

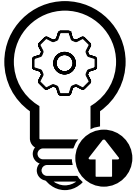


EDITION 7
VOLUME 1

12 ENGINEERING BENEFITS

OF SOUTHWIRE® MACHINE FLEX® CABLES WITH TPE JACKET COMPARED TO SDN CABLES

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HISTORICAL IMPROVEMENTS

Neoprene used in Type SDN cable is an older general-purpose rubber developed in the 1930s. TPE with an advanced formulation was launched 40 years after Neoprene.



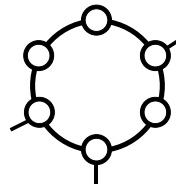
THERMAL RESISTANCE

TPE features an enhanced temperature stability upon repeated thermal cycling resistance compared to Neoprene.



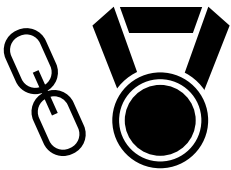
PHYSICAL BENEFITS

A lower specific gravity for TPE compared to Neoprene contributes to lighter weight and easier processing.



CHEMICAL STABILITY

TPE delivers better long-term performances without the need for crosslinking to achieve Neoprene properties.



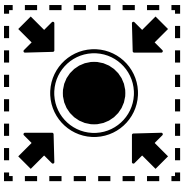
SYNERGETIC PROPERTIES

TPE combines a thermoplastic-based polymer and a thermosetting rubber in one single formulation and creates synergetic properties mimicking vulcanized rubbers.



ELECTRICAL ADVANTAGE

Southwire® Machine FLEX® Type TC-ER cable is rated up to 1kV (when used as WTTC or AWM) compared to SDN which is limited to 600V (Type TC). A higher voltage rating extends the life without early replacement due to system upgrades.



DIMENSIONAL COMPACTNESS

Reduction of the overall size enables the cables to be installed in the most confined or congested space.



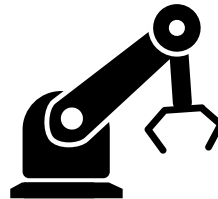
OPERATIONAL EFFICIENCY

Reduction in the total weight of the cable allows for longer pulls or multiple pulls of larger cables with the lowest weight per length.



QUALIFIED PERFORMANCE

Many industrial projects specify Southwire® Machine FLEX® Type TC-ER cable as an alternative to SDN. Southwire® Machine FLEX® cable has been qualified for more markings including Sun Res, Oil Res I&II, Dir Bur, FT-4, and CE.



INDUSTRIAL APPLICATIONS

Southwire® Machine FLEX® cable has gained popularity in applications including heavy duty machineries such as lifts, cranes, pulleys, and hoists.



SUPPLY CONTINUITY

Sustainable and quality supply from various TPE vendors minimizes supply chain interruptions and prevents potential quality issues.



ENVIROMENTAL MERITS

Southwire® Machine FLEX® cable made with a thermoplastic TPE yields a reduced carbon footprint and can be recycled.

