UL 20080

-20°C to +80°C, 30V



Construction
Conductor: Bare copper or Tin-plated copper
Core Insulation: Extruded · PVC
Cabling: Parallel · Parallel extruded PVC insulated conductors bonded into a flat ribbon cable.
Core Identification: 10-colour Rainbow sequence (RW); White ribbon with Orange polarity markings (WO) or Grey with Red Core-1 stripe (GR) optional.

Thermal Characteristics
Operating Temperature: -20°C to +80°C

Electrical Characteristics
Operating Voltage: 30V

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
Clear Polarity & Circuit Coding: Distinct polarity stripe or multi-color sequence simplifies pin-1 alignment and harness inspection.
Clean Zippable Separation: Parallel bonded cores separate cleanly without conductor exposure for easy branching and discrete breakout.
Low-Profile Flat Routing: Flat ribbon geometry folds and routes neatly through narrow slots, hinges, and compact enclosures.

Standards & Approvals
UL 758: UL 758 Appliance Wiring Material, Style 20080.
CSA C22.2 No. 210: cUL Appliance Wiring Material, Class I Group A, FT1.

Fire Performance
Fire Retardant: VW-1 / FT1

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)				
450428/7-P1.30-TS-XXP-RW	28	7	0.127	0.39	0.33	0.38	1.20	1.30	0.15	237

Table Notes

* "-XXP" denotes total conductor count N (available from 2P to 40P; 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.

© CASMO CABLE LLC. All rights reserved.

UL 20080

-20°C to +80°C, 30V



Table Notes (continued)

† "-TS-" = tinned copper conductor, "-AS-" = bare copper conductor.

‡ Colour suffix: "-RW" = 10-colour Rainbow sequence (Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, White, Black — standard); "-WO" = White with Orange polarity markings, "-GR" = Grey with Red Core-1 stripe (optional).

FINISHED RIBBON WIDTH CHART — PITCH 1.30 mm (mm)

Cores (-XXP)	Overall Width W (mm)	Cores (-XXP)	Overall Width W (mm)	Cores (-XXP)	Overall Width W (mm)
2P	2.60 ± 0.20	**6P**	7.80 ± 0.20	**16P**	20.80 ± 0.25
3P	3.90 ± 0.20	**8P**	10.40 ± 0.20	**20P**	26.00 ± 0.25
4P	5.20 ± 0.20	**10P**	13.00 ± 0.20	**24P**	31.20 ± 0.30
5P	6.50 ± 0.20	**12P**	15.60 ± 0.25	**40P**	52.00 ± 0.30

Other conductor counts (N, 2P to 40P): Finished width W = 1.30 × N. Width tolerance: ±0.20 mm (N ≤ 10), ±0.25 mm (N = 11–20), ±0.30 mm (N ≥ 21).

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

© CASMO CABLE LLC. All rights reserved.