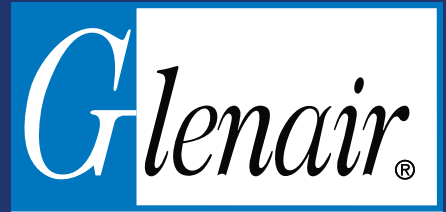


MISSION-CRITICAL  
INTERCONNECT  
SOLUTIONS



**MIGHTY  
MOUSE**



*SERIES 86*

# Mighty Mouse SealTac™ Miniature Push-Pull Connectors

Pressure-sealed tactical soldier connectors and jumpers with maintenance-free spring-loaded contacts



JULY 2022



# Mighty Mouse SealTac™ Push-Pull Connectors and Cable Jumpers



## Outstanding mating performance, 30 PSI environmental sealing, and life-of-program durability

Glenair Mighty Mouse micro miniature, precision-machined connectors are the universal standard for US and NATO tactical connector applications. The Mighty Mouse Series 86 SealTac is a durable, environmentally-sealed push-pull connector with outstanding user ergonomics. Receptacle target-contact designs are fully sealed, easy to maintain and clean, and immersible to 30 PSI / IP68 in the unmated condition. Spring pin contacts (plug side) are rated to 2 Amps and can withstand virtually unlimited mating cycles. Connectors are temperature tolerant from -55°C to +125°C, with DWV 500 VAC at sea level. The Series 86 is fully tooled, and available in both discrete connectors with solder cup, PCB, and wire termination or as turnkey point-to-point jumpers.

- **High-durability** unlimited life-cycle performance
- **30 PSI open-face / IP68-level** sealing (box side)
- **Ergonomic** keyed push-pull mating
- **High-density** micro miniature form factor
- **Maintenance-free** spring contact inserts
- **Integrated EMI/RFI ground spring** and shield termination band porch
- **High vibration and shock resistant**
- **Full qualification testing** complete and available



## SERIES 86 SealTac Tactical Push-Pull Connectors

Applications • selection guide  
performance summary

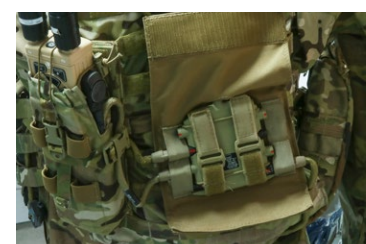
### SERIES 86 SEALTAC APPLICATIONS



C4ISR soldier devices



Rugged computers and hand-helds



Power and data hubs



Tactical Communications Gear



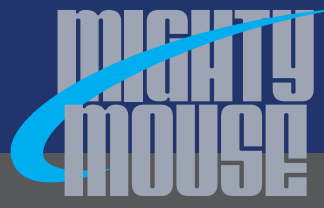
Helmet quick-disconnects

### CONNECTOR SELECTION GUIDE

<b>IN-LINE RECEPTACLES</b>		<b>860-051-01</b> Series 86 spring contact push-pull in-line receptacle for cable applications
<b>IN-LINE PLUG</b>		<b>860-050-06</b> Series 86 target contact push-pull in-line cable plug
<b>JAM-NUT PLUG</b>		<b>860-050-07</b> Series 86 target contact push-pull jam-nut mount plug
<b>CABLE JUMPER Receptacle-to-receptacle</b>		<b>861-001</b> Series 86 spring contact push-pull receptacle-to-receptacle overmolded cable jumper
<b>CABLE JUMPER Plug-to-plug</b>		<b>861-002</b> Series 86 target contact push-pull plug-to-plug overmolded cable jumper
<b>CABLE JUMPER High-speed HDMI</b>		<b>861-003</b> Series 86 target contact push-pull plug or spring contact push-pull receptacle-to-HDMI overmolded cable jumper
<b>CABLE JUMPER High-speed USB 3.0</b>		<b>861-004</b> Series 86 target contact push-pull plug or spring contact push-pull receptacle-to-USB 3.0 overmolded cable jumper

Series 86 Performance Summary		
	Performance	Specification
DWV	500 Vac	EIA 364-20
IR	5 GΩ, 200 Vdc	EIA 364-21
Temperature Range	-55°C / +125°C	
Contact Ω	40 mΩ	EIA-364-23 (26 AWG wire included)
Durability	2500 cycles min	EIA-364-09
Mating Force	8 lbs (size 06) 12 lbs (size 08)	EIA-364-13
Random Vibration		MIL-STD-810H, method 514.8, Annex E, figure 514.8E-1. One hour each axis, longitudinal and perpendicular axes
Shock		Mil-Std-810, method 516, Procedure I (40 G's, 11ms), 3 shocks X 3 axes X 2 directions = 18 shocks
Water Immersion	30 psi, 30 minutes, 100 MΩ min	EIA 364-21, mated and unmated (open face)

INTRODUCTION

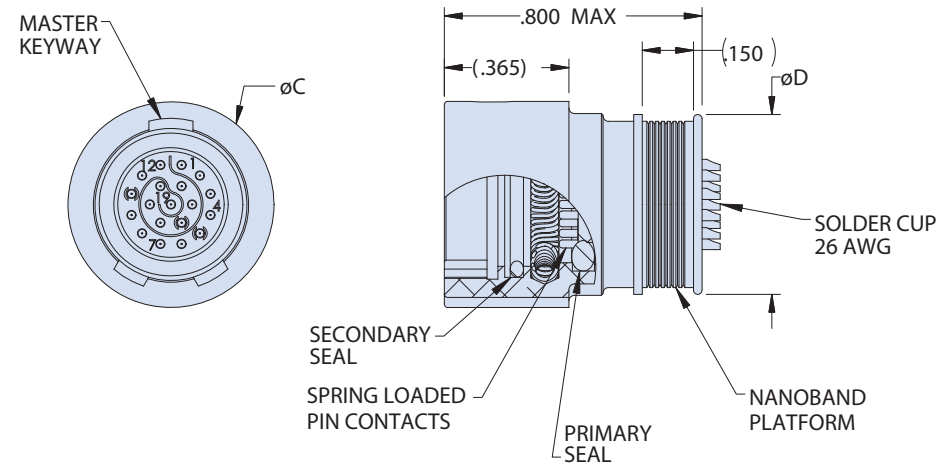


# SERIES 86 SealTac Tactical Push-Pull Connectors

860-051-01 spring contact push-pull in-line receptacle



How To Order					
Sample Part Number	860-051	-01	ME	08-19	A
Series	860-051 = spring contact push-pull in-line receptacle				
Shell Style	-01 = In-Line Receptacle				
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated				
Shell Size - Insert Arrangement	06-7, 07-10, 08-19 (See Table)				
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F				



Dimensions		
Shell Size/ Ins. Arr.	ØC Max	ØD
06-7	.500 (12.7)	.41 (10.4)
07-10	.545 (13.8)	.45 (11.4)
08-19	.625 (15.9)	.53 (13.5)

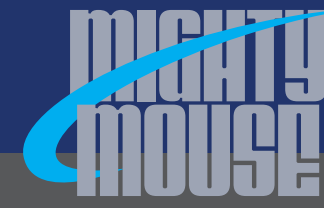
Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

### MATERIAL / FINISH

- Insulator: high-temperature thermoplastic
- O-ring: fluorosilicone
- Contacts: Copper alloy, gold over nickel plated
- Contact spring: stainless steel

### TECHNICAL SPECIFICATIONS

- Temperature range -55°C to +125°C
- DWV: 500 VAC
- Current: 2A max
- Water immersion: 30 PSI / IP68 mated

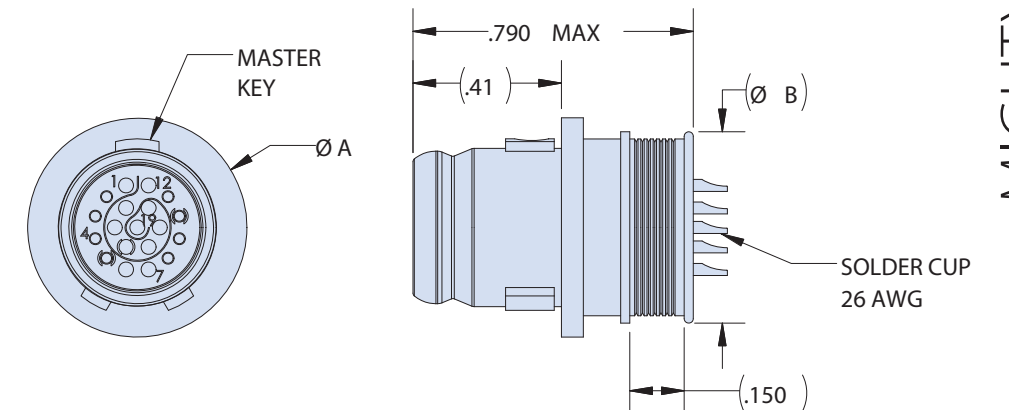


# SERIES 86 SealTac Tactical Push-Pull Connectors

860-050-06 target contact push-pull in-line plug



How To Order					
Sample Part Number	860-050	-06	ME	08-19	S A
Series	860-050 = target contact push-pull plug				
Shell Style	-06 = In-line Plug				
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated				
Shell Size - Insert Arrangement	06-7, 07-10, 08-19 (See Table)				
Termination	S = PC Tail F = Solder Cup				
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F				



Dimensions		
Shell Size/ Ins. Arr.	ØA Max	ØB
06-7	.500 (12.7)	.41 (10.4)
07-10	.545 (13.8)	.45 (11.4)
08-19	.625 (15.9)	.53 (13.5)

Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

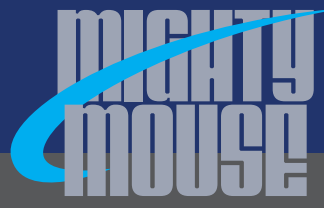
### MATERIAL / FINISH

- Insulator: high-temperature thermoplastic
- Contacts: Copper alloy, gold over nickel plated

### TECHNICAL SPECIFICATIONS

- Temperature range -55°C to +125°C
- DWV: 500 VAC
- Current: 2A max
- Fully-sealed, water immersion: 30 PSI / IP68 mated and unmated

MIGHTY MOUSE SEALTAC

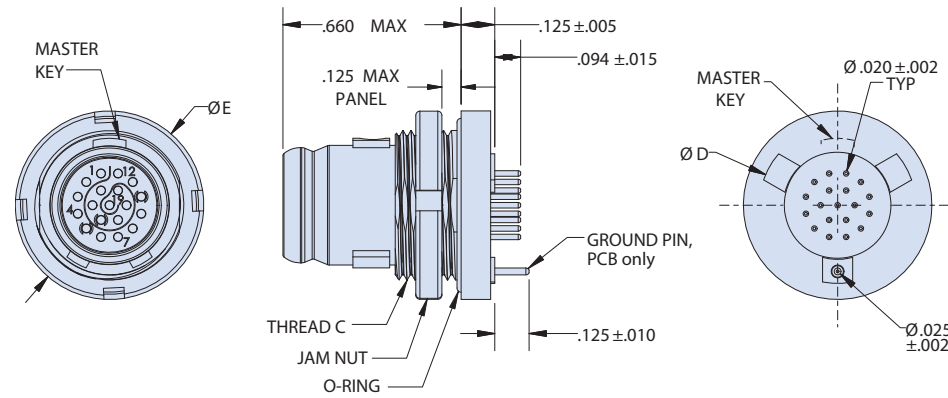


# SERIES 86 SealTac Tactical Push-Pull Connectors

860-050-07 target contact push-pull  
jam nut mount plug



How To Order						
Sample Part Number	860-050	-07	ME	08-19	F	A
Series	860-050 = target contact push-pull plug					
Shell Style	-07 = Jam Nut mount					
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated					
Shell Size - Insert Arrangement	06-7, 07-10, 08-19 (See Table)					
Termination	S = PC Tail F = Solder Cup					
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F					



Dimensions			
Shell Size/ Ins. Arr.	C Thread	ØD	ØE Max
06-7	M10 X 0.5	.446 (11.3)	.525 (13.3)
07-10	M11 X 0.75	.488 (12.4)	.615 (15.6)
08-19	M14 X 0.75	.572 (14.5)	.695 (17.7)

Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

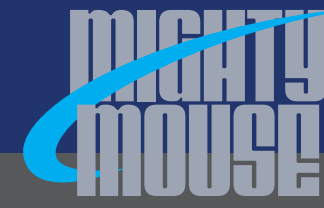
Panel Cutout		
Shell Size/ Ins. Arr.	F	G
06-7	.366/.370	.398/.402
07-10	.398/.402	.437/.441
08-19	.516/.520	.555/.559

### MATERIAL / FINISH

- Insulator: high-temperature thermoplastic
- O-ring: fluorosilicone
- Contacts: Copper alloy, gold over nickel plated

### TECHNICAL SPECIFICATIONS

- Temperature range -55°C to +125°C
- DWV: 500 VAC
- Current: 2A max
- Water immersion: 30 PSI / IP68 mated and unmated

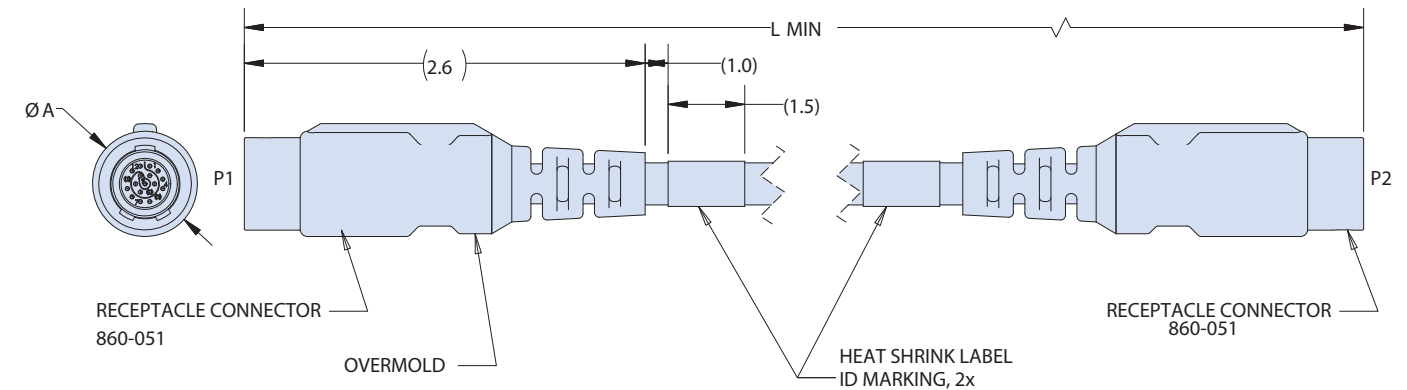


# SERIES 86 SealTac Tactical Push-Pull Connectors

861-001 cable jumper  
receptacle-to-receptacle



How To Order					
Sample Part Number	861-001	ZR	08-19	A	-36
Series	861-001 = spring contact push-pull receptacle-to-receptacle overmolded cable jumper				
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated				
Shell Size - Insert Arrangement	06-7, 07-10, 08-19 (See Table)				
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F				
Cable Length	Cable length, "L" in Inches, min.				



Dimensions	
Shell Size/ Ins. Arr.	ØA Max
06-7	.590 (15.0)
07-10	.630 (16.0)
08-19	.710 (18.0)

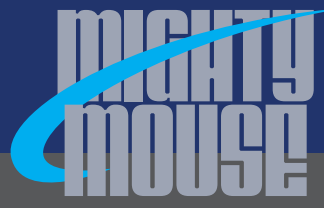
Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

### MATERIAL / FINISH

- Receptacle connectors IAW 860-051
- Overmold: TPV elastomer, black
- Cable: TPV jacket, NiCu EMI braid, 26AWG stranded wire

### TECHNICAL SPECIFICATIONS

- Temperature range -40°C to +75°C
- 100% electrical testing, pin-pin and pin-shell DWV: 500 VAC min, IR = 200 MΩ min at 500 VDC, and continuity check

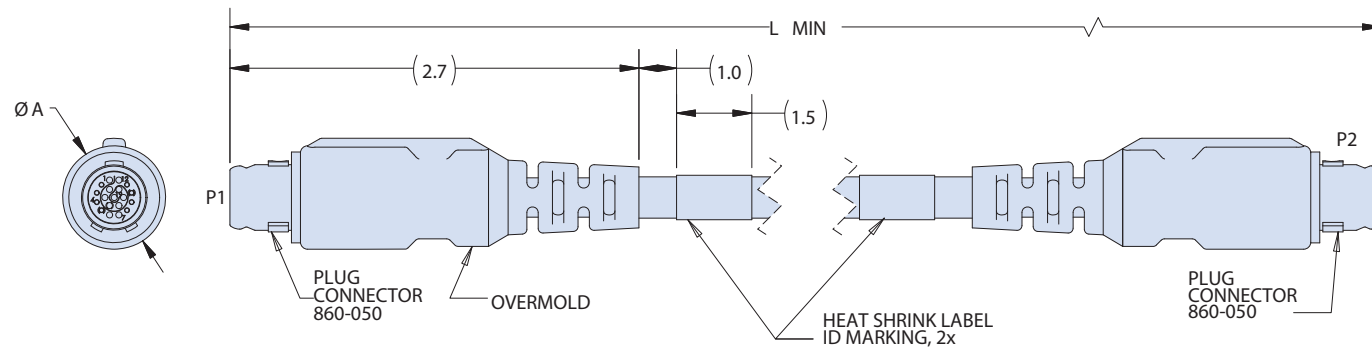


# SERIES 86 SealTac Tactical Push-Pull Connectors

## 861-002 cable jumper plug-to-plug



How To Order	
Sample Part Number	861-002 ZR 08-19 A -36
Series	861-002 = target contact push-pull plug-to-plug overmolded cable jumper
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated
Shell Size - Insert Arrangement	06-7, 07-10, 08-19 (See Table)
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F
Cable Length	Cable length, "L" in Inches, min.



Dimensions	
Shell Size/ Ins. Arr.	ØA Max
06-7	.590 (15.0)
07-10	.630 (16.0)
08-19	.710 (18.0)

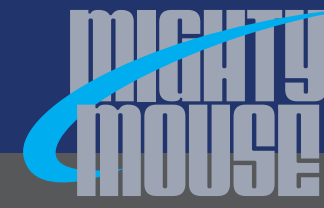
Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

### MATERIAL / FINISH

- Plug connectors IAW 860-050
- Overmold: TPV elastomer, black
- Cable: TPV jacket, NiCu EMI braid, 26AWG stranded wire

### TECHNICAL SPECIFICATIONS

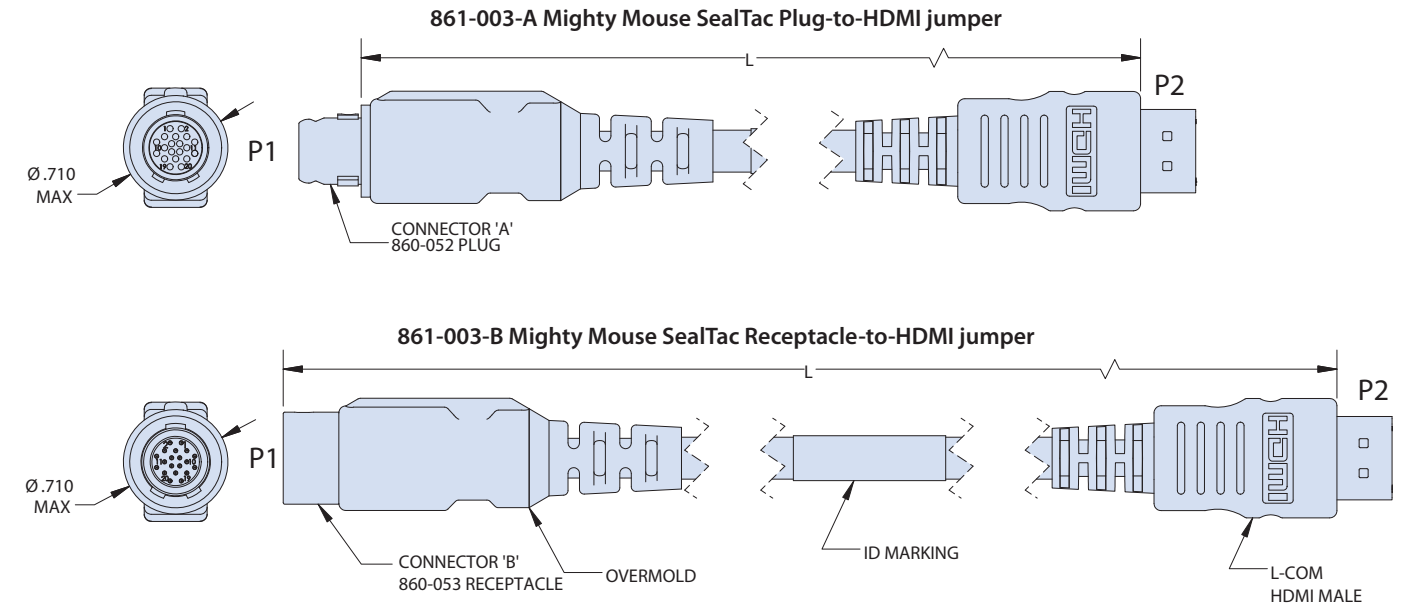
- Temperature range -40°C to +75°C
- 100% electrical testing, pin-pin and pin-shell DWV: 500 VAC min, IR = 200 MΩ min at 500 VDC, and continuity check



# SERIES 86 SealTac Tactical Push-Pull Connectors

## 861-003 cable jumper high-speed HDMI

How To Order	
Sample Part Number	861-003-B ZR A -36
Series	861-003-A = target contact push-pull plug-to-HDMI overmolded cable jumper 861-003-B = spring contact push-pull receptacle-to-HDMI overmolded cable jumper
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F
Cable Length	Cable length, "L" in inches, 114 inches max.

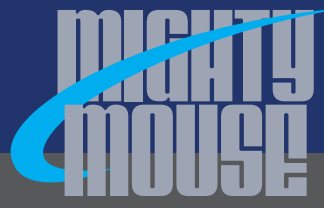


### MATERIAL / FINISH

- Connectors IAW 860-052 (plug) and 860-053 (receptacle)
- Overmold: TPV elastomer, black
- Cable: Low-smoke zero-halogen black jacket

### TECHNICAL SPECIFICATIONS

- Temperature range -10°C to +75°C
- 100% electrical testing, pin-pin and pin-shell DWV: 250 VAC min, IR = 10 MΩ min at 125 VDC, and continuity check

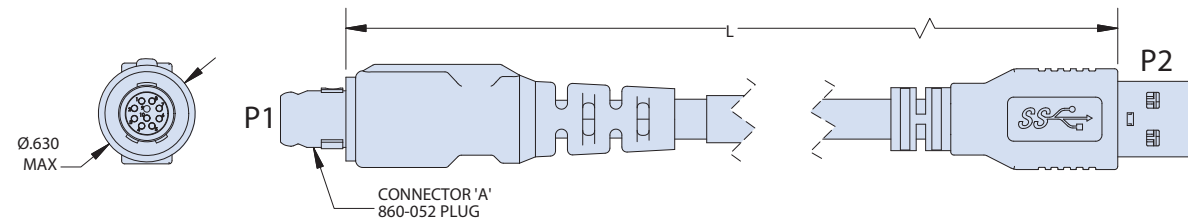


SERIES 86  
SealTac Tactical Push-Pull Connectors

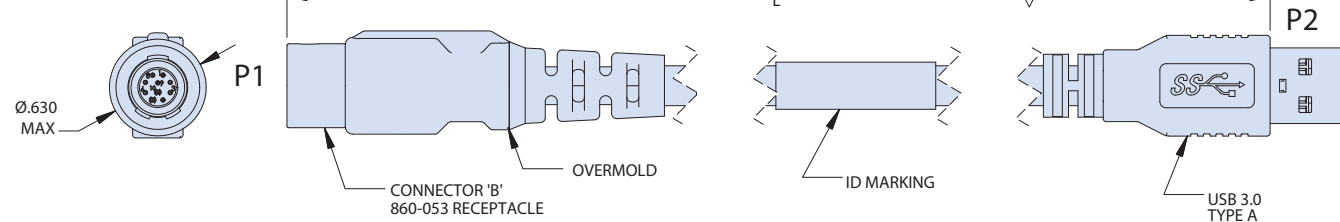
861-004 cable jumper  
SuperSpeed USB 3.0

How To Order	
Sample Part Number	861-004-B ZR A -36
Series	861-004-A = target contact push-pull plug-to-USB 3.0 overmolded cable jumper 861-004-B = spring contact push-pull receptacle-to-USB 3.0 overmolded cable jumper
Material / Finish	ME = Aluminum Electroless Nickel ZR = Aluminum / Black Zinc Nickel Z1 = 316 Stainless Steel / Passivated
Key Position	A = Normal B = Pos. B C = Pos. C D = Pos. D E = Pos. E F = Pos. F
Cable Length	Cable length, "L" in inches, 72 inches max.

861-004-A Mighty Mouse SealTac Plug-to-USB 3.0 jumper



861-004-B Mighty Mouse SealTac Receptacle-to-USB 3.0 jumper



**MATERIAL / FINISH**

- Plug connectors IAW 860-052 (plug) and 860-053 (receptacle)
- Overmold: TPV elastomer, black
- Cable: Low-smoke zero-halogen black jacket

**TECHNICAL SPECIFICATIONS**

- Temperature range -10°C to +75°C
- 100% electrical testing, pin-pin and pin-shell DWV: 100 VAC min, IR = 100 MΩ min at 100 VDC, and continuity check

SERIES 80

MIGHTY MOUSE  
CONNECTORS  
AND CABLES



save weight · save space · optimize power · enhance signal performance

SERIES 80 MIGHTY MOUSE MICRO MINIATURE



TURNKEY HARSH-ENVIRONMENT POINT-TO-POINT AND MULTIBRANCH CABLE ASSEMBLIES





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## Glenair, Inc.

1211 Air Way • Glendale, California • 91201-2497

Telephone: 818-247-6000 • Fax: 818-500-9912 • sales@glenair.com

[www.glenair.com](http://www.glenair.com)

### Glenair East

20 Sterling Drive  
Wallingford, CT  
06492

Telephone:  
203-741-1115  
Facsimile:  
203-741-0053  
sales@glenair.com

### Glenair UK Ltd

40 Lower Oakham Way  
Oakham Business Park  
Mansfield, Notts  
NG18 5BY England

Telephone:  
+44-1623-638100  
Facsimile:  
+44-1623-638111  
sales@glenair.co.uk

### Glenair Microway Systems

7000 North Lawndale Avenue  
Lincolnwood, IL  
60712

Telephone:  
847-679-8833  
Facsimile:  
847-679-8849

### Glenair Nordic AB

Gustav III : S Boulevard 42  
SE-169 27 Solna  
Sweden

Telephone:  
+46-8-50550000  
sales@glenair.se

### Glenair GmbH

Schaberweg 28  
61348 Bad Homburg  
Germany

Telephone:  
06172 / 68 16 0  
Facsimile:  
06172 / 68 16 90  
info@glenair.de

### Glenair Iberica

C/ La Vega, 16  
45612 Velada  
Spain

Telephone:  
+34-925-89-29-88  
Facsimile:  
+34-925-89-29-87  
sales@glenair.es

### Glenair Italia S.p.A.

Via Del Lavoro, 7  
40057 Quarto Inferiore –  
Granarolo dell'Emilia  
Bologna, Italy

Telephone:  
+39-051-782811  
Facsimile:  
+39-051-782259  
info@glenair.it

### Glenair France SARL

7, Avenue Parmentier  
Immeuble Central Parc #2  
31200 Toulouse  
France

Telephone:  
+33-5-34-40-97-40  
Facsimile:  
+33-5-61-47-86-10  
sales@glenair.fr

### Glenair Korea

6-21 Tapsil-ro 58beon-gil  
Giheung-gu, Yongin-si  
Gyeonggi-do  
Republic of Korea

Telephone:  
+82-07-5067-2437  
Facsimile:  
+82-504-375-4549  
sales@glenair.kr

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