

Profile

- Magnetic absolute encoder single-turn
- Compact design
- Resolution 12 ... 16 bits
- Additional analog Sin/Cos 1 V_{SS} signals
- Reading distance ≤1 mm



Mechanical data

Feature	Technical data	Additional information
Housing	zinc die-cast	
Sensor/ring reading distance	0.1 ... 1 mm	over the whole sensor line

Electrical data

Feature	Technical data	Additional information
Operating voltage	4.5 ... 30 V DC	reverse polarity protected
Power input	<1 W	
SSI clock speed input	50 ... 750 kHz	
Output circuit	1 V _{pp} ±10 %	
Offset voltage	2.5 V DC ±100 mV	
Interface	SSI, RS485	
Cycle time	≤30 μm	

System data

Feature	Technical data	Additional information
Pole length	5 mm	pole number 64
Resolution	0.08 ... 0.005° 12 ... 16 bit	0.08° ... 0.005°
System accuracy	±0.1°	with run-out error <50 μm
Repeat accuracy	0.01°	unidirectional
Circumferential speed	≤32 m/s	absolute value ≤3 m/s

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 ... 85 °C	
Storage temperature	-20 ... 85 °C	
Relative humidity	100 %	condensation admissible
EMC	EN 61000-6-2 EN 61000-6-4	interference resistance / immission emitted interference / emission
Protection category	IP54	EN 60529
Shock resistance	≤500 m/s ² , 11 ms	EN 60068-2-27
Vibration resistance	≤100 ms, 50 ... 2000 Hz	EN 60068-2-6