ELECTROLINE

ASSEMBLY INSTRUCTIONS

SD-1000, M1400 and M1600 Series Plugs For Synthetic Rope

Electroline terminations have been used with ropes since 1933. The strength of the termination, ease of assembly, and the ability to inspect for proper termination, contribute to the continued acceptance of these fittings. Following these simple steps is your assurance of a durable installation. However, many factors determine the safety of any rope assembly. **PLEASE OBSERVE ALL USE AND CARE INSTRUCTIONS SUPPLIED WITH THE ROPE.** ***DUE TO THE VARIETIES AND MANUFACTURING PROCESSES OF SYNTHETIC ROPES, ULTIMATE LOAD TESTS WILL NEED TO BE PERFORMED TO ESTABLISH ACTUAL TERMINAL EFFICIENCY.***

RECOMMENDED TOOLS:

- Electrical Tape
- Hammer
- Scissors
- Torch
- Vise

STEP 1: Insert rope into the non-threaded end of the sleeve so it extends out of the threaded end. (See Figure 1).

STEP 2: With the rope inserted through the sleeve, place the sleeve into the vise.

STEP 3: Using electrical tape, seize the rope so a section of rope protrudes that is equal to the "A" dimension. (See Chart at right for "A" dimension) (See Figure 1)

Rope Dia.	Plug	Dim. "A"
1/8"	SD-1012	1 3/16"
3/16"	SD-1018	1 1/2"
1/4"	SD-1025	1 9/16"
5/16"	SD-1031	1 7/8"
3/8"	SD-1037	1 15/16"
7/16"	SD-1043	2 3/16"
1/2"	SD-1050	2 1/2"
9/16"	SD-1056	2 13/16"

Rope Dia.	Plug	Dim. "A"
5/8"	SD-1062	3 3/16"
3/4"	SD-1075	4 1/2"
7/8"	SD-1087	5 1/8"
1"	SD-1099	5 1/2"
1 1/8"	SD-10112	7 5/8"
1 1/4"	SD-10125	9"
1 3/8"	SD-10137	10 1/2"
1 1/2"	SD-10150	11 1/2"

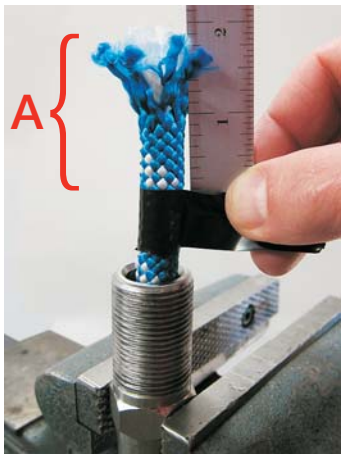

Figure 1

STEP 4: Unlay the braided rope to the "A" length from the chart. (See Figure 2)

Figure 2

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STEP 5: Insert the plug into the center of fibers that protrude above the electrical tape. To keep the rope from bunching up, pull the section of rope below the vice while pushing the plug into the sleeve. The plug must be exactly centered in order to achieve maximum terminal efficiency. (See Figure 3)

Figure 3

STEP 6: Partially remove the plug, making sure all the strands are equally distributed around the end of the sleeve. Repeat steps 5 & 6 two to three times. This process is required to achieve a length of straight, unbraided strands between the braided rope and the nose of the plug (for load equalization). (See Figure 3)

STEP 7: Once all of the strands are centered around the sleeve and plug, use a hammer to drive the plug to a solid seat while pulling on the rope at the nose of fitting where it enters the sleeve. (See Figure 3)

Figure 4

STEP 8: Make certain that all the fibers are uniformly distributed around the plug. Using electrical tape, tightly seize all the fibers together above the plug and sleeve approximately, but no less tan, 2x the rope diameter. (See Figure 4)

Figure 5

STEP 9: Use a torch, match or heat gun to fuse the protruding fibers together. (Important: Do not melt the fibers below the top of the plug). Done correctly, the diameter of the fused rope must be less than the inside diameter of the fitting. If the rope is constructed of fibers that will not melt, bind fibers together above the plug with electrical tape. (See Figures 4 & 5)

STEP 10: For critical applications such as lifelines or fire & rescue assemblies, a thread locker should be used to prevent socket loosening. In all other instances threads must be coated with an air-dry, solid film lubricant per MIL-L-23398 or equivalent, to prevent seizing. (See Figure 6)

Figure 6

Most fittings are rated for 100% of EIP rope (for straight-line pull only). Please consult an Electroline sales associate or review the Electroline catalog for specification information. Rarely do applications require a fastening device (i.e. set-screw, Loctite®, lock-wire, etc.) to retain the sleeve in the socket. The socket can be removed from the sleeve at any time for inspection and will not affect the holding efficiency of the sleeve and plug. However, a new plug is necessary if the rope is re-terminated. Periodically inspect the socket for tightness.

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