

Model SFST

Lead-Free Supply Fixture, Based On
The ST7069 Mixing Valve

APPLICATION:

The Acorn SFST is pre-piped ASSE 1070 and 1069 Certified Thermostatic Mixing Valve that is Lead-Free and ideal for delivering safe tempered water at the point-of-use fixture(s) such as sinks, baths, showers or lavatories in residential, commercial and institutional environments. This valve can deliver 12 GPM (45 LPM) @ 45 PSI (310 kPa) differential and accommodate up to 8 single temperature showers or up to 24 hand washing stations with 0.5 gpm flow restrictors.

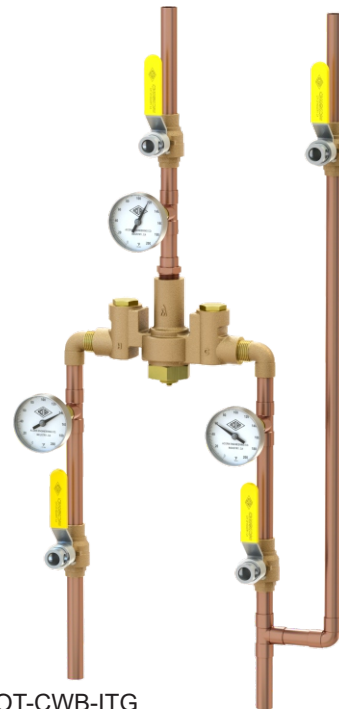
FEATURES:

- ◆ Lead-Free sweated assembly featuring a brass mixing valve containing corrosion resistant internal components.
- Integral checks with screens to prevent backflow and filter debris from entering the valve.
- Temperature adjustment is made using an Allen wrench and a locknut on the bonnet prevents unauthorized or accidental temperature adjustment.
- Commercial quality paraffin actuator provides repeatable, reliable performance.
- Includes lockable brass ball valves on inlet and outlet connections.
- Valve is IAPMO certified to ASSE 1069.
- Valve is IAPMO certified to ASSE 1070.
- Valve is IAPMO certified to CSAB125.3.
- Factory assembled and pneumatically tested to 80 PSI (552 kPa).
- Temperature gauge on outlet, with gauges optionally available for inlets.
- Available with a Cold Water Supply Bypass configuration.

* In accordance with ASSE 1070 and ASSE 1069

** Inlet Supply Pressure Variation Up to 20%

◆ 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.



SFST-B-OT-CWB-ITG

Patent #9,989,017

SPECIFICATIONS:

Valve Specifications:

Maximum Operating Pressure: 125 PSI (862 kPa)
 Maximum Hot Water Supply Temp: 180°F (82°C)
 Minimum Hot Water Supply Temp.**: 10°F (6°C)
 Above Set Point
 Outlet Temp. Range*: 90°F-115°F (32°C-46°C)
 Flow Rate: 12 GPM (45 LPM) @ 45 PSI (310 kPa)
 Differential
 Certified Minimum Flow*: 0.5 GPM (1.9 LPM)
 Connections 1/2" NCT

PRESSURE DROP PSID (kPa)	Cv	5 (34)	10 (69)	15 (103)	20 (138)	30 (207)	45 (310)	60 (414)
FLOW RATE GPM (LPM)	1.8	4 (15)	5.7 (21.4)	7 (26.2)	8 (30.2)	9.8 (37)	12 (45.4)	13.8 (52.4)

GUIDE SPECIFICATION:

SFST Supply Fixture shall be factory assembled and feature an Acorn ST7069 Thermostatic Mixing Valve which shall be IAPMO lab certified per ASSE and CSA standards. Valve shall contain a copper encapsulated, paraffin-based thermal actuator. Valve shall be a solid brass body with a capacity of 12 GPM (45 LPM) at 45 PSI (310 kPa) differential and a maximum operating pressure of 125 PSIG (862 kPa). Supply pressure variation shall be up to 20%. Valve shall have an adjustable outlet temperature range of 90°F-115°F (32°C-46°C), factory set at 105°F (41°C). Fixture shall include an outlet temperature gauge. Valve shall comply with ASSE 1069, ASSE 1070 and CSA B125.3 standards. Supply Fixture shall be Acorn model SFST _____.

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Submission # **SFST**
Revised: 05/30/19

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Certifications and Standards:



ASSE 1069
ASSE 1070
CSA B125.3

VALVE ONLY
NSF/ANSI 61
Certified



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Manufacturer of Engineered Products

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VALVE SELECTION:

- SFST Brass Valve Body, 1/2" Inlets & Outlet, 12 GPM (45 LPM)

PIPING CONFIGURATION:

INLET:

- T Top Supply Inlet
 -B Bottom Supply Inlet

OUTLET:

- OT Outlet Top
 -OB Outlet Bottom
 -OSL Outlet Side, Left
 -OSR Outlet Side, Right

VALVE OPTIONS:

- CWB Cold Water Bypass
 -ITG Inlet Temperature Gauges, Hot & Cold

OPTIONAL CABINET:

STYLE

- RC Recessed Cabinet
 -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
 -L Left
 -R Right

SFST Revised: 05/30/19

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

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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 _____



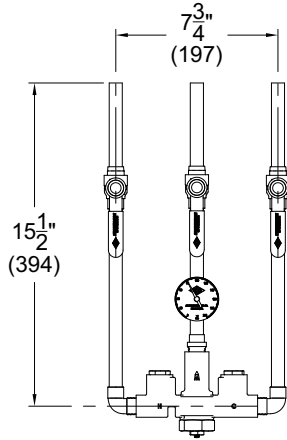
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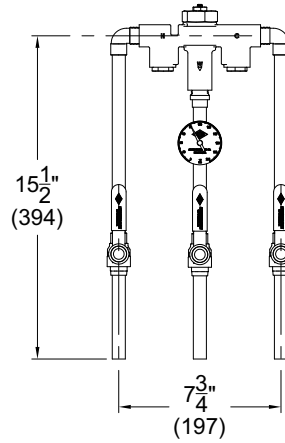
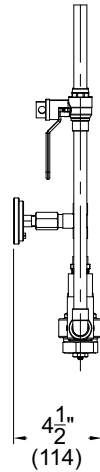
Model SFST

Lead Free Thermostatic Mixing Valve
 Supply Fixture

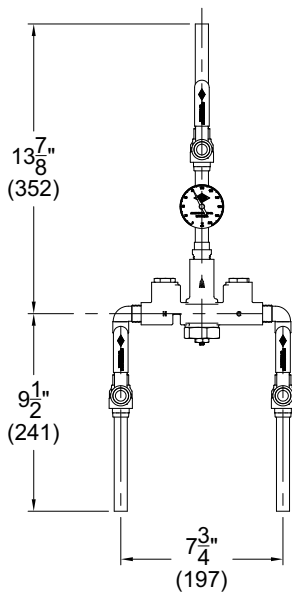
TECHNICAL DIMENSIONS: LESS OPTIONAL -ITG



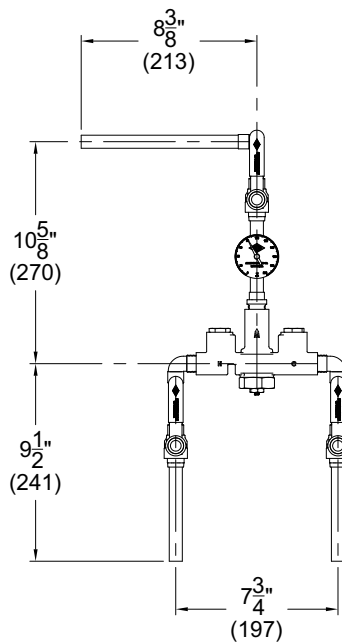
SFST-T-OT



SFST-B-OB



SFST-B-OT



SFST-B-OSL

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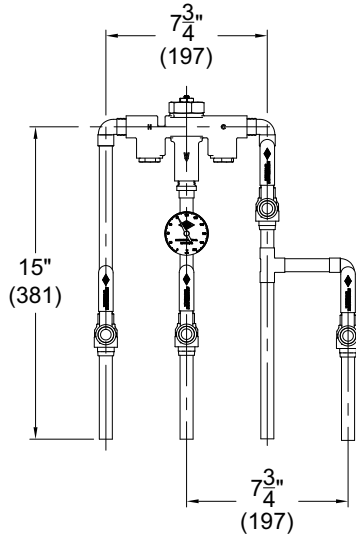
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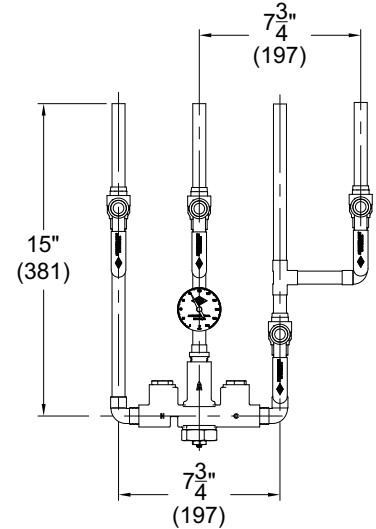
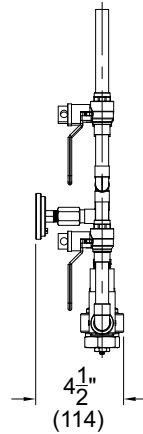
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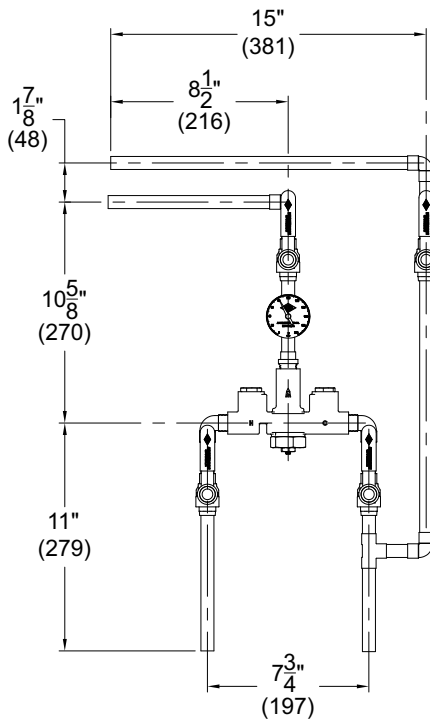
TECHNICAL DIMENSIONS: LESS OPTIONAL -ITG



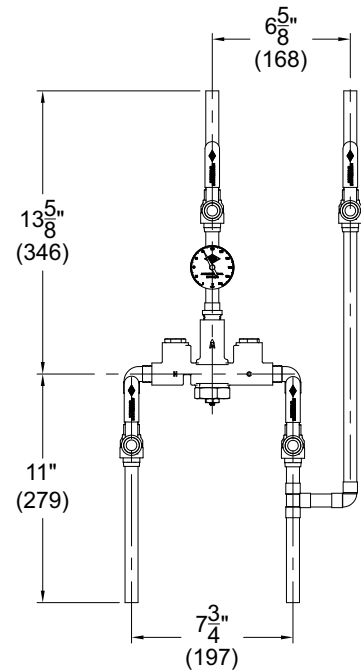
SFST-B-OB-CWB



SFST-T-OT-CWB



SFST-B-OSL-CWB



SFST-B-OT-CWB

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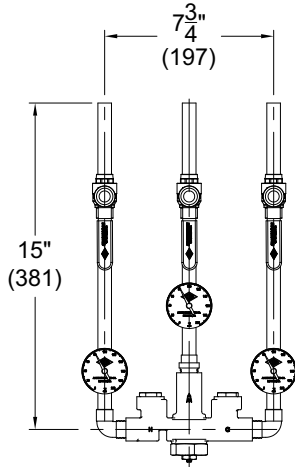
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Model SFST

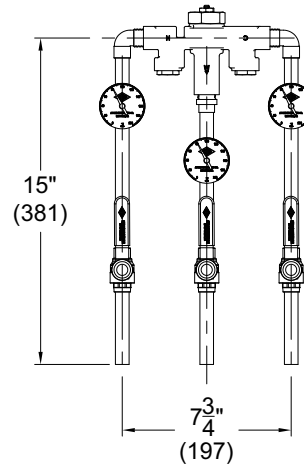
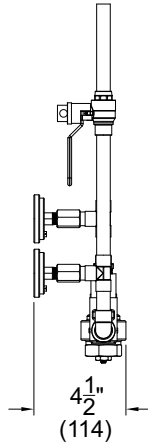
Lead Free Thermostatic Mixing Valve
Supply Fixture



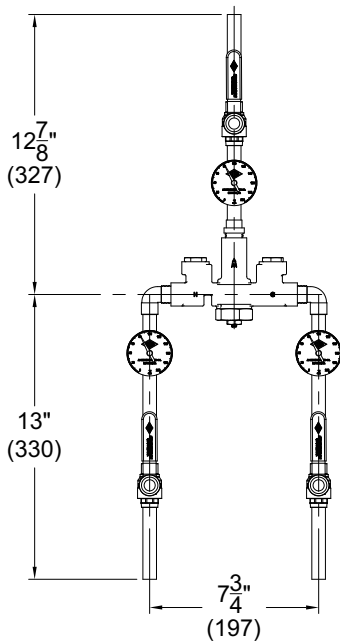
TECHNICAL DIMENSIONS: WITH OPTIONAL -ITG



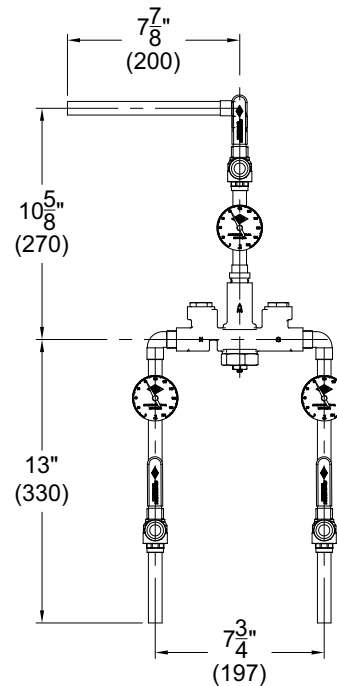
SFST-T-OT-ITG



SFST-B-OB-ITG



SFST-B-OT-ITG



SFST-B-OSL-ITG

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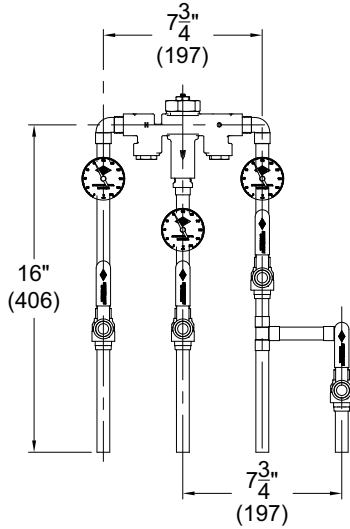
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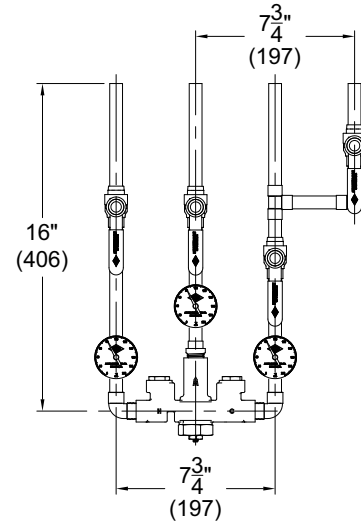
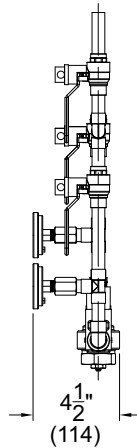
Model SFST-CWB

Lead Free Thermostatic Mixing Valve Supply
 Fixture Plumbed For Cold Water Supply Bypass

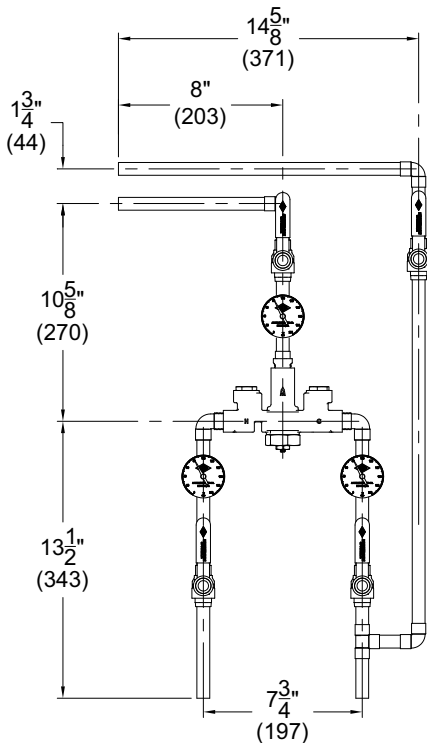
TECHNICAL DIMENSIONS: WITH OPTIONAL -ITG



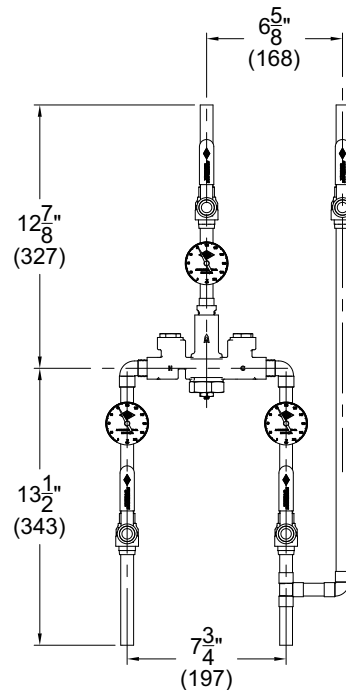
SFST-B-OB-CWB-ITG



SFST-T-OT-CWB-ITG



SFST-B-OSL-CWB-ITG



SFST-B-OT-CWB-ITG

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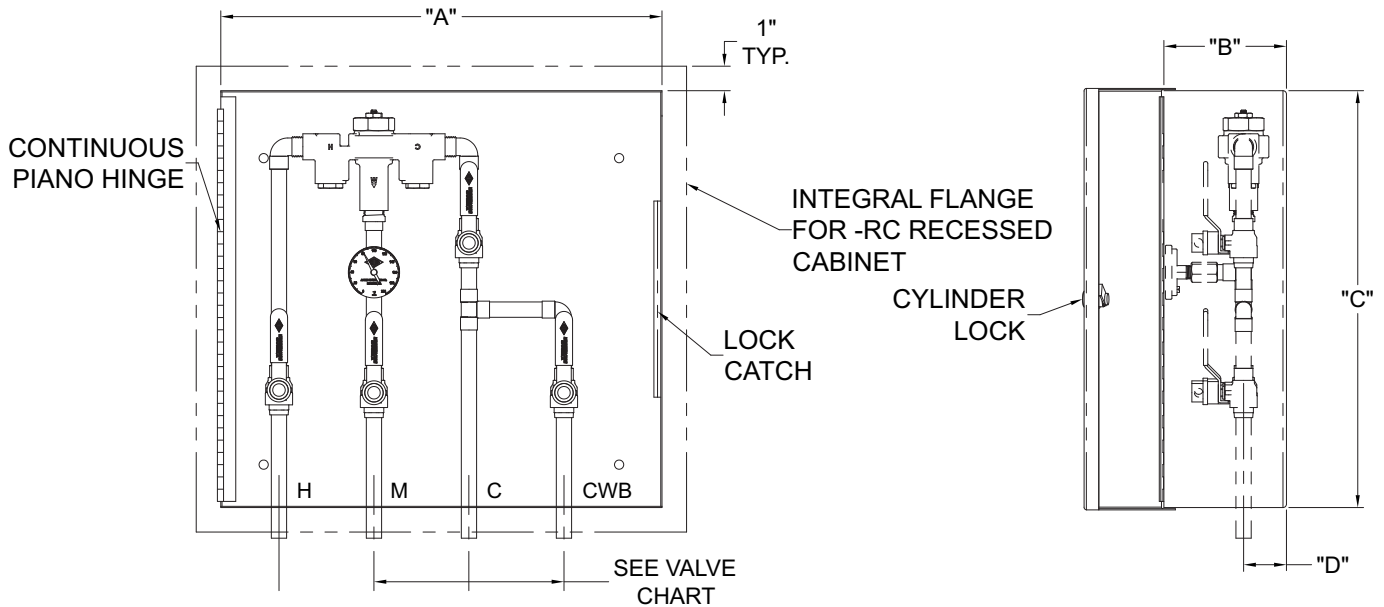
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Model SFST Cabinet

Thermostatic Mixing Valve Supply
Fixture Cabinets

TECHNICAL DIMENSIONS:



CABINET SHOWN LESS DOOR FOR CLARITY

FOR FIXTURES WITH OPTIONAL -ITG

SFST		CONFIGURATION	"A"	"B"	"C"	"D"
INLET	OUTLET	TOP/TOP BOT/BOT	15" (380)	5-1/2" (140)	17" (430)	1-3/4" (45)
1/2" NCT	1/2" NCT	BOTTOM TOP	15" (380)	5-1/2" (140)	23" (585)	1-3/4" (45)
		BOTTOM TOP/SIDE	15" (380)	5-1/2" (140)	23" (585)	1-3/4" (45)
		TOP/TOP-CWB BOT/BOT-CWB	17-1/2" (445)	5-1/2" (140)	17" (430)	1-3/4" (45)
		BOTTOM TOP-CWB	18" (460)	5-1/2" (140)	23-1/2" (560)	1-3/4" (45)
		BOTTOM TOP/SIDE-CWB	17" (430)	5-1/2" (140)	25-1/2" (650)	1-3/4" (45)

FOR FIXTURES LESS OPTIONAL -ITG

SFST		CONFIGURATION	"A"	"B"	"C"	"D"
INLET	OUTLET	TOP/TOP BOT/BOT	15" (380)	5-1/2" (140)	17" (430)	1-3/4" (45)
1/2" NCT	1/2" NCT	BOTTOM TOP	15" (380)	5-1/2" (140)	18" (455)	1-3/4" (45)
		BOTTOM TOP/SIDE	14" (355)	5-1/2" (140)	19" (480)	1-3/4" (45)
		TOP/TOP-CWB BOT/BOT-CWB	17-1/2" (445)	5-1/2" (140)	17" (430)	1-3/4" (45)
		BOTTOM TOP-CWB	17" (430)	5-1/2" (140)	20-1/2" (520)	1-3/4" (45)
		BOTTOM TOP/SIDE-CWB	17" (430)	5-1/2" (140)	23" (585)	1-3/4" (45)

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