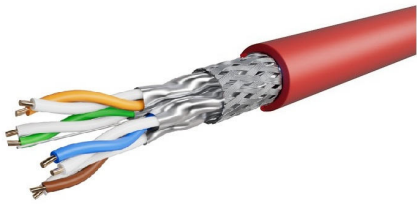
**Technical Specification**
**Cable Type: 4x2x23# S/FTP 35% Category 7 100 Ohm LS0H-1 Indoor Horizontal Cable**
**Part Number: H07-HG704R6L-35-LL**
**Revision: 01/25 Date: 17 July 2025**



Category 7 S/FTP indoor cable, conforming to ISO/IEC-11801, IEC 61156-5, tested up to 1000 MHz. 4 individually foil shielded twisted pairs are cabled together, overall TC braid shielded and jacketed with LS0H compound for indoor use. The cable conforms to IEC 60332-1 & EU Regulation 305/2011 (CPR) Class Dca-s1a,d1,a1.

**Physical Description**

| | |
|---|---|
| Basic conductor | Solid 23AWG, bare annealed copper |
| Insulation | SFS-PO |
| Total number of insulated conductors | 8, twisted in 4 pairs: Blue x White, Orange x White, Green x White, Brown x White |
| Individual pair shield | Polyester-aluminum foil, providing 100% coverage with 25% overlap, aluminum face out |
| Drain wire | Solid tin-coated copper wire, 0.40±0.01 mm |
| Overall shield | Tinned copper braid, providing 35±5% coverage |
| Outer jacket | Flame retardant, Low smoke, halogen-free (FR-LS0H) compound for indoor use |
| Color | RED, RAL 3000 |
| Jacket thickness | 0.50±0.05 mm |
| Cable OD. | 7.2±0.3 mm |
| Surface marking | WESTERN WIRE H07-HG704R6L 4x2x23 AWG S/FTP CATEGORY 7 LS0H LAN CABLE ISO/IEC-11801 & IEC 61156-5 FR IEC 60332-1 CPR Class Dca-s1a,d1,a1 CE 2011/65/EU (RoHS-2) [Batch Number] [Sequential Meter Mark] METER |

**Mechanical Properties**

| | |
|---|---|
| Bend radius | Dynamic: 8xD Static: 4xD |
| Operating temperature | -20 to +75°C |
| Storage temperature | -20 to +70°C |
| Installation temperature | 0 to +50°C |
| Jacket properties - before aging | |
| Tensile strength | 10.0 Mpa min. |
| Elongation | 125% min |
| Jacket properties - After aging (100°Cx24hx7d) | |
| Tensile strength | 8.0 Mpa min. |
| Elongation | 100% min |
| Pulling force | 110N max. |
| Cold bend | 8xD @ -20°C x 4h - No visible cracks |
| Flame test | IEC 60332-1 (Flame propagation), IEC 60754 (Acid gas) & IEC 61034 (smoke density) |
| EU Regulation 305/2011 (CPR) Conformance | Class Dca-s1a,d1,a1 |
| Total weight | 51 kg/km nom. |

**Electrical Properties**

| | |
|---|---|
| Mean Impedance | 100±5 Ohm @100MHz |
| DC Resistance | 9.38 Ohm/100m max. |
| Shield DC Resistance | 15 Ohm/km max. |
| Resistance unbalance - core to core | 2% max. |
| Resistance unbalance - pair to pair | 4% max. |
| Mutal capapcitance | 56 nF/km max. @ 1 kHz |
| Cap. unbalance (wire to ground) | 160 pF/100m max. @ 1 kHz |
| Delay skew | 25 ns/100m max. |
| Nominal Velocity of Propagation (NVP) | 78±3% |
| Coupling attenuation | IEC 61156-5 Type I,B |
| Transfer Impedance | IEC 61156-5 Grade 1 |
| TCL | IEC 61156-5 Level 1 |
| Voltage rating | 72 Vdc max. |

***Electrical parameters indicated above 600MHz are non-binding nominal values provided for reference only.***

**Transmission Properties @ 20C conforming to IEC 61156-5 Category 7 (extended to 1GHz)**

| FREQ. | RL | Attenuation | NEXT | PHASE DELAY | PS NEXT | ELFEXT | PS ELFEXT |
|---|---|---|---|---|---|---|---|
| MHz | dB | dB/100m | dB | ns | dB | dB/100m | dB/100m |
| | Min. | Max. | Min. | Max. | Min. | Min. | Min. |
| 1 | 20.0 | NS | 78.0 | 570.0 | 75.0 | 78.0 | 75.0 |
| 4 | 23.0 | 3.74 | 78.0 | 552.0 | 75.0 | 78.0 | 75.0 |
| 8 | 24.5 | 5.24 | 78.0 | 546.7 | 75.0 | 75.9 | 72.9 |
| 10 | 25.0 | 5.86 | 78.0 | 545.4 | 75.0 | 74.0 | 71.0 |
| 16 | 25.0 | 7.41 | 78.0 | 543.0 | 75.0 | 69.9 | 66.9 |
| 20 | 25.0 | 8.29 | 78.0 | 542.0 | 75.0 | 68.0 | 65.0 |
| 25 | 24.3 | 9.29 | 78.0 | 541.2 | 75.0 | 66.0 | 63.0 |
| 31.25 | 23.6 | 10.41 | 78.0 | 540.4 | 75.0 | 64.1 | 61.1 |
| 62.5 | 21.5 | 14.88 | 75.5 | 538.6 | 72.5 | 58.1 | 55.1 |
| 100 | 20.1 | 19.02 | 72.4 | 537.6 | 69.4 | 54.0 | 51.0 |
| 150 | 18.9 | 23.56 | 69.8 | 536.9 | 66.8 | 50.2 | 47.2 |
| 200 | 18.0 | 27.47 | 67.9 | 536.5 | 64.9 | 48.0 | 45.0 |
| 250 | 17.3 | 30.97 | 66.4 | 536.3 | 63.4 | 46.0 | 43.0 |
| 300 | 17.3 | 34.19 | 65.2 | 536.1 | 62.2 | 44.5 | 41.5 |
| 600 | 17.3 | 50.10 | 60.7 | 535.5 | 57.7 | 38.4 | 35.4 |
| 700* | 14.2 | 54.63 | 59.7 | 535.4 | 56.7 | 37.1 | 34.1 |
| 1000* | 13.1 | 66.93 | 57.3 | 535.1 | 54.4 | 34.0 | 31.0 |

***Transmission parameters indicated above 600MHz are non-binding nominal values provided for reference only for mass goods.**

**This cable fully conforms to EU Directive 2011/65/EU (RoHS-2)**