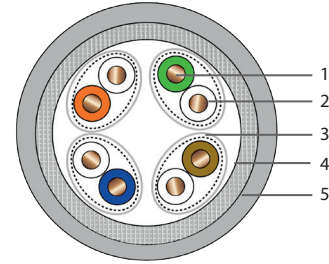


CAT 7A S-FTP 22 AWG 1200 MHZ DATA CABLE

TS EN 60332-1-2



WHERE IT IS USED/ FEATURES	CABLE STRUCTURE
ERAT CAT 7A cables are used to carry digital and analog voice, data and video, POE signals ERAT CAT 7A S/FTP cables are a type of cable that carries data at a speed of 10000 Megabits 1200 MHz. According to customer demands, LSZH-HFFR and PVC sheathed production is made. • 10000BASE-TX Gigabit Ethernet • 10000BASE-T Gigabit Ethernet • 1000BASE-TX Gigabit Ethernet • 1000BASE-T Gigabit Ethernet • ATM 155 / ATM 25 • 100BASE-T "Fast Ethernet" • 100BASE-T2/ 100BASE-T4 • 100BASE-TX • 10BASE-T Ethernet • ISDN, TPDDI, TP-PMD • Power Over Ethernet (PoE)	1. Copper Conductor 2. PE Insulation 3. Aluminium Foil 4. Tinned Copper Braid 5. Outer Jacket

PHYSICAL PROPERTIES	
Conductive	Solid, annealed copper
Conductor Diameter	22 AWG
Insulation	Polyolefin
Number of Insulated Conductors	8, twisted in 4 pairs
Overall Inner Shield	Laminated aluminum foil providing 100% coverage (the foil face is turned outwards)
Overall Outer Shield	Tinned Copper Braid
Outer Jacket	LSZH (Low Smoke Zero Halogen) flame retardant or PVC component
Jacket Color	Gray. (Ral 7040) (Different colors can be produced according to customer demand.)
Cable information the text	Brand, Type of cable, Relevant standards, Date, Serial number, Meter
CPR	Dca

MECHANICAL AND ENVIRONMENTAL PROPERTIES	
Pulling Force	50 N / mm ² max
Bending Radius (Short Term)	4 x Cable Diameter
Bending Radius (Long Term)	8 x Cable Diameter
Operating Temperature	-40 to +70 °C
Installation Temperature	-10 to +50 °C
Storage Temperature	-40 to +70 °C

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PACKAGING & SIZE & WEIGHT		
Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	7.9±0.3	31.1
1000 m Plywood Reel	7.9±0.3	63.4

ELECTRICAL SPECIFICATIONS	
Characteristic Impedance	100±6 Ohm @ 1-1200 MHz
DC Resistance	70 Ohm/km max.
Resistance Unbalance	2% max.
Capacitance	45 pF/m nom. @ 1 KHz
Capacity Imbalance (Wire to ground)	1600 pF/km max. @ 1 KHz.
Voltage	72 Vdc max.
Dielectric Strength	1500 Volt / 1 dakika min. rms
Velocity of Propagation (NVP)	Min. %77 - 80
The Signal Transmission Time (Prop. Delay)	534 + 36/f ^{1/2} nS/100m max. @ 1-1200 MHz
Propagation Delay Skew	25 nS/100m max @ 1-1200 MHz
Insulation Resistance	5000 MegaOhm•km min. @ 500 Vdc
Coupling attenuation	55 dB min @ 30-100 MHz 55-20Log(f/100) @100-1200 MHz
Transfer Impedance	10 mOhm/m max @ 1-30 MHz 30 MOhm/m max @ 30-100 MHz

Frequency (MHz)	Return Loss (dB)	Insertion Loss (dB/100m)	NEXT Loss (dB)	PS NEXT Loss (dB)	PS ELFEXT (dB/100m)
1	20,0	2,1	78,0	75,0	-
4	23,0	3,7	78,0	75,0	75,0
8	24,5	5,2	78,0	75,0	74,2
10	25,0	5,8	78,0	75,0	72,3
16	25,0	7,3	78,0	75,0	68,2
20	25,0	8,2	78,0	75,0	66,3
25	24,3	9,2	78,0	75,0	64,3
31,25	23,6	10,3	78,0	75,0	62,4
62,5	21,5	14,6	78,0	75,0	56,4
100	20,1	18,5	75,4	72,4	52,3
200	18,0	26,5	70,9	67,9	46,3
250	17,3	29,7	69,4	66,4	44,3
300	17,3	32,7	68,2	65,2	42,8
400	17,3	38,0	66,4	63,4	40,3
500	17,3	42,8	64,9	61,9	38,3
600	17,3	47,1	63,7	60,7	36,7
1000	17,3	61,9	60,4	57,4	32,3
1200	17,3	68,4	59,2	56,2	30,7

Values above 1000 MHz are for reference

INSULATION COLORS							
							
Blue	White	Orange	White	Green	White	Brown	White