



INDUSTRIAL RESOLVERS FOR MORE RELIABILITY AND HIGH PRECISION

As one of the largest sensor and connectivity companies in the world, TE Connectivity (TE) offers an industrial resolver portfolio which can be connected with a wide range of servo motor connectors and sensor applications. This allows for customization and greater flexibility for customers. The use of sensors for high-precision angular position measurement in small spaces increases with progressive automation.

TE's hollow shaft resolvers have long won their own steady position on the market and can nowadays be found in many modern, high-precision control systems. Due to its design, the hollow shaft resolver has a service life above average. This includes reliability even under extreme environmental conditions such as an operating temperature range of -55°C to +150°C, a maximal permissible speed of 20,000 rpm, a shock resistance (11 ms sine) of up to 1,000 m/s² as well as a vibration fatigue limit (0 ... 2 kHz) of 200 m/s². TE Connectivity offers customized hollow shafts as well as housing geometries.

BENEFIT STATEMENTS

- Reliability and high precision with low space requirements
- Fully operable even under extreme environmental conditions
- Stable against humidity and many lubricants
- Resistant to shock and vibration
- Lifetime above average due to the design of the mechanical structure and automated coil incorporation
- Available as single-speed and multi-speed variants
- Direct cable assemblies with TE's Intercontec connectors

KEY FEATURES

- Operating temperature range -55 °C to +150 °C
- The brushless design without bearings is free of wear and friction

APPLICATIONS

- Servo motors
- Robotics
- Factory automation equipment
- Textile weaving machines

STANDARDS & SPECIFICATIONS

- 100% EOL testing, stored. Available upon request

PRODUCT DIMENSIONS

- Available in sizes 15 and 21
- Customization of housing and rotor shaft geometry

PRODUCT OFFERING

Size	Speed	Accuracy	Input Voltage	Input Frequency	Part Number	Part Description
15	1	+/-10°	7 V _{rms}	10kHz	1-1414631-0	V23401- S1001-B101
15	1	+/-6°	7 V _{rms}	10kHz	2-1393047-5	V23401- S1001-B110
21	1	+/-10°	5 V _{rms}	4kHz	2360964-1	V23401-T2079-B101
21	1	+/-10°	7 V _{rms}	10kHz	2358691-1	V23401-T1071-B101
21	1	+/-6°	4 V _{rms}	5kHz	6-1393048-1	V23401-U1016-B110

ELECTRICAL SPECIFICATIONS

- Input voltage 4V_{RMS} to 14V_{RMS}
- Input frequency 4kHz to 10kHz
- Angular error +/-4° to +/-20°

MECHANICAL SPECIFICATIONS

- Rotor inertia: approx. 20 gcm²
- Max. rotational speed: 20,000 rpm
- Shock resistance (11 ms sine): 1,000 m/s²
- Vibration (0 ... 2 kHz): 200 m/s²

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