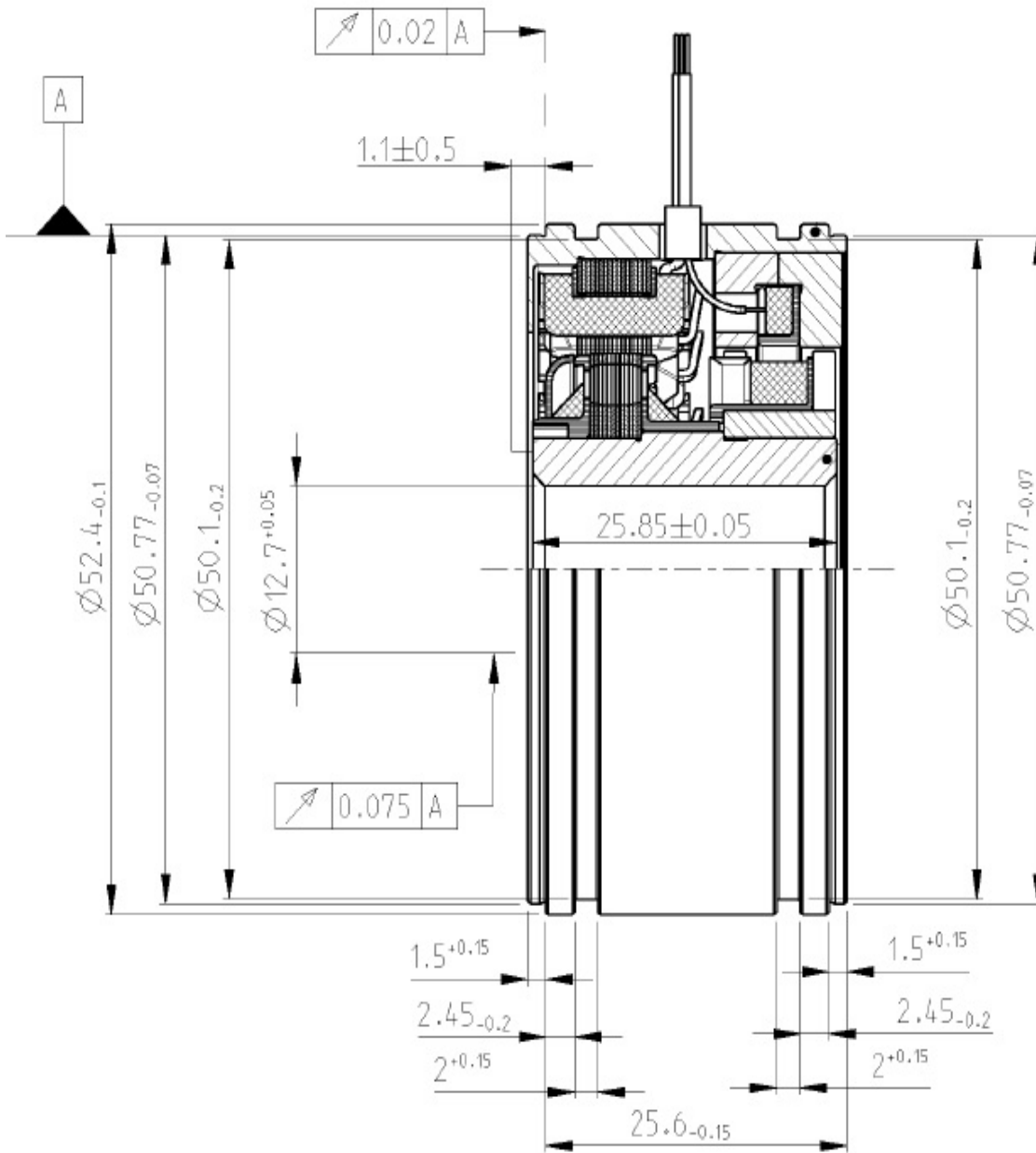




DATA SHEET - HOLLOW SHAFT RESOLVER

PN	3-1393048-5			
Description:	V23401	T1005-B101		
Size	21			
Shaft inner diameter [mm]	12,7			
Speed - pair of poles - [pp]	1			
Application Spec				
Test protocol	100% EOL testing, stored. Available up on request			
Electrical parameters (at 22°C):				
Input voltage nom. [V _{rms}]	4	possible 4V...12V	DC resistance R1R2 [Ω]	24
Frequency nom. [kHz]	5	pos, 2kHz...10kHz	R1R2 tolerance [±Ω]	2,4
Input current max [mA]	20	Based on nominal Input voltage and Frequency	DC resistance S1S3 or S2S4 [Ω]	58
Transformation ratio rT [±]	0,5		S1S3 or S2S4 tolerance [±Ω]	5,8
Transf. ratio tolerance [%]	5			
Phase shift min [°]	-5			
Phase shift max [°]	5			
Angular Error [±']	10			
Residual voltage max [mV]	15			
Connect. Wire Length [mm]	300, AWG 26 Teflon Isolated			
High Voltage test	Voltage: 500	$V_{AC} \pm 3\%$ (A)	Measured between:	
	250	$V_{AC} \pm 3\%$ (B)	A: Winding R1-R2 and housing	
	Time: 1s		Winding S1-S3 and housing	
Isolation test	Voltage: 500	$V_{DC} \pm 5\%$ (A, B)	B: Windings S1-S3 and S2-S4	
	Criterion:	$R_{isol.} > 50M\ \Omega$		
"Zero" setting:	Ele. "0" is when Winding Us2-s4 = 0 and Us1-s3 are in phase with Ur1-r2			
Transformation function	Function applies to the clockwise rotation of the rotor when looking at the (grooveless) transformer component from the top			
	$U_{S1-S3} = +rT * U_{R1-R2} * \cos(pp * \varphi)$			
	$U_{S2-S4} = +rT * U_{R1-R2} * \sin(pp * \varphi)$			
Rotor Inertia	approx. 20 g/cm ²			
Max. Rotational Speed	20.000 rpm			
Shock resistance (11ms sine)	1.000 m/s ²			
Vibration (0 ... 2 kHz)	200 m/s ²			
Operating temp.	-55°C...+150°C			



<u>DATE</u>	<u>PN REV.</u>	<u>DWN</u>	<u>APP</u>	<u>DS. REV</u>
2015-06-25	A	P. Lerchenfeld	D. Ondrej	1
2017-04-26	A	P. Lerchenfeld	D. Ondrej	2