



D-2970 DYNAMIC SERIES

D-2970 Dynamic Series is a compact 5-mm pitch wire-to-board PCB connector with field-installable, time-saving push-in clamp termination.

BENEFITS

- The push-in clamp and single-hand-operating center-locking lever – both designed to require no tooling – make it possible to cut mating time by up to 90% compared with connectors using screw-latch locking systems.
- The center-locking lever has clear tactile and audible mating feedback to ensure safe mating.
- Toolless wire release is also possible, thanks to the 50% lower insertion force, which allows users to release the wire without injuring their fingertips.
- All designs of male header mate with the same female plug, providing electronics designers flexibility.
- The new D-2970 PCB connector family is a powerful addition to TE's well-known Dynamic Series and is fully equipped to meet our customers' high standards regarding installation and application safety, also saving valuable process time and application space.
- The D-2970 will be fully compliant with UL and IEC regulations and extensively tested at UL and VDE certified laboratories, supporting customer approval processes.

APPLICATIONS

- Servo Drive/Inverter Drive Power inlet/outlet.
- Industrial Microcontrols.
- Robot and Cobot control units.
- PLCs Power inlet/outlet.
- Controls in building automation and household appliances.

ELECTRICAL

- Voltage and Current (**UL1059**)
 - Voltage (Application B): 300V AC/DC
 - Voltage (Application D): 51-150V AC/DC 15A Max.
 - Voltage (Application D): 151-300V AC/DC 10A Max.
- Voltage (**IEC61984**)
 - Voltage (Pollution Degree:2 , Protection Class:II): 400V AC/DC
 - Voltage (Pollution Degree:2 , Protection Class:III): 320V AC/DC
 - Voltage (Pollution Degree:3 , Protection Class:III): 250V AC/DC
- Current (**IEC61984**)
 - Up to 24A per pole @ 20°C ambient temperature (further derating pending on position number to be considered)
 - Up to 18A per pole @ 55°C application ambient temperature (further derating pending on position number to be considered)

MECHANICAL

- Applicable Wire size
- Solid AWG 24-16 / 0.2-1.5 mm²
- Stranded / flexible AWG 26-14 / 0.13-2.5 mm²
- # of mating cycles: 50
- Wire sizes: 0.2mm²-2.5mm² (solid, stranded, ferruled stranded acc. IEC 46228 (I, IV))
- Extraction forces: 0.2mm² (stranded, solid) >10N, 2.5mm² (stranded, solid) >50N

SPECIFICATIONS

- Product specification [108-140223](#)
- Instruction Sheet [408-78171](#)
- Product: UL1059, IEC 61984
- Electrical: IEC 60664-1
- Environmental: IEC 61249-2, IPC-4101, JPCA-ES-01 and JEDEC/ECA joint Standard JS709A, RoHs, Reach
- Mechanical: IEC 60999-1, IEC 60512, IEC 60529
- Flammability: UL 94 V-0, IEC 61800-5-1: GWIT over 875 deg.C

MATERIALS

- Female Housing: PBT
- Male Housing: LCP
- Clamp: stainless steel
- Contact: copper alloy
- Plating: tin over nickel

FEATURES

- Audible and tactile locking latch
- Robust housing
- Contacts that support shock- and vibration-exposed applications
- An IP20 “finger safe” housing that prevents unintended operator contact with live components
- Available with three different angled male headers
- Available in configurations with three or four positions; versions with anywhere from two to 12 positions will be coming soon, please contact your local sales representative for details
- Operates at up to 20 amps and 400 volts at a typical ambient application temperature of 55°C without further derating

D-2970 Dynamic Series

Pos. #	Type	CPR PN Description	PN	Plating*
3	Female Push-in Plug	D2970 REC 3POSN 1ROW Sn BOX	2336488-3	Tin
4	Female Push-in Plug	D2970 REC 4POSN 1ROW Sn BOX	2336488-4	Tin
3	90° THR Male Header	D2970 HDR 90 DEGREE 3POSN 1ROW Sn	2336490-3	Tin
4	90° THR Male Header	D2970 HDR 90 DEGREE 4POSN 1ROW Sn	2336490-4	Tin
3	180° THR Male Header	D2970 HDR 180 DEGREE 3POSN 1ROW Sn	2336494-3	Tin
4	180° THR Male Header	D2970 HDR 180 DEGREE 4POSN 1ROW Sn	2336494-4	Tin
3	270° THR Male Header	D2970 HDR 270 DEGREE 3POSN 1ROW Sn	2336491-3	Tin
4	270° THR Male Header	D2970 HDR 270 DEGREE 4POSN 1ROW Sn	2336491-4	Tin
3	Female Push-in Plug	D2970 REC 3POSN 1ROW Au BOX	2-2336488-3	Gold
4	Female Push-in Plug	D2970 REC 4POSN 1ROW Au BOX	2-2336488-4	Gold
3	90° THR Male Header	D2970 HDR 90 DEGREE 3POSN 1ROW Au	2-2336490-3	Gold
4	90° THR Male Header	D2970 HDR 90 DEGREE 4POSN 1ROW Au	2-2336490-4	Gold
3	180° THR Male Header	D2970 HDR 180 DEGREE 3POSN 1ROW Au	2-2336494-3	Gold
4	180° THR Male Header	D2970 HDR 180 DEGREE 4POSN 1ROW Au	2-2336494-4	Gold
3	270° THR Male Header	D2970 HDR 270 DEGREE 3POSN 1ROW Au	2-2336491-3	Gold
4	270° THR Male Header	D2970 HDR 270 DEGREE 4POSN 1ROW Au	2-2336491-4	Gold

*TE provides free samples of D-2970 dynamic series if they are listed under Plating as Tin.

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4-1773983-2 04/20 AK