



O.C.H. MICRO CIRCULAR CONNECTORS

DESIGNED . . . AUTHORIZED . . . US ARMY NETT WARRIOR SOLDIER VEST APPLICATIONS



Designed . . . authorized . . . US Army Nett Warrior soldier vest applications



SMALL, LIGHT, TOUGH

- Lightweight aluminum shell and thermoplastic inserts
- Very small footprint
- Ruggedized for battlefield conditions

COMPATIBLE

- Intermateable with Nett Warrior products

HIGH PERFORMANCE

- Push/pull quick disconnect coupling meets breakaway force of 13 ±3 lbf
- Ruggedized small circular connector meets mechanical and environmental performance requirements of MIL-STD-810G

DURABLE/RUGGED

- IP67 rated waterproof caps adds protection to the cables/connectors

APPLICATIONS

- Soldier Vest Cables
- Batteries
- Antennas
- Communication/Power Hubs
- Radios
- Military Vehicles

Authorized for Use in Nett Warrior Soldier Vests and Peripheral Devices

The Nett Warrior program was developed by the US Army to provide ground soldiers with instant situational awareness and communications capability by directly connecting them to the army's tactical network. Like all communications devices, smaller and lighter is the order of the day. Every ounce saved is extra weight taken off the backs of our soldiers.

TE Connectivity (TE) is now an authorized source for Nett Warrior soldier vest and vest peripheral devices. This now gives the industry another authorized source for Nett Warrior connectors.

Our ruggedized O.C.H. micro circular connectors have passed the rigorous performance requirements set by the US Army, including the mechanical and performance requirements of **MIL-STD-810G**. These circular connectors feature a push-pull coupling and quick disconnect per the US Army's Nett Warrior specification. The connectors can be ordered against National Stocking Numbers 5935-016595575 and 5935-016594090.

Specifications

- **Shell:** Aluminum alloy, selectively plated zinc-nickel over electroless nickel overall
- **Inserts:** Thermoplastic
- **Contacts:** Copper alloy, plated gold over nickel

ELECTRICAL

- **Insulation Resistance:** 100 MΩ min. at 500 VDC
- **Contact Current Rating:** 5 A (-18°C to +71°C, crimped to 22 AWG wire)

MECHANICAL

- **Shock:** MIL-STD-810G, Method 516.6, Procedure IV
- **Vibration:** MIL-STD-810G, Method 514.7, Procedure I, Method 514.6, Category 5, Procedure II

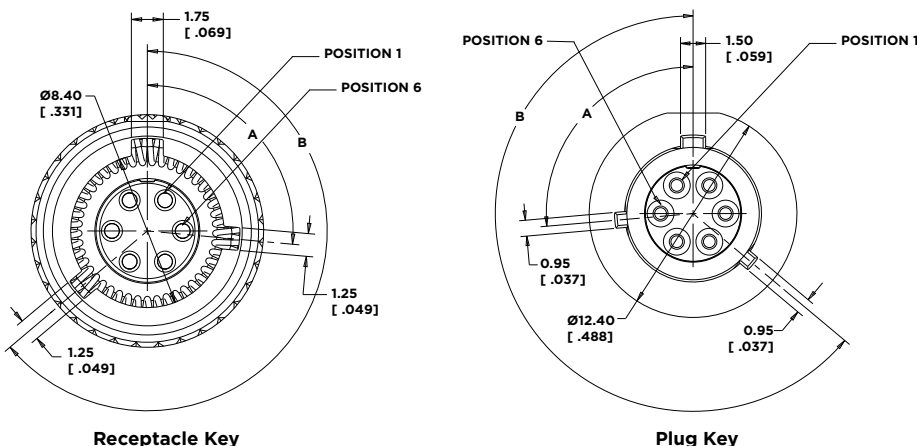
DOCUMENTATION

- **Product Specification:** 108-32114 and 108-32114-1
- **Qualification Test Reports:** 501-134052 and 501-134052-1

Nett Warrior Keying Guide

| A° | B° | Keying |
|-----|-----|--------|
| 95 | 230 | C* |
| 150 | 210 | A |
| 75 | 210 | B |
| 140 | 275 | D |
| 75 | 275 | E |
| 95 | 210 | F |
| 165 | 195 | MA |
| 140 | 220 | MB |
| 115 | 245 | MC |
| 105 | 205 | MD |
| 155 | 255 | ME |

*Tooled



O.C.H. Micro Circular Connectors

O.C.H. Cable Applied Plug/Receptacle

| TE Part No. | Part Type | Contact Type | No. of Positions | Keying | National Stocking Number |
|-------------|--------------------------------------|----------------|------------------|--------|--------------------------|
| 2226910-1 | Connector Plug - Cable Applied | Pin (crimp) | 6 | C | 5935-016595575 |
| 1-2226910-3 | Connector Plug - Cable Applied | Pin (crimp) | 6 | MA | N/A |
| 2-2226910-3 | Connector Plug - Cable Applied | Pin (crimp) | 7 | C | N/A |
| 3-2226910-4 | Connector Plug - Cable Applied | Pin (crimp) | 7 | MA | N/A |
| 2226920-1 | Connector Receptacle - Cable Applied | Socket (crimp) | 6 | C | 5935-01654090 |
| 1-2226920-3 | Connector Receptacle - Cable Applied | Socket (crimp) | 6 | MA | N/A |
| 2-2226920-3 | Connector Receptacle - Cable Applied | Socket (crimp) | 7 | C | N/A |
| 3-2226920-5 | Connector Receptacle - Cable Applied | Socket (crimp) | 7 | MA | N/A |

O.C.H. Cable Applied Contacts

| TE Part No. | Part Type | Contact Type |
|-------------|------------------------|----------------|
| 2226913-1 | Crimp Contact - Signal | Pin (crimp) |
| 2226913-2 | Crimp Contact - Power | Pin (crimp) |
| 2226923-1 | Crimp Contact | Socket (crimp) |

* Contacts are supplied w/connector - packaged separately



2226920-1



2226910-1



O.C.H. Anti-Rotation Plug/Receptacle

| TE Part No. | Part Type | Contact Type | No. of Positions | Keying |
|-------------|----------------------|---------------------|------------------|--------|
| 2337319-1 | Connector Plug | Pin (solder cup) | 6 | C |
| 2339799-1 | Connector Receptacle | Socket (solder cup) | 6 | C |



2337319



2339799

O.C.H. Receptacle PCB Termination

| TE Part No. | Part Type | Contact Type | No. of Positions | Keying |
|-------------|--------------------------------|--------------------------|------------------|--------|
| 2828420-1 | Connector Receptacle - Battery | Socket (PCB solder tail) | 6 | C |
| 2828420-2 | Connector Receptacle - Battery | Socket (PCB solder tail) | 7 | C |



2828420-1



2828420-2

O.C.H. Micro Circular Connectors

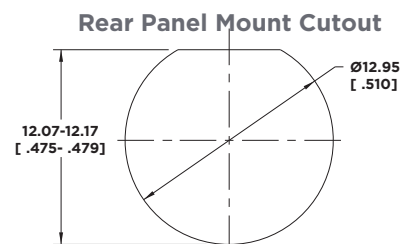
O.C.H. Rear Panel Mount Plug/Receptacle Cable Applied

| TE Part No. | Part Type | Contact Type | No. of Positions | Keying |
|-------------|-----------------------------|----------------|------------------|--------|
| 2329309-1 | Rear Panel Mount Plug | Pin (crimp) | 6 | C |
| 1-2329309-3 | Rear Panel Mount Plug | Pin (crimp) | 6 | MA |
| 2-2329309-3 | Rear Panel Mount Plug | Pin (crimp) | 7 | C |
| 3-2329309-5 | Rear Panel Mount Plug | Pin (crimp) | 7 | MA |
| 2313387-1 | Rear Panel Mount Receptacle | Socket (crimp) | 6 | C |
| 1-2313387-3 | Rear Panel Mount Receptacle | Socket (crimp) | 6 | MA |
| 2-2313387-3 | Rear Panel Mount Receptacle | Socket (crimp) | 7 | C |
| 3-2313387-5 | Rear Panel Mount Receptacle | Socket (crimp) | 7 | MA |

O.C.H. Panel Mount Crimp Contacts

| TE Part No. | Part Type | Contact Type |
|-------------|----------------------------|--------------|
| 2226923-1 | Crimp Socket Contact | Socket |
| 2226913-1 | Crimp Pin Contact (Signal) | Pin |
| 2226913-2 | Crimp Pin Contact (Ground) | Pin |

* Contacts are supplied w/connector – packaged separately



Recommended Panel Cutout Scale 6:1



2329309



2313387

O.C.H. Rear Panel Mount Plug/Receptacle PCB Termination (PCB Solder Tail)

| TE Part No. | Part Type | Contact Type | No. of Positions | Keying |
|-------------|-----------------------------|--------------------------|------------------|--------|
| 2313426-1 | Rear Panel Mount Plug | Pin (PCB solder tail) | 6 | C |
| 1-2313426-4 | Rear Panel Mount Plug | Pin (PCB solder tail) | 6 | MA |
| 2-2313426-3 | Rear Panel Mount Plug | Pin (PCB solder tail) | 7 | C |
| 3-2313426-5 | Rear Panel Mount Plug | Pin (PCB solder tail) | 7 | MA |
| 2329308-1 | Rear Panel Mount Receptacle | Socket (PCB solder tail) | 6 | C |
| 2329308-7 | Rear Panel Mount Receptacle | Socket (PCB solder tail) | 6 | MA |
| 1-2329308-2 | Rear Panel Mount Receptacle | Socket (PCB solder tail) | 7 | C |
| 1-2329308-8 | Rear Panel Mount Receptacle | Socket (PCB solder tail) | 7 | MA |



2313426



2329308



O.C.H. Micro Circular Connectors

O.C.H. Caps

O.C.H. rubber caps provide an optimal solution to protect the cable/connector on a soldier system's applications. TE offers these molded rubber caps with a fused end, slip knot or lug terminal connection options, so end users can choose what works best for their solution. These caps are IP67 rated and built to withstand the rugged battlefield conditions of today's soldiers.



Plug Cap with Slip Knot



Receptacle Cap with Lug Terminal Attachment

| Part Number | Part Description | Product | Connector Series | Connector Gender | Connector Gender Designation | Shell Size | Lanyard | Lanyard Length | Lanyard Attachment | Attachment | Terminal Lug Screw |
|-------------|------------------|---------|------------------|------------------|------------------------------|------------|---------|----------------|--------------------|------------|--------------------|
| Z395379-9 | OCH-51-6 | End Cap | OCH | Plug | 51 | 6 | Without | | N/A | | |
| Z395379-1 | OCH-51-6-4 | End Cap | OCH | Plug | 51 | 6 | With | 4 | Fused End | | |
| Z395379-2 | OCH-51-6-5 | End Cap | OCH | Plug | 51 | 6 | With | 5 | Fused End | | |
| Z395379-3 | OCH-51-6-4-SK | End Cap | OCH | Plug | 51 | 6 | With | 4 | Slip Knot | SK | |
| Z395379-4 | OCH-51-6-5-SK | End Cap | OCH | Plug | 51 | 6 | With | 5 | Slip Knot | SK | |
| Z395379-5 | OCH-51-6-4-T1 | End Cap | OCH | Plug | 51 | 6 | With | 4 | Lug Terminal | T1 | M3 |
| Z395379-6 | OCH-51-6-5-T1 | End Cap | OCH | Plug | 51 | 6 | With | 5 | Lug Terminal | T1 | M3 |
| Z395379-7 | OCH-51-6-4-T2 | End Cap | OCH | Plug | 51 | 6 | With | 4 | Lug Terminal | T2 | M4 |
| Z395379-8 | OCH-51-6-5-T2 | End Cap | OCH | Plug | 51 | 6 | With | 5 | Lug Terminal | T2 | M4 |
| Z395380-9 | OCH-52-6 | End Cap | OCH | Receptacle | 52 | 6 | Without | | | | |
| Z395380-1 | OCH-52-6-4 | End Cap | OCH | Receptacle | 52 | 6 | With | 4 | Fused End | | |
| Z395380-2 | OCH-52-6-5 | End Cap | OCH | Receptacle | 52 | 6 | With | 5 | Fused End | | |
| Z395380-3 | OCH-52-6-4-SK | End Cap | OCH | Receptacle | 52 | 6 | With | 4 | Slip Knot | SK | |
| Z395380-4 | OCH-52-6-5-SK | End Cap | OCH | Receptacle | 52 | 6 | With | 5 | Slip Knot | SK | |
| Z395380-5 | OCH-52-6-4-T1 | End Cap | OCH | Receptacle | 52 | 6 | With | 4 | Lug Terminal | T1 | M3 |
| Z395380-6 | OCH-52-6-5-T1 | End Cap | OCH | Receptacle | 52 | 6 | With | 5 | Lug Terminal | T1 | M3 |
| Z395380-7 | OCH-52-6-4-T2 | End Cap | OCH | Receptacle | 52 | 6 | With | 4 | Lug Terminal | T2 | M4 |
| Z395380-8 | OCH-52-6-5-T2 | End Cap | OCH | Receptacle | 52 | 6 | With | 5 | Lug Terminal | T2 | M4 |

Specifications

- **Rubber Cap:** Neoprene
- **Rope:** Nylon
- **Crimp Sleeve and Lug Terminal:** Aluminum, Black Zinc Nickel Finish

Part Numbering

OCH-51-6 - 5 - T2

PLUG CAP _____

LENGTH OF ROPE _____
(In Inches)

TERMINAL TYPE _____

- Blank** Fused End
- SK** Slip Knot
- T1** Lug Terminal, M3 Size
- T2** Lug Terminal, M4 Size

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QUALITY STARTS WITH THE RIGHT APPLICATION TOOLING

Creating a quality crimp connection is essential to delivering high performance and reliability in extreme environments. From low to high volume wire processing, TE has you covered with a full range of application tooling and a global field service team.

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