

SAMCON ASKD02-T
 Sectional view

SAMCON[®] ASKD02-T

The cable **ASKD02-T** is an armoured 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 **ASKD02-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

Chemical characteristics:

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

Labeling:

WWW.SAMCON.EU ASKD02-T / Cat.6A / 4x2xAWG23/1 GN JW xxxxx m

Design:

Outer and inner jacket: PUR
 Color: yellow green, RAL 6018
 Diameter: 12.0 ± 0.4 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:
 Fixed installed: -60°C to +80°C
 During installation: -30°C to +80°C
 Bending radius: 20 x diameter during installation
 10 x diameter after installation
 Weight: 179 kg/km
 Mechanical protection: Steel braid with wire 0.2



Electrical characteristics:

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

Typical transmission performance:

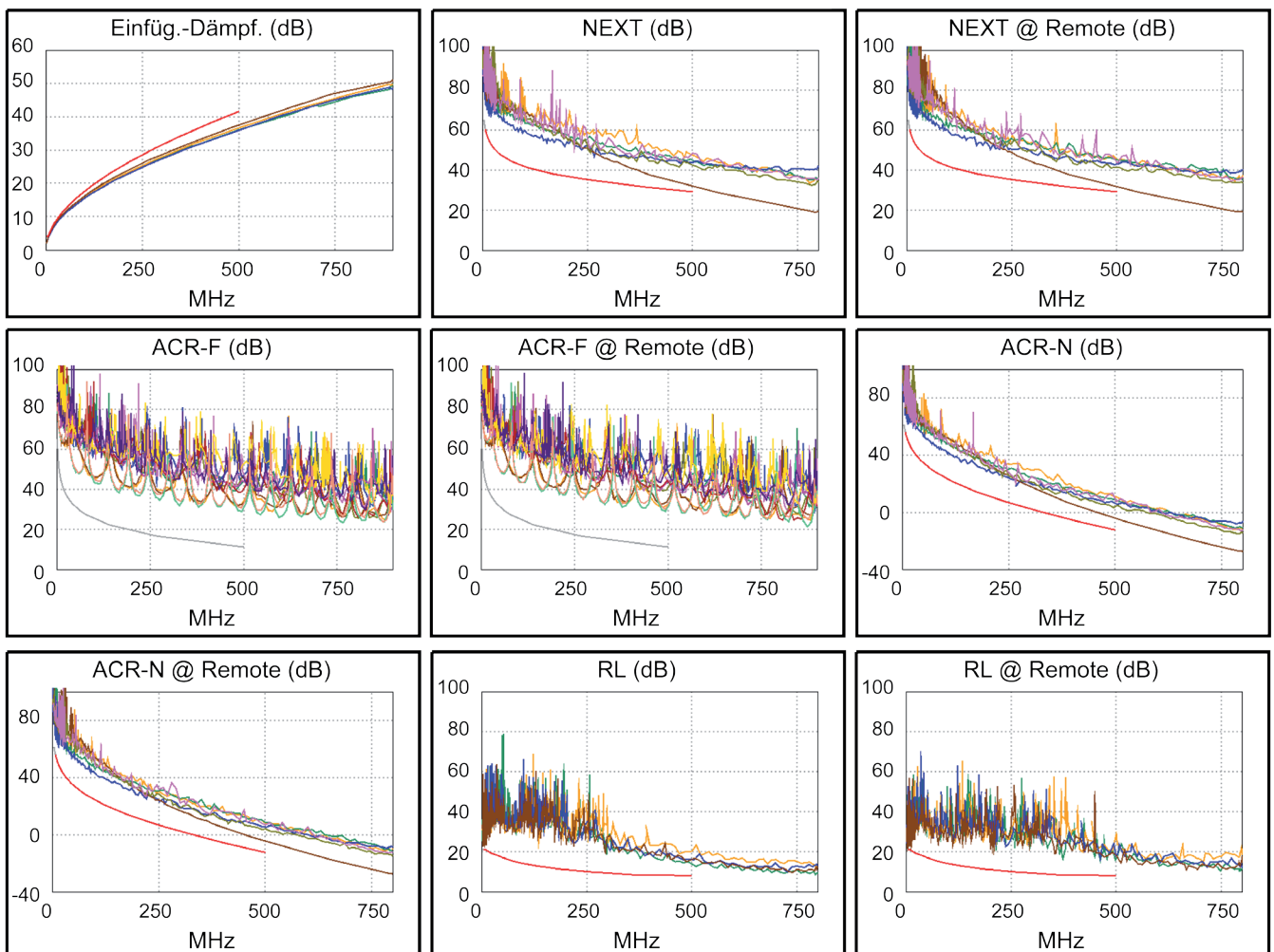
f in MHz	Attenuation (dB/100m) nom.	NEXT (dB) nom.	ACR dB/100m) nom.	ELFEXT (dB/10m) nom.	RL (dB) nom.
1	2.1	75.3	96	68	20
4	3.8	66.3	95	56	24.5
10	5.9	60.3	89	48	25
16	7.5	57.2	86	43.9	25
20	8.4	55.8	83	42	25
31,25	10.5	52.9	78	38.1	23.6
62,5	15.0	48.4	70	32.1	21.5
100	19.1	45.3	64	28	20.1
155	24.1	42.4	56	24.2	18.8
200	27.6	40.8	51	22	17.3
300	34.3	38.1	42	18.5	17.3
500	45.3	34.8	38	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 Class Ea:



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