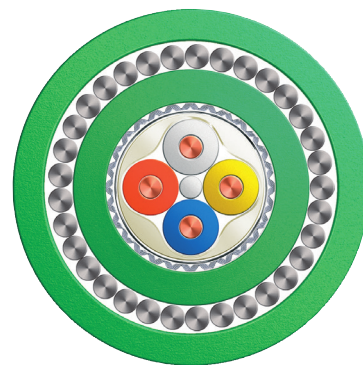


DataGuard® (SWA)

PROFINET Type A Industrial Ethernet Cat 5e ES

LSZH FireFighter®



Cable Design

Wire

Conductor	Solid bare copper wire (22awg)	Ø 0,65 mm
Insulation	Polyethylene (PE)	Ø 1,50 mm

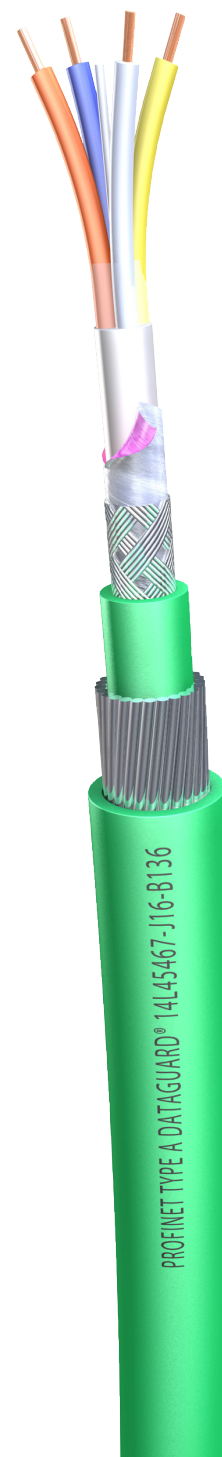
Core

Central Element	Filler	
1° Layer	4 wires twisted (WH-YE-BU-OG)	
Tape	Plastic tape overlapped	
Easystrip Jacket	Soft Thermoplastic copolymer	Ø 4,0 mm
Screen	Alulaminat foil overlapped	
Braid	Tinned copper wire braid, 85% coverage	Ø 4,60 mm

Inner Jacket LSZH (Low Smoke Zero Halogen), Green Ø 6,5 ± 0,20 mm

Armour DataGuard® Steel Wire Armour (DSWA)

Outer Jacket LSZH FireFighter®, Green Ø 11,0 ± 0,50 mm



Characteristics

- Indoor/Outdoor applications
- Mechanical protection
- Rodent Protection
- Direct Burial
- UV-Stable and colourfast
- Flame retardant acc. to IEC 60332-3 Cat. A/F,
- Halogen free acc. to IEC 60754,

Specification

Part Number	Type
14L45467-J16-B136	Industrial Ethernet Cat 5e, PROFINET cable for permanent installation LSZH, 2x2x22AWG1, DataGuard® (SWA) / LSZH FireFighter®

DataGuard® (SWA)

PROFINET Type A Industrial Ethernet Cat 5e ES

LSZH FireFighter®

Electrical Data @ 20 °C

Loop resistance		≤	124	Ohm/km
Resistance Difference			5	%
Signal run time		≤	5,3	ns/m
Insulation resistance		≥	500	MOhm*km
Characteristic Impedance	1-100 MHz		100±15	Ohm
Ground unbalance attenuation	64 kHz	>	43	dB
Capacity unbalanced to ground	1 MHz	≤	3300	pF/m
Return Loss (dB)	1 ≤ f ≤ 10 MHz		20+5	log (f)
Return Loss (dB)	10 ≤ f ≤ 20 MHz		25	
Return Loss (dB)	20 ≤ f ≤ 100 MHz		25-7	log (f/20)
Surface Transfer Impedance	10 MHz	≤	10	mOhm/m
UL-Rating			600	V
Test Voltage (wire/wire/screen rms 50Hz min.)			2000	V

Frequency (MHz)	0,256	0,512	0,772	1	4	10	16	20	31,25	62,5	100
Attenuation typ. Value (dB/100m)	0,8	1,0	1,1	1,6	3,2	5,2	6,9	7,8	10,5	15	19,5
NEXT typ. Value (dB/100m)	-	-	≥ 80	≥ 80	75	70	65	63	60	55	50
FEXT typ. Value (dB/100m)	-	-	≥ 80	≥ 80	75	65	59	55	50	47	45

Mechanical & Thermal Characteristics

Permissible temperature range	-25 ~ +75 °C
Min. Bending radius allowed	10 x Ø (see Ø tolerance)
Weight (approx.)	340 kg/km