

Model ET71-BVS-OTG Series

Lead-Free Emergency Fixture Thermostatic Mixing Valve with Cold Water Bypass and Includes Ball Valve Shut-offs and Outlet Temperature Gauge



APPLICATION:

The Acorn ET71-BVS-OTG Series Emergency Tempering Valve is certified to ASSE 1071 and will deliver safe tepid water to safety systems such as eye, face and shower fixtures and combination units. It's factory set to 85°F (30°C) to ensure comfort when used with an eye wash, yet can be safely set up to 95°F (35°C) for maximum comfort and effectiveness when used with body washes. The ET71 is offered in 4 models/sizes you can meet the needs of your application based on minimum flow performance requirements and maximum flow demands. This valve can be used to control the temperature of recirculating as well as non-recirculating supply systems.



ET71-1-BVS-OTG

Patent Pending

FEATURES:

- IAPMO certified per ASSE 1071 at the minimum flow rates shown in the chart to the right.
- Lead-Free certified DZR brass body with corrosion resistant and lead free internal components.
- Integral cartridge style checks with screens to prevent backflow and to filter debris from entering the valve.
- On demand internal cold water bypass ensures the flow of cold water in the event of loss of hot water.
- Temperature adjustment is made using a allen wrench. A locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Acorn's -BVS lockable ball valve shut-offs meet ANSI Z358 and ASSE 1071 requirements that state "If shut-off valves are installed in the supply line for maintenance purposes provisions SHALL be made to prevent unauthorized shut-off". Acorn eliminates the need for a locked cabinet or other means to prevent unauthorized access to un-lockable, and potentially unsafe, check stop shut-off valves."
- Outlet Temperature Gauge

◆ The wetted surface of these valves contacted by consumable water contains less than 0.25% of lead by weight in conformance with national lead free law.

GUIDE SPECIFICATION:

Emergency Fixture Thermostatic Mixing Valve shall be IAPMO lab certified to ASSE 1071 and CSA standards. Valve shall have an on demand internal cold water bypass of at least 60% of the normal flow rate. Valve body shall be "lead-free" brass with corrosion resistant internal components. Checks and screen must be integral. The sensor will be an advanced paraffin actuator with a temperature range of 60°F to 95°F (16°C or 35°C) or 60°F to 90°F (16°C to 32°C) (t), factory set to 85°F (29°C) and adjustable by the safety officer. A locknut will prevent unauthorized or accidental set point changes. Shut-offs shall be lockable ball valves to help prevent unauthorized or accidental closing in accordance with ANSI Z358 and ASSE 1071. Valve shall include an outlet temperature gauge. Valve shall be Acorn Model ET71 - (1,2,3 or 4) - BVS-OTG-(Option(s))."

SPECIFICATIONS:

Valve Specifications:

Maximum Operating Pressure: 125 PSI (861 kPa)
 Maximum Hot Water Supply Temp: 180°F (82°C)
 Outlet Temp. Range: 60°F-95°F (15°C-35°C)
 (ET71-4 Only)..... 60°F-90°F (15°C-32°C)
 Minimum Hot Water Supply 5°F (3°C)
 Above Set Point

Certified Minimum Flow*:

ET71-1-BVS-OTG 0.5 GPM (1.9 LPM)
 ET71-2-BVS-OTG 1 GPM (3.8 LPM)
 ET71-3-BVS-OTG 2 GPM (7.6 LPM)
 ET71-4-BVS-OTG 3 GPM (11.4 LPM)

GPM (LPM) FLOW RATES @30 PSID*			
MODEL	TEMPERED	CW BY-PASS	CW FAILURE MAX.
ET71-1-BVS-OTG	9.8 (37.1)	6.5 (24.5)	0.5 (1.9)
ET71-2-BVS-OTG	35.1 (133)	25 (94.6)	1 (3.8)
ET71-3-BVS-OTG	70.2 (256.7)	60 (227)	1 (3.8)
ET71-4-BVS-OTG	110 (416.4)	80 (302.8)	1 (3.8)

* In accordance with ASSE 1071
 (t) For ET71-4 Only



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Recyclable
Product

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Product carries the following certifications:



C ASSE 1071
 CSA B125.3



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ACORN SAFETY

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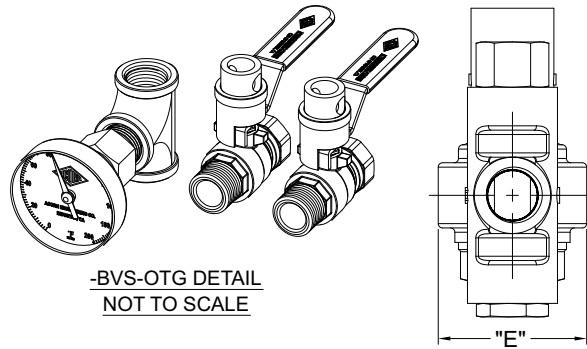
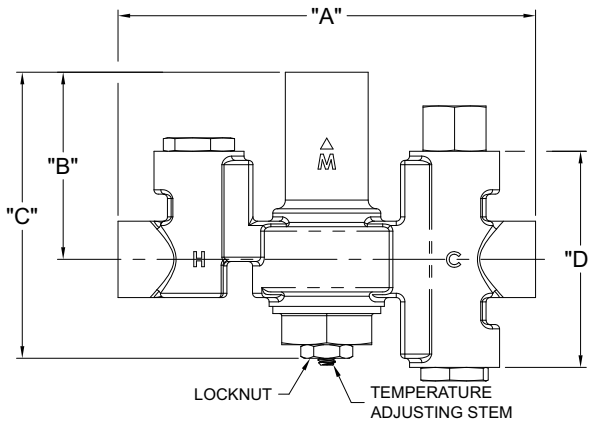
VALVE SELECTION:

- ET71-1-BVS-OTG Brass Valve Body With Ball Valve Shut-offs, Outlet Temperature Gauge & 1/2" NPT Inlet & Outlet Connections
- ET71-2-BVS-OTG Brass Valve Body With Ball Valve Shut-offs, Outlet Temperature Gauge, 3/4" NPT Inlets & 1" NPT Outlet Connections
- ET71-3-BVS-OTG Brass Valve Body With Ball Valve Shut-offs, Outlet Temperature Gauge, 1" NPT Inlet & 1-1/4" NPT Outlet Connections
- ET71-4-BVS-OTG Brass Valve Body With Ball Valve Shut-offs, Outlet Temperature Gauge, 1-1/4" NPT Inlet & 1-1/2" NPT Outlet Connections

Acorn's locking ball valves are the only safe and acceptable method for supply shut-off to this product, unless installed in a lockable cabinet or other means to prevent unauthorized supply shut-off.

TECHNICAL DIMENSIONS:

	INLET	OUTLET	"A"	"B"	"C"	"D"	"E"
ET71-1-BVS-OTG	1/2" NPT	1/2" NPT	5-3/4" (146)	2-5/8" (67)	4" (102)	3" (76)	2" (51)
ET71-2-BVS-OTG	3/4" NPT	1" NPT	8-1/2" (216)	3 (78)	5-1/2" (140)	4-1/4" (108)	3" (76)
ET71-3-BVS-OTG	1" NPT	1-1/4" NPT	14" (356)	5-1/4" (133)	8-3/4" (222)	6-1/4" (159)	5-3/4" (145)
ET71-4-BVS-OTG	1-1/4" NPT	1-1/2" NPT	14" (356)	5-1/4" (133)	8-3/4" (222)	6-1/4" (159)	5-3/4" (145)



OPTIONAL CABINET:

STYLE

- SMC Surface Mounted Cabinet

FINISH

- PRC Prime Coat Finish (16 Gage Mild Steel)
- SSTL Stainless Steel (18 Gage Type 304)

DOOR OPTIONS

- DRS Solid Door
- DRV Door Viewport

Must Specify: Hinge Location: (N/A ET71-3 & ET71-4)

- L Left
- R Right

	PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
ET71-1-BVS-OTG 12 GPM (45 LPM)	FLOW RATE GPM (LPM)	1.8	4 (15.1)	5.66 (21.4)	6.9 (26.1)	8 (30.2)	9.8 (37.1)	12 (45.4)	13.9 (52.6)
	COLD WATER BYPASS ONLY								6.5 (24.5)
ET71-2-BVS-OTG 43 GPM (163 LPM)	FLOW RATE GPM (LPM)	6.4	14.3 (54.1)	20.3 (76.8)	24.8 (93.9)	28.7 (108.6)	35.1 (132.9)	43 (162.8)	49.7 (188)
	COLD WATER BYPASS ONLY								25 (94.6)
ET71-3-BVS-OTG 86 GPM (325.5 LPM)	FLOW RATE GPM (LPM)	12.8	28.7 (108.6)	40.5 (153.3)	49.7 (188.1)	57.3 (217)	70.2 (265.7)	86 (325.5)	99.3 (375.9)
	COLD WATER BYPASS ONLY								60 (227)
ET71-4-BVS-OTG 150 GPM (568 LPM)	FLOW RATE GPM (LPM)	22.4	50 (189.2)	70.7 (267.6)	86.6 (327.8)	100 (378.5)	110 (416.4)	150 (567.8)	173 (654.8)
	COLD WATER BYPASS ONLY								80 (302.8)

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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Acorn Safety warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of shipment. Acorn's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Acorn is notified in writing within one year from date of shipment, F.O.B. City of Industry, California.

SELECTION SUMMARY & APPROVAL FOR MANUFACTURING

Model Number & Options _____ Quantity _____

Company _____

Contact _____ Title _____

Signature
(Approval for Manufacturing)

Date _____



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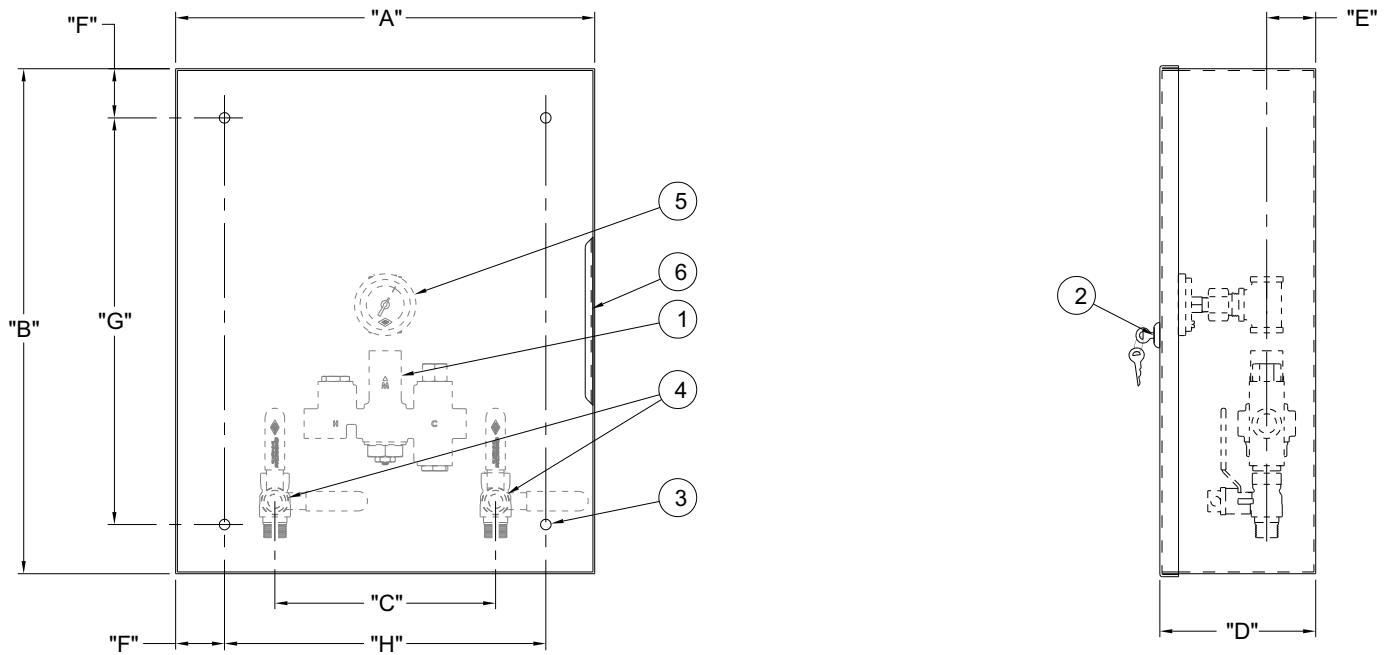
Model ET71-BVS-OTG Series Cabinet

Emergency Fixture Thermostatic Mixing Valve Cabinets



TECHNICAL DIMENSIONS:

NOTE:
 ITEMS ①, ④, AND ⑤ ARE SHOWN FOR REFERENCE ONLY.
 ALL PLUMBING CONNECTIONS ARE PROVIDED BY INSTALLER.



SHOWN LESS DOOR FOR CLARITY

- ① ET71 SERIES THERMOSTATIC MIXING VALVE
- ② CYLINDER LOCK WITH KEYS
- ③ Ø3/8" MOUNTING HOLES (4) PLACES
- ④ -BVS BALL VALVE SHUT-OFFS
- ⑤ -OTG OUTLET TEMPERATURE GAUGE
- ⑥ DOOR STOP

	INLET	OUTLET	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
ET71-1 -BVS -OTG	1/2" NCT	1/2" NCT	15" (381)	18" (457)	7-7/8" (200)	5-5/8" (143)	1-3/4" (45)	1-3/4" (45)	14-1/2" (368)	11-1/2" (292)
ET71-2 -BVS -OTG	3/4" NCT	1" NCT	21" (533)	22" (559)	11" (279)	6" (153)	2" (51)	1-3/4" (45)	18-1/2" (470)	17-1/2" (445)
ET71-3 -BVS -OTG	1" NCT	1-1/4" NCT	28-1/2" (724)	29-1/2" (749)	16-7/8" (429)	7-3/4" (197)	3-1/4" (83)	2-1/2" (64)	24-1/2" (622)	23-1/2" (597)
ET71-4 -BVS -OTG	1-1/4" NCT	1-1/2" NCT	30-1/2" (775)	33" (838)	17-3/4" (450)	7-3/4" (197)	3-1/4" (83)	2-1/2" (64)	28" (711)	25-1/2" (648)

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Product carries the following certifications:



C ASSE 1071
 CSA B125.3



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