TECHNICAL DATASHEET
CAT-5e F/UTP 4x2x24 AWG

UNALKABLO
Cable Systems

APPLICATION

These cables are used in data communication and analogue systems that work up to 155 Mbit/s.
Also support to ISDN, 10 Base-T Ethernet, 100 Base-T Ethernet, 1000 Base-T Ethernet, TP-PMD/TP-DDI, ATM SYSTEMS.

Reference standards	*IEC 61156-5, TIA/EIA-568-C.2, ISO/IEC 11801, EN 50173-1*
1 *CONDUCTOR*	
Material of conductor	*Electrolytic copper wire 24 AWG*
2 *INSULATION*	
Material of insulation	*PE (Polyethylene) acc.to EN 50290-2-23*
Thickness of insulation (mm)	*0,245*
Diameter of insulation (mm)	*1,00*
Colour code	*EIA/TIA568.B2*
Stranding	*Two cores twisted in pair and pairs stranded together*
3 *SCREEN*	
Screen type	*AL/PET (Aluminium/polyester tape 20 x 0,024) with tinned copper drain wire (0,40)*
4 *SHEATH*	
Material of outer sheath	*PVC (Polyvinyl chloride) compound acc.to EN 50290-2-22 TM 51*
Thickness of sheath (mm)	*0,7*
Overall cable diameter (mm) approx	*5,25*
Colour of outer sheath	*Grey*
TECHNICAL CHARACTERISTICS	
Max. DC resistance of conductor of 20 °C	*94 Ω/km*
Working voltage	*250 V*
Test voltage	*1200 V*
Insulation resistance	*5000 MΩ.km*
Mutual capacitance	*48 pF/m*
Characteristic empendance	*100 ±15 Ω*
Velocity of propagation	*% 67*
Resistance unbalanced	*% 3*
Minimum bending radius during laying (mm)	*8xCable Ø*
Weight of cable (approx)	*37 kg/km*

ELECTRICAL CHARACTERISTICS

Frequency	*Attenuation*	*Near end crosstalk (NEXT)*	*Return loss*
MHz	*(dB/100m) max.*	*(dB/100m) min.*	*(dB/100m) min.*
1	2	68,3	20
4	4	59,3	23
10	6,5	53,3	25
16	8	50,3	25
20	9	48	25
25	10,2	47,3	24
31,25	11	45,9	22
62,5	16,5	41,4	20
100	21	38,3	19
155	25,5	36,5	18