
SAMCON SKD02-T

Sectional view

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

SAMCON® SKD02-T

The cable **SKD02-T** is a system cable for connecting digital camera systems and was particularly developed to be used in hazardous areas. It meets the requirements for cables and wires according to DIN EN 60079-14. When using the applicable cable gland, it is possible to insert the cable directly into flameproof enclosures.

The **SKD02-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 60079-14:2014 „Electrical installations design, selection and erection“ (q.v. declaration of conformity)
 IEC 60079-14:2013 „Electrical installations design, selection and erection“ (q.v. declaration of conformity)
 EN 50288-10-1; IEC 61156-5 ; EN 50173 ; ISO/IEC 11801 2. edition
 EN 60332-1-2 ; IEC 60754-2 ; UL AWM 21586


Hazardous areas characteristics:

The cable meets the requirements for cables in hazardous areas to avoid inter-zone gas-transfer in accordance to IEC/EN 60079-14 Appendix E.


Chemical characteristics:

RoHS 2011/65/EU ; IEC 60811-2-1 (IRM 902, 4h at 70°C) ;
 The cable is sunlight resistant in accordance with UL 2556 Sec. 4.2.8.5 (720h).
 The cable is flame retardant in accordance with IEC 60332-1-2.
 The cable is oil resistant in accordance with IEC 60811-404 (7x24h at 90°C).
 The cable is mud resistant in accordance with NEK 606.


Labeling:

WWW.SAMCON.EU SKD02-T / Cat.6A / 4x2xAWG23/1/ xxxxx m


Design:

Outer jacket: PUR FHF
 Color: yellow green, RAL 6018
 Diameter: 8.9 ± 0.3 mm

Conductor design:

Conductor: AWG 23/1, blank
 Insulation: SFS-PE foamed
 Diameter: 1.43 ± 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: -60°C to +80°C
 Fixed installed: -30°C to +80°C
 During installation: -30°C to +80°C
 Bending radius: 8 x diameter during installation
 4 x diameter after installation
 Weight: 102 kg/km


Electrical characteristics:

Loop resistance: Maximum 140 Ohm / km according to VDE 0812
 Insulation resistance: Minimum 5 GOhm x km bei +20°C
 Operating capacity: Nom. 50 nF / km
 Characteristic impedance at 100MHz: 100 Ohm ± 5 Ohm
 Test voltage: 1000 V / AC
 Signal run time: 5.3 ns/m



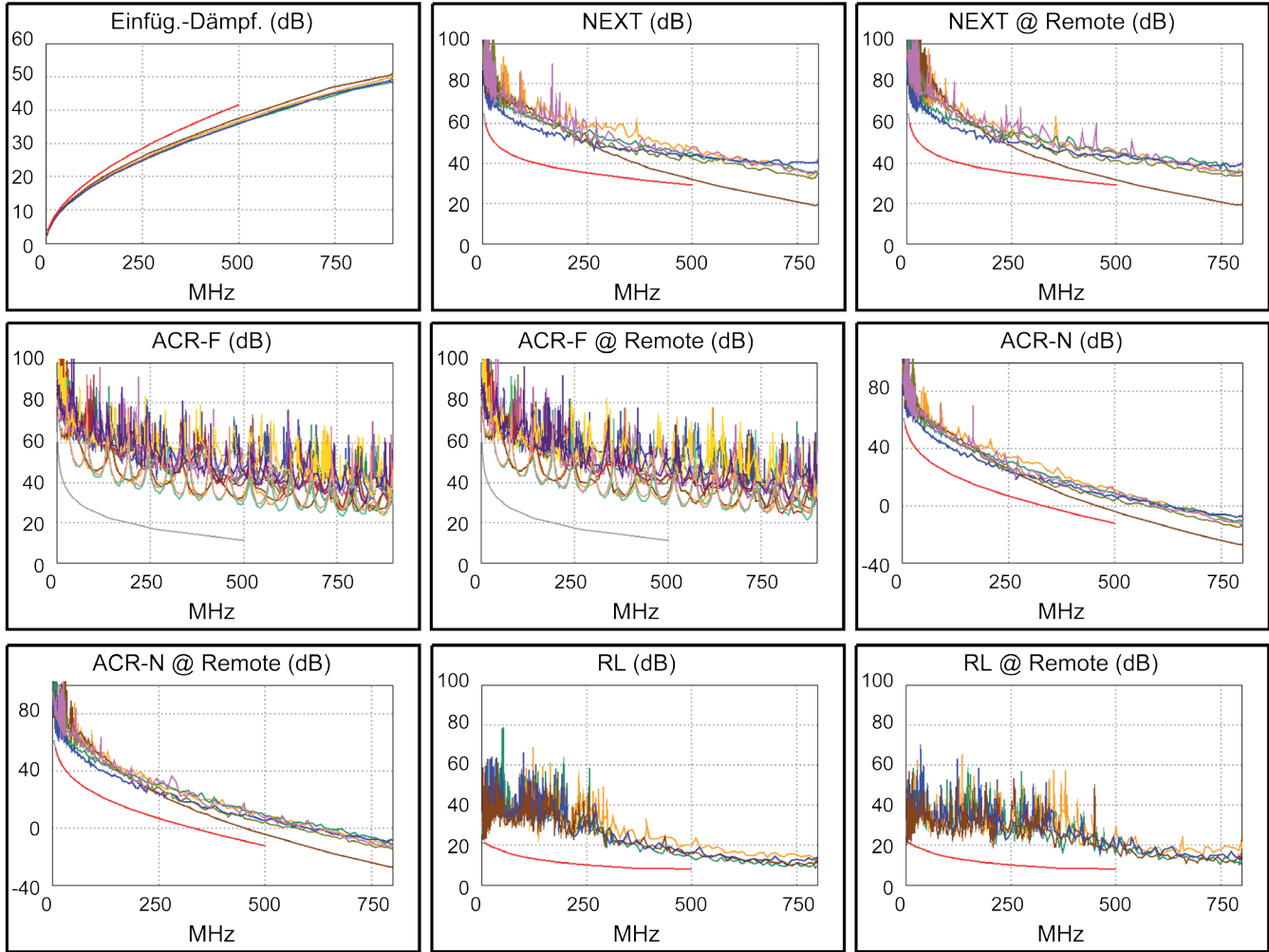
Typical transmission performance:

f in MHz	Attenuation (dB/100m) nom.	NEXT (dB) nom.	ELFEXT (dB/10m) nom.	RL (dB) nom.
1	2.1	75.3	68	20
4	3.8	66.3	56	23
10	5.9	60.3	48	25
16	7.5	57.2	44	25
20	8.4	55.8	42	25
31.25	10.5	52.9	38	23.6
62.5	15.0	48.4	32	21.5
100	19.1	45.3	28	20.1
155	24.1	42.4	24	18.8
200	27.6	40.8	22	17.3
300	34.3	38.1	19	17.3
500	45.3	34.8	14	17.3

Schillerstrasse 17
D-35102 Lohra-Altenvers

info@samcon.eu
T: +49 6426 9231-0
F: +49 6426 9231-31

Sample measurement report 107 meter EN50173 PL2 Ea:



© SAMCON GmbH All rights and technical changes reserved. No liability for wrong or missing data