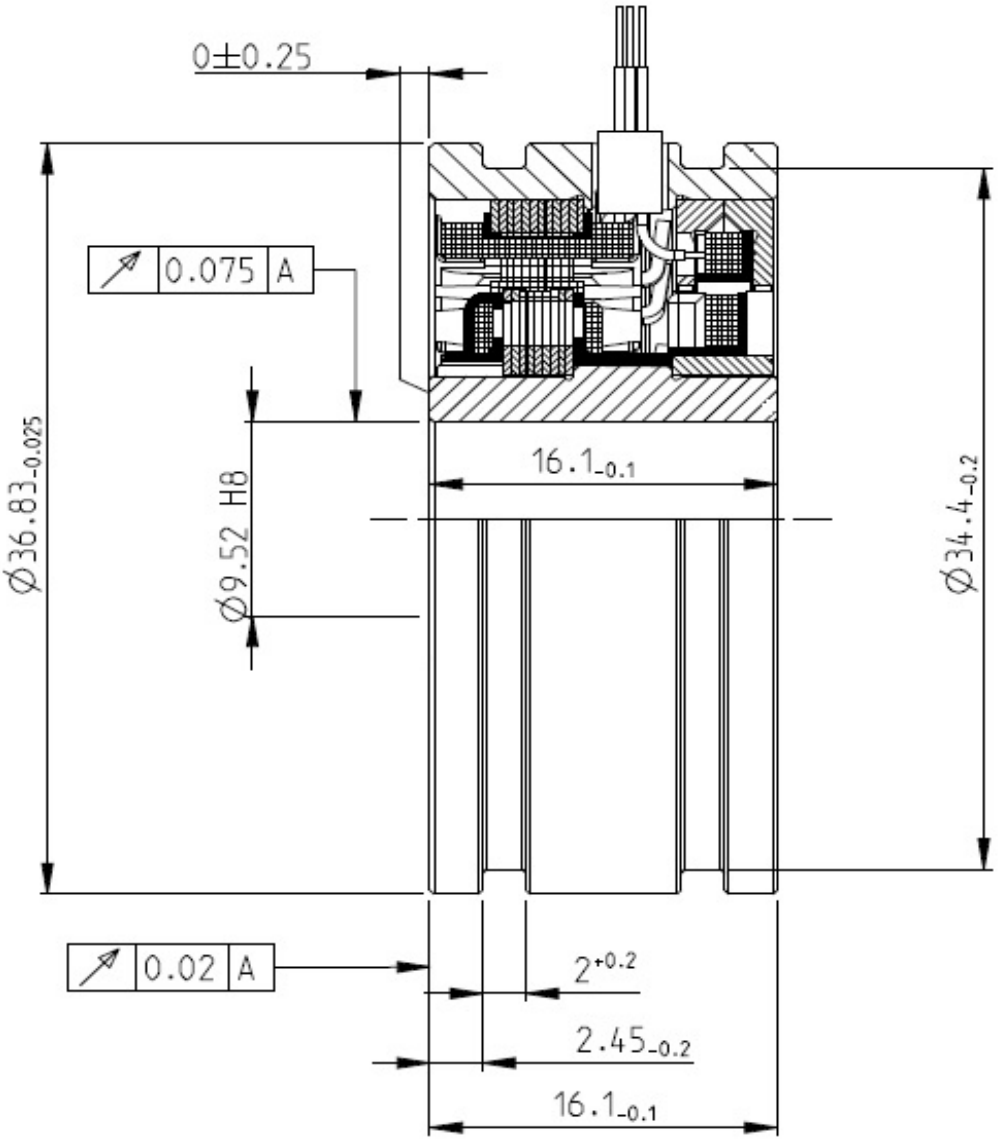
DATA SHEET - HOLLOW SHAFT RESOLVER

PN	2-1393047-5			
Description:	V23401		S1001-B110	
Size	15			
Shaft inner diameter [mm]	9,52 H8			
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]	7	possible 2V…8V	DC resistance R1R2 [Ω]	82
Frequency nom. [kHz]	10	pos, 4kHz…20kHz	R1R2 tolerance [±Ω]	8,2
Input current max [mA]	40	Based on nominal Input voltage and Frequency	DC resistance S1S3 or S2S4 [Ω]	68
Transformation ratio rT [±]	0,5		S1S3 or S2S4 tolerance [±Ω]	6,8
Transf. ratio tolerance [%]	4			
Phase shift min [º]	-2			
Phase shift max [º]	8			
Angular Error [±']	6			
Residual voltage max [mV]	25			
Connect. Wire Lenght [mm]	470, 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			

| Indicates Change



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