# pulseOne





pulseOne cable assemblies are ready-made to meet your exacting specifications.

When longevity is required, pulseOne's robust standard configuration ensures durability in repeated-use applications. Whether sterilized by EtO, or disinfected with standard hospital cleaning agents, pulseOne continues to perform after reprocessing.

Yet for applications best served by disposable products, pulseOne's "Limited Use" alternative is an ideal choice. Select this option to get great performance at the right price.

And if intelligent solutions are needed, pulseOne's factory

installed PCB option\* allows you to program in limits to the number of uses, proper OEM identification and other 'smart' features.

# **FEATURES & BENEFITS**

Pre-molded to Cable

Performance matched cable with connector simplifies the specification process

- Tactile & Audible Confirmation of Mate Assurance that the connector is mated properly
- "D" Shape Friction Fit Design Easy to align and connect in blind mate applications. Simply pull to disconnect
- Touch Proof Contacts<sup>1</sup> 1- Per IEC-60601-1 Protects against accidental touch in multiple keying options
- Sealed to IP-64 and IP-67<sup>2</sup> 2 IP-67 applies to panel mount receptacle only Keeps water and cleaning agents out of the connector when mated
- **Optional Active Components** Properly identify and control single use or variable device parameters

# APPLICATION EXAMPLES

**Surgical Devices** 

The "Limited Use" option is perfect for disposable electrosurgical products

Vital Sign Monitoring Devices Simple to use and small size make pulseOne great for patient wearable products

Therapy Delivery Devices Easily connect to electrodes for a wide array of single use applications









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### STANDARD CONNECTOR OPTIONS

#### **Plug Cable Assemblies**

- 4, 7, 10, and 14 pin options available
- · Unshielded or Shielded
- Up to 3 keyways standard
- PCB Option (future)

Note: For custom cables, cable lengths, colors and keys available, please consult factory

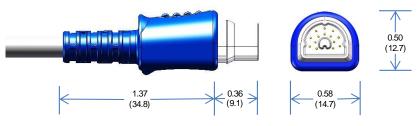
#### **Receptacle Assemblies**

- Cable Mount or Panel Mount
- 4, 7, 10, and 14 pin options
- · Unshielded or Shielded
- · Up to 3 keyways standard

# BASIC DIMENSIONS

Inches (mm)

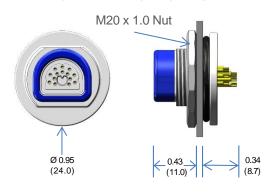
#### Cable-mount plug



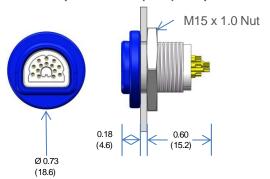
#### Cable-mount receptacle



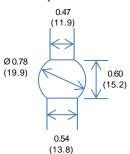
#### Rear panel-mount (RPM) receptacle



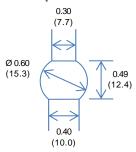
#### Front panel-mount (FPM) receptacle



#### **RPM** panel cutout



**FPM** panel cutout



Pin ID View

Note: Cable side of the receptacle shown **PIN #8** PIN #7 PIN #1



Phone: 508-427-7000

Fax: 508-583-0164

For additional information about pulseOne or any other product, please contact an Amphenol Alden Product Specialist today.

pulseOne



# HOW TO ORDER / PART NUMBER

**pulseOne** is available in a variety of standard configurations as well as an infinite number of custom possibilities. Standard contacts are arrayed in a semi-circular pattern in 4, 7, 10 and 14 poles with 3 choices for keying. Each connector is assembled and molded onto a standard cable, one meter in length. For custom cable, shielded connectors, and plugs with programmable PCB's, please consult the factory.

Part Number:			N	L	04	В	1	N	1000	- YYY	Υ
<u>_</u>	Plug	Р									
Connector Body	Receptacle	R									
	Non-Shielded		Ν								
	Shielded		S								
Mating Cycles	Limited Use (< 100 mating cycles) - plug only			L							
Mat Cyc	Multiple Use - up to 5,000 mating cycles			М	_						
₩	4 pole				04						
Number of Contacts	7 pole				07						
Cont	10 pole				10						
20	14 pole				14						
,	Blue - standard					В					
Color	Gray					G					
O	Custom Color - requires suffix	С									
	Key 1 standard			1							
7	Key 2						2				
Key 1	Key 3						3				
	Custom Key - requires suffix						С				
	Standard Cable - no shield							Ν			
	Standard Cable - with shield			S							
	Custom Cable - requires suffix					С					
2	Front Panel Mount (PCB tail) - no cable							Ε			
Mount To	Front Panel Mount (solder cup tail) - no cable							F			
Mo	Rear Panel Mount (PCB tail) - no cable	cable			Q						
	Rear Panel Mount (solder cup tail) - no cable	able			R						
	Cable Length (millimeters) -								XXXX		
	1,000 and 2,000 mm standard								^^^^		
Custom	Suffix to be assigned by Amphenol Alden			YYY	Υ						



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4 Pole Key 1 Plug Face



7 Pole Key 1 Plug Face



10 Pole Key 1 Plug Face



14 Pole Key 1 Plug Face



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# TECHNICAL SPECIFICATIONS

#### Mechanical

Mating Cycle Durability:	per EIA-364-26
Receptacle	> 5,000
Plug, Limited use	< 100
Plug, Multiple use	> 5,000
Mating Forces (N):	per EIA-364-13
Insertion:	31
Withdrawal:	23
Flex Cycles:	+/- 90 degrees
Cable unshielded	> 5,000 one axis
Cable shielded	> 2,500 one axis
Panel Nut Torque Spec:	4.5 kgf-cm

#### Environmental

Mated Plug to In-line Receptacle Seal to IP-64		
Mated Plug to Panel Mount Receptacle Seal to IP-67		
Disinfect with standard hospital cleaning agents		
Sterilize with EtO		

#### Electrical

Operating Current:	1.0A per contact, continuous duty, ≤ 30°C temperature rise, all 14 contacts energized, per EIA-364- 70
Operating Voltage:	300 V RMS per EIA-364-20
DWV – Pin to Pin:	1,000 VDC @ 100 microamps leakage max per EIA-364-20
DWV – Pins to Ground:	5,000 VDC @ 100 microamps leakage max per EIA-364-20

### **Component Materials**

Standard Cable:	28AWG stranded cond. PVC insulated, TPU jacket, non shielded, color natural (off white)		
Contacts:	Copper alloy with gold over nickel plate		
Connector Housing:	Polyamide, color white		
Overmolds:	TPU, color blue		

#### THE AMPHENOL ADVANTAGE

No other interconnect manufacturer can match our special knowledge, collaborative engineering expertise, the flexibility to quickly customize our standard product, and the power of Amphenol's global manufacturing capabilities to serve the demands of the global market.

Amphenol Alden is designed to be your complete interconnect resource regardless of your interconnect need. From simply providing world-class connectors, to engineering and manufacturing the most complex final overmolded cable and electronic accessory, only Amphenol Alden merges design engineering, product and process expertise to deliver interconnect results that are as ergonomic and effective as they are economical.

Amphenol Alden is located in Brockton, Massachusetts, at 117 N. Main Street. Visit us on the web at www.amphenolalden.com or call us at 508-427-7000 for more information and to discuss your specific application in detail.



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