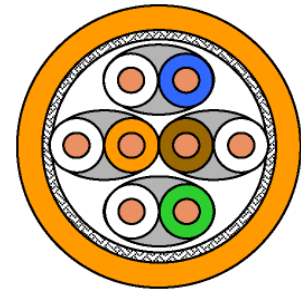


Data Cable – Twisted Pair – Cat-7

S/STP 4x2xAWG 23



Construction:

Conductor	Bare copper wire $\varnothing 0,56\text{mm}$
Insulation	Foamskin Polyethylene, $\varnothing 1,4\text{mm}$
Twisting	2 cores to the pair
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs (PiMF) to the core
Screen	Tinned copper braid (approx. 35% coverage)
Sheath	FRNC, orange

Technical Data:

Outer diameter	7,0mm
Fire load	590 MJ/km 0,170 kWh/m
Weight	65 kg/km
Copper content	26 kg/km
Tensile force	110N

Mechanical Properties:

Bending radius	≥ 40 mm without load ≥ 80 mm with load
Temperature range	-20 °C up to 60 °C during operation 0 °C up to 50 °C during installation

Electrical Properties:

DC loop resistance	$\leq 165 \Omega/\text{km}$
Resistance unbalance	$\leq 2\%$
Insulation resistance (500V)	$\geq 2000 \text{ M}\Omega/\text{km}$
Capacitance at 800 Hz	nom. 43 nF/km
Capacitance unbalance (pair to ground)	$\leq 1500 \text{ pF}/\text{km}$
Characteristic impedance (1-100 MHz)	$(100 \pm 15) \Omega$
(100-250 MHz)	$(100 \pm 18) \Omega$
(250-600 MHz)	$(100 \pm 25) \Omega$
Nominal velocity of propagation	approx. 78%
Propagation delay	$\leq 427 \text{ ns}/100\text{m}$
Delay skew	$\leq 12 \text{ ns}/100\text{m}$
Test voltage (DC, 1 min)	1000 V

Frequency	1	4	10	16	20	31,2	62,5	100	155	200	300	450	600	750	900
Attenuation (dB/100m)	1.8	3,4	5,4	6,8	7,7	9,6	13,7	17,4	21,9	25,0	30,9	38,3	44,8	52,0	59,4
NEXT (dB)	100	100	100	100	100	100	100	100	94	92	89	87	85	83	82
PS-NEXT (dB)	97	97	97	97	97	97	97	97	91	89	86	84	82	80	79
ACR (dB/100m)	98	97	95	93	92	90	86	83	72	67	58	48	40	31	23
PS-ACR (dB/100m)	95	94	92	90	89	87	83	80	69	64	55	45	37	28	20
ELFEXT (dB/100m)	105	105	97	93	91	87	81	77	73	71	67	64	61	59	58
PS-ELFEXT (dB/100m)	105	102	94	90	88	84	78	74	70	68	64	61	58	56	55
Return Loss (dB)	-	27	30	30	30	30	30	30	26	25	24	23	22	21	20



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