



UL 842B

STANDARD FOR SAFETY

Valves for Diesel Fuel, Biodiesel Fuel,
Diesel/Biodiesel Blends with Nominal
Biodiesel Concentrations up to 20
Percent (B20), Kerosene, and Fuel Oil

UL Standard for Safety for Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil, UL 842B

First Edition, Dated February 18, 2015

Summary of Topics

This revision of ANSI/UL 842B dated June 3, 2020 adds renewable diesel to the scope of the standard; [1.2](#)

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated January 31, 2020.

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UL 842B

Standard for Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil

Prior to the first edition, the requirements for the products covered by this standard were included in the Outline of Investigation for Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil, UL 842B.

First Edition

February 18, 2015

This ANSI/UL Standard for Safety consists of the First Edition including revisions through June 3, 2020.

The most recent designation of ANSI/UL 842B as an American National Standard (ANSI) occurred on June 3, 2020. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements cover valves that are intended to be used for the control of fluids and their vapors for the fluids indicated in [1.2](#). They are of the type commonly used in piping systems and in the assembly of motor fuel dispensing equipment. Valves covered by this standard are for use with flammable fluids which are handled at temperatures normally within the range of minus 29°C (minus 20°F) to 52°C (125°F).

1.2 Valves covered by these requirements are intended for use with one or more of the following as applicable:

- a) Diesel fuel, which includes renewable diesel, and diesel/biodiesel blends with nominal biodiesel concentrations up to 5 percent (B0 – B5) formulated in accordance with the Standard Specification for Diesel Fuel Oils, ASTM D975;
- b) Diesel /biodiesel and renewable diesel/biodiesel blends with nominal biodiesel concentrations from 5 percent up to 20 percent (B6 – B20) formulated in accordance with the Standard Specification for Diesel Fuel Oil, Biodiesel Blends (B6 – B20), ASTM D7467;
- c) Biodiesel (B99.9/B100) formulated in accordance with the Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ASTM D6751;
- d) Kerosene formulated in accordance with the Standard Specification for Kerosine, ANSI/ASTM D3699; or
- e) Fuel oil (heating oil) formulated in accordance with the Standard Specification for Fuel Oils, ASTM D396.

1.3 These requirements cover valves of the manually operated, pressure operated, or temperature operated types, or combinations of such to the exclusion of types operated wholly or partially by electricity. When they form a part of an assembly which provides for additional functions or service, the requirements are outside the scope of these requirements.

1.4 These requirements do not cover the following:

- a) Valves for handling liquids under cryogenic conditions.
- b) Valves for general refinery service, offshore and pipe line terminals, natural gas processing plants, gas distribution systems, petrochemical processing facilities, or the like.
- c) Constant-level oil valves and electrically operated valves.
- d) Relief valves and pressure regulators for liquefied petroleum gas (LP-Gas) service.
- e) Shutoff, emergency shutoff and check valves for liquefied petroleum gas (LP-Gas) in the liquid phase.
- f) Manually operated gas valves of the plug and body or rotating disc type which are evaluated under the Standard for Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves, ANSI Z21.15.
- g) Valves covered by the Standard for Gas Appliance Pressure Regulators, ANSI Z21.18; the Standard for Automatic Valves for Gas Appliances, ANSI Z21.21; or the Standard for Gas Appliance Thermostats, ANSI Z21.23.