

INCH-POUND

MIL-V-5527A  
AMENDMENT 1  
9 June 2001

MILITARY SPECIFICATION

VALVES, AIRCRAFT, HYDRAULIC, THERMAL EXPANSION RELIEF

INACTIVE FOR NEW DESIGN AFTER 7 AUGUST 1996

This amendment forms a part of MIL-V-5527A, dated 14 May 1951, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

2.1.1: Military Specification, Air Force- Navy Aeronautical:

Delete "AN QQ-A-696" and substitute "MIL-A-8625, Anodic Coatings for Aluminum and Aluminum Alloys"

Delete "AN-S-126" and substitute "SAE-AS8879, Screw Threads UNJ Profile, Inch"

PAGE 3

3. Requirements: Add the following:

"3.1 First article. When specified (see 6.3), a sample shall be subjected to first article inspection in accordance with 4.2."

3.1.2: Delete.

3.2.2: Delete and substitute:

"3.2.2 Temperature range. The valve shall be designed to operate satisfactorily throughout a temperature range of -65 to +275 °F (-55 to +135 °C)."

MIL-V-5527A  
AMENDMENT 1

PAGE 4

3.7, line 2: Delete "Qualifying Agency" and substitute "contracting activity".

PAGE 5

3.11.2, line 2: Delete "Qualification" and substitute "first article" and line 3: Delete "Qualifying Service" and substitute "contracting activity".

4: Delete "SAMPLING, INSPECTION, AND TEST PROCEDURES" and substitute "VERIFICATION".

4.1: Delete and substitute:

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

- a. First article inspection (see 4.2).
- b. Conformance inspection (see 4.3)."

4.2: Delete and substitute:

"4.2 First article inspection. The first article inspection shall consist of the examinations and tests specified herein."

4.2.1.1, line 1: Delete "Qualification" and substitute "first article" and line 2: Delete "qualification" and substitute "first article inspection".

PAGE 6

4.2.1.4: Delete the third, fourth and last sentence.

4.2.1.5, lines 3 and 5: Delete "Qualification" and substitute "First Article".

4.2.1.6: Delete and substitute:

"4.2.1.6 Similarity. Satisfactory completion of first article inspection of one type valve may at the discretion of contracting activity, be extended to other types of valves after performing one or two tests if all of the internal working parts are completely identical and the valves are made from the same manufacturer."

MIL-V-5527A  
AMENDMENT 1

4.2.2: Delete.

4.3: Delete paragraph heading "Inspection Tests" and substitute "Conformance inspection".

4.3.1, line 2: Delete "Inspection tests" and substitute "conformance inspection".

4.3.2, line 1: Delete "inspection tests" and substitute "conformance inspection".

4.4.1: Delete and substitute:

"4.4.1 Test fluid. First article inspection shall be performed with fluid conforming to "MIL-H-5606" or "MIL-PRF-6083."

11.5.2.2: Delete and substitute the following:

"4.5.2.2 Other nonmetallic parts. Valves containing nonmetallic parts other than standard MIL-P-83461 packings and MIL-G-5514 glands shall be immersed in MIL-H-5606 or MIL-PRF-6083 hydraulic fluid for a period of 7 days at a temperature of  $+ 275 \pm 10$  °F ( $135 \pm 5$  °C) prior to conducting the first article inspections specified herein. All internal parts shall be in contact with the hydraulic fluid during this period. If this test is necessary as a result of the use of nonstandard packings and gland design installation, the seals used in the valves shall be fabricated of the approved packing compound having the highest swell and shall be compatible with the hydraulic fluid. The use of nonstandard packing and gland design shall be approved by the contracting activity before installing in the valve. After the above immersion, the valve shall remain in the high swell hydraulic fluid at normal room temperature until ready for test. It shall not be exposed to air for any appreciable length of time during the tests."

PAGE 9

4.5.7.2, First sentence: Delete and substitute: "The valve shall be subjected to hydraulic fluid with temperature of 275 °F (135 °C) for a period of 6 hours minimum."

PAGE 11

4.5.9, line 5: Delete "Qualification tests" and substitute "first article inspections".

5.4: Delete.

6.2: Delete.

6.3: Delete and substitute:

MIL-V-5527A  
AMENDMENT 1

“6.3 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of the specification.
- b. Issue of DoDISS to be cited in the solicitation and if required, the specific issue of individual documents referenced (see 2.1).
- c. Packaging requirements (see 5.1).
- d. When first article is required.
- e. MS or AN part number of the valves (see 3.11.1).
- f. Class and type of the valves (see 1.2).

PAGE 12

6.4: Delete.

6.5: Delete.

6.5.1: Delete.

6.6: Delete “NOTICE” in its entirety.

CONCLUDING MATERIAL

Custodians:

Army - AV  
Navy - AS  
Air Force - 99  
DLA - CC

Preparing activity:

Navy - AS

(Project 4820-0852)

Review activities:

Navy - MC, SA