
SAMCON SKD01-T

Sectional view

1. Jacket
2. Braid
3. Shielding pair
4. Insulation
5. Conductor

SAMCON® SKD01-T

The cable **SKD01-T** is a system cable for connecting digital camera systems and was developed to be used in industrial areas. Thanks to its extremely robust jacket the cable is particularly suited for use in industrial environment.

The **SKD01-T** is a high speed cable for Industrial Ethernet for fixed installations in dry, wet, or damp rooms. The cable meets the transmission characteristics for Category 6a of IEC 61156-5 Ed. 2 even at -60°C and it has an excellent resistance against mechanical stress, oils as well as greases and is halogenfree.

Data.

Application areas:

IEEE 802.3 : Ethernet 10Base-T ; Fast Ethernet 100Base-T ; Gigabit Ethernet 1000Base-T ; 10GBase-T
 IEEE 802.5 : 16 MB; ISDN ; FDDI ; ATM ; Cable sharing
 IEEE 802.3at : PoE suitable

Standards:

EN 50288-10-1; IEC 61156-5 ; EN 50173 ; ISO/IEC 11801 2. edition
 EN 60332-1-2 ; IEC 60754-2 ; UL AWM 21586

Chemical characteristics:

RoHS 2011/65/EU ; IEC 60811-2-1 (IRM 902, 4h at 70°C); UV resistant

Labeling:

WWW.SAMCON.EU SKD01-T / Cat.6A / 4x2xAWG22/1 GN J/W xxxxx m

Design:

Outer jacket:	PUR FHF
Color:	yellow green, RAL 6018
Diameter:	9.1 ± 0.2 mm
Wall thickness:	1.0 ± 0.1 mm


Conductor design:

Conductor:	AWG 22/1, blank
Insulation:	SFS-PE foamed
Diameter:	1.52 ± 0.02 mm
Color code:	IEC 708-1
Shielding pairs:	Plastic laminated aluminium foil
Shielding:	Copper, tinned wire 0.10, optical cov. app. 85%


Mechanical characteristics:

Temperature range:	
Fixed installed:	-60°C to +80°C
During installation:	-10°C to +50°C
Bending radius:	10 x diameter during installation 5 x diameter after installation
Maximum tractive force:	140N
Pressure resistance at 20°C:	14 bar


Electrical characteristics:

Loop resistance:	Maximum 115 Ohm / km according to VDE 0812
Insulation resistance:	Minimum 5 GOhm x km bei +20°C
Operating capacity:	Nom. 45 nF / km
Characteristic impedance at 100MHz:	100 Ohm ± 5 Ohm
Test voltage:	700 V / AC
Velocity of propagation:	Approx. 0.78 c
Signal term:	Maximum 425 ns/100m
Running time difference:	< 8 ns/100m
Screening attenuation to 1000 MHz:	> 85 dB
Coupling attenuation:	> 90 dB
Transfer impedance:	< 5 mOhm/m at 10MHz

Typical transmission performance:

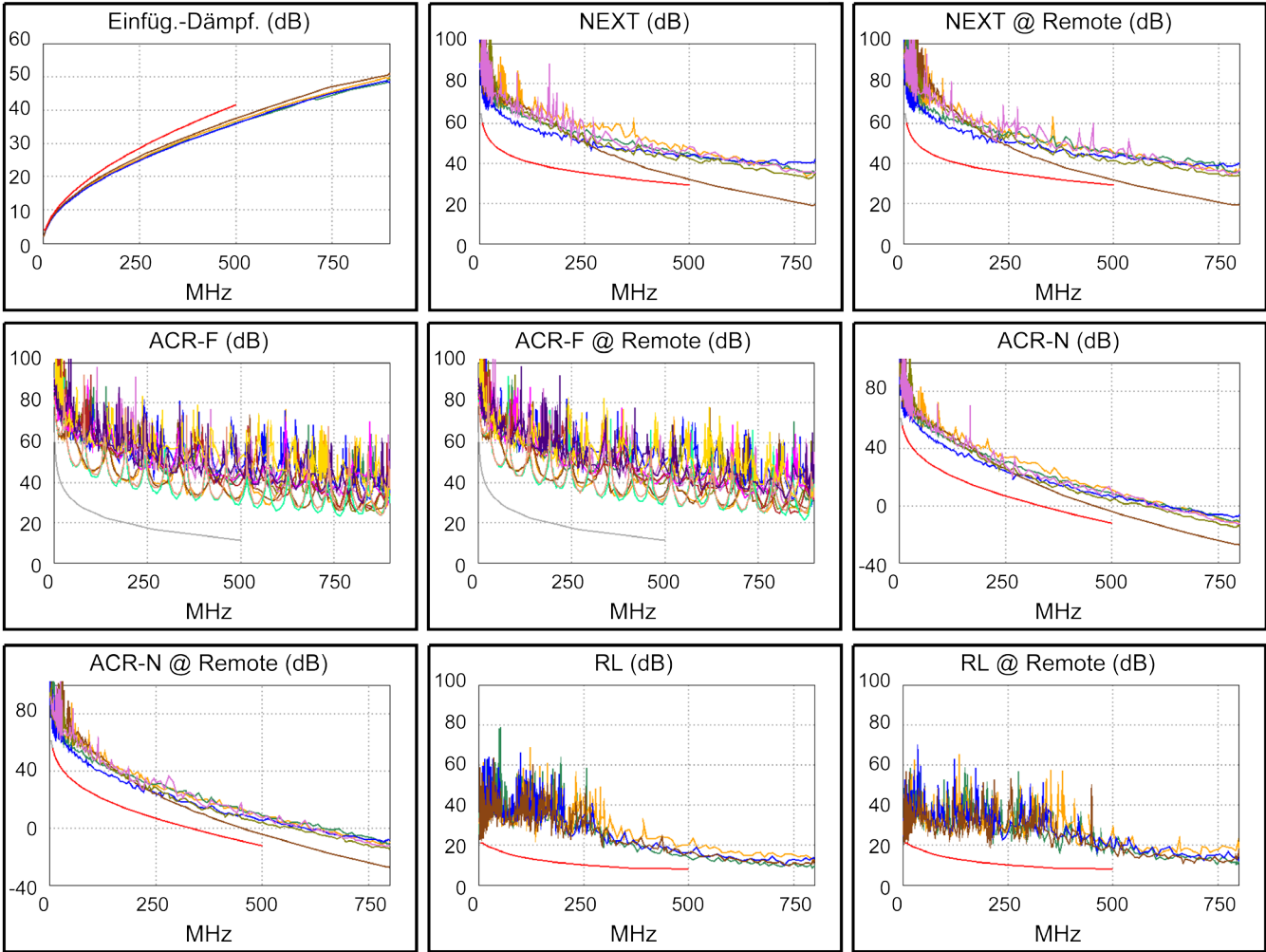
f in MHz	Attenuation (dB/100m) nom.	NEXT (dB) nom.	ACR dB/100m nom.	ELFEXT (dB/10m) nom.	RL (dB) nom.
1	1.7	98	96	95	25
4	3.4	98	95	93	28
10	5.5	95	89	92	30
16	6.9	93	86	91	30
20	7.8	91	83	90	30
31.25	9.8	88	78	86	30
62.5	14.2	85	70	82	30
100	19.0	83	64	77	30
155	24.2	80	56	73	28
200	27.3	78	51	70	26
300	33.2	75	42	67	25
500	42.1	70	38	62	23



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Sample measurement report 107 meter EN50173 PL2 Ea:



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