



# Tourline

Professional Audio Connectors

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# Introduction

## Tourline connectors for Professional Audio Applications

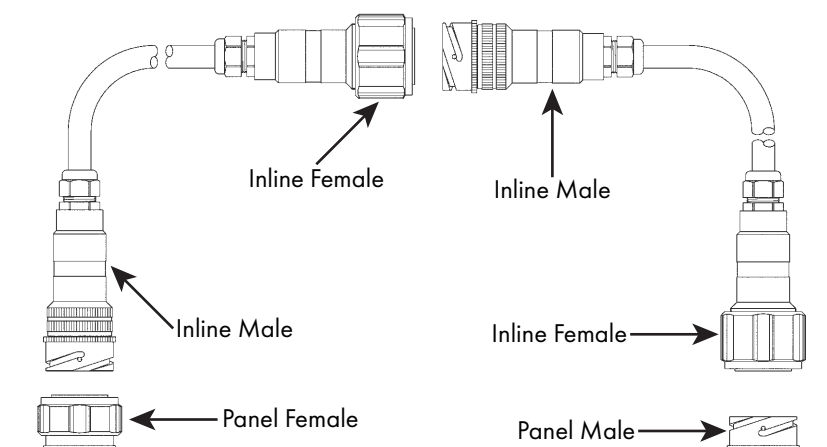
These connectors have been designed and are manufactured to ensure continual and reliable operation in the harsh environment of the professional sound applications.

They are directly derived from a reliable and rugged military standard (Mil C 5015 & VG 95234) and are fully intermateable with the widely used LK and CIRLK standard.



## Key Features

- Fast coupling and uncoupling.
- Audible, visual and tactile indication of locking.
- Guaranteed locking of the coupling nut under vibration or shock conditions.
- Bayonet ramp protrusion protected by stainless steel ring.
- IP 67 grade waterproof (when mated) for outdoor applications.
- Insert manufactured in a high insulating chloroprene rubber: allowing easy contact insertion and removal, during assembly or repair.
- Gold Plated Crimp or Silver Plated Solder contacts (wide range of terminations for many wire sections).



Typical configuration

# Enhanced Touring Grade Professional Audio

Circular Multipin Audio connectors are commonly subjected to various forms of abuse. Even after being dropped from heights, driven over by vehicles, subjected to rough handling on a regular basis, these connectors are expected to provide continuous reliable performance.

The Tourline series connector is the “definitive” solution for Touring (PA) or Outdoor broadcast (OB) environments.

Tourline connectors have been enhanced to offer even greater long term reliability, in the most arduous of applications. It includes all the arrangements of PLK series plus a 67 channel 201 pin configuration.

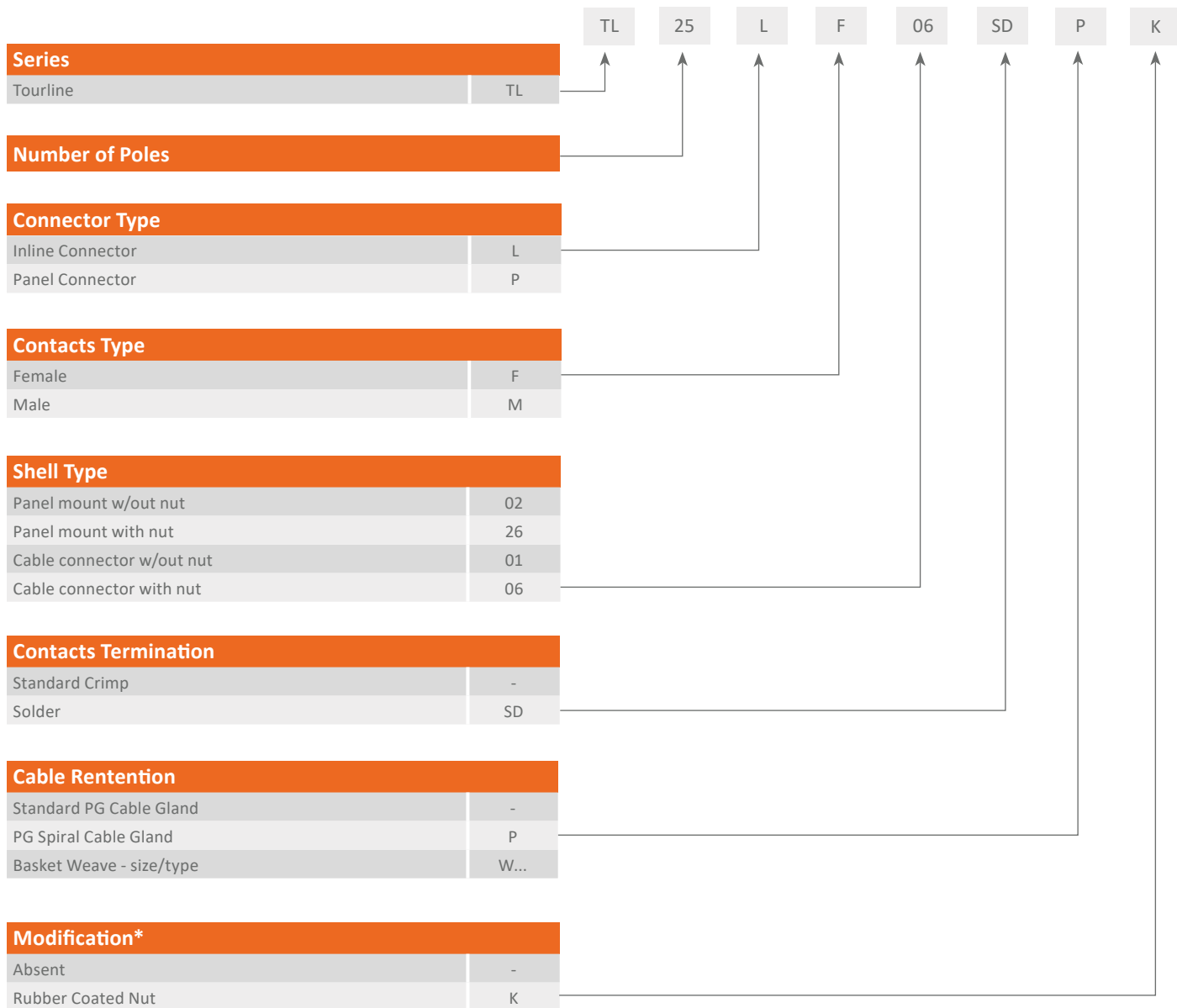
- Thicker wall sections coupling nuts and shells, give increased impact resistance.
- Rolling pins in the coupling nut allow for easier mating and increased mating cycles.
- Longer back shells, allow more internal space for easier cable assembly, especially where large Multicores are being terminated.
- Back shells have a new protective cap fixing system. No back shell drilling or additional accessories are required in order to fix the cap chain to the connector body. A special chain fixing kit is supplied as standard.
- Connectors can be supplied labelled with custom marking e.g. customers name or company logo.



## PLK Series (Standard Audio Bayonet Connector)

Our PLK series is a budget audio multipin connector suited for applications in less harsh environments without the enhanced features of our Tourline series. Please contact our sales office for further details.

# Part Number Explanation



\* Contact sales for any bespoke requirements

# Electrical Data

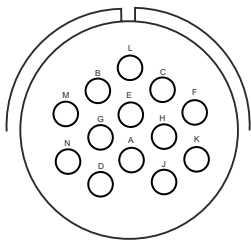
| Contact Size | Maximum Current (A) | Rated Current (A) | Max. Voltage Drop (mV) |
|--------------|---------------------|-------------------|------------------------|
| 20           | 7.5                 | 7.5               | 83                     |
| 18           | 11                  | 10                | 79                     |
| 16           | 22                  | 13                | 74                     |

| Number of poles | Rated Voltage (Vac) | Rated Voltage (Vdc) | Dielectric Strength (Vac) | Min Flashover (Vac) |
|-----------------|---------------------|---------------------|---------------------------|---------------------|
| 25/37/54/85     | 700                 | 500                 | 2.000                     | 2.800               |
| 55/72/150/201   | 250                 | 200                 | 1.400                     | 1.000               |

# Insert layout and wiring list

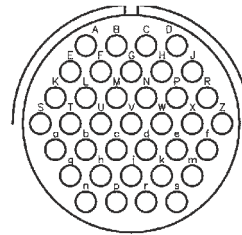
## Front view of male insert

20-11



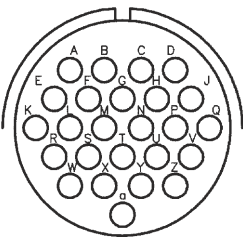
| 25 Pin / 8 Channel |   |   |   |
|--------------------|---|---|---|
| Ch.                | + | - | G |
| 1                  | B | C | E |
| 2                  | F | K | H |
| 3                  | J | D | A |
| 4                  | N | M | G |
| General ground     |   | L |   |

28-21



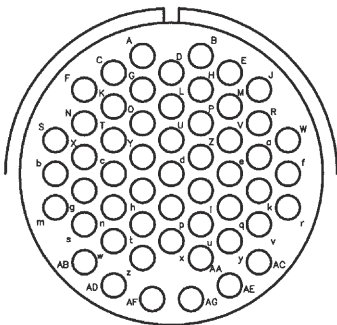
| 37 Pin / 12 Channel |   |   |   |
|---------------------|---|---|---|
| Ch.                 | + | - | G |
| 1                   | E | F | A |
| 2                   | B | C | G |
| 3                   | H | J | D |
| 4                   | S | T | K |
| 5                   | L | M | U |
| 6                   | V | W | N |
| 7                   | P | R | X |
| 8                   | a | b | g |
| 9                   | c | d | i |
| 10                  | e | f | m |
| 11                  | n | p | h |
| 12                  | r | s | k |

24A-25



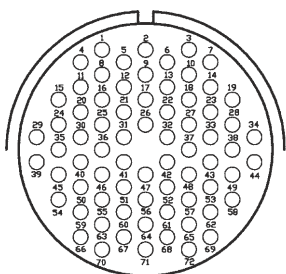
| 25 Pin / 8 Channel |   |   |   |
|--------------------|---|---|---|
| Ch.                | + | - | G |
| 1                  | A | E | F |
| 2                  | G | C | B |
| 3                  | D | H | J |
| 4                  | M | L | K |
| 5                  | Q | P | N |
| 6                  | W | S | R |
| 7                  | T | X | Y |
| 8                  | Z | V | U |

32-22



| 54 Pin / 16 Channel |   |   |    |     |   |   |    |
|---------------------|---|---|----|-----|---|---|----|
| Ch.                 | + | - | G  | Ch. | + | - | G  |
| 1                   | W | f | r  | 9   | d | p | x  |
| 2                   | J | R | a  | 10  | A | G | O  |
| 3                   | k | v | AC | 11  | Y | h | t  |
| 4                   | E | M | V  | 12  | C | K | T  |
| 5                   | e | q | y  | 13  | c | n | w  |
| 6                   | B | H | P  | 14  | F | N | X  |
| 7                   | Z | i | u  | 15  | g | s | AB |
| 8                   | D | L | U  | 16  | S | b | m  |

28-72

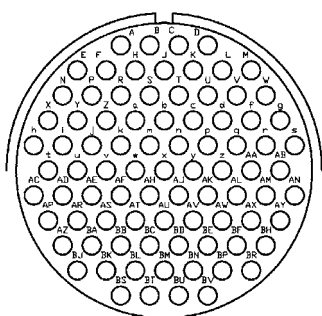


| 72 Pin / 24 Channel |    |    |    |     |    |    |    |     |    |    |    |
|---------------------|----|----|----|-----|----|----|----|-----|----|----|----|
| Ch.                 | +  | -  | G  | Ch. | +  | -  | G  | Ch. | +  | -  | G  |
| 1                   | 2  | 3  | 1  | 9   | 36 | 32 | 31 | 17  | 56 | 52 | 51 |
| 2                   | 8  | 5  | 4  | 10  | 23 | 28 | 27 | 18  | 53 | 49 | 48 |
| 3                   | 9  | 13 | 12 | 11  | 35 | 39 | 29 | 19  | 59 | 55 | 54 |
| 4                   | 10 | 7  | 6  | 12  | 36 | 40 | 30 | 20  | 64 | 61 | 60 |
| 5                   | 11 | 16 | 15 | 13  | 37 | 43 | 33 | 21  | 62 | 58 | 57 |
| 6                   | 17 | 22 | 21 | 14  | 38 | 44 | 34 | 22  | 63 | 67 | 66 |
| 7                   | 14 | 19 | 18 | 15  | 47 | 42 | 41 | 23  | 65 | 69 | 68 |
| 8                   | 20 | 25 | 24 | 16  | 50 | 46 | 45 | 24  | 71 | 72 | 70 |

# Insert layout and wiring list

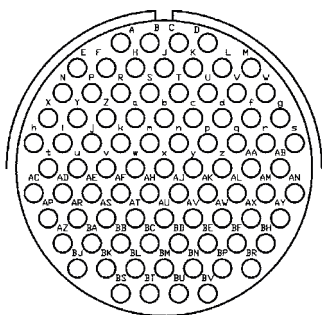
## Front view of male insert

40-56



| 85 Pin / 28 Channel |   |   |   |     |    |    |    |     |    |    |    |
|---------------------|---|---|---|-----|----|----|----|-----|----|----|----|
| Ch.                 | + | - | G | Ch. | +  | -  | G  | Ch. | +  | -  | G  |
| 1                   | A | B | C | 10  | k  | m  | n  | 19  | AT | AU | AV |
| 2                   | E | F | H | 11  | p  | q  | r  | 20  | AW | AX | AY |
| 3                   | J | K | L | 12  | t  | u  | v  | 21  | AZ | BA | BB |
| 4                   | N | P | R | 13  | w  | x  | y  | 22  | BC | BD | BE |
| 5                   | S | T | U | 14  | z  | AA | AB | 23  | BJ | BK | BL |
| 6                   | X | Y | Z | 15  | AC | AD | AE | 24  | BM | BN | BP |
| 7                   | a | b | c | 16  | AF | AH | AJ | 25  | BS | BT | BU |
| 8                   | d | f | g | 17  | AK | AL | AM | 26  | BV | BR | BF |
| 9                   | h | i | j | 18  | AP | AR | AS | 27  | BH | AN | s  |
|                     |   |   |   |     |    |    |    | 28  | W  | M  | D  |

40A-150

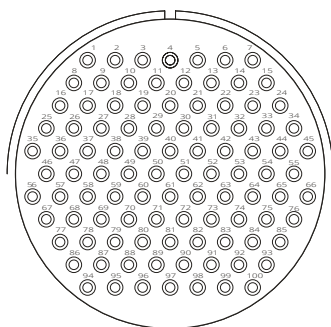


| 150 Pin / 48 Channel |    |    |    |     |    |    |    |     |     |     |     |
|----------------------|----|----|----|-----|----|----|----|-----|-----|-----|-----|
| Ch.                  | +  | -  | G  | Ch. | +  | -  | G  | Ch. | +   | -   | G   |
| 1                    | 1  | 2  | 3  | 17  | 50 | 51 | 52 | 33  | 100 | 101 | 102 |
| 2                    | 5  | 6  | 7  | 18  | 53 | 54 | 55 | 34  | 103 | 104 | 105 |
| 3                    | 8  | 9  | 10 | 19  | 57 | 58 | 59 | 35  | 56  | 81  | 106 |
| 4                    | 11 | 12 | 13 | 20  | 60 | 61 | 62 | 36  | 107 | 108 | 109 |
| 5                    | 14 | 15 | 16 | 21  | 63 | 64 | 65 | 37  | 110 | 111 | 112 |
| 6                    | 17 | 18 | 19 | 22  | 66 | 67 | 68 | 38  | 113 | 114 | 115 |
| 7                    | 21 | 22 | 23 | 23  | 69 | 70 | 71 | 39  | 116 | 117 | 118 |
| 8                    | 24 | 25 | 26 | 24  | 72 | 73 | 74 | 40  | 119 | 120 | 121 |
| 9                    | 27 | 28 | 29 | 25  | 75 | 76 | 77 | 41  | 122 | 123 | 124 |
| 10                   | 20 | 30 | 31 | 26  | 78 | 79 | 80 | 42  | 125 | 126 | 127 |
| 11                   | 32 | 33 | 34 | 27  | 82 | 83 | 84 | 43  | 139 | 128 | 129 |
| 12                   | 35 | 36 | 37 | 28  | 85 | 86 | 87 | 44  | 130 | 131 | 132 |
| 13                   | 38 | 39 | 40 | 29  | 88 | 89 | 90 | 45  | 133 | 134 | 135 |
| 14                   | 41 | 42 | 43 | 30  | 91 | 92 | 93 | 46  | 136 | 137 | 138 |
| 15                   | 44 | 45 | 46 | 31  | 94 | 95 | 96 | 47  | 140 | 141 | 142 |
| 16                   | 47 | 48 | 49 | 32  | 97 | 98 | 99 | 48  | 143 | 144 | 145 |

# Insert layout and wiring list

## Front view of male insert

40A-100



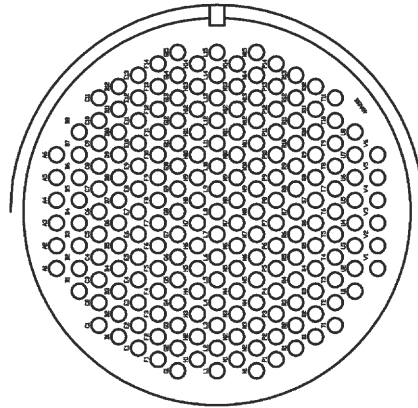
| 100 Pin / 32 Channel |    |    |    |     |    |    |    |
|----------------------|----|----|----|-----|----|----|----|
| Ch.                  | +  | -  | G  | Ch. | +  | -  | G  |
| 1                    | 1  | 2  | 3  | 17  | 49 | 50 | 51 |
| 2                    | 4  | 5  | 6  | 18  | 52 | 53 | 54 |
| 3                    | 7  | 8  | 9  | 19  | 55 | 56 | 57 |
| 4                    | 10 | 11 | 12 | 20  | 58 | 59 | 60 |
| 5                    | 13 | 14 | 15 | 21  | 61 | 62 | 63 |
| 6                    | 16 | 17 | 18 | 22  | 64 | 65 | 66 |
| 7                    | 19 | 20 | 21 | 23  | 67 | 68 | 69 |
| 8                    | 22 | 23 | 24 | 24  | 70 | 71 | 72 |
| 9                    | 25 | 26 | 27 | 25  | 73 | 74 | 75 |
| 10                   | 28 | 29 | 30 | 26  | 76 | 77 | 78 |
| 11                   | 31 | 32 | 33 | 27  | 79 | 80 | 81 |
| 12                   | 34 | 35 | 36 | 28  | 82 | 83 | 84 |
| 13                   | 37 | 38 | 39 | 29  | 85 | 86 | 87 |
| 14                   | 40 | 41 | 42 | 30  | 88 | 89 | 90 |
| 15                   | 43 | 44 | 45 | 31  | 91 | 92 | 93 |
| 16                   | 46 | 47 | 48 | 32  | 94 | 95 | 96 |
|                      |    |    |    | 33  | 97 | 98 | 99 |



# Insert layout and wiring list

## Front view of male insert

40A-201



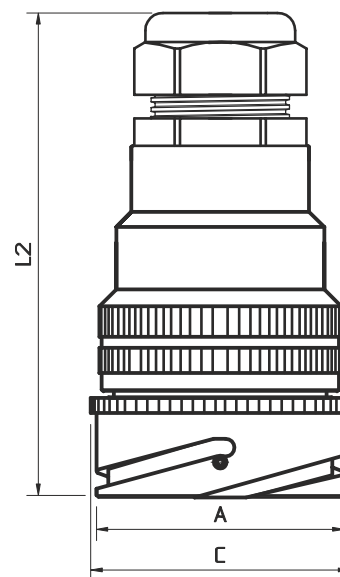
| 201 Pin / 67 Channel |     |     |     |     |     |     |     |     |     |     |     |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ch.                  | +   | -   | G   | Ch. | +   | -   | G   | Ch. | +   | -   | G   |
| 1                    | A1  | A2  | A3  | 23  | G4  | G5  | G6  | 45  | N10 | N11 | N12 |
| 2                    | A4  | A5  | A6  | 24  | G7  | G8  | G9  | 46  | N13 | N14 | N15 |
| 3                    | B1  | B2  | B3  | 25  | G10 | G11 | G12 | 47  | P1  | P2  | P3  |
| 4                    | B4  | B5  | B6  | 26  | G13 | G14 | F14 | 48  | P4  | P5  | P6  |
| 5                    | B7  | B8  | C10 | 27  | H1  | H2  | H3  | 50  | P10 | P11 | P12 |
| 6                    | C1  | C2  | C3  | 28  | H4  | H5  | H6  | 51  | P13 | R13 | S12 |
| 7                    | C4  | C5  | C6  | 29  | H7  | H8  | H9  | 52  | R1  | R2  | R3  |
| 8                    | C7  | C8  | C9  | 30  | H10 | H11 | H12 | 53  | R4  | R5  | R6  |
| 9                    | D1  | D2  | D3  | 31  | H13 | H14 | G15 | 54  | R7  | R8  | R9  |
| 10                   | D4  | D5  | D6  | 32  | L1  | L2  | L3  | 55  | R10 | R11 | R12 |
| 11                   | D7  | D8  | D9  | 33  | L4  | L5  | L6  | 56  | S1  | S2  | S3  |
| 12                   | D10 | D11 | C11 | 34  | L7  | L8  | L9  | 57  | S4  | S5  | S6  |
| 13                   | E1  | E2  | E3  | 35  | L10 | L11 | L12 | 58  | S7  | S8  | S9  |
| 14                   | E4  | E5  | E6  | 36  | L13 | L14 | L15 | 59  | S11 | S12 | T11 |
| 15                   | E7  | E8  | E9  | 37  | M1  | M2  | M3  | 60  | T1  | T2  | T3  |
| 16                   | E10 | E11 | E12 | 38  | M4  | M5  | M6  | 61  | T4  | T5  | T6  |
| 17                   | F1  | F2  | F3  | 39  | M7  | M8  | M9  | 62  | T7  | T8  | T9  |
| 18                   | F4  | F5  | F6  | 40  | M10 | M11 | M12 | 63  | U1  | U2  | U3  |
| 19                   | F7  | F8  | F9  | 41  | M13 | M14 | N15 | 64  | U4  | U5  | U6  |
| 20                   | F10 | F11 | F12 | 42  | N1  | N2  | N3  | 65  | U7  | U8  | T10 |
| 21                   | F13 | E13 | D12 | 43  | N4  | N5  | N6  | 66  | V1  | V2  | V3  |
| 22                   | G1  | G2  | G3  | 44  | N7  | N8  | N9  | 67  | V4  | V5  | V6  |

# Overall Dimensions

## Inline Connector without nut

| Pin Nr. | $\theta A$<br>+0<br>-0.15 | $\theta C$<br>Max<br>Max | L2<br>Max<br>PLK | L2<br>Max<br>TL | PG | Cable dia.<br>Min. - Max. |
|---------|---------------------------|--------------------------|------------------|-----------------|----|---------------------------|
| 13      | *                         | *                        | *                | *               | *  | *                         |
| 25      | 40.9                      | 44                       | 110              | 160             | 16 | 9-14                      |
| 37      | 46.7                      | 50                       | 125              | 165             | 21 | 13-18                     |
| 54      | 53.4                      | 56                       | 126              | 166             | 21 | 13-18                     |
| 72      | 46.7                      | 50                       | 125              | 165             | 21 | 13-18                     |
| 85      | 65.5                      | 69                       | 138              | 173             | 29 | 14-25                     |
| 150     | 65.5                      | 69                       | 146              | 181             | 36 | 24-32                     |
| 201     | 65.5                      | 69                       | 146              | 181             | 36 | 24-32                     |

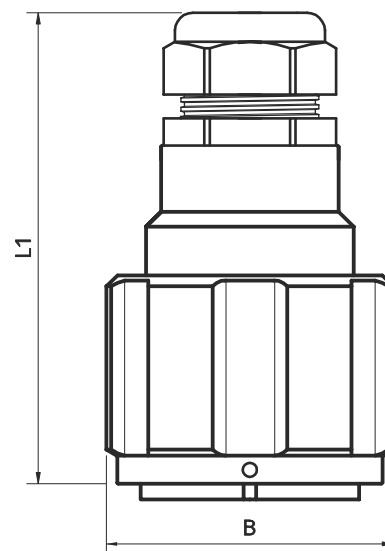
\* Consult sales office for details.



## Inline Connector with nut

| Pin Nr. | $\theta B$<br>Max<br>PLK | $\theta B$<br>Max<br>TL | L1<br>Max<br>PLK | L1<br>Max<br>TL | PG | Cable dia.<br>Min. - Max. |
|---------|--------------------------|-------------------------|------------------|-----------------|----|---------------------------|
| 13      | *                        | *                       | *                | *               | *  | *                         |
| 25      | 50                       | 53                      | 110              | 160             | 16 | 9-14                      |
| 37      | 57                       | 61                      | 124              | 164             | 21 | 13-18                     |
| 54      | 64                       | 67.5                    | 126              | 166             | 21 | 13-18                     |
| 72      | 57                       | 61                      | 124              | 164             | 21 | 13-18                     |
| 85      | 76                       | 79.5                    | 139              | 174             | 29 | 14-25                     |
| 150     | 76                       | 79.5                    | 147              | 182             | 36 | 24-32                     |
| 201     | 76                       | 79.5                    | 147              | 182             | 36 | 24-32                     |

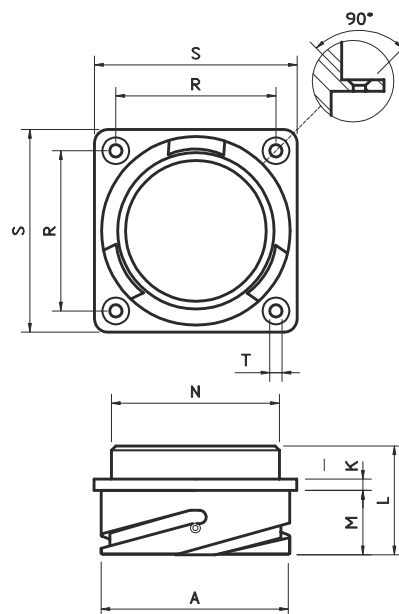
\* Consult sales office for details.



# Overall Dimensions

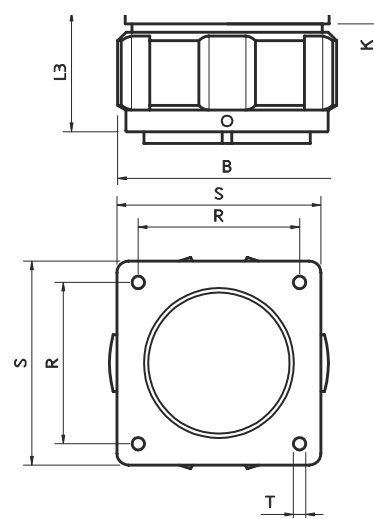
## Panel Connector without nut

| Pin Nr. | $\theta A$<br>+0<br>-0.15 | K<br>$\pm 0.2$ | L<br>$\pm 0.3$ | M<br>+0.4<br>-0 | $\theta N$<br>Max | R<br>$\pm 0.1$ | S<br>$\pm 0.3$ | T<br>H13 |
|---------|---------------------------|----------------|----------------|-----------------|-------------------|----------------|----------------|----------|
| 13      | 34.2                      | 4              | 34.3           | 19              | 28.8              | 29.4           | 38.1           | 3.1      |
| 25      | 40.9                      | 4              | 35.7           | 20.6            | 35.3              | 34.9           | 44.5           | 3.7      |
| 37      | 46.7                      | 4              | 35.7           | 20.6            | 41.1              | 39.7           | 50.8           | 3.7      |
| 54      | 53.4                      | 4              | 37.3           | 22.2            | 47.8              | 44.5           | 57             | 4.3      |
| 72      | 46.7                      | 4              | 35.7           | 20.6            | 41.4              | 39.7           | 50.8           | 3.7      |
| 85      | 65.6                      | 4              | 37.3           | 22.2            | 59                | 55.6           | 69.8           | 4.3      |
| 150     | 65.5                      | 4              | 37.3           | 22.2            | 59                | 55.6           | 69.8           | 4.3      |
| 201     | 65.5                      | 4              | 37.3           | 22.2            | 59                | 55.6           | 69.8           | 4.3      |

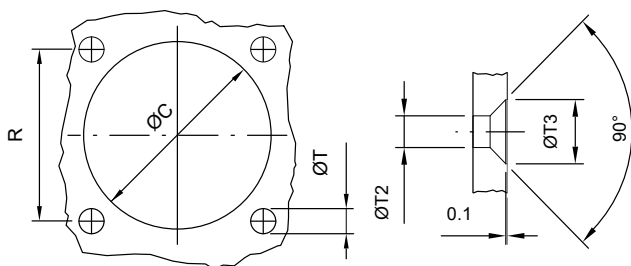


## Panel Connector with nut

| Pin Nr. | $\theta B$<br>Max<br>TL | L3<br>Max | K<br>$\pm 0.2$ | R<br>$\pm 0.1$ | S<br>$\pm 0.3$ | T<br>H13 |
|---------|-------------------------|-----------|----------------|----------------|----------------|----------|
| 13      | 51.5                    | 38.3      | 4              | 29.4           | 38.1           | 3.1      |
| 25      | 53                      | 41        | 4              | 34.9           | 44.5           | 3.7      |
| 37      | 61                      | 41        | 4              | 39.7           | 50.8           | 3.7      |
| 54      | 67.5                    | 44.5      | 4              | 44.5           | 57             | 4.3      |
| 72      | 61                      | 41        | 4              | 39.7           | 50.8           | 3.7      |
| 85      | 79.5                    | 45.5      | 4              | 55.6           | 69.8           | 4.3      |
| 150     | 79.5                    | 45.5      | 4              | 55.6           | 69.8           | 4.3      |
| 201     | 79.5                    | 45.5      | 4              | 55.6           | 69.8           | 4.3      |



## Panel Cut Out Dimensions



| Pin Nr.       | R<br>$\pm 0.1$ | $\theta C$<br>$\pm 0.2$ | $\theta T$<br>Through<br>holes | $\theta T2$<br>Countersunk<br>holes* | $\theta T3$<br>Countersunk<br>holes* |
|---------------|----------------|-------------------------|--------------------------------|--------------------------------------|--------------------------------------|
| 13            | 29.4           | 30                      | 3.4                            | 3.2                                  | 6.5                                  |
| 25            | 34.9           | 36                      | 3.9                            | 3.7                                  | 7.5                                  |
| 37            | 39.7           | 42                      | 3.9                            | 3.7                                  | 7.5                                  |
| 54            | 44.5           | 48.5                    | 4.5                            | 4.3                                  | 8                                    |
| 72            | 39.7           | 42                      | 3.9                            | 4.3                                  | 8                                    |
| 85<br>150/201 | 55.6           | 61                      | 4.5                            | 4.3                                  | 8.5                                  |

\* Panel receptacles only

# Cable Retention System

The standard strain relief supplied with the Tourline series and PLK is the PG SKINTOP. These glands provide positive strain relief and water tight sealing.

## Gland Technical Characteristics

- **Approval:** UL E146370 - CSA LR 50370 - VDE 57086 - SEV 100989
- **Material:** Polyamide flame retardant, self-extinguishing nylon, with neoprene bushing
- **Rated Temperature:** -20 oC to + 80 oC - Short Term to + 100 oC
- **Sealing:** IP68

For the cable clamping range of the glands please refer to the overall dimensions section of the catalogue.



## SKINTOP spiral versions

SKINTOP spiral versions are also available (PG 16 and 21 only). The spiral gland eliminates damage to cable cores through flexing of cable at the connector - cable interface, and therefore is commonly used with audio cable, where the small gauge of the signal wires can be easily damaged.



## Cable Grips

Cord Grips sometimes referred to as "Basket Weave" grips are also available. These cable grips consist of a woven steel wire mesh and watertight gland nut assembly.

### The key benefits of this system are:

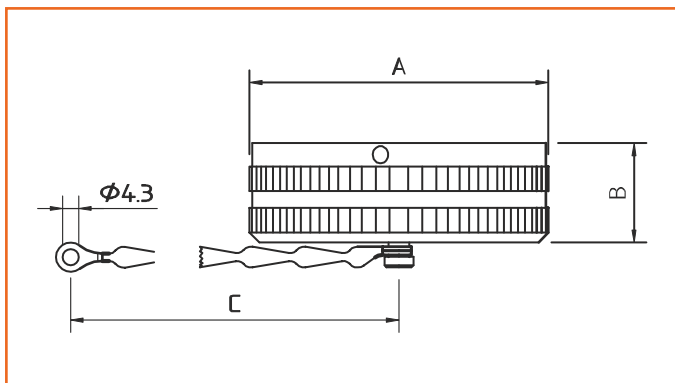
- The design of the weave is such that it is virtually impossible for a cable to be pulled out of the sock through lateral force. The more the cable is pulled the tighter the grip will become.
- The anti bend characteristics of the weave sock, eliminate damage to cable through flexing cable, where the small gauge of the signal wires can be easily damaged.

This design of grip is mainly used in large channel count systems, where the added protection of the valuable Multicore is a warranted feature. However, versions are available for virtually any cable or connector configuration.



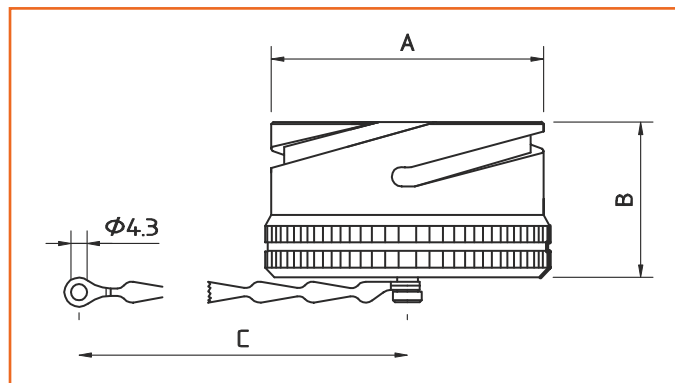
# Protection Caps

- The caps are waterproof IP67 grade when mated with the connectors.
- A sleeve protects the chain and prevents damages to the connector's external surface.



Caps TC 01-02 for connectors without coupling nut

| P/N         | θA Max. | B Max. | C Min. | Pin Nr.    |
|-------------|---------|--------|--------|------------|
| TC 01-02-25 | 48      | 23     | 200    | 25/55      |
| TC 01-02-37 | 54      | 23     | 200    | 37/72      |
| TC 01-02-54 | 61      | 23     | 200    | 54         |
| TC 01-02-85 | 73      | 23     | 200    | 85/150/201 |



Caps TC 06-26 for connectors with coupling nut

| P/N          | θA Max. | B Max. | C Min. | Pin Nr. |
|--------------|---------|--------|--------|---------|
| TC 06-26-25  | 44      | 36     | 200    | 25/55   |
| TC 06-26-37  | 50      | 36     | 200    | 37/72   |
| TC 06-26-54  | 56      | 36     | 200    | 54      |
| TC 06-26-85  | 68      | 36     | 200    | 85/150  |
| TC 06-26-201 | 68      | 36     | 200    | 201     |

# Contacts

- Crimp termination contacts are supplied loose.
- Solder contacts are supplied pre fitted in the insert.

| P/N        | Contact Type | Wire section mm <sup>2</sup> | Wire section AWG | Pin number  |
|------------|--------------|------------------------------|------------------|-------------|
| GMC-16P-13 | Male         | 0.15 ÷ 0.6                   | 26 ÷ 20          | 25/37/54/85 |
| GFC-16S-13 | Female       | 0.15 ÷ 0.6                   | 26 ÷ 20          | 25/37/54/85 |
| GMC-16P    | Male         | 1 ÷ 1.5                      | 18 ÷ 16          | 25/37/54/85 |
| GFC-16S    | Female       | 1 ÷ 1.5                      | 18 ÷ 16          | 25/37/54/85 |
| GMC-18P    | Male         | 0.15 ÷ 0.6                   | 26 ÷ 20          | 150         |
| GFC-18S    | Female       | 0.15 ÷ 0.6                   | 26 ÷ 20          | 150         |
| GMC-20P    | Male         | 0.15 ÷ 0.6                   | 26 ÷ 20          | 72          |
| GFC-20S    | Female       | 0.15 ÷ 0.6                   | 26 ÷ 20          | 72          |



# Crimp and Assembly Tools

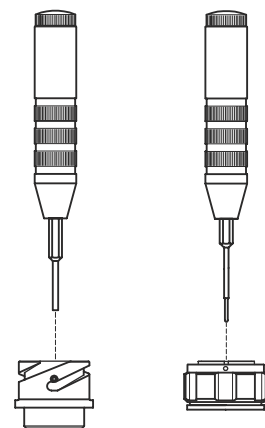
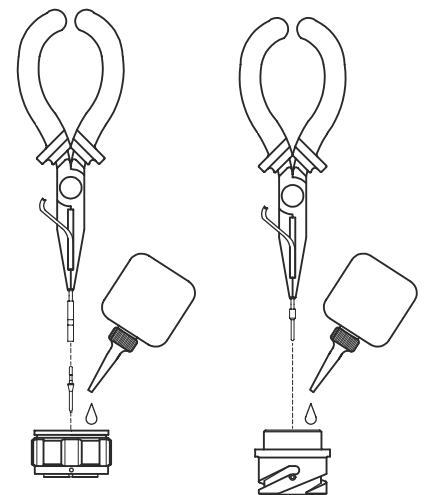
| Pin Nr | Crimp Tool   | Locator | Inserting tool | Guide pin for female ct. | Removal Tool |
|--------|--------------|---------|----------------|--------------------------|--------------|
| 25     | 8780 0004 61 | *N/A    | 61010          | 61020                    | 61014        |
| 37     | 8780 0004 61 | *N/A    | 61010          | 61020                    | 61014        |
| 54     | 8780 0004 61 | *N/A    | 61010          | 61020                    | 61014        |
| 55     | M22520/1     | 61060   | 61036          | 61061                    | 61057        |
| 72     | M22520/1     | 61060   | 61036          | 61061                    | 61057        |
| 85     | 8780 0004 61 | *N/A    | 61010          | 61020                    | 61014        |
| 150    | 8780 0004 61 | *N/A    | 61036          | 61064                    | 61058        |



\* Crimp tool supplied with locator

## Assembly Instructions

1. Strip the wire.
2. Assemble the locator on the crimp tool frame. Turn the locator to the required position (select the colour according to the contact type). Depress the locator until it snaps into the locked position.
3. Raise and rotate the wire gauge selection knob on the tool frame, to select the correct crimping dimension
4. Place the contact (mating end first) into the tool as shown below
5. Insert the stripped wire into the hollow end of the contact. Close the tool completely and release.
6. For ease of insertion is it beneficial to lubricate insert cavities with an isopropyl alcohol.
7. Insert the wired contact from the rear of the connector as shown below, using the insertion tool.
8. When inserting socket contacts, it is recommended that a guide pin be used. Remove the guide pin from the inserted contact and use it for the next contact.
9. Apply a slow, even pressure until the contact snaps into position.
10. Only use the recommended extraction tool to remove the contact or to adjust its position in the cavity. Use of other tools could damage the contact or insert.



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**PA-COM connectors** use the industry standard 8 pin and 19 pin configuration for speaker array connections and are fully intermateable with CA-COM connectors, commonly used by many loudspeakers manufacturers.

Long term reliability is ensured through the robust construction and addresses the short comings of the more traditional Industrial and Military connectors when used in touring applications.



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Adopted by some of the world's leading speaker manufacturers, these connectors are based on our popular Tourline series and are manufactured to ensure continual and reliable operation in the harsh environment of professional sound applications.



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