RTD-APA

-65°C to +260°C



Construction
Conductor: Nickel Plated Copper · Stranded
Core Insulation: Extruded · PFA
Cabling: Laid Up · 3-core concentric twist
Core Identification: 3-wire IEC 60751 color code (2 Red + 1 White)
Shield: Braid · 2% Nickel-plated copper braid (≥85%)
Jacket: Extruded · PFA

Thermal Characteristics
Operating Temperature: -65°C to +260°C

Electrical Characteristics
Signal Circuit Duty: Low-voltage RTD excitation and bridge measurement signal circuits only (not rated for mains power distribution); extruded core insulation is factory dielectric-verified at 1000 V AC for 1 min.

Application
PT100 and RTD Resistance Thermometry: For three-wire resistance thermometer lead connections between RTD sensors, transmitters and temperature controllers.
Autoclaves, Cryogenic Chambers and Test Rigs: For precision thermal profiling in aerospace autoclaves, environmental test chambers, semiconductor tools and laboratory instrumentation.
Sensors and Instrumentation: For connections between sensors, measuring instruments and associated control equipment.

General Characteristics
Low-Resistance Lead Compensation: Matched three-conductor copper construction minimizes lead-wire resistance imbalance in bridge-connected RTD circuits.
EMC Interference Shielding: Metallic shielding helps suppress electromagnetic interference and maintain signal integrity in electrically noisy environments.
High-Temperature Thermal Stability: Heat-resistant insulation and jacketing resist thermal aging, embrittlement and cut-through in elevated-temperature zones.
Chemical Resistance: Resistant to chemical exposure, helping protect the cable covering against deterioration in chemically demanding environments.

Standards & Approvals
IEC 60751: 3-wire platinum resistance thermometer (PT100 / PT1000) lead-cable configuration and color identification.
ASTM E1137: Industrial platinum resistance thermometry wiring compatibility.
ASTM B355 Class 2: 2% nickel-coated soft copper conductors and internal 2% nickel-plated copper EMI braid shield.

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CABLES FOR EXTREMES

RTD-APA

-65°C to +260°C



CASMO Part No.	Total Cores	Conductor				Insulation		Nom. Shield Thickness (mm)	Cable		
		Conductor Size (AWG)	No. Of Strands	Nom. Strand Dia. (mm)	Nom. Conductor Dia. (mm)	Nom. Ins. Thickness (mm)	Nom. Core O.D. (mm)		Nom. Jkt. Thickness (mm)	Nom. O.D. (mm)	O.D. Tolerance ± (mm)
710403C26-NS-XX	3	26	7	0.16	0.48	0.2	0.9	0.2	0.5	3.3	0.2
710403C24-NS-XX	3	24	7	0.2	0.6	0.2	1.0	0.2	0.5	3.6	0.2
710403C22-NS-XX	3	22	7	0.254	0.76	0.2	1.2	0.2	0.5	4.0	0.2
710403C20-NS-XX	3	20	7	0.32	0.96	0.2	1.4	0.2	0.5	4.4	0.2
710403C18-NS-XX	3	18	7	0.39	1.17	0.25	1.7	0.2	0.5	5.1	0.3
710403C16-NS-XX	3	16	19	0.3	1.5	0.25	2.0	0.2	0.5	5.7	0.3
710403C14-NS-XX	3	14	19	0.37	1.85	0.25	2.4	0.2	0.5	6.6	0.3

Table Notes

* "-NS-" = stranded 2% nickel-plated copper conductor with 2% nickel-plated copper braid EMI shield (standard for 260°C PFA RTD cable). Standard 3-core IEC 60751 configuration (2 Red + 1 White); 2-core (2C) and 4-core (4C) constructions available upon request.

† "-XX" = outer jacket color code: RD Red (standard), WH White, BK Black, or GY Grey (3-core identification per Color Code Chart below).

COLOR CODE CHART					
Cond. #	Color	Cond. #	Color	Cond. #	Color
1	Red (Lead A)	2	Red (Lead A')	3	White (Sense B)

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