Data Sheet

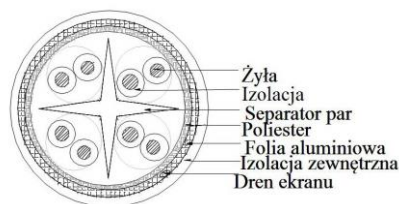## ICT cable, FTP (F/UTP) kat.6 450 MHz LSZH-FR, wire 4x2x23AWG code: K/EMITERNET-FTP6LS0H.

Description and Technical Characteristics of the Product:

Category 6 four-pair shielded cable is designed for broadband data transmission systems.

The cable design is based on 4 pairs of wires (the strands are made of pure copper) twisted together in such a way as to reduce near-end crosstalk. In addition, the pairs are protected with an aluminium foil shield. This cable is available with LSZH-FR outer sleeving (LS0H-FR, "low smoke zero halogen flame retardant") - halogen-free cable. The cable has 4 pairs of colour-coded wires. The cable tested up to a frequency of 450MHz.

The manufacturer's designation is printed on the cable, as well as compliance with standards and a length marking: EmiterNet -HN F/UTP cat.6 450MHz LSZH-FR 23AWG x 4PR, Verified to EN/PL 50173 ISO/IEC 11801   EIA/TIA 568-C.2 CE Reaction to fire: Dca-s2-d2-a2 MM/YY   xxxm
, where MM/YY is the month and year, xxx – cable length.

Products compatible with the cable:

panels:

19" panel, 24xRJ45 STP Cat. 6 (1U) blue, with shelf, code: DCN/PPFA674EKS248C6
19" panel 48xRJ45 STP Cat. 6 (1U) blue, with shelf, code: DCN/3012IPRL48S-C6-1U

sockets:

STP RJ45 Cat.6 keystone blue, code: DCN/FA-1090SF-8-C6
STP RJ45 Cat.6 keystone blue (tool-free) slim, code: EM/SQKSS-C6

Technical parameters:

Outer diameter of the cable	7.3mm
Diameter of a single strand	0.6mm ± 0.03mm; 23 AWG
Outer insulation of the cable	LSZH-FR (LS0H-FR)
Colour of external insulation	blue
Strand insulation	PE
Strands	single-wire copper
Wave impedance	100Ω +/- 15Ω for 1–100MHz
	100Ω +/- 22Ω for 100–450MHz
Resistance of any pair for DC voltage (20°C)	90Ω/km
NVP	70.00%
Insulation resistance of any strand (min)	150MΩ/km
Mutual capacitance of any pair	150pF/100m
Bending radius when laying	80mm
Bending radius during operation	50mm
Operating temperature	-20ºC - +70 ºC
Temperature during laying	0ºC - +50 ºC
Weight	57 kg/km
Packaging	500m drum

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Parameters				
Dynamic parameters:				
Frequency	*Return Loss*	*Attenuation*	*NEXT*	*ACR*
(MHz)	(dB)	(dB/100m)	(dB)	(dB)
1	20.0	2.0	74.3	72.3
4	23.0	3.8	65.3	61.5
8	24.5	5.3	60.8	55.4
10	25.0	6.0	59.3	53.3
16	25.0	7.6	56.2	48.7
20	25.0	8.5	54.8	46.3
25	24.3	9.5	53.3	43.8
31.25	23.6	10.7	51.9	41.2
62.5	21.5	15.4	47.4	32.0
100	20.1	19.8	44.3	24.5
150	18.9	24.7	41.7	16.9
200	18	29.0	39.8	10.8
250	17.3	32.8	38.3	5.5
350	16.3	39.7	36.2	--
450	15.7	45.9	34.6	--

Frequency	*PSNEXT*	*ELFEXT*	*PSELFEXT*	*Delay*
(MHz)	(dB)	(dB/100m)	(dB/100m)	(ns/100m)
1	72.3	67.8	64.8	570.0
4	63.3	55.8	52.8	552.0
8	58.8	49.7	46.7	546.7
10	57.3	47.8	44.8	545.4
16	54.2	43.7	40.7	543.0
20	52.8	41.8	38.8	542.0
25	51.3	39.8	36.8	541.2
31.25	49.9	37.9	34.9	540.4
62.5	45.4	31.9	28.9	538.6
100	42.3	27.8	24.8	537.6
150	39.7	24.3	21.3	536.9
200	37.8	21.8	18.8	536.5
250	36.3	19.8	16.8	536.3
350	34.2	--	--	535.9
450	32.6	--	--	535.7

Standards compliance: EIA/TIA 568-C.2, EIA/TIA 568-B.2, ISO/IEC 11801, EN50173, IEC61156-5, EN50288-6-1, IEC60332-1, IEC 60754-2, IEC61034 (LS0H)

The cable meets the requirements of PN-EN50575.
Class of reaction to fire (flammability class): Dca-s2-d2-a2*
*according to tests performed by VDE Testing and Certification Institute according to the following standards: EN-13501-6/ EN50575 and EN 60332-1-2, EN 50399 , EN61034-2, EN 60754-2.

DECLARATIONS: CE-Declaration of Conformity, Declaration of Performance (DoP) No. 006/5020671/7-1

Product warranty 5 years from the date of purchase. Designed for installation with EmiterNet certified or standard series system. The possibility of obtaining a 25-year System Warranty (after meeting the conditions specified in the EmiterNet Structural Cabling System Warranty Program).

We have made every effort to ensure that the information presented is accurate and complete. However, we are not responsible for the accuracy and completeness of the data and, in particular, we cannot guarantee that this specification does not contain errors or mistakes. The information contained in this specification may be changed at any time without notice.