



Product Overview

Coaxial Cables according to CERN specification 461 Rev. 6 and DESY specification

Flexible 50 Ω Miniature Coaxial Cable with crosslinked PE	2XCH 0.3L/0.87 (C-50-1-1) CAD50
Flexible 50 Ω Miniature Coaxial Cable with crosslinked PE	2XCH 0.5L/1.5 (C-50-2-1) CA50
Flexible flame retardant non corrosive and high screened 50 Ω Coaxial Cable with screening factor \geq 100 dB	02Y(St)C(St)H 0.96L/2.6AF (C-50-3-1) CB50
Flexible flame retardant non corrosive and high screened 50 Ω Coaxial Cable with screening factor \geq 100 dB	02Y(St)C(St)H 2.25L/6.1 AF (C-50-6-1) CC50
Flame retardant non corrosive and high screened 50 Ω Coaxial Cable with screening factor \geq 100 dB according to DESY specification	02Y(St)C(St)H 2.6/7.3AF
Flame retardant non corrosive and high screened 50 Ω Coaxial Cable with screening factor \geq 100 dB	02Y(St)C(St)H 4.2/11.5 AF (CK50)
General information to construction and application of Draka High Frequency Cables according to national and international standards	General Information
Construction of the High Frequency Cables	Construction
Electrical properties of the High Frequency Cables	Electrical Properties
Overview of the technical data	Technical Data



Product Overview

Application

The radio-frequency cables described in this chapter are used in transmitter and receiver installations in radio communications as well as in the entire field of CERN and DESY radio-frequency technology and electronics.

The cables are mainly dedicated for indoor installations on metal cable trays and under certain conditions suitable for mobile applications and as connecting cable for measuring instruments.

Construction

The inner conductors which essentially determine the mechanical and electrical properties of the cables are drawn with very close tolerances from electrolytic copper and can be supplied bare, tin or silver plated. Highly flexible cables are manufactured with stranded inner conductor and for very thin inner conductors copperweld wires are used in view of their greater tensile strength.

Stabilized polyethylene is used almost exclusively as insulation material. Foam-PE insulation is required only for cables with exceptionally low attenuation and capacity.

The outer conductors of radio-frequency cables are almost exclusively in copper braid with high coverage or in longitudinal double Al-PET foil and a tinned copper braid.

As in IEC recommendations, the cable sheaths are manufactured in the standard design with a highly resistant, flame retardant PVC sheath or a flame-retardant, non corrosive sheath of copolymer (FRNC).

Identification

The cable sheaths cover the colours, black RAL 9005, white RAL 9010 and brown, RAL 8017.

Sheath printing: Name of manufacturer, cable type, batch number, the halogenfree and flame retardant types additional with "FRNC".

Properties

Temperature range		- 30°C up to + 70°C
Bending radius during installation	without load	single cable 5 x D multicore cable 10 x D
	with load	single cable 10 x D multicore cable 20 x D (D = Cable diameter)
Fire propagation test		for cables < 10 mm acc. to IEC 60332-1 for FRNC-cables > 10 mm acc. to IEC 60332-3-24 and VDE 0472 part 804 class C
Corrosivity		for FRNC-cables acc. to IEC 60754-2