



1516 Manual Reset

1517 Motorized

Sanctioned: UL, FM, CGA (IRI approvable)

Proof-of-Closure Switch SPDT

High Capacity

Large Open/Shut Indicator

Metal-to-Metal Seating

Fluid Limits:

Temperature: -20 to 250 F

Max. Viscosity: 5000 SSU

Max. Pressure: 300 psig

(600 psig for -S models)

Enclosure meets NEMA 1, 3, 3S, 4, 12 and

CSA 2, 4, and 5 Standards

Normally-closed valves. Powering of an internal solenoid or circuit board permits opening. Interruption of power supply results in virtually instantaneous closure. Sanctioned for oil, kerosene, and JP-4. Suitable for many other fluids. Non-sanctioned "U" versions available for some special gases and liquids, including the 1517U-1-CR for #6 or crude oil heated above 250 F but not exceeding 300 F.

TYPICAL APPLICATIONS

North American Automatic Shutoff Valves are used in fuel supply lines on industrial furnaces, ovens, kilns, boilers, and other heating equipment. They shut off fuel automatically and instantly upon any break in electric power or the safety circuit. They cannot be opened until an interlocking safety or control circuit is complete, restoring power to the valve.

They could be suitable for pipe lines carrying a variety of liquids used in processes other than combustion.

Use 1516 Manual Reset Valves where "manned" opening is required or preferred. (Offered in 1" and 1¹/₄" pipe sizes.)

Specify 1517 Motorized Valves where remote or "un-manned" opening is needed. (Offered in 1/2" through 1¹/₄" pipe sizes.)

1516 and 1517 Valves are for emergency automatic shutdown only--following any shutdown, close manual shutoff valves promptly.

STANDARDS

All North American 1516 and 1517 Automatic Shutoff Valves have the following standard characteristics:

- Sanctioned by FM, UL, and CGA.
- Approvable by IRI.
- Enclosure meets NEMA 1, 3, 3S, 4, 12, and CSA 2, 4, and 5 standards.
- SPDT "Proof-of-Closure" switch.
- DPDT "Valve Open" switch.
- Prewired terminal block.
- Cast iron body, rated for 300 psi.
- 120 V ac/60 Hz operation (other characteristics available).
- Top assembly position is field rotatable.
- 6 seconds opening time for most motorized valves on 60 Hz.
- Ambient temperature limits -20 F to 140 F for 1" and 1¹/₄" valves, -20 F to 125 F for 1517 half inch and three quarter inch valves.

OPTIONS

- Steel body (-S) rated for 600 psi.
- Expanded capacity ports.†

† Not available for all sizes.

See Specifications 1516/1517 for size, capacities and trim of each Manual Reset and Motorized Valve (Sanctioned and Non-sanctioned Valves).

Sanctioned Valves carry FM, UL, and CGA labels for #2, #4, #5, and #6 fuel oil; kerosene and JP-4. All are IRI approvable. Maximum pressure differentials vary from 100 to 125 psi (depending on size).

Non-sanctioned Valves, which carry no agency approvals, are for use on special fluids. Fluid analysis is always required to determine suitability, pressure allowance, and valve materials. The 1517U is used on #6 or crude oil heated above 250 F but not in excess of 300 F.

Valve action closes aggressively within one second of power loss. A two-stage latch/return motion by the operator opens a Manual Reset Valve after it is re-powered. Motorized Valves allow flow to begin within one second of powering and are fully open in six seconds for most sizes.

PERFORM FREQUENT FIELD INSPECTIONS, LEAK TESTS, AND PROPER MAINTENANCE TO ASSURE CONTINUED SATISFACTORY VALVE PERFORMANCE. REFER TO INSTALLATION/MAINTENANCE BULLETINS.

DO NOT OPERATE MOTORIZED VALVES MORE THAN ONE CYCLE PER MINUTE FOR PERIODS OVER 15 MINUTES TO AVOID OVERHEATING MOTOR.

WARNING: Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American urges compliance with National Safety Standards and insurance Underwriters recommendations, and care in operation.