



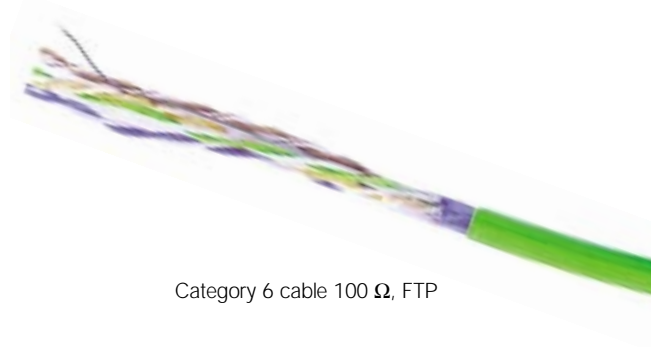
Volition™

Category 6 cable 100 Ω, FTP

Belonging to the 3M™ Volition™ Network Solutions, this 350 MHz FTP Category 6 cable will deliver the best performance when used with the 3M RJ45 K6 jacks, to give highest margins over Category 6 / TIA/EIA 568 and ISO 11801 and EN 50173 Class E standards.

An integral cross separator structure ensures permanent stability of the physical structures for enhanced long term performance and reduced crushing risk at cable anchorage points.

The green sheath has length marking which is easy and convenient for the installer and gives a clear identification of cable and link lengths.



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Applications

- IEEE 802.3-IEEE802.5
- FDDI
- ATM
- RNIS

Standards

- EN 50167
- EN 50173
- ISO/IEC 11801
- TIA/EIA 568-B
- IEC 61156-5

Flammability Performances

- Fire retardant IEC 60332-1
- Halogen free (LSOH version) IEC 60754-1

Installation Characteristics

Maximum pulling tension (N):	80
Minimum installed bend radius (mm):	30
Minimum bend radius during installation (mm):	60
Nominal weight:	52 kg/km
Temperature rating (°C):	
Installation:	0 to +50
Operation:	-20 to +60

Features

- Excellent electrical performance - Tested to 350MHz
- Length markings on cable sheath
- Low smoke, zero halogen (LSOH) and PVC versions available

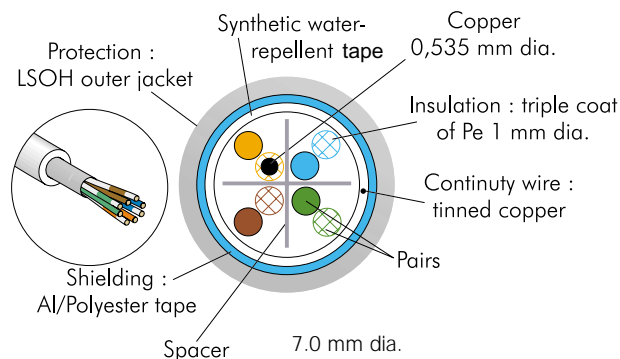
Benefits

- Good headroom at Category 6 performance
- Installer friendly
- Solutions for all levels of fire protection

Specifications

Electrical characteristics at 20° C :

Conductor resistance at 20° C (max.):	98,6 Ω/km
Dielectric strength at 50 Hz:	1kV/1min.
Insulation resistance (min.):	5000 MΩ/km
Velocity (nom.)	66 %
Characteristic impedance	100 +/- 15 Ω (1 to 100 MHz)
Mutual capacitance (nom.)	< 55 pF/m
Propagation delay skew	< 20 ns/100m



Cable performance

Frequency (MHz)		1	4	10	16	20	31,25	62,5	100	200	250	300**
Max. Attenuation (dB/100 m)	Typical Value	1,9	3,6	5,7	7,3	8,3	10,3	14,8	19	27,3	31	34
	Cat. 6 (max.)	2,1	3,8	6	7,6	8,5	10,8	15,5	19,9	29,2	33	-
Min. NEXT (dB)	Typical Value	77	68	62	59	57	55	50	47	42	41	40
	Cat. 6 (min.)	75	66	60	57	56	53	48	45	41	39	-
Min. ACR (dB)	Typical Value	75,1	64,4	56,3	51,7	48,7	44,7	35,2	28	14,7	10	6
	Cat. 6 (min.)	72,9	62,2	54	49,4	47,5	42,2	32,5	25,1	11,8	6	-
PS NEXT (dB)	Typical Value	74	65	59	56	54	52	47	44	39	38	37
	Cat. 6 (min.)	72	63	57	54	53	50	45	42	38	36	-
ELFEXT dB	Typical Value	80	73	65	61	59	55	49	45	39	37	35
	Cat. 6 (min.)	68	56	48	44	42	38	32	28	22	20	-
PS ELFEXT (dB /100 m)	Typical Value	77	70	62	58	56	52	46	42	36	34	32
	Cat. 6 (min.)	65	53	45	41	39	35	29	25	19	17	-
Return Loss (dB)	Typical Value	25	25	25	25	25	25	23,8	23	21	20	20
	Cat. 6 (min.)	20	23	25	25	25	23,6	21,5	20,1	18	17,3	-

Ordering Information

3M™ Volition™ Category 6 cable, 100 Ω

Volition™ Cat 6 Cable, FTP, PVC, 4 pairs, 1000m Drum
 Volition™ Cat 6 Cable, FTP, LSOH, 4 pairs, 500m Drum
 Volition™ Cat 6 Cable, FTP, LSOH, 4 pairs, 1000m Drum
 Volition™ Cat 6 Cable, FTP, LSOH, 2x4 pairs, 500m Drum
 Volition™ Cat 6 Cable, FTP, LSOH, 2x4 pairs, 1000m Drum
 Item/unit: 1 box or drum

Ref.-No.

VOL-6FP4-1000
 VOL-6FL4-500
 VOL-6FL4-1000
 VOL-6FL8-500
 VOL-6FL8-1000

User shall ensure before using our product that it is suitable for the intended use. All questions of liability relating to our products are governed by 3M terms of sale subject where applicable to the prevailing law.

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