



SAMCON SKD01
 sectional view

SAMCON® SKD01

The **SKD01** is a system cable for digital camera systems.
 (System Kabel Digital 01)

The **SKD01** was developed to be used in hazardous areas. It meets the requirements for cables and wires according to DIN EN 60079-14. The cable can be inserted directly into flameproof enclosures.

The **SKD01** 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. It has an excellent resistance against mechanical stress, oils and greases and is halogenfree.

Data.

Mechanical and environmental characteristics:

Outer diameter:	ø 8.7 ±0.3 mm
Maximum bending radius:	200 mm
Conductor material	acc. to DIN EN 13602 Cu-ETP-R460-P
Screen material	acc. to DIN EN 13602 Cu-ETP-A013-C
Insulating material	acc. to DIN EN 50290-2-23 (VDE 0819), table 2/B
Jacket material	acc. to CENELEC HD22.10, compound type TMPU
Flame retardant	acc. to IEC 60332-1-2
Oil resistant	acc. to DIN EN 60811-2-1
Stripping of sheath:	min. 5 N to max. 70 N at a length of 50 mm
Permissible temperature range:	-40 °C (-40 °F) up to 80 °C (176 °F)
Weight approx.:	91 kg/km (61 lb/1000 ft)

Design:

Solid bare copper wire ø 0,64 (AWG22/1)	ø 0.64 mm (0.025 in)
Insulation of foamed Polyethylene (PE) with skin	ø 1.52 mm (0.059 in) nom. ø 1.60 mm (0.063 in) max.

Core:

2 cores individually screened with aluminium bonded plastic tape and stranded to form the stranded element	
Sequence of colours:	pair 1: white / blue (WH/BU)-blue (BU), pair 2: white / orange (WH/OG)-orange (OG) pair 3: white / green (WH/GN)-green (GN), pair 4: white / brown (WH/BN)-brown (BN)
Shield braiding of tinned copper wires 0.13 mm diameter (36 AWG)	
Coverage approx. 85%	
Non woven tape, longitudinally applied	ø 6.7 mm (0.264 in)

Jacket:

Special compound based on polyurethane (PUR) green (GN) flame retardant, halogen free	
Wall thickness	approx. 1.0 mm

Electrical data at 20°C:

Loop resistance	≤ 118,2 Ohm/km
Signal run time	≤ 4.7 ns/m
Insulation resistance	≥ 5 GOhm*km
Capacitance at 800 Hz	approx. 45 pF/m
Velocity of propagation	nom. 79%
Characteristic impedance:	
1 – 100 MHz	100 (±15) Ohm
100 - 500 MHz	100 (± 22) Ohm
Operating voltage (peak)	≤ 100V
Test voltage (wire/wire/screen rms 50Hz 1min)	700V