MIL-H-24595(SH)-17 October: 1979

MILITARY SPECIFICATION.

HOSE, WIRE-REINFORCED LARGE-DIAMETER

WITH REUSEABLE END PITTINGS

FOR FLEXIBLE CONNECTIONS

This specification is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers large-diameter, (~80 and -96 sizes) wire-reinforced, flexible hose and associated reuseable end fittings for shipboard piping systems.

1.2 Classification.

1.2.1 Hose. Hose shall be furnished in the sizes listed in table I and as specified (see 6.2.1).

1.2.2 Fittings. End fittings shall be of the following types:

Type A - Straight flanged (see figure 1). Type AL - 90-degree flanged (see figure 2). Type B - Straight split clamp (see figure 3). Type BL - 90-degree split clamp elbow (see figure 4). Type C - 90-degree dogleg elbow (see figure 5).

2. APPLICABLE DOCUMENTS

2.1 Issues of documents. The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

QQ-C-390'- Copper-Alloy Castings (Including.Cast Bar).

MILITARY

MIL-P-775 - Packaging of Hose, Hose Assemblies; Rubber, Plastic, Fabric, or Metal (Including Tubing); and Fittings, Nozzles; and Strainers. MIL-L-2104 - Lubricating Oil, Internal Combustion/Engine, Tactical Service. MIL-B-24480 - Bronze, Nickel-Aluminum Castings, For Seawater Service.

STANDARDS

MILITARY MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes. MIL-STD-278 - Fabrication Welding and Inspection; and Casting Inspection and Repair for Machinery, Piping and Pressure Vessels in Ships of the United States Navy.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 3112, Department of the Navy, Washington, DC 20362, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

PSC 4720

'41L-H-24595(SH)

(Copies of specifications, standards, drawings, and publications required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

2.2 Other publications. The following documents, form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) D380 - Rubber Hose, Testing. D1141 - Substitute Ocean Water.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. REQUIREMENTS

3.1 Sample for first article inspection. Prior to beginning production a sample shall be tested as specified in 4.3 (see 6.4).

3.2 Material. Hose, fabricated of a synthetic rubber inner tube, a layer of breaker fabric, multiple layers of spiral-wrap wire reinforcement, and a synthetic rubber cover shall be as specified herein. Materials not specified shall be selected by the contractor and shall be subject to all provisions of this specification.

3.2.1 <u>Rubber</u>. Rubber compounds specified herein shall consist of synthetic rubber or a blend of synthetic rubbers resistant to fresh or salt water, water-lithium bromide solutions, fuel oils and lubricating oil.

3.2.2 <u>Reinforcing wire</u>. Wire reinforcement used in the hose shall be made of carbon steel.

3.2.3 End fittings. End fittings shown on figures 1 through 5 shall be fabricated of the following materials:

(a) Nipples MIL-B-24480.

(b) Body and flanges MIL-B-24480 and QQ-C-390 alloy 903.

3.2.4 <u>Recovered materials</u>. Unless otherwise specified herein, all equipment, material, and articles incorporated in the products covered by this specification shall be new and shall be fabricated using materials produced from recovered materials to the maximum extent practicable without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this specification unless otherwise specifically specified.

3.2.4.1 Nonmetallic portions of the hose shall be made of virgin materials only.

3.3 Construction.

Å.

ł

3.3.1 Hose. Hose shall be constructed of a tube reinforcement and cover in accordance with the following requirements:

3.3.1.1 Tube. Tube of the hose (inner liner) shall be of a seamless, synthetic, rubber compound. It shall have a smooth bore, a uniform gage, and be free of pits, dirt, foreign matter, mandrel lubricants, or other defects which would render the hose unacceptable.

3.3.1.1.i <u>Mandrel lubricants</u>. If talc/talcum is used as a mandrel release agent it shall be asbestos free.

3.3.1.2 <u>Reinforcement</u>. Hose reinforcement shall be high-tensile, carbon steel. There shall be no broken, irregular, or omitted reinforcement in any length of hose.

.3.3.1.3 · Cover. ?The cover. shall be at synthetic rubber compound funitorm in thickness and presistant to flugue, Soxidation, weathering, Sabrasion, and light siging.

3.3.1:4 <u>Internal support</u>: device. For vacuum-testing-and service a NAVSEA approved internal support device must be used to prevent hose collapse. The support device shall be installed during the vacuum and impulse testing of 4.6.7 and 4.6.4 respectively.

3.3.1.5 <u>Concentricity</u>. Hose reinforcement shall be concentric with the inside bore of the hose within tolerances consistent with good manufacturing practices. The outside diameter of rubber covered hose shall be concentric with the inside diameter of the hose within 0.0625 inch full indicator measurement.

3.3.1.6 End fittings. The end fittings shall be the types and sizes specified on figures 1 through 5% and shall be of the reuseable design. The hose end of the fitting may be of the segmented, split clamp or any other design capable of meeting all the requirements of this specification. The hose end of the fitting shall be readily removable and reattachable to a new section of hose by the use of commonly ava table tools, such as open end and box wrenches, which are normally carried aboard ship.

3.3.1.6.1 Weights and dimensions. The weight of the end fitting shall be kept to a minimum and the dimensions of the fitting shall fall within the envelope limits shown on figures 1 through 5.

3.3.6.1.2 Finish. "End fittings shall be finished smooth and free from defects as is consistent with good manufacturing practices.

3.3.1.6.3 Welding. Welding, if used, shall be in accordance with MIL-STD-278. Brazing of fitting parts shall not be permitted.

3.3.1.6.4 Where two parts of the same material are mated together, galling and seizing of the mated surfaces shall be prevented. A solid film lubricant, such as molybdenum disulfide, or two classes or treatments of the same material, or a combination of any of these methods may be used to prevent galling and seizing.

3.3.2 Dimensions, pressures, and performance. Hose dimensions, pressures, and performance shall be as specified in table I.

3.3.3 Tolerances. "Standard commercial tolerances for tube, cover, and wall thickness are satisfactory.

TABLE	I.	Hose dimensions	pressures	.' ∙anđi	performance data.

	-Hose dash number				
Requirements	-80	-96			
Inside.diameter.~(inch) *Nominal *Minimum *Maximum		-6:00 -5:90 -6:10			
Outside diamter. (inch) Minimum Maximum	⊴5`.80 6.00	6.80 7.00			
Approximate weight (lb/ft)	7.61	8.40			
Minimum bend radius (inch)	42.00	48.00			
Pressure: Vacuum (inches of mercury) Maximum working lb/in ² Minimum proof Minimum burst lb/in ²	29 500 1000 2000	29 50 700 1400			
Cemperature range	-40°F to	-40°F to + 200°F			

Downloaded from http://www.everyspec.com

MIL-H-24595(SH)

3.4 Length of bulk hose. Unless otherwise specified (see 6.2.1), bulk hose shall be furnished in lengths of 30 to 40 feet.

3.5 Performance.

3.5.1 Length change. When tested as specified in 4.6.2, hose shall not change in length more than plus 2 percent nor more than minus 4 percent for all sizes.

3.5.2 Environmental conditions.

3.5.2.1 Low temperature. When conditioned and tested in accordance with 4.6.3, the hose shall withstand the minimum bend radius, specified in table I, within 8 to 12 seconds while at minus 40°F without evidence of splitting or cracking. After bending to the minimum bend radius, specified in table I, at minus 40°F, hose shall withstand the applicable proof pressure without evidence of rupture, leakage, irregularities, or any deformation when tested as specified in 4.6.3. A certified affidavit that all rubber compounds meet the requirements of ASTM D380 is acceptable in lieu of test.

3.5.2.2 Aging and impulse. Hose, after being subjected to $250^{\circ}F + 5^{\circ}F$ for 24 hours shall withstand a dynamic impulse of not less than 150,000 impulse cycles without evidence of rupture, leakage, irregularities, or any deformation when subjected to the test specified in 4.6.4.

3.5.3 <u>Burst pressure</u>. Hose shall withstand not less than the burst pressure specified in table I without evidence of rupture, leakage, irregularities, or any deformation when subjected to the test specified in 4.6.5.

3.5.4 Proof pressure. Hose shall withstand not less than the proof pressure specified in table I, without evidence of rupture, leakage, irregularities, or any deformation when subjected to the test specified in 4.6.6.

3.5.5 Vacuum. The hose shall show no evidence of collapse when tested as specified in 4.6.7. An internal support coil (see 3.3.1.4), shall be installed in the hose for the vacuum test.

3.6 Age. Hose shall be manufactured not more than 8 calendar quarter (2 years) prior to date of delivery.

3.7 <u>Identification of hose</u>. Each length of hose shall have a permanent and visible embossed or inlaid layline along its entire length. The numerals and lettering shall be not less than 3/16 inch high and each set of markings shall be repeated at 9-inch intervals. The layline shall contain, but not be limited to, the following:

Military specification part number - M24595	80	4077	54321
Military specification number			
Hose dash size			
Quarter of year and year of manufacture			
Manufacturer's Federal Code Identification _			

Example: M24595/80/4Q77/54321

3.8 Workmanship. Workmanship shall be of the highest commercial quality. The hose shall be free of defects such as voids, blisters, and shall show no exposed reinforcing wire. The inside surface shall be smooth and free from mandrel lubricants. The outside surface shall be uniform and may show a rough surface texture embossed by the wrapping tape during the curing process.

4. QUALITY ASSURANCE PROVISIONS

4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements, as specified herein. Except as otherwise specified in the contract, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

(a) First article inspection (see 4.3).(b) Quality conformance inspection (see 4.4).

4.3 First article inspection. First article inspection shall consist of the examination of 4.5 and tests specified in table II.

Test number	Inspection	Test paragraph	Requirement paragraph	Number of specimens per size
1	Length change	4.6.2	3.5.1	2
2	Low temperature	4:6.3	3.5.2.1	2
3	Aging and impulse	4.5.4	3.5.2.2	2
4	Burst pressure	4.6.5	3.5.3	2
5	Proof pressure	4.6.6	3.5.4	3
6	Vacuum	4.6.7	3.5.5	3

TABLE II. First article test.

4.4 Quality conformance inspection. Quality conformance inspection shall consist of the examination in 4.5 and the tests specified in 4.6.2, 4.6.5 and 4.6.6 (see 6.3).

4.4.1 Lot size. A lot shall consist of not more than 10,000 feet of hose of the same size, produced over a period not to exceed 30 days.

4.4.2 Sampling. Sampling for quality conformance testing shall be in accordance with MIL-STD-105 for normal level of examination using an AQL (acceptable quality level) of 2.5.

4.5 Examination: Sampling for examination shall be in accordance with MIL-STD-105 with an acceptance quality level (AQL) of 1.0 percent defective for major defects and 2.5 percent defective for minor defects. Hose shall be examined for the defects specified in table III.

Category	Defects
Critical	None defined
Major	· · · · · · · · · · · · · · · · · · ·
101	Tube not as specified:
	(a) Blistered.
	(b) Pitted.
	(c) Not uniform gage.
	(d) Cracked.
	(e) Rubber not virgin material.
102	Reinforcement not as specified:
	(a) Wires broken.
	(b) Wires applied irregularly.
103	Cover not as specified:
	(a) Blistered.
	(b) Pitted.
	(c) Not uniform gage.
	(d) Loose.
	(e) Cracked.
	(f) Wrinkled.
	(g) Patched.
	(h) Exposed wire.
	(i) Rubber not virgin material.

TABLE III. Classification of defects.

TABLE III. Classification of defects - (Continued)

Category	Defects
Major (cont!d)	
104 105	Age not as specified. Hose does not conform to specified dimensions and tolerances.
106 107	Failed pressure testing. Size not as specified (diameter).
Minor	
201 202 203	Length not as specified. Presence of foreign material (dirt, etc.). Marking not as specified or missing.

4.6 Tests.

4.6.1 Assembly preparation. Sample hoses shall have fittings attached when required by tests specified herein. Special contractor's test fittings may be utilized at the option of the contractor when testing procedures will be simplified.

4.6.2 Length change. Measurement for the determination of elongation or contraction shall be conducted on a previously untested hose assembly having at least a 12-inch length of free hose between hose test adapters. The test assemblies shall be pressurized to the working pressure specified in table I for not less than 30 seconds, after which time the pressure shall be released. After allowing the hose to restabilize for not less than 30 seconds following the pressure release, reference marks 10.0 inches, plus or minus 0.05 inch, apart shall be repressurized to the specified pressure for a minimum period of 30 seconds, after which time, while the hose is pressurized, the distance between the reference marks shall be measured. This length shall be the final length. The change in length shall be computed using the following formula:

Percent change = $\frac{(Final length - 10) \times 100}{10}$

Nonconformance to 3.5.1 shall constitute failure of this test.

4.6.3 Low temperature. Test assemblies shall be preconditioned by filling with oil conforming to MIL-L-2104, grade 30, and placing in an ambient air temperature of 250° F, plus or minus 5°F, for 24 hours, plus 1/2 hour, minus zero hour. After preconditioning, the oil shall be drained and the test assembly and the applicable size mandrel shall be placed in an ambient temperature of minus 40°F, plus or minus 5°F, for 24 hours, plus 1/2 hour, minus zero hour. After preconditioning, the oil shall be drained and the test assembly and the applicable size mandrel shall be placed in an ambient temperature of minus 40°F, plus or minus 5°F, for 24 hours, plus 1/2 hour, minus zero hour. At the end of this 24-hour period, the test assembly shall be bent to the applicable minimum radius around the mandrel through an angle of 90 degrees. The test assembly shall then be straightened and bent around the mandrel in the diametrically opposite direction. The bending force shall be applied to the test adapters and elbows. Each bend shall be accomplished at a uniform rate within 8 to 12 seconds. The bend radius shall be as specified in table I. Nonconformance to 3.5.2.1 shall constitute failure of this test. The test assembly may be allowed to return to room temperature prior to further testing.

4.6.4 Aging and impulse. Test assemblies shall be preconditioned by filling with oil conforming to MIL-L-2104, Grade 30, and placing in an ambient temperature of 200°F plus or minus 5°F, for the times specified herein: 76 hours in air and 46 hours in synthetic seawater in accordance with ASTM D1141. At the end of the aging period, the oil shall be drained and the test assembly may be allowed to cool. The preconditioned assembly shall be cycled to obtain the minimum average number of 150,000 impulse pressure cycles. Impulse cycles shall occur at the rate of 35 cycles per minute (cpm) plus or minus 5 cpm with an oil temperature of 120°F, plus or minus 10°F. Each impulse cycle shall consist of a pressure rise from zero pounds per square inch ($1b/in^2$) (tolerance plus 15 $1b/in^2$) to 125 percent (tolerance plus 5 percent, minus 0 percent) of the applicable working pressure specified in table 1, followed by a pressure drop to zero $1b/in^2$ (tolerance plus 15 $1b/in^2$). Impulse pressure rise rate measured between 10 percent and 90 percent of the peak pressure shall be 25,000 to 75,000 pounds per square inch per second ($1b/in^2/s$). The shape of the pressure time curve u^{2} 11 conform to figure 6. Nonconformance to 3.5.2.2 shall constitute failure of this test. For this test, one end shall be capped and free from support, i.e. nonrigid.

4.6.5 Burst pressure. Test assemblies shall be pressurized to failure. Pressure application shall be at a constant rate so as to attain a pressure equal to four times the applicable working pressure specified in table I within a period of not less then 15 seconds and not more than 30 seconds, continuing to failure. Nonstandard manufacturer's test fittings may be used for this test. Nonconformance to 3.5.3 shall constitute failure of this test.

4.6.6 <u>Proof pressure</u>. All hose shall be pressurized to twice the applicable working pressure specified in table I. When the proof pressure is reached, the bulk hose shall be disconnected from the pressure source by a valve. Proof pressure shall be held for not less than 30 seconds nor more than 60 seconds. Any suitable fluid may be used as the pressure medium. Upon completion of the test, the bulk hose shall be cleaned free of the pressure medium. Nonconformance to 3.5.4 shall constitute failure of this test.

4.6.7 Vacuum. When it is intended that the bulk hose is to be used for multiple use, pressure and Vacuum, the specified hose shall be tested under vacuum at not less than 29 inches of mercury for not less than one minute. Nonconformance to 3.5.6 shall constitute failure of this test.

4.7 Packaging inspection. Sample packages and packs and the inspection of packaging, packing, and marking for shipment and storage shall be in accordance with the requirements of section 5 and the documents specified therein.

5. PACKAGING

(The preparation for delivery requirements specified herein apply only for direct Government acquisitions. For the extent of applicability of the proparation for delivery requirements of referenced documents listed in section 2, see 6.5.)

5.1 Preservation-packaging, packing and marking. Hose and end fittings shall be preserved-packaged level A or C, packed level A, B, or C (see 6.2.1) and marked in accordance with MIL-P-775. Hose shall be processed as specified for "straight lengths" in accordance with MIL-P-775.

5.2 Cushioning, dunnage, and wrapping materials.

5.2.1 Level A packaging, level A and B packing. Use of all types of loose-fill materials for applications such as cushioning, filler, stuffing and dunnage for material destined for shipboard use is prohibited.

5.2.2 Level C packaging and packing. Unless otherwise specified in the contract or order (see 6.2.1), use of all types of loose-fill materials for applications such as cushioning, filler, stuffing and dunnage for material destined for shipboard use is prohibited. When approved for use by the contract or order, unit packages and containers (interior and exterior) shall be marked or labeled as follows:

"CAUTION

Contents cushioned etc. with loose-fill material, shall not be taken aboard ship. Remove and discard loose-fill material. If required, recushion with cellulosic material bound fiber, fiberboard, or transparent flexible cellular material."

5.2.3 Cushioning, filler, dunnage, and wrapping materials selected, whenever available, shall have properties/characteristics for resistance to fire.

5.2.4 Talc/talcum. Talc/talcum, when used, shall be free of asbestos.

6. NOTES

6.1 Intended use. Hose covered by this specification is intended for use in marine piping systems under various operating pressures, vacuum, and environmental conditions. The hose will have largest use in applications as flexible connections to resiliently mounted (sound and shock isolated) equipment. Working pressures will vary from 29 inches of mercury vacuum to 300 lb/in², and temperatures vary from minus 40°F to plus 200°F. Liquids to be transported are petroleum base products (fuel oil and lubricating oil), seawater and fresh water, and water-lithium bromide solutions.

6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

- Title, number, and date of this specification. Hose size required (dash number) (see 3.4). (a)
- (b)
- Total length of bulk hose required and acceptable lengths of bulk (c)
- hose, if other than specified (see 3.4).
- (đ) Internal support device if hose is for vacuum service (see 3.3.1.4).
- (e) Level of preservation and packing required (see 5.1).
 (f) When "loose-fill" material is permitted (see 5.2.3).

6.3 Quality conformance testing. It is recommended that the contracting activity waive sample testing on lots that contain fewer than 500 units of product when the contractor has tested and furnished a like item to the Government within the past year, and provided : adequate certification.

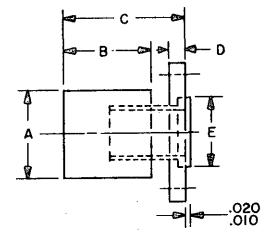
6.4 First article inspection. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection as to those bidders offering a product which has been previously acquired or tested by the Govern-ment, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract.

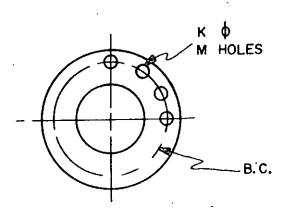
6.5 Sub-contracted material and parts. The preparation for delivery requirements of referenced documents listed in section 2 do not apply when material and parts are acquired by the contractor for incorporation into the equipment and lose their separate identity when the equipment is shipped.

8

Preparing activity: Navy - SH (Project 4720-N519)

AU.S. GOVERNMENT PRINTING OFFICE: 1979-603-022/4367





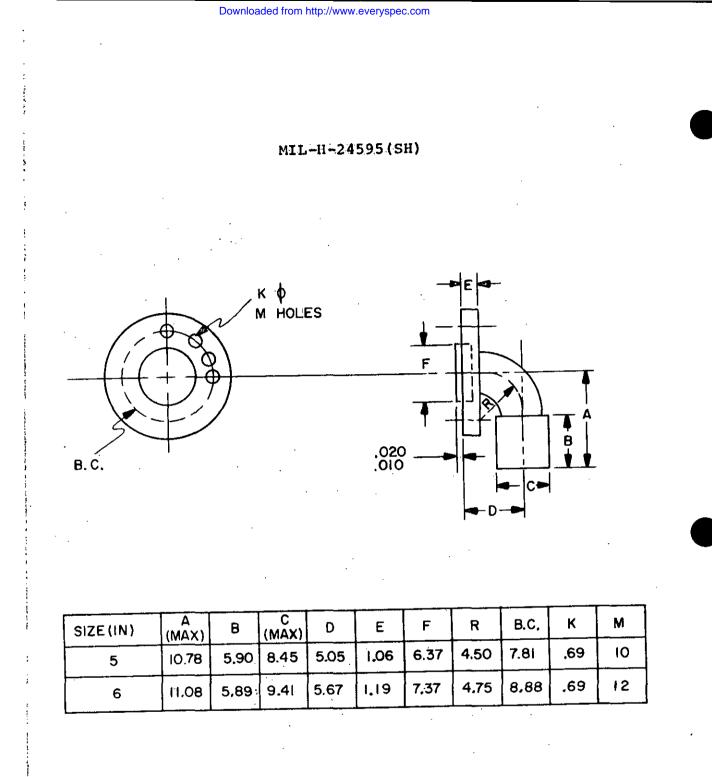
SIZE (IN)	MAX	в	MAX C	D	Ε.	B.C.	к	М
5	8.45	5.90	7.31	1.06	6.37	7.81	،69	10
6	9.41	5.89	7.30	1,19	7.37	8 .88	.69	12

NOTE-DIMENSIONS ARE IN INCHES.

-STANDARD COMMERCIAL TOLERANCES ARE ACCEPTABLE.

FIGURE 1. Type A - Straight flanged fitting.

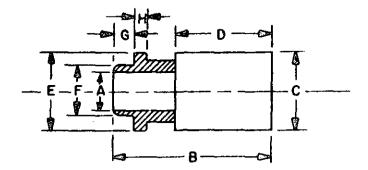
9



NOTES - DIMENSIONS ARE IN INCHES. - STANDARD COMMERCIAL TOLERANCES ARE ACCEPTABLE

SH 11476

FIGURE 2. Type AL - 90-degree flanged.

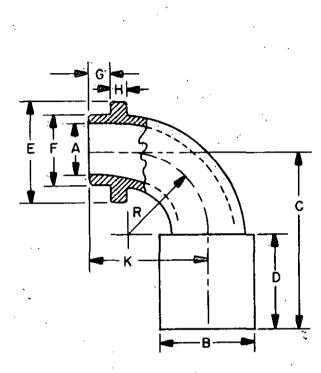


SIZE	Α	MAX B	MAX C	D	E	F	G	н
5	5.30	8.42	8.45	5.90	6,63	5.64	.42	
6	6.38	8.67	9.41	5.89	7.57	6.76	.47	

NOTE – Dimensions are in inches. Standard Commercial Tolerances are acceptable.

54 :1477

FIGURE 3. Type B - Straight split clamp.



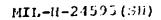
SIZE	A	В	С	D	Ε	F	G	н	к	R
• 5	5,30	8.45	10.78	5.90	6.63	5.64	.42		5.64	4.50
6	6.38	9;41	11.08	5.89	7.57	6.76	,47		6.43	4.75

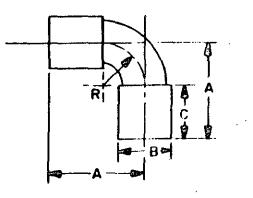
NOTE: Dimensions are in inches.

Standard commercial tolerances are accepted.

5#11478

FIGURE 4. Type BL - 90-degree split clamp elbow.



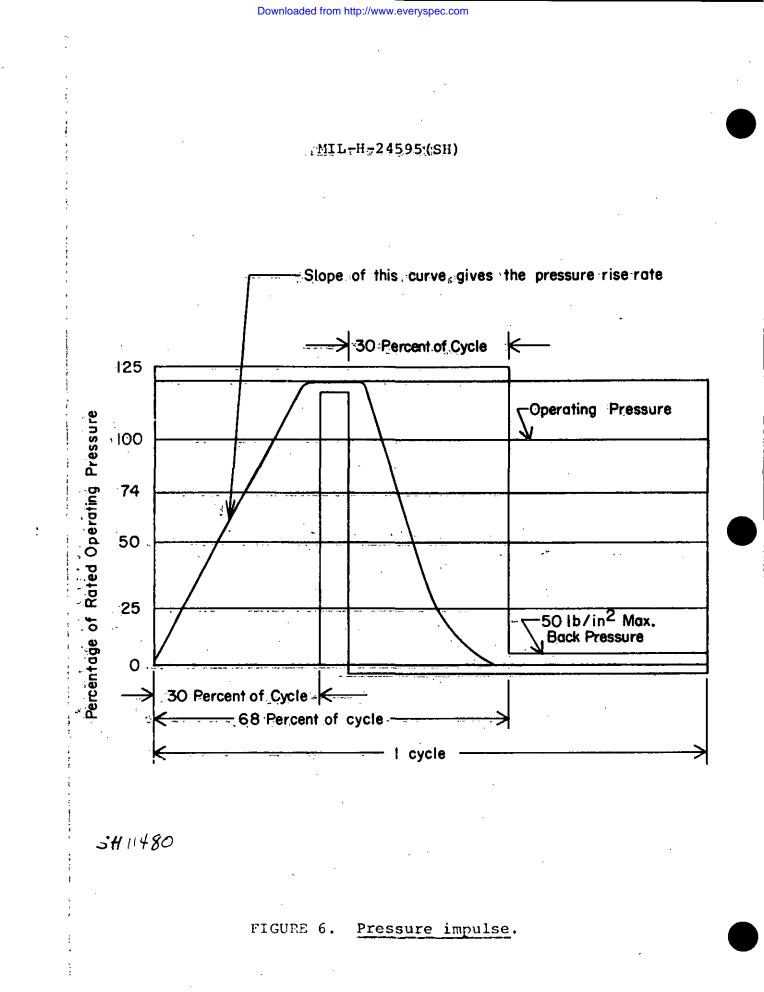


SIZE	A	B	С	R
5	10.78	8.45	5.90	4.50
6	11,08	9.41	5.89	4.75

NOTE: DIMENSIONS ARE IN INCHES. Standard commercial tolerances are accepted.

SH11479

FIGURE 5. Type C - 90-degree dogleg elbow.



¥

STANDARDIZATION DOCUMENT IMPROVE		OMB Approval No. 22-R255
INSTRUCTIONS: The purpose of this form is to solic ment of suitable products at reasonable cost and mini- DoD contractors, government activities, or manufactur are invited to submit comments to the government. For preparing activity. Comments submitted on this form portion of the referenced document(s) or to amend com- may be of use in improving this document. If there are envelope addressed to preparing activity.	mum delay, or will otherwi rers/vendors who are pros old on lines on reverse sid do not constitute or imply tractual requirements. Att	se enhance use of the doc pective suppliers of the pri- e, staple in Corner, and se authorization to waive any ach any pertinent data whi
DOCUMENT IDENTIFIER AND TITLE	······································	
MIL-H-24595 (SH)		
NAME OF ORGANIZATION AND ADDRESS	CONTRACT NUMBER	
	MATERIAL PROCURED UND	ER A
	DIRECT GOVERNMENT	
1. HAS ANY PART OF THE DOCUMENT CREATED PROBL	EMS OR REQUIRED INTERF	RETATION IN PROCUREME
USE? A. GIVE PARAGRAPH NUMBER AND WORDING.		
	;	
B. RECOMMENDATIONS FOR CORRECTING THE DEFIC		
•		
. *		•
	· •	
2. COMMENTS ON ANY DOCUMENT REQUIREMENT CONSI	DERED TOO RIGID	
		·
3. IS THE DOCUMENT RESTRICTIVE!	<u></u>	
YES NO (II "Yes", in what way?)		
4. REMARKS		
	,	
SUBMITTED BY (Printed or typed name and address - Optiona	U. TELEP	HONE NO.
SUDMITICU BT (Frinted of typed name and address + Optiona		
	DATE	
	52	

•