



Tourline Hybrid

Screened Hybrid Data, Digital
Audio and Power Connector



Tourline - SHC

Screened Hybrid Data, Digital Audio & Power Connectors, Cables and Assemblies

Within 1 circular design, TOURLINE - SHC Connectors and Cable assemblies incorporate features that ensure high quality, extreme durability and safe connection for:

Data: Individually Foil Shielded Ethernet CAT5 Twisted Pairs

Digital: Audio: Individually Foil Shielded Digital Audio Twisted Pairs

Power: 3 core Shielded TCWB and rated to 23Amps

Category 5 Data Contact Features

- Groups of 3 x size 20 contacts for Ethernet Category 5 Foil Shielded Twisted Pairs
- Solder terminations
- Gold Plated contacts for Ethernet and Silver Plated contact for Drainwire termination

Digital Audio Contact Features

- Groups of 3 x size 20 contacts for 110 Ohm Digital Audio Foil Shielded Twisted Pairs
- Solder terminations
- Gold Plated contacts for Digital and Silver Plated contact for Drainwire termination

Power Module Features

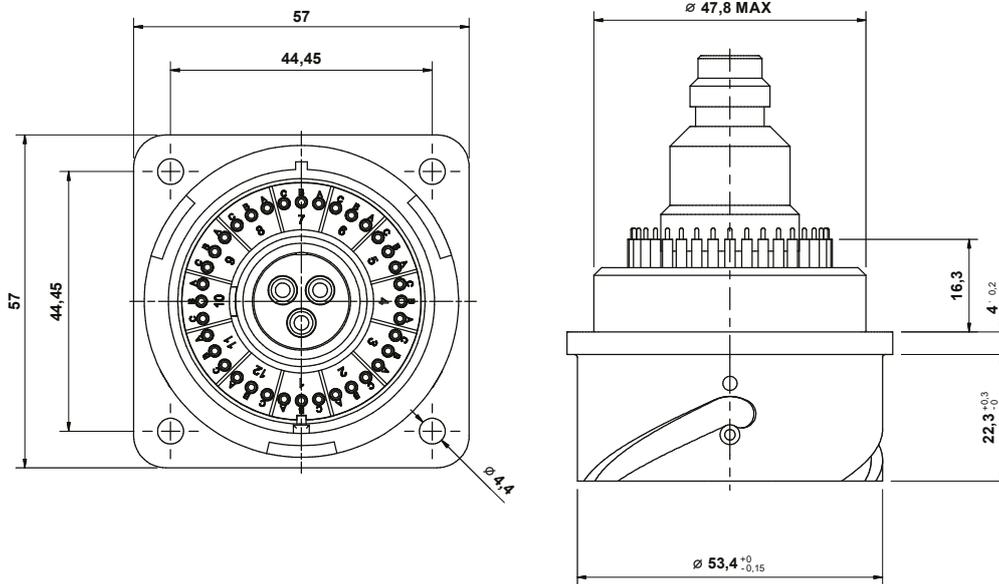
- UL approved Insert material
- First Mate Last Break Earth contact
- 3 x size 12 contact / 2.5mm² rated to 23Amps
- Clip retained Module with 100% screening

Connector Design Features

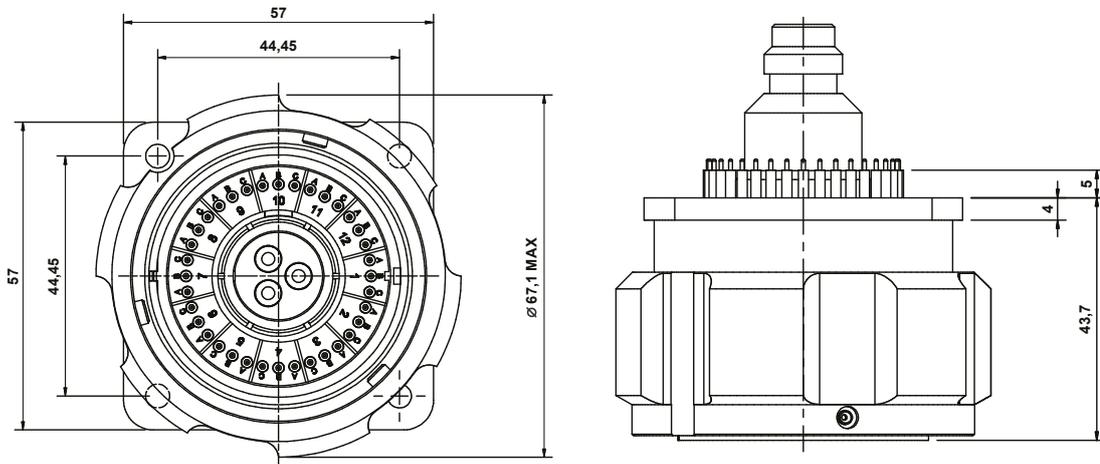
- Machine Alloy coupling ring with increased wall sections for extra strength and impact resistance
- Extended length coupling ring for extra handgrip and additional protection
- Roller Coupling studs to ease connector mating
- Machined backshell with increased wall sections
- Extended length backshell to ease wiring operations
- IP67 when mated
- First Make Last Break Earth contact in Power module
- Reverse Bayonet coupling for fast and accurate mating / un-mating
- Panel Mounting connectors can be fitted with PCB or solder termination contacts



Panel Female Connector



Panel Male Connector



Part Numbering System

CONNECTOR SHELL SIZE 32:

- 8 pairs x 24AWG Sheilded CAT5
- 4 pairs x 24AWG Sheilded Digital Audio
- 3 core x 14AWG Sheilded Power

39 WAY HYBRID CABLE PART NUMBER

- TLH-32-39

39 WAY CONNECTOR PART NUMBER:

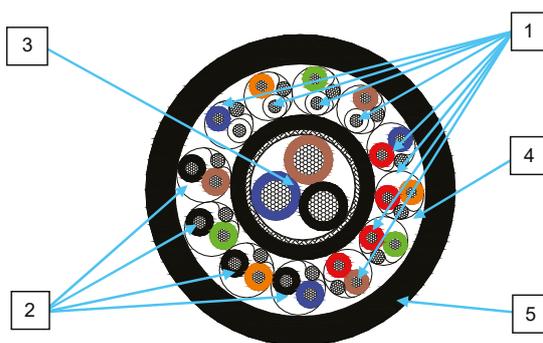
- Panel Male: TLH-32/39-PM
- Panel Female: TLH-32/39-PF
- Cable Male: TLH-32/39-CM
- Cable Female: TLH-32/39-CF

39 WAY HYBRID CABLE PART NUMBER

- Cable Male to Cable Female: TLH32-39-CMCF-XX
 - Cable Male to Cable Male: TLH32-39-CMCM-XX
 - Cable Female to Cable Female: TLH32-39-CFCF-XX
- XX- Cable length in metres

No	Description	No.	Description
1	8 Twisted Pairs (2xAWG24)ccSN (Ethernet CAT5): - Bare Copper Conductor AWG24 (0.21mm ²) Stranded - Foam Polyolefin Insulation, Nominal Ø1.6mm Pairs: White-Blue, White-Orange, White-Green, White-Brown, Red-Blue, Red-Orange, Red-Green, Red-Brown - Twisted pair + AWG24 Tinned Copper Drainware , Foil shield.	3	(3x2.5mm ²)ST/R : - Bare Copper Conductor AWG14 (2.5mm ²) Stranded. - Polyolefin Insulation, Nominal Diameter 3.2mm Colours Black, Brown, Blue. - 3 cores with Plastic Tape - Shield Tinned Copper Braid coverage ≥ 85% - PVC Sheath, Nominal Ø 9.6mm. Colour Black
2	4 Twisted Pairs (2xAWG24)ccSN (Digital Audio) OR 7 Twisted Pairs (2xAWG24)ccSN (Digital Audio) : - Bare Copper Conductor AWG24 (0.21mm ²) Stranded. - Foam Polyolefin Insulation, Nominal Ø 1.8mm Pairs: Black-Blue, Black-Orange, Black-Green, Black-Brown. - Twisted pair + AWG24 Tinned Copper Drainwire, Foil shield.	4	Total Assembly : Elements 1 – 2 – 3 assembled with fillers + No-Woven Tape
		5	Overall Sheath : Matt Black Polyurethane 39 Way (4 Audio Pairs). Ø 20.4 ± 0.4mm. 48 Way (7 Audio Pairs). Ø 25.5 ± 0.4mm

39 WAY CABLE FOR CONNECTOR SHELL SIZE 32



Other Characteristics

Electrical Resistance at 20°C	≤ 92Ω/k m (Section 0,21mm ²) ≤ 7.98Ω/km (Section 2,50mm ²)
Insulation Resistance at 20°C	≥ 1 GΩ/k m
Test Voltage	3000Va.c. (Section 2,5mm ²) 1000Va.c. (Section 0,21mm ²)
Operating Voltage	1000V (Section 2,5mm ²) 30V (Section 0,21mm ²)
Nominal Capacitance at 800÷1000Hz	55pF/m (Ethernet Category 5) 40pF/m (Digital Audio)
Characteristic Impedance	100 Ω ± 1 5 % (f=1÷100MHz) (Ethernet Category 5) 110 Ω ± 15% (f=1MHz) (Digital Audio)

Nominal Attenuation (Ethernet CAT. 5)

MHz	1	4	10	16	20	31.25	62.5	100
dB/100m	3.4	6.3	9.3	11.5	12.9	16.2	23.9	35.2

Nominal Crosstalk Next (Ethernet CAT. 5)

MHz	1	4	10	16	20	31.25	62.5	100
dB	66	65.3	59.3	56.2	54.8	51.9	47.4	44.3

Nominal Attenuation (Digital Audio)

MHz	1	4	10	16
dB	3.15	9.05	10.9	11.5

Temperature Range	-20°C ÷ +80°C
Minimal Bending Radius	5 x Ø (Static Use) 10 x Ø (Dynamic Use)
Max Pull Strength	20 N/mm ²
Flame resistance	IEC 60332.1 , UL Vertical Flame Test , CSA FT1



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