

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.	45 284 - 16 HH
Company	bedea Berkenhoff & Drebes GmbH Herborner Str. 100 35614 Asslar, Germany
Product Description	Radio frequency coaxial cables
Type	RG 58-FRNC, RG 213-FRNC, RG 214-FRNC, RG 223-FRNC
Environmental Category	None
Technical Data / Range of Application	Temperature range: -20 to 70 °C Inner conductor: Bare copper (RG 213-FRNC) Tinned copper (RG 58-FRNC) Silver coated copper (RG 214-FRNC, RG 223-FRNC) Insulation: Polyethylene (PE) Braid: Bare copper (RG 213-FRNC) Tinned copper (RG 58-FRNC) Silver coated copper (RG 214-FRNC, RG 223-FRNC) Sheath: SHF 1 Electrical data and characteristics: According to the manufacturer's data sheet
Test Standard	IEC 60096-0-1:2012, 61196-9-1:2015, 61196-9:2014, 60092-360:2014, IEC 60332-1-2:2004;
Documents	Test report : BEDEA dated 2016-04-06 witnessed by DNV GL BEDEA dated 1/2014 Specification: FE-No.: 900495, 890063, 950098, 940075
Remarks	This certificate is issued on the basis of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007 and the GL Type Approval Procedure for Shipboard Cables. Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Valid until **2021-04-26**

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Electrical Characteristics	Capacitance pF/m	Impedance Ω	Screen attenuation dB
RG 58-FRNC	101,3 +- 2,5	50 +- 2	>50
RG 213-FRNC	100,5 +- 2,5	50 +- 2	>50
RG 214-FRNC	100,8 +- 2,5	50 +- 2	>80
RG 223-FRNC	101,6 +- 2,5	50 +- 2	>80

Attenuation max. dB/100m

Frequency MHz	1	10	20	50	100	200	500	1000	2000	3000
RG 58-FRNC	<1,8	<5,6	<7,9	<12,6	<18,1	<26,1	<42,9	<63,3		
RG 213-FRNC	<0,7	<2,3	<3,3	<5,3	<7,7	<11,1	<18,2	<26,8		
RG 214-FRNC	<0,7	<2,1	<3,0	<4,9	<7,1	<11,6	<18,1	<28,0	<44,2	<58,4
RG 223-FRNC	<1,5	<4,9	<6,9	<11,0	<15,7	<22,4	<36,1	<52,2	<76,0	<95,2

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