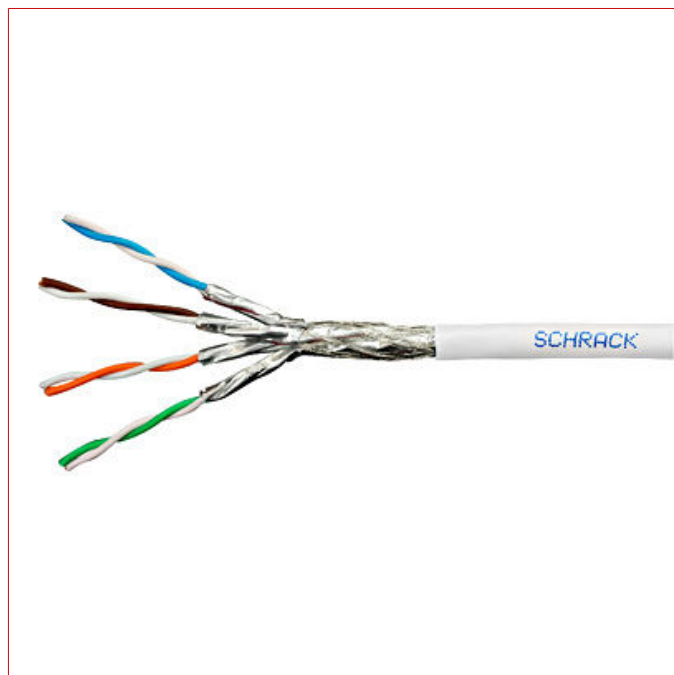


Podatkovni list izdelka: HVKP423H01

# Kabel S/FTP Cat.7, 4x2xAWG23/1, 1.000Mhz, LSOH, 40%

Dca-s2-d1-a1, bel, kolut 1000m



## SCHRACK-Info

Inštalacijski kabel za uporabo v komunikacijskih inštalacijah

- Primeren za vse aplikacije razreda D do F (npr. 10GBase-T, 1000Base-T, 100Base-TX, ATM) ter VoIP, PoE, 4PPoE
- Primarni (Campus), sekundarni (Riser), tercialni (horizontalni)

### Standardi:

- ISO/IEC 11801, EN 50173-1
- Boljši od kategorije 7 po IEC 61156-5, EN 50288-4-1
- Veliko boljši od IEEE 802.3an 10 Gigabit Ethernet

## Tehnični podatki

|                     |                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------|
| kategorija          | Cat.7                                                                                         |
| kabelski oklop      | S/FTP                                                                                         |
| vodnik              | masivna bakrena žica, AWG23/1 (0,58mm)                                                        |
| barvna oznaka paric | Parica 1 bela/modra<br>Parica 2 bela/oranžna<br>Parica 3 bela/zelena<br>Parica 4 bela / rjava |

## Tehnični podatki - Nadaljevanje

|                                                                                  |                                                                                                                 |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| število paric                                                                    | 4, zvito skupaj                                                                                                 |
| izolacijski material                                                             | penjeni polietilen                                                                                              |
| premer izolacijskega materiala (mm)                                              | 1<br>43                                                                                                         |
| oklop                                                                            | oklopljen                                                                                                       |
| enojni oklop                                                                     | laminiran poliester iz aluminija, aluminij zunaj (PiMF)                                                         |
| celotni oklop                                                                    | pocinjene Cu-žice                                                                                               |
| oplet (%)                                                                        | 40                                                                                                              |
| vlečna nit za prerez                                                             | najlon                                                                                                          |
| kabelski plašč                                                                   | LS0H                                                                                                            |
| plašč                                                                            | LS0H, FRNC v skladu z:<br>IEC 61034-1/2, EN 50268-1/2<br>IEC 60754-1/2, EN 50267-1/2<br>IEC 60332-1, EN 60332-1 |
| klasifikacija glede na EN50575                                                   | Dca                                                                                                             |
| razvoj/gostota dima                                                              | s2                                                                                                              |
| razvoj vnetljivih kapljic                                                        | d1                                                                                                              |
| razvoj kislin                                                                    | a1                                                                                                              |
| barva plašča                                                                     | bela                                                                                                            |
| požarna obremenitev (kJ/m)                                                       | 500                                                                                                             |
| zunANJI premer (mm)                                                              | 7                                                                                                               |
| nominalna masa (kg/km)                                                           | 53                                                                                                              |
| barva                                                                            | bela                                                                                                            |
| temperaturno območje - delovanje (°C)                                            | -30 do +60                                                                                                      |
| temperaturno območje - montaža (°C)                                              | +0 do +50                                                                                                       |
| polmer upogibanja kabla - delovanje (dolgo) (Ø)                                  | 4                                                                                                               |
| polmer upogibanja kabla - inštalacija (kratko) (Ø)                               | 8                                                                                                               |
| največja natezna moč (N)                                                         | 110                                                                                                             |
| nazivna napetost                                                                 | ≤72V DC in ≤50V AC                                                                                              |
| največji enosmerni tok na prevodnik (25 °C) (A)                                  | 1,5                                                                                                             |
| DC-odpornost pri 20 °C (Ohm/100m)                                                | ≤9,5                                                                                                            |
| asimetrija odpornosti: v parih / med pari (%)                                    | ≤2 / ≤4                                                                                                         |
| D.C. insulation resistance: conductor – conductor and conductor – screen (MΩ*km) | ≥ 5000                                                                                                          |
| Dielectric strength conductor – conductor (2 sec) (kV DC)                        | 2,5                                                                                                             |
| Dielectric strength conductor – screen (2 sec) (kV DC)                           | 2,5                                                                                                             |
| delovna zmogljivost (nF/km)                                                      | ≤56                                                                                                             |
| Capacitance unbalance pair to ground (pF/km)                                     | ≤1600                                                                                                           |
| NVP (%)                                                                          | 78                                                                                                              |
| dolžina/postavitev                                                               | 1000m - kolut                                                                                                   |
| IEEE Compliance                                                                  | PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4                                                                |

## Tabela datoteke: S/FTP kabel Cat.7, 4x2xAWG23/1, 1000Mhz, LSOH, 40%, bel

|                                                     | Freq. (MHz)  | Specification                     | Unit     |
|-----------------------------------------------------|--------------|-----------------------------------|----------|
| NVP (Nominal velocity of propagation)               | 4 – 600      | 0.78                              | c        |
| Skew                                                | 4 – 600      | ≤ 25                              | ns/ 100m |
| Propagation delay                                   | 4 – 600      | ≤ 534 + 36/Vf                     | ns/ 100m |
| Attenuation                                         | 4 – 600      | ≤ 1.8 * Vf + 0.01 * f + 0.20 / Vf | dB       |
| TCL, level 1 (Transverse conversion loss)           | 1 – 250      | ≥ 40 – 10 * log (f)               | dB       |
| ELTCL (Equal level transverse conversion loss)      | 1 – 30       | ≥ 35 – 20 * log (f)               | dB       |
| NEXT (Near end cross talk)                          | 4 – 600      | ≥ 102.4 - 15 * log (f) (78 max.)  | dB       |
| PS NEXT (Power sum near end cross talk)             | 4 – 600      | ≥ 99.4 - 15 * log (f) (75 max.)   | dB       |
| ACR-N (Attenuation cross talk ratio)                | 4 – 600      | NEXT – Dämpfung                   | dB       |
| PS ACR-N (Power sum attenuation cross talk ratio)   | 4 – 600      | PSNEXT – Dämpfung                 | dB       |
| ACR-F (Equal level far end cross talk)              | 4 – 600      | ≥ 95.3 - 20 * log (f) (78 max.)   | dB       |
| PS ACR-F (Power sum equal level far end cross talk) | 4 – 600      | ≥ 92.3 - 20 * log (f) (75 max.)   | dB       |
| Input impedance open / short (Zo/s)                 | 4 – 600      | 100                               | Ω        |
| RL (Return loss)                                    | 4 ≤ f ≤ 10   | ≥ 20 + 5 * log (f)                | dB       |
|                                                     | 10 ≤ f ≤ 20  | ≥ 25                              | dB       |
|                                                     | 20 ≤ f ≤ 600 | ≥ 25 - 7 * log (f/20)             | dB       |
| Coupling attenuation (type I)                       | 30 – 100     | ≥ 85                              | dB       |
|                                                     | 100 – 1000   | ≥ 85 - 20 * log (f/100)           | dB       |
| Transfer impedance (ZT, grade 1)                    | 1            | < 10                              | mΩ/m     |
|                                                     | 10           | < 10                              | mΩ/m     |
|                                                     | 30           | < 30                              | mΩ/m     |
|                                                     | 100          | < 100                             | mΩ/m     |

## REFERENCE STANDARD: IEC 61156-5

| Frequency   | 1 * | 4    | 10   | 16   | 31,3 | 62,5 | 100  | 125  | 200  | 300  | 600  | 1000 * | MHz     |
|-------------|-----|------|------|------|------|------|------|------|------|------|------|--------|---------|
| Attenuation | 2   | 3.7  | 5.9  | 7.4  | 10.4 | 14.9 | 19   | 21.4 | 27.5 | 34.2 | 50.1 | 66.9   | dB/100m |
| NEXT        | 78  | 78   | 78   | 78   | 78   | 75.5 | 72.4 | 70.9 | 67.9 | 65.2 | 60.7 | 57.4   | dB/100m |
| PS NEXT     | 75  | 75   | 75   | 75   | 75   | 72.5 | 69.4 | 67.9 | 64.9 | 62.2 | 57.7 | 54.4   | dB/100m |
| ACR-N       | 76  | 74.3 | 72.1 | 70.6 | 67.6 | 60.6 | 53.4 | 49.6 | 40.4 | 31.1 | 10.6 | -9.5   | dB/100m |
| PS ACR-N    | 73  | 71.3 | 69.1 | 67.6 | 64.6 | 57.6 | 50.4 | 46.6 | 37.4 | 28.1 | 7.6  | -12.5  | dB/100m |
| ACR-F       | 78  | 78   | 75.3 | 71.2 | 65.4 | 59.4 | 55.3 | 53.4 | 49.3 | 45.8 | 39.7 | 35.3   | dB/100m |
| PS ACR-F    | 75  | 75   | 72.3 | 68.2 | 62.4 | 56.4 | 52.3 | 50.4 | 46.3 | 42.8 | 36.7 | 32.3   | dB/100m |
| RL          | 20  | 23   | 25   | 25   | 23.6 | 21.5 | 20.1 | 19.4 | 18   | 17.3 | 17.3 | 15.1   | dB/100m |

\* Limits below 4 MHz and values at 1000 MHz are for information only.

## TYPICAL VALUES AT 20°C

| Frequency   | 1 * | 4   | 10  | 16  | 31,3 | 62,5 | 100  | 125  | 200  | 300  | 600  | 1000 | MHz     |
|-------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|---------|
| Attenuation | 1,8 | 3,3 | 5,3 | 6,7 | 9,4  | 13,4 | 17,1 | 19,3 | 26,7 | 30,8 | 45,5 | 60,3 | dB/100m |
| NEXT        | 103 | 100 | 98  | 97  | 95   | 94   | 93   | 92   | 91   | 90   | 89   | 88   | dB/100m |
| PS NEXT     | 100 | 97  | 95  | 94  | 92   | 91   | 90   | 89   | 88   | 87   | 86   | 85   | dB/100m |
| ACR-N       | 101 | 97  | 93  | 91  | 85   | 81   | 76   | 71   | 64   | 59   | 43   | 28   | dB/100m |
| PS ACR-N    | 98  | 94  | 90  | 88  | 82   | 78   | 73   | 70   | 61   | 56   | 40   | 25   | dB/100m |
| ACR-F       | 95  | 94  | 93  | 91  | 90   | 87   | 85   | 83   | 77   | 74   | 60   | 50   | dB/100m |
| PS ACR-F    | 92  | 91  | 92  | 88  | 87   | 84   | 82   | 80   | 74   | 71   | 57   | 47   | dB/100m |
| RL          | 27  | 30  | 32  | 32  | 35   | 33   | 32   | 31   | 30   | 25   | 23   | 21   | dB/100m |

\* Limits below 4 MHz and values at 1000 MHz are for information only.

## Tabela izdelkov

| Opis                                                                                  | NVP (%) | Teža bakra (kg/km) | Šifra      |
|---------------------------------------------------------------------------------------|---------|--------------------|------------|
| Kabel S/FTP Cat.7, 4x2xAWG23/1, 1.000Mhz, LS0H, 40%<br>Dca-s2-d1-a1, bel, kolut 1000m | 78      | 28                 | HVKP423H01 |
| <b>dodatni pribor</b>                                                                 |         |                    |            |
| S-JACK modul RJ45, oklopljen, Cat.6a 10Gb, 4PPoE 100W, SFB<br>v škatli 24 kosov       |         |                    | HSEMRJ6GS2 |
| S-JACK modul RJ45, oklopljen, Cat.6a 10Gb, 4PPoE 100W, SFB<br>posamezno pakiranje     |         |                    | HSEMRJ6GS1 |
| Modul, RJ45, TOOLLESS LINE, oklop., Cat.6a 10GB 4PPoE 100W<br>AMD2                    |         |                    | HSEMRJ6GWA |
| Modul, RJ45, TOOLLESS LINE, oklopljen, razred Ea 10GB 4PPoE<br>100 W (SFA)            |         |                    | HSEMRJ6GWT |
| Modul RJ45, TOOLLESS LINE, oklopljen, Cat.6 (SFA)                                     |         |                    | HSEMRJ6GWS |
| Stojalo za kabelski kolut, nosilnost 250kg<br>maks. širina koluta 52cm                |         |                    | HTOOL00006 |
| Vezica, kabelska, sprijemalna, modra, 16mm x 4m                                       |         |                    | Q7KB0416-B |
| Vezica, kabelska, sprijemalna, rdeča, 16mm x 4m                                       |         |                    | Q7KB0416-R |
| Vezica, kabelska, sprijemalna, črna, 16mm x 4m                                        |         |                    | Q7KB0416-S |
| Vezica, kabelska, sprijemalna, rumena, 16mm x 4m                                      |         |                    | Q7KB0416-Y |
| Vezica, kabelska, sprijemalna, zelena, 16mm x 4m                                      |         |                    | Q7KB0416-U |