INTRODUCING

CIRCULAR HYBRID CONNECTORS

- Help save time and cost with a hybrid design using VARAN-bus standard and by combining power & data communication
- Design for harsh environments with IP65 sealing performance



TE Connectivity (TE) introduces the Circular Hybrid Connector (CHC) with 8 power and 4 data contacts for Industrial Ethernet connections. TE's CHC has been designed for machine automation applications requiring higher performing data connections and power of up to 10 Amps. The connector provides highly reliable connection technology and meets the demanding durability and quality requirements of real-time Ethernet applications in industrial automation. Combining power, signal and data into a single connector provides customers with greater flexibility in machine architecture. With VARAN-bus standard compatibility, this connector supports fast mold change over times in molding machines and its simplified cabling reduces installation time by up to 50%.

BENEFITS

- Help save time and cost with one hybrid connector design combining power, signal and data communication
- Help achieve more connections in less space with 8 power contacts and fast Ethernet interface in one housing
- Offer optional housing with 11+ PE (Protected Earth) contacts in retrofit option platform design
- Enable design flexibility with a broad portfolio of wire-to-board and wire-to-panel options
- Design for harsh environments with radial sealing elements that provide IP65 sealing performance
- Benefit from fast data transfer with VARAN bus compatibility

APPLICATIONS

- · Molding machines
- High-performance process control systems
- Machine automation
- Factory automation
- · Control valves and control units
- Stand-alone or remote power units
- Transport and sorting machines

ELECTRICAL

- 60 V (pollution degree 3, according EN 61984)
- 10 A @ 40°C
- -20°C up to +80°C
- Cat5e (ISO/IEC 11801 Edition 2.0 Connector Category 5)

MATERIALS

• Metal: 180°

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MECHANICAL

- Shock: 25 q (DIN EN 50155)
- EMC: min -60dB to 1 GHz
- Isolation level: 1.5 kV AC
- Durability: 50 mating/un-mating cycles
- IP65 (according to IEC 60529) 180° metal only

STANDARDS & SPECIFICATIONS

- Meets the VARAN standard (Versatile Automation Random Access Network), an Industrial Ethernet based protocol used in factory automation
- Cat5e fast Ethernet (ISO/IEC11801)
- DIN EN 61984

IEC 60512	Electromechanical components for electric equipment, basic testing procedures and measuring methods/edition
EN 60664-1	Insulation coordination for equipment within low-voltage systems
IEC 60068	Electrical engineering, basic environmental testing procedures/edition
DIN EN 61984	Connectors - safety requirements and tests
IEC 60529	Degrees of protection provided by enclosures (IP Code)
IEC 62153-4-7 IEC 11801	Metallic communication cable test methods- Parts 4-7: Electromagnetic compatibility (EMC) - Test method for measuring the transfer impedance and the screening - or the coupling attenuation - Tube in tube method; Ed 2006 Information technology - Generic cabling for customer premises; Ed 2002

LEARN MORE

Circular Hybrid Connector Webpage
Circular Hybrid Connector Press Release
Circular Hybrid Connector Flyer
Circular Hybrid Connector Video
Circular Hybrid Connector Parts List

