

MachineFLEX™ Tray Control Cable 20 AWG 300/600V PVC TPE Jacket

300V Type PLTC-ER ITC-ER Bare Copper Conductors PVC/Nylon Insulation with TPE Jacket Oil Res I/II 90C -40C Cold Impact Method 4 Identification.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class K, Flexible stranded bare annealed copper per ASTM B3 and B174
- Insulation:** Polyvinyl Chloride (PVC) with nylon layer
- Ground:** One Green Ground with Yellow Stripe
- Jacket:** Gray Thermoplastic Elastomer TPE: Other jacket colors available upon request

APPLICATIONS AND FEATURES:

Southwire's MachineFLEX™ Tray Control is a flexible 20 AWG 300/600V cable and suitable for machine tool, Power Limited Tray and Instrumentation Tray and both exposed run (PLTC-ER & ITC-ER) applications. This product conforms to the NFPA 79 and suited for use in wet and dry areas, conduits, ducts, troughs, trays and where superior electrical properties are desired. It has North American approvals, is CE RoHS-2 for universal use in, on and off the machines utilized in industrial manufacturing work centers. For use in Class 1 Div 2 locations per NEC 501 and 502. These cables can operate continuously at the conductor temperature not in excess of 90C, 130C for emergency overload and 150C for short circuit conditions. Suitable for use in CNC machines, processing and packaging equipment, assembly lines, control panels food and beverage and plant expansions.

SPECIFICATIONS:

- ASTM B3 Standard Specification for Soft or Annealed Copper Wire
- ASTM B174 Standard Specification for Bunch-Stranded Copper
- UL 13 Standard for Power-Limited Circuit Cables
- UL 758 AWM Style 2587 Standard for Appliance Wiring Material
- UL 1063 Machine Tool Wiring (MTW)
- UL 2250 Standard for Instrumentation Tray Cable
- CSA C22.2 No. 210 Appliance wiring material products I/II A/B (Sizes 16 - 8AWG)
- **CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive**

SAMPLE PRINT LEGEND:

Southwire EXXXXX (UL) Type PLTC-ER XXAWG (XXmm²) XX/C PVC/Nylon 300V 90°C Sun Res Oil Res I/II -40°C or ITC-ER or MTW Flexing 600V or AWM 2587 or -- LLXXXXXX CSA AWM I/II A/B 105C 600V -40°C FT4 -- CE RoHS -2 Made in USA Sequential Footage



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Table 1 – Physical and Electrical Data

Stock Number	Cond. Size	Cond. Number	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Allowable Ampacity 90°C*
	AWG	No.	mil	mil	inch	lb /1000ft	inch	Amp
20 AWG								
677511◇	20	3	16	47	0.264	38	1.1	5
672434◇	20	4	16	47	0.285	41	1.2	5
672437◇	20	5	16	47	0.307	48	1.2	5
677513◇	20	7	16	47	0.331	60	1.3	5
677515◇	20	9	16	62	0.409	88	1.6	5
672439◇	20	12	16	62	0.453	105	1.8	5
677517◇	20	18	16	62	0.519	147	2.1	5
677519◇	20	25	16	62	0.598	195	2.4	5

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F). Ampacities have been adjusted for more than three current-carrying conductors based on Table 310.15(C) 1.

