



# MAKING SINGLE-POLE POWER EASY TO CONNECT

CONNECTORS OFFER INCREASED SAFETY, DURABILITY,  
AND EASE OF USE



Off- and on-highway heavy duty vehicles require reliable power terminations for inline and wall-mounted applications. Sealed, single-pole connectors offer a simple, reliable, and convenient solution for connecting power wherever needed.

As demand for rugged, secure interconnect solutions increases in the truck, bus, agriculture, construction, mining, and marine industries as well as industrial equipment, having a sealed power connector that can be mated and unmated easily by hand is ideal.

### SIMPLE AND CONVENIENT QUICK CONNECTS

Managing power in heavy duty applications is always a challenge to the electrical architect. Whether it is inline, as a pass-through, stud or a splice, engineers and technicians are looking for a connector system that will meet harsh environmental requirements while being simple to install and repair in the field.

With TE Connectivity's (TE's) DEUTSCH DTSK connectors, technicians can readily connect and disconnect power with better access at the connector rather than going to the source of power (i.e. at the battery). There is minimum risk of touching the contacts, and the push-click connect is easily undone by hand with no tools required.

DTSK is offered as a sealed single-pole inline plug and receptacle system. A flange is available to use the receptacle as a sealed pass-through allowing for through wall or bulkhead applications.



*“Our DEUTSCH DTSK connectors offer simplicity in design for ease of use and safe assembly, installation, and field repair, while remaining a rugged solution that stands up to the harsh conditions faced in the truck, construction, agriculture and similar industries”*



### RUGGEDIZED, SIMPLE, RELIABLE DESIGN

TE's DEUTSCH DTSK series are single-pole connectors which accept 8mm round contacts. The system consists of a plug and receptacle, including a secondary lock and a rear protective cover. Contacts and individual wire seals are sold separately.

The plug and receptacle each offer a secondary lock, confirming that contacts are fully seated and secure in the connectors. The protective cover protects the wire seal and supports the cable exiting the connector, providing added protection against water and dust ingress.

The optional flange is easily snap-locked onto the receptacle (pin connector), and mounted to the wall with 2 screws, providing a robust sealed pass-through.

Designers, manufacturers and users can be confident that the power supply will remain consistent and the interconnect will withstand the vibration, temperature and sealing requirements of harsh environment applications.

“There aren't many single-pole sealed power connectors available in the industrial and commercial vehicle and equipment market that can be used for inline or pass-through applications,” said Jean-Paul Gervais, product manager for TE's Industrial & Commercial Transportation business. “Our DEUTSCH DTSK connectors offer simplicity in design for ease of use and safe assembly, installation, and field repair, while remaining a rugged solution that stands up to the harsh conditions faced in the truck, construction, agriculture and similar industries”.



## HOW CUSTOMERS ARE USING TE'S DEUTSCH DTSK CONNECTORS

TE's DEUTSCH DTSK single-pole, sealed power connectors were designed specifically for heavy duty vehicles and equipment to safely connect power sources. A ruggedized single-pole connector is a simple, quality alternative to a splice or a wall-mounted stud.

The connectors are easy to mate and un-mate, which makes them a better, user-friendly option to disconnect power away from the source, which is rarely easily accessible. For example, on trucks and other heavy vehicles, the battery or A/C blower can be difficult to reach. DTSK connectors offer a way to move the connecting point to an accessible location.

Protecting a battery from accelerated aging and shortened useful life is a concern to all users. For example, in the marine industry, where use of boats and other equipment may be seasonal, disconnecting power during months of downtime will protect the system against future battery-related failures by preventing the battery from draining.

## FEATURES OF TE'S DEUTSCH DTSK SINGLE-POLE POWER CONNECTORS

The DTSK connectors are constructed of heavy-duty thermoplastic to withstand the stringent environmental requirements of the SAE-J2030 Heavy-Duty Electrical Connector Performance Standard.

The female socket is fitted with a spring insert with multiple points of contact. This high reliability contact allows for high mating cycles while maintaining low insertion/separation force. The high normal force, evenly distributed on the large contact area, provides contact stability for excellent performance at high current, vibration, and temperature levels commonly endured by heavy duty vehicles and equipment.

### Features include:

- Operating Temperature: -55 to +125°C
- Ingress Protection (IP) Level: IP68 and IP69K
- Current rating: 125 amps at 125°C using 35 mm<sup>2</sup> wire (derated per EIA-364-70)
- Silver-plated spring insert contact
- Wire sizes: 25, 32, 35 mm<sup>2</sup> [4-2 AWG]
- Individual wire seals matching each wire size (blue, red, green)
- Contact secondary lock
- Wire seal rear protective cover
- 3 connector color options (grey, black, brown) with distinct mechanical keying
- Optional wall mount flange
- Contacts use a hex-shaped barrel crimp per NFC 20.130 standard
- Uses standard DEUTSCH removal tool (DT-RT1)

## A LEADER IN HARSH ENVIRONMENTS

DTSK single-pole power connectors are designed to withstand the harsh environmental conditions commonly found on heavy-duty vehicles in the truck, bus, agriculture, construction, marine, and mining industries; or other industrial applications. They can be used inline or as a pass-through.

TE Connectivity is a global connectivity leader known for developing rugged, reliable connectivity solutions that maintain high performance in harsh environments. Finding ways to increase reliability, safety, ease of manufacturability, and ease of use in harsh environments are just some of the ways TE lives up to its purpose of creating a safer, sustainable, productive and connected future—for our customers and yours.

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