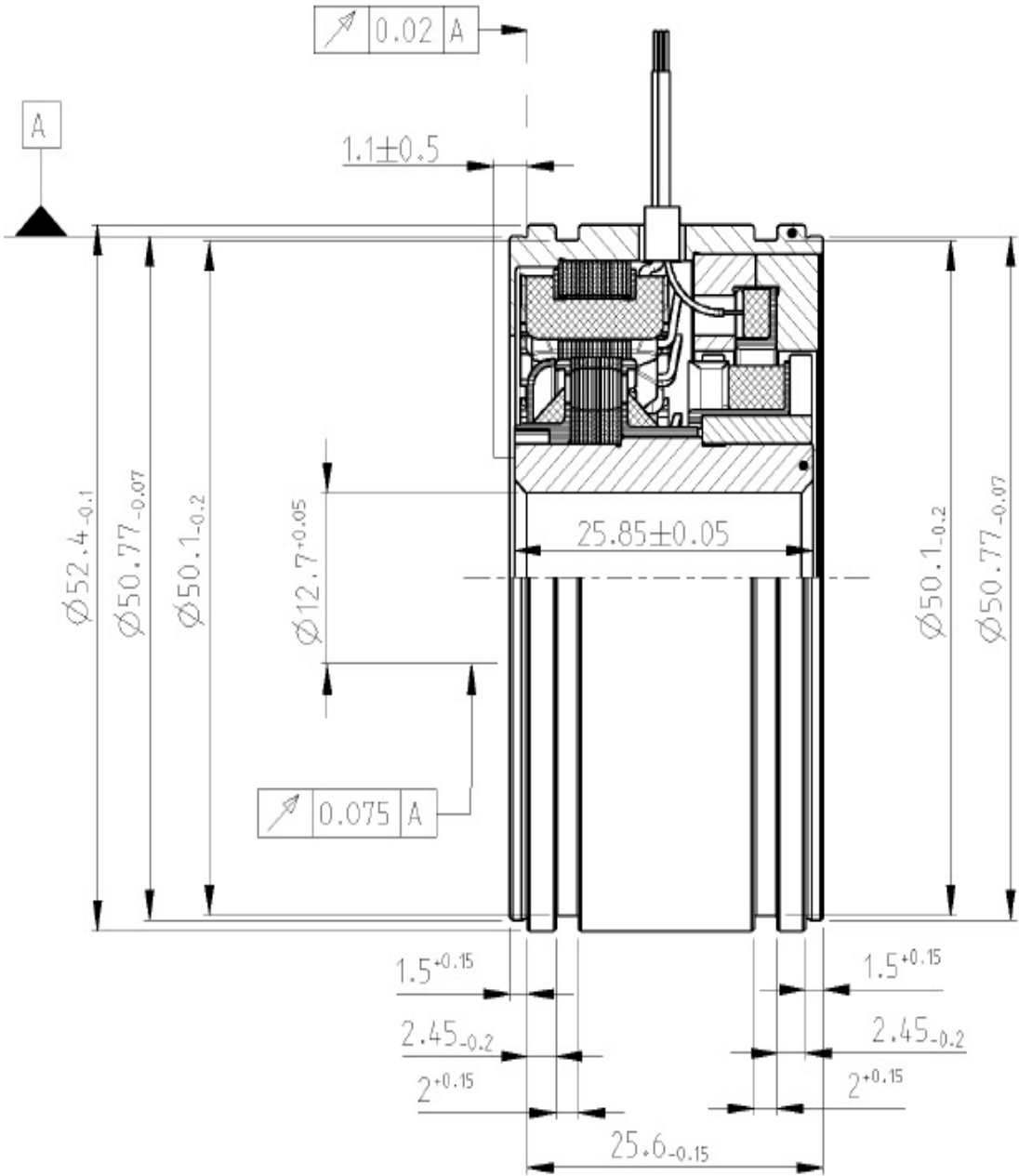


## DATA SHEET - HOLLOW SHAFT RESOLVER

<b>PN</b>	3-1393048-3			
<b>Description:</b>	V23401	T1001-B122		
<b>Size</b>	21			
<b>Shaft</b>	B1			
<b>Speed - pair of poles - [pp]</b>	1			
<b>Application Spec</b>				
<b>Test protocol</b>	100% EOL testing, stored. Available up on request			
<b>Electrical parameters (at 22°C):</b>				
Input voltage nom. [V <sub>rms</sub> ]	7.0	Based on nominal Input voltage and Frequency	DC resistance R1R2 [Ω]	19
Frequency nom. [kHz]	10.0		R1R2 tolerance [±%]	10
Input current max [mA]	40		DC resistance S1S3 or S2S4 [Ω]	58
Transformation ratio rT [±]	1.00		S1S3 or S2S4 tolerance [±%]	10
Transf. ratio tolerance [%]	10			
Phase shift min [°]	-12			
Phase shift max [°]	-2			
Angular Error max [']	40			
Residual voltage max [mV]	25			
<b>Connect. Wire Length [mm]</b>	300, AWG 26 Teflon Isolated			
<b>High Voltage test</b>	Voltage: 500 V <sub>AC</sub> ± 3% (A)		Measured between:	
	250 V <sub>AC</sub> ± 3% (B)		A: Winding R1-R2 and housing	
	Time: 1s		Winding S1-S3 and housing Winding S2-S4 and housing	
<b>Isolation test</b>	Voltage: 500 V <sub>DC</sub> ± 5% (A, B)		B: Windings S1-S3 and S2-S4	
	Criterium: R <sub>isol.</sub> > 50M Ohm			
<b>"Zero" setting:</b>	Ele. "0" is when Winding Us2-s4 = 0 and Us1-s3 are in phase with Ur1-r2			
<b>Transformation function</b>	Function applies to the clockwise rotation of the rotor when looking at the (grooveless) transformer component from the top			
	$U_{S1-S3} = + rT * U_{R1-R2} * \cos(pp * \varphi)$			
	$U_{S2-S4} = + rT * U_{R1-R2} * \sin(pp * \varphi)$			
<b>Rotor Inertia</b>	approx. 20 g/cm <sup>2</sup>			
<b>Max. Rotational Speed</b>	20.000 rpm			
<b>Shock resistance (11ms sine)</b>	1000 m/s <sup>2</sup>			
<b>Vibration (0 ... 2 kHz)</b>	200 m/s <sup>2</sup>			
<b>Operating temp.</b>	-55°C...+150°C			



DATE	REV.	DWN	APP	LTR
2015-06-25	A	P. Lerchenfeld	D. Ondrej	1