FLOWING EXPERTISE

FEBRUARY 2023









# FLOWING EXPERTISE

With our heating and plumbing solutions, we have been redesigning the comfort of the spaces we live and work in for over 60 years. This is thanks to the flow of expertise, technology, experience and innovations that we have acquired over the years by constantly exchanging ideas with our customers and suppliers. A flow that pushes boundaries, allowing us to constantly set the benchmark. A flow that allows us to always look one step ahead into the future.



FLOW OF LIFE A unique way of flowing. It is **continuous change**, a high degree of reliability in our work, and the ongoing pursuit of total quality, which is the result of small daily actions.



## FUTURE

Innovation aimed at creating **new** forms of comfort for spaces, which motivates us to continue to grow and improve.



#### SUSTAINABILITY Our focus on preserving

environmental, social and economic well-being so that it can be passed on to future generations through our products and processes.



#### TECHNOLOGY

Our ability to do research, invest in processes and develop **state-ofthe-art solutions** in an ever-evolving world of expertise.



## MADE IN CALEFFI

A uniqueness consisting of many details, which is what we are known for worldwide. True **"Made in Italy"** quality, the hallmark of our company.

SECTION	PAGES	
P1	9	MIXING VALVES FOR PLUMBING AND HYDRONICS
P2	21	BALANCING VALVES FOR PLUMBING AND HYDRONICS
Р3	37	PRVS, BACKFLOW PREVENTERS
P4	49	PLUMBING MISCELLANEOUS COMPONENTS
Р5	57	FITTINGS AND MISCELLANEOUS COMPONENTS
P6	68	INDEX

www.caleffi.com



# **EXPLORE OUR EXCELLENCE** IN EDUCATION





Caleffi is committed to providing not only high quality and innovative products but also delivering **outstanding educational resources** to aid in heating, cooling and plumbing system design, configurations and problem solving. We are flexible to assist with customized or hybrid training For more information, visit **caleffi.com** or contact us at marketingadmin@caleffi.com. **CALEFFI GUARANTEED**.

www.caleffi.com

# AWARD-WINNING PLUMBING INNOVATION

We are honored to be recognized by the AHR Innovation Award judges over the years. Caleffi's success is based on listening to the marketplace combined with a total commitment to quality. The result? Creative product design, superior performance and support that exceeds our customers' expectations. **CALEFFI GUARANTEED.** 

2019

2020

2021

2022

**INNOVATION AWARDS** 

2014

2018



2023

# **Plumbing Product Selector**



Key	Part Number	Description	Catalog Pages
1	600074A	LEGIOMIX® electronic mixing valve ASSE 1017	16
2	523177A	High-flow mixing valve ASSE 1017	12
3	128456AF	FlowCal+ <sup>™</sup> dynamic balancing valve	27
4	521201A	SinkMixer <sup>™</sup> scald protection valve ASSE 1070	15
5	521333A	TubMixer <sup>™</sup> scald protection mixing valve ASSE 1070	15
6	520516AX	TankMixer <sup>™</sup> mixing valve assy ASSE 1017	19
7	520616A	AngleMix <sup>™</sup> with valve with gauge ASSE 1017	14
8	521616A	MixCal <sup>™</sup> mixing valve ASSE 1017	11



Key	Part Number	Description	Catalog Pages
9	<b>132537AFC</b> QuickSetter+ <sup>™</sup> manual balancing valve		22
10	127356AF         FlowCal <sup>™</sup> automatic balancing valve		29
11	116151AC	ThermoSetter <sup>™</sup> thermal balancing valve	34
12	533351HA	PresCal™ pressure reducing valve ASSE 1003	40
13	574050A	RPZ backflow preventer ASSE 1013	44
14	NA502640A	PLUMBVENT <sup>™</sup> low lead automatic air vent	55
15	535991HA	PresCal™ pressure reducing valve ASSE 1003	38
16	128741A 000	FlowCal+™ union Y-strainer	50

www.caleffi.com



# **CUTTING-EDGE INNOVATION** IN TEMPERATURE MIXING

**Caleffi mixing valves lead the way.** From 3/8" under-sink scald protection valves to 3" flanged digital master mixing valves, a full selection is available for residential and commercial plumbing and hydronic applications. **Over 60 years of innovation and global experience** assure high quality and proven reliability. A wide selection of double union connection types work with copper, iron, stainless steel and non-metallic pipes. **Approvals include compliance with U.S. and Canadian plumbing codes. CALEFFI GUARANTEED.** 

HREXP

2020

FINALIS

AMREXPO

2018

INNOVATION AWARDS

2021

WINNER



AHREXPO INVATION AUX 2022

## MIXING VALVES FOR PLUMBING AND HYDRONICS





This diagram is for illustration purposes only

#### **PRODUCTS INCLUDED IN SECTION**

Thermostatic mixing valves for plumbing and hydronics High flow thermostatic mixing valves for plumbing and hydronics Scald protection thermostatic mixing valves for plumbing Electronic mixing valves for plumbing Thermostatic mixing valve kits for domestic water heaters



#### THERMOSTATIC MIXING VALVES FOR PLUMBING AND HYDRONICS



#### 521 MixCal<sup>™</sup> sweat

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm.



## **521 MixCal**<sup>™</sup> press

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm.

Code	Description	Cv	Lbs	USD
<b>521</b> 409A	1/2" sweat union	3.0	2.4	200.00
521409AC	1/2" sweat union, check valves	3.0	2.4	221.00
<b>521</b> 509A	¾" sweat union	3.0	2.4	209.00
521509AC	3/4" sweat union, check valves	3.0	2.4	240.00
<b>521</b> 609A	1" sweat union	3.0	2.4	249.00
521609AC	1" sweat union, check valves	3.0	2.4	278.00

Code	Description	Cv	Lbs	USD
<b>521</b> 406A	1⁄2" press union	3.0	2.4	213.00
521406AC	1/2" press union, check valves	3.0	2.5	234.00
<b>521</b> 506A	¾" press union	3.0	2.4	218.00
521506AC	3/4" press union, check valves	3.0	2.5	271.00
<b>521</b> 606A	1" press union	3.0	2.6	264.00
521606AC	1" press union, check valves	3.0	3.1	287.00



## **521 MixCal™** PEX

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960

Code	Description	Cv	Lbs	USD
<b>521</b> 407A	1/2" PEX crimp union	3.0	2.4	200.00
521407AC	1/2" PEX crimp union, check valves	3.0	2.9	221.00
<b>521</b> 408A	1/2" PEX expansion union	3.0	2.4	209.00
521408AC	1/2" PEX expansion union, check valves	3.0	2.9	240.00
<b>521</b> 507A	¾" PEX crimp union	3.0	2.4	249.00
521507AC	3/4 " PEX crimp union, check valves	3.0	2.9	278.00
<b>521</b> 508A	3/4 " PEX expansion union	3.0	2.4	200.00
521508AC	3/4 "PEX expansion union, check valves	3.0	2.9	221.00
<b>521</b> 607A	1" PEX crimp union	3.0	2.4	209.00
521607AC	1" PEX crimp union, check valves	3.0	2.9	240.00
<b>521</b> 608A	1" PEX expansion union	3.0	2.4	249.00
521608AC	1" PEX expansion union, check valves	3.0	2.9	278.00

<b>521</b> 400A	1/2" NPT male union	3.0	2.4	209.00
521400AC	1/2" NPT male union, check valves	3.0	2.4	230.00
<b>521</b> 500A	34" NPT male union	3.0	2.4	218.00
521500AC	3/4" NPT male union, check valves	3.0	2.4	249.00
521600A	1" NPT male union	3.0	2.4	259.00
521600AC	1" NPT male union, check valves	3.0	2.4	288.00

Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.



Description

#### **521 MixCal™**NPT

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm.

Cv

Lbs

USD

Code

#### THERMOSTATIC MIXING VALVES FOR PLUMBING AND HYDRONICS



#### 521 MixCal<sup>™</sup> sweat

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body. with gauge. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm. Optional Gauge scale: 30° – 210°F.



#### 521 MixCal<sup>™</sup> press

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body with gauge. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm. Optional Gauge scale: 30° – 210°F.

Code	Description	Cv	Lbs	USD
<b>521</b> 419A	1/2" sweat union	3.0	2.9	238.00
521419AC	1/2" sweat union, check valves	3.0	2.9	258.00
<b>521</b> 519A	3/4" sweat union	3.0	2.9	246.00
521519AC	3/4" sweat union, check valves	3.0	2.9	276.00
<b>521</b> 619A	1" sweat union	3.0	2.9	287.00
521619AC	1" sweat union, check valves	3.0	2.9	317.00

Code	Description	Cv	Lbs	USD
<b>521</b> 416A	1⁄2" press union	3.0	2.9	250.00
521416AC	1/2" press union, check valves	3.0	3.0	269.00
<b>521</b> 516A	34" press union	3.0	2.9	256.00
<b>521</b> 516AC	3/4" press union, check valves	3.0	3.0	307.00
<b>521</b> 616A	1" press union	3.0	3.1	302.00
521616AC	1" press union, check valves	3.0	3.5	324.00



#### 521 MixCal<sup>™</sup> NPT

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body with gauge. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm. Optional Gauge scale: 30° – 210°F.



## **521 MixCal™** PEX

Adjustable thermostatic mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems. Low-lead brass body with gauge. Locking set point knob. Max. working pressure: 200 psi. Max. inlet temperature: 200°F. Adjustable range: 85° – 150°F. Min. flow for optimum performance: 1.0 gpm. (0 gpm with recirculation) Flow at 20 psid: 14 gpm. Optional Gauge scale: 30° – 210°F. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960.

Code	Description	Cv	Lbs	USD
<b>521</b> 417A	1/2" PEX crimp union	3.0	2.5	238.00
521417AC	1/2" PEX crimp union, checks	3.0	2.9	258.00
<b>521</b> 418A	1/2" PEX expansion union	3.0	2.5	238.00
521418AC	1/2" PEX expansion union, checks	3.0	2.9	258.00
<b>521</b> 517A	34" PEX crimp union	3.0	2.5	246.00
521517AC	¾" PEX crimp union, checks	3.0	2.9	276.00
<b>521</b> 518A	34" PEX expansion union	3.0	2.5	246.00
521518AC	34" PEX expansion union, checks	3.0	2.9	276.00
<b>521</b> 617A	1" PEX crimp union	3.0	2.5	287.00
521617AC	1" PEX crimp union, checks	3.0	2.9	317.00
<b>521</b> 618A	1" PEX expansion union	3.0	2.5	287.00
521618AC	1" PEX expansion union, checks	3.0	2.9	317.00
-				

Code	Description	Cv	Lbs	USD
<b>521</b> 410A	1/2" NPT male union	3.0	2.9	246.00
521410AC	1/2" NPT male union, check valves	3.0	2.9	266.00
<b>521</b> 510A	34" NPT male union	3.0	2.9	256.00
521510AC	3/4 "NPT male union, check valves	3.0	2.9	284.00
<b>521</b> 610A	1" NPT male union	3.0	2.9	298.00
521610AC	1" NPT male union, check valves	3.0	2.9	325.00

Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.





Point of distribution mixed temperature gauge adaptor fits 1" male union thread mixing valves.

Removable gauge fits into pocket well. Dual scale:  $30^{\circ} - 210^{\circ}$ F ( $0^{\circ} - 100^{\circ}$ C). Gauge accuracy:  $\pm 6^{\circ}$ F. Gauge dial: 2" diameter. Certified: Low-lead brass.



#### **521 MixCal™** Body

Replacement body (½", ¾", 1" valve). See fitting selection table in Section P5.

Code	Description	Cv	Lbs	USD
<b>521</b> 101A	1" union body	3.0	1.9	153.00

#### **Construction details**



#### HIGH FLOW THERMOSTATIC MIXING VALVES FOR PLUMBING AND HYDRONICS

5231 MixCal+™ Body					<b>5231</b> MixCal+™ Sweat						
	The second se	eplacement bod ee fitting select						Adjustable therm for domestic wat hydronic system DZR low lead br Max. working pr Max. inlet tempe Adjustable range Gauge scale: 30 Gauge accuracy Gauge dial: 2" d Min. flow for optir (0 gpm with reci Flow at 20 psid:	ter syste s. ass body essure: 2 erature: 1 e: 95°-1 °-210°l : ± 6°F. iameter. num perf rculation)	ms and /. 200 psi. 95°F. 150°F. =. ormanc	radiant
Code	Description	Min - Max Row (gpm)	Cv	Lbs	USD						
<b>5231</b> 79A	For 1" and 11/4" sizes	4.4 to 40	7.6	5.0	1,129.00	Code	Description		Cv	Lbs	USD
<b>5231</b> 99A	For 11/2" and 2" sizes	8.8 to 70	14.2	14.2	1,616.00	<b>5231</b> 77A	1¼" sweat union		7.6	9.0	1,412.00

Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.



#### ACCESSORIES

**(†)** 

Replacement check valves for 521 (AC models).

Code	Description	Lbs	USD
NA10405	Replacement for 521 PEX, press fittings	0.1	2.50
R39204	Replacement for 521 sweat, NPT fittings	0.1	3.50
(	Conical inlet filter for 5	21 mixir	ng valves.
Code	Conical inlet filter for 5	21 mixir <sub>Lbs</sub>	ng valves. USD

#### HIGH FLOW THERMOSTATIC MIXING VALVES FOR PLUMBING AND HYDRONICS



#### 5231 MixCal+<sup>™</sup> sweat

Adjustable thermostatic mixing valve for domestic water systems and radiant hydronic systems. DZR low lead brass body. Max. working pressure: 200 psi. Max. inlet temperature: 195°F. Adjustable range: 95°-150°F.



Point of distribution mixed temperature gauge adaptor fits MixCal+™ High Flow 5231 Series mixing valves. Removable gauge fits into pocket well. Dual scale: 30°-210°F (0° - 100°C). Gauge accuracy: ± 6°F. Gauge dial: 2" diameter. Certified: Low-lead brass.

Code	Description	Lbs	USD
NA10315	1¼" sweat	0.5	144.00
NA10476	1" and 11/4" male x female union	3.0	165.00
NA10461	11/2" and 2" male x female union	4.0	283.00
688003A	Replacement gauge with pocket well	0.2	40.50
R39591	Replacement gauge	0.1	26.50



Inlet check valve assembly for installing on inlet union tail pieces of 5231 mixing valves. Stainless steel body. No Lead. Ordered separately, field installed. Assembly examples shown below.



523177A shown with (2) NA10366

523178A shown with (2) NA10366

Code	Description	Lbs	USD
NA10366	Check valve assembly 1" and 11/4"	1.0	103.00
NA10367	Check valve assembly 11/2" & 2"	1.5	228.00



#### Min - Max Flow (gpm) Code Description Cv Lbs USD 523168A 1" sweat union 4.4 to 40 7.0 7.0 1,257.00 4.4 to 40 523178A 7.6 7.0 11/4" sweat union 1,313.00 523188A 11/2" sweat union 8.8 to 70 1,973.00 13 17 523198A 2" sweat union 8.8 to 70 2,074.00 14 18



#### **5231 MixCal+**<sup>™</sup> NPT

Adjustable thermostatic mixing valve for domestic water systems and radiant hydronic systems. DZR low lead brass body. Max. working pressure: 200 psi. Max. working pressure: 195°F. Adjustable range: 95° – 150°F.

Code	Description	Min - Max Flow (gpm)	Cv	Lbs	USD
523160A	1" NPT male union	4.4 to 40	7.0	7.0	1,270.00
523170A	1¼" NPT male unior	n 4.4 to 40	7.6	7.0	1,372.00
523180A	1½" NPT male unior	n 8.8 to 70	13	17	2,023.00
523190A	2" NPT male union	8.8 to 70	14	18	2,127.00



## **5231** MixCal+™ press

Adjustable thermostatic mixing valve for domestic water systems and radiant hydronic systems. DZR low lead brass body. Max. working pressure: 200 psi. Max. inlet temperature: 195°F. Adjustable range: 95° – 150°F.

Code	Description	Min - Max Row (gpm)	Cv	Lbs	USD
<b>5231</b> 66A	1" press union	4.4 to 40	7.0	7.0	1,337.00
<b>5231</b> 76A	1¼" press union	4.4 to 40	7.6	7.0	1,399.00
<b>5231</b> 86A	1½" press union	8.8 to 70	13	17	2,150.00
<b>5231</b> 96A	2" press union	8.8 to 70	14	18	2,391.00

Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.

Ρ





#### 520 AngleMix<sup>™</sup> sweat

Body is DZR low lead brass with gauge. Adjustment temperature range:  $95^{\circ}-150^{\circ}$ F. Max. body pressure rating (static): 150 psi. Max. working pressure (dynamic): 75 psi. Max. inlet temperature: 195°F. Gauge scale:  $30^{\circ}-210^{\circ}$ F. Min. flow for optimum performance: ½" and ¾" valves 0.5 GPM, 1" valves 1 GPM. (0 gpm with recirculation) Flow at 20 psid: ½" and ¾" valves 9 GPM, 1" valves 16 GPM.

Code	Description	Cv	Lbs	USD
520419A	1/2" sweat union	2.0	1.7	238.00
520419AC	1/2" sweat union, checks	2.0	1.8	258.00
520519A	3/4" sweat union	2.0	2.0	256.00
520519AC	34" sweat union, checks	2.0	2.1	284.00
520619A	1" sweat union	3.5	3.7	344.00
520619AC	1" sweat union, check	3.5	3.8	372.00



#### **520** AngleMix<sup>™</sup> NPT

Body is DZR low lead brass with gauge. Adjustment temperature range: 95° - 150°F. Max. body pressure rating (static): 150 psi. Max. working pressure (dynamic): 75 psi. Max. inlet temperature: 195°F. Gauge scale: 30° - 210°F. Min. flow for optimum performance: ½" and ¾" valves 0.5 GPM, 1" valves 1 GPM.

(0 gpm with recirculation) Flow at 20 psid: ½" and ¾" valves 9 GPM, 1" valves 16 GPM.

Code	Description	Cv	Lbs	USD
520410A	1/2" NPT male union	2.0	1.7	246.00
520410AC	1/2" NPT male union, checks	2.0	1.8	266.00
520510A	34" NPT male union	2.0	2.0	256.00
520510AC	34" NPT male union, checks	2.0	2.1	284.00
520610A	1" NPT male union	3.5	3.9	353.00
520610AC	1" NPT male union, check	3.5	4.0	382.00



## **520** AngleMix<sup>™</sup> Body

Replacement body. See fitting selection table in Section 8.

Code	Description	Cv	Lbs	USD
<b>520</b> 051A	1" union body (½", ¾" valves)	2.0	2.0	153.00
<b>520</b> 061A	1¼" union body (1" valves)	3.5	4.0	214.00



## **520** AngleMix<sup>™</sup> press

Body is DZR low lead brass with gauge. Adjustment temperature range: 95° -150°F. Max. body pressure rating (static): 150 psi. Max. working pressure (dynamic): 75 psi. Max. inlet temperature: 195°F. Gauge scale: 30° -210°F. Min. flow for optimum performance: ½" and ¾" valves 0.5 GPM, 1" valves 1 GPM. (0 gpm with recirculation) Flow at 20 psid: ½" and ¾" valves 9 GPM, 1" valves 16 GPM.

Code	Description	Cv	Lbs	USD
520416A	1⁄2" press union	2.0	1.8	250.00
520416AC	1/2" press union, check	2.0	1.8	268.00
520516A	¾" press union	2.0	2.0	246.00
520516AC	¾" press union, check	2.0	2.1	307.00
520616A	1" press union	3.5	3.7	358.00
520616AC	1" press union, check	3.5	3.9	388.00

#### **Construction details**

**Anti-scale materials** The material used in the construction of the Caleffi AngleMix 520 Series thermostatic mixing valve reduces jamming caused by lime deposits. All the working parts such as shutter, seats and slide guides are made of a special anti-scale polymer material, with a low friction coefficient, assuring long term performance.



Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.

#### SCALD PROTECTION THERMOSTATIC MIXING VALVES FOR PLUMBING



#### **5212 SinkMixer™** 4-way Scald Protection Point of use

Thermostatic mixing valve for under sink and under counter applications where the user must be protected from the danger of scalding caused by excessively hot water. Temperature adjustment range:  $95^{\circ} - 120^{\circ}$ F. Cold inlet temperature: Min.  $39^{\circ}$ F; Max.  $85^{\circ}$ F. Hot inlet temperature: Min.  $120^{\circ}$ F; Max.  $195^{\circ}$ F. Min flow for optimum performance 0.35 gpm. Flow at 20 psid: 2.3 gpm Complies with NSF/ANSI/CAN 61. Cv = 0.52

Code	Description	Lbs	USD
<b>5212</b> 01A	<sup>3</sup> /8" compression	1.0	113.00
<b>5212</b> 01AP	<sup>3</sup> /8" compression, plug/fittings	1.1	115.00





Construction details SinkMixer<sup>™</sup>

#### SinkMixer™

Replacement check valve/filter kit. Includes two checks and two filters.

A	
	and the second
H	

#### **5213 TubMixer™** High-Flow Scald Protection

Adjustable thermostatic high-flow point of use mixing valve for Roman Tubs and other high-flow fixtures. Locking set point knob. Complete with check valves on both hot and cold inlets. Low-lead brass body. Max. working pressure: 150 psi. Max. inlet temperature: 185°F. Adjustable range:  $85^{\circ}$ — 120°F. Temperature control:  $\pm 3^{\circ}$ F. Min. flow for optimum performance: 0.5 gpm. Flow at 20 psid: 9 gpm Cv = 2

Code	Description	Lbs	USD
<b>5213</b> 33A	<sup>3</sup> / <sub>8</sub> " compression union	2.0	136.00
<b>5213</b> 47A	1/2" PEX crimp union	2.0	136.00
<b>5213</b> 48A	1/2" PEX expansion union	2.0	136.00
<b>5213</b> 42A	1/2" NPT male union	2.0	136.00
<b>5213</b> 49A	1/2" sweat union	2.0	136.00
<b>5213</b> 57A	3/4" PEX crimp union	2.0	143.00
<b>5213</b> 58A	3/4" PEX expansion union	2.0	143.00
<b>5213</b> 52A	34" NPT male union	2.0	143.00
<b>5213</b> 59A	3/4" sweat union	2.0	143.00
<b>5213</b> 67A	1" PEX crimp union	2.0	221.00
<b>5213</b> 68A	1" PEX expansion union	2.0	221.00
<b>5213</b> 62A	1" NPT male union	2.0	230.00
<b>5213</b> 69A	1" sweat union	2.0	221.00
521301A*	Replacement body, no fittings	1.5	123.00
*See fitting sel	ection table in Section 8.		

 Code
 Description
 Lbs
 USD

 F0001270
 Replacement check valve/filter kit
 0.1
 6.80



SinkMixer™ 5-pack plug/nut fitting kit. The cold outlet port plug is for single-pipe, mixed-water fixtures.

Code	Description	Lbs	USD
NA10741	5-pack plug/nut fitting kit	0.2	17.10

#### Application diagram TubMixer<sup>™</sup>



Meets requirements of NSF/ANSI/CAN 372. Complies with ASSE 1070, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.



#### 6000 LEGIOMIX<sup>®</sup> sweat

Electronic mixing valve with optional selectable programs for thermal disinfection of hot water recirculation system to kill Legionella bacteria.

Power: 24 VAC +/- 10% - 50/60 Hz - 6 VA. 115/24 VAC transformer included. Adjustment temperature range: 70° – 185°F. Disinfection temperature range: 100° – 185°F. Max body pressure rating (static): 230 psi. Max operating pressure: 150 psi. Max. inlet temperature: 212°F.

Code	Description	Cv	Lbs	USD
<b>6000</b> 59A	34" sweat union	9.7	5.1	2,820.00
600069A 001	1" sweat union, 34" body	9.7	5.3	2,972.00
<b>6000</b> 69A	1" sweat union	21	7.3	3,121.00
<b>6000</b> 79A	1¼" sweat union	24	8.2	3,174.00
<b>6000</b> 89A	11/2" sweat union	34	21	3,603.00
<b>6000</b> 99A	2" sweat union	48	22	3,696.00



## 6000 LEGIOMIX<sup>®</sup> press

Electronic mixing valve with optional selectable programs for thermal disinfection of hot water recirculation system to kill Legionella bacteria.

Power: 24 VAC +/- 10% - 50/60 Hz - 6 VA. 115/24 VAC transformer included. Adjustment temperature range: 70°-185°F. Disinfection temperature range: 100°-185°F. Max body pressure rating (static): 230 psi. Max operating pressure: 150 psi. Max. inlet temperature: 212°F.

Code	Description	Cv	Lbs	USD
<b>6000</b> 56A	¾" press union	9.7	5.1	2,972.00
600066A 001	1" press union, ¾" body	9.7	5.2	3,084.00
<b>6000</b> 66A	1" press union	21	7.3	3,197.00
<b>6000</b> 76A	11/4" press union	24	8.2	3,252.00
<b>6000</b> 86A	11/2" press union	34	21	3,767.00
<b>6000</b> 96A	2" press union	48	22	3,989.00



#### 6000 LEGIOMIX® NPT

Electronic mixing valve with optional selectable programs for thermal disinfection of hot water recirculation system to kill Legionella bacteria.

Power: 24 VAC +/- 10% - 50/60 Hz - 6 VA. 115/24 VAC transformer included. Adjustment temperature range: 70° – 185°F. Disinfection temperature range: 100° – 185°F. Max body pressure rating (static): 230 psi. Max operating pressure: 150 psi. Max. inlet temperature: 212°F.



## 6000 LEGIOMIX® flange

Electronic mixing valve with optional selectable programs for thermal disinfection of hot water recirculation system to kill Legionella bacteria.

Power: 24 VAC +/- 10% - 50/60 Hz - 6 VA. 115/24 VAC transformer included. Adjustment temperature range: 70° – 185°F. Disinfection temperature range: 100° – 185°F. Max body pressure rating (static): 230 psi. Max operating pressure: 150 psi. Max. inlet temperature: 212°F.

Code	Description	Cv	Lbs	USD
<b>6000</b> 60A	21/2" ANSI 150 flanges	105	30	13,462.00
<b>6000</b> 80A	3" ANSI 150 flanges	120	42	14,250.00

Code	Description	Cv	Lbs	USD
<b>6000</b> 54A	34" NPT male union	9.7	5.1	2,850.00
600064A 001	1" NPT male union, ¾" body	9.7	5.3	2,992.00
<b>6000</b> 64A	1" NPT male union	21	7.3	3,132.00
<b>6000</b> 74A	1-1/4" NPT male union	24	8.2	3,230.00
<b>6000</b> 84A	11/2" NPT male union	34	21	3,647.00
<b>6000</b> 94A	2" NPT male union	48	22	3,746.00



The LEGIOMIX<sup>®</sup> includes:

Three-way ball valve. 3-wire floating control actuator. Controller/user interface with DIN rail mounting bracket. Mixed outlet temperature sensor/probe. Return temperature sensor/probe. Mixed outlet temperature gauge.

Meets requirements of NSF/ANSI/CAN 372 and complies with ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ESfor use in accordance with the U.S. and Canadian plumbing codes. Meets requirements of CSA Z317.1 Special Requirements For Plumbing Installations In Health Care Facilities.

	Recommended Flow Rates (gpm/lpm)						
Size	3⁄4"	1"	1¼"	11⁄2"	2"	<b>2</b> ½"	3"
Minimum flow*	2.2 / 8.3	3.1 / 12	4.4 / 17	6.6 / 25	8.8/33	17 / 64	22/ 83
Design flow**	27 / 102	58 / 220	66 / 250	93 / 352	131 / 495	288 / 1,090	329 / 1,245
Flow at 20 psid	43 / 172	94 / 356	107 / 405	152 / 575	215/814	470/1,780	537 / 2,033
Cv	9.7	21	24	34	48	105	120

\*To ensure stable operation and ± 3° F accuracy. Minimum flow rate is 0 gpm when recirculation flow rate is greater than or equal to the valve size minimum flow rating. \*\*Suggested maximum flow rate for optimum modulating control (at 7.5 psid pressure drop).

## **P1**

#### ACCESSORIES AND REPLACEMENT

USD

66.30



Replacement mixed temp sensor.



#### Replacement temp gauge.

Code	Description	Lbs	ι
F69807	Fits 1" and 11/4" valve	1.0	66
	Replacement	mixed temp ser	ISOr.

Code	Description	Lbs	USD
F69804	Fits 11/2"and 2" valve	1.0	94.30



Replacement re	circulation sensor.
----------------	---------------------



Code	Description	Lbs	USD
F69591	Replacement recirculation sensor	1.0	84.20



Description

Description

Description

888888 11100000III THE PROPERTY AND ADDRESS

Description

Bag assembly

Replacement controller

Replacement actuator

Plug-in transformer 20 VA

Code

Code

645114

Code

Code

R0001397

NA10759

F0000962

Replacement controller.

Replacement actuator.

Replacement transformer.

LEGIOMIX® parts bag assembly.

Lbs

1.0

Lbs

1.0

l bs

0.2

USD

473.00

USD

40.60

USD

86.50

Code	Description	Lbs	USD
R19101	Replacement temp gauge	0.3	23.00
	-		





Code	Description	Lbs	USD
<b>7550</b> 52	Modbus-to-BACnet gateway	1.2	2,007.00



Inlet check valve assembly for installing on 6000 Series valve body (if required). Stainless steel body. No Lead. Ordered separately, field installed. 2 required per valve.

Lbs USD Code Description	1.5	1,890.00	1440007	Ob a structure
			NA10366	Check valve
	Lbe		Code	Description

Code	Description	Lbs	USD
NA10366	Check valve assembly 1" and 11/4"	1.0	103.00
NA10367	Check valve assembly 11/2" & 2"	1.5	228.00



Replacement body includes gauge adapter assembly. See fitting selection table in Section P5.

Code	Description	Lbs	USD
NA10758	Body, gauge adapter (¾" valve)	3.5	484.00
NA10615	Body, gauge adapter (1", 1¼" valves)	5.1	546.00
NA10616	Body, gauge adapter (11/2", 2" valves)	11	800.00

Replacement controller battery.



uvi	
\$ MY	Tean (
1.0	

		)
u	44-1	)
	J. Marcia	
1		·

Code	Description	Lbs	USD
F69888	Replacement controller battery	0.1	47.50

#### ELECTRONIC MIXING VALVES FOR PLUMBING



## 6000 **LEGIOMIX®** Station

Electronic mixing valve pre-packaged in a convenient wall mount configuration. 100% factory tested for plug-and-play in a packaged wall mount configuration.

Ρ

Station assembly includes pre-piped 3-way mixing valve with union connections, serviceable check valves, a recirculation connection and isolation valves for fast and simple installation, all mounted on welded, powder-coat painted steel strut. The LEGIOMIX® controller/user interface with DIN rail mounting bracket is pre-mounted and pre-wired and includes a return water temperature sensor. Simply wall mount the assembly, hook up the hot and cold water supplies, the mixed outlet and the recirculation circuit. Plug in 120/24 VAC transformer with 20 ft cable included.

Code	Description	Cv	Lbs	USD
600066AS	1" copper wall-mount station	8.0	130	9,922.00
600076AS	11/4" copper wall-mount station	9.0	148	11,274.00
600086AS	11/2" copper wall-mount station	20	219	14,269.00
600096AS	2" copper wall-mount station	38	248	16,196.00
600060AS	21/2" copper wall-mount station	43	250	18,522.00



#### **Construction details**

#### THERMOSTATIC MIXING VALVE KITS FOR DOMESTIC WATER HEATERS



### 520 TankMixer™

Adjustment temperature range: 95°–150°F. Max. working pressure (static): 150 psi. Max. working pressure (dynamic): 75 psi. Max. inlet temperature: 195°F. Minimum flow for optimum performance: 0.5 GPM (0 GPM with recirculation). Max flow for optimum performance: 9 gpm. Tank: ¾" NPT female union connections. System: ¾" NPT M, press or sweat union connections.

Code	Description	Cv	Lbs	USD
520500AX	3/4" NPT male union system connections	2.0	2.4	287.00
520506AX	3/4" press union system connections	2.0	2.4	328.00
520509AX	3/4" sweat union system connections	2.0	2.4	277.00



### 520 TankMixer<sup>™</sup> with gauge

Adjustment temperature range: 95° – 150°F. Max. working pressure (static): 150 psi. Max. working pressure (dynamic): 75 psi. Max. inlet temperature: 195°F. Gauge scale: 30° – 210°F. Gauge accuracy: ± 6°F. Gauge dial: 2" diameter. Minimum flow for optimum performance: 0.5 GPM (0 GPM with recirculation). Max flow for optimum performance: 9 gpm. Tank: ¾" NPT female union connections. System: ¾" NPT M, press or sweat union connections.

Code	Description	Cv	Lbs	USD
<b>520</b> 510AX	3/4" NPT male union system connections	2.0	2.9	328.00
<b>520</b> 516AX	3/4" press union system connections	2.0	2.9	369.00
<b>520</b> 519AX	3/4" sweat union system connections	2.0	2.9	318.00

#### Construction details TankMixer™





#### 520 TankMixer™ with Tankless Heater Service Valve Kit

For use on tankless water heaters and combi boilers, the kit includes the 520 TankMixer for tempered water control and the 290 Series service valves for fill/flush/drain functionality. A pressure relief valve and temperature gauge are included.

Full details on the 290 Series are shown in section P4

Code	Description	Cv	Lbs	USD
290516A	34" press	2.0	5.0	475.00
290519A	3/4" sweat	2.0	5.0	456.00
290510A	34" FNPT	2.0	5.0	467.00
290517A	¾" PEX crimp	2.0	5.0	456.00
290518A	¾" PEX exp	2.0	5.0	456.00

#### Construction details TankMixer<sup>™</sup> Kit



The TankMixer Kit takes your tankless water heater to the next level with service valves that allow for easy flushing of the heat exchanger. With the included pressure relief valve and TankMixer mixing valve you can also ensure safe operation of your tankless water heater and accurate temperature control to your fixtures.

Meets requirements of NSF/ANSI/CAN 372. Certified to ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.

www.caleffi.com



CALEFFE

CE

# **THERMAL BALANCING SET IT AND FORGET IT**

AHREXPO INNOVATION AWARDS 2019

ThermoSetter<sup>™</sup> thermal balancing valves maintain precise temperature in recirculation return piping using state-of-the-art modulating control. Setup is simple and safe with an easy-to-read, lockable temperature adjustment dial. Enjoy ease of maintenance with serviceable cartridge. Models with bypass cartridges available for systems that provide thermal disinfection to control Legionella bacteria. Factory assemblies with isolation and check valves are available. Approvals include compliance with the U.S. and Canadian plumbing codes. CALEFFI GUARANTEED.



FINALIST

## BALANCING VALVES FOR PLUMBING AND HYDRONICS





#### **PRODUCTS INCLUDED IN SECTION**

Static balancing valves with built-in flowmeter for plumbing Static balancing valves with built-in flowmeter for hydronics Static balancing valves, fixed orifice, for plumbing and hydronics Static balancing valves, variable orifice, for plumbing and hydronics Dynamic balancing valves for plumbing and hydronics Dynamic balancing valves for hydronics Thermal balancing valves for plumbing

#### STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER FOR PLUMBING



#### 132 QuickSetter<sup>+™</sup> sweat

Balancing valve with flow meter. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve.



#### 132 QuickSetter<sup>+™</sup> sweat

2

Balancing valve with and temperature gauge. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve. Dual scale:  $30^{\circ} - 210^{\circ}$ F ( $0^{\circ} - 100^{\circ}$ C). Gauge accuracy:  $\pm 6^{\circ}$ F.

Code	Description	Flow scale (gpm)	Lbs	USD
132439AFC	1/2" sweat union	0.5-1.8	1.8	265.00
132539AFC	34" sweat union	0.5-1.8	2.0	276.00
132639AFC	1" sweat union	0.5-1.8	2.4	305.00
132559AFC	3/4" sweat union	2.0-7.0	2.0	276.00
132659AFC	1" sweat union	2.0-7.0	2.4	305.00
132459AFC	1⁄2" sweat union	2.0-7.0	1.8	265.00

Code	Description	Flow scale (gpm)	Lbs	USD
132438AFC	1/2" sweat union	0.5-1.8	2.4	304.00
132538AFC	3/4" sweat union	0.5-1.8	2.2	316.00
132638AFC	1" sweat union	0.5-1.8	2.8	342.00
132458AFC	1/2" sweat union	2.0-7.0	2.4	304.00
132558AFC	3/4" sweat union	2.0-7.0	2.2	316.00
132658AFC	1" sweat union	2.0-7.0	2.8	342.00



#### 132 QuickSetter<sup>+™</sup> press

Balancing valve with flow meter. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve.

Code	Description	Flow scale (gpm)	Lbs	USD
132436AFC	1⁄2" press union	0.5-1.8	1.8	305.00
132536AFC	3/4" press union	0.5-1.8	1.8	317.00
132636AFC	1" press union	0.5-1.8	2.2	351.00
132456AFC	1⁄2" press union	2.0-7.0	1.8	305.00
132556AFC	3/4" press union	2.0-7.0	1.8	317.00
132656AFC	1" press union	2.0-7.0	2.2	351.00



#### **132** QuickSetter+™ PEX

Balancing valve with flow meter. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960

Code	Description	Flow scale (gpm)	Lbs	USD
132434AFC	1/2" PEX crimp union	0.5-1.8	1.8	265.00
132432AFC	1/2" PEX expansion union	0.5-1.8	1.8	265.00
132534AFC	¾" PEX crimp union	0.5-1.8	2.0	276.00
132532AFC	3/4" PEX expansion union	0.5-1.8	2.0	276.00
132634AFC	1" PEX crimp union	0.5-1.8	2.2	319.00
132632AFC	1" PEX expansion union	0.5-1.8	2.2	319.00
132454AFC	1/2" PEX crimp union	2.0-7.0	1.8	265.00
132452AFC	1/2" PEX expansion union	2.0-7.0	1.8	265.00
132554AFC	¾" PEX crimp union	2.0-7.0	2.0	276.00
132552AFC	34" PEX expansion union	2.0-7.0	2.0	276.00
132654AFC	1" PEX crimp union	2.0-7.0	2.2	319.00
132652AFC	1" PEX expansion union	2.0-7.0	2.2	319.00



## **132 QuickSetter**<sup>+™</sup> press

Balancing valve with and temperature gauge. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve. Dual scale:  $30^\circ - 210^\circ$ F (0° –  $100^\circ$ C). Gauge accuracy:  $\pm 6^\circ$ F.

Code	Description	Flow scale (gpm)	Lbs	USD
132437AFC	1⁄2" press union	0.5-1.8	1.8	349.00
132537AFC	3/4" press union	0.5-1.8	2.2	364.00
132637AFC	1" press union	0.5-1.8	2.6	392.00
132457AFC	1⁄2" press union	2.0-7.0	1.8	349.00
132557AFC	34" press union	2.0-7.0	2.2	364.00
132657AFC	1" press union	2.0-7.0	2.6	392.00



#### **132** QuickSetter+™ PEX

Balancing valve with and temperature gauge. Direct reading of flow rate. DZR low-lead brass. Inlet flow check valve. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960

Code	Description	Flow scale (gpm)	Lbs	USD
132435AFC	1/2" PEX crimp union	0.5-1.8	2.2	304.00
132433AFC	1/2" PEX expansion union	0.5-1.8	2.2	304.00
132535AFC	¾" PEX crimp union	0.5-1.8	2.4	316.00
132533AFC	34" PEX expansion union	0.5-1.8	2.4	316.00
132635AFC	1" PEX crimp union	0.5-1.8	2.6	357.00
132633AFC	1" PEX expansion union	0.5-1.8	2.6	357.00
132455AFC	1/2" PEX crimp union	2.0-7.0	2.2	304.00
132453AFC	1/2" PEX expansion union	2.0-7.0	2.2	304.00
132555AFC	¾" PEX crimp union	2.0-7.0	2.4	316.00
132553AFC	3/4" PEX expansion union	2.0-7.0	2.4	316.00
132655AFC	1" PEX crimp union	2.0-7.0	2.6	357.00
132653AFC	1" PEX expansion union	2.0-7.0	2.6	357.00

Complies with NSF/ANSI/CAN 372-2000, low lead laws, for use in accordance with the U.S. and Canadian plumbing codes.

#### STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER FOR HYDRONICS



#### 132 QuickSetter<sup>™</sup> press

Balancing valve with flow meter. Direct reading of flow rate. No sight gauge clouding or scaling. Brass valve body and flow meter. Max. working pressure: 150 psi. Temperature range: 14°-230°F. Max. percentage of glycol: 50%. Insulation jacket included.



## 132 QuickSetter™

Balancing valve with flow meter. Direct reading of flow rate. No sight gauge clouding or scaling. Brass valve body and flow meter. Max. working pressure: 150 psi. Temperature range: 14° – 230°F. Max. percentage of glycol: 50%. Insulation jacket included.

Code	Description	Flow scale (gpm)	Lbs	USD
132436A	1/2" press	0.5-1.8	2.2	226.00
132556A	<sup>3</sup> ⁄ <sub>4</sub> " press	2.0-7.0	2.0	254.00
132666A	1" press	3.0-10	2.4	298.00
132776A	1¼" press	5.0-19	2.8	394.00
132886A	11/2" press	8.0-32	3.4	469.00
132996A	2" press	12-50	4.4	574.00

Code	Description	Flow scale (gpm)	Lbs	USD
132432A	1/2" FNPT	0.5-1.8	2.0	210.00
132552A	34" FNPT	2.0-7.0	1.8	226.00
132662A	1" FNPT	3.0-10	2.4	264.00
132772A	11/4" FNPT	5.0-19	2.8	351.00
132882A	11/2" FNPT	8.0-32	3.4	416.00
132992A	2" FNPT	12-50	4.4	509.00

#### STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER



Connection size	Flow rate (gpm)	Fully open Cv
1⁄2"	0.5 - 1.8	1.0
3⁄4 "	0.5 - 1.8	1.0
1"	0.5 - 1.8	1.0
1⁄2"	2.0 - 7.0	6.3
3⁄4 "	2.0 - 7.0	6.3
1"	2.0 - 7.0	6.3

#### Construction details for QuickSetter™



Connection size	Flow rate (gpm)	Fully open Cv
1⁄2"	0.5 - 1.8	3.0
3⁄4 "	2.0 - 7.0	6.3
1"	3.0 - 10	8.3
1¼"	5.0 - 19	15
1½"	8.0 - 32	32
2"	12 - 50	54

## **P2**

P 2



#### ACCESSORIES



See 290030 and NA108 isolation valves in Section 6D.

Code	Description	Lbs	USD
290030	Isolation ball valve 1" M x 1" F union	1.0	47.60
NA10815	Stem extension for 290030	0.2	27.10



#### **NA108**

NPT full port ball valves with extended operator handle for insulated or bare pipes. For use with hot or cold water piping in plumbing or hydronic applications. High strength forged low lead brass. Blowout-proof stem with dual o-ring seals. Pressure rating 600 WOG. Temperature rating -4°- 366°F.

Code	Description	Lbs	USD
NA10824	1/2" FNPT ball valve low lead	0.4	38.40
NA10825	3/4" FNPT ball valve low lead	0.6	47.10
NA10826	1" FNPT ball valve low lead	1.0	61.10
NA10827	11/4" FNPT ball valve low lead	1.6	102.00
NA10828	11/2" FNPT ball valve low lead	1.9	129.00
NA10829	2" FNPT ball valve low lead	3.0	314.00

Code	Description	Lbs	USD
F0000940	Replacement flowmeter 0.5 to 1.75 GPM	0.2	116.00
F0000941	Replacement flowmeter 2.0 to 7.0 GPM	0.2	116.00
F0000942	Replacement flowmeter 3.0 to 10 GPM	0.2	116.00
F0000943	Replacement flowmeter 5.0 to 19 GPM	0.2	123.00
F0000944	Replacement flowmeter 8.0 to 32 GPM	0.2	123.00
F0000945	Replacement flowmeter 12 to 50 GPM	0.2	123.00
F0000946	Replacement flowmeter 30 to 105GPM	0.2	129.00
F0000947	Replacement flowmeter 38 to 148 GPM	0.2	129.00
F0000948	Replacement flowmeter 55 to 210 GPM	0.2	129.00
F19346	Replacement by-pass valve stem*	0.2	42.50

Replacement flow meter.

\*With operating ring



QuickSetter+™ Insulation sleeve for valve and fitting on each end.

Code	Description	Lbs	USD
F0000926	For models with temperature gauge	0.1	42.40
<b>112</b> 001	For models without temperature gauge	0.1	41.80



QuickSetter+™ replacement body. See fitting section table in Section 8.

	$\bigcirc$		
Code	Description	Lbs	USD
<b>132</b> 637	0.5 - 1.8 GPM	1.0	210.00
<b>132</b> 657	2.0 - 7.0 GPM	1.0	221.00

#### STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER FOR HYDRONICS



#### 132 QuickSetter<sup>™</sup> flange

Balancing valve with flow meter. Direct reading of flow rate. ANSI 125 flanged cast iron body. Brass flow meter. Max. working pressure: 150 psi. Temperature range: 14° – 230°F. Max. percentage of glycol: 50%.

Code	Description	Flow scale (gpm)	Lbs	USD
<b>132</b> 060A	21/2" ANSI flange	30-105	35	1,256.00
<b>132</b> 080A	3" ANSI flange	38-148	62	1,675.00
<b>132</b> 100A	4" ANSI flange	55-210	67	2,556.00



The 132 Series balancing valve accurately sets the flow rate of heating and cooling transfer fluid. The flow meter is housed in a bypass circuit on the valve body and can be shut off during normal operation. The flow meter permits fast and easy circuit balancing without added differential pressure gauges and reference charts.



#### **130 Flo-Set™** Fixed Orifice Balancing Valve

Fixed orifice. Multi-turn adjustment range. Memory stop feature. Max. working pressure: 232 psi Working temperature range: -4° – 250°F Number of adjustment turns: 6 DZR Low-lead brass body. Stainless steel valve plug. Teflon® stem guide bearing.



Insulation shell fits 130 Series balancing valves.

Code	Description	Lbs	USD
CBN130400	fits 1/2" NPT	0.1	31.20
CBN130500	fits ¾" NPT	0.1	33.90
CBN130600	fits 1" NPT	0.1	40.70
CBN130700	fits 11/4" NPT	0.1	50.70
CBN130800	fits 11/2" NPT	0.1	63.30
CBN130900	fits 2" NPT	0.1	84.40

Code	Description	Max Cv	Lbs	USD
<b>130</b> 400A	1/2" NPT female	3.7	1.0	142.00
<b>130</b> 500A	34" NPT female	5.1	1.2	156.00
<b>130</b> 600A	1" NPT female	8.8	1.5	185.00
<b>130</b> 700A	1¼" NPT female	14	2.0	232.00
130800A	11/2" NPT female	20	2.3	288.00
<b>130</b> 900A	2" NPT female	31	2.5	384.00

#### Venturi flow rate measurement device

The 130 Series valves are equipped with a flow rate measurement device based on the Venturi effect. The device is incorporated in the body of the valve upstream of the valve plug.

#### **Operating Principal**

The 130 Series balancing valve is a hydraulic device that controls the flow rate of a fluid. Turning the knob moves a plug within the fluid stream which varies the flow rate. The flow rate is determined according to the pressure drop value measured by a differential pressure meter connected to the pressure test ports.



#### STATIC BALANCING VALVES, VARIABLE ORIFICE, FOR PLUMBING AND HYDRONICS



#### **142 Flo-Set**<sup>™</sup> Variable Orifice Balancing Valve

Memory stop feature.

Characterized plug for smooth adjustment. Maximum working pressure: 232 psi. Working temperature range: 14°-250°F. DZR low-lead brass body. Meets requirements of ANSI/NSF 372-2011. Certified to Low Lead Laws and listed by ICC-ES for use in accordance with the U.S.

and Canadian plumbing codes.

Code	Description	Max Cv	Lbs	USD
<b>142</b> 241A	1/2" NPT female	3.4	1.0	111.00
<b>142</b> 251A	34" NPT female	5.0	1.2	119.00
<b>142</b> 261A	1" NPT female	7.5	1.5	161.00
<b>142</b> 271A	11/4" NPT female	13	2.3	231.00
<b>142</b> 281A	11/2" NPT female	17	3.0	258.00
<b>142</b> 291A	2" NPT female	22	3.5	330.00



Insulation shell fits 142 Series balancing valves.

Code	Description	Lbs	USD
CBN142241A	fits ½" NPT	0.1	28.60
CBN142251A	fits ¾" NPT	0.1	30.40
CBN142261A	fits 1" NPT	0.1	41.40
CBN142271A	fits 1¼" NPT	0.1	59.10
CBN142281A	fits 1½" NPT	0.1	66.50

#### **Operating Principal**

The 142 Series balancing valve is a hydraulic device that controls the flow rate of a fluid. Turning the knob moves a plug within the fluid stream which varies the flow rate. The flow rate is determined according to the pressure drop value measured by a differential pressure meter connected to the pressure test ports and the adjustment knob position.



Meets requirements of ANSI/NSF 372. Certified to Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes.

#### DYNAMIC BALANCING VALVES FOR PLUMBING AND HYDRONICS



#### 128 FlowCal+™ sweat

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal™ cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32°-212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Models with 2" diameter temperature gauge. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128448AFC***	1/2" sweat, PT ports, check	2.0	162.00
128458AFC***	¾" sweat, PT ports, check	2.0	189.00
128468AFC***	1" sweat, PT ports, check	2.2	198.00



#### 128 FlowCal+™ NPT

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Models with 2° diameter temperature gauge. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128440AFC***	1/2" NPT male, PT ports, check	2.0	167.00
128450AFC***	3/4" NPT male, PT ports, check	1.8	194.00
128460AFC***	1" NPT male, PT ports, check	2.0	200.00



#### 128 FlowCal+™ press

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Models with 2" diameter temperature gauge. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128447AFC***	½" press, PT ports, check	2.0	184.00
128457AFC***	¾" press, PT ports, check	2.0	207.00
128467AFC***	1" press, PT ports, check	2.2	215.00



#### 128 FlowCal+™ PEX

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal™ cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960. Models with 2" diameter temperature gauge. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128445AFC***	1/2" PEX crimp, PT ports, check	2.0	162.00
128455AFC***	¾" PEX crimp, PT ports, check	2.0	189.00
128465AFC***	1" PEX crimp, PT ports, check	2.2	198.00
128443AFC***	1/2" PEX expansion, PT ports, check	2.0	162.00
128453AFC***	3/4 "PEX expansion, PT ports, check	2.0	189.00
128463AFC***	1" PEX expansion, PT ports, check	2.2	198.00

#### **Construction details**

The Y-body 128 Series FlowCal uses the same flow cartridges as the 127 Series FlowCal. Because the body can remain in the piping, the Y-body simplifies serviceability and cartridge changeout. The 128 Series includes factory installed PT ports.



#### DYNAMIC BALANCING VALVES FOR PLUMBING AND HYDRONICS



#### 128 FlowCal+™ sweat

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32°-212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128449AFC***	1/2" sweat, PT ports, check	1.8	130.00
128459AFC***	¾" sweat, PT ports, check	1.8	137.00
128469AFC***	1" sweat, PT ports, check	2.0	165.00



#### 128 FlowCal+™ NPT

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32°-212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128441AFC***	1/2" NPT male, PT ports, check	1.8	131.00
128451AFC***	¾" NPT male, PT ports, check	1.6	138.00
128461AFC***	1" NPT male, PT ports, check	1.8	167.00



128 FlowCal+™ press

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. . Max. working pressure: 400 psi. Temperature range: 32°-212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128446AFC***	1/2" press, PT ports, check	1.8	141.00
128456AFC***	¾" press, PT ports, check	1.8	155.00
128466AFC***	1" press, PT ports, check	2.0	173.00



#### 128 FlowCal+™ PEX

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128444AFC***	1/2" PEX crimp, PT ports, check	1.8	130.00
128454AFC***	34" PEX crimp, PT ports, check	1.8	137.00
128464AFC***	1" PEX crimp, PT ports, check	2.0	165.00
128442AFC***	1/2" PEX expansion, PT ports, check	1.8	130.00
128452AFC***	3/4 "PEX expansion, PT ports, check	1.8	137.00
128462AFC***	1" PEX expansion, PT ports, check	2.0	165.00

#### **Connecting Device**

Integral pressure temperature ports allow for quick confirmation of differential pressure to ensure that the valve is functioning within its control range.



#### Replaceable cartridge

The internal regulator is assembled in the form of a self contained cartridge so as to permit easy removal from the body for inspection or replacement. It is equipped with a special automatic fixing system with wire and an operating ring for fast and safe positioning without using tools.



#### DYNAMIC BALANCING VALVES FOR PLUMBING AND HYDRONICS



#### 128 FlowCal<sup>™</sup> sweat

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal™ cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128549AF***	1/2" sweat, PT ports	1.8	120.00
128559AF***	34" sweat, PT ports	2.0	125.00
128569AF***	1" sweat, PT ports	2.2	141.00



#### 128 FlowCal™ NPT

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal™ cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
<b>128</b> 541AF***	1/2" NPT male, PT ports	2.0	125.00
128551AF***	¾" NPT male, PT ports	2.1	130.00
128561AF***	1" NPT male, PT ports	2.2	145.00



128 FlowCal™ press

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal™ cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F.

Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
128546AF***	1⁄2" press, PT ports	2.0	136.00
128556AF***	¾" press, PT ports	2.1	147.00
128566AF***	1" press, PT ports	2.2	175.00

NEN CON

#### 128 FlowCal™ PEX

Y-body automatic balancing valves. Patented anti-scale, low noise polymer FlowCal<sup>™</sup> cartridge. DZR low-lead brass bodies. PT ports included. Max. working pressure: 400 psi. Temperature range: 32° – 212° F. Max. percentage of glycol: 50%. Flow rate range: 0.35 to 10 GPM. Flow accuracy: +/- 10%. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs USD	
128544AF***	1/2" PEX crimp, PT ports	<sup>2</sup> " PEX crimp, PT ports 2.0 <b>12</b>	
128554AF***	¾" PEX crimp, PT ports	2.1	125.00
128564AF***	1" PEX crimp, PT ports	2.2	141.00
128542AF***	1/2" PEX expansion, PT ports	2.0	120.00
128552AF***	34" PEX expansion, PT ports	2.1	125.00
128562AF***	1" PEX expansion, PT ports	2.2	141.00

#### **Construction details**

The Y-body 128 Series FlowCal uses the same flow cartridges as the 127 Series FlowCal. Because the body can remain in the piping, the Y-body simplifies serviceability and cartridge changeout. The 128 Series includes factory installed PT ports. The FlowCal+ models come with a check valve in the inlet tailpiece, to prevent backward flow in DHW recirculation applications, and are available with or without outlet temperature gauge. The standard FlowCal models do not include a check valve.





#### 127 FlowCal<sup>™</sup> sweat

Compact automatic recirculation balancing valves. DZR low-lead brass bodies.

Patented anti-scale, low noise polymer. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127349AF ***	1/2" sweat union	0.8	108.00
127359AF ***	3/4" sweat union	0.8	114.00
127369AF ***	1" sweat union	1.0	131.00



## 127 FlowCal™ NPT

Compact automatic recirculation balancing valves.

DZR low-lead brass bodies. Patented anti-scale, low noise polymer. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	
127341AF ***	1/2" NPT male union	1.0	115.00
127351AF ***	34" NPT male union	1.0	119.00
127361AF ***	1" NPT male union	1.2	135.00



#### 127 FlowCal<sup>™</sup> press

Compact automatic recirculation balancing valves. DZR low-lead brass bodies. Patented anti-scale, low noise polymer. Max. working pressure: 230 psi. Temperature range: 32° – 212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on **page 30** to complete full part number.



### 127 FlowCal™ PEX

Compact automatic recirculation balancing valves. DZR low-lead brass bodies. Patented anti-scale, low noise polymer. Max. working pressure: 230 psi. Temperature range: 32° – 212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960 Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs USD	
127344AF ***	1/2" PEX crimp union	n 1.0 <b>108.0</b>	
127342AF ***	1/2" PEX expansion union	1.0	108.00
127354AF ***	3/4" PEX crimp union	1.0	114.00
127352AF ***	3/4" PEX expansion union	1.0	114.00
127364AF ***	1" PEX crimp union	1.3	131.00
127362AF ***	1" PEX expansion union	1.3	131.00



#### 127 FlowCal<sup>™</sup> body

Compact automatic recirculation balancing valves. DZR low-lead brass bodies. Patented anti-scale, low noise polymer. Max. working pressure: 230 psi. Temperature range: 32° – 212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on **page 30** to complete full part number.

Code Description		Lbs	USD
127000A ***	127 body + *** GPM cartridge, no fittings	1.0	82.20



Union isolation ball valve Low lead MxF union fits between valve body and tailpiece.

Code	Description	Lbs	USD				
127346AF ***	1⁄2" press union	0.9	127.00	Code	Description	Lbs	USD
127356AF ***	¾" press union	1.0	140.00	290030	1" M x 1" F union ball valve	1.0	47.60
127366AF ***	1" press union	1.3	171.00	NA10815	Stem extension for 290030	0.2	27.10

#### DYNAMIC BALANCING VALVES FOR PLUMBING AND HYDRONICS



#### 127 FlowCal+™ sweat

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. FlowCal™ cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Dual scale: 30 - 210°F (0° - 100°C). Gauge accuracy: ±6°F. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127148AFC **	* 1/2" sweat union	1.0	156.00
127158AFC **	* ¾" sweat union	1.0	170.00
127168AFC **	* 1" sweat union	1.2	198.00



#### 127 FlowCal+™ PEX

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. FlowCal<sup>TM</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range:  $32^{\circ} - 212^{\circ}$ F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Dual scale: 30 – 210°F (0° – 100°C). Gauge accuracy: ± 6°F. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960 Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127145AFC ***	1/2" PEX crimp union	1.2	156.00
127143AFC ***	1/2" PEX expansion union	1.2	156.00
127155AFC ***	¾" PEX crimp union	1.2	170.00
127153AFC ***	3/4 "PEX expansion union	1.2	170.00
127165AFC ***	1" PEX crimp union	1.5	198.00
127163AFC ***	1" PEX expansion union	1.5	198.00

#### Flow rate selection for 127 and 128 FlowCal<sup>™</sup>

GPM	Last 3 digits 	Differential Pressure Control Ranges (psid)
0.35	G35	
.5	G50	2-14
.75	G75	
1.0	1G0	
1.3	1G3	
1.5	1G5	
1.7	1G7	
2.0	2G0	
2.2	2G2	
2.5	2G5	2-32
2.6	2G6	
3.0	3G0	
3.5	3G5	
4.0	4G0	
4.5	4G5	
5.0	5G0	
6.0	6G0	
7.0	7G0	4-34
8.0	8G0	
9.0	9G0	5.05
10	10G	5-35

#### Comp Pater FlowC Inlet fl Max. Temp Max. Flow

#### 127 FlowCal+™ NPT

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. FlowCal<sup>™</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Dual scale: 30 - 210°F (0° - 100°C). Gauge accuracy: ± 6°F. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127140AFC ***	1/2" NPT male union	1.2	161.00
127150AFC ***	3/4" NPT male union	1.2	193.00
127160AFC ***	1" NPT male union	1.4	200.00



#### 127 FlowCal+™ press

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. FlowCal<sup>™</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Dual scale: 30 - 210°F (0° - 100°C). Gauge accuracy: ± 6°F. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127147AFC ***	1/2" press union	1.0	151.00
127157AFC ***	¾" press union	1.2	188.00
127167AFC ***	1" press union	1.5	207.00



#### 127 FlowCal+<sup>™</sup> sweat

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. DZR low-lead brass bodies. FlowCal<sup>™</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on **page 30** to complete full part number.

Code	Description	Lbs	USD
127149AFC ***	1/2" sweat union	0.8	119.00
127159AFC ***	¾" sweat union	0.8	129.00
127169AFC ***	1" sweat union	1.0	159.00



#### 127 FlowCal+™ PEX

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. DZR low-lead brass bodies. FlowCal<sup>™</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. PEX crimp: ASTM F1807 PEX expansion: ASTM F1960 Select desired flow rate on page 30 to complete full part number.

Code	Description	Lbs	USD
127144AFC ***	1/2" PEX crimp union	1.0	119.00
127142AFC ***	1/2" PEX expansion union	1.0	129.00
127154AFC ***	¾" PEX crimp union	1.0	159.00
127152AFC ***	34" PEX expansion union	1.0	119.00
127164AFC ***	1" PEX crimp union	1.3	129.00
127162AFC ***	1" PEX expansion union	1.3	159.00

#### Construction details FlowCal+



#### 127 FlowCal+™ NPT

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. DZR low-lead brass bodies. FlowCal™ cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on page 30 to complete full part number.

Code	Description	Lbs	USD
127141AFC	*** 1⁄2" NPT male union	1.0	120.00
127151AFC	*** ¾" NPT male union	1.0	128.00
127161AFC	*** 1" NPT male union	1.2	161.00



#### 127 FlowCal+™ press

Compact automatic recirculation balancing valves. Patented anti-scale, low noise polymer. DZR low-lead brass bodies. FlowCal<sup>™</sup> cartridge. Inlet flow check valve. Max. working pressure: 230 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50% Flow rate range: 0.35 to 10 GPM. Flow accuracy: ±10%. Select desired flow rate on page 30 to complete full part number.

Code	Description	Lbs	USD
127146AFC ***	1/2" press union	0.9	119.00
127156AFC ***	¾" press union	1.0	147.00
127166AFC ***	1" press union	1.3	169.00

## 121 **FlowCal**<sup>™</sup>

Automatic flow balancing valve with integral ball valve. Not for use in potable water / plumbing systems, not low lead Brass body. Patented anti-scale, low noise polymer FlowCal™ cartridge. Maximum working pressure: 400 psi (400 WOG). Working temperature range: 32°-212°F (0°-100°C). Max. percentage of glycol: 50%. Differential pressure control ranges: 2-14, 2-32, 4-34, 5-35 psid. Flow rate: fixed flow rate settings ranging from 0.35-21 GPM. Flow accuracy: ±10%. US Patent 7,246,635 B2.

Available with optional factory-installed pressure and temperature test ports (1213xxx Series).



Code	Description	Lbs	USD
<b>121</b> 141A •••	1/2" NPT female	2.7	142.00
<b>121</b> 149A •••	1/2" sweat	2.7	136.00
<b>121</b> 151A •••	3/4" NPT female	2.7	143.00
<b>121</b> 159A •••	3/4" sweat	2.7	137.00
<b>121</b> 161A •••	1" NPT female	5.0	294.00
<b>121</b> 169A •••	1" sweat	5.0	280.00
<b>121</b> 171A •••	1¼" NPT female	5.0	330.00
<b>121</b> 179A •••	1¼" sweat	5.0	314.00
<b>121</b> 341A •••	1/2" NPT female with PT test ports	3.2	153.00
121349A •••	1/2" sweat with PT test ports	3.2	145.00
<b>121</b> 351A •••	3/4" NPT female with PT test ports	3.2	157.00
121359A •••	3/4" sweat with PT test ports	3.2	146.00
<b>121</b> 361A •••	1" NPT female with PT test ports	5.5	304.00
121369A •••	1" sweat with PT test ports	5.5	290.00
<b>121</b> 371A •••	11/4" NPT female with PT test ports	5.5	340.00
121379A •••	11/4" sweat with PT test ports	5.5	323.00



#### Select desired flow rate to complete full part number.

Size	GPM	Last 3 digits 	Differential Pressure Control Ranges (psid)
1⁄2", 3⁄4"	0.35	G35	
1/2", 3/4"	0.5	G50	2 - 14
1/2", 3/4"	0.75	G75	
1/2", 3/4"	1	1G0	
1/2", 3/4"	1.3	1G3	
1/2", 3/4"	1.5	1G5	
1/2", 3/4"	1.7	1G7	
1/2", 3/4"	2	2G0	
1/2", 3/4"	2.2	2G2	
1/2", 3/4"	2.5	2G5	2 - 32
1⁄2", 3⁄4", 1"	2.6	2G6	
1⁄2", 3⁄4", 1"	3	3G0	
1⁄2", 3⁄4", 1"	3.5	3G5	
1⁄2", 3⁄4", 1", 11⁄4"	4	4G0	
1⁄2", 3⁄4", 1", 11⁄4"	4.5	4G5	
1⁄2", 3⁄4", 1", 11⁄4"	5	5G0	
1⁄2", 3⁄4", 1", 11⁄4"	6	6G0	
1⁄2", 3⁄4", 1", 11⁄4"	7	7G0	4 — 34
1⁄2", 3⁄4", 1", 11⁄4"	8	8G0	1

Size	GPM	Last 3 digits 	Differential Pressure Control Ranges (psid)
1⁄2", 3⁄4", 1", 11⁄4"	9	9G0	5 - 35
1⁄2", 3⁄4", 1", 11⁄4"	10	10G	5 - 55
1", 1¼"	11	11G	
1", 1¼"	12	12G	3 — 32
1", 1¼"	13	13G	
1", 1¼"	14	14G	
1", 1¼"	15	15G	
1", 1¼"	16	16G	
1", 1¼"	17	17G	4 - 35
1", 1¼"	18	18G	4 - 55
1", 1¼"	19	19G	
1", 1¼"	20	20G	
1", 1¼"	21	21G	

Size	Flow Rates
1/2"	.35 - 10 GPM
3⁄4"	.35 -10 GPM
1"	2.5-21 GPM
1¼"	4-21 GPM

Replacement flow cartridge kits are available. Consult factory.



#### THERMAL BALANCING VALVES FOR PLUMBING



## 1164 ThermoSetter™

Compact adjustable thermal balancing valve for domestic hot water recirculation circuits. Drywell for optional temperature gauge or probe.

DZR low-lead brass body. Optional outlet check valve. Max. working pressure: 230 psi. Adjustment temperature range: 105° – 150°F. Cv max: 2.1; Cv min: 0.35. Cv design: 0.69.



### 1163 ThermoSetter™

Adjustable thermal balancing valve for domestic hot water recirculation circuits. With by-pass valve for thermal disinfection. Purchase 656 actuator separately. Temperature gauge included. DZR low-lead brass body. Optional outlet check valve. Max. working pressure: 230 psi. ½" and ¾" models: Adjustment range; 95° – 140°F Cv max: 2.1; Cv min: 0.23. Cv disinfection: 1.2; Cv design: 0.52. 1" and 1¼" models: Adjustment range: 95° – 150°F Cv max: 4.4; Cv min: 1.0. Cv disinfection: 2.3; Cv design: 1.9.

Code	Description	Lbs	USD
<b>116</b> 440A	1/2" FNPT	1.6	203.00
116440AC	1/2" FNPT, check valve	1.8	247.00
<b>116</b> 441A	1⁄2" FNPT, gauge	1.5	216.00
<b>116</b> 441AC	1⁄2" FNPT, gauge, check valve	1.7	263.00
<b>116</b> 450A	34" FNPT	1.6	218.00
116450AC	3/4 "FNPT, check valve	1.8	271.00
<b>116</b> 451A	¾" FNPT, gauge	1.5	233.00
<b>116</b> 451AC	3/4" FNPT, gauge, check valve	1.7	284.00

Code	Description	Lbs	USD
116340A	1⁄2" FNPT	1.8	307.00
116340AC	1/2" FNPT, check valve	2.0	353.00
116350A	34" FNPT	1.7	323.00
116350AC	3/4" FNPT, check valve	1.9	376.00
116360A	1" FNPT, gauge	2.3	426.00
116360AC	1" FNPT, gauge, check valve	2.5	559.00
116370A	1¼" FNPT, gauge	2.2	451.00
116370AC	11/4" FNPT, gauge, check valve	2.4	597.00

#### **Construction details**



Complies with NSF/ANSI/CAN 372 low lead laws for use in accordance with the U.S. and Canadian plumbing codes, and with NSF/ANSI/CAN 61 (180F).

33



## 1162,1166 ThermoSetter™

Adjustable thermal balancing valve for domestic hot water recirculation circuits. With thermal by-pass cartridge for thermal disinfection. DZR low-lead brass body. Temperature gauge included. Max. working pressure: 230 psi. ½" and ¾" models: Adjustment range; 95° – 140°F Cv max: 2.1; Cv min: 0.23. Cv disinfection: 1.2; Cv design: 0.52. 1" and 1¼" models: Adjustment range: 95° – 150°F Cv max: 4.4; Cv min: 1.0. Cv disinfection: 2.3; Cv design: 1.9.



## 1161 ThermoSetter™

Adjustable thermal balancing valve for domestic hot water recirculation circuits. Drywell for optional temperature gauge or probe. DZR low-lead brass body.

D2H low-lead brass body. Max. working pressure: 230 psi. ½" and ¾" models: Adjustment range; 95°—140°F Cv max: 2.1; Cv min: 0.23. Cv disinfection: 1.2; Cv design: 0.52. 1" and 1¼" models: Adjustment range: 95°—150°F Cv max: 4.4; Cv min: 1.0. Cv disinfection: 2.3; Cv design: 1.9.

Code	Description	Lbs	USD
<b>116</b> 240A	1/2" FNPT, 160°F bypass	1.8	294.00
116240AC	1/2" FNPT, check valve, 160°F bypass	2.0	336.00
<b>116</b> 250A	3/4 " FNPT, 160°F bypass	1.7	308.00
116250AC	3/4" FNPT, check valve, 160°F bypass	1.9	361.00
<b>116</b> 260A	1" FNPT, 160°F bypass	1.8	411.00
116260AC	1" FNPT check, 160°F bypass	2.0	543.00
<b>116</b> 270A	1-1/4" FNPT, 160°F bypass	1.7	438.00
116270AC	11/4" FNPT, check, 160°F bypass	1.9	583.00
<b>116</b> 640A	1/2" FNPT, 140°F bypass	1.8	294.00
116640AC	1/2" FNPT, check valve, 140°F bypass	2.0	336.00
116650A	¾" FNPT, 140°F bypass	1.7	308.00
116650AC	3/4" FNPT, check valve, 140°F bypass	1.9	361.00
<b>116</b> 660A	1" FNPT, 140°F bypass	2.3	411.00
116660AC	1" FNPT, check, 140°F bypass	2.5	543.00
<b>116</b> 670A	1¼" FNPT, 140°F bypass	2.2	438.00
116670AC	11/4" FNPT, check, 140°F bypass	2.4	583.00

Code	Description	Lbs	USD
<b>116</b> 140A	1/2" FNPT	1.6	244.00
116140AC	1/2" FNPT, check valve	1.8	298.00
<b>116</b> 141A	1⁄2" FNPT, gauge	1.7	260.00
116141AC	1/2" FNPT, gauge, check valve	1.9	316.00
<b>116</b> 150A	3/4" FNPT	1.5	262.00
116150AC	¾" FNPT, check valve	1.7	324.00
<b>116</b> 151A	¾" FNPT, gauge	1.6	279.00
116151AC	¾" FNPT, gauge, check valve	1.8	342.00
<b>116</b> 160A	1" FNPT	2.1	343.00
116160AC	1" FNPT, check	2.3	476.00
<b>116</b> 161A	1" FNPT, gauge	2.2	358.00
116161AC	1" FNPT, gauge, check	2.4	492.00
<b>116</b> 170A	1¼" FNPT	2.0	369.00
116170AC	1¼" FNPT, check	2.2	515.00
<b>116</b> 171A	1¼" FNPT, gauge	2.1	383.00
116171AC	1¼" FNPT, gauge, check	2.3	530.00

#### Construction details



Complies with NSF/ANSI/CAN 372 low lead laws for use in accordance with the U.S. and Canadian plumbing codes, and with NSF/ANSI/CAN 61 (180F).





Thermal disinfection bypass cartridges.

Code	Description	Lbs	USD
F0001286	140°F bypass cartridge	0.1	52.70
F0000580	160°F bypass cartridge	0.1	52.70



Temperature gauge fits 116 ThermoSetter™
Working temperature range: 30°-180°F.

Code	Description	Lbs	USD
<b>116</b> 010	11/2" dial temp. gauge	0.1	15.00

Replacement actuator bypass cartridge

DZR low-lead brass.



Description

Code

**116**000

Actuator disinfection cartridge for use with 656 actuator.

Check valve fits 116 ThermoSetter<sup>™</sup>.

Max. working pressure: 150 psi.

Max. working temperature: 250°F.

Lbs

0.1

USD

68.00

Code	Description	Lbs	USD
F0001516	1/2", 3/4" balancing cartridge	0.1	52.70
	Insulation shell fit		о II тм

Code	Description	Lbs	USD
CBN116140*	Insulation shell for 1161, 1162, 1163	0.1	36.40
CBN116440*	Insulation shell for 1164	0.1	35.70
CBN116160**	Insulation shell for 1161, 1162, 1163	0.1	38.90
*Fits 1/2" and 3/4"			

\*\*Fits1" and 11/4"



l ===== () 📑 MMB

## NA108

NPT full port ball valves with extended operator handle for insulated or bare pipes. For use with hot or cold water piping in plumbing or hydronic applications. High strength forged low lead brass. Blowout-proof stem with dual o-ring seals. Pressure rating 600 WOG. Temperature rating -4° – 366°F.

Replacement main balancing cartridge.

Code	Description	Lbs	USD
NA10469	1/2" FNPT x MNPT inline check valve	0.1	45.30
<b>NA104</b> 67	34" FNPT x MNPT inline check valve	0.1	52.70
NA51361*	1" MNPT in, 1" FNPT out	1.1	131.00
<b>NA513</b> 71*	1¼" MNPT in, 1¼" FNPT out	1.3	144.00



Low lead brass pipe nipples. For connecting NA108 ball valve to other FNPT valves such as 130, 132, 142, 116 Series.

Code	Description	Lbs	USD
NA10834	1⁄2" NPT nipple	0.1	4.80
NA10835	¾" NPT nipple	0.1	7.60
NA10836	1" NPT nipple	0.1	11.90
NA10837	1¼" NPT nipple	0.3	20.60
NA10838	1½" NPT nipple	0.3	21.60
NA10839	2" NPT nipple	0.5	31.40

Code	Description	Lbs	USD
NA10824	1/2" FNPT ball valve low lead	0.4	38.40
NA10825	3/4 " FNPT ball valve low lead	0.6	47.10
NA10826	1" FNPT ball valve low lead	1.0	61.10
NA10827	11/4" FNPT ball valve low lead	1.6	102.00
NA10828	11/2" FNPT ball valve low lead	1.9	129.00
NA10829	2" FNPT ball valve low lead	3.0	314.00

To order a ThermoSetter<sup>™</sup> with isolation ball valves, add suffix "...001" to any of the 116 Series code numbers listed in these pages. See NA108 Series on page 52 for isolation valve details.



www.caleffi.com



# **PRESCAL<sup>™</sup> PRVS PRECISION ENGINEERED** FOR DURABLE PERFORMANCE

<image>

The **PresCal™** pressure reducing valve family is constructed of dezincification-resistant low lead brass and low friction moving parts that stand up to hard water and scale for maximum durability. The diaphragm models as well as the new *true piston* models feature a service-friendly **removable cartridge** with integral stainless steel mesh strainer that makes cleaning or rebuilding **fast and easy**. Approvals include compliance with U.S. and Canadian plumbing codes. CALEFFI GUARANTEED.


# PRVS, BACKFLOW PREVENTERS AND VACUUM RELIEF VALVES





#### **PRODUCTS INCLUDED IN SECTION**

Pressure reducing valves Backflow preventers, RPZ type Backflow preventers, dual check Vacuum relief valve This diagram is for illustration purposes only



#### 535H PresCal<sup>™</sup> sweat

Pressure reducing valve for residential and commercial applications. DZR low-lead brass body. Max. working pressure: 300 psi. Max. working temperature: 180°F. Pressure setting range: 15 - 90 psi. Front and back set point indication for visibility in any mounting orientation. UV protective cover included.



# 535H PresCal™ NPT

Pressure reducing valve for residential and commercial applications. DZR low-lead brass body. Max. working pressure: 300 psi. Max. working temperature: 180°F. Pressure setting range: 15 – 90 psi. Front and back set point indication for visibility in any mounting orientation. UV protective cover included.

Code	Description	Max GPM	Lbs	USD
535940HA	1/2" sweat union	7.3	1.9	117.00
<b>535</b> 941HA*	1/2" sweat union	7.3	2.0	128.00
535950HA	3/4" sweat union	12	2.2	128.00
<b>535</b> 951HA*	3/4" sweat union	12	2.3	140.00
535960HA	1" sweat union	19	2.9	168.00
535961HA*	1" sweat union	19	3.0	180.00
535970HA	1¼" sweat union	34	5.6	372.00
535971HA*	11/4" sweat union	34	5.7	383.00
535980HA	11/2" sweat union	44	7.3	522.00
535981HA*	11/2" sweat union	44	7.4	533.00
535990HA	2" sweat union	70	9.7	677.00
535991HA*	2" sweat union	70	9.8	689.00
GPM flowrate a	t 6 feet per second water velocity.			

\*With gauge

#### Construction details 535H PresCal™



Code	Description	Max GPM	Lbs	USD
<b>535</b> 340HA	1/2" NPT female union	7.3	2.0	128.00
<b>535</b> 341HA*	1/2" NPT female union	7.3	2.1	140.00
<b>535</b> 350HA	3/4" NPT female union	12	2.3	137.00
535351HA*	3/4" NPT female union	12	2.4	148.00
535360HA	1" NPT female union	19	3.0	179.00
535361HA*	1" NPT female union	19	3.1	190.00
<b>535</b> 370HA	11/4" NPT female union	34	5.7	383.00
535371HA*	11/4" NPT female union	34	5.8	395.00
535380HA	11/2" NPT female union	44	7.3	549.00
<b>535</b> 381HA*	11/2" NPT female union	44	7.4	560.00
535390HA	2" NPT female union	70	9.7	677.00
535391HA*	2" NPT female union	70	9.8	689.00

GPM flowrate at 6 feet per second water velocity.

\*With gauge



#### 535H PresCal<sup>™</sup> press

Pressure reducing valve for residential and commercial applications. DZR low-lead brass body. Max. working pressure: 300 psi. Max. working temperature: 180°F. Pressure setting range: 15 — 90 psi. Front and back set point indication for visibility in any mounting orientation. UV protective cover included.

Code	Description		Max GPM	Lbs	USD
535640HA	1/2" press union	NEW	7.3	1.9	141.00
535641HA*	1⁄2" press union	NEN	7.3	2.0	152.00
<b>535</b> 650HA	34" press union		12	2.3	144.00
<b>535</b> 651HA*	3/4" press union		12	2.4	155.00
535660HA	1" press union		19	3.0	195.00
535661HA*	1" press union		19	3.1	207.00
<b>535</b> 670HA	1¼" press union		34	5.8	543.00
535671HA*	1¼" press union		34	5.8	554.00
535680HA	1½" press union		44	7.3	779.00
535681HA*	1½" press union		44	7.4	791.00
535690HA	2" press union		70	9.7	960.00
535691HA*	2" press union		70	9.8	971.00
GPM flowrate at	6 feet per second water velocity.				

\*With gauge

Complies with: ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes. Plenum rated: compliant with the requirements of standard UL 2043.

USD

#### PRESSURE REDUCING VALVES

Code



\*With gauge

#### **535H PresCal™** PEX

Pressure reducing valve for residential and commercial applications. DZR low-lead brass body. Max. working pressure: 300 psi. Max. working temperature: 180°F. Pressure setting range: 15 – 90 psi. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960. Front and back set point indication for visibility in any mounting orientation. UV protective cover included.

PVC jumper nipple with male union thread. The

length of the jumper nipple matches the 535H

Series valve body face-to-face dimension (B'), allowing the piping to be completed prior to the installation of valve and permitting quick change out from the jumper to the valve.



Description

#### **535H PresCal**<sup>™</sup> Body

Replacement valve body. DZR low lead body. Gauge port plug NA10438 included with body. See fitting selection table in Section P5.

Lbs

Code	Description	Max GPM	Lbs	USD
<b>535</b> 750HA	¾" PEX crimp union	12	2.3	128.00
<b>535</b> 751HA*	34" PEX crimp union	12	2.4	140.00
<b>535</b> 550HA	3/4" PEX expansion union	19	2.3	168.00
<b>535</b> 551HA*	3/4" PEX expansion union	19	2.4	180.00
<b>535</b> 760HA	1" PEX crimp union	12	3.0	128.00
<b>535</b> 761HA*	1" PEX crimp union	12	3.1	140.00
535560HA	1" PEX expansion union	19	3.0	168.00
<b>535</b> 561HA*	1" PEX expansion union	19	3.1	180.00
GPM flowrate at	6 feet per second water velocity.			

NA535840HA 1/2" body 1.9 89.10 NA535841HA 2.0 100.80 1/2" body, gauge NA535850HA 3/4" body 2.2 93.90 2.3 NA535851HA 34" body, gauge 105.00 NA535860HA 1" body 2.9 123.90 1" body, gauge NA535861HA 3.0 135.50 NA535870HA 11/4" body 6.1 270.90 NA535871HA 11/4" body, gauge 6.2 282.50 382.20 7.3 NA535880HA 11/2" body NA535881HA 11/2" body, gauge 7.4 393.80 NA535890HA 9.7 443.10 2" body NA535891HA 2" body, gauge 9.8 455.70



Replacement cartridge for 535H Series pressure reducer.

Code	Description	Lbs	USD
NA11304	Jumper nipple for 535H ½"	0.1	15.90
NA11305	Jumper nipple for 535H ¾"	0.1	17.50
NA11306	Jumper nipple for 535H 1"	0.2	18.70
NA11307	Jumper nipple for 535H 1¼"	0.3	20.10
NA11308	Jumper nipple for 535H 1½"	0.3	21.90
NA11309	Jumper nipple for 535H 2"	0.5	63.20

Code	Description	Lbs	USD
<b>535</b> 006HA	Fits 535H ½", ¾" , 1"	0.3	65.70
535009HA	Fits 535H 1¼", 1½", 2"	0.5	198.00

Complies with: ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes. Plenum rated: compliant with the requirements of standard UL 2043.



#### 533H PresCal<sup>™</sup> Compact sweat

Compact pressure reducing valve for residential and light commercial applications.

DZR low lead body with inlet union connection.

Low friction anti-scale moving parts. High flow seat design. Adjustment screw for pressure set point. Tamper-resistant cap included. Max. working pressure: 250 psi. Max. working temperature: 180°F. Pressure setting range: 15-80 psi. Factory setting: 45 psi.



#### 533H PresCal<sup>™</sup> Compact press

Compact pressure reducing valve for residential and light commercial applications. DZR low-lead brass body with inlet union connection.

Low friction anti-scale moving parts. High flow seat design. Adjustment screw for pressure set point. Tamper-resistant cap included. Max. working pressure: 250 psi. Max. working temperature: 180°F. Pressure setting range: 15-80 psi. Factory setting: 45 psi.

Code	Description	Max GPM	Lbs	USD
533940HA*	1/2", sweat union in	5.6	2.0	91.30
<b>533</b> 941HA**	1⁄2", sweat union in	5.6	2.1	104.00
<b>533</b> 950HA*	¾", sweat union in	10	2.3	65.90
533951HA**	¾", sweat union in	10	2.4	77.30

Code	Description		Max GPM	Lbs	USD
533640HA*	1⁄2", press union in	NEW	10	2.3	110.00
533641HA**	1⁄2", press union in	NEN	10	2.4	121.00
533650HA*	¾", press union in		10	2.3	65.90
533651HA**	¾", press union in		10	2.4	77.30
*ENIDE II I					

\*FNPT outlet

\*\*FNPT outlet with gauge



\*\*FNPT outlet with gauge

\*FNPT outlet

#### **533H** PresCal<sup>™</sup> Compact NPT

Compact pressure reducing valve for residential and light commercial applications.

DZR low-lead brass body with inlet union connection.

Low friction anti-scale moving parts. High flow seat design.

Adjustment screw for pressure set point. Tamper-resistant cap included.

Max. working pressure: 250 psi.

Max. working temperature: 180°F. Pressure setting range: 15-80 psi. Factory setting: 45 psi.



#### **533H** PresCal™ Compact PEX

Compact pressure reducing valve for residential and light commercial applications. DZR low-lead brass body with inlet union connection. Low friction anti-scale moving parts. High flow seat design. PEX crimp: ASTM F1807. PEX expansion: ASTM F1960. Adjustment screw for pressure set point. Tamper-resistant cap included. Max. working pressure: 250 psi. Max. working temperature: 180°F. Pressure setting range: 15-80 psi. Factory setting: 45 psi.

Code	Description	Max GPM	Lbs	USD
533340HA*	1/2", NPT female union in	5.6	1.9	100.00
533341HA**	1⁄2", NPT female union in	5.6	2.0	113.00
533350HA*	3/4", NPT female union in	10	2.2	65.90
5333351HA**	34", NPT female union in	10	2.3	77.30

		,	
*FNPT outlet			

\*\*FNPT outlet with gauge

Description Max GPM Lbs USD Code 533750HA\* 3/4", PEX crimp union in 2.3 65.90 10 533751HA\*\* 3/4", PEX crimp union in 10 2.4 77.30 2.3 533850HA\* 34", PEX expan union in 65.90 10 533851HA\*\* 3/4", PEX expan union in 10 2.3 77.30 \*FNPT outlet

\*\*FNPT outlet with gauge

Complies with: ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes.



Code

533000H

#### Construction details 533H PresCal™





Replacement cartridge for 533H Series pressure reducer.

P 3

USD

49.10

2.	
A F	
1.	

Description

Fits 533H 1/2", 3/4"

#### **533H PresCal**<sup>™</sup> Body

Replacement valve body. DZR low lead body. Gauge port plug NA10438 included with body. See fitting selection table in Section P5.

Lbs

0.2



Code	Description	Lbs	USD
NA533449HA	1/2" body	0.7	81.60
NA533459HA	¾" body	0.9	86.30

Pressure gauge fits 535H and 533H Series pressure reducers. Dial size: 2". Pressure range: 0-100 psi /0-7 bar. Connection:  $\frac{1}{6}$ " NPT.

Code	Description	Lbs	USD
<b>NA102</b> 73	1/8" NPT male	0.1	14.60



#### PRESSURE REDUCING VALVES



#### 536 PresCal™ HP sweat High Range

High performance piston type pressure reducing valve for high rise buildings and other applications where high pressures are present and require staged pressure control. DZR low-lead brass body. Pressure gauge: 0-200 psi. Max. working pressure: 360 psi. Max. working temperature: 180°F. Pressure setting range: 90 – 150 psi Factory setting: 115 psi



## **536 PresCal™ HP** NPT High Range

High performance piston type pressure reducing valve for high rise buildings and other applications where high pressures are present and require staged pressure control. DZR low-lead brass body. Pressure gauge: 0-200 psi. Max. working pressure: 360 psi. Max. working temperature: 180°F. Pressure setting range: 90 – 150 psi Factory setting: 115 psi

Code	Description	Мах	Lbs	USD
<b>536</b> 043A 109	1/2" sweat	7.3	3.3	321.00
<b>536</b> 053A 109	3/4" sweat	12	4.4	354.00
<b>536</b> 063A 109	1" sweat	19	5.0	468.00
<b>536</b> 073A 109	11/4" sweat	34	7.5	648.00
<b>536</b> 083A 109	11/2" sweat	44	8.8	793.00
<b>536</b> 093A 109	2" sweat	70	12	1,020.00





#### Gauge for high range. 2½" dial. ¼" CBM

NA10813	0-200 psi	0.4	54.10
Code	Description	Lbs	USD

#### Application diagram

The high range 536A PresCal HP is designed for 1st stage pressure control due to it's adjustment range of 90 - 150 psi. The 2nd stage PRV is typically a diaphragm type, such as the 535H PresCal, with an adjustment range of 15 - 90 psi.





Complies with NSF/ANSI/CAN 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, as certified by ICC-ES, file PMG-1360.

#### PRESSURE REDUCING VALVES



#### 536 PresCal™ HP sweat Low Range

High performance piston type pressure reducing valve designed for demanding applications where water hammer and pressure spikes are present that would damage a diaphragm type PRV. DZR low-lead brass body. Pressure gauge: 0-100 psi. Max working pressure: 300 psi. Max working temperature: 180°F Pressure setting range 10 - 90 psi. Factory setting 45 psi

Code	Description	Max GPM	Lbs	USD
<b>536</b> 044A 109	1/2" sweat	7.3	3.3	321.00
<b>536</b> 054A 109	3/4" sweat	12	4.4	354.00
<b>536</b> 064A 109	1" sweat	19	5.0	468.00
<b>536</b> 074A 109	1¼" sweat	34	7.5	648.00
<b>536</b> 084A 109	11/2" sweat	44	8.8	793.00

#### Function

The PresCal<sup>™</sup>HP 536A Series pressure reducing valve is a high performance true piston-type PRV that can withstand the punishing conditions of water hammer while ensuring high pressure reduction and control. Models 536x3A, with set point adjustment range 90 to 150 psi, provide the first stage of pressure reduction in a two-valve Series where the pressure ratio between the inlet and outlet would be too high for single PRV to control. Models 536x4A, also a piston PRV, comply with ASSE 1003, have a standard adjustment range of 10 to 90 psi and the all-metal design makes them ideal for outdoor locations and irrigation pressure control.



# **536 PresCal™ HP** NPT Low Range

High performance piston type pressure reducing valve designed for demanding applications where water hammer and pressure spikes are present that would damage a diaphragm type PRV. DZR low-lead brass body. Pressure gauge: 0-100 psi. Max working pressure: 300 psi. Max working temperature: 180°F Pressure setting range 10 - 90 psi. Factory setting 45 psi



#### 536 PresCal<sup>™</sup> HP press Low Range

High performance piston type pressure reducing valve designed for demanding applications where water hammer and pressure spikes are present that would damage a diaphragm type PRV. DZR low-lead brass body. Pressure gauge: 0-100 psi. Max working pressure: 300 psi. Max working temperature: 180°F Pressure setting range 10 - 90 psi. Factory setting 45 psi

Code	Description	Max GPM	Lbs	USD
<b>536</b> 044A 106	1/2" press	7.3	3.3	353.00
<b>536</b> 054A 106	¾" press	12	4.4	409.00
<b>536</b> 064A 106	1" press	19	5.0	540.00
536074A 106	1-¼" press	34	7.5	749.00
<b>536</b> 084A 106	1-1/2" press	44	8.8	959.00



O-ring seal and NA10810 gauge adapter for 536A PresCal™ HP valves.

Code	Description	Lbs	USD
R57264*	O-ring seal	0.1	1.00
NA10810**	1/4" G male x 1/4" FNPT	0.3	24.90

\*for NA10810 gauge adapter for high and low range.

\*\*Gauge adapter fitting for high and low range.

Code Description Max GPM Lbs USD 536044A 103 1/2" NPT female 7.3 3.3 338.00 34" NPT female 536054A 103 12 4.4 372.00 536064A 103 1" NPT female 19 491.00 5.0 536074A 103 1-1/4" NPT female 34 680.00 7.5 536084A 103 1-1/2" NPT female 44 8.8 835.00



Gauge for low range. 2½" dial. ¼" CBM

Code	Description	Lbs	USD
NA10817	0-100 psi gauge, low range	0.4	52.50

#### Pressure compensating

Caleffi 536A Series pressure reducing valves are designed with a pressure balanced seat/plug. This ensures precise and constant controlled outlet pressure despite upstream pressure fluctuations. In the figure, the thrust towards the opening is counterbalanced by the force created by the closing pressure acting on the compensating piston. Since the piston has a surface area equal to that of the valve plug, the two forces cancel out each other.



Complies with NSF/ANSI/CAN 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, as certified by ICC-ES, file PMG-1360.

#### **BACKFLOW PREVENTERS, RPZ TYPE**



#### 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body. Max. working pressure: 150 psi. Max. working temperature: 150°F.



Description

#### 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body. Max. working pressure: 150 psi. Max. working temperature: 150°F.

l hs

LISD

Code	Description	Lbs	USD
<b>574</b> 004A	1⁄2" FNPT	5.0	361.00
<b>574</b> 064A	1⁄2" press	5.1	382.00
59977*	Upstream check valve	0.1	22.40
59978*	Downstream check valve	0.2	25.90
59979*	Discharge valve assembly	0.1	40.20
NA11604**	Rebuild kit (1/2") incl. checks, disch valve	0.7	80.00
59980*	Discharge air gap	0.1	54.10
F0001006*	Test port valve (½" - 1")	0.2	24.70

\*Replacement

\*\*Rebuild kit

#### Function

Caleffi 574 Series RPZ backflow preventers have dual unions for simple removal of the body for service or rebuilding. Access to the internal components from the top is also easy without removing the valve from the piping, if desired. Rebuild parts are available by ordering a single part number kit, for each size RPZ. The PT ports are located on top for easy access whether flow is right-to-left or left-to-right.

#### Construction details 1/2" RPZ Backflow Preventer



0000	Beschption	LUU	000
<b>574</b> 050A	¾" FNPT	9.5	433.00
<b>574</b> 056A	¾" press	9.6	471.00
59469*	Upstream check valve (¾")	0.2	57.60
59470*	Downstream check valve (3/4")	0.2	61.20
59471*	Discharge valve assembly (¾")	0.3	122.00
59472*	Valve seat (¾")	0.1	43.20
NA11605**	Checks, disch valve, seat for (3/4 ")	0.8	258.00
39623*	Discharge air gap (¾" to 2")	0.2	59.50
F0001006*	Test port valve (1/2" to 1")	0.2	24.70
*Replacement	1		

\*\*Rebuild kit

#### Function

Code

The backflow preventer can be used in all systems where there is danger of the potable water supply system being contaminated. It prevents an accidental reduction in the pressure in the distribution system from causing backflow from contaminated water in user installations.

#### Construction details 3/4 and 1" RPZ Backflow Preventer



Complies with: ASSE 1013, CSA B64.4, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes.

#### **BACKFLOW PREVENTERS, RPZ TYPE**



#### 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body. Max. working pressure: 150 psi. Max. working temperature: 150°F.

Code	Description	Lbs	USD
574006A	1" FNPT	11	451.00
<b>574</b> 066A	1" press	11	501.00
59455*	Upstream check valve (1")	0.3	94.10
59456*	Downstream check valve (1")	0.3	94.10
59471*	Discharge valve assembly (1")	0.3	122.00
59472*	Valve seat (1")	0.1	43.20
NA11606**	Checks, disch valve, seat (1")	0.1	303.00
39623*	Discharge air gap (¾" to 2")	0.2	59.50
F0001006	Test port valve (1/2" to 1")	0.2	24.70

\*Replacement

\*\*Rebuild kit

# 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body. Max. working pressure: 150 psi. Max. working temperature: 150°F.

Code	Description	Lbs	USD
<b>574</b> 801A	11/2" FNPT	14	887.00
574806A	1½" press	14	1,006.00
59455*	Upstream check valve (11/2")	0.3	94.10
59456*	Downstream check valve (11/2")	0.6	94.10
59457*	Discharge valve assembly (1½")	0.6	133.00
59458*	Valve seat (11/2")	0.2	45.40
NA11608**	incl. checks, disch valve, seat for (11/2")	1.4	367.00
39623*	Discharge air gap (¾" to 2")	0.2	59.50
F0001901	Test port valve (11/4" to 2")	0.2	20.10
*Renlacemen	1		

\*Replacement

\*\*Rebuild kit

#### Construction details 11⁄4" and 11⁄2" RPZ Backflow Preventer





#### 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body.

Max. working pressure: 150 psi. Max. working temperature: 150°F.

Code	Description	Lbs	USD
<b>574</b> 700A	11/4" FNPT	14	821.00
<b>574</b> 706A	1¼" press	14	934.00
59455*	Upstream check valve (11/4")	0.3	94.10
59456*	Downstream check valve (11/4")	0.3	94.10
59457*	Discharge valve assembly (11/4")	0.6	133.00
59458*	Valve seat (11/4")	0.2	45.40
NA11607**	Incl. checks, disch valve, seat for (11/4")	1.4	367.00
39623*	Discharge air gap (¾" to 2")	0.2	59.50
F0001901	Test port valve (11/4" to 2")	0.2	20.10
*Replacement			

\*\*Rebuild kit



#### 574 RPZ Backflow Preventer

Testable reduced pressure zone backflow preventer. DZR low lead brass body. Max. working pressure: 150 psi. Max. working temperature: 150°F.

Code	Description	Lbs	USD
<b>574</b> 900A	2" FNPT	20	1,396.00
<b>574</b> 906A	2" press	20	1,606.00
59459*	Upstream check valve (2")	0.4	152.00
59460*	Downstream check valve (2")	0.4	135.00
59461*	Discharge valve assembly (2")	0.7	258.00
59462*	Valve seat (2")	0.3	51.90
NA11609**	incl. checks, disch valve, seat for (2")	1.8	709.00
39623*	Discharge air gap (¾" to 2")	0.2	59.50
F0001901	Test port valve (11/4" to 2")	0.2	20.10
*D	1		

\*Replacement

\*\*Rebuild kit

#### Construction details 2" RPZ Backflow Preventer



Complies with: ASSE 1013, CSA B64.4, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes.

#### **BACKFLOW PREVENTERS, DUAL CHECK**



#### 3048 Dual Check Backflow Preventer sweat

Serviceable inline spring check valves. DZR low-lead brass body. Max working pressure 160 psi (11 bar). Operating temperature range 32°-150° F

#### Function

Dual check backflow preventer for residential domestic water supply lines or commercial low-hazard backflow applications, wherever **ASSE 1024** backflow preventers are approved.



### 3048 Dual Check Backflow Preventer PEX

Serviceable inline spring check valves. DZR low-lead brass body. Max working pressure 160 psi (11 bar). Operating temperature range 32°-150° F PEX crimp: ASTM F1807. PEX expansion: ASTM F1960.

Code	Description	Lbs	USD
304849A	1/2" sweat	1.2	79.00
304859A	3/4" sweat	1.6	80.00
304869A	1" sweat	1.6	89.00



#### 3048 Dual Check Backflow Preventer MNPT

Serviceable inline spring check valves. DZR low-lead brass body. Max working pressure 160 psi (11 bar). Operating temperature range 32°-150° F

Description	Lbs	USD
1/2" PEX crimp	1.0	79.00
1/2" PEX expansion	1.0	79.00
¾" PEX crimp	1.2	80.00
34" PEX expansion	1.2	80.00
1" PEX crimp	1.4	89.00
1" PEX expansion	1.4	89.00
	½" PEX crimp         ½" PEX expansion         ¾" PEX crimp         ¾" PEX expansion         1" PEX crimp	½" PEX crimp         1.0           ½" PEX expansion         1.0           ¾" PEX crimp         1.2           ¾" PEX expansion         1.2           ¾" PEX crimp         1.4



#### 3048 Dual Check Backflow Preventer press

Serviceable inline spring check valves. DZR low-lead brass body. Max working pressure 160 psi (11 bar). Operating temperature range 32°-150° F

Code	Description	Lbs	USD
304840A	1/2" MNPT	1.0	85.00
304850A	3/4" MNPT	1.2	86.00
304860A	1" MNPT	1.6	94.00



#### 3048 Dual Check Backflow Preventer FNPT

Serviceable inline spring check valves. DZR low-lead brass body. Max working pressure 160 psi (11 bar). Operating temperature range 32°-150° F

Code	Description	Lbs	USD
304843A	1/2" FNPT	1.2	85.00
304853A	34" FNPT	1.6	86.00

Code Description l bs USD 304846A 1/2" press 1.0 92.00 304856A 93.00 3/4" press 1.2 304866A 102.00 1" press 1.4

#### **Construction details**



Complies with the requirement of ASSE 1024 and NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes.

#### **BACKFLOW PREVENTERS, DUAL CHECK**



# 573 **Dual Check Backflow Preventer**

Dual check continuous pressure backflow preventer with atmospheric vent. DZR low Lead brass body. Max. working pressure: 175 psi. Working temperature range: 32°-250°F.

Emergency backpressure temperature: 250°F.

Certified to: ASSE 1012, CSA B64.3, NSF/ANSI/CAN 372, Low Lead Laws and listed by ICC-ES. Meets codes IPC, IRC & UPC for use in accordance with the U.S. and Canadian plumbing codes.

#### **Construction details**



#### USD Code Description Lbs 573403A 1/2" NPT female unions 1.7 97.50 573406A 1/2" press unions 1.7 119.00 573409A 1/2" sweat unions 1.7 92.70 1/2" sweat union inlet. 1/2" FNPT union outlet 573493A 1.7 95.40 34" NPT female unions 102.00 573503A 1.7 573100A\* Replacement body w/washers 1.5 71.60

\*See fitting selection table in Section 8

#### **VACUUM RELIEF VALVE**



Code	Description	Lbs	USD
304040A	1/2" MNPT	0.8	35.00
304050A	34" MNPT	0.8	38.00

#### Application diagram

JEW



304 Vacuum Relief Valve (VRV)

Vacuum relief valves automatically allow air to enter into the piping system to prevent vacuum conditions that could siphon the water from the system and damage water heater/tank equipment. VRVs are suitable for water and low pressure steam service and are ideal for use in water heaters and supply tanks, table top heaters, jacketed steam kettles, unit heaters, low pressure steam systems, and steam coil heaters.

DZR low-lead brass body.

Max working pressure 160 psi.

Operating temperature range 32°-150°F.

#### **Construction details**



Approvals: ANSI 21.22-2015, ANSI/NSF/CAN 372 low lead laws and ANSI/NSF/CAN 61 commercial hot rating certified by ICC-ES.

www.caleffi.com



# PLUMBVENT™ LOW LEAD AR VENT

PLUMBVENT<sup>™</sup> is the market's **only** low lead air vent designed to automatically remove air from domestic water at high points in plumbing systems. As water within the system warms, air naturally comes out of solution. It can accumulate into air pockets, risking efficient pump performance. PLUMBVENT ensures reliable recirculation flow. Approvals include compliance with U.S. and Canadian plumbing codes. CALEFFI GUARANTEED.



# PLUMBING MISCELLANEOUS COMPONENTS





#### **PRODUCTS INCLUDED IN SECTION**

Union Y-strainers for plumbing and hydronics Y-strainer with ball valve for hydronics Isolation ball valves Tankless water heater service valve kit Serviceable low low lead check valves Automatic air vent for plumbing



#### 128 Y-strainer sweat

Y-strainer with union connections. PT ports included. ½" FNPT plugged blowdown port. Max. working pressure: 400 psi. Temperature range: 32°-212°F. Max. percentage of glycol: 50%



#### 128 Y-strainer PEX

Y-strainer with union connections. PT ports included. ½" FNPT plugged blowdown port. Max. working pressure: 400 psi. Temperature range: 32° – 212°F. Max. percentage of glycol: 50%

Code	Description	Lbs	USD
<b>128</b> 749A 000	Union strainer 1/2" sweat, PT ports	1.3	133.00
128759A 000	Union strainer ¾" sweat, PT ports	1.5	136.00
<b>128</b> 769A 000	Union strainer 1" sweat, PT ports	1.7	141.00



#### 128 Y-strainer NPT

Y-strainer with union connections. PT ports included. ½" FNPT plugged blowdown port. Max. working pressure: 400 psi. Temperature range: 32° – 212°F. Max. percentage of glycol: 50%

Code	Description	Lbs	USD
<b>128</b> 744A 000	Union strainer ½" PEX crimp, PT ports	1.5	137.00
<b>128</b> 754A 000	Union strainer ¾" PEX crimp, PT ports	1.5	141.00
<b>128</b> 764A 000	Union strainer 1" PEX crimp, PT ports	1.7	143.00
<b>128</b> 742A 000	Union strainer ½" PEX expan., PT ports	1.5	137.00
<b>128</b> 752A 000	Union strainer ¾" PEX expan., PT ports	1.5	141.00
<b>128</b> 762A 000	Union strainer 1" PEX expan., PT ports	1.7	143.00

#### **Construction details**

The 128 Series Y-strainer uses the same brass body as the 128 Series FlowCal balancing valve, with dual unions and PT ports included. The 20 mesh stainless steel screen can be easily removed for cleaning without removing the body from the piping or a  $\frac{1}{2}$ " purge valve can replace the plug for easy dirt blowdown.



Code	Description	Lbs	USD
128741A 000	Union strainer ½" NPT male, PT ports	1.5	144.00
<b>128</b> 751A 000	Union strainer ¾" NPT male, PT ports	1.5	147.00
128761A 000	Union strainer 1" NPT male, PT ports	1.7	149.00



## 128 Y-strainer press

Y-strainer with union connections. PT ports included. ½" FNPT plugged blowdown port. Max. working pressure: 400 psi. Temperature range: 32°−212°F. Max. percentage of glycol: 50%

Code	Description	Lbs	USD
128746A 000	Union strainer ½" press, PT ports	1.5	153.00
128756A 000	Union strainer ¾" press, PT ports	1.5	157.00
128766A 000	Union strainer 1" press, PT ports	1.7	166.00

#### **Y-STRAINER WITH BALL VALVE FOR HYDRONICS**



Code	Description	Cv	Lbs	USD
120141A 000	1/2" NPT female	8.0	3.0	129.00
<b>120</b> 149A 000	1/2" sweat	8.0	3.0	123.00
<b>120</b> 151A 000	34" NPT female	8.4	3.0	130.00
<b>120</b> 159A 000	3/4" sweat	8.4	3.0	124.00
<b>120</b> 161A 000	1" NPT female	19	6.0	258.00
<b>120</b> 169A 000	1" sweat	19	6.0	245.00
<b>120</b> 171A 000	1¼" NPT female	20	6.0	294.00
<b>120</b> 179A 000	1¼" sweat	20	6.0	280.00
<b>120</b> 341A 000	1/2" NPT female with PT	8.0	3.5	139.00
<b>120</b> 349A 000	1/2" sweat with PT	8.0	3.5	134.00
<b>120</b> 351A 000	34" NPT female with PT	8.4	3.5	141.00
120359A 000	3/4" sweat with PT	8.4	3.5	135.00
120361A 000	1" NPT female with PT	19	6.5	269.00
120369A 000	1" sweat with PT	19	6.5	255.00
<b>120</b> 371A 000	11/4" NPT female with PT	20	6.5	304.00
120379A 000	1¼" sweat with PT	20	6.5	290.00

#### **Construction details**



## 120 Y-strainer

Y-strainer with integral ball valve for hydronic applications only, not for plumbing. Brass body. Stainless steel strainer cartridge. Maximum working pressure: 400 psi (400 WOG). Working temperature range: 32° – 212°F. Max. percentage glycol: 50%. Strainer (20 mesh). Connections: – body: FNPT union x FNPT, sweat union x sweat. Pressure and temperature ports: ¼" NPT. Drain port connection: ¼" for ½" & ¾" or ½" for 1" & 1¼".

#### **DRAIN VALVES AND PT PORTS**



Drain valves for field installation in blow-down-port connection of the 120 Series Y-strainer. Brass body. With ¾" garden hose connection. Max. working pressure: 150 psi. Max: working temperature: 250°F.

Code	Description	Lbs	USD
538202 FD	1/4" NPT fits 1/2-3/4" 120 Series	0.3	15.20
538402 FD	1/2" NPT fits 1-11/4" 120 Series	0.3	15.60



Fast-plug pressure/temperature test ports fits FlowCal<sup>™</sup> automatic flow balancing valves and the 120 Series Y-strainer. The double-sealing core insures long and trouble free service. Low Lead brass body. Nordel Core. Connections: ¼" NPT male. Cap thread: ¾"-24 UNF. Working temperature range: 0° – 275°F. Max. working pressure: 435 psi. Pair (2 ports included).

Code	Description	Lbs	USD
<b>100</b> 001A	Standard size, 11/2" length (pair)	0.5	16.10

#### **ISOLATION BALL VALVES**



290 Isolation Valve

Isolation ball valve. Low lead MxF union fits between valve body and tailpiece.

Code	Description	Lbs	USD
290030	1" M x 1" F union ball valve	1.0	47.60
NA10815	Stem extension for 290030	0.2	27.10



Example: NA108 valves + nipples on 116 series balancing valves



## NA108

NPT full port ball valves with extended operator handle for insulated or bare pipes. For use with hot or cold water piping in plumbing or hydronic applications. High strength forged low lead brass. Blowout-proof stem with dual o-ring seals. Pressure rating 600 WOG. Temperature rating -4° – 366°F.

Code	Description	Lbs	USD
NA10824	1/2" FNPT ball valve low lead	0.4	38.40
NA10825	3/4" FNPT ball valve low lead	0.6	47.10
NA10826	1" FNPT ball valve low lead	1.0	61.10
NA10827	11/4" FNPT ball valve low lead	1.6	102.00
NA10828	11/2" FNPT ball valve low lead	1.9	129.00
NA10829	2" FNPT ball valve low lead	3.0	314.00





Low lead brass pipe nipples. For connecting NA108 ball valve to other FNPT valves such as 130, 132, 142, 116 Series.

Code	Description	Lbs	USD
NA10834	1/2" NPT nipple	0.1	4.80
NA10835	¾" NPT nipple	0.1	7.60
NA10836	1" NPT nipple	0.1	11.90
NA10837	1¼" NPT nipple	0.3	20.60
NA10838	11/2" NPT nipple	0.3	21.60
NA10839	2" NPT nipple	0.5	31.40

#### TANKLESS WATER HEATER SERVICE VALVE KIT



#### 290 Tankless Water Heater Service Valve Kit

Tankless water heater service valves have union connections that attach directly to %" water heater MNPT nipples. Isolation valves and %" garden hose connections allow for flushing and servicing the water heater. A pressure relief valve, set to 150 psi, is included with each kit. DZR low lead brass body. Max working pressure 400 psi (27 bar). Operating temperature range 32°-210°F

Code Description Lbs USD

 $(0^{\circ} - 100^{\circ} C).$ 

 290503A
 ¾" FNPT service valve kit
 2.0
 156.00



#### **290 Service Valve Kit** with 520 TankMixer<sup>™</sup>

Relief valve and temperature gauge are included with the kit. DZR low lead brass body CW724R.

Max working pressure 400 psi (27 bar). Operating temperature range  $32^{\circ}$  –  $210^{\circ}$ F (0° – 100°C).

Code	Description	Lbs	USD
<b>290</b> 516A	3/4" press	5.0	475.00
<b>290</b> 519A	3/4" sweat	5.0	456.00
<b>290</b> 510A	34" FNPT	5.0	467.00
<b>290</b> 517A	3/4" PEX crimp	5.0	456.00
<b>290</b> 518A	34" PEX exp	5.0	456.00

Construction details



The tankless water heater service valve kit is available standalone (shown) or with the 520 Series TankMixer thermostatic mixing valve assembly.

#### Construction details for TankMixer<sup>™</sup> Kit





#### NA51 sweat

Serviceable low lead check valve. Max. working pressure: 150 psi (10 bar). Operating temperature range:  $32^{\circ}-150^{\circ}$ F (0° - 65°C).

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (1/2" through 11/4"); 0.50 psi (11/2", 2").



#### NA51 press

Serviceable low lead check valves Max. working pressure: 150 psi (10 bar). Operating temperature range:  $32^{\circ}-150^{\circ}$ F (0° - 65°C).

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (1/2" through 11/4"); 0.50 psi (11/2", 2").

Code	Description	Cv	Lbs	USD
<b>NA51</b> 246	1/2" press	17	0.4	114.00
NA51256	34" press	17	0.6	123.00
NA51366	1" press	30	1.1	178.00
<b>NA51</b> 376	1-1⁄4" press	30	1.3	209.00
<b>NA51</b> 486	11/2" press	75	2.6	451.00
<b>NA51</b> 496	2" press	75	2.6	495.00

Code	Description	Cv	Lbs	USD
NA51249	1/2" sweat	17	0.4	79.00
NA51259	34" sweat	17	0.4	86.70
NA51369	1" sweat	30	0.9	123.00
<b>NA51</b> 379	11/4" sweat	30	1.1	138.00
<b>NA51</b> 489	11/2" sweat	75	2.4	344.00
NA51499	2" sweat	75	2.4	366.00



Description

1/2" MNPT

3/4 MNPT

1" MNPT

1¼" MNPT

11/2" MNPT

2" MNPT

#### NA51 MNPT

Serviceable low lead check valve.

Cv

17

17

30

30

75

75

Serviceable low lead check valve. Max. working pressure: 150 psi (10 bar). Operating temperature range: 32° – 150°F

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (½" through 1¼"); 0.50 psi (1½", 2").

NA51 FNPT

Max. working pressure: 150 psi (10 bar). Operating temperature range:  $32^{\circ}-150^{\circ}F$  (0° - 65°C).

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (1/2" through 11/4"); 0.50 psi (11/2", 2").

Lbs

0.4

0.6

1.1

1.3

2.6

2.6

USD

94.30

99.50

130.00

143.00

366.00

388.00



# NA51 PEX

Serviceable low lead check valve. Max. working pressure: 150 psi (10 bar). Operating temperature range:  $32^{\circ}-150^{\circ}$ F (0° - 65°C).

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (½" through 1¼"); 0.50 psi (1½", 2"). PEX crimp: ASTM F1807 PEX expansion: ASTM F1960

Code	Description	Cv	Lbs	USD
<b>NA51</b> 247	1⁄2" PEX crimp	17	0.4	86.70
NA51257	34" PEX crimp	17	0.6	94.30
<b>NA51</b> 248	1/2" PEX expansion	17	0.4	86.70
NA51258	34" PEX expansion	17	0.6	94.30



# NA51 body

Serviceable low lead check valve without fittings.

Max. working pressure: 150 psi (10 bar). Operating temperature range:  $32^{\circ}$  –  $150^{\circ}$ F ( $0^{\circ}$  –  $65^{\circ}$ C).

Max. temperature: for one hour: 190°F (88°C). Opening pressure differential: 0.25 psi (½" through 1¼"); 0.50 psi (1½", 2").

Code	Description	Cv	Lbs	USD
NA51200	1⁄2", 3⁄4" body, small	17	0.2	56.00
NA51300	1", 1¼" body, medium	30	0.5	71.40
NA51400	11/2", 2" body, large	75	1.8	186.00



Replacement checks.



 $(0^{\circ} - 65^{\circ}C).$ 

	0.	Lbs	USD
Fits ½", ¾" (small body)	17	0.1	10.30
Fits 1", 1¼" (medium body)	30	0.1	10.30
Fits 11/2", 2" (large body)	75	0.2	17.80
	Fits 1", 1¼" (medium body)	Fits 1", 1¼" (medium body) 30	Fits 1", 1¼" (medium body) 30 0.1

Code

NA51240

NA51250

NA51360

NA51370

NA51480

NA51490

Code

NA502640A

**Application Diagram** 

Description

1/2" MNPT

#### AUTOMATIC AIR VENT FOR PLUMBING



NA5026	
<b>PLUMBVENT</b> <sup>TM</sup>	

Automatic air vent with low lead brass body. Compatible with plumbing systems. Hygroscopic cap (anti-drip). Max. working pressure: 150 psi. Max. discharge pressure: 90 psi. Max. discharge rate: 1.75 SCFM. Max working temperature: 240°F. Approval: NSF/ANSI/CAN 372 low lead.

#### Function

Float type automatic air vent designed to vent air from water at high points in plumbing system piping. Example applications include risers, domestic hot water storage tanks and recirculation system pump inlets. The automatic air vent is installed in the vertical position in parts of the system where air can accumulate and cause circulator air-lock or reduced efficiency. It is supplied complete with a safety hygroscopic cap that automatically closes the air discharge in case of contact with water.

#### **Construction details**



Lbs

0.6

USD

50.00



Complies with NSF/ANSI/CAN 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, as certified by ICC-ES, file PMG-1360.

www.caleffi.com



# FAST CONNECTIONS EASY & VERSATILE

**Fast, leak-proof and no-flame** Press and PEX connections are becoming the preferred standard by many professionals. Caleffi offers these convenient connections on our most popular products. Dual union valve bodies allow for flexible **mixing or matching of inlet and outlet fitting choices** to save transition adapters. **CALEFFI GUARANTEED**.



# FITTINGS AND MISCELLANEOUS COMPONENTS





#### **PRODUCTS INCLUDED IN SECTION**

Fittings configuration table Small mixing valves, zone valves, others with 1" union fittings PresCal<sup>™</sup> pressure reducing valve fittings Press fitting kits Mixing valve fittings AutoFill<sup>™</sup> and backflow preventer fittings Hydro separator fittings Fittings with threads Differential pressure bypass Uni-Switch<sup>™</sup> Universal flow switch Miscellaneous components

# G CALEFFI \_\_\_\_\_

P 5

Product Series	Code	Description	Nut code	Tailpiece code	Washer code	US
	NA20543	1⁄2" FNPT, 3⁄4" nut, washer	incl. w/tail	F49644	incl. w/tail	20.90
535H PresCal <sup>™</sup> (½")	NA20540	1/2" MNPT, 3/4" nut, washer	F41186	F31868	R0001458	17.30
533H PresCal™ (½") 553 AutoFill™	NA20549	1/2" sweat, 3/4" nut, washer	incl. w/tail	F49655	incl. w/tail	15.10
	NA20546	1/2" press, 3/4" nut, washer	F41186	NA10809	R0001458	17.70
	NA20643	1/2" FNPT, 1" nut, washer	F0000698	NA10569	R20011	20.90
	NA20640	1/2" MNPT, 1" nut, washer	F61008	R31981	R20011	18.00
	NA20640C	1/2" MNPT, 1" nut, washer, check	F61008	59893A	R20011	28.10
	NA20649	1/2" sweat, 1" nut, washer	F61008	NA10002	R20011	14.90
I27 FlowCal™	NA20649C	1/2" sweat, 1" nut, washer, check	F61008	NA10164	R20011	25.10
	NA20646	1/2" press, 1" nut, washer	F61008	NA10403	R20011	19.30
127 FlowCal+™	NA20646C	1/2" press, 1" nut, washer, check	F61008	NA10869C	R20011	20.70
32 QuickSetter+™	NA20647	1/2" PEX crimp, 1" nut, washer	F61008	F0000492	R20011	14.90
TOO T IN TH	NA20647C	1/2" PEX crimp, 1" nut, washer, check	F61008	NA10484	R20011	25.10
i20 TankMixer™	NA20648	1/2" PEX expansion, 1" nut, washer	F61008	F0001007	R20011	14.90
i20 AngleMix™	NA20648C	1/2" PEX expansion, 1" nut, washer, check	F61008	NA10634	R20011	25.10
21 MixCal™	NA20653	3/4" FNPT, 1" nut, washer	incl. w/tail	F49645	incl. w/tail	23.80
21 11112001	NA20650	34" MNPT, 1" nut, washer	F61008	31901A	R20011	20.90
213 TMV (req. inlet port check)	NA20650C	34" MNPT, 1" nut, washer, check	F61008	59840A	R20011	35.90
350 AutoFill™	NA20659	<sup>3</sup> / <sub>4</sub> " sweat, 1" nut, washer	F61008	NA10003	R20011	17.90
	NA20659C	<sup>3</sup> / <sub>4</sub> " sweat, 1" nut, washer, check	F61008	NA10165	R20011	32.90
33H PresCa™(¾")	NA20656	3/4" press, 1" nut, washer	incl. w/tail	NA16265	R20011	21.00
35H PresCal™ (¾")	NA20656C	3/4" press, 1" nut, washer, check	incl. w/tail	NA16265LC	R20011	46.70
	NA20657	3/4" PEX crimp, 1" nut, washer	F61008	F0000520	R20011	17.90
517 DISCAL®	NA20657C	3/4" PEX crimp, 1" nut, washer, check	F61008	NA10485	R20011	32.90
:000 LEGIOMIX (¾")	NA20658	3/4" PEX expansion, 1" nut, washer	F61008	F0001008	R20011	17.90
644 Ball Valve	NA20658C	3/4" PEX expansion, 1" nut, washer, check	F61008	NA10635	R20011	32.90
44 Dali Valve	NA20660	1" MNPT, 1" nut, washer	incl. w/tail	59817A	R20011	34.60
76 Zone Valve	NA20660C	1" MNPT, 1" nut, washer, check	incl. w/tail	59894A	R20011	49.60
2, Z3 Zone Valve	NA20669	1" sweat, 1" nut, washer	incl. w/tail	59834A	R20011	31.20
,	NA20669C	1" sweat, 1" nut, washer, check	incl. w/tail	59906A	R20011	46.20
IA512xx Serviceable check	NA20666	1" press, 1" nut, washer	incl. w/tail	NA16266	R20011	36.40
/40 Flow Meter	NA20666C	1" press, 1" nut, washer, check	incl. w/tail	NA16266LC	R20011	71.40
	NA20667	1" PEX crimp, 1" nut, washer	F61008	F0000521	R20011	31.20
	NA20667C	1" PEX crimp, 1" nut, washer, check	F61008	NA10486	R20011	46.20
	NA20668	1" PEX expansion, 1" nut, washer	F000698	F0001009	R20011	31.20
	NA20668C	1" PEX expansion, 1" nut, washer, check	F000698	NA10636	R20011	46.20
	NA20066C	1" MNPT, 11/4" nut, washer	R31495	NA10030	R0001454	30.30
	NA20760	1" FNPT, 11/4" nut, washer	incl. w/tail	F49646	incl. w/tail	33.30
535H PresCal™(1")	NA20763	1" PEX crimp, 1¼" nut, washer	R31495	NA10496	R0001454	33.30
		1" PEX crimp, 1 <sup>74</sup> nut, washer				
i20 AngleMix™ (1")	NA20768	• • •	R31495	NA10556	R0001454	31.20 40.20
	NA20766	1" press, 11/4" nut, washer	R11222	NA10747	R0001454	
	NA20769	1" sweat, 11/4" nut, washer	incl. w/tail	F49657	incl. w/tail	24.60
35H PresCal™(1¼")	NA20873	1¼" FNPT, 1½" nut, washer	incl. w/tail	F49647	incl. w/tail	60.60
IA513xx Serviceable check	NA20879	1¼" sweat, 1½" nut, washer	R31589	41787 CST	R0001457	54.60
	NA20876	11/4" press, 11/2" nut, washer	R11221	NA10707	R0001457	80.00
	NA20983	11/2" FNPT, 2" nut, washer	incl. w/tail	F0000493	incl. w/tail	92.00
535H PresCal™(1½")	NA20989	11/2" sweat, 2" nut, washer	incl. w/tail	F0000494	incl. w/tail	76.50
	NA20986	11/2" press, 2" nut, washer	incl. w/tail	NA10715	R0001459	167.00

58

# G CALEFFI \_\_\_\_\_

Product Series	Code	Description	Nut code	Tailpiece code	Washer code	USD
535H PresCal <sup>™</sup> (2")	NA21193	2" FNPT, 21/2" nut, washer	incl. w/tail	F0000495	R0001460	128.00
000111103001 (2)	NA21199	2" sweat, 2½" nut, washer	incl. w/tail	F0000496	incl. w/tail	139.00
NA514xx Serviceable check	NA21196	2" press, 2½" nut, washer	incl. w/tail	NA10709	R0001460	233.00
	NA20863	1" FNPT, 11/2" nut, washer	R0001452	31553 FD	R50005	37.30
548, 5495 Seps(1")	NA20869	1" sweat, 1½" nut, washer	R0001452	31554 FD	R50005	37.70
	NA20866	1" press 11/2" nut, washer	R0001452	NA10406	R50005	61.90
	NA20973	11/4" FNPT, 2" nut, washer	R53003	31401 FD	R50008	79.40
548, 5495 Seps (11/4")	NA20979	11/4" sweat, 2" nut, washer	R53003	31403 FD	R50008	106.00
	NA20976	1¼" press 2" nut, washer	R53003	NA10407	R50008	109.00
	NA21083	11/2" FNPT, 21/4" nut, washer	R53004	R41441	R50047	86.50
548, 5495 Seps (11/2")	NA21089	11/2" sweat, 21/4" nut, washer	R53004	41882A	R50047	110.00
5461 DISCALDIRTMAG™ (1½")	NA21086	11/2" press 21/4" nut, washer	R53004	NA10408	R50047	145.00
510 5105 0 (01)	NA21293	2" FNPT, 2¾" nut, washer	R53005	31426 FD	R50048	133.00
548, 5495 Seps (2")	NA21299	2" sweat, 2¾" nut, washer	R53005	31428 FD	R50048	157.00
5461 DISCALDIRTMAG™ (2")	NA21296	2" press 2¾" nut, washer	R53005	NA10409	R50048	214.00
5004 M/L O 1 TM (410)	NA20860	1" MNPT 11/2" nut, washer	R31589	NA10009	R0001457	41.50
5231 MixCal+™ (1") 6000 LEGIOMIX <sup>®</sup> (1")	NA20869	1" sweat, 1½" nut, washer	R31589	31554 FD	R0001457	37.70
0000 LEGIOIVIX" (T)	NA20866	1" press, 1-1/2" nut, washer	R31589	NA10706	R0001457	61.90
FOOT Miscore TM (11/11)	NA20870	11/4" MNPT 11/2" nut, washer	R31589	R41660	R0001457	72.90
5231 MixCal+™ (11/4")	NA20879	11/4" sweat, 11/2" nut, washer	R31589	41787 CST	R0001457	54.60
6000 LEGIOMIX® (11/4")	NA20876	1-1/4" press, 1-1/2" nut, washer	R11221	NA10707	R0001457	80.00
5001 M' O.I. TM (11/1)	NA21180	11/2" MNPT 21/2" nut, washer	R51838	41371A	R0001460	123.00
5231 MixCal+™ (1½")	NA21189	11/2" sweat 21/2" nut, washer	R51838	41788 CST	R0001460	107.00
6000 LEGIOMIX® (11/2")	NA21186	11/2" press, 2-1/2" nut, washer	R51838	NA10708	R0001460	161.00
FOOT MinOrly TM (OII)	NA21190	2" MNPT 21/2" nut, washer	R51838	41372A	R0001460	153.00
5231 MixCal+™ (2")	NA21199	2" sweat 21/2" nut, washer	R51838	41789 CST	R0001460	139.00
6000 LEGIOMIX® (2")	NA21196	2" press, 2-1/2" nut, washer	incl. w/tail	NA10709	R0001460	233.00

P 5

#### SMALL MIXING VALVES, ZONE VALVES, OTHERS WITH 1" UNION FITTINGS

Tail piece with check valve. Low lead brass.

Code	Description	Lbs	USD
<b>598</b> 93A	1/2" NPT male fits 1" nut	0.2	21.80
<b>598</b> 40A	3/4" NPT male fits 1" nut	0.3	29.80



Tail piece without check valve. Low lead brass.

	-		
Code	Description	Lbs	USD
<b>R319</b> 81	1/2" NPT male fits 1" nut	0.3	11.60
<b>319</b> 01A	34" NPT male fits 1" nut	0.4	15.10



Tail piece. Low lead brass. Requires sealing washer R20011, not included.

Code	Description	Lbs	USD
<b>598</b> 17A	1" NPT male with 1" nut	0.4	32.90
<b>598</b> 94A	1" NPT male with 1" nut w/check valve	0.5	47.80



Tail piece with check valve. Low lead brass.

Code	Description	Lbs	USD
<b>599</b> 04A	1/2" sweat fits 1" nut	0.2	19.00
<b>599</b> 05A	3/4" sweat for 1" nut	0.3	26.60



Copper press tail piece with 1" brass union nut. Low lead. Requires sealing washer, not included.

Code	Description	Lbs	USD
NA16264	1/2" press with 1" union nut	0.3	17.60
NA16265	3/4" press with 1" union nut	0.4	19.40
NA16266	1" press with 1" union nut	0.5	34.50



Long copper press tail piece with 1" brass union slip nut. Low lead. Requires sealing washer, not included.

Code	Description	Lbs	USD
NA10864L	½" press with 1" union nut 🛛 🕬	0.3	17.10
NA10864LC	½" press with 1" union nut/check valve 🝻	0.3	23.00
NA16265L	3/4 long press with 1" union slip nut	0.3	44.40
NA16265LC	3/4" long press with 1" union nut/check valve	0.3	56.20
NA16266L	1" long press with 1" union slip nut	0.3	66.30
NA16266LC	1" long press with 1" union nut/check valve	0.3	68.90



20011	1" union washer	0.1	1.60
ode	Description	Lbs	USD
	$\checkmark$		



Tail piece. Low lead brass.

Code	Description	Lbs	USD
<b>NA100</b> 02	1/2" sweat fits 1" nut	0.2	8.40
NA10003	34" sweat fits 1" nut	0.3	11.60



Tail piece. Low lead brass. Requires sealing washer R20011, not included.

Code	Description	Lbs	USD
<b>598</b> 34A	1" sweat with 1" nut	0.4	29.70
<b>599</b> 06A	1" sweat with 1" nut w/check valve	0.5	44.70



Tail piece with high temperature check valve. Low lead brass.

Code	Description	Lbs	USD
<b>NA101</b> 64	1/2" sweat fits 1" nut	0.2	26.30
<b>NA101</b> 65	3/4" sweat fits 1" nut	0.3	30.70



Tail piece with high temperature check valve. Low lead brass. Requires sealing washer R20011, not included.

NA10166	1" sweat with 1" nut w/check valve	0.4	50.30
Code	Description	Lbs	USD



Copper press low lead tail piece with check valve, requires F0000698 1" slip nut.

Code	Description	Lbs	USD
NA10419C	3/4" press long fits 1" slip nut w/check	0.3	45.00



Copper press low lead tail piece, requires F0000698 1" slip nut.

Code	Description		Lbs	USD
NA10403	1⁄2" press fits 1" nut		0.1	22.90
NA10864	1⁄2" press long fits 1" nut	NEW	0.1	21.70
NA10744	3/4" press fits 1" slip nut	NEW	0.1	16.50
NA10419	34" press long fits 1" slip nut		0.3	38.40
NA10404	1" press fits 1" slip nut		0.4	34.60
NA10786	1" press long fits 1" slip nut		0.5	58.40

5



#### SMALL MIXING VALVES, ZONE VALVES, OTHERS WITH 1" UNION FITTINGS



Union nut fits 1" union thread.

Code	Description	Lbs	USD
F61008	1" brass nut	0.2	4.60
F0000698	1" brass slip nut	0.2	6.40



PEX crimp (ASTM F1807) tailpiece for 1" union nut, requires sealing washer and nut, not included.



Compression fitting.

Code	Description	Lbs	USD
F0000718	3/8" compression tailpiece for 1" nut	0.1	17.10



PEX expansion (ASTM F1960) tailpiece for 1" union nut, requires sealing washer and nut, not included.

Code	Description	Lbs	USD
F0000492	1/2" PEX for 1" union nut	0.1	8.40
F0000520	¾" PEX for 1" union nut	0.1	11.60
F0000521	1" PEX for 1" union nut	0.1	24.90



PEX crimp (ASTM F1807) tailpiece for 1" union nut with check valve, requires sealing washer and nut, not included.

Code	Description	Lbs	USD
F0001007	1/2" PEX for 1" union nut	0.1	8.40
F0001008	3/4" PEX for 1" union nut	0.1	11.60
F0001009	1" PEX for 1" union nut	0.1	24.90



PEX expansion (ASTM F1960) tailpiece for 1" union nut with check valve, requi sealing washer and nut, not included.

Э		
ires		

5

Code	Description	Lbs	USD
NA10484	1⁄2" PEX for 1" union nut	0.1	19.00
NA10485	¾" PEX for 1" union nut	0.1	26.60
NA10486	1" PEX for 1" union nut	0.1	39.90

Code	Description	Lbs	USD
NA10634	1/2" PEX for 1" union nut	0.1	19.00
NA10635	3/4 "PEX for 1" union nut	0.1	26.60
NA10636	1" PEX for 1" union nut	0.1	39.90

## **5231 AND 6000 SERIES MIXING VALVE FITTINGS**



press tail piece. Low lead brass.



Sweat tail piece. Low lead brass.

Code	Description	Lbs	USD
NA10809	½" press tailpiece for ¾" nut 🛛 🕬	0.2	16.50
NA10744	¾" press tailpiece for 1" nut 🛛 🕬	0.2	16.50
NA10747	1" press tailpiece for 1¼" slip nut 🕬	0.4	22.80
NA10707	11/4" press tailpiece for 11/2" nut	0.4	84.20
NA10708	11/2" press tailpiece with 2" nut	0.5	121.00
NA10709	2" press tailpiece with 2½" nut	0.5	214.00



Description

1" brass nut

1" brass slip nut

11/2" union nut

21/2" union nut

Code

F61008

F0000698\*

R31589\*\*

R51838\*\*\*

\*Fits 3/4 valves \*\* Fits 1" and 11/4" valves

\*\*\* Fits 11/2" and 2" valves

R11221

Union nut.

11/2" slip union nut for 1-1/4" press

Description	Lbs	USD
1" sweat	0.3	36.50
1¼" sweat	0.3	35.80
11/2" sweat	0.4	56.80
2" sweat	0.5	73.90
	1" sweat 1¼" sweat 1½" sweat	1" sweat         0.3           1¼" sweat         0.3           1½" sweat         0.4



NPT male tailpiece. Low lead brass.

Code	Description	Lbs	USD
NA10009	1" NPT male	0.3	45.80
R41660	1¼" NPT male	0.3	52.40
<b>413</b> 71A	11/2" NPT male	0.4	59.10
<b>413</b> 72A	2" NPT male	0.5	76.50

15.60	<b>D</b> 000
45.00	0000
6.40	Code
4.60	
USD	

15.20

38.10

Lbs 0.2

0.2

0.2

0.2

0.3

Washer.

Code	Description	Lbs	USD
R0001462*	1" union washer	0.1	1.60
R0001457**	11/2" union washer	0.1	3.60
R0001460***	21/2" union washer	0.1	17.00
* Eite 3/ !! ush see			

\* Fits 3/4" valves \*\* Fits 1" and 11/4" valves

\*\*\* Fits 11/2" and 2" valves

#### PRESCAL<sup>™</sup> PRESSURE REDUCING VALVE FITTINGS



NPT female tailpieces with union nut and washer.

NPT male tailpieces for union nut.



PEX expansion tailpieces (ASTM F1960) for union nut.

Lbs

0.1

0.2

USD

11.60

27.10

Code	Description	Lbs	USD
F49644	1/2" NPT female tailpiece with 3/4" union nut	0.4	20.30
F49645	3/4" NPT female tailpiece with 1" union nut	0.5	23.00
F49646	1" NPT female tailpiece with 11/4" union nut	0.6	30.60
F49647	11/4" NPT female tailpiece with 11/2" union nut	0.7	51.00
F0000493	11/2" NPT female tailpiece with 2" union nut	0.9	91.70
F0000495	2" NPT female tailpiece with 2½" union nut	1.0	109.00

Code	Description	Lbs	USD
F0001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
NA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

F0001008	34" PEX expansion tailpiece for 1" union nut	0.1	11.60
NA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

-0001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
VA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

0001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
A10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

0001008	34" PEX expansion tailpiece for 1" union nut	0.1	11.60
IA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

-0001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
VA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

-0001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
VA10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

8001008	3/4" PEX expansion tailpiece for 1" union nut	0.1	11.60
A10556	1" PEX expansion tailpiece for 11/4" union nut	0.2	15.20

	( crimp tailpieces (ASTM F1807) for on nut.
--	---

Code Description F0000520 3/4" PEX crimp tailpiece for 1" union nut NA10496 1" PEX crimp tailpiece for 11/4" union nut

Со F3 31





ode	Description	Lbs	USD
31868	1/2" NPT male tailpiece for 3/4" union nut	0.1	12.20
1901A	3/4" NPT male tailpiece for 1" union nut	0.1	15.10



68	1/2" NPT male tailpiece for 3/4" union nut	0.1	12.20
1A	3/4" NPT male tailpiece for 1" union nut	0.1	15.10
	Sweat tailpieces.		



Union washers.





Union nut.

Code	Description	Lbs	USD
NA10001	1/2" sweat tailpiece for 3/4" union nut	0.1	10.20
NA10003	3/4" sweat tailpiece for 1" union nut	0.2	11.60
F49657*	1" sweat tailpiece with 11/4" nut	0.4	20.30
41787 CST	11/4" sweat tailpiece for 11/2" union nut	0.3	35.80
F0000494*	11/2" sweat tailpiece with 2" union nut	0.7	68.90
F0000496*	2" sweat tailpiece with 21/2" union nut	0.8	94.30

\*With washer



press tailpieces.

Code	Description	Lbs	USD
NA16265	3/4" press with 1" union nut	0.2	19.40
NA10497	1" press tailpiece with 11/4" union nut	0.4	38.20
NA10707	11/4" press tailpiece for 11/2" union nut	0.6	84.20
NA10715	1½" press tailpiece with 2" union nut	0.8	167.00
NA10709	2" press tailpiece with 21/2" union nut	0.9	214.00
NA10744	¾" press tailpiece for 1" nut 😡	0.2	16.50
NA10747	1" press tailpiece for 1¼" slip nut 🛛 🕬	0.4	22.80
NA10809	1/2" press tailpiece for 3/4" nut 🛛 📌	0.2	16.50

Code	Description	Lbs	USD
R0001458	3/4" union washer for 1/2" 535H	0.1	1.50
R20011	1" union washer for ¾" 535H	0.1	1.60
R0001454	1-1/4" union washer 1" 535H	0.1	2.50
R0001457	11/2" union washer for 11/4" 535H	0.1	3.60
R0001459	2" union washer for 11⁄2" 535H	0.1	6.90
R0001460	21/2" union washer for 2" 535H	0.1	17.00



5

## **AUTOFILL™ FITTINGS**

AutoFill™ union nut.

<b>(</b> )-	
	Descripti
6	3/11

Code

Code

R0000892

R0001393

R0001458

Code	Description		Lbs	USD
F41186	34" union nut		0.1	3.00
E		AutoFill™ tail piece.		
Code	Description		Lbs	USD
NA10001	1/2" sweat		0.3	9.40
		AutoFill™ tail piece.		
Code	Description		Lbs	USD
F31868	1⁄2" NPT male		0.1	11.20

AutoFill™ washer.

**BACKFLOW PREVENTER FITTINGS** 

preventer.



SEPARATOR FITTINGS



Tail piece for steel 548, 5495, 5461.

Tail piece for steel 548, 5495, 5461.

Code	Description	Lbs	USD
31554 FD	1" sweat, fits 546A	0.3	36.50
31403 FD	11/4" sweat, fits 547A	0.3	67.80
41882A	11/2" sweat, fits 548A	0.3	64.20
31428 FD	2" sweat, fits 549A	0.4	105.00



Press tail piece for steel 548, 5495, 5461.

Code	Description	Lbs	USD
NA10707	11/4" press tailpiece for 11/2" nut	0.4	1.40
NA10708	11/2" press tailpiece with 2" nut	0.5	1.40
NA10709	2" press tailpiece with 2½" nut	0.5	1.40

Union nut for steel 548, 5495, 5461.

Code	Description	Lbs	USD
R0001452	fits 546A	0.4	15.10
R53003	fits 547A	0.4	31.00
R53004	fits 548A	0.4	31.00
R53005	fits 549A	0.4	35.50



Union washer for steel 548, 5495, 5461.

Code	Description	Lbs	USD
R50005	fits 546A	0.2	3.60
R50008	fits 547A	0.2	7.20
R50047	fits 548A	0.2	14.50
R50048	fits 549A	0.2	17.60
-			

**P5** 



Description

3/4" union washer

NEN 0.1

Tail piece with screen fits 573 backflow

Lbs

0.1

Lbs

0.1

USD

1.40

USD

15.20

7.30

Tail piece fits 573 backflow preventer.

Code Description	Lbs	USD

R0001622	Union washer		0.1	3.50
Code	Description		Lbs	USD
0		Vasher union fits 573 backflow preventer		

# **G**CALEFFI \_

# **FITTINGS WITH ¾" THREADS**

		Union nut.	
Code	Description		Lbs
F41186	34" union nut		0.1

# **FITTINGS WITH 1" THREADS**



Double nipple.

Code Description Lbs USD	<b>NA121</b> 73	1" NPT x 1" NPT	0.4	27.40
	Code	Description	Lbs	USD



Sweat adapter.

<b>NA100</b> 62	1" sweat adaptor w/ 1" male thread	0.1	23.80
Code	Description	Lbs	USD

				-
<b>100</b> 62	1" sweat adaptor w/ 1" male thread	0.1	23.80	
de	Description	Lbs	USD	
	-			

USD

3.00

Code

Code

Code

R31706

**NA100**87

NA10119

Description

Description

Code	Description	Lbs	USD
61215A	1" NPT F x 1¼" M thread bushing	0.8	22.00

**FITTINGS WITH 11/4" THREADS** 

Sweat adapter.

1" sweat adapter x 11/4" union thread

Bushing.

1" female x 11/4" male thread bushing

Bushing.

l bs

0.4

Lbs

0.4

Lbs

0.3

USD

27.40

USD

7.60

USD

30.20

USD

22.10



Nipple.



Description

1" male x 11/4" male nipple



Union nut fits 1" union thread.

Code	Description	Lbs	USD
F61008	1" brass nut	0.2	4.60
F0000698	1" brass slip nut	0.2	6.40



Nipple.

<b>NA121</b> 62	¾" male w/ O-ring x 1" male thread	0.2	25.30
Code	Description	Lbs	USD



Union nut.

Code Description Lbs USD R0001454 11/4" washer 0.1 2.50



<b>NA100</b> 64	1" NPT w/ 1" male thread	0.2	24.70
Code	Description	Lbs	USD

Nipple.

#### DIFFFERENTIAL PRESSURE BYPASS

#### **UNIVERSAL FLOW SWITCH**



#### 519

Differential pressure by-pass valve. Adjustable from 2 to 10 psid. Brass body. Max. working pressure: 150 psi. Working temperature range: 32° – 230°F. 34" flow up to 9 gpm. 1" flow up to 40 gpm. 11/4" flow up to 45 gpm.



#### 626 **Uni-Switch**<sup>™</sup>

Universal flow switch. Suitable for 1" to 8" pipe size. Working pressure: 150 psi. Working temperature range: -20° – 250°F. Minimum flow: 5.7 gpm. Switch contacts: NO or NC. Switch rating: 15 A. CE, cUL, NEMA Type 3, IP 54. (UL) us

Code	Description	Lbs	USD
519502A	34" NPT male union	1.0	134.00
<b>519</b> 566A	¾" press union	1.0	152.00
<b>519</b> 599A	¾" sweat union	1.0	133.00
519600A	1" FNPT in, 1" NPT male union out	1.4	210.00
519609A	1" FNPT in, 1" sweat union out	1.4	210.00
519700A	11/4" FNPT in, 11/4" NPT male union out	1.5	252.00
519709A	11/4" FNPT in, 11/4" sweat union out	1.5	252.00

Code	Description	Lbs	USD
<b>626</b> 600A	1" NPT male thread	2.3	263.00
<b>626</b> 009	Replacement paddle assembly*	0.1	24.60
* stainless ste	eel		

#### **MISCELLANEOUS COMPONENTS**



#### **NA101**

Ball valve. Brass body. Max. working pressure: 600 psi. Max. working temperature: 365°F.



#### **NA510**

NBR, POM check valve. Max. percentage of glycol: 50%. Max. working pressure: 150 psi. Temperature range: 32° –150°F (190°F for max. 1 hour). Opening pressure differential: 0.25 psi (½" through 1¼"); 0.50 psi (1½", 2").

Code	Description	Lbs	USD
<b>NA101</b> 67	1/2" sweat x 1/2" sweat	0.5	10.30



# 538

Drain valve. Brass body. 3/4" garden hose thread with cap. Max. working pressure: 150 psi. Max. working temperature: 250°F.

NA51069	1" sweat union	17	1.0	76.50
Code	Description	Cv	Lbs	USD



## **NA503**

Tridicator dual pressure / temperature gauge for boilers. Dial size: 3 1/8". Pressure range: 0-75 psi. Temperature range: 60°-320°F. 1/4" NPT rear probe. For direct fluid stream submersion.

Code Description Lbs USD 538202 FD 1/4" NPT male x 3/4" GHT 0.3 15.20 538402 FD 1/2" NPT male x 3/4" GHT 0.3 15.60

Code	Description	Lbs	USD
<b>NA503</b> 040	1/4" NPT male center back	0.2	38.10

5 Ρ



www.caleffi.com

# **CALEFFI BIM LIBRARY THE HEART**OF YOUR DESIGNS





A LAN

Caleffi is BIM ready and we are eager to share our design know-how. The whole library is natively modeled in REVIT so files are of the highest quality, delivered in a user-friendly file size. Each family contains the parametric variants to allow calculation functions within AUTODESK® REVIT®. Choose Caleffi as part of your standard of excellence in design. **CALEFFI GUARANTEED.** 

#### Download the free library

#### For more information

bim.caleffi.com

woody.dickinson@caleffi.com

# **NOTES**





# LIMITED WARRANTY

**COVERAGE:** Caleffi North America Inc. ("WARRANTOR") warrants that each Caleffi PRODUCT will be free from defects in material and workmanship for a period of two years\* from the date of shipment/delivery of the PRODUCT (that can be identified by the "Caleffi" trademark, trade name, or logo affixed to them). The Limited Warranty is referred to herein as "the Limited warranty." The PURCHASER's sole and exclusive remedy under this Limited Warranty for defects in the PRODUCT shall be the repair, replacement or refund of the purchase price, in WARRANTOR's sole discretion, of the defective PRODUCT, or components thereof.

#### \*PRODUCT warranty exceptions:

Switching Zone Relays	3 years
Switching zone relays + valves (Z-one valves and Z-one relays installed together)	5 years

NOT COVERED: This Limited Warranty also does not apply to, and WARRANTOR shall have no liability or responsibility in respect of, damages or expenses relating to:

- The failure to properly store, transport, install or use the PRODUCT as, for example, specified in any manuals or other literature supplied by WARRANTOR, on WARRANTOR's website, or in accordance with any applicable laws, codes, regulators or standards;
- Any PRODUCT purchased from any entity other than WARRANTOR;
- Alteration, change or modification of the PRODUCT, including its subcomponents, parts or assemblies;
- WARRANTOR also makes no warranty that a PRODUCT manufactured does not infringe the intellectual property or other proprietary rights of any third party,
- Accidents, misuse, abuse, abnormal use, improper use, negligent use, wilful misconduct, or use exceeding the recommended and permitted limits of the PRODUCT, and/ or normal wear or deterioration;
- Any defect or non-conformity that has not been timely and promptly communicated in writing to WARRANTOR as set forth herein.
- Any damage, cost or expense caused by Act of God; or
- Loss of time, loss of use, inconvenience, loss of profits, lost business, lost business opportunities, damage to reputation, goodwill and any incidental or consequential damages arising out of or relating to the PRODUCT, or other matters not specifically covered hereunder.

PROCEDURE: Upon delivery, PURCHASER shall, within one (3) business day, inspect the PRODUCT for conformity and visible defects. PURCHASER shall give WARRANTOR immediate written, specific and detailed notice of any non-conformities or defects regarding the PRODUCT. Upon receipt of the written notice of claim, WARRANTOR shall have the right to inspect the PRODUCT. In the event of a defect covered by this Limited Warranty, WARRANTOR will, at WARRANTOR's discretion, repair or replace the PRODUCT or any of the WARRANTOR, is unfounded, the PURCHASER shall reimburse the WARRANTOR all reasonable costs incurred by the WARRANTOR, is unfounded, the PURCHASER shall reimburse the WARRANTOR all reasonable costs incurred by the WARRANTOR must approve, in advance and in writing, all repairs or replacements covered under or performed pursuant to this Limited Warranty. Any warranty repairs or service must be performed exclusively by WARRANTOR or other authorized representative of WARRANTOR or by another servicing facility pre-approved in writing by WARRANTOR. Acceptance of any Limited Warranty claim is not an admission that any PRODUCT or any of its component parts are defective. The PURCHASER forfeits any rights it may have under this Limited Warranty if the PURCHASER does not follow the procedure described herein.

All requests and notices under this Limited Warranty shall be directed to:

Caleffi North America Inc.

3883 West Milwaukee Road Milwaukee, WI 53208 E-Mail: returns.us@caleffi.com Phone (414) 238-2360 Fax: (414) 238-2366

LIMITATION OF DAMAGES: Except as expressly provided by this Limited Warranty, WARRANTOR SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ASSOCIATED WITH THE USE OR NON-USE OF THE PRODUCT OR A CLAIM UNDER THIS LIMITED WARRANTY, WHETHER THE CLAIM IS BASED ON CONTRACT, TORT OR OTHERWISE. The foregoing statements of warranty are exclusive and in lieu of all other remedies or damages. Some states do not

allow the exclusion or limitation of incidental or consequential damages, so only in this case this limitation or exclusion may not apply to you. This Limited Warranty shall be the sole and exclusive remedy available to the PURCHASER with respect to this PRODUCT. In the event of any alleged breach of any warranty or any legal action brought by the PURCHASER, based on breach of warranty, alleged negligence or other tortious conduct by WARRANTOR, the PURCHASER's sole and exclusive remedy will be the repair or replacement of any defective PRODUCT as stated herein. In no event shall the liability of the WARRANTOR exceed the purchase price of the PRODUCT.

DISCLAIMER: ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OF TRADE, BY STATUTE OR OTHERWISE, IS HEREBY STRICTLY LIMITED TO THE TERM OF THIS WRITTEN WARRANTY. This Limited Warranty shall be the sole and exclusive remedy available to the PURCHASER with respect to this PRODUCT. In the event of any alleged breach of any warranty or any legal action brought by the PURCHASER based on alleged negligence or other tortious conduct by WARRANTOR, the PURCHASER'S sole and exclusive remedy will be repair or replacement of defective materials or refund of the purchase price, as stated herein.

TRANSFER OF LIMITED WARRANTY: This warranty is made by WARRANTOR with only first PURCHASER of the PRODUCT and does not extend to any subsequent PURCHASER or any third parties. The unexpired portion of this Limited Warranty may not be transferred to any entity.

APPLICABLE LAW: The parties expressly acknowledge and irrevocably agree that any and all claims or disputes arising out of or otherwise relating to this Limited Warranty shall be decided by a binding arbitration administered by the American Arbitration Association pursuant to Commercial Industry Rules in effect as of the date of this Limited Warranty, to the exclusion of any place, except as necessary for the enforcement of arbitration rights. The place for any such arbitration shall be The State of Wisconsin. PURCHASER expressly waives any provision of law in the jurisdiction in which PURCHASER is located or any other potentially applicable law which conflicts with any provision of this Limited Warranty at any time.

OTHER RIGHTS: Your acceptance of delivery of The PRODUCT constitutes your acceptance of the terms of this Limited Warranty. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If any term or provision of this Limited Warranty is invalid or unenforceable under any local, state, or federal law, statute, judicial decision, regulation, ordinance, executive order or other rule of law, such term shall be deemed reformed or deleted, but only to the extent necessary to comply with such statute, regulation, ordinance, order or rule and the remaining provisions of this Limited Warranty shall remain in full force and effect.

**ENTIRE AGREEMENT:** This document alone contains the entire Limited Warranty given by WARRANTOR in respect of the PRODUCT. Nothing in WARRANTOR's product literature, marketing materials, advertisements and technical specifications expand or enlarge the scope of this Limited Warranty. There are no terms, promises, conditions or warranties regarding the PRODUCT other than those expressly contained herein. WARRANTOR specifically does not authorize any person, including but not limited to any dealer or other agent or employee of WARRANTOR to extend the time, scope, terms or conditions of this Limited Warranty or to create or assume for WARRANTOR my other obligation or liability with respect to the PRODUCT or other products designed, manufactured or sold by WARRANTOR. All terms of this Limited Warranty are contractual and not mere recitals, and constitute material terms of this Limited Warranty. It is agreed and acknowledged that the provisions of this Limited Warranty allocate the risks between WARRANTOR and PURCHASER, that WARRANTOR's pricing reflects this allocation of risk, and but for this allocation and limitation of liability, WARRANTOR would not have entered into this Limited Warranty. The agents, employees, and dealers of Caleffi Products are not authorized to make modifications to this limited warranty or make additional warranties binding on Caleffi.

THIS DOCUMENT AND ALL PROVISIONS CONTAINED HAS BEEN SPECIFICALLY AGREED BETWEEN THE PARTIES.



# HAVE A QUESTION? WANT TO LEARN MORE?

We are committed to your success and are here to help. Check out our website **CALEFFI.US** to explore an expansive collection of product information, training webinars, BIM objects, and our expansive library of educational idronics<sup>™</sup> journals.



marketing.us@caleffi.com

Caleffi North America, Inc. 3883 West Milwaukee Road · Milwaukee, WI 53208 Tel: 414.238.2360 · Fax: 414.238.2366