INCH-POUND

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DETAIL SPECIFICATION

VALVES, CHECK, AIRCRAFT FUEL SYSTEM

INACTIVE FOR NEW DESIGN

Comments, suggestions, or questions on this document should be addressed to Oklahoma City Air Logistics Center/ENSDAA, 3001 Staff Drive, Suite 1AB81A, Tinker AFB, OK 73145 or emailed to ocalc.dsp@us.af.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at https://assist.dla.mil.

AMSC N/A

FSC 4820

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers low-pressure check valves suitable for use with hydrocarbon fuels, fuel vapors, and air.

1.2 Classification. The check valves should be of the following classes based on the applicable temperature ranges of SAE-ARP8615.

Class	Low Temp Fuel and Ambient	High Temp Fuel	High Temp Ambient
A	-55°C (-67°F)	57°C (135°F)	71°C (160°F)
B	-55°C (-67°F)	94°C (200°F)	177°C (350°F)
C	-55°C (-67°F)	150°C (300°F)	315°C (600°F)

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of these lists, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-PRF-680	-	Degreasing Solvent
MIL-DTL-5624	-	Turbine Fuel, Aviation, Grades JP-4 and JP-5
MIL-PRF-6855	-	Rubber, Synthetic, Sheets, Strips, Molded or Extruded Shapes, General Specification for
MIL-PRF-7024	-	Calibrating Fluids, Aircraft Fuel System Components
MIL-S-7742	-	Screw Threads, Standard, Optimum Selected Series: General Specification for
MIL-I-8500	-	Interchangeability and Replaceability of Component Parts for Aerospace Vehicles
MIL-A-8625	-	Anodic Coatings for Aluminum and Aluminum Alloys
MIL-DTL-25988	-	Rubber, Fluorosilicone Elastomer, Oil and Fuel Resistant,

		Sheets, Strips, Molded Parts, and Extruded Shapes
MIL-DTL-83133	-	Turbine Fuel, Aviation, Kerosene Type, JP-8 (NATO F-34), NATO F-35, and JP-8+100 (NATO F-37)

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-130	-	Identification Marking of U.S. Military Property
MIL-STD-810	-	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-889	-	Dissimilar Metals
MS21344	-	Fitting – Installation of Flared Tube, Straight Threaded Connectors, Design Standard for
MS21430	-	Valve, Check, Fuel and Air, Poppet Type, Zero, Leak
MS28882	-	Valve, Fuel Check, Low Pressure, Gasket Seal Straight Thread Connection
MS28884	-	Valve, Fuel Check, Low Pressure, Flared Tube Connection
MS29521	-	Disk, Valve

DEPARTMENT OF DEFENSE HANDBOOKS

MIL-HDBK-831	-	Preparation of Test Reports

(Copies of these documents are available online at http://quicksearch.dla.mil).

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

ASME INTERNATIONAL

ASME-Y14.24	-	Types and Applications of Engineering Drawings
ASME-Y14.34	-	Associated Lists
ASME-Y14.35M	-	Revision of Engineering Drawings and Associated Documents
ASME-Y14.100	-	Engineering Drawing Practices

(ASME documents may be obtained online at http://www.asme.org/ or from ASME International, Three Park Avenue, New York, New York 10016-5990, USA.)

ASTM INTERNATIONAL

ASTM-D471	-	Rubber Property – Effects of Liquids
ASTM-D910	-	Gasolines, Aviation
ASTM-D1655	-	Aviation Turbine Fuels
ASTM-D6227	-	Standard Specification for Unleaded Aviation Gasoline

Containing a Non-hydrocarbon Component

(ASTM documents may be obtained online at http://www.astm.org/ or from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

SAE INTERNATIONAL

SAE-ARP868	-	Fuel System Components, Pressure Drop Tests for, Method
SAE-AMS2175	-	Castings, Classification and Inspection of
SAE-AMS3216	-	Fluorocarbon (FKM) Rubber, High-Temperature – Fluid Resistant, Low Compression, Set 70-80
SAE-AMS3218	-	Fluorocarbon (FKM) Rubber, High-Temperature-Fluid Resistant, Low Compression, Set 85-95
SAE-AMS-P-5315	-	Butadiene – Acrylonitrile (Nbr) Rubber for Fuel-Resistant Seals 60-70
SAE-AMS7259	-	Rings, Sealing, Fluorocarbon (FKM) Rubber High-Temperature-Fluid Resistant Low Compression Set 85-95
SAE-AMS7276	-	Rings, Sealing, Fluorocarbon (FKM) Rubber High-Temperature-Fluid Resistant Low Compression Set 70-80
SAE-ARP8615	-	Fuel System Components: General Specification for
SAE-AS8879	-	Screw Threads – Unj Profile, Inch Controlled Radius Root With Increased Minor Diameter
SAE-AMS-R-83485	-	Rubber, Fluorocarbon Elastomer, Improved Performance at Low Temperatures

(SAE documents may be obtained online at http://www.sae.org/ or from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001 USA.)

2.4 Order of Precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Qualification. Valves furnished under this specification shall be products that are authorized by the qualifying activity for listing on the applicable qualified products list before contract award (see 4.3 and 6.3).

3.2 Materials. Materials and processes used in the manufacture of check valves shall be suitable for the purpose and shall conform to applicable Government specifications. Materials conforming to contractor's specifications may be used provided the specifications are approved by the services and contain provisions for adequate tests. The use of contractor's specifications shall not constitute waiver of Government inspection.

3.2.1 Metals. All metals used in construction of the valves shall be corrosion resistant or

protected to resist corrosion during normal service life of the valve when in storage or during normal service use. The selection of metals shall be based on the stress corrosion limits of the material and not on the normal yield strength. Internal stresses due to assembly methods and stresses due to assembly in the next assembly shall be considered. The torque limits specified in MS21344 for the applicable fitting end shall be used for this purpose.

3.2.1.1 Dissimilar metals. Unless suitably protected against electrolytic corrosion, dissimilar metals as defined in MIL-STD-889 shall not be used in intimate contact with each other.

3.2.1.2 Magnesium and copper. Magnesium or copper or the alloy thereof shall not be used in contact with fuel.

3.2.2 Finish. Plating and protective treatments shall be in accordance with applicable Government specifications. Anodizing shall be in accordance with MIL-A-8625. Painting shall not be used on surfaces that may be in contact with fuel.

3.2.3 Fungus resistance. Materials that contain nutrients to fungi shall not be used in the valves.

3.2.4 Rubber material. Rubber materials shall be in accordance with SAE-AMS-P-5315, MIL-PRF-6855 (Class I), MIL-R-25988 or SAE-AMS-R-83485. Other elastomeric materials are required to have approval from the procurement activity for the particular application. SAE-AMS-P-5315 and MIL-R-6855 rubbers are limited to use in class A valves. If SAE-AMS7276, SAE-AMS7259, SAE-AMS3216, and SAE-AMS3218 rubber is substituted for SAE-AMS-R-83485, great care must be exercised to assure satisfactory low temperature operation.

3.2.5 Castings. Castings shall be in accordance with SAE-AMS2175. The class and grade shall be specified on the casting drawing.

3.3 Design and construction. The check valves shall be in accordance with MS21430, MS28882, and MS28884. Swing check elements shall be in accordance with MS29521.

3.3.1 Rated flow. At the rated fuel flow, the valves shall not exceed the pressure drop requirements of Table I.

TABLE I. Flow capacity and pressure drop.

Dash No.	Rated Flow GPM	Pressure Drop – PSI – Max		
		MS28882	MS28884	MS21430
-4	1.25			
-6	3.25	2.5	1.5	
-8	6.0			
-10	10			3.0
-12	15			
-16	30	1.5	1.0	
-20	50			
-24	70			
-32	130			

3.3.2 Pressure and leakage. The valve housing and the check elements shall be designed for fluid or pneumatic pressures of 60 psig operating, 120 psig proof, and 180 psig ultimate without warpage or failure. There shall be no external leakage from zero pressure up to ultimate. Internal leakage in the check direction shall be in accordance with 4.5.2.2.

3.3.3 Operation. The valves shall open at a pressure differential from inlet to outlet of less than 8 inches of water and permit flow of fuel, fuel vapors, or air in one direction and check the flow in the opposite direction before the outlet pressure becomes equal to the inlet pressure. In the absence of fluid pressure, the check valve element shall remain closed with the valve assembly in either the horizontal or vertical position.

3.3.4 Fuel resistance. The valves shall function properly and be resistant to fluids in accordance with ASTM-D910, MIL-DTL-5624, MIL-PRF-7024, MIL-DTL-83133, and ASTM-D471 (all containing up to 30 percent aromatics by volume) and also MIL-PRF-680, ASTM-D910, ASTM-D6227, and ASTM-D1655 jet fuels, Types A, A-1, and B, and other comparable fuels.

3.3.5 Screw threads. Screw threads shall be in accordance with MIL-S-7742 or SAE-AS8879.

3.3.5.1 Locking of parts. Threaded parts shall be locked or safetied in accordance with applicable military standards or other accepted practice. Self-locking nuts shall not be used where loosening or disengagement could result in the nut or other parts entering the fuel system. The use of lockwashers or staking is prohibited.

3.3.6 Contaminated fuel. The valve shall be capable of operating with fuel containing contaminants as specified in 4.5.3e.

3.3.7 Lubrication. The valves shall not require any lubrication except the fluid in which it operates.

3.4 Performance. The valve shall demonstrate satisfactory performance when subjected to the inspections and tests as specified in table II.

TABLE II. Qualification inspection.

Inspections	Valve No. 1	Valve No. 2
Examination of product	4.5.1	4.5.1
Calibration (Initial)	4.5.2	4.5.2
Endurance		4.5.3
Contaminated fuel		4.5.3.1
Vibration	4.5.4	
Accelerated Corrosion	4.5.5	
Fuel Resistance	4.5.6	
Ultimate Pressure	4.5.7	4.5.7
Calibration (Final)	4.5.2	4.5.2
Disassembly and inspection	4.5.8	4.5.8

3.4.1 Swing check element. Valve elements in accordance with MS29521 shall be mated to a test fixture for the accomplishment of the above performance tests, except the ultimate pressure test.

3.5 Interchangeability. The assembly and all component parts are governed by MIL-I-8500.

3.6 Drawings. Drawings shall be in accordance with ASME-Y14.24, ASME-Y14.34, ASME-Y14.35M and ASME-Y14.100. The top assembly drawing shall list each component part, part number, material, and material specification. Finishes shall also be shown, as applicable.

3.7 Identification of product. The valve assembly shall be marked in accordance with MIL-STD-130. The information may be etched, engraved, embossed, or stamped on the valve body or on a name plate securely attached to the valve, and shall contain the following, at least:

Valve, Check
MS part number
Manufacturer’s part number
Manufacturer’s name or trade mark

3.7.1 Color identification. The valve shall be color coded to indicate fuel use by means of a red color. The color shall be permanent and shall not deteriorate, loosen, or fade due to contact with fuel or the operational environment. The marking may consist of a red band .25 inch or wider around the component body or by coloring the entire outer surface of the principal body, or by use of an embossed nameplate with a red background color.

3.8 Age control. The month and year of assembly shall be marked on the valve.

3.9 Workmanship. Workmanship shall be in accordance with all applicable specifications, drawings, and quality control plans.

4. VERIFICATION

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

a. Qualification inspection (see 4.3).
b. Conformance inspection (see 4.4).

4.2 Test conditions.

4.2.1 Temperature and pressure. Unless otherwise specified, the tests shall be conducted with the valves and fuel at a temperature between 15°C (60°F) and 33°C (90°F) and at atmospheric pressure. All pressures specified are gage pressures.

4.2.2 Test fluids. The pressure drop test shall be conducted using fluid in accordance with MIL-PRF-7024, type II. Jet fuel, MIL-DTL-5624 or cleaning solvent, MIL-PRF-680, may be substituted, provided the test data is corrected to account for the differences in specific gravity and viscosity of these fluids from MIL-PRF-7024. For other tests where no fluid is specified, any fluid specified in 3.3.4 may be used.

4.3 Qualification inspection.

4.3.1 Test samples. The test samples shall consist of two valves of each size representative of the production items. The samples shall be identified with the manufacturer's part number and test item numbers as referenced in the test report.

4.3.1.1 Data to accompany test samples. The test samples shall be accompanied by a complete set of production drawings and a parts list.

4.3.2 Test report, test samples, and data for the qualifying activity. The following shall be furnished to the qualifying activity:

a. A test report in accordance with MIL-HDBK-831
b. The test samples referenced in the test report
c. The data required under 4.3.1.1

4.3.3 Qualification examination and tests. The qualification inspection shall consist of the examination and tests conducted on the test samples in the order listed in table II. Air pressure leakage tests (4.5.2.2.1) shall be conducted after each test. Each valve shall satisfactorily complete the required tests without failure.

4.4 Quality conformance tests. The quality conformance tests shall consist of:

a. Individual tests
b. Sampling tests

4.4.1 Individual tests. Each valve shall be subjected to the following tests:

a. Examination of product (see 4.5.1)
b. Internal leakage (see 4.5.2.2)

4.4.2 Sampling tests. One valve out of each lot of 100 or less shall be subjected to the following test in the order listed:

a. Examination of product (see 4.5.1)
b. Ultimate pressure (see 4.5.7)
c. Calibration (see 4.5.2)

4.5 Inspection methods.

4.5.1 Examination of product. All items shall be inspected and certified to be in accordance with this specification, the applicable military standard, and the manufacturer's drawings. The units shall be clean and free of any contaminants, oil, grease, or any other material not specified on the assembly drawing.

4.5.2 Calibration.

4.5.2.1 Pressure drop. The fuel pressure drop through the valve shall be determined in accordance with SAE-ARP868 test procedure. Data shall be taken at 5, 20, 50, and 100 percent rated flow, and at other points as needed, for plotting a satisfactory flow curve. For valves with female ends (MS28882), the tare pressure drop of the union fittings shall be obtained by using a dummy housing.

4.5.2.2 Internal leakage.

4.5.2.2.1 Air pressure leakage. Air or dry nitrogen pressure shall be applied to the outlet of the valve while it is immersed in fluid (water may be used) with the valve vertical and inlet up at a depth no greater than 1 inch below the surface. Apply test pressures of 4 inches of fuel, 1 psig, 10 psig, 30 psig, and 60 psig in succession while observing for leakage as follows:

a. For hinged type flapper valves, the waiting period at each pressure level shall be 30 seconds. No more than one bubble may be released during any waiting period. For individual tests, the pressure shall be 4 inches of fuel and 60 psig with waiting periods of 10 seconds.

b. For poppet type valves, the waiting period at 4 inches of fuel and at 60 psig shall be 10 minutes and at other pressure, 1 minute. There shall be no bubbles released during the entire test period. For individual tests the pressure shall be 4 inches of fuel and 60 psig with 30 second waiting periods.

4.5.2.2.2 Proof pressure. Following the tests of 4.5.2.2.1, the pressure shall be raised from 60 psig to 120 psig and held for 1 minute. There shall be no external leakage or other failure. For individual tests the time shall be 10 seconds.

4.5.2.2.3 Fuel pressure leakage. Using MIL-PRF-680 or MIL-DTL-5624, apply fluid pressure to the valve outlet with the valve in a horizontal position as follows:

a. For hinged type flapper valves, apply fluid pressure of 4 inches of fuel, 1 psig, 10 psig, 30 psig and 60 psig with a waiting period of 1 minute at each pressure level. Leakage shall not exceed 0.10 cc per minute. For individual tests, apply a fluid pressure of 60 psig for a waiting period of 30 seconds.

b. For poppet type check valves, slowly increase the fluid pressure from 0 to 4 inches of fuel at a rate of 0.2 inches a minute. At 4 inches of fuel, hold the pressure for 10 minutes. Then increase the pressure to 1 psig, 10 psig, and 30 psig with waiting periods of 2 minutes at each pressure level. Then increase to 60 psig and hold for 10 minutes. There shall be no evident leakage at any time (see 4.5.2.2.1b). For individual tests, the rate of pressure rise from 0 to 4 inches a minute shall not exceed 1 inch a minute. Hold the pressure at 4 inches of fuel for 10 minutes and at 60 psig for 5 minutes.

4.5.2.3 Valve opening and closing. The opening and closing pressures shall be determined. A test set-up as shown on Figure 1 may be used. The opening pressure shall be less than 8 inches of water, and the valve shall close before the liquid head differential becomes zero. Water may be used for this test. The test shall be repeated three times.

4.5.3 Endurance. The endurance test shall consist of a total of 100,000 operating cycles at a maximum rate of 15 cycles per minute. Each cycle shall consist of flow through the valve, stopping the flow, and venting the inlet to ambient pressure while the outlet is subjected to 60 psig above ambient. During the test there shall be no evidence of external leakage or excessive internal leakage. The test sequence is as follows:

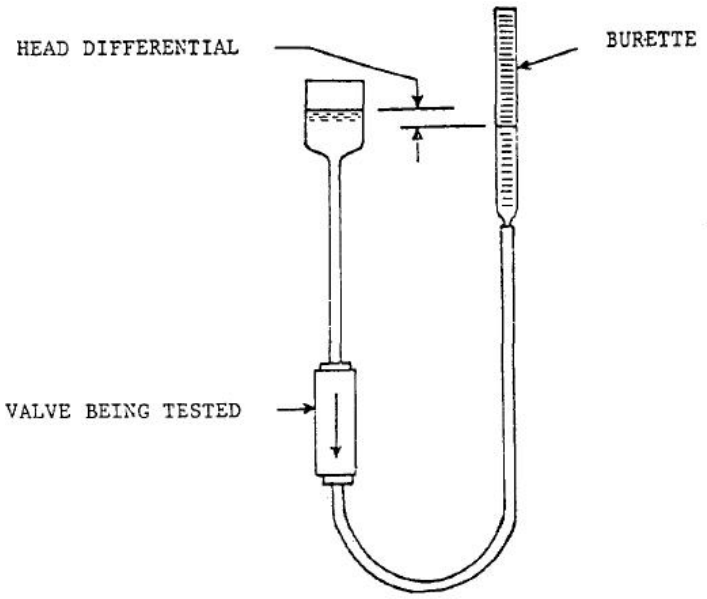

FIGURE 1. Test apparatus for valve opening and closing test.

a. Room temperature – This test shall consist of 74,000 cycles, using a fluid of 3.3.4 with the fluid and ambient temperature at 15°C(60°F) to 38°C(100°F). Flow shall be at 80 percent to 100 percent of rated flow. When completed, the fluid pressure leakage test (4.5.2.2.3) shall be conducted.

b. Dry – This test shall consist of three 5,000-cycle periods, using air or other suitable gas. These periods shall follow each of the following three wet endurance periods. The flow shall be with at least 50 percent of the pressure drop for rated flow. After each dry endurance period, the air pressure leakage test (4.5.2.2.1) shall be conducted.

c. Low temperature – This test shall consist of 5,000 cycles using ASTM-D471, Type I fluid with fluid and ambient temperature at -50°C(-60°F) to -57°C(-70°F). Flow rate shall be at least 40 percent of rated. After completion of the 5,000 cycles and while still at the low temperature, conduct a fuel pressure leakage test (4.5.2.2.3) using the above test fluid.

d. High temperature – This test shall consist of 5,000 cycles using ASTM-D471, Type III fluid with the fuel at -57°C(-70°F) and the ambient at 71°C(160°F), at 80 percent to 100 percent of rated flow. For class B and C valves, at least 1,000 cycles shall be at the high fuel and ambient temperatures of the class, using JP-5 or MIL-PRF-680 fluids.

e. Contaminated fuel – This test shall consist of 1,000 cycles using fuel containing the contaminants of table III. 500 cycles shall be at 90 to 100 percent of rated flow, and 500 cycles at 10 to 20 percent of rated flow. After completion of the 1,000 cycles, the valve may be flushed with fresh fuel and the fuel pressure leakage test (4.5.2.2.3) shall be conducted.

TABLE III. Contaminant mixture test.

Contaminant	Particle Size (Microns)	Quantity (gms per 1000 liters)
Iron Oxide	0 – 5	19
	5 – 10	1.0
Sharp Silica Sand	150 – 300	0.7
	300 – 420	0.7
Prepared dirt conforming to AC Spark Plug Co. Part No. 1543637 (Coarse Arizona road dust)	Mixture as follows: 0 – 5 (12%) 5 – 10 (12%) 10 – 20 (14%) 20 – 40 (23%) 40 – 80 (30%) 80 – 200 (9%)	5.3
Cotton linters	Staple Below 7 U.S. Dept of Agriculture Grading Standards	0.07

4.5.4 Vibration. The vibration test shall be conducted dry, first along the principal axis of the valve, and secondly along an axis perpendicular to the first. For hinged flapper valves, the second axis shall also be perpendicular to the hinge line. The vibration load level shall be 2G's from 20 to 33 Hz, 10G's from 74 to 2000 Hz, and at a double amplitude of .036 inch from 33 to 74 Hz. Scan time from minimum to maximum and return shall be 15 minutes. The total vibration time while scanning on each axis shall be 1 hour. Vibration time at each resonant frequency shall be 30 minutes. If more than four resonant points exist, the test shall be conducted at the four most significant frequencies. If a resonance shift occurs, the time of occurrence shall be noted and the vibration frequency adjusted to maintain the peak resonance condition. Following vibration, the air pressure leakage test and proof pressure tests (4.5.2.2.1 and 4.5.2.2.2) shall be conducted.

4.5.5 Accelerated corrosion. The complete valve with open ports shall be immersed in a solution consisting of 2-1/2 percent of weight of sodium chloride in distilled water. After immersion, the solution shall be drained, and the valve shall be heated in an oven to a temperature of 55°C ±3°C(130° ±5°F) for 1 hour. The immersion and heating cycle shall be repeated 50 times. The valve shall not be operated any time during the above 50 cycles. Immediately after completion of the immersion cycles, the valve, in the assembled state, may be flushed with warm water to remove salt accumulations and a fuel pressure leakage test of 4.5.2.2.3 conducted.

4.5.6 Fuel resistance. This test shall be accomplished in accordance with the schedule of table IV, and with the valve installed in a fluid flow circuit as in 4.5.3. At least once each day during soak and dry periods, operation shall be accomplished for 25 cycles. During non-operating periods, the pressure may be removed.

TABLE IV. Test schedule.

Test Period	Class	Test Fluid	Temperature °C (°F)	Time Hours	Remarks
1	A B C	ASTM-D471 Type III	57° (135°) 93° (200°) 93° (200°)	96	At end of period, conduct leakage test (4.5.2.2.3) at room temperature (R.T.) with test fluid
2	A B C	Air	71° (160°) 176° (350°) 176° (350°)	24	At end of period, conduct leakage test (4.5.2.2.3) at R.T. with Type I
3	A B C	Type III Type III MIL-DTL-624 JP-5	57° (135°) 93° (200°) 148° (300°)	18	At end of period, conduct leakage test (4.5.2.2.3) at R.T. with test fluid

TABLE IV. Test schedule. (Continued)

Test Period	Class	Test Fluid	Temperature °C (°F)	Time Hours	Remarks
4	A B C	Air	71° (160°) 176° (350°) 316° (600°)	18	At end of period, conduct leakage test (4.5.2.2.3) at R.T. with Type I
5	All	Type I	-55° (-67°)	18	At end of period, conduct leakage test (4.5.2.2.3) at low temp and at R.T. with Type I

NOTES. Each period shall follow the preceding in the order noted with a minimum of delay. For the dry periods, the component shall be drained, without disassembly, and blown dry with the ports open and placed in a test chamber having air continuously circulating around the component t at the test temperature. For the high temperature soak periods, it is advisable to perform the soak in a closed container with a pressure not to exceed 15 psi to prevent boiling.

4.5.7 Ultimate pressure. A fluid pressure of 180 psig shall be applied for a period of 1 minute to the inlet port with the outlet capped and then to the outlet port with the inlet open. There shall be no external leakage, permanent distortion, or other failure. Following this test, performance shall remain satisfactory during the final calibration (4.5.2). For individual tests, the pressure duration shall be for 10 seconds.

4.5.8 Disassembly and inspection. Following completion or all tests, all test articles shall be disassembled for inspection. There shall be no evidence of failure, deterioration, excessive corrosion, or undue wear.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the military service's system commands. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. Components covered by this specification are intended for use in fuel and fuel vapor systems.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of this specification.
b. MS part number
c. Quantity required
d. Applicable levels of preservation-packaging, and packing (see 5.1).

6.3 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Products List QPL-7899 whether or not such products have actually been listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Oklahoma City Air Logistics Center/ENSDAA (AF-71), 3001 Staff Drive, Suite 1AB81A, Tinker AFB, OK 73145 or email ocalc.dsp@us.af.mil. An online listing of products qualified to this specification may be found in the Qualified Products Database (QPD) at https://assist.dla.mil.

6.3.1 Limited approval. For cases where a fully qualified product is not available, and there is a limited application for only a few valves, and where flight safety is not a factor, a limited approval may be granted by the procuring activity for values capable of satisfying the following tests:

a. Examination of product (see 4.5.1)
b. Calibration (see 4.5.2)
c. Endurance (1,000 cycles) (see 4.5.3.a)
d. Ultimate pressure (see 4.5.7)
e. Disassembly and inspection (see 4.5.8)

6.4 Subject term (key word) listing.

Kerosene
Low-pressure
Seal, Gasket

6.5 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - AV
Navy - AS
Air Force - 71

Preparing activity:
Air Force - 71

(Project 4820-2013-012)

Reviewer activities:
Army – CR4
Army – MI
Air Force – 99
DLA - CC

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at https://assist.dla.mil/.