



# **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

### **Nett Warrior Keying Guide**

A°	В°	Keying
95	230	C*
150	210	А
75	210	В
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

### 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**

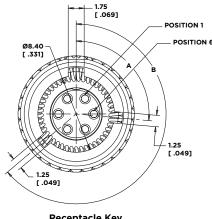
- Insulation Resistance: 100 MQ min. at 500 VDC
- Contact Current Rating: 5 A (-18°C to +71°C, crimped to 22 AWG wire)

### **MECHANICAL**

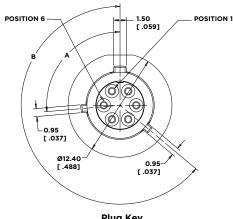
- Shock: MIL-STD-810G, Method 516.6, Procedure IV
- Vibration: MIL-STD-810G, Method 514.7, Procedure I, Method 514.6, Category 5, Procedure II

#### **DOCUMENTATION**

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







Plug Key

### 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	С	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	С	N/A
3-2226910-4	Connector Plug - Cable Applied	Pin (crimp)	7	MA	N/A
2226920-1	Connector Receptacle - Cable Applied	Socket (crimp)	6	С	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	С	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

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

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





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	С
2828420-2	Connector Receptacle - Battery	Socket (PCB solder tail)	7	С





2828420-1 2828420-2

### 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	С
1-2329309-3	Rear Panel Mount Plug	Pin (crimp)	6	MA
2-2329309-3	Rear Panel Mount Plug	Pin (crimp)	7	С
3-2329309-5	Rear Panel Mount Plug	Pin (crimp)	7	MA
2313387-1	Rear Panel Mount Receptacle	Socket (crimp)	6	С
1-2313387-3	Rear Panel Mount Receptacle	Socket (crimp)	6	MA
2-2313387-3	Rear Panel Mount Receptacle	Socket (crimp)	7	С
3-2313387-5	Rear Panel Mount Receptacle	Socket (crimp)	7	MA

#### **O.C.H. Panel Mount Crimp Contacts**

TE Part No.	<b>Contact Type</b>	
2226923-1	Crimp Socket Contact	Socket
2226913-1	Crimp Pin Contact (Signal)	Pin
2226913-2	Crimp Pin Contact (Ground)	Pin

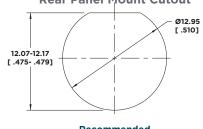
<sup>\*</sup> Contacts are supplied w/connector - packaged separately





2313387

**Rear Panel Mount Cutout** 



Recommended Panel Cutout Scale 6:1

### 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	С
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	С
3-2313426-5	Rear Panel Mount Plug	Pin (PCB solder tail)	7	MA
2329308-1	Rear Panel Mount Receptacle	Socket (PCB solder tail)	6	С
2329308-7	Rear Panel Mount Receptacle	Socket (PCB solder tail)	6	MA
1-2329308-2	Rear Panel Mount Receptacle	Socket (PCB solder tail)	7	С
1-2329308-8	Rear Panel Mount Receptacle	Socket (PCB solder tail)	7	MA





AEROSPACE, DEFENSE & MARINE / O.C.H. MICRO CIRCULAR CONNECTORS





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



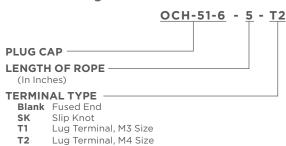
Receptacle Cap with Lug Terminal Attachment

Part Number	Part Description	Product	Connector Series	Connector Gender	Connector Gender Designation	Shell Size	Lanyard	Lanyard Length	Lanyard Attachment	Attachment	Terminal Lug Screw
2395379-9	0CH-51-6	End Cap	OCH	Plug	51	6	Without		N/A		
2395379-1	0CH-51-6-4	End Cap	OCH	Plug	51	6	With	4	Fused End		
2395379-2	OCH-51-6-5	End Cap	OCH	Plug	51	6	With	5	Fused End		
2395379-3	OCH-51-6-4-SK	End Cap	OCH	Plug	51	6	With	4	Slip Knot	SK	
2395379-4	OCH-51-6-5-SK	End Cap	OCH	Plug	51	6	With	5	Slip Knot	SK	
2395379-5	OCH-51-6-4-T1	End Cap	OCH	Plug	51	6	With	4	Lug Terminal	T1	M3
2395379-6	OCH-51-6-5-T1	End Cap	OCH	Plug	51	6	With	5	Lug Terminal	T1	M3
2395379-7	OCH-51-6-4-T2	End Cap	OCH	Plug	51	6	With	4	Lug Terminal	T2	M4
2395379-8	OCH-51-6-5-T2	End Cap	OCH	Plug	51	6	With	5	Lug Terminal	T2	M4
2395380-9	OCH-52-6	End Cap	OCH	Receptacle	52	6	Without				
2395380-1	OCH-52-6-4	End Cap	OCH	Receptacle	52	6	With	4	Fused End		
2395380-2	OCH-52-6-5	End Cap	OCH	Receptacle	52	6	With	5	Fused End		
2395380-3	OCH-52-6-4-SK	End Cap	OCH	Receptacle	52	6	With	4	Slip Knot	SK	
2395380-4	OCH-52-6-5-SK	End Cap	OCH	Receptacle	52	6	With	5	Slip Knot	SK	
2395380-5	OCH-52-6-4-T1	End Cap	OCH	Receptacle	52	6	With	4	Lug Terminal	T1	M3
2395380-6	OCH-52-6-5-T1	End Cap	OCH	Receptacle	52	6	With	5	Lug Terminal	T1	M3
2395380-7	OCH-52-6-4-T2	End Cap	OCH	Receptacle	52	6	With	4	Lug Terminal	T2	M4
2395380-8	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**



### Empower Engineers to Solve Problems, Moving the World Forward.

AMP | AGASTAT | CII | DEUTSCH | DRI | HARTMAN | KILOVAC MICRODOT | NANONICS | POLAMCO | Raychem | SEACON

### **CONNECT WITH US**

We make it easy to connect with our experts and are ready to provide all the support you need. Visit **te.com/support** to chat with a Product Information Specialist.

### 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.

- · View all application tooling
- · Connect with our experts to find the right tool for your application

### te.com/O.C.H.

AMP, AGASTAT, CII, DEUTSCH, DRI, HARTMAN, KILOVAC, MICRODOT, NANONICS, O.C.H., POLAMCO, Raychem, SEACON, TE, TE Connectivity, and TE connectivity (logo) are trademarks owned or licensed by TE Connectivity. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2022 TE Connectivity All Rights Reserved.

1-1773920-2 11/22

## O.C.H. MICRO CIRCULAR CONNECTORS

TE Connectivity Aerospace, Defense & Marine 2900 Fulling Mill Road Middletown, PA 17057

