

SERIES 802 2400M / 3500 PSI Ultraminiature Subsea Connectors



Overmolded, Shielded Submersible Cordsets Performance Overview

Series 802 Harsh Environment Shielded Cordsets



Overmolded AquaMouse™ cordsets are used in oil and gas pipeline equipment and other hostile environments where interconnect reliability and survivability is essential. High performance cordsets feature easy ordering and fast delivery. These fully shielded and watertight assemblies withstand abrasion, temperature extremes and chemicals. Flexible overmolding provides rugged, watertight protection to wire and shield. Two styles are available. For oil and gas equipment or continuous water immersion, choose **Style 1** with thermoplastic polyurethane cable jacket and thermoset polyurethane overmolding. For non-critical general purpose applications, **Style 2** cordsets with polyurethane jackets and polyamide overmolds are a good choice if cost is a concern.

Product Features

- 2500 PSI (Style 1)
- Rugged, watertight construction
- 100% electrically tested
- BandMaster ATS Shield Termination
- Abrasion Resistance
- Resistant to chemicals
- Withstands UV and ozone

Harsh Environment Cordset Selection Guide

Property	Style 1 Polyurethane Jacket Polyurethane Overmold	Style 2 Polyurethane Jacket Polyamide Overmold
Cable jacket	Thermoplastic polyurethane (TPU), black	Thermoplastic polyurethane (TPU), black
Overmold	Thermoset polyurethane, black	Polyamide, black
Operating temperature	-40° C. to +105° C.	-30° C. to +105° C.
Flexibility	Good	Good
Water Resistance	2500 PSI (mated)	1 meter immersion
Solvent Resistance, Cable Jacket	Excellent	Good
Solvent Resistance, Overmold	Excellent	Fair
Weatherability	Excellent	Excellent
Abrasion Resistance	Excellent	Good
Flammability	Flame retardant UL 94 V-0	Flame retardant UL 94 V-0
Cost	\$\$\$\$	\$\$

Specifications

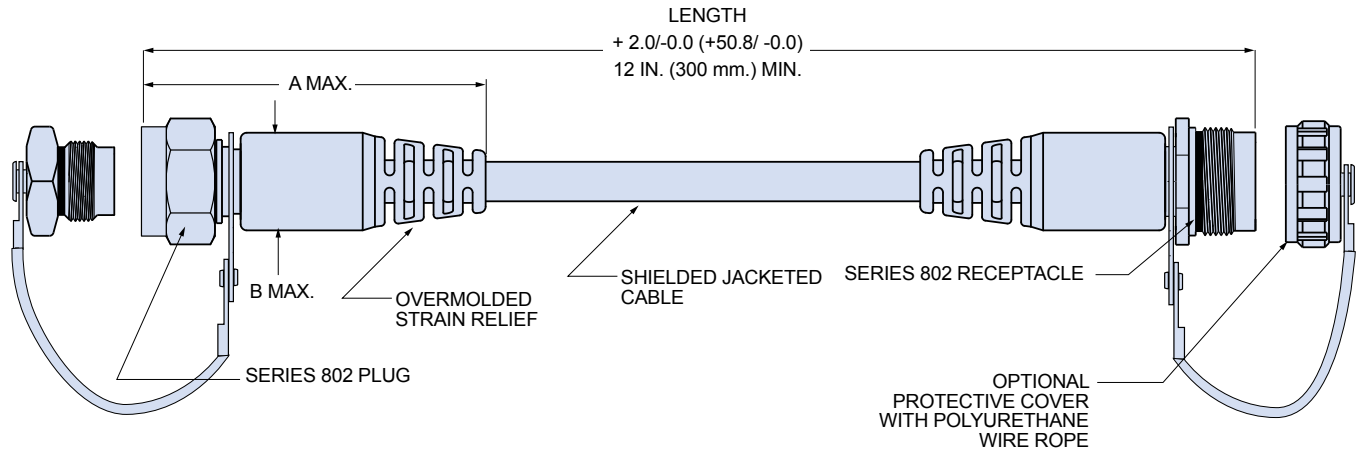
Cable jacket	Thermoplastic polyurethane, black, low-smoke, zero-halogen
Overmold	Style 1: thermoset polyurethane Style 2: polyamide
Cable shield	Tin-coated copper braid, 90% minimum coverage
Conductors	Silver coated stranded wire, TFE insulated, per M22759/11
Shield Termination	Band-Master™ ATS stainless steel shield termination band
Current rating	#23–5 amps, #20–7.5 amps, #16–13 amps, #12–23 amps
Test voltage (DWV)	#23–500 Vac, #20–500 vac, #16 and #12–500 VAC sea level
Insulation resistance	200 Megohms minimum
Shielding effectiveness	50 dB minimum from 100MHz to 1000MHz.

SUBSEA SHALLOW WATER: AQUAMOUSE™



Shielded overmolded submersible cordsets
Dimensions

SUBSEA/SHALLOW WATER: AQUAMOUSE™



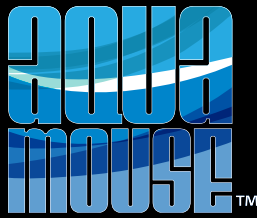
Dimensions		
Shell Size	A Max.	B Max.
5	2.31 (58.67)	0.5 (12.70)
6	2.40 (60.96)	0.55 (13.97)
7	2.50 (63.50)	0.65 (16.51)
8	2.52 (64.01)	0.71 (18.03)
9	2.80 (71.12)	0.78 (19.81)
10	2.75 (69.85)	0.82 (20.83)
11	2.85 (72.39)	0.87 (22.10)
12	3.10 (78.74)	0.9 (22.86)
14	3.40 (86.36)	1.1 (27.94)
15	3.40 (86.36)	1.2 (30.48)

Key Positions		
Key Position	Key Rotation	
	A°	B°
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

Keyway Positions		
Key Position	Key Rotation	
	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

NOTES

1. Double-ended cordsets are wired pin #1 to pin #1, #2 to #2, and so on.
2. Wires are silver-coated stranded copper with TFE insulation, 600V, in accordance with M22759/11.
3. Wire color is IAW MIL-STD-681 for cables containing 10 wires or less. For cable containing more than 10 wires, wire color is white.



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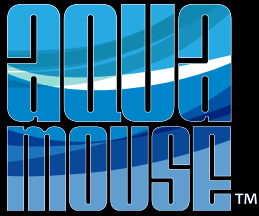
Shielded overmolded submersible cordsets
with Size #23 or #20HD contacts

Series 802 Cordsets with #23 Contacts								
Sample Part Number								
802-019	-A	C	4	M	9-19	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Key Pos.	Length
802-022 Style 1 Polyurethane Cable Jacket, Thermoset Polyurethane Overmold, 2500 PSI 802-019 Style 2 Polyurethane Cable Jacket, Polyamide Overmold, 1 Meter Immersion	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	2 #22 AWG	Z1 Stainless Steel Shell / Passivated	See pages 4 - 6 for insert arr.	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	4 #24 AWG	ZM Stainless Steel Shell / Electroless Nickel Plated	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		AB Marine Bronze Shell Unplated			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts					D Pos. D	
		N No Connector (Single-Ended)					E Pos. E	
							F Pos. F	

Series 802 Cordsets with #20HD Contacts								
Sample Part Number								
802-032	-A	C	0	M	9-19	N	A	-36
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Key Pos.	Length
802-033 Style 1 Polyurethane Cable Jacket, Thermoset Polyurethane Overmold, 2500 PSI Rated 802-032 Style 2 Polyurethane Cable Jacket, Polyamide Overmold, 1 Meter Immersion	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	0 #20 AWG	Z1 Stainless Steel Shell / Passivated	See page 4 - 6 for insert arr.	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	2 #22 AWG	ZM Stainless Steel Shell / Electroless Nickel Plated	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		AB Marine Bronze Shell Unplated			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts					D Pos. D	
		N No Connector (Single-Ended)					E Pos. E	
							F Pos. F	

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SERIES 802 2400M / 3500 PSI
Ultraminiature Subsea Connectors



Shielded overmolded submersible cordsets
 with size #16 or #12 contacts

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Series 802 Cordsets with #16 Contacts								
Sample Part Number								
802-026	-A	C	6	Z1	9-4	N	A	-48
Series	End A Connector	End B Connector	Wire Size	Shell Material/ Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
802-028 Style 1 Polyurethane Cable Jacket, Thermoset Polyurethane Overmold, 2500 PSI Rated 802-026 Style 2 Polyurethane Cable Jacket, Polyamide Overmold, 1 Meter Immersion	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	6 #16 AWG	Z1 Stainless Steel Shell / Passivated	See page B-3 for insert arr.	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	8 #18 AWG	ZM Stainless Steel Shell / Electroless Nickel Plated	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		AB Marine Bronze Shell Unplated			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts					D Pos. D	
		N No Connector (Single-Ended)					E Pos. E	
							F Pos. F	

Series 802 Cordsets with #12 Contacts								
Sample Part Number								
802-027	-A	C	0	M	10-2	N	A	-48
Series	End A Connector	End B Connector	Wire Size	Shell Material / Finish	Insert Arr.	Protective Cover	Shell Key Pos.	Length
802-029 Style 1 Polyurethane Cable Jacket, Thermoset Polyurethane Overmold, 2500 PSI Rated 802-027 Style 2 Polyurethane Cable Jacket, Polyamide Overmold, 1 Meter Immersion	-A Plug, with Male Pin Contacts	A Plug, with Male Pin Contacts	2 #12 AWG	Z1 Stainless Steel Shell / Passivated	See page 4 - 6 for insert arr.	P Metal Protective Covers Included	A Normal	Overall Length In Inches 12 Inch Min.
	-B Plug, with Female Socket Contacts	B Plug, with Female Socket Contacts	4 #14 AWG	ZM Stainless Steel Shell / Electroless Nickel Plated	Consult Factory for Combo Arr.	N No Covers Supplied	B Pos. B	
	-C Receptacle, with Male Pin Contacts	C Receptacle, with Male Pin Contacts		AB Marine Bronze Shell Unplated			C Pos. C	
	-D Receptacle, with Female Socket Contacts	D Receptacle, with Female Socket Contacts					D Pos. D	
		N No Connector (Single-Ended)					E Pos. E	
							F Pos. F	