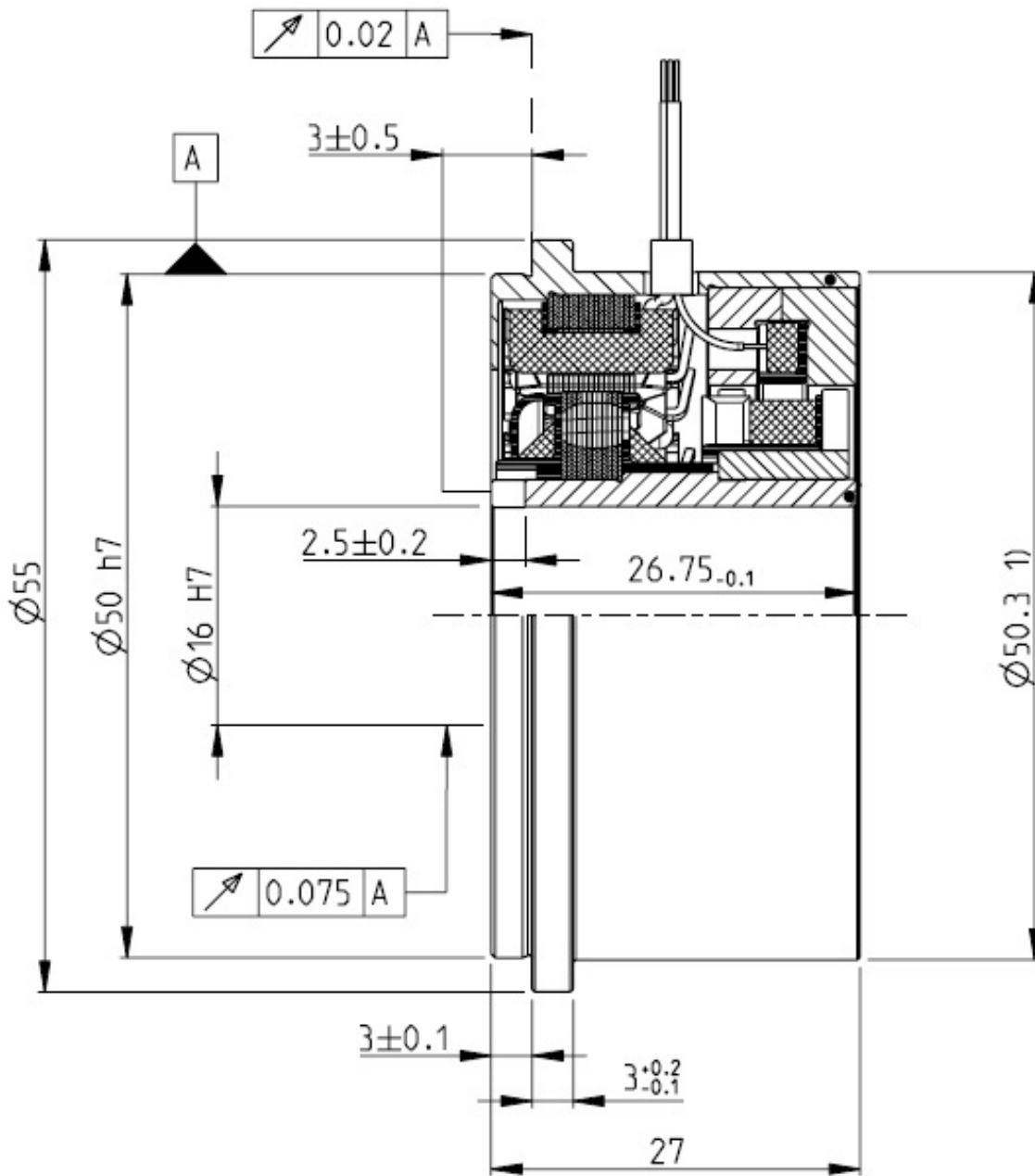




DATA SHEET - HOLLOW SHAFT RESOLVER

PN	4-1393048-6			
Description:	V23401		T2014-B209	
Size	21			
Shaft inner diameter [mm]	16 H7			
Speed - pair of poles - [pp]	4			
Application Spec				
Test protocol	100% EOL testing, stored. Available up on request			
Electrical parameters (at 22°C):				
Input voltage nom. [V _{rms}]	6	possible 2V...10V	DC resistance R1R2 [Ω]	36
Frequency nom. [kHz]	8	pos, 4kHz...15kHz	R1R2 tolerance [±Ω]	3,6
Input current max [mA]	50	Based on nominal Input voltage and Frequency	DC resistance S1S3 or S2S4 [Ω]	48
Transformation ratio rT [±]	0,46		S1S3 or S2S4 tolerance [±Ω]	4,8
Transf. ratio tolerance [%]	5			
Phase shift min [°]	0			
Phase shift max [°]	10			
Angular Error [±]	8			
Residual voltage max [mV]	19			
Connect. Wire Length [mm]	300, AWG 26 Teflon Isolated			
High Voltage test	Voltage: 500 V _{AC} ± 3% (A)		Measured between:	
	250 V _{AC} ± 3% (B)		A: Winding R1-R2 and housing	
	Time: 1s		Winding S1-S3 and housing	
Isolation test	Voltage: 500 V _{DC} ± 5% (A, B)		B: Windings S1-S3 and S2-S4	
	Criterion:	R _{isol.} > 50M Ohm		
"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	C	P. Lerchenfeld	D. Ondrej	1
2017-04-26	C	P. Lerchenfeld	D. Ondrej	2