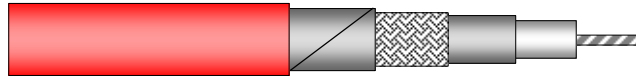


## HTC-50-7-2, 2.25LZ/7.25AF, CCH50

Coaxial and Triaxial FRNC-High Voltage Low Power Cables acc. to CERN and DESY Specifications



### Application

see product overview

### Standards

acc. to CERN-Specification 477 rev. 2

### Flame resistance

IEC 60332-3-24

### Construction

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| Inner conductor | stranded copper wires, tinned, 7x0.75, diameter 2.25 mm          |
| Insulation      | XPE, crosslinked, diameter 7.25 mm                               |
| Outer conductor | Al-PET-Al-foil + copper braid, tinned                            |
| Wrapping        | Al-PET-Al-foil                                                   |
| Sheath          | FRNC, flame retardant, non corrosive Copolymer, diameter 10.1 mm |
| Colour          | red RAL 3002                                                     |

### Mechanical properties

|                                              |              |                                              |
|----------------------------------------------|--------------|----------------------------------------------|
| Minimum bending radius (during Installation) | without load | 5 x D (D= outer diameter)                    |
|                                              | with load    | 10 x D (D= outer diameter)                   |
| Temperature range                            |              | -25° C to + 70° C                            |
| Radiation resistance                         |              | ≥ 10 <sup>6</sup> Gy (= 10 <sup>8</sup> rad) |
| Fire propagation test                        |              | cables < 10 mm acc. to IEC 60332-1           |
|                                              |              | cables > 10 mm acc. to IEC 60332-2-24        |
| Corrosivity                                  |              | acc. to IEC 60754-2                          |
| Smoke density                                |              | acc. to IEC 61034                            |

## HTC-50-7-2, 2.25LZ/7.25AF, CCH50

### Electrical properties

at 20°C

|                           |                  |                                          |
|---------------------------|------------------|------------------------------------------|
| DC resistance             | Inner conductor  | $\leq 6.1 \Omega/\text{km}$              |
|                           | Outer conductor  | $\leq 4.1 \Omega/\text{km}$              |
| Mutual capacitance        |                  | 101 pF/km                                |
| Characteristic impedance  | at 1 MHz         | $50 \Omega \pm 2 \Omega$                 |
| Operating voltage         |                  | 18 kV <sub>DC</sub>                      |
| Test voltage              | conductor/screen | 45 kV <sub>DC</sub>                      |
| Insulation resistance     |                  | $\geq 5 \text{ G}\Omega \cdot \text{km}$ |
| Partial discharge test    |                  | 19.1 kV <sub>rms</sub>                   |
| Discharge pulse magnitude |                  | $\leq 20 \text{ pC}$                     |

### Technical data

| Product code | Designation      | Type               | Brand name            | Outer diameter<br>mm | Weight<br>kg/km | Standard delivery length<br>m | Drum size<br>*OWD   | Gross weight<br>kg | Copper content | Tensile force<br>N |
|--------------|------------------|--------------------|-----------------------|----------------------|-----------------|-------------------------------|---------------------|--------------------|----------------|--------------------|
| 1002818      | 2X(St)C<br>(St)H | 2.25LZ/<br>7.25 AF | (HTC-50-7-2)<br>CCH50 | 10.1                 | 157             | 1000                          | 800/<br>330/<br>448 | 182                | 76.7           | 520                |

\*OWD (One way drum)

### Product Code Table

| Product Description                  | Product Code | PG Reference Code | PG Part Number  |
|--------------------------------------|--------------|-------------------|-----------------|
| DR HTC-50-7-2 (2.25LZ/7.25 AF) CCH50 | 1002818      | 60013657          | <b>60013657</b> |

© PRYSMIAN GROUP 2015, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result.

The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian Group. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior notice. This specification is not contractually valid unless specifically authorised by Prysmian Group.