DATA SHEET - HOLLOW SHAFT RESOLVER

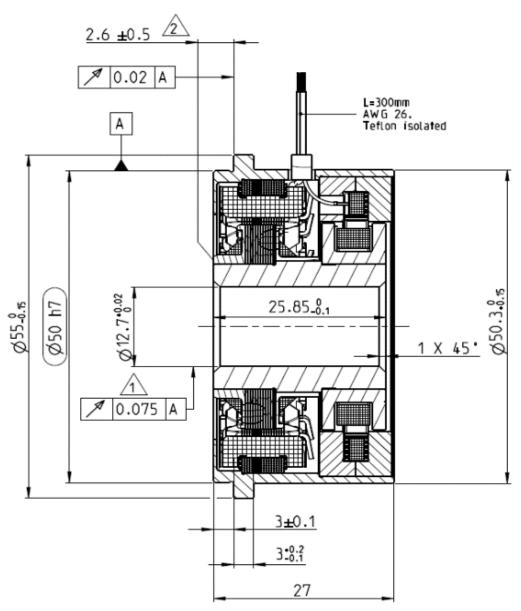| PN	2350437-1			
Description:	V23401-		T2071-B101	
Size	21			
Shaft inner diameter [mm]	12.7			
Speed (pair of poles) [p]	1			
Number of poles	2			
Application Specification				
Test protocol	Results saved to manufacturing site archives. Available by request			
Electrical parameters (22°C)				
Input voltage [V]	7		Input resistance R1R2 [Ω]	80
Frequency Typical [kHz]	10		R1R2 tolerance [%]	± 10
Input current max [mA]	50		Output resistance S1S3 or S2S4 [Ω]	80
Transformation ratio (rT)	0.5		S1S3 or S2S4 tolerance [%]	± 10
Transf. ratio tolerance [%]	± 10	Based on specified Input voltage and Frequency		
Phase shift min [º]	-15			
Phase shift max [º]	5			
Electrical Angular Error max [']	± 10			
Residual voltage max [mV]	25			

High Voltage test	Voltage: $500V_{AC}$ (A)	Measured between:
	$250V_{AC}$ (B)	A: Winding R1-R2 and housing
	Time: 1s	Winding S1-S3 and housing Winding S2-S4 and housing
Isolation test	Voltage: $500V_{DC}$ (A, B)	B: Windings S1-S3 and S2-S4
	Criterium: $R_{isol.} > 50M\Omega$	
"Zero" setting:	Electrical "0" is when Coils $V_{S2-S4} = 0$ and V_{S1-S3} are in phase with V_{R1-R2}	
Transfer function	Looking at Transformation part and turning Rotor clockwise	
	$V_{S1-S3} = +rT * V_{R1-R2} * \cos(p*\alpha)$	
	$V_{S2-S4} = +rT * V_{R1-R2} * \sin(p*\alpha)$	
Rotor Inertia	approx. $20g.cm^2$	
Max. Rotational Speed	20,000 rpm	
Shock resistance (11ms sine)	$1000 \ m/s^2$	
Vibration	$200 \ m/s^2$	
Operating temp.	-55°C…+150°C	

2.6 ±0.5 /2\

| ↗ | 0.02 | A |

A

L=300mm
AWG 26.
Teflon isolated

Ø55 $^{0}_{-0.15}$

Ø50 h7

Ø12.7 $^{+0.02}_{0}$

25.85 $^{0}_{-0.1}$

Ø50.3 $^{0}_{-0.15}$

1 X 45°

/1\

| ↗ | 0.075 | A |

3±0.1

3 $^{+0.2}_{-0.1}$

27

/1\ Gesamtschlag im eingebauten Zustand
Concentricity in installed situation

/2\ Axialversatz
Axial displacement/offset

DATE	PN. REV.	DWN	APP	DS. REV.
22-01-20	1	H.Bernardo	D.Ondrej	1
25-06-20	1	H.Bernardo	D.Ondrej	2