

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



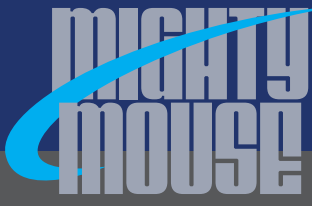
Mighty Mouse SealTac™ Push-Pull Connectors and Cable Jumpers



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

INTRODUCTION

SERIES 86 SEALTAC APPLICATIONS



C4ISR soldier devices



Rugged computers and hand-helds



Power and data hubs



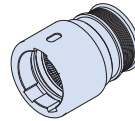
Tactical Communications Gear



Helmet quick-disconnects

CONNECTOR SELECTION GUIDE

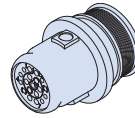
IN-LINE RECEPTACLES



860-051-01

Series 86 spring contact push-pull in-line receptacle for cable applications

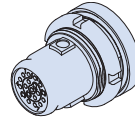
IN-LINE PLUG



860-050-06

Series 86 target contact push-pull in-line cable plug

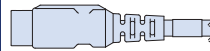
JAM-NUT PLUG



860-050-07

Series 86 target contact push-pull jam-nut mount plug

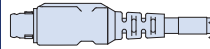
CABLE JUMPER Receptacle-to-receptacle



861-001

Series 86 spring contact push-pull receptacle-to-receptacle overmolded cable jumper

CABLE JUMPER Plug-to-plug



861-002

Series 86 target contact push-pull plug-to-plug overmolded cable jumper

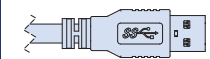
CABLE JUMPER High-speed HDMI



861-003

Series 86 target contact push-pull plug or spring contact push-pull receptacle-to-HDMI overmolded cable jumper

CABLE JUMPER High-speed USB 3.0



861-004

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)



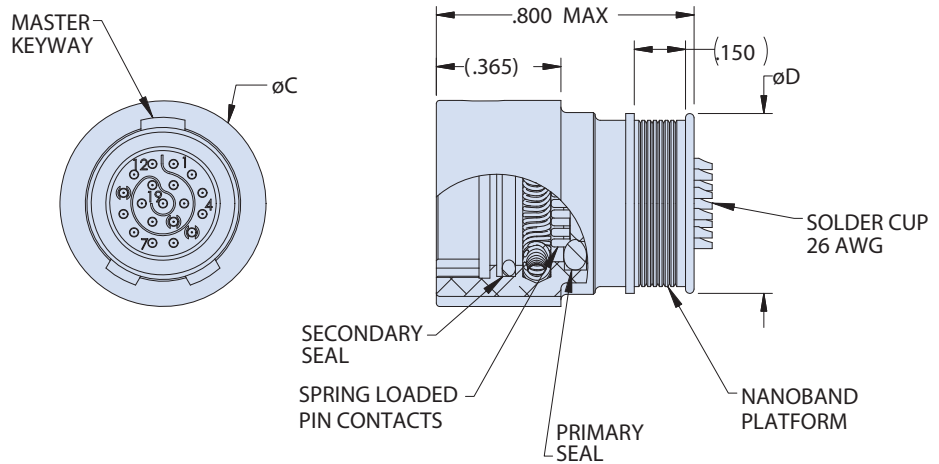
SERIES 86 SealTac Tactical Push-Pull Connectors

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

MIGHTY MOUSE SEALTAC



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.	$\varnothing C$ Max	$\varnothing D$
06-7	.500 (12.7)	.41 (10.4)
07-10	.545 (13.8)	.45 (11.4)
08-19	.625 (15.9)	.53 (13.5)

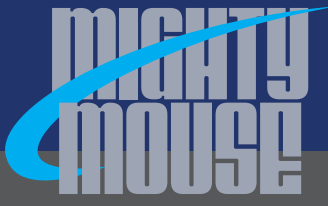
Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

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

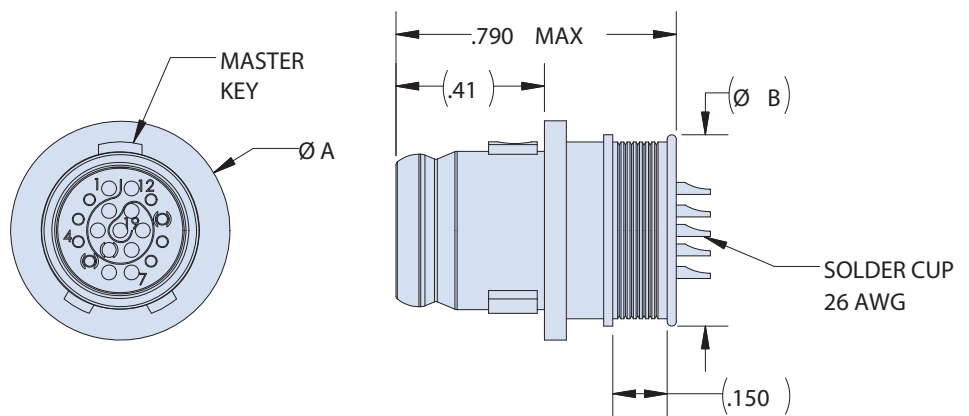


SERIES 86 SealTac Tactical Push-Pull Connectors

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



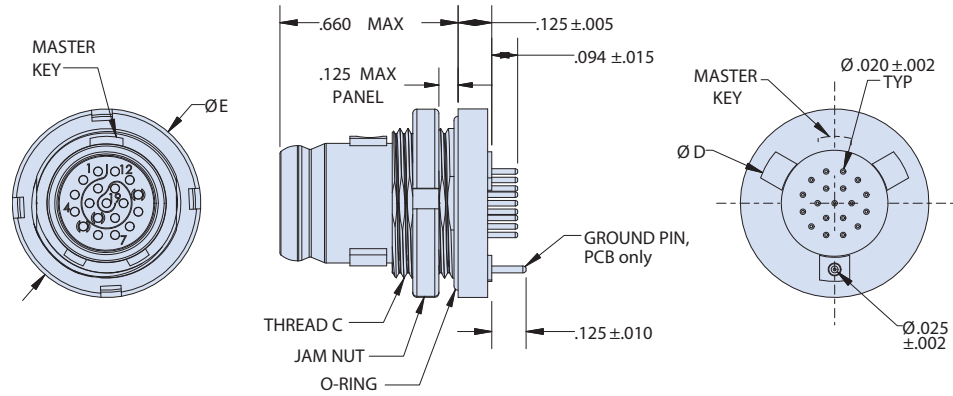
SERIES 86 SealTac Tactical Push-Pull Connectors

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

MIGHTY MOUSE SEALTAC



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

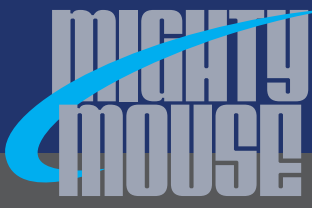
Panel Cutout		
Shell Size/ Ins. Arr.	F	G
06-7	.366/.370	.398/.402
07-10	.398/.402	.437/.441
08-19	.516/.520	.555/.559

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



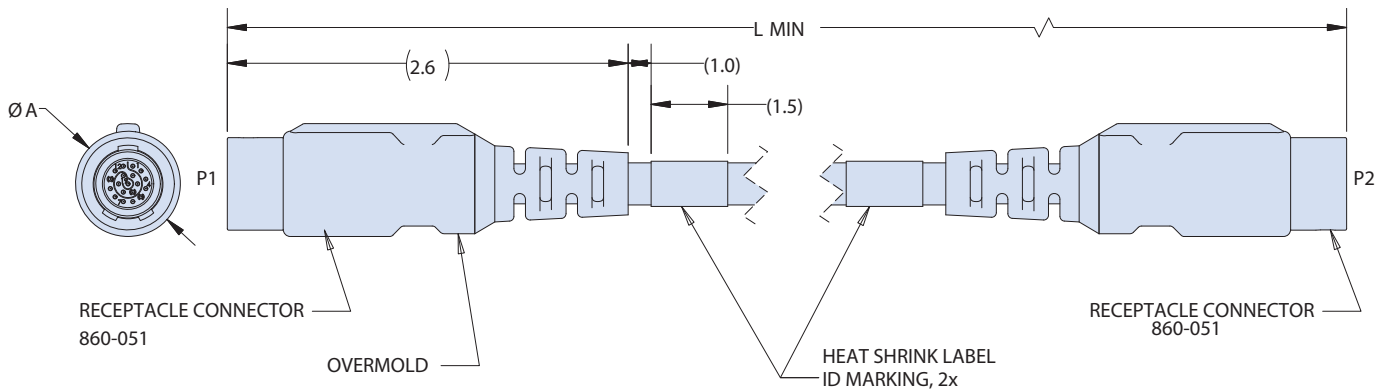
SERIES 86 SealTac Tactical Push-Pull Connectors

861-001 cable jumper receptacle-to-receptacle

MIGHTY MOUSE SEALTAC



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



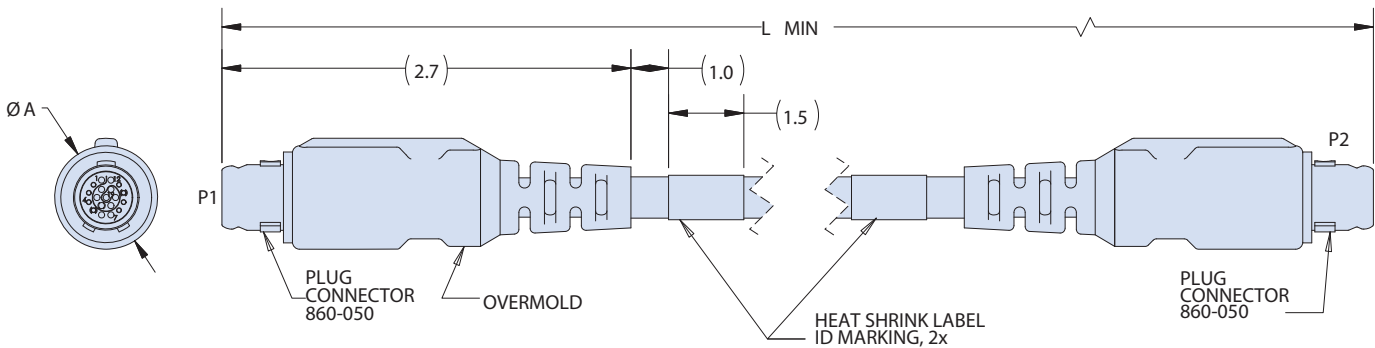
SERIES 86 SealTac Tactical Push-Pull Connectors

861-002 cable jumper plug-to-plug

MIGHTY MOUSE SEALTAC



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)

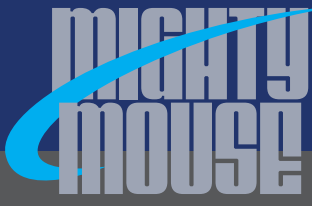
Shell Size / Contact Arrangements		
06-7 shell size 6, 7 contacts	07-10 shell size 7, 10 contacts	08-19 shell size 8, 19 contacts

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



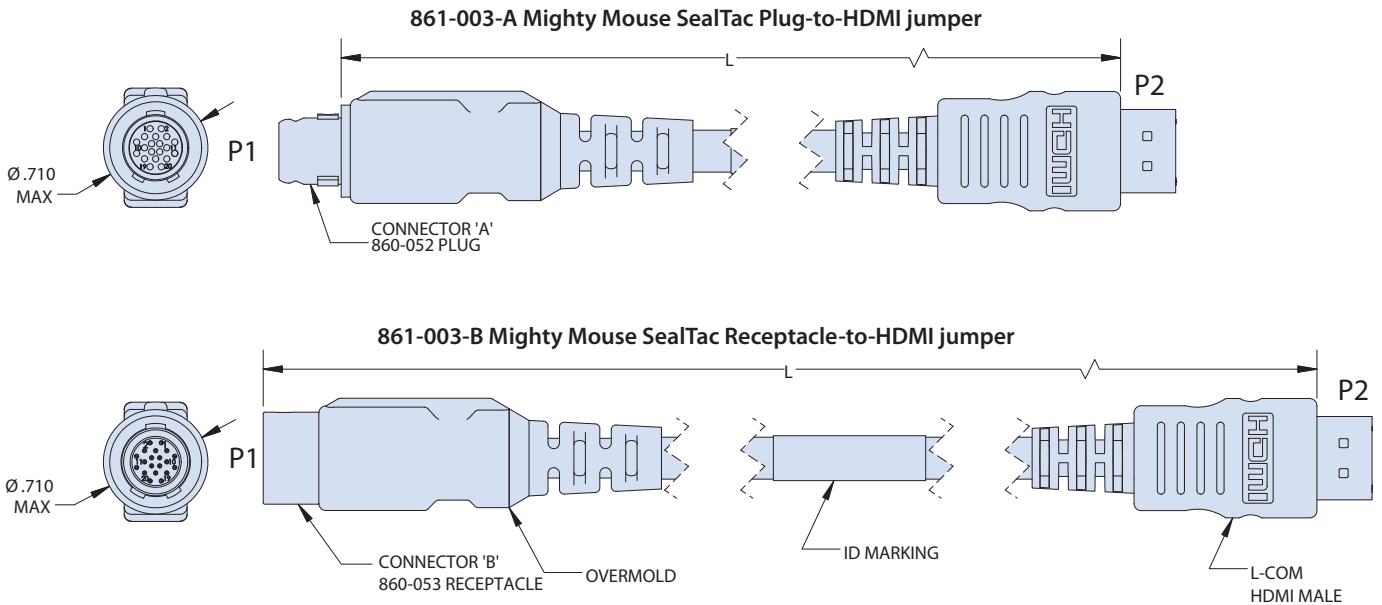
SERIES 86

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.			

MIGHTY MOUSE SEALTAC

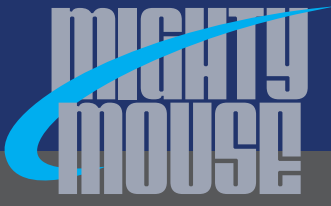


MATERIAL / FINISH

- 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

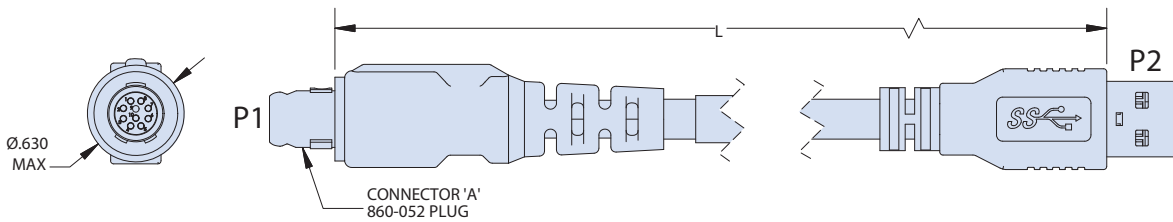
SealTac Tactical Push-Pull Connectors

861-004 cable jumper SuperSpeed USB 3.0

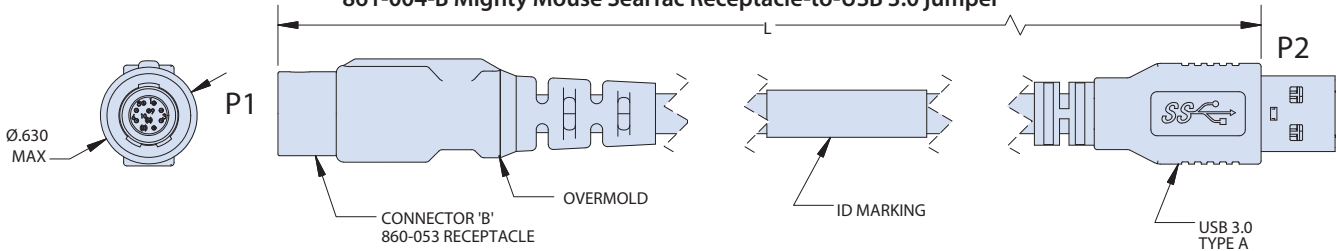
MIGHTY MOUSE SEALTAC

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

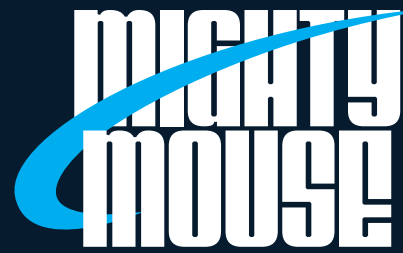
- Plug connectors IAW 860-052 (plug) and 860-053 (receptacle)
- Overmold: TPV elastomer, black
- Cable: Low-smoke zero-halogen black jacket

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

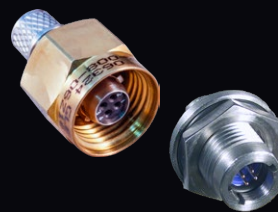
SERIES 80 MIGHTY MOUSE MICRO MINIATURE



Series 800
UN thread



Series 801
double-start



Series 802
AquaMouse



Series 803
bayonet



Series 804
push-pull



Series 805
triple-start



Series 811
high-density TwistPin

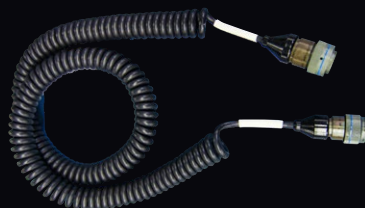


Mighty Mouse SuperSeal®
Micro-USB

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



Overmolded
point-to-point cables



Coil-cord solutions
for radio / audio applications



Multibranch harnesses and
cable assemblies



MISSION-CRITICAL INTERCONNECT SOLUTIONS

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