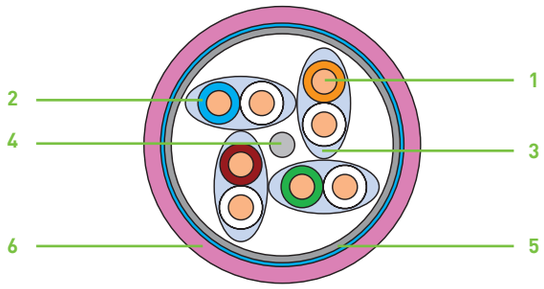
# CATEGORY 6A CABLES - F/FTP - 555 MHZ



1. Core: Solid annealed copper AWG23
2. Insulation: Skin-Foam-Skin PE
3. Shielding 1: Individual Al/Pet foil – Coverage 110%
4. Drain wire: Solid tinned copper AWG24
5. Shielding 2: Al/Pet foil– Coverage 110%
6. Jacket: LSZH –Violet RAL 4001

**F5554SH**




## FEATURES AND BENEFITS

- Exceed CAT6A standard requirements, tested up to 555 MHz
- Installed as component of a shielded Class Ea/CAT6A link, its high coupling attenuation level enables the Alien Cross Talk performance to be « guaranteed by construction ». No field test will be necessary for this parameter.
- Excellent protection against electromagnetic interferences thanks to double shielding
- Perfectly adapted to VoIP and PoE applications, including the future 802.3 at standard

## NETWORK APPLICATIONS

- ISDN - VoIP
- TOKEN RING 4/16 Mbits - 100 VG-AnyLAN
- TP-PMD/TP-DDI - ATM 155, 622,1200 Mbits
- ETHERNET: 10 Base T, 100 Base Tx, 100 Base T4, 1000 Base T, 10 G Base T
- IEEE 802.3af – PoE (Power Over Ethernet)
- Future 802.3at – PoEP (Power over Ethernet Plus)

## CABLING STANDARDS

- CABLE: - EIA/TIA 568-B2-10 CAT6A
  - IEC 61156-5 Ed2 CAT6A
  - EN 50288-10-1 (CAT6A)
- SYSTEM: - AD1.0 & AD2.0 ISO11801 CLASSE Ea
  - EIA/TIA 568-B.2-10 CAT6A
  - EN 50173-1 – CLASSE Ea

## TECHNICAL CHARACTERISTICS

- Linear resistance (max.): 95 Ω / Km
- Characteristic impedance: (from 1 to 100 MHz) 100 +/- 15 Ω
  (from 100 to 250 MHz) 100 +/- 20 Ω
  (from 250 to 500 MHz) 100 +/- 25 Ω
- Mutual capacity (nom.): 45 pF / m
- Coupling attenuation (nom.): 70 dB
- Nominal velocity propagation: 79 %
- Operating temperature: - 20° C / + 70°C
- Bending radius (min.): 8 x Cable diameter

| F (MHz) | INSERTION LOSS (dB/100 m) | | NEXT (dB/100 m) | | ACR-N (dB/100 m) | | PSNEXT (dB/100 m) | | ACR-F (dB/100 m) | | PSACR-F (dB/100 m) | | RETURN LOSS (dB/100 m) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C | Standard | M.M.C |
| 1 | 2.0 | 1.8 | 75.0 | 90 | 73.0 | 83 | 72.0 | 87 | 67.8 | 87 | 64.8 | 84 | 20.0 | 36 |
| 4 | 3.7 | 2.9 | 65.3 | 88 | 61.6 | 79 | 62.3 | 79 | 55.8 | 86 | 52.8 | 83 | 23.0 | 35 |
| 10 | 5.8 | 4.6 | 59.3 | 86 | 53.5 | 79 | 56.3 | 83 | 47.8 | 83 | 44.8 | 80 | 25.0 | 35 |
| 16 | 7.4 | 6.1 | 56.2 | 85 | 48.8 | 76 | 53.2 | 82 | 43.7 | 82 | 40.7 | 79 | 25.0 | 32 |
| 25 | 9.2 | 8.6 | 53.3 | 84 | 44.1 | 74 | 50.3 | 81 | 39.8 | 77 | 36.8 | 74 | 24.5 | 35 |
| 31.25 | 10.4 | 9.1 | 51.9 | 83 | 41.5 | 69 | 48.9 | 80 | 37.9 | 72 | 34.9 | 69 | 23.8 | 34 |
| 100 | 19.0 | 17.3 | 44.3 | 80 | 25.3 | 60 | 41.3 | 77 | 27.8 | 64 | 24.8 | 61 | 20.1 | 33 |
| 200 | 27.5 | 25.5 | 39.8 | 78 | 12.3 | 48 | 36.8 | 75 | 21.8 | 55 | 18.8 | 52 | 18.0 | 32 |
| 250 | 31.0 | 30.5 | 38.3 | 75 | 7.3 | 43 | 35.3 | 72 | 19.8 | 49 | 16.8 | 46 | 17.3 | 31 |
| 300 | 34.2 | 33.6 | 37.1 | 74 | 2.9 | 41 | 34.1 | 71 | 19.8 | 47 | 16.8 | 44 | 17.3 | 28 |
| 400 | 40.0 | 38.0 | 35.3 | 72 | -4.7 | 34 | 32.3 | 69 | 19.8 | 46 | 16.8 | 43 | 17.3 | 24 |
| 500 | 45.3 | 42.5 | 33.8 | 72 | -11.5 | 29 | 30.8 | 69 | 19.8 | 46 | 16.8 | 43 | 17.3 | 22 |
| 555 | - | 47.0 | - | 71 | - | 24 | - | 68 | - | 44 | | 41 | - | 20 |

## ORDERING INFORMATION

| Part Number | Pairs | Core Section | Shielding | Jacket | Outer Diameter | Weight | Packaging |
|---|---|---|---|---|---|---|---|
| F5554SH | 4 | AWG 23 | F/FTP | LSZH | 7.4 mm | 58 kg/km | 500M - 1000M |
| F5558SH | 2 x 4 | AWG 23 | F/FTP | LSZH | 7.4 x 14.8 mm | 116 kg/km | 500M - 1000M |