6-1393048-1
Rev. A
26 April 2017

DATA SHEET - HOLLOW SHAFT RESOLVER

PN	6-1393048-1			
Description:	V23401		U1016-B110	
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. [Vrms]	4	possible 2V…20V	DC resistance R1R2 [Ω]	65
Frequency nom. [kHz]	5	pos, 2kHz…10kHz	R1R2 tolerance [±Ω]	6,5
Input current max [mA]	20	Based on nominal Input voltage and Frequency	DC resistance S1S3 or S2S4 [Ω]	81
Transformation ratio rT [±]	0,5		S1S3 or S2S4 tolerance [±Ω]	8,1
Transf. ratio tolerance [%]	5			
Phase shift min [º]	-7			
Phase shift max [º]	3			
Angular Error [±']	6			
Residual voltage max [mV]	15			
Connect. Wire Lenght [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
			Winding S2-S4 and housing
Isolation test	Voltage: 500	V_{DC} ± 5% (A, B)	B: Windings S1-S3 and S2-S4
	Criterium:	$R_{isol.} > 50M\ Ohm$	
"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 componnent from the top		
	$U_{S1-S3} = +\mathrm{rT} * U_{R1-R2} * \cos(pp * \varphi)$		
	$U_{S2-S4} = +\mathrm{rT} * U_{R1-R2} * sin(pp * \varphi)$		
Rotor Inertia	approx. $20\ g/cm^2$		
Max. Rotational Speed	20.000 rpm		
Shock resistance (11ms sine)	1.000 m/s2		
Vibration (0 … 2 kHz)	200 m/s2		
Operating temp.	-55°C…+150°C		

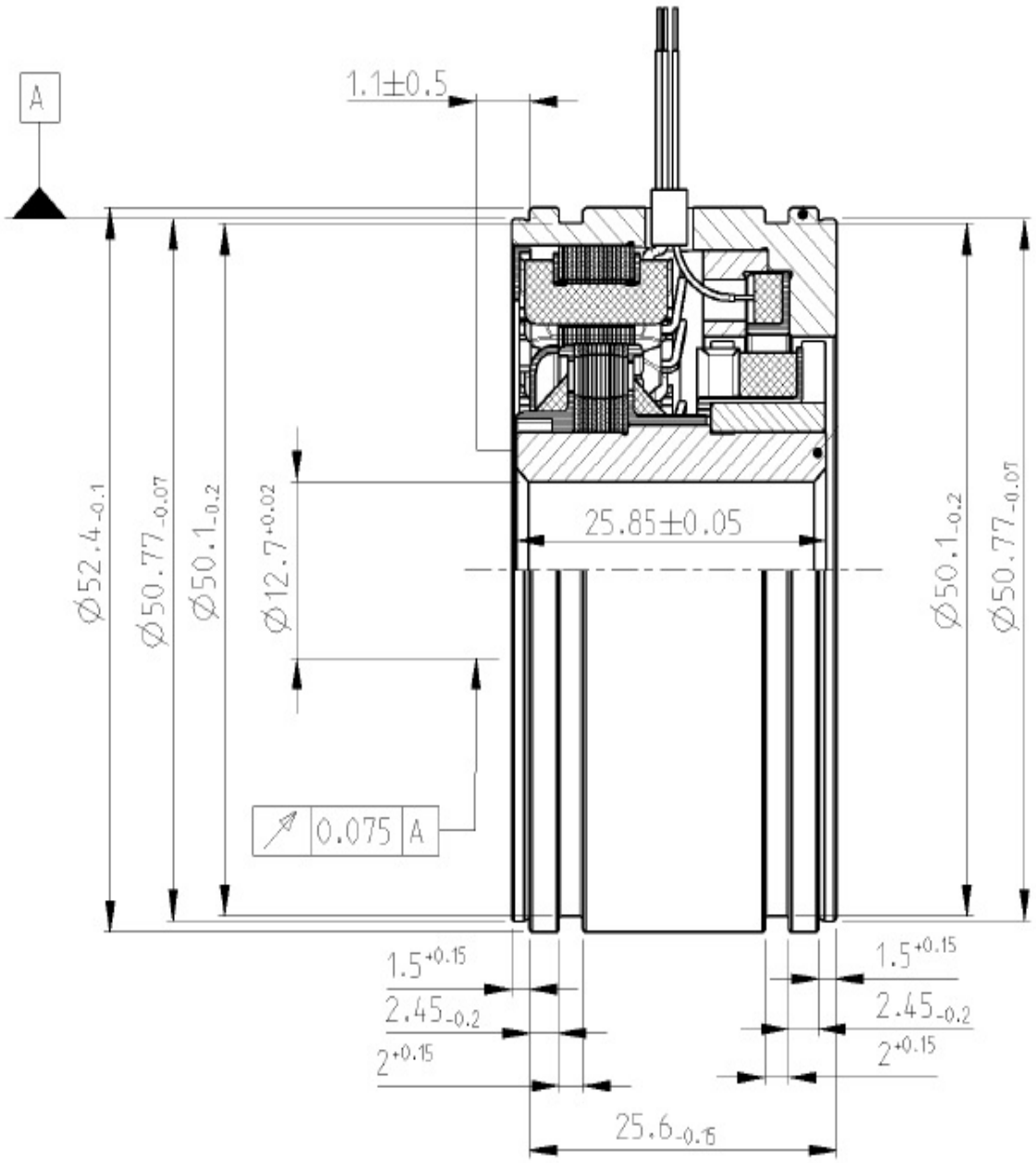
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DATE	PN REV.	DWN	APP	DS. REV
2015-06-25	A	P. Lerchenfeld	D. Ondrej	1
2017-04-26	A	P. Lerchenfeld	D. Ondrej	2

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