CASRAD XE 150MC

-65°C to +150°C, 600V



Construction
Conductor: Tinned Copper · Compact concentric stranded
Core Insulation: Extruded · XL-ETFE
Cabling: Twisted · Concentric twisted lay for tight flexibility and EMI balance
Core Identification: Colour-coded cores per NEMA chart (2C: Black / White; 3C: Black / White / Green; 4C: Black / White / Green / Red)
Shield: Braid · Tinned copper braid (≥85% coverage)
Jacket: Extruded overall jacket · XL-ETFE

Thermal Characteristics
Operating Temperature: -65°C to +150°C
Thermal Shock & Cold-Bend Endurance: Maintains flexibility and mechanical integrity across -65°C to +150°C thermal cycling without cracking or shrink-back.

Electrical Characteristics
Operating Voltage: 600V
Test Voltage: 2500V / 1 min

Application
Motorsport & UAV Sensor / CAN-Bus Harnesses: For EMI-shielded ECU, telemetry, actuator, and differential data runs in space- and weight-constrained race vehicles and unmanned aircraft.
Aerospace & Robotics Interconnects: For shielded avionics sub-assemblies, gimbal control wiring, and ruggedized mobile equipment exposed to vibration and fluids.

General Characteristics
Radiation Cross-Linked Non-Melting Polymer: Electron-beam cross-linked polymer network eliminates cold-flow creep and resists soldering iron melt-back during dense harness termination.
Dual-Wall Scrape & Cut-Through Toughness: Co-extruded dual-wall construction combines high dielectric strength with a tough fluoropolymer outer jacket for superior cut-through resistance.
Fuel, Oil & Solvent Resistance: Engineered to resist aviation fuels, hydraulic fluids, motorsport lubricants, coolants, and industrial cleaning solvents.
360° EMI Braid Screening: Round-wire copper braid shield (≥85% optical coverage) provides low-impedance EMI/RFI protection for sensitive sensor, CAN, and avionics signals.

Standards & Approvals
NEMA WC 27500 (Reference): Shielded and jacketed multiconductor architecture aligned with NEMA WC 27500 (SB / SD XL-ETFE component wires, non-QPL).
SAE AS22759/32 Core Reference: Inner component wires follow CASRAD XE 150S / AS22759/32 dimensional envelope.

Fire Performance
Fire Retardant: IEC 60332-1-2
Fire Performance: SAE AS4373 60° Flame Test

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.

casmocable
CABLES FOR EXTREMES

CASRAD XE 150MC

-65°C to +150°C, 600V



CASMO Part No.	Total Cores	Conductor			Nom. Ins. Thickness (mm)	Braid Coverage (%)	Cable			Max. DCR @20°C (Ω/km)	Max. Cable Weight (kg/km)
		Conductor Size (AWG)	No. Of Strands	Nom. Strand Dia. (mm)			Nom. Jkt. Thickness (mm)	Nom. O.D. (mm)	Max. Overall O.D. (mm)		
522012C26-TS-WH	2	26	19	0.102	0.15	85	0.20	2.46	2.59	135	11.8
522013C26-TS-WH	3	26	19	0.102	0.15	85	0.20	2.59	2.74	135	14.4
522014C26-TS-WH	4	26	19	0.102	0.15	85	0.20	2.79	3.23	135	18.0
522012C24-TS-WH	2	24	19	0.127	0.15	85	0.20	2.72	2.84	86.0	14.6
522013C24-TS-WH	3	24	19	0.127	0.15	85	0.20	2.87	3.02	86.0	18.3
522014C24-TS-WH	4	24	19	0.127	0.15	85	0.20	3.12	3.58	86.0	22.9
522012C22-TS-WH	2	22	19	0.160	0.15	85	0.20	3.02	3.18	53.1	18.2
522013C22-TS-WH	3	22	19	0.160	0.15	85	0.20	3.25	3.35	53.1	23.7
522014C22-TS-WH	4	22	19	0.160	0.15	85	0.20	3.48	4.04	53.1	29.3
522012C20-TS-WH	2	20	19	0.203	0.15	85	0.20	3.43	3.58	32.4	24.1
522013C20-TS-WH	3	20	19	0.203	0.15	85	0.20	3.63	3.78	32.4	32.3
522014C20-TS-WH	4	20	19	0.203	0.15	85	0.20	3.91	4.55	32.4	40.2
522012C18-TS-WH	2	18	19	0.254	0.15	85	0.20	3.94	4.11	20.4	32.6
522013C18-TS-WH	3	18	19	0.254	0.15	85	0.20	4.19	4.37	20.4	45.2
522014C18-TS-WH	4	18	19	0.254	0.15	85	0.20	4.52	5.28	20.4	56.1
522012C16-TS-WH	2	16	19	0.287	0.16	85	0.20	4.34	4.52	15.8	39.7
522013C16-TS-WH	3	16	19	0.287	0.16	85	0.20	4.62	4.80	15.8	55.7

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.

CASRAD XE 150MC

-65°C to +150°C, 600V



CASMO Part No.	Total Cores	Conductor			Nom. Ins. Thickness (mm)	Braid Coverage (%)	Cable			Max. DCR @20°C (Ω/km)	Max. Cable Weight (kg/km)
		Conductor Size (AWG)	No. Of Strands	Nom. Strand Dia. (mm)			Nom. Jkt. Thickness (mm)	Nom. O.D. (mm)	Max. Overall O.D. (mm)		
522014C16-TS-WH	4	16	19	0.287	0.16	85	0.20	5.03	5.87	15.8	69.0

Table Notes

* "-TS-" = tinned copper conductor.

† "-WH" = White outer jacket (standard); "-BK" Black and other jacket colours available on request.

1. Manufactured to CASRAD™ commercial, motorsport, UAV, and industrial specifications (non-QPL). Max. Overall O.D., Max. DCR at 20°C, and Max. Cable Weight are upper specification limits.

COLOR CODE CHART					
Cond. #	Color	Cond. #	Color	Cond. #	Color
1	Black	3	Green		
2	White	4	Red		

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.