



AXELERON™ GP C-0588 BK CPD

Black Low Density Polyethylene Compound for Cable Jacketing

Overview

AXELERON™ GP C-0588 BK CPD is a prime quality telephone cable black jacketing compound ("CPD"). It offers excellent environmental stress-cracking resistance, outdoor weatherability, toughness, low temperature performance, and extrudability.

AXELERON™ GP C-0588 BK CPD can be used by wire and cable manufacturers for the entire range of telephone cable sizes and configurations. It can be used for both air-core, and jelly-filled constructions, and in both aerial and buried applications. AXELERON™ GP C-0588 BK CPD can also be used as a high-grade power cable jacket.

Specifications

AXELERON™ GP C-0588 BK CPD meets the following raw material specifications:

- ASTM D 1248 IC-5, Grades E5, J1, J3
- Federal LP-390C, III-L, Grades 2, 3 and 4, Category 5
- REA PE-22, 38, 39, 86, 89, 90

Cable jacketed with AXELERON™ GP C-0588 BK CPD, using sound commercial extrusion practices, should meet the following specifications:

- ICEA: S-61-402; NEMA WC5
- ANSI: C8. 35
- ASTM: D 2308
- British Post Office Specification M-132G
- Telcordia GR 421 Core
- ANSI/ICEA S-84-608-1988

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.932 g/cm ³	0.932 g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.34 g/10 min	0.34 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, F20	> 500 hr	> 500 hr	
Carbon Black Content	2.6 %	2.6 %	ASTM D1603
Absorption Coefficient - (kAB/m)	> 400	> 400	ASTM D3349
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ^{1,2}			ASTM D638
Yield	1580 psi	10.9 MPa	
--	2380 psi	16.4 MPa	
Tensile Elongation ^{1,2} (Break)	700 %	700 %	ASTM D638
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Constant (1 MHz)	2.54	2.54	ASTM D1531
Dissipation Factor (1 MHz)	2.0E-4	2.0E-4	ASTM D1531
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	400 to 440 °F	204 to 227 °C	

Extrusion Notes

AXELERON™ GP C-0588 BK CPD provides excellent surface finish and outstanding output rates over a broad range of conditions. For optimum results, use melt extrusion temperatures in the suggested range of 400 to 440 °F (204-227°C). Hopper drying at 150-160 °F (67-71°C) to remove moisture is recommended.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Type IV, 2.0 in/min (50 mm/min)

² Speed C

