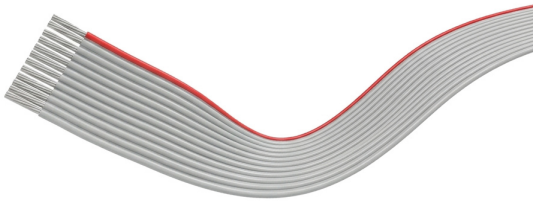
UL 4478

-20°C to +105°C, 300V



Construction
Conductor: Bare copper or Tin-plated copper
Core Insulation: Extruded · XLPE
Cabling: Parallel · Parallel cross-linked XLPE insulated conductors bonded into a flat ribbon cable.
Core Identification: Grey ribbon with Red polarity stripe on Core 1 (GR); 10-colour Rainbow sequence (RW) or All-Black (BK) optional.

Thermal Characteristics
Operating Temperature: -20°C to +105°C

Electrical Characteristics
Operating Voltage: 300V

Application
IDC & Board-to-Board Interconnects: Internal mass-termination (IDC) and discrete board-to-board wiring in computers, instrumentation, and industrial electronics.
Internal Appliance & Electronic Wiring: Compact flat routing in confined enclosures, hinged assemblies, and modular electronic sub-systems.

General Characteristics
Soldering Heat Resistance: Cross-linked insulation resists melt-back, shrinkage, and deformation during soldering and assembly.
Abrasion & Cut-Through Resistance: Tough insulation compound resists pinch, cut-through, and mechanical wear against chassis edges.
Precision Pitch Accuracy: Tightly controlled conductor-to-conductor spacing ensures reliable one-step IDC mass termination.

Standards & Approvals
UL 758: UL 758 Appliance Wiring Material, Style 4478.
CSA C22.2 No. 210: cUL Appliance Wiring Material, Class I Group A.
Halogen-Free: EN 50525-1 Annex B / IEC 60754-1 & IEC 60754-2
Low Smoke: EN 61034-2 / IEC 61034-2

Fire Performance
Fire Retardant: VW-1 / FT1 / FT2

CASMO Part No.	Conductor				Insulation		Nom. Overall Thickness (mm)	Nom. Conductor Pitch (mm)	Pitch Tolerance ± (mm)	Max. DCR @20°C (Ω/km)
	Conductor Size (AWG)	No. Of Strands	Nom. Strand Dia. (mm)	Nom. Conductor Dia. (mm)	Min. Ins. Thickness (mm)	Nom. Ins. Thickness (mm)				
451128/7-P1.27-TS2-XXP-GR	28	7	0.127	0.39	0.20	0.23	0.90	1.27	0.15	239

Table Notes

* "-XXP" denotes total conductor count N (available from 2P to 64P; e.g., "-10P" = 10 conductors).

Please confirm application-specific requirements with CASMO before ordering. Specifications are subject to change; please ensure you are using the latest revision.

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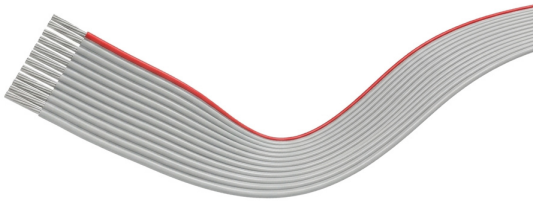


Table Notes (continued)

† "-TS2-" = tinned copper conductor with FT2 flame rating (standard). "-TS1-" = tinned copper conductor with VW-1 / FT1 flame rating (optional).

‡ Colour suffix: "-GR" = Grey ribbon with Red Core-1 stripe (standard); "-RW" = 10-colour Rainbow sequence, "-BK" = All-Black (optional).

FINISHED RIBBON WIDTH CHART — PITCH 1.27 mm (mm)

Cores (-XXP)	Overall Width W (mm)	Cores (-XXP)	Overall Width W (mm)	Cores (-XXP)	Overall Width W (mm)
6P	7.62 ± 0.20	**16P**	20.32 ± 0.20	**40P**	50.80 ± 0.30
8P	10.16 ± 0.20	**20P**	25.40 ± 0.20	**50P**	63.50 ± 0.35
10P	12.70 ± 0.20	**26P**	33.02 ± 0.25	**60P**	76.20 ± 0.40
14P	17.78 ± 0.20	**34P**	43.18 ± 0.25	**64P**	81.28 ± 0.40

Other conductor counts (N, 2P to 64P): Finished width W = 1.27 × N. Width tolerance: ±0.20 mm (N ≤ 20), ±0.25 mm (N = 21–39), ±0.30 mm (N = 40–49), ±0.35 mm (N = 50–59), ±0.40 mm (N ≥ 60).

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