

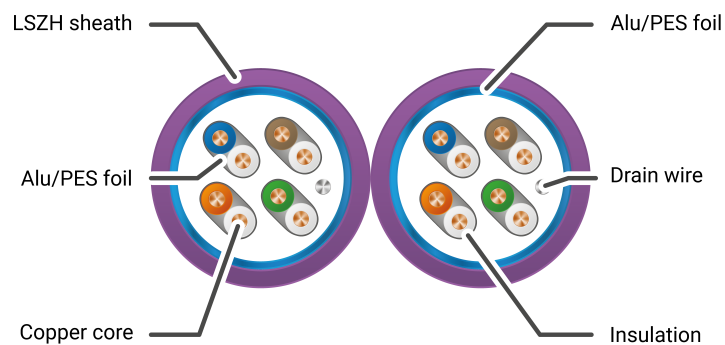
F5558SH5

**CAT6A F/FTP 2x4P 555 MHz LSZH Dca**  
Cable Drum of 500m



## DESCRIPTION

The CAT6A F/FTP F555xSHC cable is used in shielded cabling solutions for horizontal or vertical configurations. Its performance exceeds the limits imposed by CAT6A cabling standards up to 555 MHz thanks to an adapted construction and F/FTP shielding. The combination of overall and individual shielding provides high electromagnetic immunity (coupling attenuation > 85 dB). Declared Dca s2, d2, a2 according to CPR EN 50575.



## ADVANTAGES

- Tested up to 555 MHz
- Very high electromagnetic immunity
- Available in high CPR level : up to B2ca



**CONSTRUCTION & TECHNICAL PERFORMANCE**

|                                        |                                                                                                                                   |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Product Type                           | F555xSHyyyyyz                                                                                                                     |
| Core gauge                             | AWG23                                                                                                                             |
| Assembly type                          | Pairs                                                                                                                             |
| Shielding description                  | Aluminium polyester tape                                                                                                          |
| Outer Sheath Material                  | LSZH                                                                                                                              |
| Color                                  | Purple RAL 4001                                                                                                                   |
| Nom. diameter of the outer sheath (mm) | 7.1                                                                                                                               |
| Ground drain presence                  | No                                                                                                                                |
| Shielding type                         | F/FTP                                                                                                                             |
| Insulation Color Code                  | Blue and White blue or White - Orange and White orange or White - Green and White green or White - Brown and White brown or White |
| Nominal insulation diameter (mm)       | 1,23                                                                                                                              |

**ELECTRICAL CHARACTERISTICS**

|                                     |                |
|-------------------------------------|----------------|
| Loop resistance                     | 154            |
| Minimum insulation resistance       | > 5000 MΩ x km |
| Service Voltage (V)                 | <250Vdc        |
| Linear electrical resistance (Ω/Km) | 77             |
| Mutual Capacity                     | < 45 pF        |
| Capacity Imbalance                  | < 1600 pF/km   |

**TRANSMISSION CHARACTERISTICS**

|                                 |                                                                             |
|---------------------------------|-----------------------------------------------------------------------------|
| Coupling attenuation (dB)       | 85                                                                          |
| Delay skew                      | < 30                                                                        |
| Unbalance resistance            | < 2                                                                         |
| Propagation speed (%)           | 79                                                                          |
| Segregation Class               | D                                                                           |
| Performance Category            | Category 6A                                                                 |
| Data Transmission Standard      | EIA/TIA 568-C.2 Cat6A, EN 50173-1: 2011 Classe Ea, ISO 11801 Ed.3 Classe Ea |
| Characteristic Impedance (Ohms) | 100                                                                         |
| Conductor/Shield Capacitance    | 1,6 nF/km                                                                   |
| Conductor/Conductor Capacitance | 45 nF/km                                                                    |

## ENVIRONMENTAL CHARACTERISTIC

|                    |                                   |
|--------------------|-----------------------------------|
| CPR classification | Dca s2, d2, a2                    |
| Fire behaviour     | IEC 60332-1                       |
| Smoke emission     | IEC 61034-1 & -2                  |
| Gas emission       | IEC 60754-2                       |
| RoHS Compliance    | Compliant with the RoHS directive |
| Component Standard | IEC 61156-5 Cat6A                 |

## ADDITIONAL INFORMATION

|                   |              |
|-------------------|--------------|
| Product Packaging | Drum of 500m |
| Weight (Kg)       | 0.108        |

## TRANSMISSION PERFORMANCE

| FREQUENCY<br>(Mhz) | INSERTION LOSS<br>(dB/100M) |               | NEXT<br>(dB/100M) |               | PSNEXT<br>(dB/100M) |               | ACR-F<br>(dB/100M) |               | PSACR-F<br>(dB/100M) |               | RETURN LOSS<br>(dB/100M) |               |
|--------------------|-----------------------------|---------------|-------------------|---------------|---------------------|---------------|--------------------|---------------|----------------------|---------------|--------------------------|---------------|
|                    | Standard                    | Typical Value | Standard          | Typical Value | Standard            | Typical Value | Standard           | Typical Value | Standard             | Typical Value | Standard                 | Typical Value |
| 4                  | -3,8                        | -3,5          | -66,3             | -100,0        | -63,3               | -97,0         | -56,0              | -106,4        | -53,0                | -103,4        | -23,0                    | -27,9         |
| 10                 | -5,9                        | -5,4          | -60,3             | -106,7        | -57,3               | -103,7        | -48,0              | -107,6        | -45,0                | -104,6        | -25,0                    | -30,3         |
| 16                 | -7,5                        | -6,8          | -57,2             | -110,3        | -54,2               | -107,3        | -43,9              | -107,5        | -40,9                | -104,5        | -25,0                    | -33,7         |
| 20                 | -8,4                        | -7,6          | -55,8             | -108,1        | -52,8               | -105,1        | -42,0              | -108,5        | -39,0                | -105,5        | -25,0                    | -30,2         |
| 31,25              | -10,5                       | -9,7          | -52,9             | -110,2        | -49,9               | -107,2        | -38,1              | -102,5        | -35,1                | -99,5         | -23,6                    | -30,6         |
| 62,5               | -15,0                       | -14,0         | -50,9             | -103,5        | -47,9               | -100,5        | -32,1              | -98,3         | -29,1                | -95,3         | -21,5                    | -31,1         |
| 100                | -19,1                       | -17,8         | -48,4             | -101,3        | -45,4               | -98,3         | -28,0              | -97,2         | -25,0                | -94,2         | -20,1                    | -41,3         |
| 125                | -21,5                       | -20,0         | -45,3             | -99,0         | -42,3               | -96,0         | -26,1              | -95,0         | -23,1                | -92,0         | -19,4                    | -37,0         |
| 155                | -24,1                       | -22,1         | -42,4             | -98,5         | -39,4               | -95,5         | -24,2              | -93,0         | -21,2                | -90,0         | -18,8                    | -33,0         |
| 200                | -27,6                       | -25,4         | -40,8             | -97,9         | -37,8               | -94,9         | -22,0              | -90,1         | -19,0                | -87,1         | -18,0                    | -30,1         |
| 250                | -31,1                       | -27,5         | -39,3             | -98,0         | -36,3               | -95,0         | -20,0              | -86,0         | -17,0                | -83,0         | -17,3                    | -30,0         |
| 300                | -34,3                       | -31,4         | -38,1             | -99,2         | -35,1               | -96,2         | -18,5              | -83,1         | -15,5                | -80,1         | -17,3                    | -29,7         |
| 350                | -37,2                       | -34,2         | -37,1             | -95,0         | -34,1               | -92,0         | -17,1              | -83,0         | -14,1                | -80,0         | -17,3                    | -28,0         |
| 400                | -40,1                       | -36,3         | -36,3             | -92,0         | -33,3               | -89,0         | -16,0              | -83,2         | -13,0                | -80,2         | -17,3                    | -27,1         |
| 450                | -42,7                       | -39,0         | -35,5             | -91,0         | -32,5               | -88,0         | -14,9              | -77,0         | -11,9                | -74,0         | -17,3                    | -27,5         |
| 500                | -45,3                       | -40,9         | -34,8             | -90,5         | -31,8               | -87,5         | -14,0              | -74,9         | -11,0                | -71,9         | -17,3                    | -27,9         |
| 555                | N/A                         | -45,0         | N/A               | -90,0         | N/A                 | -87,0         | N/A                | -71,0         | N/A                  | -68,0         | N/A                      | -25,0         |