

**TMV-1**

BS593130BP

BRADLEY

TMV-1 THERMOSTATIC MIXING VALVE

HL130 HIGH-LOW MIXING VALVE CONSIST OF A LIQUID FILLED THERMOSTAT AND A STAINLESS STEEL PISTON AND LINER WITH POSITIVE SHUT-OFF HOT WATER WHEN COLD WATER SUPPLY IS LOST, INTEGRAL STRAINER CHECK STOPS ON INLETS, ADJUSTABLE SET POINT WITHIN TEMPERATURE



HL130 Thermostatic High-Low Valves

- Lead-Free Brass Design †
- Reliable Liquid-Filled Thermostat with 10-Year Warranty
- Integral Strainer Checkstops on Inlets
- Adjustable Set Point within Temperature Range
- Accurate Temperature Control to within $\pm 3^{\circ}$ F
- Positive Shutoff of Flow in the Event of Cold Supply Line Failure or Thermostat Failure
- Easy Installation and Serviceability
- Dirt and Lime Resistant
- Factory Assembled and Tested
- Universal Mounting Capability
- Dial Thermometer
- Cabinet Features:
 - 18 Gauge Body & Door
 - Left-Hand Hinge
 - Cylinder Lock
 - Inlet/Outlet Knock-Out Holes for Mounting Flexibility
 - Stainless Steel or Baked White Enamel Finishes
 - Surface-Mounted or Recessed Style with Flange

Valve Specifications

Maximum Operating Pressure

125 PSI (860 kPa)

Maximum Inlet Temperature

200° F (93° C)

Temperature Range

	Std.	90° F (32° C) to 120° F (49° C)	Set Point	110° F (43° C)
	Low	70° F (21° C) to 100° F (38° C)		80° F (27° C)
	High	110° F (43° C) to 140° F (60° C)		130° F (54° C)

Flow Capacities – GPM (L/Min)

Model	Min* Flow	Pressure Drop – PSI (Bar)						
		5 (.5)	10 (1.0)	15 (1.5)	20 (2.0)	30 (2.5)	45 (3.0)	60 (4.0)
S59-3130	4.0 (15)	40.0 (184.5)	58.0 (265.0)	71.0 (327.0)	83.0 (380.0)	102.0 (427.0)	126.0 (470.0)	147.0 (546.0)

*Recirculation system only (See diagram on Page 2). When properly installed near the hot water source with a **continuously operating** recirculation pump, the valve will maintain set temperature with a .5 GPM (2.0 L/Min) draw from the plumbing system.

Code Compliance and Certifications

ASSE 1017 & cUPC certified. Complies with California Lead Plumbing Law.



† Wetted surface contains less than .25% lead



Standard product selections contained within this document are third party CERTIFIED to NSF/ANSI 372 meeting the Lead-Free content requirement. Any product configured with custom options will be COMPLIANT with NSF/ANSI 372 meeting the Lead-Free content requirement.

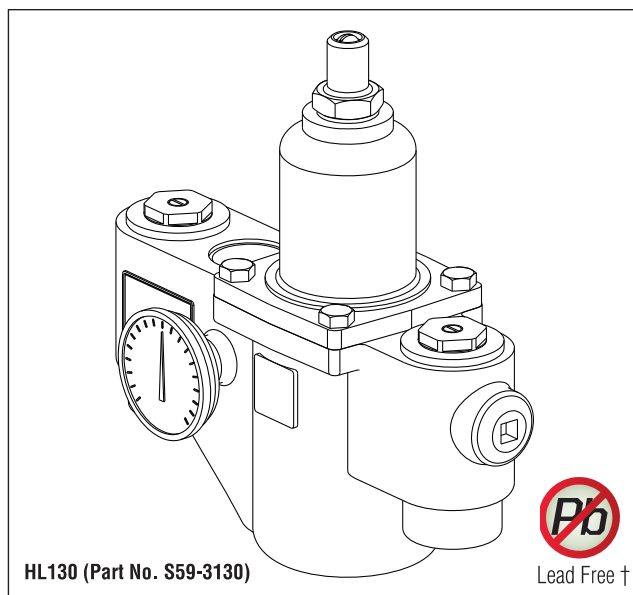
Engineer's Approval _____

Page 1 of 4

8/19/2014

This information is subject to change without notice.

Bradley_TMV_HighLow_HL130



HL130 (Part No. S59-3130)

Lead Free †

Optional Selections

Finish

☐ C Chrome Plated

Thermostat

☐ L Low Range Thermostat
☐ H High Range Thermostat

Bracket

☒ B Wall Mounting Bracket

Piped Assembly

☒ P Piped Assembly with Inlet and Outlet Shutoff
☐ N Piped Assembly with Outlet Shutoff

Cabinets

☐ SS Surface Mount Stainless Steel
☐ RS Recessed Stainless Steel
☐ SE Surface Mount White Enamel
☐ RE Recessed White Enamel
☐ W Plexi-glass Window in Door

Sample Specification

Thermostatic water mixing valve shall consist of a liquid-filled thermal motor and a piston control mechanism with positive shutoff of hot water when cold water supply is lost. Valve allows a restricted cold flow in the event of loss or interruption of the hot water supply. All flow is shut off in the event of thermostat failure. Construction shall be bronze body and cap with replaceable corrosion resistant components, including stainless steel piston and liner. Valve shall come equipped with integral checkstops, thermometer, and removable strainers. Valve shall control temperature within $\pm 3^{\circ}$ F from a low flow to a maximum flow rate for a given pressure differential per the "Flow Capacity Chart."

© 2015 Bradley

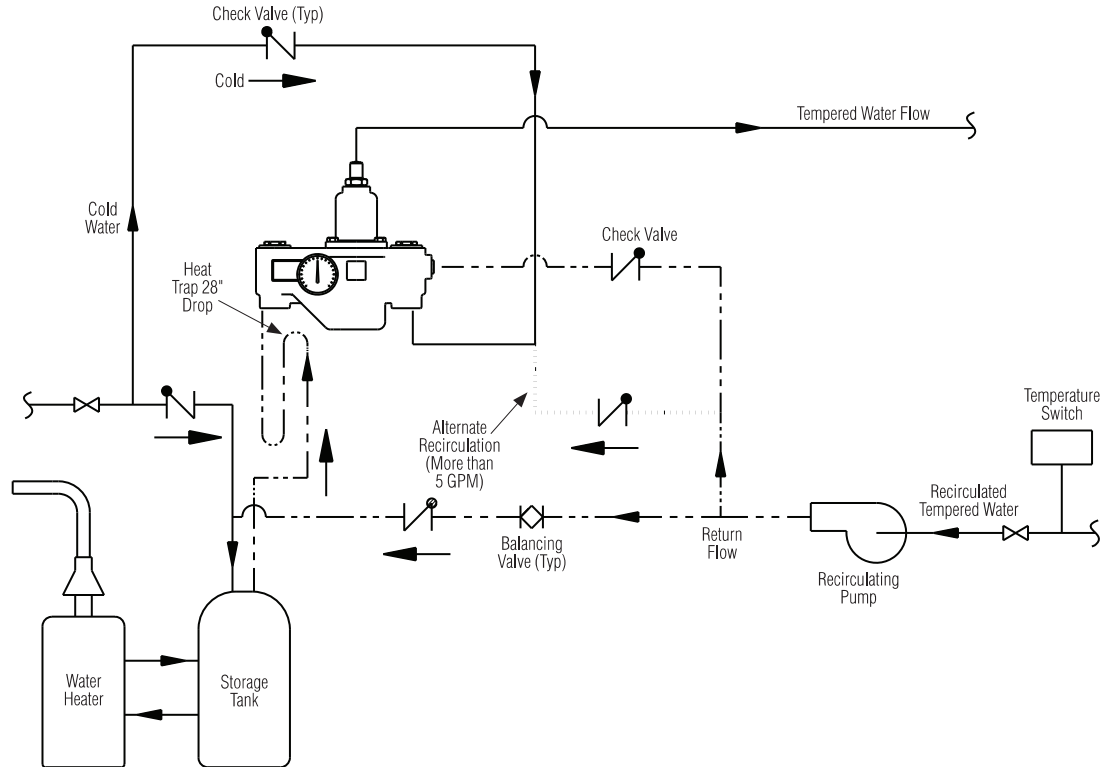
P.O. Box 309, Menomonee Falls, WI 53052-0309
 800 BRADLEY (800 272 3539) +1 262 251 6000
 bradleycorp.com



HL130 Thermostatic High-Low Valves

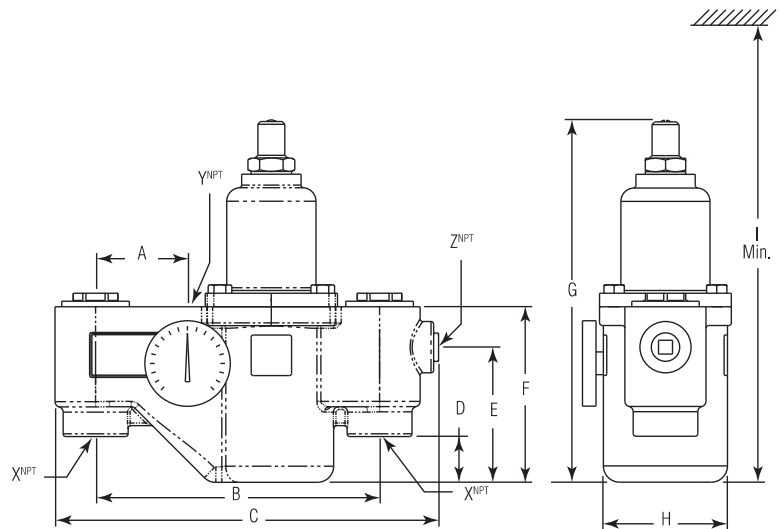
Recirculation Diagram

(mm)



Dimensions

Model	A	B	C	D	E	F	G	H	I	X ^{NPT}	Y ^{NPT}	Z ^{NPT}
S59-3130	2-3/4" (70)	10-1/2" (267)	14" (356)	1-3/4" (45)	5" (127)	6-5/8" (169)	13-1/2" (343)	4-7/8" (124)	22" (559)	1-1/4"	1-1/2"	3/4"



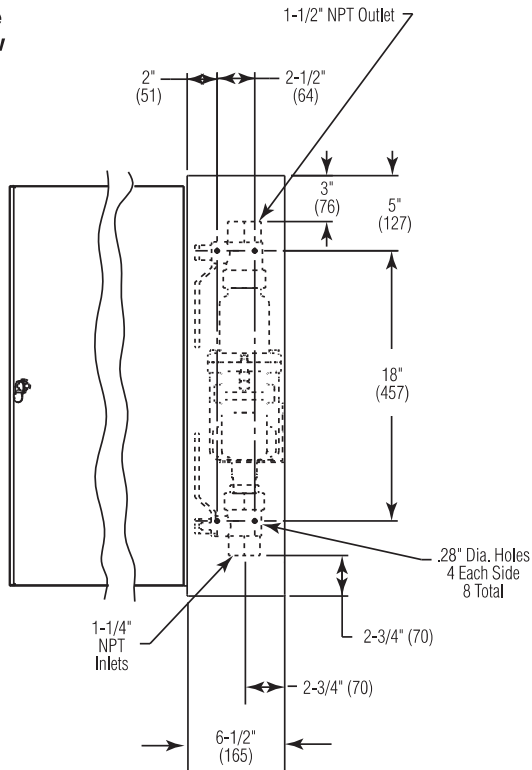


HL130 Thermostatic High-Low Valves

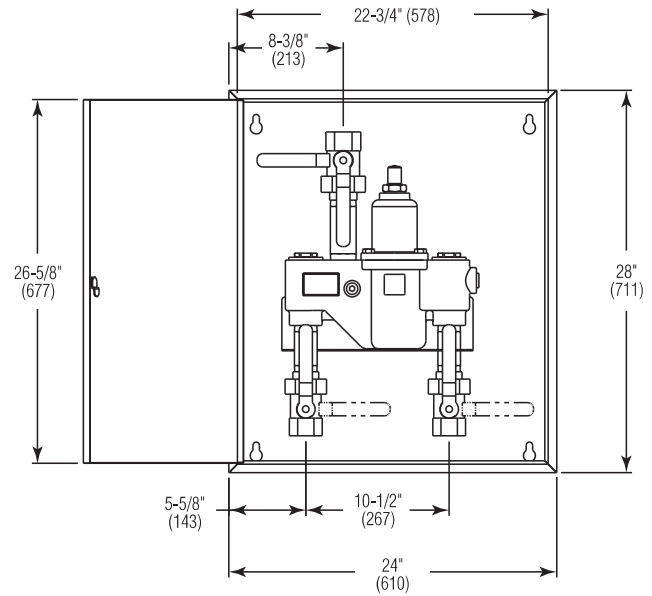
Dimensions — HL130 Surface-Mounted Cabinet

(mm)

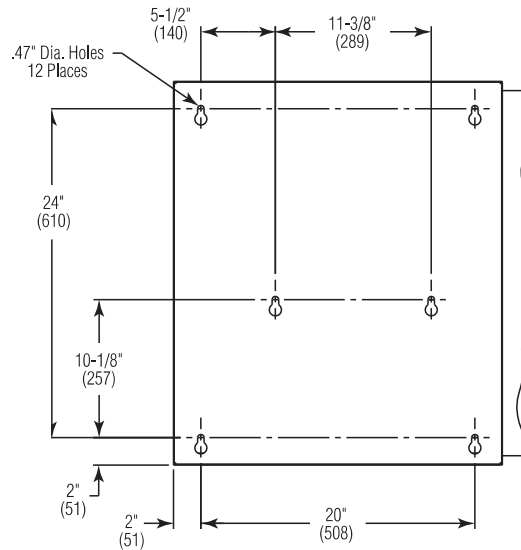
Side View



Front View



Back View



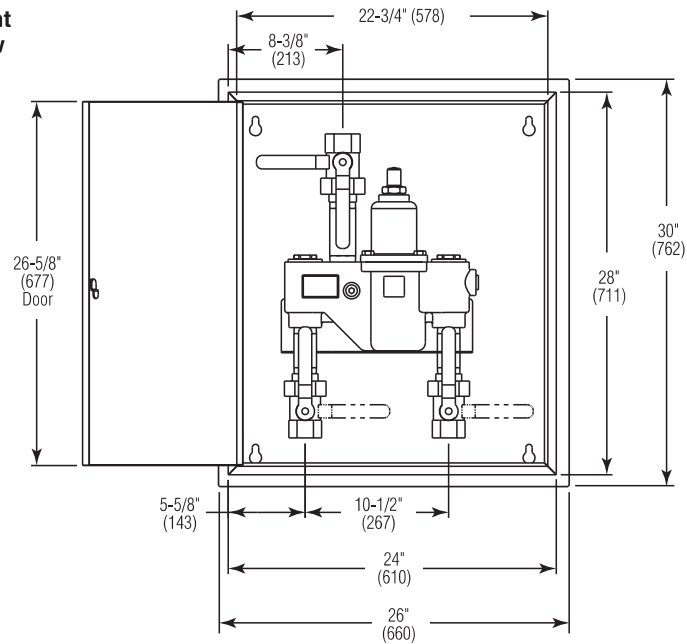


HL130 Thermostatic High-Low Valves

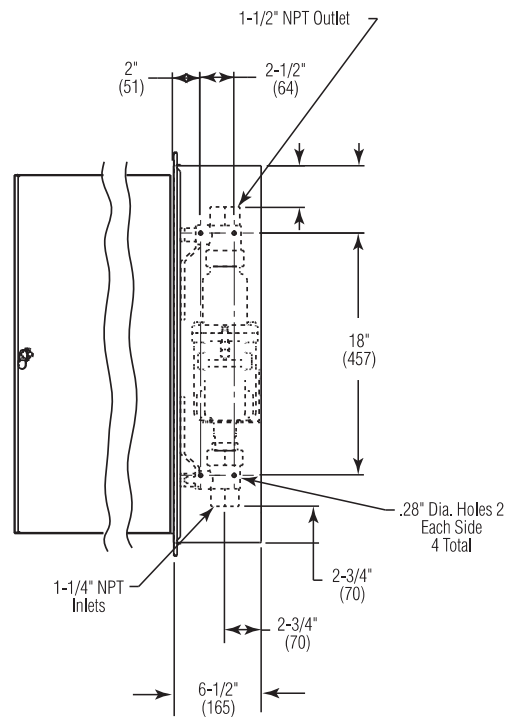
Dimensions — HL130 Recessed Cabinet

(mm)

Front View



Side View



Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: June 7, 2016

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Mike Whitworth (WES)

Project No. WT 14127.01
WES 607

☐ UPS ☐ Courier ☒ **Email**

Copies	No.	Description
1 PDF	221119P01	(Submittal No.'s)
		(Cannon #221119-003) - (Paric #15051-) – (WES #607)
		➤ Domestic Water Specialties
		• Bradley Mixing Valves – TMV-1, TMV-2, TMV-3
		• Acorn Hose Station – HS-1
		• IPS Guy Gray – Coffee Maker Outlet Box – CM-1
		• IPS Guy Gray – Ice Maker Outlet Box – IM-1
		• IPS Guy Gray – Dish Washer Outlet Box – DW-1
		• J.R. Smith Wall Hydrant – WH-1
		• Bell & Gossett Hot Water Circulating Pump – HWP-1

***Remarks: See Submittal Review from Webb Engineering.**

c: Kevin Patel
Kpatel@cannondesign.com

☒ ***Reviewed**

☒ ***No Exceptions Taken**

☒ ***Rejected-See Remarks**

☒ ***Amend & Resubmit**

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.



1400 S. 3rd Street, Suite 201
St. Louis, Missouri 63104
Phone: (314) 588-0600
Fax: (314) 588-0604

Letter of Transmittal

To: wtashop@wmtao.com

From: Mike Whitworth

Date: June 05, 2016

Re: Webster University ISB

WES No: 607

☐ For your Files

☐ For Review

☐ Please Comment

☐ Please Reply

Item No.	Description	No. of Copies	Date
1	Shop Drawing Review – 22 1119 Domestic Water Piping Specialties	1	06-05-2016

•Signature: Mike Whitworth



1400 S. 3rd Street, Suite 201 • St. Louis, Missouri 63104 • 314.588.0600 • fax 314.588.0604

**WEBB
ENGINEERING
SERVICES INC.**

www.webb-engineering.com

The review of this submittal is limited to the general conformance with the designated design concept and intent of this project and with the general compliance of the information provided in the contract documents. All comments, remarks and notations made on the submittal(s) as a result of this review do not relieve the contractor from full compliance with requirements of the contract documents. Approval for a specific item shall not include approval of an assembly of which the item is not a component. The contractor is solely responsible for rough-in and installation confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordination of this work with that of other trades on this project; and in a safe and satisfactory manner. All work shall be installed in full compliance with the manufacturer's recommendation, Federal, State and Local rules and regulation and the Authority Having Jurisdiction (AHJ) and applicable adopted codes and standards.

PROJECT NAME: Webster University ISB
LOCATION: St. Louis Missouri
CLIENT PROJ. NO.: N/A
WES PROJ. NO.: 607
221119
Domestic Water Piping
SPEC SECTION: Specialties
SUBMITTAL ITEM: See Below -

CONTRACTOR: Deluca Plumbing, LLC
CTR. SUBMITTAL # 22 1119-003
SUBMITTAL DATE: May 25, 2016
DATE RECEIVED: May 26, 2016
RECEIVED VIA: E-Mail
RECEIVED FROM: WTA
DATE RETURNED: JUNE 05, 2016
RETURNED VIA: E-MAIL
RETRURNED TO: WTASHOP@WMTAO.COM

STATUS KEY:

NEC	MCN	AAR	REJ	REV	NO EXCEPTION TAKEN	
					MAKE CORRECTIONS NOTED, NO RESUBMITTAL:	
					AMEND AND RESUBMIT	
					REJECTED, SEE REMARKS:	
					REVIEWED ONLY	
					ITEM	REMARKS
X					Thermostatic Mixing Valve – TMV-1 Bradley Model S59-3130-B-P	
		X			Thermostatic Mixing Valve – TMV-2 Bradley Model X	Submitted cut sheet is not for TMV-2, cut sheet is for Pedestal-Mounted Eyewash Fixture
X					Thermostatic Mixing Valve – TMV-3 Bradley Model S19-2000-B	
X					Hose Station – HS-1 ACORN Model 8156-SSLF	
X					Coffee Maker Outlet Box – CM-1 IPS Guy Gray Model MDWB1AB	
X					Ice Maker Outlet Box – IM-1 IPS Guy Gray Model MIB1HAAB	



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	X			Dish Washer Outlet Box – DW-1 IPS Guy Gray Model MDWB1AB	
		X	X	Wall Hydrant – WH-1 J. R. Smith Model 5518	Provide non-freeze wall hydrant as specified.
X				Hot Water Circulating Pump – HWP-1 Bell & Gossett Model PD-40T	

REVIEWED BY: Michael R. Whitworth DATE: June 05, 2016

THESE COMMENTS ARE TO BE ATTACHED TO ALL COPIES OF THE SHOP DRAWING REFERENCED ABOVE.



77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0049

Paric Corporation

PROJECT: Webster University Interdisciplinary Science Building

DATE: 05/25/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Domestic water Specialties product data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☒ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		221119-003	1		05/25/2016	Domestic water Specialties product data	Submitted

NOTES:

CC: Paric Corporation, Kathy Bathe

Project Coordinator: Paric Corporation, Kathy Bathe

Signed: _____
Devin Gates

Shop Drawing Submittal

Project Name: WEBSTER ISB

Specification # **221119-01**

Specification Description: Domestic Water Specialties
TMV
Hot Water Return Pumps
Service Boxes
Hydrants

Date: 05-23-16

General Contractor / Construction Manager: PARIC

ARCHITECT: KWA

ENGINEER: William Tao

Contractor: DeLuca Plumbing, L.L.C.
8465 Delport Drive
St. Louis, MO 63114

Supplier: FERGUSON

Manufacturer: Various

Reviewed & Approved by: DeLuca Plumbing 05-23-16

Action: Forward to GC/CM for Review & Approval

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