UL 2586B

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

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Summary of Topics

This fifth issue of the Outline of Investigation for Hose Nozzle Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends With Nominal Biodiesel Concentrations Up To 20 Percent (B20), Kerosene, and Fuel Oil, UL 2586B, is being issued to clarify the secondary shut off operation.

This outline is effective April 30, 2015. Prior to the effective date, the requirements for products covered in this outline are included in the ninth edition of the Standard for Valves for Flammable Fluids, UL 842.

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INTRODUCTION

1 Scope

1 effective April 30, 2015

1.1 These requirements cover hose nozzle valves that are intended to be used for the control of motor fuels as indicated in 1.2. They are of the type used in motor fuel dispensing equipment. Hose nozzle valves covered by this standard are for use with motor fuels which are handled at temperatures within the range of minus 29°C (minus 20°F) to 52°C (125°F) and an operating pressure of minimum 50 psi (350 kPa).

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

a) Diesel fuel 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 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 hose nozzle valves of the manually operated and automatic pressure operated type. 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 When they form a part of an assembly which provides for additional functions or service, the requirements are outside the scope of these requirements.

1.5 These requirements do not cover the following:

a) Hose nozzle valves for handling liquids under cryogenic conditions.

b) Hose nozzle valves for general refinery service, offshore and pipe line terminals, natural gas processing plants, gas distribution systems, petrochemical processing facilities, or the like.

c) Hose nozzle valves operated wholly or partially by electricity or battery.

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1.6 This outline does not cover hose nozzle valves for use with gasoline or gasoline/ethanol blends which are covered under the Outline of Investigation for Hose Nozzle Valves for Gasoline and Gasoline/Ethanol Blends With Nominal Ethanol Concentrations Up To 85 Percent (E0 – E85), UL 2586A.

1.7 This outline does not cover hose nozzle valves for use with liquefied petroleum gas (LP-Gas), which are covered under the Standard for Flow Control Valves for Anhydrous Ammonia and LP-Gas, UL 125.

1.8 Requirements for the installation and use of these dispensing devices are included in the Code for Motor Fuel Dispensing Facilities and Repair Garages, ANSI/NFPA 30A.

2 General

2 effective April 30, 2015

2.1 Components

2.1.1 Except as indicated in 2.1.2, a component of a product covered by this outline shall comply with the requirements for that component.

2.1.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this outline, or

b) Is superseded by a requirement in this outline.

2.1.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.1.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

2.1.5 A hose nozzle valve with an integral swivel shall be additionally evaluated to the Electrical-Continuity and Operation Tests in the Outline of Investigation for Emergency Breakaway Fittings, Swivel Connectors and Pipe-Connection Fittings for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends With Nominal Biodiesel Concentrations Up To 20 Percent (B20), Kerosene, and Fuel Oil, UL 567B. The force is to be applied at the point on the swivel farthest from the joint. When necessitated by the swivel construction, this test is to be conducted on additional samples of the swivel with the load applied on the opposite side of the plane of rotation. See UL 567B, Figures 16.1 – 16.3 for examples.

2.2 Units of measurement

2.2.1 When a value for measurement is followed by a value in other units in parentheses, the first stated value is the requirement.

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