

JML 6279-1301

CONTRACT ITEM DESCRIPTION:

Seawater Or Freshwater Suction/Discharge Firemain Hose Assembly (4" ID X 50' Long)

Suggested Sources:

1. HBD/Thermoid
2. Goodyear
3. Unisource Manufacturing
4. Eaton Corp

Purchase Specification:

Hose, Nonmetallic, UV & Abrasion Resistant Nitrile Tube & Carboxylated Nitrile Cover: Coupled and Fully Assembled.

Application or Intended Use: Will be installed in the weather in a marine environment for use as a temporary freshwater or saltwater fire header. Use location is in Washington State. When not in use, hose will be coiled and stacked for storage in an area with fluorescent lighting.

1. Size: 4" ID, length 50'
2. Nominal OD: n/a
3. Vacuum: Full
4. Working Pressure: 250 PSI, minimum.
5. Burst Pressure: 1,000 PSI, minimum.
6. Rated bend radius: 15 inches or less.
7. Rated Continuous Temperature: -20°F to 180°F
8. Weight of hose: Less than 3.6 lb per foot, not including the added weight of end fittings.

Construction:

9. Tube: Nitrile rubber. Shall meet Association for Rubber Product Manufacturers (ARPM), Class B standard for medium/high oil resistance. Hose shall have a wall construction which allows the use of crimped or swaged couplings with interlocking ferrules.
10. Reinforcement: Multiple plies of synthetic textile fabrics with one or more high-tensile strength wire helix.
11. Cover: Carboxylated Nitrile rubber with high abrasion resistance. The cover shall be formulated to provide resistance to UV and weathering adequate to prevent failure due to these causes for a minimum of 10 years when installed and stored as described in this specification. ARPM Class A high oil resistance. High ozone resistance.
12. Cover Color: Black cover with a contrasting Red colored brand strip down the entire lay line with contrasting lettering.
13. The hose shall be manufactured in conformance with ARPM standard IP-2.
14. Hose end assembly shall be accomplished in accordance with established National Association for Hose Accessories Distribution (NAHAD) certification standards.
15. Each hose assembly shall have the following components installed at each end:
 - A. 1st Hose End; Brass, 4", 300 psi, Heavy Duty Male Cam & Groove Adapter by Hose Shank. PT Coupling Co., alloy UNS C92200, Part # 40EHD, Item # 1200540H, or equal.
 - B. 2nd Hose End; Brass, 4", 300 psi, Heavy Duty Female Cam & Groove Coupler by Hose Shank with Stainless Steel Cam Arms, Pins, and Pull Rings. PT Coupling Co., alloy UNS C92200, Part # 40CHD, Item # 1200340H (modified to include stainless steel locking arms, pins, and pull rings), or equal.
 - C. End Fitting Interlocking Ferrules: End fittings shall be coupled to the hose with PT Coupling Co., "Pro-Grip C50SS Stainless Steel Crimp Ferrule", sized to match the hose and fittings. No hose clamps or bands will be accepted.
16. End fittings shall be made from virgin brass, and meet Commercial Item Description (CID) A-A-59326 and shall have a working pressure of 300 PSI or greater. The ferrules and at least one inch of hose at each end of the hose assembly shall be painted "fire engine" red, or similar. Paint coverage of these areas shall be at least 80%.
17. Branding / Marking: Hose shall be continuously ink-branded, stencil painted, Mylar or stripe branded /marked in 1" lettering (minimum), which shall be in a contrasting color to the RED band strip and black outer cover of the hose. The lettering shall state as a minimum:
 - A. Standard Hose Brand/Line/Model number, working pressure, date of manufacture
 - B. PSNS & IMF S/99
18. Price quotes for market survey request will not be accepted without the hose, fitting, and ferrule manufacturer cut sheets or product description sheets attached, which shall include as a minimum the technical characteristic of the components and the manufacturer's address, telephone/fax number and manufacturer point of contact. The market survey price quote must reference the manufacturer's part numbers for the item quoted.
19. Each quoting vendors, if requested, shall submit a five foot (or longer) hose assembly at vendor expense, for destructive testing analysis by the government.
20. Or-Equal offers must be approved by PSNS & IMF Temporary Services Engineering, Code 260.5TS prior to purchase.

Hose Test & Assembly Certification:

Each hose assembly shall be hydrostatically strength tested with commercial clean, fresh water as a test medium, at 275 (+10, -0) PSIG for 10 minutes. Each certified hose assembly shall be assigned a unique serial number by the vendor assembling the hose carcass and end fittings. The serial number shall be permanently stamped or etch marked on the hose ferrule of each hose end. Hose manufacturer shall certify that hose assemblies are free of leaks, deformation, layer separation, excessive twisting or kinking; that end fittings are not damaged or faulty, and that the end fittings and ferrules are properly positioned on the hose ends, in accordance to NAHAD standards. Also that the hose does not have hairline cracks, breaks, abrasions, soft spots, bulges, or other defects in the outer cover. Written certification of satisfactory hose end assembly in accordance with NAHAD standards and satisfactory hydrostatically testing shall be provided with each shipped hose. Written certifications shall include the witness signature of the tester, test date, test pressure and duration, and shall include the unique hose serial numbers.

25 July 2014

Applicable regulations: PSNS&IMFINST 10330.11F, PSNS&IMFINST 11300.10K, Industrial Process Instruction 0505-904C CH-2, Code of Federal Regulations Title 33, Volume 2, Section 154, and Commercial Item Description (CID) A-A-59326.