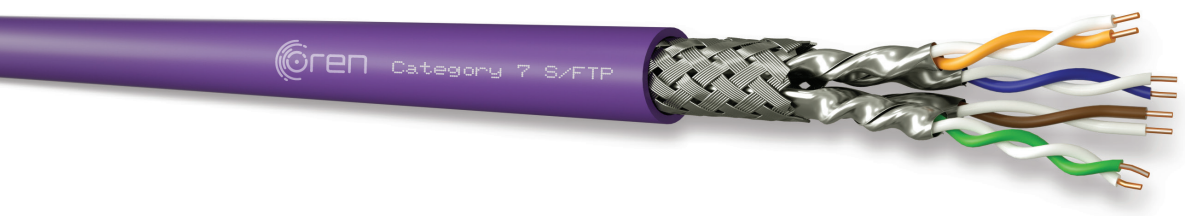

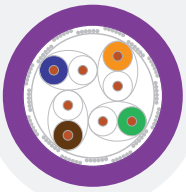

EC900 Cat 7 S/FTP

Application

10Base-T, 100Base-T, 1000Base-T, 10GBase-T, and Filedbus systems. Applicable for Power over Ethernet PoE / PoE+

Cable Construction

- 23 AWG Bare Copper
- Skin/Foam/Skin PE Insulation
- Al-Pet Foil 100% Coverage
- Tinned Copper Wire Braiding
- Ø 7.30 mm ± 0.20
  LSZH or PE Jacket

Standards

EIA/TIA-568
ISO/IEC 11801 Class F
IEC 61156-5 , EN 50173-1
EN 50288-4-1

Technical Properties

Copper Weight	24.9 kg/km
Min. Bending radius during draw in	60 mm
Min. Bending radius permanently installed	30 mm
Max. Tensile Strength	95 N
Min. Crush Resistance	1000 N/10 cm
Min. Impact	10 Impacts
Installation Temperature	0°C ... +50°C
Operating Temperature	-20°C ... +70°C
Packing	305 / 500 m

Electrical Properties at 20 °C

Max. Conductor Resistance	< 9.5 Ω / km
Max. Resistance Unbalance	< 2%
Min. Insulation Resistance	5000 MΩ x m
Mutual Capacitance	< 56 pF / m
Capacitance Unbalance	1600 pF / km
Impedance at 100 MHz	100 ± 5 Ω
Velocity of Propagation	76 %
Delay Skew	< 25 ns / 100 m
Coupling Attenuation	> 80 dB
Segregation Class	D
Transfer Impedance at 1/10/30 MHz	< 10/10/30 mΩ/m
Test Voltage	1000 V
Operating Voltage	125 V

Electrical Data (Nominal) @ 20 °C

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS - NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100 m)	PS-ACRF (dB/100 m)	Return Loss (dB)
1	2.0	104	101	99	96	101	98	24
4	3.4	104	101	97	94	98	95	30
10	4.9	101	98	95	92	98	95	32
100	17.3	100	97	82	79	84	81	34
250	28.2	95	92	63	60	70	67	27
500	42.0	95	92	56	53	61	58	24
600	44.0	88	85	45	42	59	56	22
700	53.5	84	81	30	27	52	49	20
800	55.5	83	80	28	25	50	47	19
900	57.3	80	77	23	20	49	46	18
1000	59.1	77	75	23	20	48	45	18

Product Name	Euro Class (CPR)	Flame Retardancy	Corrosive Gases Test	Smoke Density	Cable Weight
EC900 Cat 7 S/FTP LSZH $B2_{ca}$	$B2_{ca}$	EN 60332-1-2	EN 50267-2-3	EN 61034-2	58
EC900 Cat 7 S/FTP LSZH C_{ca}	C_{ca}	EN 60332-1-2	EN 50267-2-3	EN 61034-2	58
EC900 Cat 7 S/FTP LSZH D_{ca}	D_{ca}	EN 60332-1-2	EN 50267-2-3	EN 61034-2	58
EC900 Cat 7 S/FTP LSZH E_{ca}	E_{ca}	EN 60332-1-2	EN 50267-2-3	EN 61034-2	58
EC900 Cat 7 S/FTP PE F_{ca}	F_{ca}	N/A	N/A	N/A	50

*HF(HalogenFree)=HFFR(HalogenFree,FlameRetardant)=FRNC(FlameRetardant,NoneCorrosive)=LSNH(LowSmokeNoneHalogen)=LSZH(LowSmokeZeroHalogen)=LS0H(LowSmokeZeroHalogen)