

3-A[®] Sanitary Standard for Sensors and Sensor Fittings and Connections, Number 74-06

*Standards Developing Organizations
3-A Sanitary Standards, Inc. (3-A SSI)
In Collaboration With
United States Public Health Service (USPHS)/
United States Food and Drug Administration (USFDA)
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European Hygienic Engineering & Design Group (EHEDG)*

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Disclaimers

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3-A Standards and 3-A Practices do not include provisions for mechanical and electrical safety. Mechanical and electrical safety criteria are established by government regulations and other standards development organizations (SDOs). Other SDO standards may be referenced.

3-A Sanitary Standards, Inc., its employees and its volunteer committees shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the development, use, interpretation of, and reliance upon this 3-A Standard.

Drawings and illustrations contained herein are to assist in understanding the criteria in this 3-A Standard. Drawings and illustrations are not intended to show all variations of the equipment or system nor are they to exclude alternate methods meeting this standard. Drawings and illustrations are non-normative.

Foreword

This 3-A Standard is to establish minimum sanitary (hygienic) requirements for Sensors and Sensor Fittings and Connections. Standard English is the official language of 3-A Sanitary Standards and 3-A Accepted Practices.

This 3-A Standard is for voluntary use by directly and materially affected organizations such as equipment and machinery fabricators, processors, regulatory agencies and by 3-A Sanitary Standards, Inc. to assure adequate public health protection exist for the devices and covered products. 3-A Sanitary Standards, Inc. use these documents as the source for sanitary criteria as part of 3-A Symbol authorization.

This 3-A Standard was developed jointly by 3-A Sanitary Standards, Inc. (3-A SSI), the United States Public Health Service (USPHS), United States Food and Drug Administration (USFDA), the United States Department of Agriculture – Dairy Programs (USDA), and the European Hygienic Engineering & Design Group (EHEDG).

It is our purpose to encourage inventive genius and provide a forum to discuss new developments. Suggestions for improvement and new technology are welcome any time for consideration by the 3-A Sanitary Standards Committees. Please forward comments to 3-A SSI, 6888 Elm Street, Suite 2D, McLean, VA 22101-3829 USA. By fax: 703-761-6284. By e-mail to: 3-ainfo@3-a.org.

A SCOPE

- A1 This 3-A Sanitary Standard applies to the sanitary aspects of sensors and sensor fittings and connections for equipment which contains or processes milk and milk products and on pipelines which convey milk and milk products and to sensors and sensor fittings and connections within recirculation cleaning systems.
- A2 To conform to this 3-A Sanitary Standard, sensors and sensor fittings and connections shall conform to the following criteria for design, materials of construction, fabrication techniques and the current revisions or editions of all referenced documents cited herein and, in the case of field-installed adaptors or spuds and their associated sensors, installation criteria.

B NORMATIVE REFERENCES

- B1 The following listed 3-A Sanitary Standards and other documents shall be considered as Normative References and the provisions of the referenced documents shall apply to this Standard without further reference in this document unless necessary to describe special considerations.

B2 3-A Sanitary Standards

<u>Doc. No.</u>	<u>Title (3-A Sanitary Standard for:)</u>
18-	Multiple-Use Rubber and Rubber-Like Materials
20-	Multiple-Use Plastic Materials
33-	Metal Tubing
63-	Sanitary Fittings

B3 Other References and Standards

<u>Ref. No.</u>	<u>Title</u>
1.	The Code of Federal Regulations (CFR), Title 21, Part 110.3 (o) Current good manufacturing practice in manufacturing, packaging, or holding human food, definitions. (FDA's definition of sanitize from the GMP regs). The Code of Federal Regulations (CFR), Title 40, Part 152.500 Pesticide registration and classification procedures, requirements for devices. The Code of Federal Regulations (CFR), Title 40, Part 161.640 Data requirements for registration, product performance data. The Code of Federal Regulations (CFR), Title 40, Part 180.940 Tolerances and exemptions from tolerances for pesticide chemicals in food, tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (food-contact surface sanitizing solutions). For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, Phone: (202) 512-1800 or at http://www.gpoaccess.gov/cfr/index.html .
2.	<i>Advanced Materials and Processes</i> , Volume 137(1), "Coatings and Coating Practices" by H. Herman, "Surface Modification" by F. A. Smidt. ASM International, Materials Park, OH 44073, Phone: (216) 338-5151, Internet http://asminternational.org
3.	SAE AMS 2406, Chromium Plating (Electrodeposited). SAE-AMS QQ-N-290A, Nickel Plating (Electrodeposited). SAE International, 400 Commonwealth Dr., Warrendale, PA 15096-0001, Internet: http://www.sae.org