

Subject 252A

September 15, 2017

SUMMARY OF TOPICS

The following changes in requirements to the Standard for Compressed Gas Regulator Accessories, UL 252A, are being proposed:

1. Addition of requirements for outlet connections and batteries

STP BALLOTS AND ALL COMMENTS DUE: October 30, 2017

For your convenience in review, proposed additions to existing requirements are shown underlined and proposed deletions are shown ~~lined-out~~.

1. Addition of requirements for outlet connections and batteries

RATIONALE

Proposal submitted by: Edgar Wolff-Klammer, Underwriters Laboratories LLC

Addition and revision of requirements are being proposed based on the following:

A definition for Intrinsically Safe Circuit to clarify the use of the term in the Exception to new Clause 8.4.

The Exceptions to Clause 7.2 revised, and a new Clause 7.3 added, to provide for quick-connect tube connections.

Test requirements for flow indicators that include batteries, added to Table 8.1 including Drop and Impact Tests to address the ignition hazard due to damaged lithium-ion batteries.

New Section 7A (Batteries) to address products with batteries.

New requirements to Section 8, Performance – General, to address electrical circuits and components, as well as batteries.

New Sections 19A (Drop Test), 19B (Mold Stress Test) and 19C (Impact Test) (see the information provided on the revisions to Table 8.1 for further details).

A new Marking Clause, to address battery-operated accessories.



PROPOSAL

4 Glossary

4.4.1 INTRINSICALLY SAFE CIRCUIT – A circuit in which any spark or thermal effect, produced either normally or in specified fault conditions, is incapable of causing ignition of a mixture of flammable or combustible material in air in the mixture's most easily ignitable concentration.

7 Connections

7.2 Outlet hose connections, for welding and cutting equipment, when used, shall be provided with right-hand threads for nonfuel gases and with left-hand threads for fuel gases, complying with the Standard Connections for Regulator Outlets, Torches and Fitting Hose for Welding and Cutting Equipment, CGA E-1.

Exception No. 1: The outlet connection of a compressed gas regulator accessory for use with carbon-dioxide or inert gases is permitted to be a slip-on hose connector of the serrated stem type.

Exception No. 2: The outlet connection complies with the requirements of a national pipe thread standard compatible with those fittings.

7.3 The outlet connection of a regulator accessory for use with nitrogen, carbon-dioxide or inert gases, if provided, may be a slip-on hose connector of the serrated stem type or a quick-connect tube connection.

7A Batteries

7A.1 When used with fuel gases and oxygen the batteries provided in products covered by this standard shall comply with one of the following standards:

- a) Standard for Lithium Batteries, UL 1642 or
- b) Standard for Household and Commercial Batteries, UL 2054.

PERFORMANCE

8 General

Table 8.1
Required tests

Tests	Pressure gauges	Flow indicators	Flow indicators with metering or shut-off valves	Flow indicators with batteries	Valves	Shut-off valves	Relief devices
Torque Test, Section 9	X	X	X	X	X	X	X
External Leakage Test, Section 10	X	X	X	X	X	X	X
Hydrostatic Strength Test, Section 11	X	X	X	X	X	X	
Excess Pressure Test, Section 12	X	X	X	X	X	X	X
Volume Change and Weight Loss Tests, Section 13	X	X	X	X	X	X	X
Accelerated Aging Test for Elastomers, Section 14	X	X	X	X	X	X	X
Comparative Corrosion Test, Section 15	X	X	X	X	X	X	X
Accelerated Aging Test for Nonmetallic Tubes of Flow Meters, Section 16		X	X	X			
Endurance Test for Valves, Section 17			X		X	X	
Seat Leakage Test, Section 18			X			X	
Start-to- Discharge and Burst Test, Section 19							X

UL COPYRIGHTED MATERIAL –
NOT AUTHORIZED FOR FURTHER REPRODUCTION OR
DISTRIBUTION WITHOUT PERMISSION FROM UL

Table 8.1 Continued on Next Page



Documents

Document Sharing Hub