

Model ST70

Lead-Free Lavatory Tempering Valve

APPLICATION:

The Acorn ST70 is an ASSE 1070 certified, lead-free thermostatic tempering valve that protects against dangerously hot water in any commercial sink or lavatory application. This valve can be used with any type of faucet for maximum flexibility and can accommodate a single lavatory or up to 8 hand washing stations having a 0.5 gpm flow rate.



ST70-38

ST70CP-12



Patent #9,989,017

FEATURES:

- ◆ Lead-Free certified DZR brass body with corrosion resistant and lead free internal components.
- Valve body available in rough brass or rough chrome plated.
- Integral and cartridge-style checks with accessible screens to prevent backflow and to filter debris from entering the valve.
- Temperature adjustment is made using an Allen wrench. A locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Factory set to 105°F (41°C) and field adjustable.

* In accordance with ASSE 1070 as certified by IAPMO
** Under Normal Operating Conditions

◆ 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:

The lavatory tempering valve shall be IAPMO lab certified per ASSE 1070 at 0.25 GPM (1.0 LPM) and CSA standards and shall have a solid brass body with corrosion resistant internal components. It shall include integral checks with screens to prevent backflow and to filter debris from entering the valve. Temperature adjustment shall be made using an allen wrench and a locknut on the bonnet to prevent unauthorized or accidental temperature adjustment. Valve shall provide 4.0 GPM (15 LPM) with 3/8" compression connection and 4.5 GPM (17 LPM) capacity with the 1/2" NPT connection at 45 psi (310 kPa) differential. Temperature range shall be 85°F-115° F (29°C-46° C). Valve shall be Acorn model ST70.

SPECIFICATIONS:

Valve Specifications:

- Maximum Operating Pressure: 125 PSI (861 kPa)
 Flow Rate @ 45 psi (310 kpa) differential:
 ST70-12: 4.5 GPM (17 LPM)
 ST70-38: 4.0 GPM (15 LPM)
 Certified Minimum Flow Rate*: 0.25 GPM (1.0 LPM)
 Maximum Hot Water Temp: 180°F (82°C)
 Minimum Hot Water Supply Temp**: 5°F (3°C)
 Above Set Point
 Temperature Range*: 85°F-115°F (29°C-46°C)
 Connections 1/2" NPT or 3/8" Compression

ST70-12

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.7	1.5 (5.7)	2.1 (8)	2.6 (9.8)	3 (11.4)	3.7 (14)	4.5 (17)	5.2 (19.7)

ST70-38

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	0.6	1.3 (5)	1.9 (7.1)	2.3 (8.7)	2.7 (10)	3.3 (12.4)	4 (15)	4.6 (17.5)

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Submission # **ST70**
Revised: 08/06/18

Certifications:



ASSE 1070
CSA B125.3



Est. 1954
ACORN ENGINEERING COMPANY
Manufacturer of Engineered Products

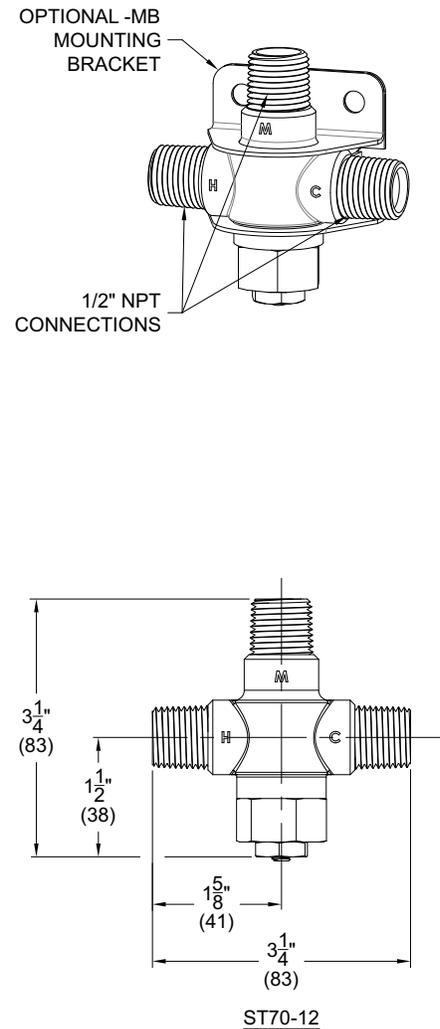
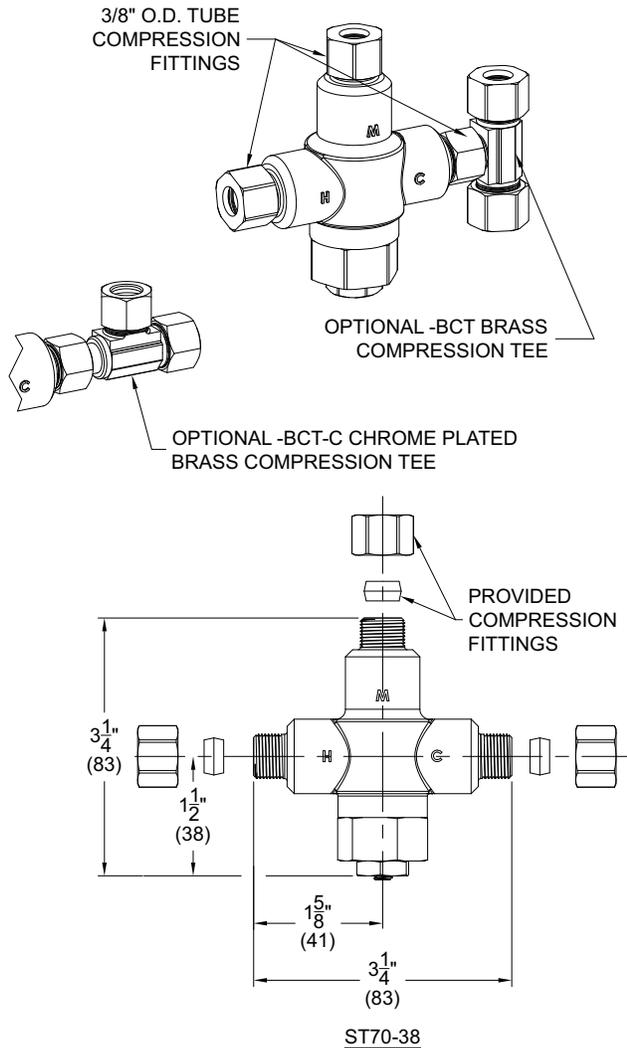
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VALVE SELECTION:

- ST70-12 Brass Valve Body With 1/2" NPT Connections
- ST70CP-12 Rough Chrome Plated Body Valve With 1/2" NPT Connections
- ST70-38 Brass Valve Body With 3/8" Compression Connections
- ST70CP-38 Rough Chrome Plated Valve Body With 3/8" Compression Connections

TECHNICAL DIMENSIONS:



ACCESSORIES:

- BCT 3/8" Brass Compression Tee
- BCT-C 3/8" Brass Compression Tee, Chrome Plated
- MB Mounting Bracket

ST70 Revised: 08/06/18

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

Acorn Controls 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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