

FLOWING EXPERTISE

FEBRUARY 2025



**PLUMBING AND
HYDRONICS
CATALOG**

THE CALEFFI GREEN



OUR SUSTAINABLE COMMITMENT

We maximize energy efficiency through sustainable manufacturing innovation and Caleffi's expert application support.

**WASTE
RECOVERY
AND MORE**

85%
RAW MATERIALS
FROM ITALY

98.7%
RAW MATERIALS
FROM EUROPE



100%
EXPANDED POLYURETHANE
ELIMINATED
FROM PRODUCT PACKAGING



80%
SOLAR PV
FACILITY ENERGY MIX
NORTH AMERICA

-60%
POLYETHYLENE
FOR OUTGOING
PACKAGING

98.5%
PLASTIC
SCRAP
RECOVERED



100%
BRASS
SCRAP
RECOVERED

**WATCH
THE VIDEO**



SECTION	PAGES	
1	5	HYDRAULIC SEPARATORS
2	11	AIR AND DIRT SEPARATORS AND AIR VENTS
3	23	THERMOSTATIC RADIATOR VALVES
4	29	ZONE VALVES, CONTROLS AND COIL KITS
5	39	DISTRIBUTION MANIFOLDS AND MIXING STATIONS
6	47	FILLING UNITS AND BOILER TRIM KITS
7	53	MIXING VALVES
8	69	BALANCING VALVES
9	89	PRESSURE REDUCING VALVES
10	95	BACKFLOW PREVENTION AND SAFETY DEVICES
11	103	RENEWABLE COMPONENTS
12	107	SPECIALTY COMPONENTS AND KITS
13	117	FITTINGS
14	149	INDEX



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CALEFFI
Hydronic Solutions

SEP4™ 4-IN-1

HIGH PERFORMANCE HYDRAULIC SEPARATORS

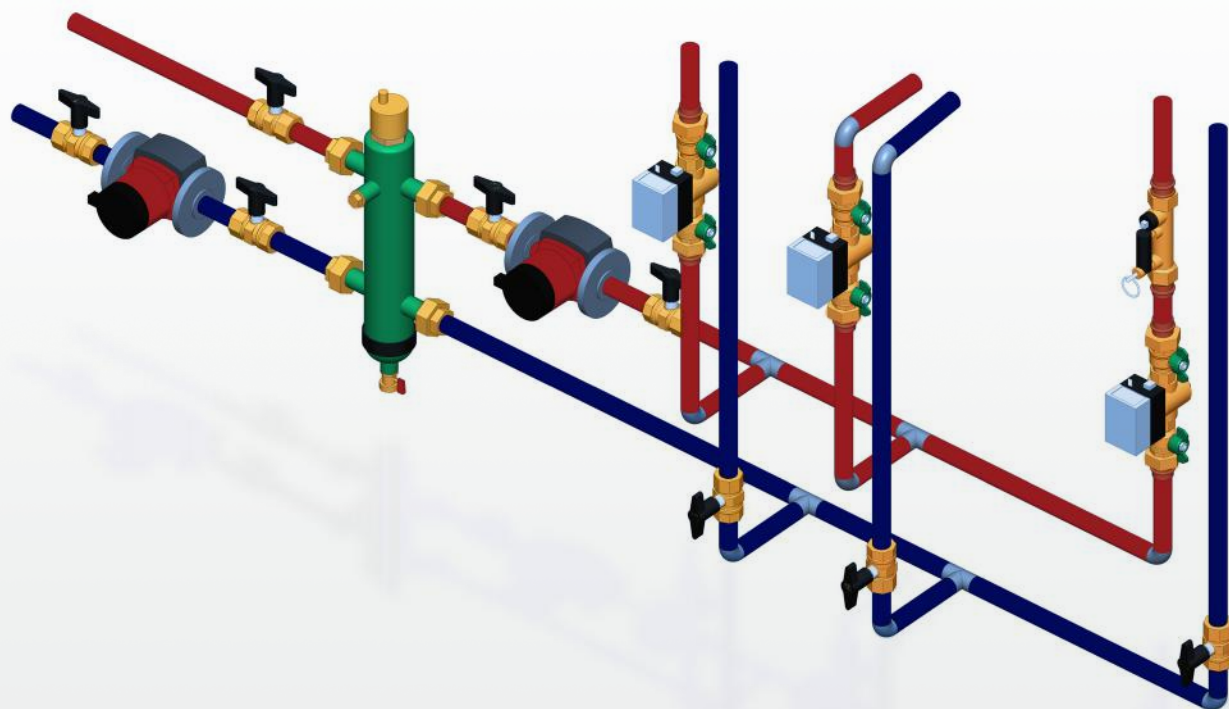


The Caleffi **SEP4™ hydraulic separator** combines air, hydraulic, dirt and magnetic separation, reducing installation costs. Don't settle for less, maintain peak system energy efficiency with SEP4. **CALEFFI GUARANTEED.**



HYDRAULIC SEPARATORS

1



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

4-in-1 hydraulic separators

Hydraulic separators

Accessories

4-IN-1 HYDRAULIC SEPARATORS



5495 SEP⁴™

Combination: air, hydraulic, dirt, and magnetic separation
Complete with:
- Drain valve
- Thermowell tap: ½" straight female
- Mounting bracket

Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 212 °F
Material: Steel



549/NA549 SEP⁴™

Combination: air, hydraulic, dirt, and magnetic separation
Complete with:
- Air vent isolation valve
- Drain valve
- Insulation jacket (2-4" sizes)

Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 212 °F
Material: Steel

Code	Description	Lbs	USD
549596A	1" sweat union	15	771.00
549506A	1" NPT female union	15	802.00
549566A	1" press union	15	844.00
549597A	1¼" sweat union	19	941.00
549507A	1¼" NPT female union	19	972.00
549567A	1¼" press union	19	1,069.00
549598A	1½" sweat union	27	1,229.00
549508A	1½" NPT female union	27	1,272.00
549568A	1½" press union	27	1,388.00
549599A	2" sweat union	29	1,409.00
549509A	2" NPT female union	29	1,444.00
549569A	2" press union	29	1,621.00
549506US 001*	1" no tailpieces	13	657.00
549507US 001*	1¼" no tailpieces	16	767.00
549508US 001*	1½" no tailpieces	23	904.00
549509US 001*	2" no tailpieces	24	1096.00

*See fitting selection in section 13

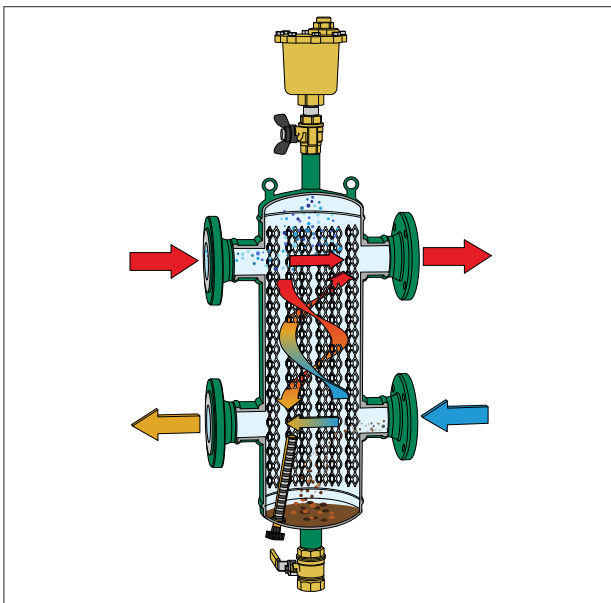
Code	Description	Lbs	USD
549552A	2" ANSI flange	76	5,852.00
549562A	2½" ANSI flange	82	6,237.00
549582A	3" ANSI flange	112	7,805.00
549510A	4" ANSI flange	120	8,741.00

Code	Description	Lbs	USD
NA549052AM	2" ANSI flange ASME & CRN	76	6,812.00
NA549062AM	2½" ANSI flange ASME & CRN	82	7,315.00
NA549082AM	3" ANSI flange ASME & CRN	112	9,053.00
NA549102AM	4" ANSI flange ASME & CRN	120	9,546.00
NA549120AM*	5" ANSI flange ASME & CRN	220	13,750.00
NA549150AM*	6" ANSI flange ASME & CRN	235	16,587.00

*Without insulation

NA prefix indicates ASME U-stamp tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.

Operating Principle for NA549 SEP4



NA549 SEP⁴™ ASME

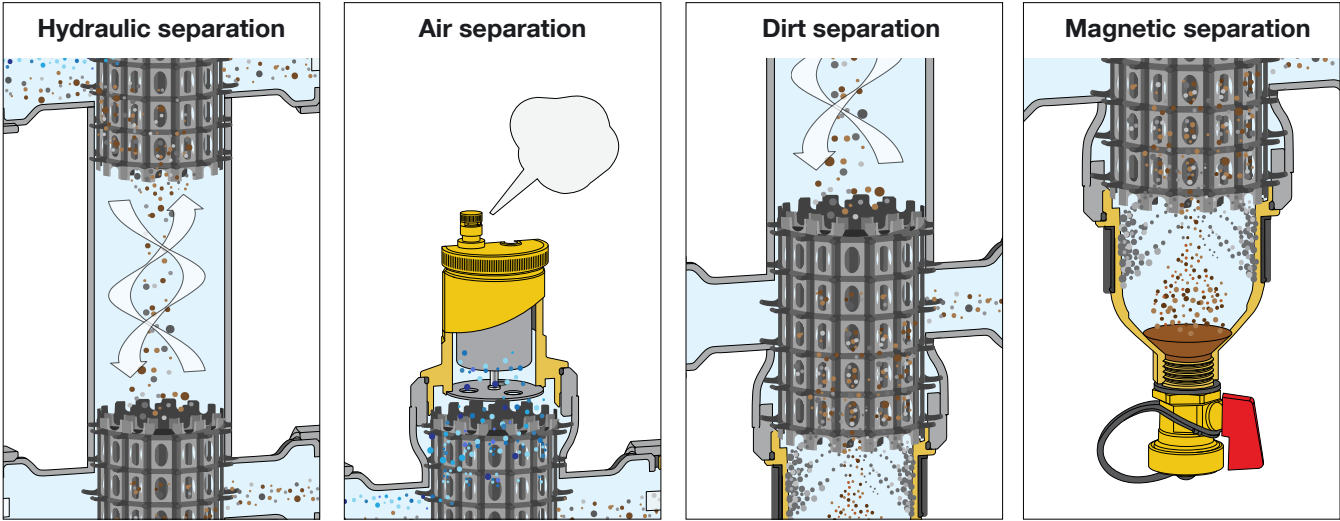
Combination: air, hydraulic, dirt, and magnetic separation
Complete with:
- Air vent isolation valve
- Drain valve
- Thermowell tap (NPT): ½" inlet/outlet flanges, ¾" front center

Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 270 °F
Material: Steel

Code	Description	Lbs	USD
NA549200AM	8" ANSI flange ASME & CRN	530	28,709.00
NA549250AM	10" ANSI flange ASME & CRN	740	38,897.00
NA549300AM	12" ANSI flange ASME & CRN	1,110	51,187.00
NA549350AM	14" ANSI flange ASME	1,550	60,346.00

4-IN-1 HYDRAULIC SEPARATORS

Operating principle for 5495 SEP4™



Four separators combined in one: Minimizing costs for systems with primary and secondary piping by eliminating the need for separate air and dirt separators.

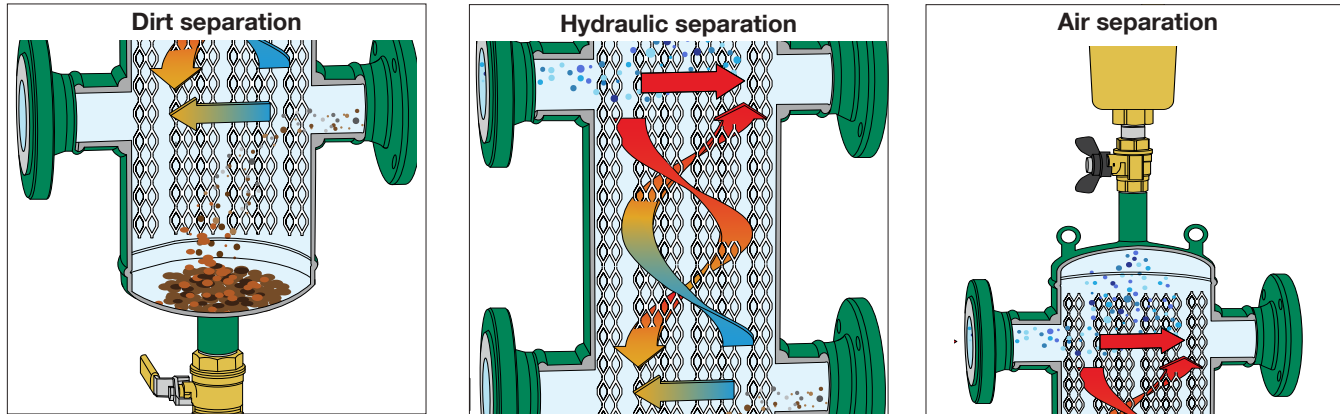
FLOW RATES

UNION 548/5495 SEP4™ FLOW RATE				
Size	1"	1¼"	1½"	2"
GPM	11	18	26	37
Gallons	0.5	0.7	1.3	3.5

548/549/NA548/NA549 SEP4™ FLOW RATE										
Size	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"
GPM	60	80	124	247	300	484	792	1330	1850	2500
Gallons	4.0	4.0	8.0	8.0	23	23	95	175	255	450

HYDRAULIC SEPARATORS

Operating principle for NA549 HydroCal



HYDRAULIC SEPARATORS



548 Hydro Separator

Hydraulic separator
Complete with:
- Drain valve
- Thermowell tap: ½" straight female
- Mounting bracket

Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 212 °F
Material: Steel

Code	Description	Lbs	USD
548006A	1" NPT female union	13	542.00
548066A	1" press union	13	581.00
548096A	1" sweat union	13	514.00
548007A	1¼" NPT female union	17	650.00
548067A	1¼" press union	17	739.00
548097A	1¼" sweat union	17	620.00
548008A	1½" NPT female union	25	852.00
548068A	1½" press union	25	959.00
548098A	1½" sweat union	25	811.00
548009A	2" NPT female union	27	993.00
548069A	2" press union	27	1,211.00
548099A	2" sweat union	27	948.00
548006US 001*	1" no tailpieces	11	408.00
548007US 001*	1¼" no tailpieces	14	459.00
548008US 001*	1½" no tailpieces	21	509.00
548009US 001*	2" no tailpieces	22	561.00

*See fitting selection in section 13



NA548 Hydro Separator ASME

Hydraulic separator
Complete with:
- Air vent isolation valve
- Drain valve
- Thermowell tap (NPT): ½" inlet/outlet flanges, ¾" front center

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
NA548200A	8" ANSI flange ASME & CRN	530	19,248.00
NA548250A	10" ANSI flange ASME & CRN	740	27,169.00
NA548300A	12" ANSI flange ASME & CRN	1,110	32,885.00
NA548350A	14" ANSI flange ASME	1,550	52,443.00



548/NA548 Hydro Separator

Hydraulic separator
Complete with:
- Air vent isolation valve
- Drain valve
- Insulation jacket (2-4" sizes)

Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 220 °F
Material: Steel

Code	Description	Lbs	USD
548052A	2" ANSI flange	75	3,868.00
548062A	2½" ANSI flange	82	4,118.00
548082A	3" ANSI flange	112	5,155.00
548102A	4" ANSI flange	117	5,768.00

Code	Description	Lbs	USD
NA548052A	2" ANSI flange ASME & CRN	75	5,088.00
NA548062A	2½" ANSI flange ASME & CRN	82	5,470.00
NA548082A	3" ANSI flange ASME & CRN	112	6,621.00
NA548102A	4" ANSI flange ASME & CRN	117	7,000.00
NA548120A*	5" ANSI flange ASME & CRN	220	10,222.00
NA548150A*	6" ANSI flange ASME & CRN	231	12,404.00

*Without insulation

NA prefix indicates ASME U-stamp tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.



NA549 HydroCal™ ASME

Combination: air, hydraulic and dirt separation

Complete with:
- Air vent isolation valve
- Drain valve
- Insulation jacket (2-4" sizes)
- Thermowell tap (NPT): ½" inlet/outlet flanges, ¾" front center (8-14" only)

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
NA549052A	2" ANSI flange ASME & CRN	73	6,614.00
NA549062A	2½" ANSI flange ASME & CRN	79	7,114.00
NA549082A	3" ANSI flange ASME & CRN	108	8,603.00
NA549102A	4" ANSI flange ASME & CRN	117	9,097.00
NA549120A*	5" ANSI flange ASME & CRN	190	13,283.00
NA549150A*	6" ANSI flange ASME & CRN	231	16,116.00
NA549200A*	8" ANSI flange ASME & CRN	520	26,039.00
NA549250A*	10" ANSI flange ASME & CRN	730	36,225.00
NA549300A*	12" ANSI flange ASME & CRN	1,100	48,517.00
NA549350A*	14" ANSI flange ASME	1,540	57,676.00

*Without insulation

NA prefix indicates ASME U-stamp tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.

ACCESSORIES



501 MAXCAL™

Replacement automatic air vent for NA548 and NA549 hydro separators

Maximum operating pressure: 230 psi
Maximum discharge pressure: 90 psi
Fluid temperature range: -4 – 250 °F

Code	Description	Lbs	USD
501502A	¾" FNPT	7.0	340.00



5023 VALCAL™

Replacement air vent with service check for union 548 hydro separators
Maximum operating pressure: 150 psi
Maximum discharge pressure: 60 psi
Maximum operating temperature: 250 °F

Code	Description	Lbs	USD
502343A	½" MNPT	0.5	52.10



Replacement air vent assembly for 5495 SEP4™

Code	Description	Lbs	USD
59829	Air vent assembly	2.0	130.00



Support bracket for union 5495 SEP4™ and union 548 hydro separators

Code	Description	Lbs	USD
NA10778	Fits 1" and 1¼" union	2.0	29.60
NA10796	Fits 1½" union	2.5	30.90
NA10797	Fits 2" union	4.0	32.10



Replacement drain valve for 5495 SEP4™ and 548 hydro separators
¾" garden hose thread with cap
Max operating pressure: 150 psi
Max operating temperature: 250 °F

Code	Description	Lbs	USD
538402 FD	½" NPT x ¾" GHT	0.3	16.10



Magnetic/drywell assembly for NA549 SEP4™

Code	Description	Lbs	USD
F0000435	Fits 2" and 2½"	0.3	145.00
49684A	Fits 3" to 6"	0.3	328.00
F0000349	Fits 8" to 14"	0.3	618.00



Air vent isolation valve for NA548 and NA549 hydro separators
Maximum operating pressure: 150 psi
Maximum operating temperature: 365 °F

Code	Description	Lbs	USD
NA39589	¾" FNPT w/T-handle	0.8	33.20



Drain ball valve for NA548 and NA549 hydro separators
Maximum operating pressure: 150 psi
Maximum operating temperature: 365 °F

Code	Description	Lbs	USD
NA39753	1" FNPT w/Lever, drain	0.7	45.20
NA39588	1¼" FNPT w/Lever, drain	1	76.10
NA59600	2" FNPT w/Lever, drain	4	161.00



Replacement pocket well kit for 548 and 5495 hydro separators
Includes sealing washer and sensor grommet

Code	Description	Lbs	USD
NA10425	Temperature pocket well kit	0.4	27.30



Insulation jacket for union 5495 SEP4™ and union 548 hydro separators

Code	Description	Lbs	USD
NA10801	Fits 1" union 5495	0.5	51.50
NA10802	Fits 1¼" union 5495	0.5	56.50
NA10803	Fits 1½" union 5495	0.6	77.30
NA10804	Fits 2" union 5495	0.6	87.40
NA10805	Fits 1" union 548	0.5	33.40
NA10806	Fits 1¼" union 548	0.5	38.60
NA10807	Fits 1½" union 548	0.6	47.60
NA10808	Fits 2" union 548	0.6	55.40



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Hydronic Solutions

MAGNETIC DUO SEPARATORS

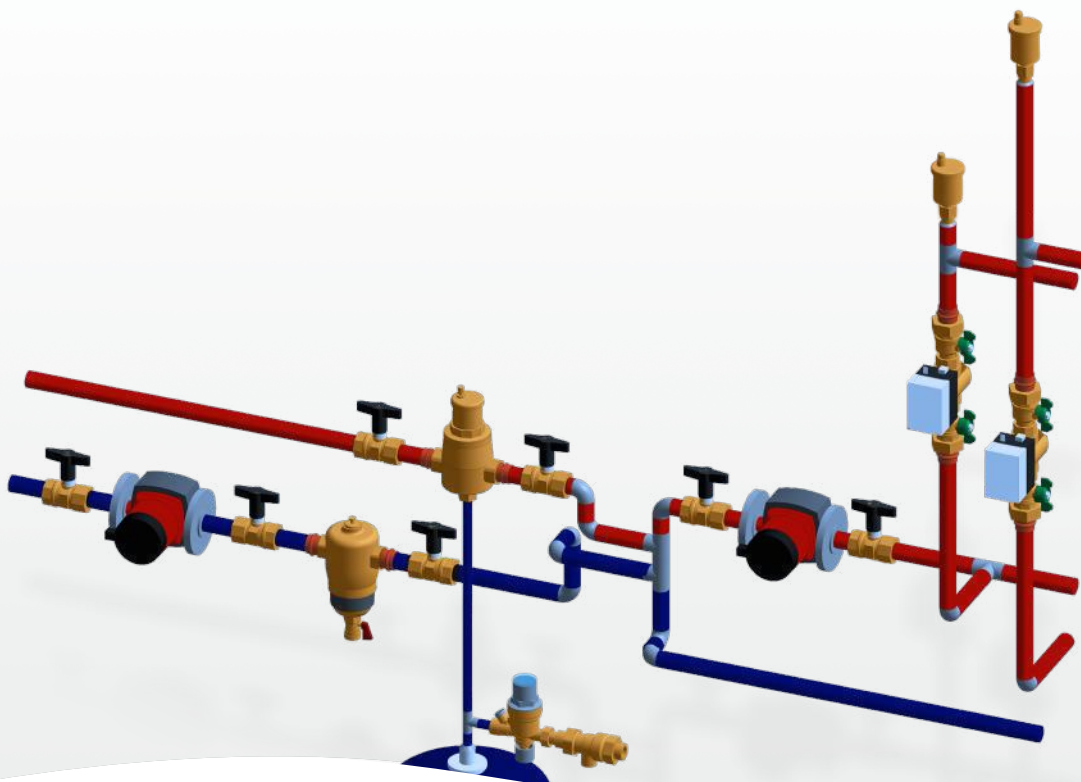


Best in the business dirt and magnetite removal! Caleffi leads the way with impurity separation technology to protect critical hydronic components. The DIRTMAG® Pro has dual magnetic fields and the XF™ adds a unique mesh filter and brush for first-pass cleaning. Don't settle for less, blowdown without the mess. **CALEFFI GUARANTEED.**



AIR AND DIRT SEPARATORS AND AIR VENTS

2



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Air separators
- Combination air and dirt separators
- Magnetic dirt separators
- Automatic and manual air vents
- Accessories for air and dirt separators

AIR SEPARATORS



551 DISCAL®

Air separator
Stainless steel float guide pin and linkage
Glass reinforced nylon internal element
½" FNPT bottom thread

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
551005A	¾" FNPT	3.7	178.00
551028A	1" sweat	3.7	183.00
551006A	1" FNPT	3.7	192.00
551066A	1" press	3.8	218.00
551035A	1¼" sweat	3.7	266.00
551007A	1¼" FNPT	4.9	281.00
551067A	1¼" press	5.0	336.00
551041A	1½" sweat	4.9	346.00
551008A	1½" FNPT	4.9	364.00
551068A	1½" press	5.1	434.00
551054A	2" sweat	5.5	424.00
551009A	2" FNPT	5.5	445.00
551069A	2" press	5.5	530.00

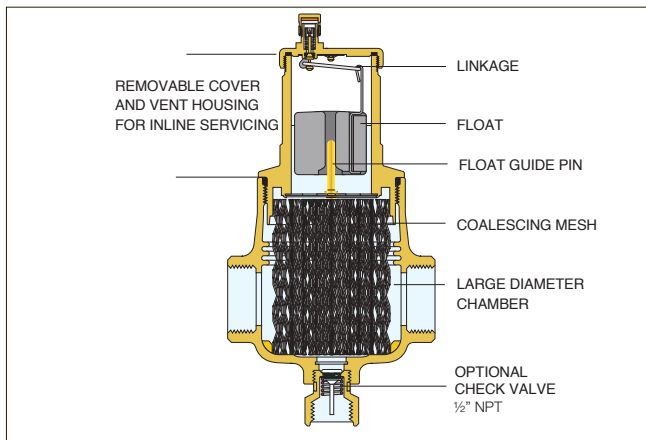


Insulation shell fits DISCAL® 551 Series.

Code	Description	Lbs	USD
CBN551005	Fits ¾" and 1"	0.1	60.90
CBN551007	Fits 1¼" and 1½"	0.1	65.20
CBN551009	Fits 2"	0.1	71.40

*Will not fit the ¾" compact DISCAL®, codes 551003A and 551022A.

Construction Details for 551 DISCAL®



551 DISCAL® Service check

Air separator with service check
Stainless steel float guide pin and linkage
Glass reinforced nylon internal element
Complete with:
- ½" NPT service check valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–230 °F
Material: Brass

Code	Description	Lbs	USD
551005AC	¾" FNPT	3.8	185.00
551028AC	1" sweat	3.8	190.00
551006AC	1" FNPT	3.8	199.00
551066AC	1" press	3.9	224.00
551035AC	1¼" sweat	3.8	273.00
551007AC	1¼" FNPT	5.0	286.00
551067AC	1¼" press	5.1	343.00
551041AC	1½" sweat	5.0	354.00
551008AC	1½" FNPT	5.0	371.00
551068AC	1½" press	5.2	441.00
551054AC	2" sweat	5.6	430.00
551009AC	2" FNPT	5.6	451.00
551069AC	2" press	5.6	537.00

551 DISCAL® FLOW RATE					
Size	¾"	1"	1¼"	1½"	2"
GPM	6	10	15	22	39
Cv	19	32	56	73	81



5517 DISCAL® Rotating collar

Air separator with rotating collar
Stainless steel float guide pin and linkage
Stainless steel mesh internal element

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
551705A	¾" NPT male union	4.9	282.00
551765A	¾" press union	4.9	297.00
551795A	¾" sweat union	4.9	279.00
551706A	1" NPT male union	4.9	302.00
551766A	1" press union	4.9	332.00
551796A	1" sweat union	4.9	296.00
551716*	Body only	4.4	258.00

*See fitting selection in Section 13.

AIR SEPARATORS



551 DISCAL® Compact

Air separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
½" FNPT bottom thread

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass



NA551 DISCAL® ASME/CRN

Air separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½ MNPT side drain valve
- 1" FNPT bottom drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
551003A	¾" FNPT	2.0	119.00
551003AC	¾" FNPT, service check valve	2.1	125.00
551022A	¾" sweat	2.0	115.00
551022AC	¾" sweat, service check valve	2.1	122.00

5517/551 DISCAL® FLOW RATE			
Size	¾" compact	¾" rotating	1" rotating
GPM	6	6	10
Cv	12	14	14

Code	Description	Lbs	USD
NA551050A	2" ANSI flange ASME & CRN	34	3,769.00
NA551060A	2½" ANSI flange ASME & CRN	35	4,029.00
NA551080A	3" ANSI flange ASME & CRN	62	5,333.00
NA551100A	4" ANSI flange ASME & CRN	67	5,968.00
NA551120A	5" ANSI flange ASME & CRN	106	6,864.00
NA551150A	6" ANSI flange ASME & CRN	117	11,189.00

NA prefix indicates ASME tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.



551 DISCAL®

Air separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½ MNPT side drain valve
- 1" FNPT bottom drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel



NA551 DISCAL® ASME/CRN

Air separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½ MNPT side drain valve
- 2" FNPT bottom drain valve
- Thermowell tap (NPT): ½" inlet/outlet flanges

Maximum operating pressure: 200 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
551050A	2" ANSI flange	34	3,009.00
551050AT	2" MNPT	30	2,861.00
551060A	2½" ANSI flange	35	3,215.00
551060AT	2½" MNPT	31	3,069.00
551080A	3" ANSI flange	62	4,257.00
551100A	4" ANSI flange	67	4,762.00

Code	Description	Lbs	USD
NA551200A	8" ANSI flange ASME & CRN	371	18,311.00
NA551250A	10" ANSI flange ASME & CRN	617	27,462.00
NA551300A	12" ANSI flange ASME & CRN	871	35,703.00

NA prefix indicates ASME tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.

FLANGED 551/NA551 DISCAL® FLOW RATE									
Size	2"	2½"	3"	4"	5"	6"	8"	10"	12"
GPM	100	155	220	400	615	880	1,570	2,450	3,525
Cv	87	174	208	324	520	832	1,109	1,387	1,664

COMBINATION AIR AND DIRT SEPARATORS



5461 DISCALDIRTMAG™

Air & Dirt separator with magnet
Stainless steel float guide pin and linkage
Glass reinforced nylon internal element
Complete with:
- External clip-on magnet
- Drain valve with cap

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
546196A	1" sweat	8.5	472.00
546166A	1" press	8.5	506.00
546116A	1" MNPT	8.5	493.00
546197A	1¼" sweat	8.5	563.00
546167A	1¼" press	8.5	638.00



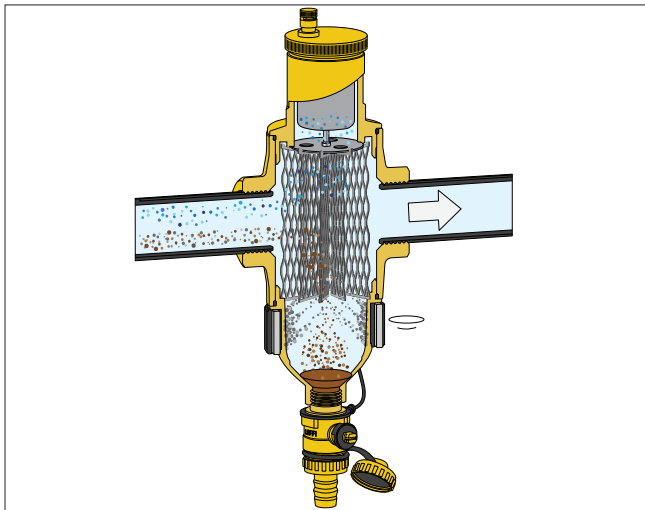
546 DISCALDIRT®

Air & Dirt separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½" MNPT side drain valve
- 1" FNPT bottom drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
546050A	2" ANSI flange	40	3,821.00
546060A	2½" ANSI flange	42	4,027.00
546080A	3" ANSI flange	73	5,187.00
546100A	4" ANSI flange	78	5,685.00
546120A	5" ANSI flange	181	8,573.00

Operating principle for 5461 DISCALDIRTMAG™



5461 DISCALDIRTMAG™

Air & Dirt separator with magnet
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- External clip-on magnet
- Drain valve with cap

Maximum operating pressure: 150 psi
Fluid temperature range: 32–230 °F
Material: Steel

Code	Description	Lbs	USD
546198A	1½" sweat union	22	1,417.00
546108A	1½" NPT female union	22	1,462.00
546168A	1½" press union	22	1,619.00
546199A	2" sweat union	23	1,486.00
546109A	2" NPT female union	23	1,542.00
546169A	2" press union	23	1,807.00



546 DISCALDIRT®

Air & Dirt separator
Stainless steel float guide pin and linkage
Glass reinforced nylon internal element
Complete with:
- Drain valve with cap

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
546096A	1" sweat	8.3	373.00
546016A	1" MNPT	8.3	391.00
546097A	1¼" sweat	8.3	445.00



Insulation jacket for:
- Brass 546 DISCALDIRT®
- Brass and union 5461 DISCALDIRTMAG™

Code	Description	Lbs	USD
CBN546002	Fits ¾", 1", 1¼" brass 546 and 5461	0.1	95.50
CBN546118	Fits 1½" union 5461 only	0.1	119.00
CBN546119	Fits 2" union 5461 only	0.1	137.00

546/5461 DISCALDIRTMAG® FLOW RATE

Size	1"	1¼"	1½"	2"
GPM	10	15	22	39
Cv	32	40	50	79

COMBINATION AIR AND DIRT SEPARATORS



NA546 DISCALDIRT® ASME/CRN

Air & Dirt separator
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½" MNPT side drain valve
- 1" FNPT bottom drain valve (2-6" sizes) OR
2" FNPT bottom drain valve (8-14" sizes)

Maximum operating pressure: 150 psi
Medium temperature range: 32-270 °F
Material: Steel



NA546M DISCALDIRTMAG™ ASME/CRN

Air & Dirt separator with magnets
Stainless steel float guide pin and linkage
Stainless steel mesh internal element
Complete with:
- ½" MNPT side drain valve
- 1" FNPT bottom drain valve (2-6" sizes) OR
2" FNPT bottom drain valve (8-14" sizes)

Maximum operating pressure: 150 psi
Medium temperature range: 32-270 °F
Material: Steel

Code	Description	Lbs	USD
NA546050T	2" MNPT ASME & CRN	28	3,659.00
NA546060A	2½" ANSI flange ASME & CRN	42	4,921.00
NA546080A	3" ANSI flange ASME & CRN	73	6,337.00
NA546100A	4" ANSI flange ASME & CRN	78	6,949.00
NA546120A	5" ANSI flange ASME & CRN	181	10,023.00
NA546150A	6" ANSI flange ASME & CRN	188	12,783.00
NA546200A	8" ANSI flange ASME & CRN	355	23,746.00
NA546250A	10" ANSI flange ASME & CRN	555	36,510.00
NA546300A	12" ANSI flange ASME & CRN	825	45,654.00
NA546350A	14" ANSI flange ASME	950	57,729.00

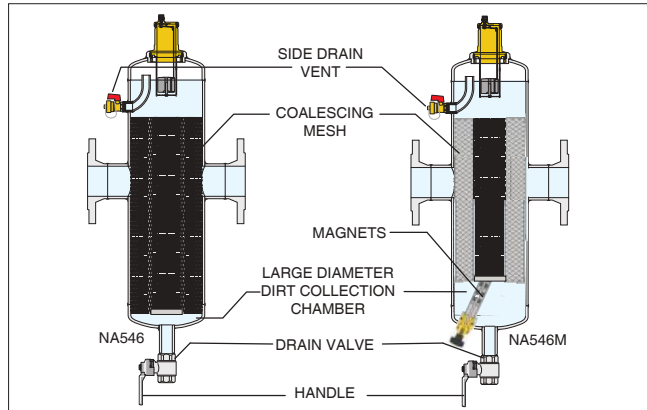
Code	Description	Lbs	USD
NA546050TM*	2" MNPT ASME & CRN	31	4,228.00
NA546060AM*	2½" ANSI flange ASME & CRN	45	5,528.00
NA546080AM*	3" ANSI flange ASME & CRN	76	7,193.00
NA546100AM*	4" ANSI flange ASME & CRN	81	7,821.00
NA546120AM*	5" ANSI flange ASME & CRN	184	11,486.00
NA546150AM*	6" ANSI flange ASME & CRN	191	13,860.00
NA546200AM**	8" ANSI flange ASME & CRN	365	27,191.00
NA546250AM**	10" ANSI flange ASME & CRN	565	39,260.00
NA546300AM**	12" ANSI flange ASME & CRN	835	49,748.00
NA546350AM**	14" ANSI flange ASME	960	62,176.00

*With one magnet

**With three magnets

NA prefix indicates ASME tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered 2" to 12"; consult factory for 14"

Construction details for NA546/NA546M DISCALDIRT™



NA546 DISCALDIRT/NA546M DISCALDIRTMAG® FLOW RATE

Size	2"	2½"	3"	4"	5"	6"
GPM	100	155	220	400	615	880
Cv	87	174	208	324	520	832

NA546 DISCALDIRT/NA546M DISCALDIRTMAG® FLOW RATE

Size	8"	10"	12"	14"
GPM	1,570	2,450	3,525	4,800
Cv	1,109	1,387	1,664	1,967

MAGNETIC DIRT SEPARATORS



5463M DIRTMAG® PRO

Dual magnet dirt separator
Glass reinforced nylon internal element
Complete with:
- Internal magnet in drywell
- External clip-on magnet
- Drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
546328AM	1" sweat	4.7	233.00
546306AM	1" FNPT	4.7	244.00
546366AM	1" press	5.0	266.00
546335AM	1¼" sweat	4.7	339.00
546307AM	1¼" FNPT	5.8	355.00
546367AM	1¼" press	6.1	406.00
546341AM	1½" sweat	5.4	442.00
546308AM	1½" FNPT	6.7	465.00
546368AM	1½" press	7.0	529.00
546354AM	2" sweat	6.0	539.00
546309AM	2" FNPT	6.7	558.00
546369AM	2" press	7.0	646.00

5463M DIRTMAG® PRO FLOW RATE

Size	1"	1¼"	1½"	2"
GPM	14	21	31	54
Cv	32	45	69	104



Insulation jacket fits 5463 DIRTMAG® PRO

Code	Description	Lbs	USD
CBN546205	Fits ¾" & 1"	0.1	57.90
CBN546207	Fits 1¼" & 1½"	0.1	62.40
CBN546209	Fits 2"	0.1	68.00



577 CALEFFI XF Extra Filtration Separator

Magnetic dirt separator
Composite body with rotating brass collar
Internal filter mesh with rotating brush
50% bypass feature on 1¼" and 1½" sizes
Complete with:
- Internal magnet in drywell
- Drain valve

Maximum operating pressure: 45 psi
Fluid temperature range: 32 – 195 °F
Material: Composite PA66G30, brass

Code	Description	Lbs	USD
577660A	1" NPT male union	4.3	367.00
577666A	1" press union	4.7	399.00
577669A	1" sweat union	4.3	349.00
577870A	1¼" NPT female union	8.7	676.00
577876A	1¼" press union	8.9	771.00
577879A	1¼" sweat union	8.7	644.00
577980A	1½" NPT female union	8.4	836.00
577986A	1½" press union	7.8	953.00
577989A	1½" sweat union	8.0	795.00

577 CALEFFI XF FLOW RATE

Size	1"	1¼"	1½"
GPM	13	26	26
Cv	12	27	27
Cv 50% bypass	--	46	46



NA5453 DIRTMAG®

Magnetic dirt separator
Composite body with rotating brass collar
HDPE internal element
Drain valve with hose connection
Complete with:
- External clip-on magnet

Maximum operating pressure: 45 psi
Fluid temperature range: 32 – 195 °F
Material: Composite PA66G30, brass

Code	Description	Lbs	USD
NA545305	¾" NPT male union	4.5	220.00
NA545365	¾" press union	4.5	240.00
NA545395	¾" sweat union	4.5	219.00
NA545306	1" NPT male union	4.5	254.00
NA545366	1" press union	4.7	286.00
NA545396	1" sweat union	4.5	243.00

MAGNETIC DIRT SEPARATORS



NA5453 DIRTMAG®

Magnetic dirt separator
Composite body with rotating brass collar
HDPE internal element
Drain valve with hose connection
Complete with:
- External clip-on magnet
- Union isolation ball valves

Maximum operating pressure: 45 psi
Fluid temperature range: 32 – 195 °F
Material: Composite PA66G30, brass

Code	Description	Lbs	USD
NA545355	¾" NPT female union, isolation valves	5.5	273.00
NA545375	¾" press union, isolation valves 	5.5	293.00
NA545385	¾" sweat union, isolation valves 	5.5	272.00
NA545356	1" NPT female union, isolation valves	5.5	314.00
NA545376	1" press union, isolation valves	5.5	346.00
NA545386	1" sweat union, isolation valves 	5.5	303.00

NA5453 DIRTMAG® FLOW RATE

Size	¾"	1"
GPM	6	10
Cv w/ iso ball valve	9	9
Cv w/o iso ball valve	12	12



Replacement gasket for brass collar on
NA5453 DIRTMAG®

Code	Description	Lbs	USD
F57312 DDT	Replacement gasket	0.3	12.50



5465M DIRTMAG®

Magnetic dirt separator
Stainless steel and HDPE internal elements
¾" MNPT top thread with brass cap
Complete with:
- 1" FNPT drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
546550AM	2" ANSI flange	41	2,492.00
546560AM	2½" ANSI flange	41	2,683.00
546580AM	3" ANSI flange	58	3,627.00
546510AM	4" ANSI flange	58	4,012.00



NA5465M DIRTMAG® ASME/CRN

Magnetic dirt separator
Stainless steel and HDPE internal elements
¾" MNPT top thread with brass cap
Complete with:
- 1" FNPT drain valve

Maximum operating pressure: 150 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
NA546550AM	2" ANSI flange ASME & CRN	41	3,534.00
NA546560AM	2½" ANSI flange ASME & CRN	41	3,731.00
NA546580AM	3" ANSI flange ASME & CRN	58	4,921.00
NA546510AM	4" ANSI flange ASME & CRN	58	5,327.00
NA546512AM	5" ANSI flange ASME & CRN	141	7,733.00
NA546515AM	6" ANSI flange ASME & CRN	151	9,732.00

NA prefix indicates ASME tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered.

5465M/NA5465M DIRTMAG® FLOW RATE

Size	2"	2½"	3"	4"	5"	6"
GPM	89	150	227	355	816	904
Cv	88	176	211	328	520	842



NA5465M DIRTMAG® ASME/CRN

Magnetic dirt separator with three-magnet assembly
Stainless steel and HDPE internal elements
¾" MNPT top thread with brass cap
Complete with:
- 2" FNPT drain valve
- Thermowell tap (NPT): ½" inlet/outlet flanges

Maximum operating pressure: 200 psi
Fluid temperature range: 32–270 °F
Material: Steel

Code	Description	Lbs	USD
NA546520AM	8" ANSI flange ASME & CRN	345	21,152.00
NA546525AM	10" ANSI flange ASME & CRN	630	31,188.00
NA546530AM	12" ANSI flange ASME & CRN	880	38,003.00
NA546535AM	14" ANSI flange ASME	1,010	47,106.00

NA prefix indicates ASME tagged and registered with the National Board of Boiler and Pressure Vessel Inspectors; CRN registered 2" to 12"; consult factory for 14"

NA5465M DIRTMAG® FLOW RATE

Size	8"	10"	12"	14"
GPM	1,570	2,450	3,525	4,800
Cv	1,055	1,400	1,755	2,075

AUTOMATIC AND MANUAL AIR VENTS



5022 VALCAL™

High discharge automatic air vent
Hygroscopic safety air vent cap

Maximum operating pressure: 150 psi
Maximum discharge pressure: 60 psi
Maximum discharge rate: 2.5 SCFM
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
502243A	½" MNPT	0.5	44.00



5020 MINICAL™

Automatic air vent
Hygroscopic safety air vent cap

Maximum operating pressure: 150 psi
Maximum discharge pressure: 40 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
502043A	½" MNPT	0.6	25.70



5020 MINICAL™

Automatic air vent

Maximum operating pressure: 150 psi
Maximum discharge pressure: 40 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–250 °F
Material: Brass

Code	Description	Lbs	USD
502015A	⅛" MNPT	0.4	18.30
502040A	½" MNPT	0.4	18.30



5027 ROBICAL™

Automatic air vent with service check valve

Maximum operating pressure: 150 psi
Maximum discharge pressure: 90 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–230 °F
Material: Brass

Code	Description	Lbs	USD
502710A	⅛" MNPT	0.6	22.60
502720A	¼" MNPT	0.6	23.90



5023 VALCAL™

High discharge automatic air vent with
service check valve
Hygroscopic safety air vent cap

Maximum operating pressure: 150 psi
Maximum discharge pressure: 60 psi
Maximum discharge rate: 2.5 SCFM
Fluid temperature range: 32–230 °F
Material: Brass

Code	Description	Lbs	USD
502343A	½" MNPT	0.5	52.10



5080 HYGROCAL™

Automatic hygroscopic air vent
Manually operated by rotating knob

Maximum operating pressure: 150 psi
Maximum steam pressure: 15 psi
Fluid temperature range: 40–212 °F
Material: Chrome-plated brass body

(Priced each, sold in quantities of 25)

Code	Description	Lbs	USD
508013A	⅛" MNPT	0.1	8.70



5021 MINICAL™

Automatic air vent with service check valve

Maximum operating pressure: 150 psi
Maximum discharge pressure: 40 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–230 °F
Material: Brass

Code	Description	Lbs	USD
502115A	⅛" MNPT	0.4	24.60
502113A	⅛" MNPT, hygroscopic anti-drip cap	0.4	28.20



NA5027 ROBICAL™

Automatic air vent with service check valve
Hygroscopic safety air vent cap

Maximum operating pressure: 150 psi
Maximum discharge pressure: 90 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–230 °F
Material: Brass

Code	Description	Lbs	USD
NA502740A	½" MNPT	0.6	31.10

AUTOMATIC AND MANUAL AIR VENTS

2



5081

Replacement hygroscopic cartridge
Fits 5080 HYGROCAL™

(Priced each, sold in quantities of 25)

Code	Description	Lbs	USD
508100A	Replacement cartridge	0.1	7.70



501 MAXCAL™

Extra high-capacity automatic air vent
Discharge top thread: 3/8" female straight
Stainless steel float guide pin and linkage

Maximum operating pressure: 230 psi
Maximum discharge pressure: 90 psi
Maximum discharge rate: 9 SCFM
Fluid temperature range: -4 – 250 °F
Material: Brass

Code	Description	Lbs	USD
501502A	3/4" FNPT	7.0	340.00



5026 ROBOCAL™

Automatic air vent

Maximum operating pressure: 150 psi
Maximum discharge pressure: 90 psi
Maximum discharge rate: 1.75 SCFM
Fluid temperature range: 32–240 °F
Material: Brass

Code	Description	Lbs	USD
502610A	1/8" MNPT	0.6	16.30
502620A	1/4" MNPT	0.6	17.20
502420	1/4" straight thread	1.0	22.20
502630	3/8" straight thread	1.0	22.20
502640	1/2" straight thread	1.0	24.10



551 DISCAL AIR®

High discharge automatic air vent
Stainless steel float guide pin and linkage

Maximum operating pressure: 150 psi
Maximum discharge pressure: 150 psi
Maximum discharge rate: 4.5 SCFM
Fluid temperature range: 32 – 230 °F
Material: Brass

Code	Description	Lbs	USD
551004A	1/2" FNPT and 3/4" MNPT	0.8	105.00



337

Manual air vent with adjustable outlet

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Brass body with composite knob

Code	Description	Lbs	USD
337221A	1/4" MNPT	0.1	11.00

ACCESSORIES FOR AIR AND DIRT SEPARATORS



Hygroscopic safety air vent cap fits 551 DISCAL®, 546 DISCALDIRTMAG™ and DISCALDIRT®, 502 MINICAL™, 5022 and 5023 VALCAL™, and NA5027 ROBOCAL™

Code	Description	Lbs	USD
R59681	Vent cap	0.1	20.40



Replacement plastic air vent cap for 5026 and 5027 ROBOCAL™

Code	Description	Lbs	USD
R56142	Vent cap	0.1	2.30



Air vent cap fits 551 DISCAL®, 546 DISCALDIRTMAG™ and DISCALDIRT®, 502 MINICAL™, 5022 and 5023 VALCAL™, and NA5027 ROBOCAL™

Code	Description	Lbs	USD
R59119	Vent cap	0.1	13.50



Replacement plastic air vent cap for 5026 and 5021 MINICAL™

Code	Description	Lbs	USD
R56214	Vent cap	0.1	2.30



Air vent cap adapter fits all air vents and air separators (except for 5026 and 5027 ROBOCAL™)

Code	Description	Lbs	USD
NA10204	¼" MNPT	0.1	23.10



Anti-suction air vent cap fits 551 DISCAL®, 546 DISCALDIRTMAG™ and DISCALDIRT®, 502 MINICAL™, 5022 and 5023 VALCAL™, and NA5027 ROBOCAL™

Code	Description	Lbs	USD
562100	Vent cap	0.1	20.90



Replacement air vent assembly for steel 551 and NA551 DISCAL®, steel 546 and NA546 DISCALDIRT® and NA546 DISCALDIRTMAG™

Code	Description	Lbs	USD
59756	Air vent assembly	3.0	143.00



Replacement air vent assembly for brass 546 DISCALDIRT®, brass and steel union 5461 DISCALDIRTMAG™ and brass 551 DISCAL® (except for compact and rotating collar)

Code	Description	Lbs	USD
59829	Air vent assembly	2.0	130.00

ACCESSORIES FOR AIR AND DIRT SEPARATORS



Replacement coalescing element for brass separators (except 551 DISCAL® compact and rotating collar versions)

Code	Description	Lbs	USD
F0001179	For sizes ¾", 1" and sweat 1¼"	0.2	20.30
F59917	For sizes 1¼" to 2"	0.2	20.90



Replacement drain ball valve for flanged 546 DISCALDIRT® and DISCALDIRTMAG™, flanged 5465 DIRTMAG® and flanged 551 DISCAL®

Code	Description	Lbs	USD
NA39753	1" FNPT with lever	0.7	45.20
NA59600	2" FNPT with lever	3.5	161.00



Replacement drain valve for 546 DISCALDIRT®, 5461 DISCALDIRTMAG™ and 5463 DIRTMAG® PRO

Code	Description	Lbs	USD
538402 FD	½" MNPT x ¾" GHT	0.3	16.10
R49418	Replacement cap with tether	0.1	18.00



Replacement service check valve
Fits all VALCAL™, MINICAL™, brass 551 DISCAL® and MNPT ROBOCAL™

Code	Description	Lbs	USD
59474A	⅛" MNPT x FNPT	0.1	13.40
59804A	¼" MNPT x FNPT	0.1	14.20
561402A	½" MNPT x FNPT	0.2	16.40



Replacement clip-on magnets for DIRTMAG® PRO

Code	Description	Lbs	USD
R39949	Magnetic band	0.2	39.90



Magnet and drywell assembly for flanged 546 DISCALDIRTMAG™ and 5465 DIRTMAG®

Code	Description	Lbs	USD
49684A	For 2" and 2½"	3.0	328.00
49685A	For 3" to 6"	3.0	473.00
F0000349	For 8" to 14"	3.0	618.00



Replacement air vent cover and float for DISCAL® series

*vent cap sold separately

Code	Description	Lbs	USD
F39807	Cover and float for brass DISCAL®	0.4	63.90
F0001470	Cover and float for steel DISCAL®	0.5	75.70



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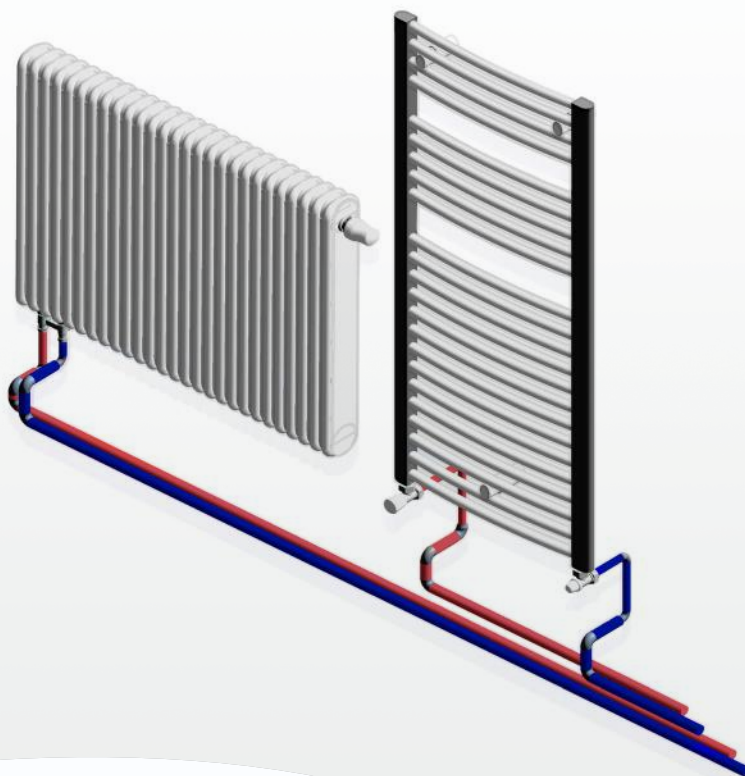
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THERMOSTATIC RADIATOR VALVES

3



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Thermostatic control heads
- Thermo-electric actuator
- NPT thermostatic radiator valve bodies
- European style towel warmer radiator valves
- Connection valves for panel radiators
- Connection fittings

THERMOSTATIC CONTROL HEADS



200

Thermostatic control head for radiator valves
Set point locking mechanism
Built-in sensor with liquid-filled element
Fits 220, 221, 338 and 339 series valves

Temperature adjustment range: 45–82 °F
Maximum ambient temperature: 120 °F

Code	Description	Lbs	USD
200000	Control head with built-in sensor	0.5	62.00



201

Thermostatic control head for radiator valves
Set point locking mechanism
Remote sensor with liquid-filled element
Fits 220, 221, 338 and 339 series valves

Capillary length: 78"
Temperature adjustment range: 45–82 °F
Maximum ambient temperature: 120 °F

Code	Description	Lbs	USD
201000	Control head with remote sensor	1.0	110.00



472

Thermostatic control head for radiator valves
Set point locking mechanism
Remote adjustment knob
Fits 220, 221, 338, 339 and 676 valves

Capillary length: 78"
Temperature adjustment range: 43–82 °F
Maximum ambient temperature: 120 °F

Code	Description	Lbs	USD
472000	Control head with remote wall sensor	1.0	210.00



203

Thermostatic control head for radiator valves
Set point locking mechanism
Remote contact probe
Built-in sensor with liquid-filled element
Fits 220, 221, 338 and 339 series valves

Capillary length: 78"
Temperature adjustment range: 68–122 °F
Maximum sensor temperature: 212 °F

THERMO-ELECTRIC ACTUATOR



6564

Thermo-electric actuator for electric control of radiator valves
Install in any orientation
Fits 220, 221, 338 and 339 series valves

Ambient temperature range: 32–120 °F
Power supply: 24V AC/DC
Operating power consumption: 3W
Starting current draw: ≤ 250 mA
Microswitch contact rating: 5A (24V)
Protection class: NEMA 3 (IP 54)



Code	Description	Lbs	USD
656404	24 V AC/DC	0.4	85.30
656414	24 V AC/DC with microswitch	0.4	108.00

Code	Description	Lbs	USD
203502	Control head with contact probe	0.5	209.00



4490

Manual knob for radiator valves
Fits 220 and 221 series valves

Code	Description	Lbs	USD
449010	Manual knob	0.1	13.00

NPT THERMOSTATIC RADIATOR VALVE BODIES

220



Angled radiator valve body
Compatible with 200, 201, 203, 472 and 4490 control heads, and 6564 actuators

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Description	Cv	Lbs	USD
220400A	1/2" FNPT in, 1/2" NPT male union out	2.8	0.3	60.80
220500A	3/4" FNPT in, 3/4" NPT male union out	3.7	0.3	66.50

221



Straight radiator valve body
Compatible with 200, 201, 203, 472 and 4490 control heads, and 6564 actuators

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Description	Cv	Lbs	USD
221400A	1/2" FNPT in, 1/2" NPT male union out	1.7	0.3	60.80
221500A	3/4" FNPT in, 3/4" NPT male union out	2.6	0.3	66.50



Universal radiator tool for installing 1/2" and 3/4" tailpieces

Code	Description	Lbs	USD
387127	Radiator tool	1.0	89.10

EUROPEAN STYLE TOWEL WARMER RADIATOR VALVES

338



Angled radiator valve body
Manual control knob
Convertible to automatic control with 200, 201, 203 and 472 control heads

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Cv	Lbs	USD
338452	1/2" straight	3/4" conical	3.1	0.5	64.00

342



Angled radiator isolation and balancing valve
Manual adjustment of valve to isolate radiator or modulate flow rate

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Cv	Lbs	USD
342452	1/2" straight	3/4" conical	4.6	0.5	42.00

339



Straight radiator valve body
Manual control knob
Convertible to automatic control with 200, 201, 203 and 472 control heads

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Cv	Lbs	USD
339452	1/2" straight	3/4" conical	2.0	0.5	69.00

343



Straight radiator isolation and balancing valve
Manual adjustment of valve to isolate radiator or modulate flow rate

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Cv	Lbs	USD
343452	1/2" straight	3/4" conical	2.5	0.5	44.10

Intended for use in metric radiators such as European towel warmers and panel radiators.

CONNECTION VALVES FOR PANEL RADIATORS



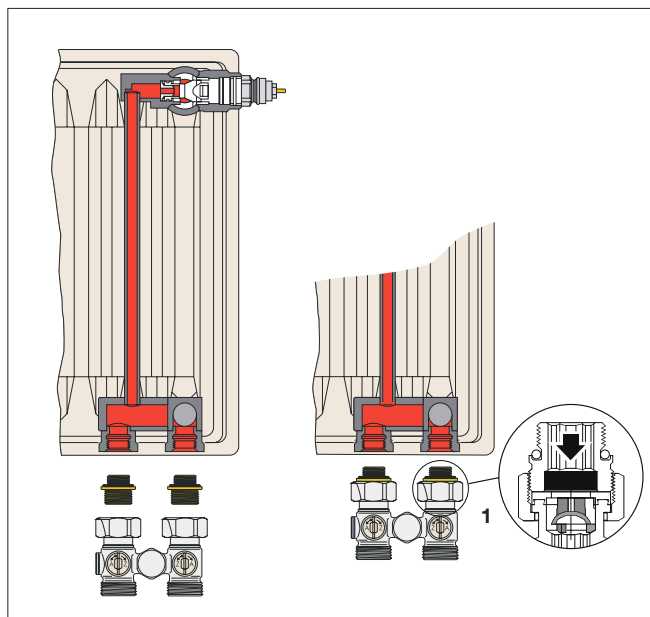
3010

Straight isolation valve for panel radiators with two-pipe systems

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Lbs	USD
301040	1/2" straight	3/4" conical	1.0	51.20

Operating principle for 3010



3012

Straight isolation valve for panel radiators with one-pipe systems
Adjustable by-pass valve to divert flow

Adjustable by-pass range: 30-50% of flow
Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Lbs	USD
301241	1/2" straight	3/4" conical	1.0	89.60



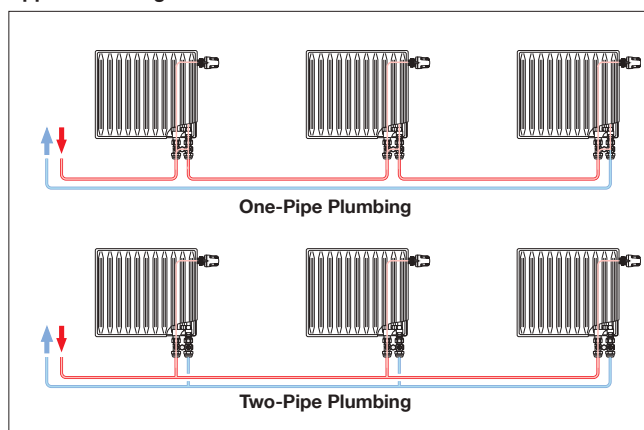
3011

Angled isolation valve for panel radiators with two-pipe systems

Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Lbs	USD
301143	1/2" straight	3/4" conical	1.0	51.20

Application Diagram for 301 valves



3013

Angled isolation valve for panel radiators with one-pipe systems
Adjustable by-pass valve to divert flow

Adjustable by-pass range: 30-50% of flow
Maximum operating pressure: 150 psi
Fluid temperature range: 40–212 °F
Material: Chrome plated brass

Code	Radiator Connection	Pipe Connection	Lbs	USD
301341	1/2" straight	3/4" conical	1.0	89.60



4497

Wall covering plate for 301 series panel radiator valves
Complete with wall connections

Code	Description	Lbs	USD
449740	Plate	0.1	4.50

CONNECTION FITTINGS



681 Universal PEX fittings

Compatible with any ASTM F876 single layer PEX tubing
Fits 301, 338, 339, 342 and 343 valves

Maximum operating pressure: 150 psi
Fluid temperature range: 40–180 °F
Material: Brass, chrome plated nut

Code	Description	Lbs	USD
681503A	3/8" nominal PEX	0.2	10.90
681524	1/2" nominal PEX	0.2	10.90
681555	5/8" nominal PEX	0.2	10.70



437

Compression fitting to connect 1/2" copper
Fits 301, 338, 339, 342 and 343 valves

Maximum operating pressure: 150 psi
Fluid temperature range: 40–250 °F
Material: Brass, chrome plated brass

Code	Description	Lbs	USD
437516	1/2" compression	0.1	8.80



940

Adapter for directly connecting panel radiator with PEX, PEX-AL-PEX, sweat, MNPT or compression fittings
Includes two fittings

Code	Description	Lbs	USD
940451	1/2" M straight x 3/4" M conical	0.1	19.70



NA103

MNPT fitting to connect 1/2" copper
Fits 301, 338, 339, 342 and 343 valves

Maximum operating pressure: 150 psi
Fluid temperature range: 40–250 °F
Material: Brass, chrome plated brass

Code	Description	Lbs	USD
NA10313	1/2" NPT male	0.2	12.60



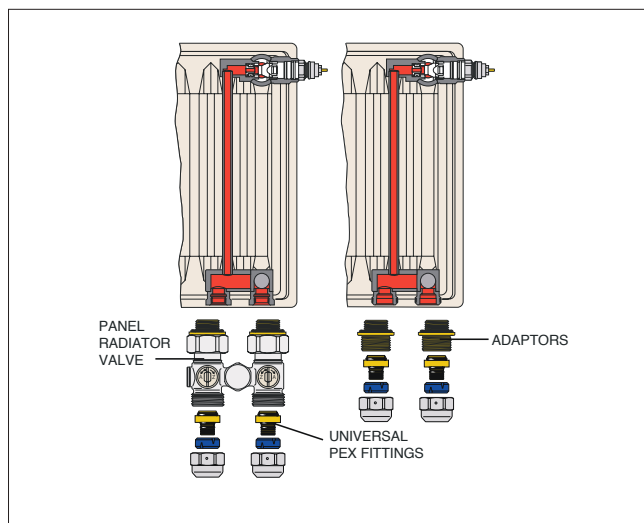
682 Universal PEX-AL-PEX fittings

Compatible with any ASTM F1281 multi-layer PEX-AL-PEX tubing
Fits 301, 338, 339, 342 and 343 valves

Maximum operating pressure: 150 psi
Fluid temperature range: 40–200 °F
Material: Brass

Code	Description	Lbs	USD
682540A	1/2" PEX-AL-PEX	0.2	10.70

Operating principle for 682 Universal PEX-AL-PEX fittings



NA102

Sweat fitting to connect 1/2" copper
Fits 301, 338, 339, 342 and 343 valves

Maximum operating pressure: 150 psi
Fluid temperature range: 40–250 °F
Material: Brass, chrome plated brass

Code	Description	Lbs	USD
NA10262	1/2" sweat	0.2	11.60



Wrench for tightening PEX fitting to radiator valve

Code	Description	Lbs	USD
387100	26 mm x 30 mm	1.5	49.20



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Z-ONE™ VALVES AND RELAYS

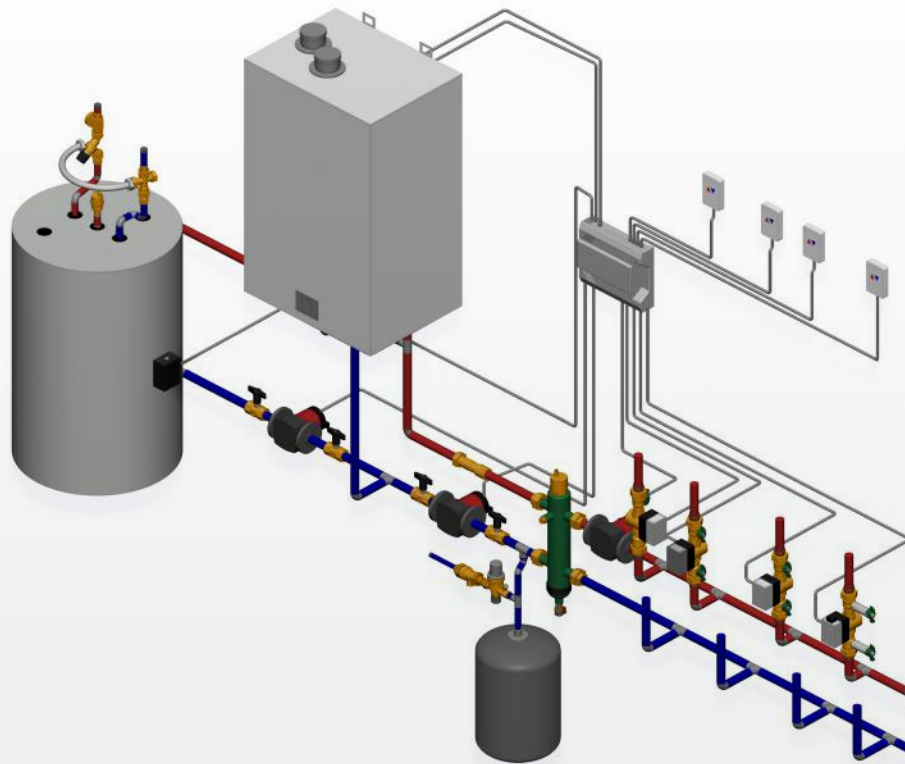
ZONING DONE RIGHT



The reliable **Z-one™ Motorized Zone Valves** offer quick installation and easy service in a wide variety of commercial and residential applications including radiant, fan coils, chilled or hot water and low pressure steam applications. When installed with a **Z-one™ Relay Control**, featuring universal compatibility and versatility, both qualify for our industry exclusive five-year warranty. **CALEFFI GUARANTEED.**



ZONE VALVES, CONTROLS AND COIL KITS



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Pressure independent control valves (PICV)
- Coil kits
- Thermo-electric zone valves
- Motorized zone valves
- Pump zone controls
- Valve zone controls
- Motorized ball zone valves
- Motorized ball valves

PRESSURE INDEPENDENT CONTROL VALVES (PICV)

145 FLOWMATIC® NPT



Pressure independent control valve
Control flow rates manually or automatically
Actuator sold separately
Complete with:
- PT test ports

Maximum operating pressure: 360 psi
Fluid temperature range: -4 – 250 °F
Material: DZR brass

Code	Description	GPM Range	Lbs	USD
145443A G90	½" NPT female union	0.1 – 0.9	1.0	172.00
145443A 1G8	½" NPT female union	0.4 – 1.8	1.0	172.00
145443A 3G5	½" NPT female union	0.4 – 3.5	1.0	172.00
145553A G90	¾" NPT female union	0.1 – 0.9	1.0	183.00
145553A 1G8	¾" NPT female union	0.4 – 1.8	1.0	183.00
145553A 3G5	¾" NPT female union	0.4 – 3.5	1.0	183.00
145553A 5G3	¾" NPT female union	0.5 – 5.3	1.0	183.00
145663A 7G9	1" NPT female union	0.8 – 7.9	1.1	332.00
145663A 13G	1" NPT female union	1.3 – 13	1.1	332.00
145663A 16G	1" NPT female union	1.6 – 16	1.1	354.00

145 FLOWMATIC® press



Pressure independent control valve
Control flow rates manually or automatically
Actuator sold separately
Complete with:
- PT test ports

Maximum operating pressure: 200 psi
Fluid temperature range: -4 – 250 °F
Material: DZR brass

Code	Description	GPM Range	Lbs	USD
145446A G90	½" press union	0.1 – 0.9	1.0	183.00
145446A 1G8	½" press union	0.4 – 1.8	1.0	183.00
145446A 3G5	½" press union	0.4 – 3.5	1.0	183.00
145556A G90	¾" press union	0.1 – 0.9	1.0	195.00
145556A 1G8	¾" press union	0.4 – 1.8	1.0	195.00
145556A 3G5	¾" press union	0.4 – 3.5	1.0	195.00
145556A 5G3	¾" press union	0.5 – 5.3	1.0	195.00
145666A 7G9	1" press union	0.8 – 7.9	1.1	343.00
145666A 13G	1" press union	1.3 – 13	1.1	343.00
145666A 16G	1" press union	1.6 – 16	1.1	378.00

145 FLOWMATIC® sweat



Pressure independent control valve
Control flow rates manually or automatically
Actuator sold separately
Complete with:
- PT test ports

Maximum operating pressure: 360 psi
Fluid temperature range: -4 – 250 °F
Material: DZR brass

Code	Description	GPM Range	Lbs	USD
145449A G90	½" sweat union	0.1 – 0.9	1.0	161.00
145449A 1G8	½" sweat union	0.4 – 1.8	1.0	161.00
145449A 3G5	½" sweat union	0.4 – 3.5	1.0	161.00
145559A G90	¾" sweat union	0.1 – 0.9	1.0	172.00
145559A 1G8	¾" sweat union	0.4 – 1.8	1.0	172.00
145559A 3G5	¾" sweat union	0.4 – 3.5	1.0	172.00
145559A 5G3	¾" sweat union	0.5 – 5.3	1.0	172.00
145669A 7G9	1" sweat union	0.8 – 7.9	1.1	320.00
145669A 13G	1" sweat union	1.3 – 13	1.1	320.00
145669A 16G	1" sweat union	1.6 – 16	1.1	367.00



Proportional actuator for PICV
Fail-safe and fail-in-place variants
Compatible with 145 FLOWMATIC
and 149 FLOWMATIC Express Coil Kit

Power supply: 24V AC/DC
Supply cable length: 78"
Control and Feedback signal: 0-10V
Ambient temperature range: 32 - 120 °F

Code	Description	Lbs	USD
145013	24V, 0-10 V proportional, fail in place	0.3	200.00
145018*	24V, 0-10 V proportional	0.3	264.00

* NC / NO, fail open or closed



Proportional thermo-electric actuator
Normally closed
Compatible with 145 FLOWMATIC
and 149 FLOWMATIC Express Coil Kit

Power supply: 24V AC/DC
Supply cable length: 39"
Control and Feedback signal: 0-10V
Ambient temperature range: 32 - 140 °F

Code	Description	Lbs	USD
656524	24V, 0-10 V proportional, NC	0.3	183.00

ACCESSORIES



Thermo-electric actuator
Compatible with 145 FLOWMATIC® and
149 FLOWMATIC® Express Coil Kit

Power supply: 24V AC/DC
Supply cable length: 39"
Control signal: ON/OFF
Ambient temperature range: 32 - 140 °F



Insulation jacket for 145 FLOWMATIC®

Code	Description	Lbs	USD
656504	24V on/off, NC	0.3	103.00
656604	24V on/off, NO	 0.3	95.00

Code	Description	Lbs	USD
CBN145437	Fits ½" and ¾"	0.1	27.50
CBN145667	Fits 1"	0.1	27.50

COIL KITS



149 FLOWMATIC® Express Coil Kit

Pre-assembled terminal unit coil kit
Complete with:

- Pressure independent control valve
- 3-way shut-off valves
- Integrated by-pass
- Venturi device with PT ports
- Filtering cartridge
- Pre-formed insulation shell

Maximum working pressure: 360 psi
Fluid temperature range: 14 – 250 °F
Material: DZR brass



Insulation jacket for 149 FLOWMATIC®
Express coil kit
For use in chilled water applications

Code	Description	Lbs	USD
F0001771	Insulation shell for chilled water	0.1	41.20



Terminal unit connecting hoses
Maximum operating pressure: 400 psi
Fluid temperature range: -4 – 212 °F
Material: Braided stainless steel
Includes two hoses

Code	Description	GPM Range	Lbs	USD
149400A G40	½" NPT	0.1 – 0.4	5.0	412.00
149400A G90	½" NPT	0.4 – 0.9	5.0	412.00
149400A 1G8	½" NPT	0.9 – 1.8	5.0	412.00
149400A 3G5	½" NPT	1.8 – 3.5	5.0	412.00
149500A G90	¾" NPT	0.4 – 0.9	5.2	435.00
149500A 1G8	¾" NPT	0.9 – 1.8	5.2	435.00
149500A 3G5	¾" NPT	1.8 – 3.5	5.2	435.00
149500A 5G3	¾" NPT	3.5 – 5.3	5.2	435.00
149600A 7G9	1" NPT	5.3 – 7.9	6.3	515.00
149600A 13G	1" NPT	7.9 – 13	6.3	515.00
149600A 16G	1" NPT	8.0 – 16	6.3	515.00

Code	Description	Lbs	USD
NA10970	½" MNPT x 12" length	0.6	101.00
NA10971	½" MNPT x 18" length	0.7	113.00
NA10972	½" MNPT x 24" length	0.8	126.00
NA10973	¾" MNPT x 12" length	1.0	132.00
NA10974	¾" MNPT x 18" length	1.1	150.00
NA10975	¾" MNPT x 24" length	1.2	169.00
NA10976	1" MNPT x 12" length	2.0	293.00
NA10977	1" MNPT x 18" length	2.2	321.00
NA10978	1" MNPT x 24" length	2.4	350.00

THERMO-ELECTRIC ZONE VALVES

6767 TwisTop+™ High Performance



Two-way thermo-electric zone valve
High performance Cv and close-off
Normally closed
Complete with 656354 actuator
Maximum operating pressure: 150 psi
Fluid temperature range: 40 – 200 °F
Ambient temperature range: 32 – 120 °F
Power supply: 24V AC/DC
Material: Brass valve body

6762 TwisTop™ Zone valve



Two-way thermo-electric zone valve
Normally closed
Complete with 656354 actuator
Maximum operating pressure: 150 psi
Fluid temperature range: 40 – 200 °F
Ambient temperature range: 32 – 120 °F
Power supply: 24V AC/DC
Material: Brass valve body

Code	Description	Cv	ΔP	Lbs	USD
676746A	1/2" press union	5.6	35 psi	2.2	212.00
676749A	1/2" sweat union	5.6	35 psi	2.2	231.00
676748A	1/2" PEX expansion union	5.6	35 psi	2.2	231.00
676756A	3/4" press union	5.6	35 psi	2.2	231.00
676759A	3/4" sweat union	5.6	35 psi	2.2	224.00
676758A	3/4" PEX expansion union	5.6	35 psi	2.2	224.00
676766A	1" press union	5.6	35 psi	2.2	262.00
676769A	1" sweat union	5.6	35 psi	2.2	250.00
676768A	1" PEX expansion union	5.6	35 psi	2.2	250.00
676500A*	Body only, close-off 35 psid	5.6	35 psi	1.0	57.60

*See fitting selection in section 13

Code	Description	Cv	ΔP	Lbs	USD
676246A	1/2" press union	4.0	20 psi	1.4	193.00
676249A	1/2" sweat union	4.0	20 psi	1.4	187.00
676248A	1/2" PEX expansion union	4.0	20 psi	1.4	187.00
676256A	3/4" press union	4.0	20 psi	1.4	210.00
676259A	3/4" sweat union	4.0	20 psi	1.4	204.00
676258A	3/4" PEX expansion union	4.0	20 psi	1.4	204.00
676266A	1" press union	4.0	20 psi	1.4	242.00
676269A	1" sweat union	4.0	20 psi	1.4	233.00
676268A	1" PEX expansion union	4.0	20 psi	1.4	233.00
676000A*	Body only, close-off 20 psid	4.3	20 psi	0.5	29.00

*See fitting selection in section 13

6564



Thermo-electric actuator
Install in any orientation
Fits 676 two-way zone valve bodies
Ambient temperature range: 32–120 °F
Power supply: 24V AC/DC
Operating power consumption: 3W
Starting current draw: ≤ 250 mA
Microswitch contact rating: 5A (24V)
Protection class: NEMA 3 (IP 54)

6563 TwisTop™



Thermo-electric actuator
Manually operated using twist-top
Fits 676 two-way zone valve bodies
Ambient temperature range: 32–120 °F
Power supply: 24V AC/DC
Operating power consumption: 3W
Starting current draw: ≤ 250 mA
Microswitch contact rating: 5A (24V)
Protection class: NEMA 3 (IP 54)

Code	Description	Lbs	USD
656404	24V AC/DC	0.4	85.30
656414	24V AC/DC with micro-switch	0.4	108.00

Code	Description	Lbs	USD
656344	24V AC/DC	0.4	114.00
656354	24V AC/DC with micro-switch	0.4	135.00

MOTORIZED ZONE VALVES



E239721
US LISTED
86BP

Z4 Zone™ 2-way

Two-way motorized zone valve
Normally closed actuator: Z111000
Auxiliary micro-switch
18" wire leads
Lever for manual operation

Maximum operating pressure: 300 psi
Fluid temperature range: 32 – 240 °F
Ambient temperature range: 32 – 104 °F
Power supply: 24 VAC
Wire lead length: 18"



E239721
US LISTED
86BP

Z5 Zone™ 2-way

Two-way motorized zone valve
Normally closed actuator: Z151000
Auxiliary micro-switch
Screw terminal blocks
Lever for manual operation

Maximum operating pressure: 300 psi
Fluid temperature range: 32 – 240 °F
Ambient temperature range: 32 – 104 °F
Power supply: 24 VAC

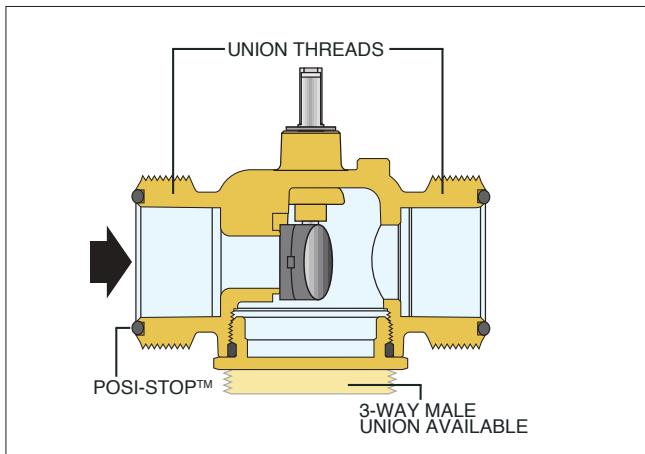
Code	Description	Cv	Δ P	Lbs	USD
Z40	Inverted flare	3.5	30 psi	2.2	178.00
Z40F*	¾" Inverted flare	3.5	30 psi	2.2	202.00
Z42	½" SAE flare	3.5	30 psi	2.2	193.00
Z44	½" sweat	2.5	50 psi	2.1	174.00
Z45	¾" sweat	7.5	20 psi	2.2	187.00
Z46	1" sweat	7.5	20 psi	2.3	235.00
Z47	1¼" sweat	7.5	20 psi	2.3	273.00

* Two ¾" sweat fittings (NA10006) included.

Code	Description	Cv	Δ P	Lbs	USD
Z50	Inverted flare	3.5	30 psi	2.2	182.00
Z50F*	¾" Inverted flare	3.5	30 psi	2.2	206.00
Z54	½" sweat	2.5	50 psi	2.1	178.00
Z55	¾" sweat	7.5	20 psi	2.2	193.00
Z56	1" sweat	7.5	20 psi	2.3	239.00
Z57	1¼" sweat	7.5	20 psi	2.3	278.00

* Two ¾" sweat fittings (NA10006) included.

Construction design for Z-one™ 2-way



Inverted flare sweat adaptors for Z-one
inverted flare valves

Code	Description	Lbs	USD
NA10005	½" sweat	0.3	8.80
NA10006	¾" sweat	0.3	11.10
NA10007	1" sweat	0.4	18.40
NA61241	Retrofit extension kit	0.2	9.10



E239721
US LISTED
86BP

Z-one™ 2-way Unions

Two-way zone valves with unions
Normally closed actuator
Auxiliary micro-switch
Lever for manual operation

Maximum operating pressure: 200 psi
Fluid temperature range: 32 – 240 °F
Ambient temperature range: 32 – 104 °F
Power supply: 24 VAC

Code	Description	Cv	Δ P	Lbs	USD
Z44P*	½" press unions*	3.5	30 psi	2.2	239.00
Z54P**	½" press unions**	3.5	30 psi	2.2	243.00
Z45P3*	¾" press unions	3.5	30 psi	2.2	243.00
Z55P3**	¾" press unions	3.5	30 psi	2.2	247.00
Z45P*	¾" press unions*	7.5	20 psi	2.2	243.00
Z55P*	¾" press unions*	7.5	20 psi	2.2	247.00
Z45PL*	¾" press unions*	7.5	20 psi	2.3	266.00
Z55PL**	¾" press unions**	7.5	20 psi	2.3	270.00
Z46P*	1" press unions*	7.5	20 psi	2.4	275.00
Z56P**	1" press unions**	7.5	20 psi	2.4	280.00
Z55S**	¾" sweat unions	7.5	20 psi	2.2	235.00

*Include Z11000 actuator with 18" wire lead connection.

**Have the Z151000 actuator with screw terminal block connection.
PL version long press fitting for retrofit includes press fittings.

MOTORIZED ZONE VALVES



Normally closed

Code	Description	Lbs	USD
Z111000	24 V, micro-switch, 18" wires	1.1	123.00
Z111900	24 V, high current switch, 18" wires	1.1	123.00
Z116000	120 V, micro-switch, 6" wires	1.1	123.00
Z151000	24 V, micro-switch, terminal blocks	1.1	128.00
Z161000	24 V, terminal blocks	1.1	116.00
Z121000	24 V, 18" wires	1.1	114.00
Z126000	120 V, 6" wires	1.1	114.00

Z3 3-way



Three-way diverting zone valve
Stainless steel stem
EPDM rubber seal and paddle

Maximum operating pressure: 300 psi
Maximum close-off pressure: 75 psi
Fluid temperature range: 32 – 240 °F
Material: Brass

Code	Description	Cv	Δ P	Lbs	USD
Z300411	½" FNPT	1.0	75 psi	1.1	72.30
Z300412	½" FNPT	2.5	50 psi	1.1	72.30
Z300413	½" FNPT	3.5	30 psi	1.1	72.30
Z300431	½" sweat	1.0	75 psi	1.0	67.90
Z300432	½" sweat	2.5	50 psi	1.0	67.90
Z307433*	½" sweat LL	3.5	30 psi	1.0	87.40
Z300512	¾" FNPT	2.5	50 psi	1.2	90.30
Z300513	¾" FNPT	3.5	30 psi	1.2	90.30
Z300515	¾" FNPT	5.0	25 psi	1.2	90.30
Z300517	¾" FNPT	7.5	20 psi	1.2	90.30
Z300532	¾" sweat	2.5	50 psi	1.1	83.80
Z300533	¾" sweat	3.5	30 psi	1.1	83.80
Z300535	¾" sweat	5.0	25 psi	1.1	83.80
Z307537*	¾" sweat LL	7.5	20 psi	1.1	104.00
Z300617	1" FNPT	7.5	20 psi	1.3	136.00
Z300635	1" sweat	5.0	25 psi	1.2	126.00
Z300637	1" sweat	7.5	20 psi	1.2	126.00
Z300737	1¼" sweat	7.5	20 psi	1.3	153.00

***LL** Low-lead brass body.

Z1

Normally closed actuators fit Z2 and Z3 valve bodies
Normally open actuators fit Z2 valve bodies only
Quick pushbutton install onto zone valve

Ambient temperature range: 32 – 104 °F
Power supply: 24 or 120 VAC
Power consumption: 5 W, 7 VA

Normally open

Code	Description	Lbs	USD
Z131000	24 V, micro-switch, 18" wires	1.1	135.00
Z136000	120 V, micro-switch, 6" wires	1.1	135.00
Z141000	24 V, 18" wires	1.1	124.00
Z146000	120 V, 6" wires	1.1	124.00

Z2 2-way



Two-way straight zone valve
Stainless steel stem
EPDM rubber seal and paddle

Maximum operating pressure: 300 psi
Maximum close-off pressure: 75 psi
Fluid temperature range: 32 – 240 °F
Material: Brass

Code	Description	Cv	Δ P	Lbs	USD
Z200041	Inverted flare	1.0	75 psi	1.1	54.30
Z200042	Inverted flare	2.5	50 psi	1.1	54.30
Z200043	Inverted flare	3.5	30 psi	1.1	54.30
Z200053	½" SAE Flare	3.5	30 psi	1.1	69.40
Z200411	½" FNPT	1.0	75 psi	1.1	54.30
Z207411*	½" FNPT LL	1.0	75 psi	1.1	74.10
Z200412	½" FNPT	2.5	50 psi	1.1	54.30
Z200413	½" FNPT	3.5	30 psi	1.1	54.30
Z200431	½" sweat	1.0	75 psi	1.0	49.70
Z200432	½" sweat	2.5	50 psi	1.0	49.70
Z207433*	½" sweat LL	3.5	30 psi	1.0	69.40
Z200512	¾" FNPT	2.5	50 psi	1.2	74.10
Z200513	¾" FNPT	3.5	30 psi	1.2	74.10
Z200515	¾" FNPT	5.0	25 psi	1.2	74.10
Z200517	¾" FNPT	7.5	20 psi	1.2	74.10
Z200532	¾" sweat	2.5	50 psi	1.1	65.60
Z207533*	¾" sweat LL	3.5	30 psi	1.1	85.30
Z200535	¾" sweat	5.0	25 psi	1.1	65.60
Z200537	¾" sweat	7.5	20 psi	1.1	65.60
Z207537*	¾" sweat LL	7.5	20 psi	1.1	85.30
Z200617	1" FNPT	7.5	20 psi	1.3	117.00
Z200635	1" sweat	5.0	25 psi	1.2	111.00
Z200637	1" sweat	7.5	20 psi	1.2	111.00
Z200737	1¼" sweat	7.5	20 psi	1.3	149.00

***LL** Low-lead brass body.

Complies with standard NSF/ANSI/CAN 372, certified by ICC-ES (for the LL models only).

MOTORIZED ZONE VALVES



Three-way union zone valve body
Fittings sold separately

Code	Description	Cv	Δ P	Lbs	USD
Z300687*	1" male union body	7.5	20 psi	1.2	94.10

*See fitting selection in Section 13



Two-way straight union zone valve body
Fittings sold separately

Code	Description	Cv	Δ P	Lbs	USD
Z200683*	1" male union body	3.5	30 psi	1.1	74.10
Z200687*	1" male union body	7.5	20 psi	1.1	74.10

*See fitting selection in Section 13



Replacement valve stem paddle for two-way and three-way zone valves
Complete with:
- C-clip
- Bottom cap o-ring

Code	Description	Lbs	USD
F69293	Fits all 1/2" and 3/4" sweat Z2, Z3	0.4	18.20
F69294	Fits all 3/4" NPT and all 1", 1 1/4" Z2, Z3	0.4	18.20



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	49.00
290031*	1" M x 1" F union ball valve	1.0	77.30

*with extended handle

Complies with standard NSF/ANSI/CAN 372, certified by ICC-ES (for the LL models only).

PUMP ZONE CONTROLS

ZSR Z-one™ Relay



Single and multi-zone pump controls
Control up to 6 circulator pumps
Compatible with low voltage thermostats

Power supply: 120 VAC, 50/60 Hz
Transformer voltage: 24 VAC
Max. transformer load: 6 VA (ZSR101), 40 VA (ZSR103-106)
Electrical switch rating: 10A (ZSR101), 20A (ZSR103-106) max combined
Ambient temperature range: 32 – 115 °F

Code	Description	Lbs	USD
ZSR101	Single zone relay	1.0	122.00
ZSR103	3 zone pump control	2.0	289.00
ZSR104	4 zone pump control	2.0	338.00
ZSR106	6 zone pump control	2.0	414.00

VALVE ZONE CONTROLS

ZVR Z-one™ Relay



Multi-zone valve relay board
Control up to 6 zone valves
Compatible with low voltage thermostats
Automatic resettable low voltage fuse

Power supply: 120 VAC, 50/60 Hz
Transformer voltage: 24 VAC
Max. transformer load: 40 VA (ZVR103/4), 80 VA (ZVR106)
Electrical switch rating: 20A max combined
Ambient temperature range: 32 – 115 °F

Code	Description	Lbs	USD
ZVR103	3 zone valve control	2.0	219.00
ZVR104	4 zone valve control	2.0	260.00
ZVR106	6 zone valve control	2.0	338.00
NA10343	Expansion transformer	0.1	70.90

ZSR Z-ONE RELAY FUSES



Replacement fuse pack for ZSR series
Type 2AG, 5A slow blow

Code	Description	Lbs	USD
NA10342	Spare fuse (package of 5)	0.1	12.30

MOTORIZED BALL ZONE VALVES



6442 2-way Straight

Two-way motorized ball zone valve
3-wire floating fail-in-place actuator with micro-switch

Maximum operating pressure: 150 psi
Fluid temperature range: 20 – 230 °F
Ambient temperature range: 32 – 130 °F
Power supply: 24 VAC
Power consumption: 4 VA
Auxiliary contact rating: 5A

Code	Description	Cv	Lbs	USD
644250A	¾" NPT male union	13	2.3	338.00
644256A	¾" press union	13	2.4	338.00
644259A	¾" sweat union	13	2.3	331.00
644260A	1" NPT male union	13	2.3	365.00
644266A	1" press union	13	2.4	368.00
644269A	1" sweat union	13	2.3	357.00
NA644200*	Body, no fittings	13	1.0	293.00

*See fitting selection in section 13



6443..3BY 3-way By-pass

Three-way bypass motorized ball zone valve
3-wire floating fail-in-place actuator with micro-switch

Maximum operating pressure: 150 psi
Fluid temperature range: 20 – 230 °F
Ambient temperature range: 32 – 130 °F
Power supply: 24 VAC
Power consumption: 4 VA
Auxiliary contact rating: 5A

Code	Description	Cv	Lbs	USD
644350A 3BY	¾" NPT male union	12	2.5	364.00
644356A 3BY	¾" press union	12	2.6	383.00
644359A 3BY	¾" sweat union	12	2.5	375.00
644360A 3BY	1" NPT male union	12	2.5	423.00
644366A 3BY	1" press union	12	2.6	430.00
644369A 3BY	1" sweat union	12	2.5	414.00
NA644300 3BY*	Body, no fittings	12	1.2	317.00

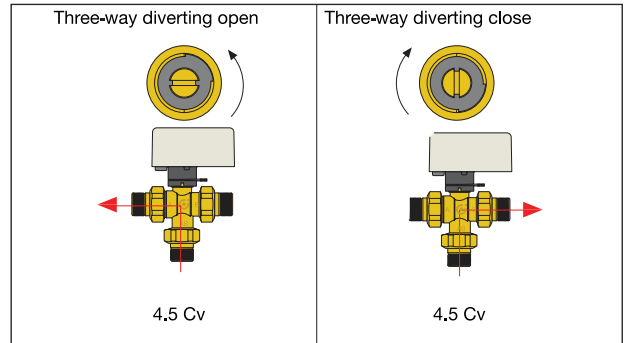
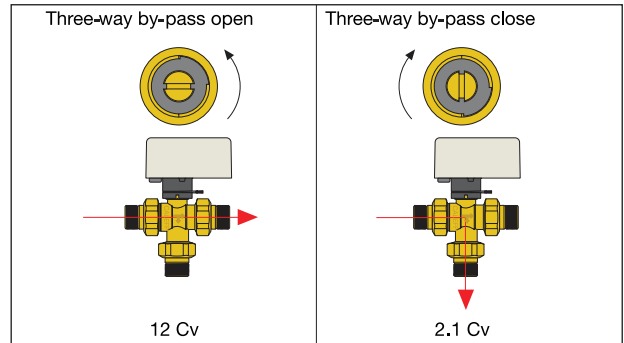
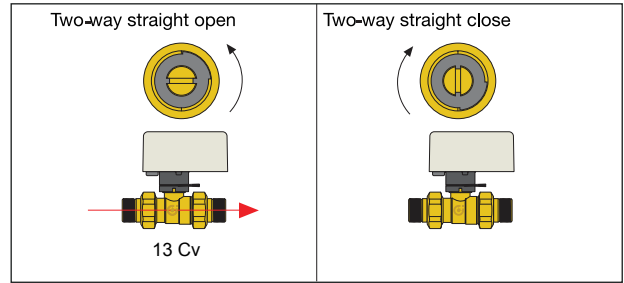
*See fitting selection in section 13



6440 24 V 3-wire control

Actuator for 6442 and 6443 series valves
Power supply: 24 VAC
Power consumption: 4 VA
Auxiliary contact rating: 5A
Wire lead length: 36"

Code	Description	Lbs	USD
644004	24 VAC	1.0	199.00



6443 3-way Diverting

Three-way diverting motorized ball zone valve
3-wire floating fail-in-place actuator with micro-switch

Maximum operating pressure: 150 psi
Fluid temperature range: 20 – 230 °F
Ambient temperature range: 32 – 130 °F
Power supply: 24 VAC
Power consumption: 4 VA
Auxiliary contact rating: 5A

Code	Description	Cv	Lbs	USD
644350A	¾" NPT male union	4.5	2.5	364.00
644356A	¾" press union	4.5	2.6	383.00
644359A	¾" sweat union	4.5	2.5	375.00
644360A	1" NPT male union	4.5	2.5	423.00
644366A	1" press union	4.5	2.6	430.00
644369A	1" sweat union	4.5	2.5	414.00
NA644300*	Body, no fittings	4.5	1.2	317.00

*See fitting selection in section 13

MOTORIZED BALL VALVES

638 Motorized Ball Valves NPT



Two-way high flow motorized ball valve
3-wire floating fail-in-place actuator
Control lever for manual operation

Maximum operating pressure: 230 psi
Fluid temperature range: 14 – 230 °F
Ambient temperature range: 14 – 230 °F
Power supply: 24 VAC, 6 VA
Auxiliary contacts rating: 6A

Code	Description	Cv	Lbs	USD
638054A 103	¾" NPT male union	20	3.3	397.00
638064A 103	1" NPT male union	42	4.5	452.00
638074A 103	1¼" NPT male union	56	5.6	576.00
638084A 103	1½" NPT male union	89	12	938.00
638094A 103	2" NPT male union	162	12.4	1,032.00

638 Motorized Ball Valves press

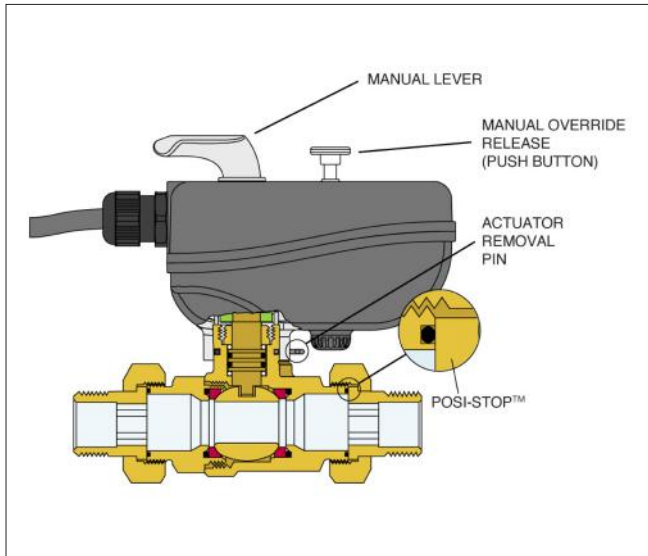


Two-way high flow motorized ball valve
3-wire floating fail-in-place actuator
Control lever for manual operation

Maximum operating pressure: 200 psi
Fluid temperature range: 14 – 230 °F
Ambient temperature range: 14 – 230 °F
Power supply: 24 VAC, 6 VA
Auxiliary contacts rating: 6A

Code	Description	Cv	Lbs	USD
638054A 106	¾" press union	20	2.7	405.00
638064A 106	1" press union	42	4.8	481.00
638074A 106	1¼" press union	56	5.8	748.00
638084A 106	1½" press union	89	11.6	1,015.00
638094A 106	2" press union	162	11.8	1,378.00

Construction design for 638 Motorized Ball Valves



638 Motorized Ball Valves sweat



Two-way high flow motorized ball valve
3-wire floating fail-in-place actuator
Control lever for manual operation

Maximum operating pressure: 230 psi
Fluid temperature range: 14 – 230 °F
Ambient temperature range: 14 – 230 °F
Power supply: 24 VAC, 6 VA
Auxiliary contacts rating: 6A

Code	Description	Cv	Lbs	USD
638054A 109	¾" sweat union	20	3.3	386.00
638064A 109	1" sweat union	42	4.5	439.00
638074A 109	1¼" sweat union	56	5.6	558.00
638084A 109	1½" sweat union	89	12	892.00
638094A 109	2" sweat union	162	12.4	983.00



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Understanding PRVs in Plumbing Systems
with Cody Mack and Kevin Freidt

10/31/2024



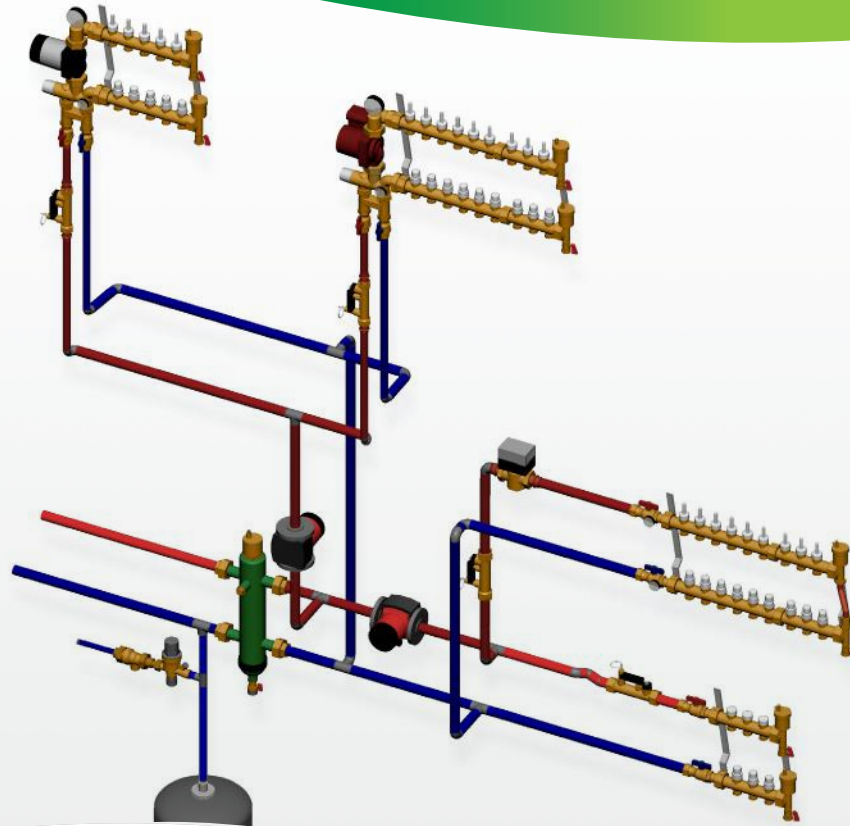
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DISTRIBUTION MANIFOLDS AND MIXING STATIONS



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Thermostatic manifold mixing stations
- Low temperature manifold mixing stations
- Brass distribution manifolds
- Pump and valve temperature mixing units
- Boxes for distribution manifolds
- Fittings for distribution manifolds and mixing stations
- Thermo electric actuators for manifolds and valves

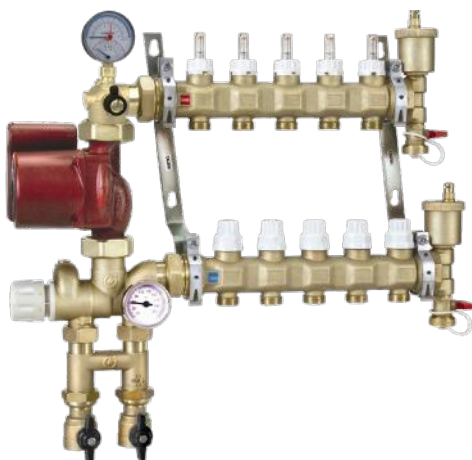
THERMOSTATIC MANIFOLD MIXING STATIONS

172

Low temperature manifold mixing station three speed pump

Supply manifold complete with flow meters and adjustable balancing valves
Return manifold complete with built-in shut-off valves and is suitable for thermo-electric actuators
Includes Grundfos UPS 15-58U pump

Maximum operating pressure: 150 psi
Control temperature range: 80 – 130 °F
Primary inlet max temp: 195 °F



Code	Description	UPS Pump	No.	Outlets	Lbs	USD
1725C1A	¾"	15-58U	3	¾" M	20	1,363.00
1725C1A IN*	¾"	15-58U	3	¾" M	20	1,363.00
1725D1A	¾"	15-58U	4	¾" M	21	1,452.00
1725D1A IN*	¾"	15-58U	4	¾" M	21	1,452.00
1725E1A	¾"	15-58U	5	¾" M	23	1,538.00
1725E1A IN*	¾"	15-58U	5	¾" M	23	1,538.00
1725F1A	¾"	15-58U	6	¾" M	25	1,627.00
1725F1A IN*	¾"	15-58U	6	¾" M	25	1,627.00
1725G1A	¾"	15-58U	7	¾" M	27	1,716.00
1725G1A IN*	¾"	15-58U	7	¾" M	27	1,716.00
1725H1A	¾"	15-58U	8	¾" M	28	1,804.00
1725H1A IN*	¾"	15-58U	8	¾" M	28	1,804.00
1725I1A	¾"	15-58U	9	¾" M	29	1,890.00
1725I1A IN*	¾"	15-58U	9	¾" M	29	1,890.00
1725L1A	¾"	15-58U	10	¾" M	31	1,977.00
1725L1A IN*	¾"	15-58U	10	¾" M	31	1,977.00
1725M1A	¾"	15-58U	11	¾" M	33	2,065.00
1725M1A IN*	¾"	15-58U	11	¾" M	33	2,065.00
1725N1A	¾"	15-58U	12	¾" M	34	2,155.00
1725N1A IN*	¾"	15-58U	12	¾" M	34	2,155.00
1725O1A	¾"	15-58U	13	¾" M	36	2,242.00
1725O1A IN*	¾"	15-58U	13	¾" M	36	2,242.00

*Models with "IN" suffix are built inverted with tubing connections going upward.

172

Low temperature manifold mixing station high efficiency pump

Supply manifold complete with flow meters and adjustable balancing valves
Return manifold shut-off valves can be replaced with thermo-electric actuators
Includes Grundfos UPMS 25-58 pump

Maximum operating pressure: 150 psi
Control temperature range: 80 – 130 °F
Primary inlet max temp: 195 °F

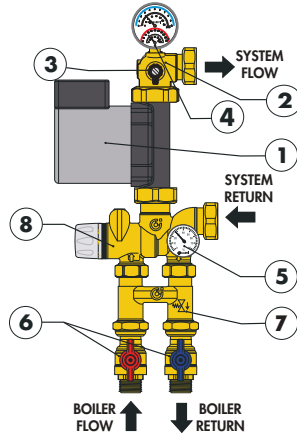


Code	Description	UPMS Pump	No.	Outlets	Lbs	USD
1725C1AHE	¾"	25-58	3	¾" M	20	1,635.00
1725C1AHE IN*	¾"	25-58	3	¾" M	20	1,635.00
1725D1AHE	¾"	25-58	4	¾" M	21	1,722.00
1725D1AHE IN*	¾"	25-58	4	¾" M	21	1,722.00
1725E1AHE	¾"	25-58	5	¾" M	23	1,810.00
1725E1AHE IN*	¾"	25-58	5	¾" M	23	1,810.00
1725F1AHE	¾"	25-58	6	¾" M	25	1,898.00
1725F1AHE IN*	¾"	25-58	6	¾" M	25	1,898.00
1725G1AHE	¾"	25-58	7	¾" M	27	1,988.00
1725G1AHE IN*	¾"	25-58	7	¾" M	27	1,988.00
1725H1AHE	¾"	25-58	8	¾" M	28	2,073.00
1725H1AHE IN*	¾"	25-58	8	¾" M	28	2,073.00
1725I1AHE	¾"	25-58	9	¾" M	29	2,162.00
1725I1AHE IN*	¾"	25-58	9	¾" M	29	2,162.00
1725L1AHE	¾"	25-58	10	¾" M	31	2,252.00
1725L1AHE IN*	¾"	25-58	10	¾" M	31	2,252.00
1725M1AHE	¾"	25-58	11	¾" M	33	2,340.00
1725M1AHE IN*	¾"	25-58	11	¾" M	33	2,340.00
1725N1AHE	¾"	25-58	12	¾" M	34	2,428.00
1725N1AHE IN*	¾"	25-58	12	¾" M	34	2,428.00
1725O1AHE	¾"	25-58	13	¾" M	36	2,514.00
1725O1AHE IN*	¾"	25-58	13	¾" M	36	2,514.00

THERMOSTATIC MANIFOLD MIXING STATIONS

Characteristic components / hydraulic diagram

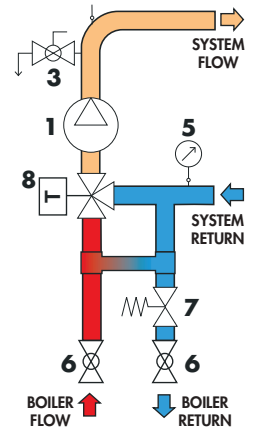
Item	Description	Symbol
1	Circulation pump UPS 15-58 pictured	
2	Top elbow with supply temperature and pressure gauge	
3	Purge valve	
4	Supply temperature and pressure gauge	
5	Return temperature gauge	
6	Primary circuit shut-off valves	
7	Primary circuit hydraulic separator with check valve	
8	Thermostatic three-way mixing valve with built-in sensor	



Supply manifold equipped with flow meters and balancing valves.

Return manifold equipped with shut-off valves.

End fittings with automatic air vent with hygroscopic cap and drain cock.



LOW TEMPERATURE MANIFOLD MIXING STATIONS



Thermostatic mixing station replacement parts

Replacement pump for 172 manifold stations.
Pump only, no fittings included

Code	Description	Lbs	USD
NA11360	UPMS 25-58 replacement pump	2.3	600.00
NA10038	UPS 15-58U replacement pump	2.3	273.00
F19153	Replacement mixing valve	1.6	304.00

BRASS DISTRIBUTION MANIFOLDS



668S1 TwistFlow™ assembly

Distribution manifold for radiant panel and in-floor systems
Supply manifold complete with flow meters and built-in balancing valve
Return manifold shut-off valves can be replaced with thermo-electric actuators

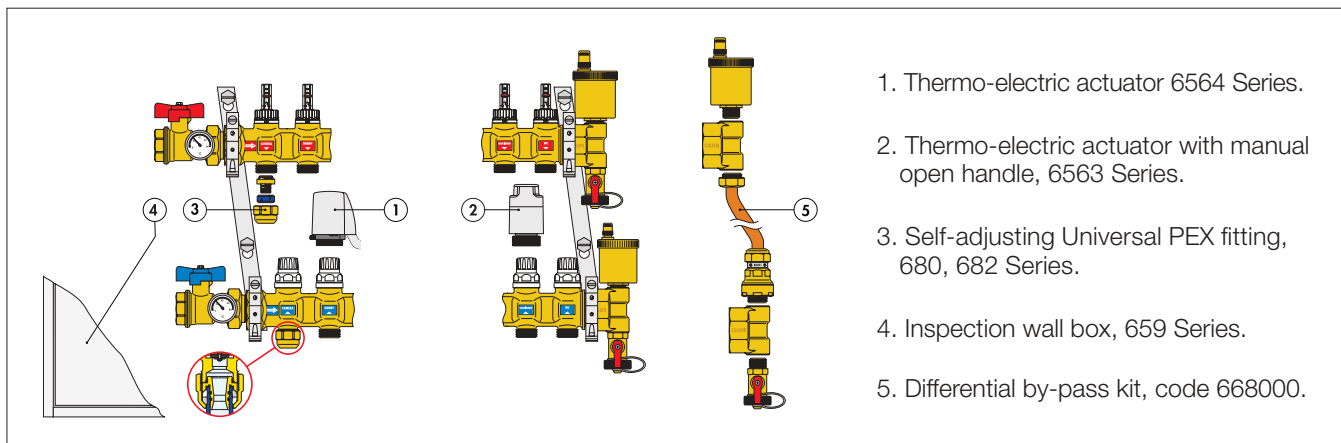
Maximum operating pressure: 150 psi
Fluid temperature range: 32 – 180 °F
Flow meter scale: ¼ – 2 GPM

Code	Description	No.	Outlets	Lbs	USD
6686C5S1A	1"	3	¾" M	17	606.00
6686C5S1A IN*	1"	3	¾" M	17	606.00
6686D5S1A	1"	4	¾" M	18	693.00
6686D5S1A IN*	1"	4	¾" M	18	693.00
6686E5S1A	1"	5	¾" M	19	780.00
6686E5S1A IN*	1"	5	¾" M	19	780.00
6686F5S1A	1"	6	¾" M	21	869.00
6686F5S1A IN*	1"	6	¾" M	21	869.00
6686G5S1A	1"	7	¾" M	23	956.00
6686G5S1A IN*	1"	7	¾" M	23	956.00
6686H5S1A	1"	8	¾" M	24	1,046.00
6686H5S1A IN*	1"	8	¾" M	24	1,046.00
6686I5S1A	1"	9	¾" M	26	1,132.00
6686I5S1A IN*	1"	9	¾" M	26	1,132.00
6686L5S1A	1"	10	¾" M	28	1,221.00
6686L5S1A IN*	1"	10	¾" M	28	1,221.00
6686M5S1A	1"	11	¾" M	29	1,308.00
6686M5S1A IN*	1"	11	¾" M	29	1,308.00
6686N5S1A	1"	12	¾" M	31	1,396.00
6686N5S1A IN*	1"	12	¾" M	31	1,396.00
6686O5S1A	1"	13	¾" M	33	1,484.00
6686O5S1A IN*	1"	13	¾" M	33	1,484.00

Code	Description	No.	Outlets	Lbs	USD
6687C5S1A	1¼"	3	¾" M	17	641.00
6687C5S1A IN*	1¼"	3	¾" M	17	641.00
6687D5S1A	1¼"	4	¾" M	18	730.00
6687D5S1A IN*	1¼"	4	¾" M	18	730.00
6687E5S1A	1¼"	5	¾" M	19	818.00
6687E5S1A IN*	1¼"	5	¾" M	19	818.00
6687F5S1A	1¼"	6	¾" M	21	905.00
6687F5S1A IN*	1¼"	6	¾" M	21	905.00
6687G5S1A	1¼"	7	¾" M	23	992.00
6687G5S1A IN*	1¼"	7	¾" M	23	992.00
6687H5S1A	1¼"	8	¾" M	24	1,082.00
6687H5S1A IN*	1¼"	8	¾" M	24	1,082.00
6687I5S1A	1¼"	9	¾" M	26	1,170.00
6687I5S1A IN*	1¼"	9	¾" M	26	1,170.00
6687L5S1A	1¼"	10	¾" M	28	1,257.00
6687L5S1A IN*	1¼"	10	¾" M	28	1,257.00
6687M5S1A	1¼"	11	¾" M	29	1,343.00
6687M5S1A IN*	1¼"	11	¾" M	29	1,343.00
6687N5S1A	1¼"	12	¾" M	31	1,431.00
6687N5S1A IN*	1¼"	12	¾" M	31	1,431.00
6687O5S1A	1¼"	13	¾" M	33	1,519.00
6687O5S1A IN*	1¼"	13	¾" M	33	1,519.00

*Models with "IN" suffix are built inverted with tubing connections going upward.

Construction details for 668S1 TwistFlow™ assembly



PUMP AND VALVE TEMPERATURE MIXING UNITS



166 HydroMixer™

Thermostatic adjustable temperature mixing unit with insulation

Complete with:

- Variable OR three-speed pump
- Temperature gauges
- Shut-off ball valves

Available with pump on right or left side

Maximum operating pressure: 145 psi
Control temperature range: 80 – 125 °F
Primary inlet max temp: 212 °F

Code	Description	Lbs	USD
166600A	Dual line with 15-58U pump on right	22	1,725.00
166610A	Dual line with 15-58U pump on left	22	1,725.00
166602A	Dual line with UPMS 25-58 pump on right	22	1,990.00
166612A	Dual line with UPMS 25-58 pump on left	22	1,990.00



Wall bracket fits 166 and 167 Series.

Code	Description	Lbs	USD
165001	Wall bracket	0.1	65.90



Differential pressure by-pass valve for 166 and 167 mixing units

Maximum operating pressure: 145 psi
Fluid temperature maximum: 212 °F

Code	Description	Lbs	USD
519006	Differential pressure by-pass valve	1.0	73.70



167 HydroMixer™

Motorized temperature mixing unit with insulation

Complete with:

- Three-point floating 24V actuator
- Variable OR three-speed pump
- Temperature gauges
- Shut-off ball valves

Available with pump on right or left side

Maximum operating pressure: 145 psi
Fluid temperature range: 40 – 212 °F

Code	Description	Lbs	USD
167600A	Dual line with 15-58U pump on right	23	1,725.00
167610A	Dual line with 15-58U pump on left	23	1,725.00
167602A	Dual line with UPMS 25-58 pump on right	23	1,990.00
167612A	Dual line with UPMS 25-58 pump on left	23	1,990.00



Top outlet fittings fit 166 and 167 series

Complete with:

- Two 1¼" union nuts
- Two sweat tailpieces
- Two washers

Code	Description	Lbs	USD
NA16069	1" sweat union outlet fittings	1.0	67.60



Bottom inlet fittings fit 166 and 167 series

Complete with:

- Two 1½" union nuts
- Two sweat tailpieces
- Two washers

Code	Description	Lbs	USD
NA16169	1" sweat union inlet fittings	1.0	68.40



Top outlet fittings fit 166 and 167 series

Complete with:

- Two 1¼" union nuts
- Two FNPT tailpieces
- Two washers

Code	Description	Lbs	USD
NA16060	1" NPT female union outlet fittings	1.0	76.70



Bottom inlet fittings fit 166 and 167 series

Complete with:

- Two 1½" union nuts
- Two FNPT tailpieces
- Two washers

Code	Description	Lbs	USD
NA16160	1" NPT female union inlet fittings	1.0	77.50

BOXES FOR DISTRIBUTION MANIFOLDS



659 Manifold cabinet

Housing wall box for 668S1 manifolds

Adjustable depth from 4⅜ – 5½"

Material: 18 gauge sheet metal

Powder coated white paint finish

Code	Description	H	Max Outlets	Lbs	USD
659044	16" width	20"	3	17	350.00
659064	24" width	20"	6	23	383.00
659084	32" width	20"	10	30	451.00
659104	40" width	20"	13	37	517.00
659124	48" width	20"	17	44	586.00

*Rough opening dimensions

FITTINGS FOR DISTRIBUTION MANIFOLDS AND MIXING STATIONS



(680504A shown)

680 Universal PEX fittings

Compatible with any ASTM F876 single layer PEX
Fits 172 and 668S1 series manifolds

Maximum operating pressure: 150 psi
Fluid temperature range: 40 – 180 °F
Material: Brass

Code	Description	Compression ring	Lbs	USD
680507	5/16" nominal PEX	Blue	0.2	10.50
680503A	3/8" nominal PEX	Black	0.2	10.50
680504A	1/2" nominal PEX	Blue	0.2	10.50
680555A	5/8" nominal PEX	Black	0.2	10.50
680505A	3/4" nominal PEX	Brass	0.2	10.50



Wrench for tightening PEX fitting to manifolds.

Code	Description	Lbs	USD
387100	26 mm x 30 mm	1.5	49.20



Double nipple for coupling PEX fittings

Code	Description	Lbs	USD
942550	3/4" x 3/4" thread	0.1	13.00



(682530A shown)

682 Universal PEX-AL-PEX fittings

Compatible with any ASTM F1281 multi-layer PEX-AL-PEX tubing
Fits 172 and 668S1 series manifolds

Maximum operating pressure: 150 psi
Fluid temperature range: 40 – 200 °F
Material: Brass

Code	Description	Lbs	USD
682530A	3/8" nominal PEX-AL-PEX	0.2	10.70
682540A	1/2" nominal PEX-AL-PEX	0.2	10.70
682545A	5/8" nominal PEX-AL-PEX	0.2	11.30
682550A	3/4" nominal PEX-AL-PEX	0.2	20.30



386

Cap to plug unused manifold outlets
Fits 172 and 668S1 series manifolds

Code	Description	Lbs	USD
386500	3/4" straight thread	0.2	10.50

THERMO ELECTRIC ACTUATORS FOR MANIFOLDS AND VALVES



6563 TwisTop™

Thermo-electric actuator
Manually operated using twist-top
Fits 172 and 668S1 series manifolds

Ambient temperature range: 32 – 120 °F
Power supply: 24V AC/DC
Operating power consumption: 3W
Starting current draw: ≤ 250 mA
Microswitch contact rating: 5A (24V)
Protection class: NEMA 3 (IP 54)

Code	Description	Lbs	USD
656344	24V AC/DC	0.4	114.00
656354	24V AC/DC with micro-switch	0.4	135.00
656354R	24V AC/DC with micro-switch Rehau	0.4	148.00



6564

Thermo-electric actuator
Install in any orientation
Fits 172 and 668S1 series manifolds

Ambient temperature range: 32 – 120 °F
Power supply: 24V AC/DC
Operating power consumption: 3W
Starting current draw: ≤ 250 mA
Microswitch contact rating: 5A (24V)
Protection class: NEMA 3 (IP 54)

Code	Description	Lbs	USD
656404	24V AC/DC	0.4	85.30
656414	24V AC/DC with micro-switch	0.4	108.00

ACCESSORIES



Replacement balance/flow meter fits 172 and 668S1 series manifolds
Flow meter scale: ¼ – 2 GPM

Code	Description	Lbs	USD
F69600	Replacement flow meter	0.2	30.30



Replacement shut-off valve for 172 and 668S1 series manifolds

Code	Description	Lbs	USD
F69590	Replacement shut-off valve	0.3	24.10



Plastic replacement/test cap fits 5020 Series, for pressure testing manifolds.

Code	Description	Lbs	USD
R56214	Vent cap	0.1	2.30



Replacement shut-off valve for 663 and old 668 series manifolds

Code	Description	Lbs	USD
69122 CST	Replacement shut-off valve	0.3	13.40



NA669

Replacement flow meter for 663 and old 668 series manifolds

Maximum operating pressure: 85 psi
Maximum fluid temperature: 210 °F
¾" straight male x ¼" straight female nut

Code	Description	Lbs	USD
NA669150	¼ — 1 GPM high temp.	0.3	35.50
NA669250	½ — 2 GPM high temp.	0.3	35.50



White replacement knob for manifolds

Code	Description	Lbs	USD
449000	Replacement knob	0.1	10.50



5020

Replacement air vent for radiant manifolds
Maximum operating pressure: 150 psi
Maximum discharge pressure: 40 psi
Fluid temperature range: 32 – 250 °F
Material: Brass

Code	Description	Lbs	USD
502043 CST	½" straight thread	0.6	25.70



668

Off-center differential by-pass assembly

Fixed setting pressure: 3.6 psi
Maximum operating pressure: 150 psi
Fluid temperature range: 14 – 230 °F

Code	Description	Lbs	USD
668000	½" straight thread	0.6	118.00



675

Snap-on thermometer with thermo-conductive paste
Fits PEX, PEX-AL-PEX and copper pipe

Box of 10, comes with 1 syringe of paste

Code	Description	Lbs	USD
675900A	¾" & ½" PEX & ½" copper	0.2	11.10
R69413	Syringe of thermo conductive paste	0.1	7.80



688

Temperature gauge with pocket well fitting for manifolds
Dual scale

Code	Description	Lbs	USD
NA11031	Replacement gauge	0.1	27.30
688003A	Gauge with pocket well	0.2	41.70
NA10498	Replacement pocket well, low lead	0.1	4.10
F67037	O-ring fits NA10498	0.1	0.80



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CALEFFI
Hydronic Solutions

AUTOFILL™

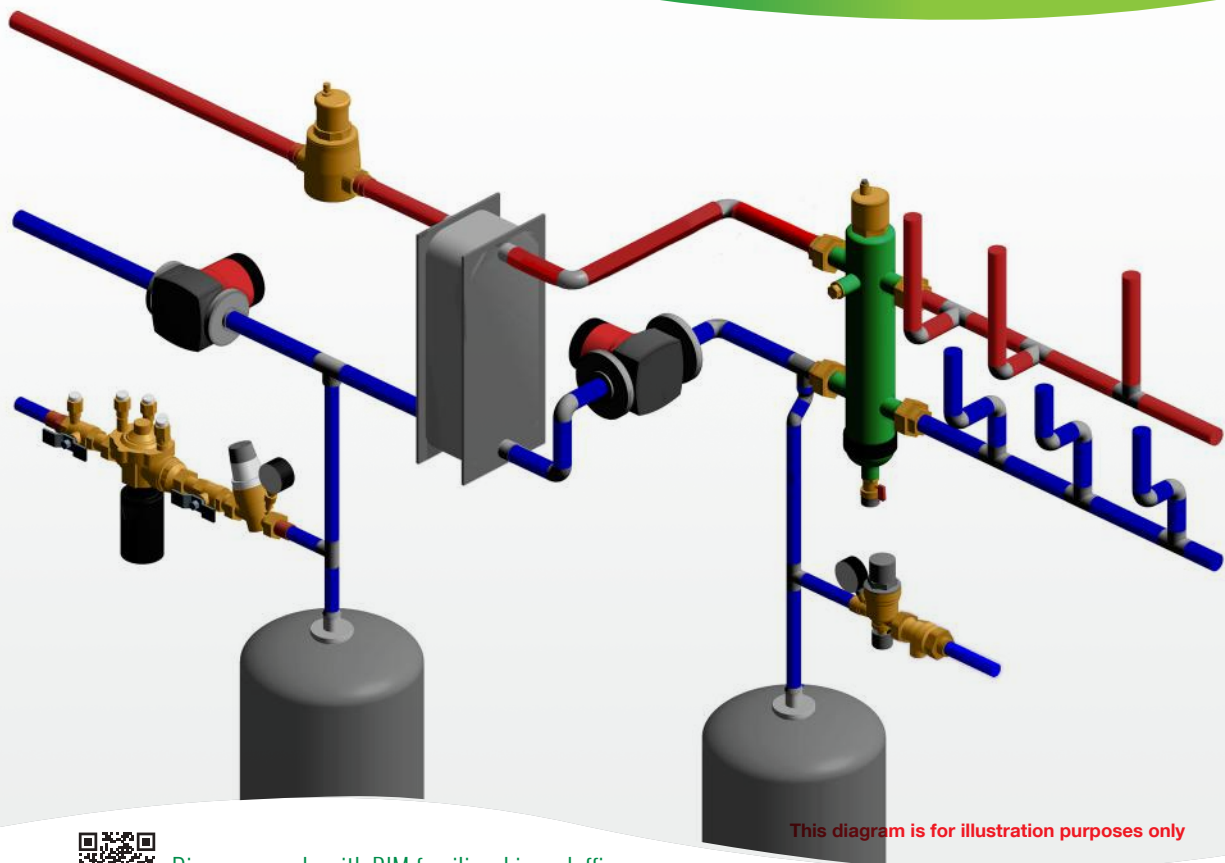
SET IT AND FORGET IT



The highly regarded and widely used **AutoFill™** is known among contractors as the **Set It and Forget It** hydronic system pressure control valve solution. The **fast-fill function** simplifies system fill by automatically opening fully until fill pressure is reached. System pressure is automatically maintained with set point dial or integral shutoff valve that can be closed for system isolation. The **AutoFill Combo** is conveniently available with an **ASSE 1012** dual check type or **ASSE 1013** RPZ backflow preventer. **CALEFFI GUARANTEED.**



FILLING UNITS AND BOILER TRIM KITS



Diagrams made with BIM families: bim.caleffi.com

PRODUCTS INCLUDED IN SECTION

- Automatic filling units
- Commercial automatic filling units
- Boiler trim kits
- Water Treatment filling unit
- Fill and flush cart

AUTOMATIC FILLING UNITS



553 AutoFill™

Pre-adjustable automatic filling valve
Anti-scale internal parts
Visual system pressure indicator
Complete with:
- Manual shut-off valve
- Check valve

Maximum operating pressure: 230 psi
Pressure setting range: 3 – 60 psi
Preset outlet pressure: 15 psi
Maximum fluid temperature: 150 °F
Material: Brass body

Code	Description	Lbs	USD
553549A	1/2" sweat union in, 1/2" FNPT out	1.7	123.00
553649A*	1/2" sweat union in, 1/2" FNPT out	1.7	138.00
553542A	1/2" NPT male union in, 1/2" FNPT out	1.7	131.00
553642A*	1/2" NPT male union in, 1/2" FNPT out	1.7	146.00

*With pressure gauge.



574 AutoFill™ Combo

Pre-adjustable automatic filling valve with testable reduced pressure zone backflow preventer with air gap
Complete with:
- 553 AutoFill™
- 574 FlowShield™ RP
- Isolation ball valves

Maximum operating pressure: 150 psi
Pressure setting range: 3 – 60 psi
Preset outlet pressure: 15 psi
Maximum fluid temperature: 150 °F

Code	Description	Lbs	USD
574002A	1/2" FNPT	9.4	488.00
574012A*	1/2" FNPT, gauge	9.4	502.00
574206A	1/2" press	9.4	510.00
574216A*	1/2" press, gauge	9.4	499.00
574207A	1/2" press in x FNPT out	9.4	474.00
574217A*	1/2" press in x FNPT out, gauge	9.4	514.00

*With pressure gauge.



573 AutoFill™ Combo

Pre-adjustable automatic filling valve with dual check backflow preventer
Complete with:
- 553 AutoFill™
- 573 FlowShield™ DuC-AV

Maximum operating pressure: 175 psi
Pressure setting range: 3 – 60 psi
Preset outlet pressure: 15 psi
Maximum fluid temperature: 150 °F
Material: Brass body

Code	Description	Lbs	USD
573002A	1/2" NPT female union in, 1/2" FNPT out	5.0	220.00
573012A*	1/2" NPT female union in, 1/2" FNPT out	5.0	238.00
573006A	1/2" press union in, 1/2" press out	5.0	246.00
573016A*	1/2" press union in, 1/2" press out	5.0	266.00
573007A	1/2" press union in, 1/2" FNPT out	5.0	235.00
573017A*	1/2" press union in, 1/2" FNPT out	5.0	252.00
573009A	1/2" sweat union in, 1/2" FNPT out	5.0	210.00
573019A*	1/2" sweat union in, 1/2" FNPT out	5.0	228.00

*With pressure gauge.



Replacement pressure gauge for 553 AutoFill™
Pressure range: 0 – 60 psi / 0 – 4 bar
Connection: 1/4" MNPT

Code	Description	Lbs	USD
NA10363	Replacement pressure gauge	0.1	16.10



Replacement cartridge for 553 AutoFill™

Code	Description	Lbs	USD
F59650	Replacement cartridge	0.2	36.50



Replacement plastic cover for 553 AutoFill™

Code	Description	Lbs	USD
NA10197	Clear plastic disc cover	0.1	1.60

COMMERCIAL AUTOMATIC FILLING UNITS



5350 AutoFill™

Pre-adjustable automatic filling valve
Integral downstream pressure gauge
Pressure setting adjustment knob

Maximum operating pressure: 365 psi
Pressure setting range: 6 – 90 psi
Preset setting pressure: 15 psi
Maximum fluid temperature: 140 °F

Code	Description	Lbs	USD
535059A	¾" sweat union	2.3	158.00
535069A	1" sweat union	2.4	169.00
535051A	¾" NPT male union	2.3	162.00
535061A	1" NPT male union	2.4	170.00
535056A	¾" press union	2.3	165.00
535066A	1" press union	2.4	178.00
535057A	¾" PEX crimp union	2.3	158.00
535067A	1" PEX crimp union	2.4	171.00
535058A	¾" PEX expansion union	2.3	158.00
535068A	1" PEX expansion union	2.4	171.00



5350 AutoFill™ Body

Pre-adjustable automatic filling valve
Integral downstream pressure gauge
Pressure setting adjustment knob
See fitting selection in section 13

Code	Description	Lbs	USD
535951A	1" male union body	2.0	112.00



574 AutoFill™ Combo

Pre-adjustable automatic filling valve with
testable reduced pressure zone backflow
preventer with air gap
Complete with:
- 5350 AutoFill™
- 574 FlowShield™ RP
- Isolation ball valves

Maximum operating pressure: 150 psi
Pressure setting range: 3 – 60 psi
Preset outlet pressure: 15 psi
Maximum fluid temperature: 140 °F

Code	Description	Lbs	USD
574151A	¾" FNPT in, ¾" FNPT union out	9.4	595.00
574161A	1" FNPT in, 1" NPT male union out	9.4	596.00
574156A	¾" press	9.4	632.00
574166A	1" press	9.4	652.00
574157A	¾" press in, ¾" FNPT union out	9.4	614.00
574167A	1" press in, 1" NPT male union out	9.4	645.00



NA102

Replacement pressure gauge for 5350
AutoFill™

Pressure range: 0 – 100 psi / 0 – 7 bar
Connection: 1/8" MNPT

Code	Description	Lbs	USD
NA10273	Replacement pressure gauge	0.2	15.00



Replacement cartridge for 5350 AutoFill™

Code	Description	Lbs	USD
535004	Replacement cartridge	0.2	58.10

BOILER TRIM KITS



NA553

Boiler trim kit with 8 boiler system components in one box

Kit includes:

- (1) 551 DISCAL® air separator
- (1) 573 FlowShield™ DuC-AV
- (1) 553 AutoFill™
- (1) Expansion tank
- (1) Expansion tank check valve
- (2) Brass nipples: ½" x 3"
- (1) Brass tee: ½" NPT

Code	Description	Tank size (gal)	Lbs	USD
NA553369	1" sweat	4.4	15	595.00
NA553379	1¼" sweat	4.4	16	691.00
NA553362	1" FNPT	4.4	15	609.00
NA553372	1¼" FNPT	4.4	16	706.00
NA553366	1" press	4.4	15	652.00
NA553376	1¼" press	4.4	16	784.00



NA553

Boiler trim kit with testable backflow preventer, 8 boiler system components in one box

Kit includes:

- (1) 551 DISCAL® air separator
- (1) 574 FlowShield™ RP
- (1) 553 AutoFill™
- (1) Expansion tank
- (1) Expansion tank check valve
- (2) Brass nipples: ½" x 3"
- (1) Brass tee: ½" NPT

Code	Description	Tank size (gal)	Lbs	USD
NA553369R	1" sweat	4.4	19	958.00
NA553379R	1¼" sweat	4.4	20	1,052.00
NA553362R	1" FNPT	4.4	19	968.00
NA553372R	1¼" FNPT	4.4	20	1,067.00
NA553366R	1" press	4.4	19	1,015.00
NA553376R	1¼" press	4.4	20	1,147.00

WATER TREATMENT FILLING UNITS



NA573

Replenishment water treatment filling unit
Demineralizes water through color changing cartridge

Kit includes:

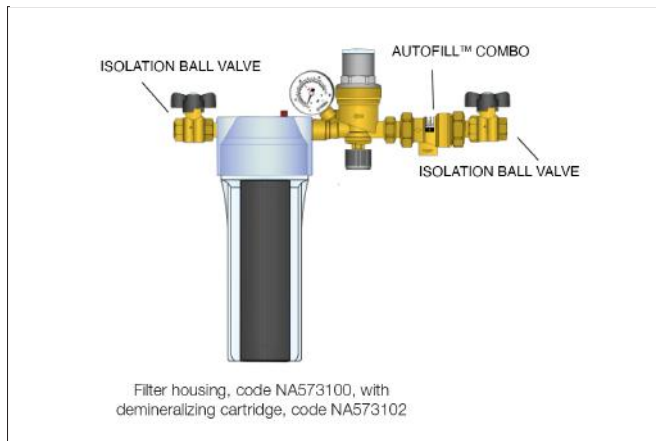
- 553 AutoFill™
- 573 FlowShield™ DuC-AV
- Filter housing with resin cartridge
- (2) Isolation ball valves

Maximum inlet pressure: 125 psi
Maximum fluid temperature: 100 °F

Code	Description	Lbs	USD
NA573022	½" FNPT	7.4	430.00
NA573100*	Replacement filter housing assembly	3.4	196.00
NA573102	Replacement color-changing filter	1.0	99.70

*Filter housing includes color changing demineralizing cartridge.

Construction detail for NA573



NA570 HYDROFILL™ replacement twist-on lid

Code	Description	Lbs	USD
NA57094	Replacement twist-on lid	3.0	707.00



NA570 HYDROFILL™ replacement parts.

Code	Description	Lbs	USD
NA57092	Replacement internal inlet/outlet screens	1.5	64.60
NA57093	Replacement o-ring seal kit	0.1	104.00



Resin bags for NA570 HYDROFILL™ in reusable plastic pail.

Code	Description	Lbs	USD
NA570971	Two resin bags for NA570912	22	519.00
NA570974	Four resin bags for NA570924	43	1,038.00

FILL AND FLUSH CART



NA255 HYDROFLUSH™

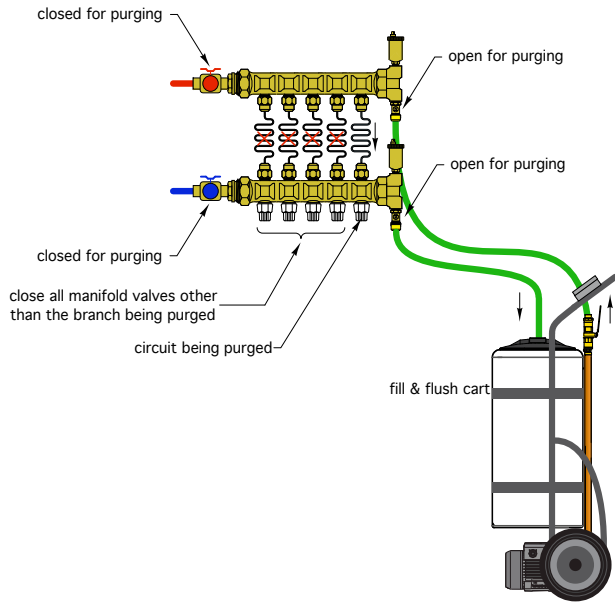
Portable pump cart for filling and flushing solar, geothermal and hydronic heating systems

Maximum fluid temperature: 140 °F
Maximum pump pressure: 55 psi
Pump delivery flow: 1-15 gpm
Pump power: ½ HP (120 VAC)
Tank: 10 gallon with dirt filter
Medium: water, glycol, cleaning fluids

Code	Description	Lbs	USD
NA25510	Clean, fill and flush cart	60	4,556.00
NA11338	Replacement hose, ¾" ID, Fx F GHT	3.0	67.00
NA11313	Replacement pump	32	1,764.00

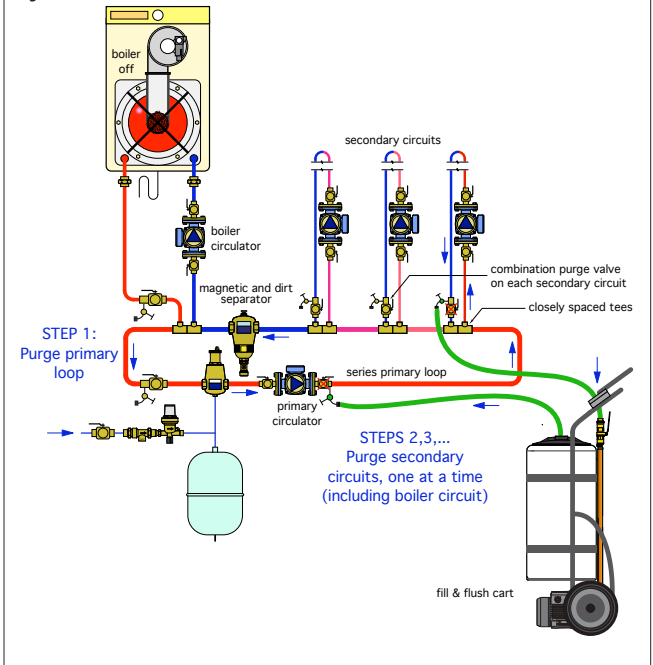
Application diagram for NA255 HYDROFLUSH™

Radiant



Application diagram for NA255 HYDROFLUSH™

Hydronic





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Hydronic Solutions

LEGIOMIX[®]evo

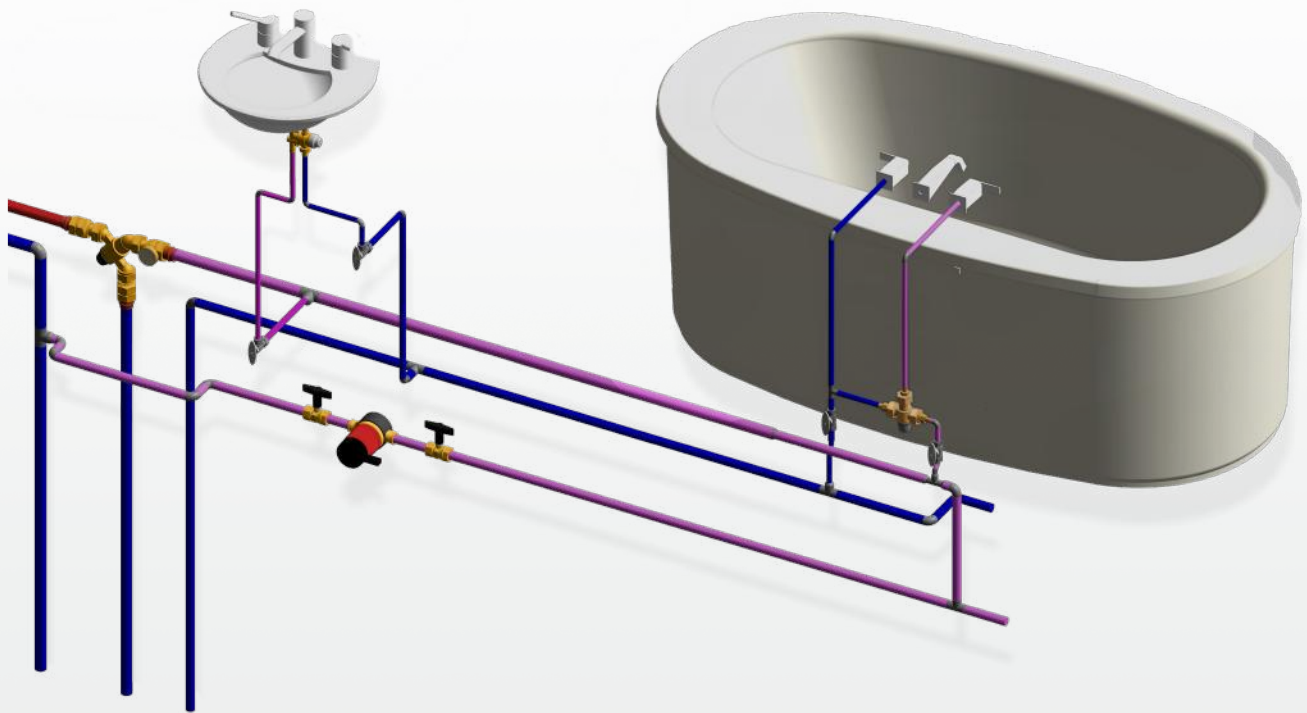
DIGITAL MIXING VALVE



The LEGIOMIX[®]evo digital mixing valve sets a new benchmark in **next-generation mixing control**, offering unmatched precision and innovation. **Meets requirements of NSF/ANSI 372-2011 and complies with ASSE 1017, CSA B125.3, UPC, IPC, for 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. CALEFFI GUARANTEED.**



MIXING VALVES



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Thermostatic mixing valves
- High flow thermostatic mixing valves
- Angle body thermostatic mixing valves
- Thermostatic mixing valve kits
- Digital mixing valves
- Scald protection thermostatic mixing valves

THERMOSTATIC MIXING VALVES



521 MixCal™ sweat

Adjustable thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521409A	½" sweat union	3.0	2.4	206.00
521409AC	½" sweat union, check valves	3.0	2.4	228.00
521509A	¾" sweat union	3.0	2.4	215.00
521509AC	¾" sweat union, check valves	3.0	2.4	247.00
521609A	1" sweat union	3.0	2.4	256.00
521609AC	1" sweat union, check valves	3.0	2.4	286.00



521 MixCal™ press

Adjustable thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521406A	½" press union	3.0	2.4	219.00
521406AC	½" press union, check valves	3.0	2.5	241.00
521506A	¾" press union	3.0	2.4	225.00
521506AC	¾" press union, check valves	3.0	2.5	279.00
521606A	1" press union	3.0	2.6	272.00
521606AC	1" press union, check valves	3.0	3.1	296.00



521 MixCal™ NPT

Adjustable thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521400A	½" NPT male union	3.0	2.4	215.00
521400AC	½" NPT male union, check valves	3.0	2.4	237.00
521500A	¾" NPT male union	3.0	2.4	225.00
521500AC	¾" NPT male union, check valves	3.0	2.4	256.00
521600A	1" NPT male union	3.0	2.4	267.00
521600AC	1" NPT male union, check valves	3.0	2.4	297.00



521 MixCal™ PEX

Adjustable thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521407A	½" PEX crimp union	3.0	2.4	206.00
521407AC	½" PEX crimp union, check valves	3.0	2.9	228.00
521507A	¾" PEX crimp union	3.0	2.4	215.00
521507AC	¾" PEX crimp union, check valves	3.0	2.9	247.00
521607A	1" PEX crimp union	3.0	2.4	256.00
521607AC	1" PEX crimp union, check valves	3.0	2.9	286.00
521408A	½" PEX expansion union	3.0	2.4	206.00
521408AC	½" PEX expansion union, check valves	3.0	2.9	228.00
521508A	¾" PEX expansion union	3.0	2.4	215.00
521508AC	¾" PEX expansion union, check valves	3.0	2.9	247.00
521608A	1" PEX expansion union	3.0	2.4	256.00
521608AC	1" PEX expansion union, check valves	3.0	2.9	286.00

Complies with: ASSE 1017 and CSA B125.3 performance standards, NSF/ANSI/CAN 372 for low lead/lead free materials requirements and IPC, IRC, UPC, NPC plumbing codes. Certified by ICC-ES.

THERMOSTATIC MIXING VALVES



521 MixCal™ sweat

Adjustable thermostatic mixing valve for point of distribution applications.
Complete with temperature gauge
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521419A	1/2" sweat union	3.0	2.9	245.00
521419AC	1/2" sweat union, check valves	3.0	2.9	266.00
521519A	3/4" sweat union	3.0	2.9	253.00
521519AC	3/4" sweat union, check valves	3.0	2.9	284.00
521619A	1" sweat union	3.0	2.9	296.00
521619AC	1" sweat union, check valves	3.0	2.9	327.00



521 MixCal™ press

Adjustable thermostatic mixing valve for point of distribution applications.
Complete with temperature gauge
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521416A	1/2" press union	3.0	2.9	258.00
521416AC	1/2" press union, check valves	3.0	3.0	277.00
521516A	3/4" press union	3.0	2.9	264.00
521516AC	3/4" press union, check valves	3.0	3.0	316.00
521616A	1" press union	3.0	3.1	311.00
521616AC	1" press union, check valves	3.0	3.5	334.00



521 MixCal™ NPT

Adjustable thermostatic mixing valve for point of distribution applications.
Complete with temperature gauge
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521410A	1/2" NPT male union	3.0	2.9	253.00
521410AC	1/2" NPT male union, check valves	3.0	2.9	274.00
521510A	3/4" NPT male union	3.0	2.9	264.00
521510AC	3/4" NPT male union, check valves	3.0	2.9	293.00
521610A	1" NPT male union	3.0	2.9	307.00
521610AC	1" NPT male union, check valves	3.0	2.9	335.00



521 MixCal™ PEX

Adjustable thermostatic mixing valve for point of distribution applications.
Complete with temperature gauge
Optional: Inlet check valves

Adjustable range: 85 – 150 °F
Max. inlet temperature: 200 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1.0 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521417A	1/2" PEX crimp union	3.0	2.5	245.00
521417AC	1/2" PEX crimp union, check valves	3.0	2.9	266.00
521418A	3/4" PEX crimp union	3.0	2.5	245.00
521418AC	3/4" PEX crimp union, check valves	3.0	2.9	266.00
521517A	1" PEX crimp union	3.0	2.5	253.00
521517AC	1" PEX crimp union, check valves	3.0	2.9	284.00
521518A	1/2" PEX expansion union	3.0	2.5	253.00
521518AC	1/2" PEX expansion union, check valves	3.0	2.9	284.00
521617A	3/4" PEX expansion union	3.0	2.5	296.00
521617AC	3/4" PEX expansion union, check valves	3.0	2.9	327.00
521618A	1" PEX expansion union	3.0	2.5	296.00
521618AC	1" PEX expansion union, check valves	3.0	2.9	327.00

Complies with: ASSE 1017 and CSA B125.3 performance standards, NSF/ANSI/CAN 372 for low lead/lead free materials requirements and IPC, IRC, UPC, NPC plumbing codes. Certified by ICC-ES.

HIGH FLOW THERMOSTATIC MIXING VALVES



5231 MixCal+™ NPT

Adjustable thermostatic mixing valve for high flow, point of distribution applications.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 4.4 GPM for 1" and 1¼" models
- 8.8 GPM for 1½ and 2" models



5231 MixCal+™ sweat

Adjustable thermostatic mixing valve for high flow, point of distribution applications. Complete with temperature gauge.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 4.4 GPM for optimal performance

Code	Description	Cv	Lbs	USD
523160A	1" NPT male union	7.0	6.0	1,308.00
523170A	1¼" NPT male union	7.6	6.0	1,413.00
523180A	1½" NPT male union	13.0	11.0	2,084.00
523190A	2" NPT male union	14.2	12.0	2,191.00

Code	Description	Cv	Lbs	USD
523177A	1¼" sweat union	7.6	9.0	1,454.00



5231 MixCal+™ sweat

Adjustable thermostatic mixing valve for high flow, point of distribution applications.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 4.4 GPM for 1" and 1¼" models
- 8.8 GPM for 1½ and 2" models



5231 MixCal+™ press

Adjustable thermostatic mixing valve for high flow, point of distribution applications.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 200 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 4.4 GPM for 1" and 1¼" models
- 8.8 GPM for 1½ and 2" models

Code	Description	Cv	Lbs	USD
523168A	1" sweat union	7.0	6.0	1,295.00
523178A	1¼" sweat union	7.6	6.0	1,352.00
523188A	1½" sweat union	13.0	11.0	2,032.00
523198A	2" sweat union	14.2	12.0	2,136.00

Code	Description	Cv	Lbs	USD
523166A	1" press union	7.0	6.0	1,377.00
523176A	1¼" press union	7.6	6.0	1,441.00
523186A	1½" press union	13.0	11.0	2,215.00
523196A	2" press union	14.2	12.0	2,463.00

Complies with standards ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

MIXCAL ACCESSORIES



521 MixCal™ Body

Replacement body for 521 MixCal.
See fitting selection in Section 13.

Code	Description	Cv	Lbs	USD
521101A	Replacement union body	3.0	1.9	158.00



Replacement for inlet tailpieces containing check valves.

Code	Description	Lbs	USD
NA10405	Replacement for PEX, press fittings	0.1	2.60
R39204	Replacement for sweat, NPT fittings	0.1	3.60



Replacement temperature gauge assembly.

Dual scale: 30 – 210 °F (0 – 100 °C)
Gauge accuracy: ± 1% FS
Gauge Size: 2" Diameter

Code	Description	Lbs	USD
NA10328	½" sweat assembly, incl. temp gauge	0.4	61.10
NA10056	¾" sweat assembly, incl. temp gauge	0.4	67.20
NA10058	1" sweat assembly, incl. temp gauge	0.4	73.70
NA10358	1" union thread assembly, incl. temp gauge	0.4	38.40
688003A	Replacement gauge with pocket well	0.5	41.70
NA11031	Replacement temperature gauge	0.1	27.30
NA10498	Replacement tin plated pocket well	0.1	4.10



Conical filter for inlet tailpieces containing check valves.

Code	Description	Lbs	USD
F52429	Conical filter	0.1	5.20

MIXCAL+ ACCESSORIES



5231 MixCal+™ Body

Replacement body for 5231 MixCal+™.
Check compatibility in code description.
See fitting selection in Section 13.

Code	Description	Lbs	USD
523179A	For 1" and 1¼" sizes	7.6	1,163.00
523199A	For 1½" and 2" sizes	14.2	1,664.00



Accessory inlet check valve assembly.
Compatible with MixCal+™ mixing valves.
Check compatibility in code description.

Code	Description	Lbs	USD
NA10366	Check valve assembly for 1" and 1¼"	0.1	106.00
NA10367	Check valve assembly for 1½" and 2"	0.1	235.00



Accessory temperature gauge assembly.

Dual scale: 30 – 210 °F (0 – 100 °C)
Gauge accuracy: ± 1% FS
Gauge Size: 2" Diameter

Code	Description	Lbs	USD
NA10315	1¼" sweat assembly	0.5	148.00
NA10476	For 1" and 1¼" sizes, MxF union	3.0	170.00
NA10461	For 1½" and 2" sizes, MxF union	4.0	291.00
688003A	Replacement gauge with pocket well	0.2	41.70
NA11031	Replacement temperature gauge	0.2	27.30

Complies with standards ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

ANGLE BODY THERMOSTATIC MIXING VALVES



520 AngleMix™ sweat

Adjustable angle body thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 0.5 GPM for optimal performance



520 AngleMix™ press

Adjustable angle body thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 0.5 GPM for optimal performance

Code	Description	Cv	Lbs	USD
520419A	½" sweat union	2.0	1.7	245.00
520419AC	½" sweat union, check valves	2.0	1.7	266.00
520519A	¾" sweat union	2.0	2.0	253.00
520519AC	¾" sweat union, check valves	2.0	2.1	284.00
520619A 001	1" sweat union NEW	2.0	3.7	256.00
520619AC 001	1" sweat union, check valves NEW	2.0	3.8	286.00

Code	Description	Cv	Lbs	USD
520416A	½" press union	2.0	1.7	258.00
520416AC	½" press union, check valves	2.0	1.7	277.00
520516A	¾" press union	2.0	2.0	264.00
520516AC	¾" press union, check valves	2.0	2.1	316.00
520616A 001	1" press union NEW	2.0	3.7	272.00
520616AC 001	1" press union, check valves NEW	2.0	3.8	296.00



520 AngleMix™ NPT

Adjustable angle body thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 0.5 GPM for optimal performance



520 AngleMix™ PEX

Adjustable angle body thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 0.5 GPM for optimal performance

Code	Description	Cv	Lbs	USD
520410A	½" NPT male union	2.0	1.7	253.00
520410AC	½" NPT male union, check valves	2.0	1.7	274.00
520510A	¾" NPT male union	2.0	2.0	264.00
520510AC	¾" NPT male union, check valves	2.0	2.1	293.00
520610A 001	1" NPT male union NEW	2.0	3.7	267.00
520610AC 001	1" NPT male union, check valves NEW	2.0	3.8	297.00

Code	Description	Cv	Lbs	USD
520414A	½" PEX crimp union	2.0	1.7	245.00
520414AC	½" PEX crimp union, check valves	2.0	1.7	266.00
520514A	¾" PEX crimp union	2.0	2.0	253.00
520514AC	¾" PEX crimp union, check valves	2.0	2.1	284.00
520614A 001	1" PEX crimp union NEW	2.0	3.7	256.00
520614AC 001	1" PEX crimp union, check valves NEW	2.0	3.8	286.00
520415A	½" PEX exp. union	2.0	1.7	245.00
520415AC	½" PEX exp. union, check valves	2.0	1.7	266.00
520515A	¾" PEX exp. union	2.0	2.0	253.00
520515AC	¾" PEX exp. union, check valves	2.0	2.1	284.00
520615A 001	1" PEX exp. union NEW	2.0	3.7	256.00
520615AC 001	1" PEX exp. union, check valves NEW	2.0	3.8	286.00

Complies with standards ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

ANGLE BODY THERMOSTATIC MIXING VALVES



520 AngleMix™ DL

Dual Listed angle body thermostatic mixing valve.
Complies with ASSE 1070 & 1017.
Complete with inlet check valves.

Factory set temperature limited to 120°F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 0.5 GPM for optimal performance



520 AngleMix™+

Adjustable angle body thermostatic mixing valve for point of distribution applications.
Optional: Inlet check valves.

Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0 GPM in recirculation applications
- 1 GPM for optimal performance

Code	Description	Cv	Lbs	USD
520419AC DL	½" sweat union	2.0	1.8	272.00
520519AC DL	¾" sweat union	2.0	2.1	300.00
520619AC DL	1" sweat union	2.0	2.4	392.00
520410AC DL	½" NPT male union	2.0	1.8	281.00
520510AC DL	¾" NPT male union	2.0	2.1	300.00
520610AC DL	1" NPT male union	2.0	2.5	404.00
520416AC DL	½" press union	2.0	1.9	309.00
520516AC DL	¾" press union	2.0	2.1	330.00
520616AC DL	1" press union	2.0	2.4	444.00
520414AC DL	½" PEX crimp union	2.0	1.7	272.00
520514AC DL	¾" PEX crimp union	2.0	1.9	300.00
520614AC DL	1" PEX crimp union	2.0	2.4	392.00
520415AC DL	½" PEX exp. union	2.0	1.7	272.00
520515AC DL	¾" PEX exp. union	2.0	1.9	300.00
520615AC DL	1" PEX exp. union	2.0	2.5	392.00

Code	Description	Cv	Lbs	USD
520619A	1" sweat union	3.5	3.7	354.00
520619AC	1" sweat union, check valves	3.5	3.8	392.00
520610A	1" NPT male union	3.5	3.9	364.00
520610AC	1" NPT male union, check valves	3.5	4.0	404.00
520616A	1" press union	3.5	3.7	400.00
520616AC	1" press union, check valves	3.5	3.9	444.00
520614A	1" PEX crimp union	3.5	3.5	354.00
520614AC	1" PEX crimp union, check valves	3.5	3.7	392.00
520615A	1" PEX exp. union	3.5	3.5	354.00
520615AC	1" PEX exp. union, check valves	3.5	3.7	392.00

Complies with standards ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES. AngleMix™ DL also complies with ASSE 1070/ASME A112.1070/CSA B125.70, CSA B125.3.

ANGLEMIX, ANGLEMIX DL, ANGLEMIX+ ACCESSORIES



520 AngleMix™ Body

Replacement body for 520 AngleMix™ or 520 AngleMix™+.
Check compatibility in code description.
See fitting selection in Section 13.

Code	Description	Lbs	USD
520051A	AngleMix replacement body	1.3	158.00
520061A	AngleMix+ replacement body	2.5	220.00



Replacement check valves.
Check compatibility in code description.

Code	Description	Lbs	USD
NA10405*	Replacement for PEX, press fittings	0.1	2.60
R39204*	Replacement for sweat, NPT fittings	0.1	3.60
NA10117	Replacement for AngleMix+ fittings	0.1	10.60

*Compatible with AngleMix and AngleMix DL product codes.



Conical filter for inlet tailpieces containing check valves.

Code	Description	Lbs	USD
F52429*	Conical filter	0.5	5.20

*Compatible with AngleMix and AngleMix DL product codes.

THERMOSTATIC MIXING VALVE KITS



520 TankMixer™

Mixing valve kit for simple connection to tank water heaters.

Connection to appliance: ¾" FNPT union
Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi



520 TankMixer™ with gauge

Mixing valve kit for simple connection to tank water heaters.

Connection to appliance: ¾" FNPT union
Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
520500AX	¾" NPT male union system connections	2.0	2.4	296.00
520506AX	¾" press union system connections	2.0	2.4	338.00
520509AX	¾" sweat union system connections	2.0	2.4	285.00

Code	Description	Cv	Lbs	USD
520510AX	¾" NPT male union system connections	2.0	2.9	338.00
520516AX	¾" press union system connections	2.0	2.9	380.00
520519AX	¾" sweat union system connections	2.0	2.9	328.00



520 TankMixer™ Compact

Mixing valve kit for heat pump or electric water heaters.

Complete with:

- Brass offset pivot connectors
- ¾" port for expansion device

Connection to appliance: ¾" FNPT union
Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
520519AP	¾" sweat union system connections	2.0	4.5	413.00
520510AP	¾" NPT male union system connections	2.0	4.5	426.00
520516AP	¾" press union system connections	2.0	4.5	434.00



520 TankMixer™ Combi

Mixing valve kit for combi boilers.

Complete with:

- 290 Service valve kit (see section 12)
- Pressure relief valve

Connection to appliance: ¾" FNPT union
Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
KIT520510AX	¾" NPT male union system connections	2.0	5.0	478.00
KIT520516AX	¾" press union system connections	2.0	5.0	520.00
KIT520517AX	¾" PEX crimp union system connections	2.0	5.0	468.00
KIT520518AX	¾" PEX exp. union system connections	2.0	5.0	468.00
KIT520519AX	¾" sweat union system connections	2.0	5.0	468.00



520 TankMixer™ Compact Combi

Mixing valve kit for combi boilers.

Complete with:

- 290 Service valve kit (see section 12)
- Pressure relief valve
- Brass offset pivot connectors

Connection to appliance: ¾" FNPT union
Adjustable range: 95 – 150 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
KIT520510AP	¾" NPT male union system connections	2.0	5.0	478.00
KIT520516AP	¾" press union system connections	2.0	5.0	520.00
KIT520519AP	¾" sweat union system connections	2.0	5.0	468.00

Complies with standards ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

DIGITAL MIXING VALVES

NEW


6003 LEGIOMIX®evo sweat

Digital mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control. Compatible with cloud and building automation systems. Color touchscreen user interface.

Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600359AF*	¾" sweat union	9.7	5.1	3,753.00
600369AF 001*	1" sweat union, ¾" body	9.7	5.3	3,954.00
600369AF*	1" sweat union	21.0	7.3	4,153.00
600379AF*	1¼" sweat union	24.0	8.2	4,224.00
600389AF*	1½" sweat union	34.0	21.0	4,795.00
600399AF*	2" sweat union	48.0	22.0	4,919.00
600359A**	¾" sweat union	9.7	5.1	3,574.00
600369A 001**	1" sweat union, ¾" body	9.7	5.3	3,766.00
600369A**	1" sweat union	21.0	7.3	3,955.00
600379A**	1¼" sweat union	24.0	8.2	4,023.00
600389A**	1½" sweat union	34.0	21.0	4,567.00
600399A**	2" sweat union	48.0	22.0	4,685.00

*Models ending in AF = 0-10V fail safe actuator

**Models ending in A = 24V fail in place actuator

NEW


6003 LEGIOMIX®evo press

Digital mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control. Compatible with cloud and building automation systems. Color touchscreen user interface.

Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600356AF*	¾" press union	9.7	5.1	3,954.00
600366AF 001*	1" press union, ¾" body	9.7	5.3	4,104.00
600366AF*	1" press union	21.0	7.3	4,256.00
600376AF*	1¼" press union	24.0	8.2	4,328.00
600386AF*	1½" press union	34.0	21.0	5,014.00
600396AF*	2" press union	48.0	22.0	5,308.00
600356A**	¾" press union	9.7	5.1	3,766.00
600366A 001**	1" press union, ¾" body	9.7	5.3	3,909.00
600366A**	1" press union	21.0	7.3	4,053.00
600376A**	1¼" press union	24.0	8.2	4,122.00
600386A**	1½" press union	34.0	21.0	4,775.00
600396A**	2" press union	48.0	22.0	5,055.00

*Models ending in AF = 0-10V Fail Safe Actuator

**Models ending in A = 24V Fail in place Actuator

7
NEW


6003 LEGIOMIX®evo NPT

Digital mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control. Compatible with cloud and building automation systems. Color touchscreen user interface.

Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600354AF*	¾" NPT male union	9.7	5.1	3,794.00
600364AF 001*	1" NPT male union, ¾" body	9.7	5.3	3,982.00
600364AF*	1" NPT male union	21.0	7.3	4,169.00
600374AF*	1¼" NPT male union	24.0	8.2	4,299.00
600384AF*	1½" NPT male union	34.0	21.0	4,853.00
600394AF*	2" NPT male union	48.0	22.0	4,984.00
600354A**	¾" NPT male union	9.7	5.1	3,613.00
600364A 001**	1" NPT male union, ¾" body	9.7	5.3	3,792.00
600364A**	1" NPT male union	21.0	7.3	3,970.00
600374A**	1¼" NPT male union	24.0	8.2	4,094.00
600384A**	1½" NPT male union	34.0	21.0	4,622.00
600394A**	2" NPT male union	48.0	22.0	4,747.00

*Models ending in AF = 0-10V Fail Safe Actuator

**Models ending in A = 24V Fail in place Actuator

NEW


6003 LEGIOMIX®evo flange

Digital mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control. Compatible with cloud and building automation systems. Color touchscreen user interface.

Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600360AF*	2½" ANSI 150 flange	105.0	30.0	17,914.00
600380AF*	3" ANSI 150 flange	120.0	42.0	18,964.00
600360A**	2½" ANSI 150 flange	105.0	30.0	17,061.00
600380A**	3" ANSI 150 flange	120.0	42.0	18,061.00

*Models ending in AF = 0-10V Fail Safe Actuator

**Models ending in A = 0-10V Fail in place Actuator

Listed and certified by ASSE to standard 1017. Complies with NSF/ANSI/CAN 61 & 372. Listed and certified by ICC-ES. Complies with CSA B125.3, IPC, IRC UPC, NPC. Listed and certified by IAPMO R&T.

DIGITAL MIXING VALVES

NEW



6003 LEGIOMIX® Station

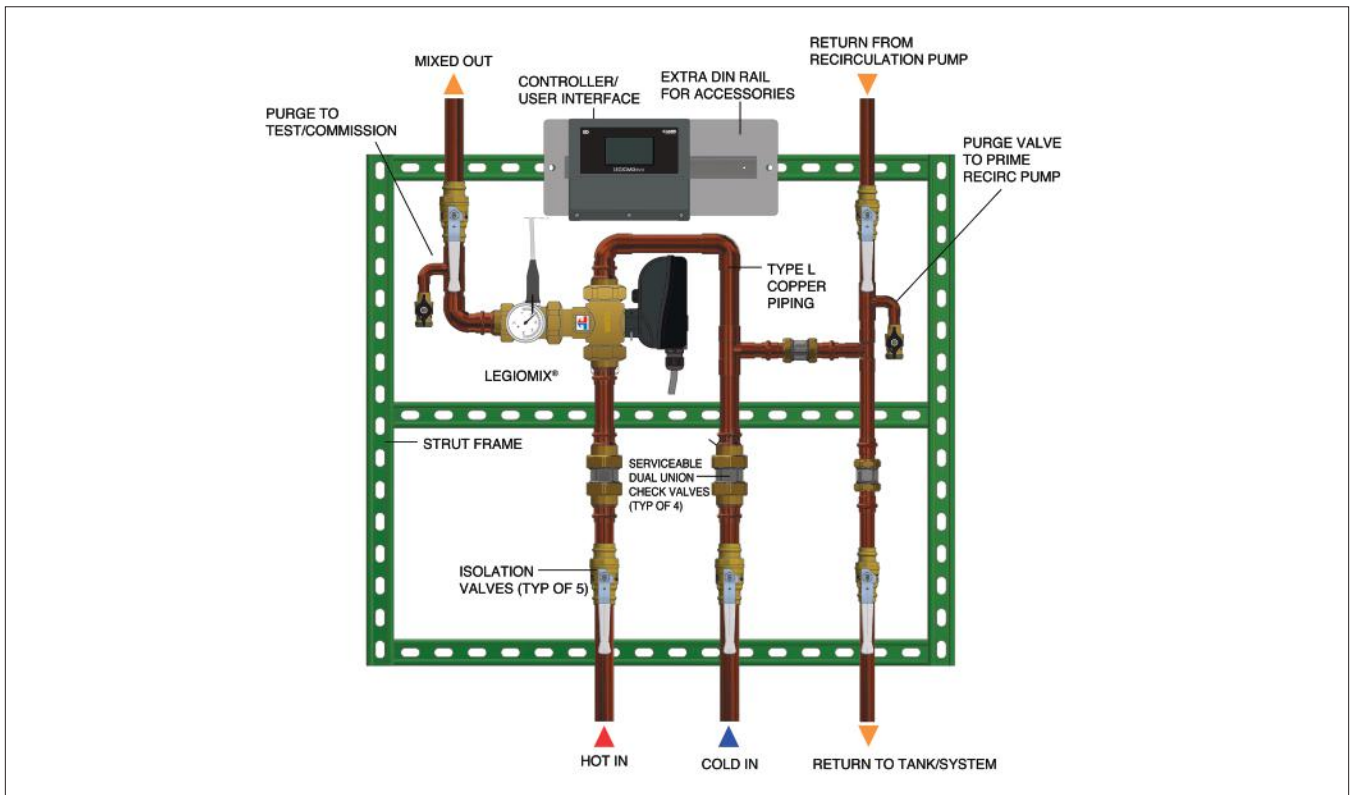
Electronic mixing valve pre-packaged in a convenient wall mount configuration. 100% factory tested for plug-and-play in a packaged wall mount configuration.

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®evo controller/user interface with DIN rail mounting bracket is pre-mounted and pre-wired and includes a return water temperature sensor and a hot water supply 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
600366AFS	1" outlet wall-mount station	7.8	130.0	11,581.00
600376AFS	1¼" outlet wall-mount station	9.0	148.0	13,303.00
600386AFS	1½" outlet wall-mount station	20.0	219.0	16,452.00
600396AFS	2" outlet wall-mount station	38.0	248.0	18,674.00
600360AFS	2½" outlet wall-mount station	43.0	250.0	21,259.00

Includes 0 - 10V fail safe actuator

Construction detail for 6003 LEGIOMIX®evo station



Listed and certified by ASSE to standard 1017. Complies with NSF/ANSI/CAN 61 & 372. Listed and certified by ICC-ES. Complies with CSA B125.3, IPC, IRC UPC, NPC. Listed and certified by IAPMO R&T.

DIGITAL MIXING VALVES



6000 LEGIOMIX® sweat

Electronic mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control.

Floating fail in place actuator.
Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi



6000 LEGIOMIX® press

Electronic mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control.

Floating fail in place actuator.
Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600059A	¾" sweat union	9.7	5.1	3,108.00
600069A 001	1" sweat union, ¾" body	9.7	5.3	3,275.00
600069A	1" sweat union	21	7.3	3,439.00
600079A	1½" sweat union	24	8.2	3,498.00
600089A	1½" sweat union	34	21	3,971.00
600099A	2" sweat union	48	22	4,074.00

Code	Description	Cv	Lbs	USD
600056A	¾" press union	9.7	5.1	3,275.00
600066A 001	1" press union, ¾" body	9.7	5.2	3,399.00
600066A	1" press union	21	7.3	3,524.00
600076A	1½" press union	24	8.2	3,584.00
600086A	1½" press union	34	21	4,152.00
600096A	2" press union	48	22	4,396.00



6000 LEGIOMIX® NPT

Electronic mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control.

Floating fail in place actuator.
Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi



6000 LEGIOMIX® flange

Electronic mixing valve for commercial domestic hot water applications, with optional thermal disinfection for Legionella control.

Floating fail in place actuator.
Adjustable range: 70 – 185 °F
Max. inlet temperature: 212 °F
Max. working pressure: 150 psi

Code	Description	Cv	Lbs	USD
600054A	¾" NPT male union	9.7	5.1	3,142.00
600064A 001	1" NPT male union, ¾" body	9.7	5.3	3,297.00
600064A	1" NPT male union	21	7.3	3,452.00
600074A	1½" NPT male union	24	8.2	3,560.00
600084A	1½" NPT male union	34	21	4,019.00
600094A	2" NPT male union	48	22	4,128.00

Code	Description	Cv	Lbs	USD
600060A	2½" ANSI 150 flange	105	30	14,836.00
600080A	3" ANSI 150 flange	120	42	15,705.00

Recommended Flow Rates (gpm/lpm)							
Size	¾"	1"	1 ¼"	1½"	2"	2½"	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 psi pressure loss.

Listed and certified by ASSE to standard 1017. Complies with NSF/ANSI/CAN 61 & 372. Listed and certified by ICC-ES. Complies with CSA B125.3, IPC, IRC UPC, NPC. Listed and certified by IAPMO R&T.

DIGITAL MIXING VALVES ACCESSORIES



Replacement controller.
Check description for compatibility.



Replacement temperature gauge.
Compatible with LEGIOMIX®evo and LEGIOMIX®.

Code	Description	Lbs	USD
F000766	For LEGIOMIX®evo NEW	1.5	-
F0000962	For LEGIOMIX®	1.5	1,890.00

Code	Description	Lbs	USD
R19101	Replacement temp gauge	0.3	23.00



Accessory Modbus-to-BACnet gateway.
Converts RS-485 serial output to BACNET IP or MSTP communication.
Compatible with LEGIOMIX® only, not required for LEGIOMIX®evo.

Code	Description	Lbs	USD
755052	Modbus-to-BACnet gateway	1.2	2,067.00



Replacement Actuators.
Check description for compatibility.

Code	Description	Lbs	USD
645124*	For LEGIOMIX®evo; ¾" to 2" NEW	1.0	-
600224*	For LEGIOMIX®evo; 2½" and 3" NEW	1.0	-
600214*	For LEGIOMIX®evo; 2½" and 3" NEW	1.0	-
645114**	For LEGIOMIX®evo & LEGIOMIX®; ¾" to 2" valves	1.0	487.00
600204**	For LEGIOMIX®; 2½" and 3" valves	1.0	-

*0-10V fail safe actuator

** Floating fail in place



Accessory stainless steel check valve assembly.
Compatible with LEGIOMIX®evo and LEGIOMIX®.

Code	Description	Lbs	USD
NA10366	Check valve assembly 1" and 1¼"	1.0	106.00
NA10367	Check valve assembly 1½" and 2"	1.5	235.00

NEW



Accessory emergency shutoff valve.
24V, Normally closed actuator.

Compatible with LEGIOMIX®evo ONLY.



Replacement valve body, includes gauge adapter.
Compatible with LEGIOMIX®evo and LEGIOMIX®.

Code	Description	Lbs	USD
NA11655	¾" FNPT	8.1	1,864.00
NA11656	1" FNPT	8.6	1,900.00
NA11657	1¼" FNPT	9.2	1,982.00
NA11658	1½" FNPT	11.0	2,070.00
NA11659	2" FNPT	13.0	2,236.00
NA11660	2½" FNPT	21.0	3,324.00
NA11661	3" FNPT	26.0	3,626.00
NA10964*	Plug in transformer, 50 VA*		137.00

*Transformer required to power safety valve and alarm indication station

Code	Description	Lbs	USD
NA10758	Body, gauge adapter (¾" valve)	3.5	499.00
NA10615	Body, gauge adapter (1", 1¼" valves)	5.1	546.00
NA10616	Body, gauge adapter (1½", 2" valves)	11	800.00



Replacement controller battery.
Compatible with LEGIOMIX® ONLY.

Code	Description	Lbs	USD
F69888	Replacement controller battery	0.1	48.90

DIGITAL MIXING VALVES ACCESSORIES



Replacement plug in transformer.
Compatible with LEGIOMIXevo and LEGIOMIX.

Code	Description	Lbs	USD
NA10759	Replacement plug-in transformer 20 VA	1.0	41.80



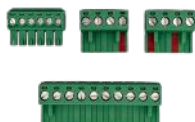
Replacement LEGIOMIX® parts bag assembly.
Compatible with LEGIOMIX® ONLY.

Code	Description	Lbs	USD
R0001397	LEGIOMIX® parts bag assembly	0.2	89.10

NEW



Replacement LEGIOMIX®evo cable components.
Compatible with LEGIOMIX®evo ONLY.



Code	Description	Lbs	USD
F0007678	LEGIOMIX®evo terminal blocks	0.2	-
F0007680	LEGIOMIX®evo cable glands	0.2	-

NEW



Accessory alarm indication station.
24 VAC power.
Includes visual and audible alert with silence button.

Compatible with LEGIOMIX®evo ONLY.

Code	Description	Lbs	USD
NA10979	Alarm indication station	1.1	475.00



Replacement mixed outlet temperature sensor.
Compatible with LEGIOMIX®evo and LEGIOMIX®.

Code	Description	Lbs	USD
F69807	For ¾", 1", 1¼" sizes	1.0	66.30
F69804	For 1½" and 2"	1.0	94.30
F69381	For 2½" and 3" sizes	NEW 1.0	132.00

NEW



Replacement DHW storage temperature sensor.
Compatible with LEGIOMIX®evo ONLY.

Code	Description	Lbs	USD
600003	Replacement DHW sensor	1.0	-



Replacement recirculation temperature sensor.
Compatible with LEGIOMIX®evo and LEGIOMIX®.

Code	Description	Lbs	USD
F69591	Replacement recirculation sensor	1.0	84.20

SCALD PROTECTION THERMOSTATIC MIXING VALVES



5213 TubMixer™

Adjustable thermostatic mixing valve for high flow point-of-use scald protection. Complete with inlet check valves.

Adjustable range: 85 – 120 °F
Max. inlet temperature: 185 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0.5 GPM for optimal performance



5213 TubMixer™ with gauge

Adjustable thermostatic mixing valve for high flow point-of-use scald protection. Complete with inlet check valves and temperature gauge.

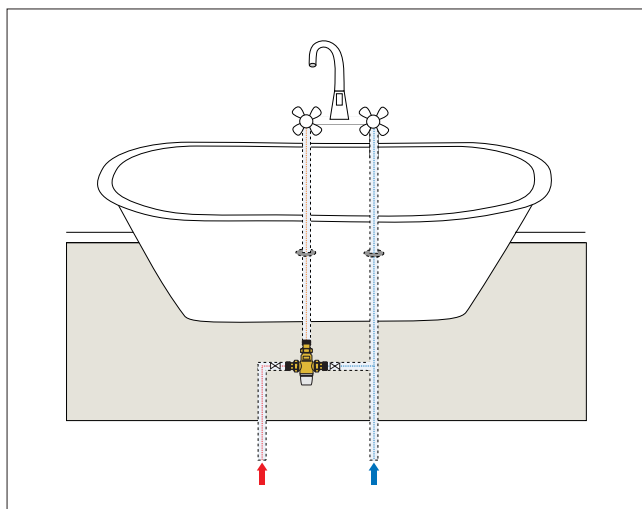
Adjustable range: 85 – 120 °F
Max. inlet temperature: 185 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0.5 GPM for optimal performance

Code	Description	Cv	Lbs	USD
521333A	3/8" compression union	2.0	2.0	140.00
521342A	1/2" NPT male union	2.0	2.0	140.00
521346A	1/2" press union	2.0	2.0	146.00
521347A	1/2" PEX crimp union	2.0	2.0	140.00
521348A	1/2" PEX expansion union	2.0	2.0	140.00
521349A	1/2" sweat union	2.0	2.0	140.00
521352A	3/4" NPT male union	2.0	2.0	147.00
521356A	3/4" press union	2.0	2.0	156.00
521357A	3/4" PEX crimp union	2.0	2.0	147.00
521358A	3/4" PEX expansion union	2.0	2.0	147.00
521359A	3/4" sweat union	2.0	2.0	147.00
521362A	1" NPT male union	2.0	2.0	180.00
521366A	1" press union	2.0	2.0	190.00
521367A	1" PEX crimp union	2.0	2.0	180.00
521368A	1" PEX expansion union	2.0	2.0	180.00
521369A	1" sweat union	2.0	2.0	180.00
521301A*	Replacement body, no fittings	2.0	1.5	127.00

*See fitting selection in Section 13.

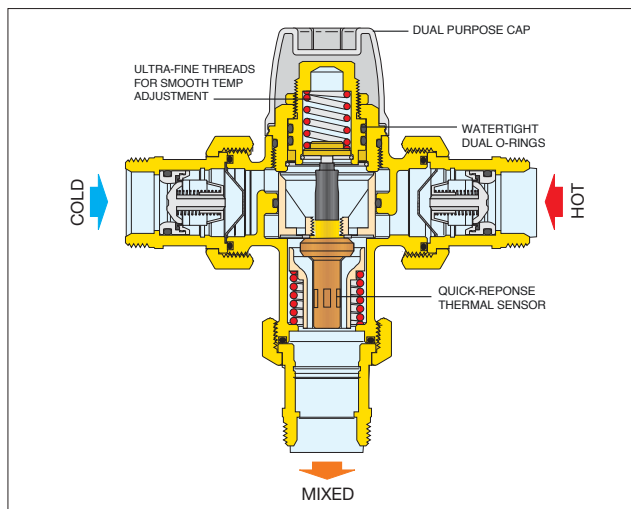
Code	Description	Cv	Lbs	USD
521333A 002	3/8" compression union	2.0	2.1	178.00
521342A 002	1/2" NPT male union	2.0	2.1	178.00
521346A 002	1/2" press union	2.0	2.1	184.00
521347A 002	1/2" PEX crimp union	2.0	2.1	178.00
521348A 002	1/2" PEX expansion union	2.0	2.1	178.00
521349A 002	1/2" sweat union	2.0	2.1	178.00
521352A 002	3/4" NPT male union	2.0	2.1	185.00
521356A 002	3/4" press union	2.0	2.1	194.00
521357A 002	3/4" PEX crimp union	2.0	2.1	185.00
521358A 002	3/4" PEX expansion union	2.0	2.1	185.00
521359A 002	3/4" sweat union	2.0	2.1	185.00
521362A 002	1" NPT male union	2.0	2.1	218.00
521366A 002	1" press union	2.0	2.1	228.00
521367A 002	1" PEX crimp union	2.0	2.1	218.00
521368A 002	1" PEX expansion union	2.0	2.1	218.00
521369A 002	1" sweat union	2.0	2.1	218.00

Application diagram



Complies with standards ASSE 1070/ASME A112.1070/CSA B125.70, CSA B125.3, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

Construction details for 5213 TubMixer™



SCALD PROTECTION THERMOSTATIC MIXING VALVES



5212 SinkMixer™ 4-way

Adjustable thermostatic mixing valve for under sink scald protection. Complete with inlet check valves.

Adjustable range: 95 – 120 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0.35 GPM for optimal performance

NEW



5212 SinkMixer™ 3-way

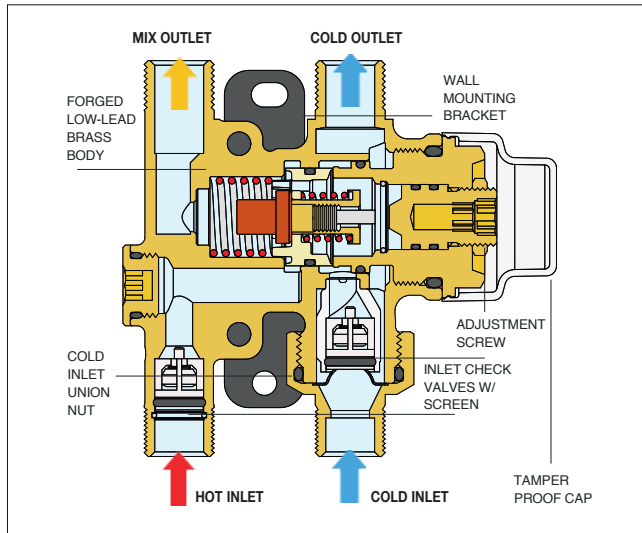
Adjustable thermostatic mixing valve for under sink scald protection. Complete with inlet check valves.

Adjustable range: 95 – 120 °F
Max. inlet temperature: 195 °F
Max. working pressure: 150 psi
Min. flow requirement:
- 0.35 GPM for optimal performance

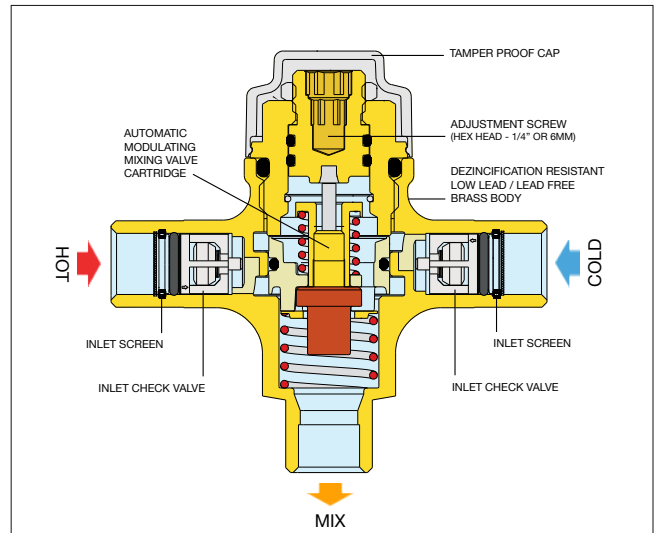
Code	Description	Cv	Lbs	USD
521201A	3/8" compression	0.52	1.0	116.00
521201AP	3/8" compression, plug/fittings	0.52	1.1	118.00

Code	Description	Cv	Lbs	USD
521204A	3/8" compression, fittings	0.52	0.9	93.70

Construction details 5212 SinkMixer™ (4-way)



Construction details 5212 SinkMixer™ (3-way)



Accessory plug/nut fitting kit for compression fittings.



Replacement check valve and filter for SinkMixer product codes.

Code	Description	Lbs	USD
NA10741	5-pack plug/nut fitting kit	0.2	17.60

Code	Description	Lbs	USD
F0001270	Replacement check valve/filter kit	0.1	7.00

Complies with standards ASSE 1070/ASME A112.1070/CSA B125.70, CSA B125.3, NSF/ANSI/CAN 61 (Commercial Hot 180 °F), NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.



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CALEFFI
Hydronic Solutions

THERMOSETTER™

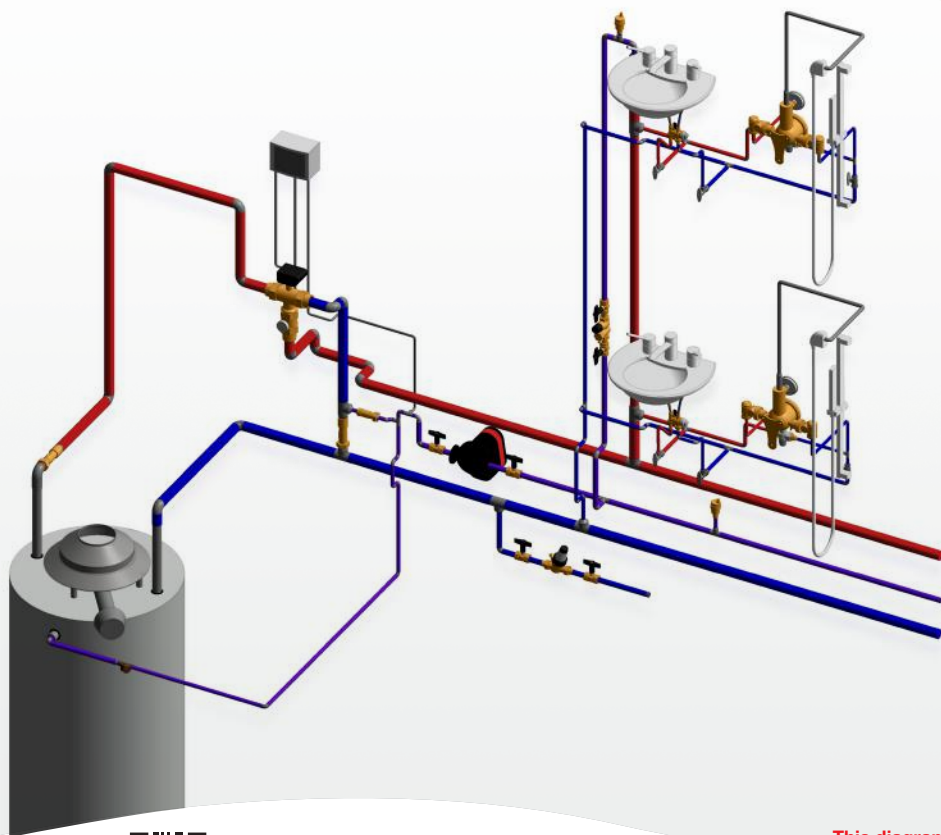
THERMAL BALANCING IN TEMPERATURE MIXING



The flow rate might change, but the temperature won't with the **ThermoSetter™** thermal balancing valves. They modulate to maintain precise temperature in DHW recirculation return piping. Models with bypass cartridges are available for **legionella bacteria management**. Factory-assembled kits ensure easy ordering. **CALEFFI GUARANTEED.**

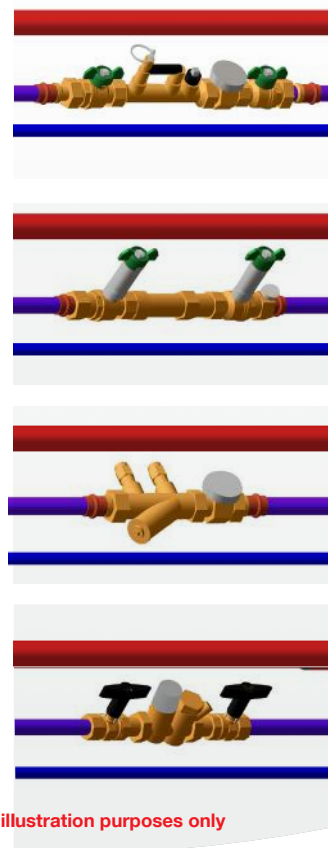


BALANCING VALVES



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only



PRODUCTS INCLUDED IN SECTION

- Static balancing valves with built-in flowmeter
- Static balancing valves (fixed orifice)
- Static balancing valves (variable orifice)
- Dynamic balancing valves
- Compact thermal balancing valves
- Thermal balancing valves

STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER



132 QuickSetter+™ sweat

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%



132 QuickSetter+™ sweat

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132439AFC	1/2" sweat union	0.5—1.8	1.8	273.00
132539AFC	3/4" sweat union	0.5—1.8	2.0	284.00
132639AFC	1" sweat union	0.5—1.8	2.4	314.00
132459AFC	1/2" sweat union	2.0—7.0	1.8	273.00
132559AFC	3/4" sweat union	2.0—7.0	2.0	284.00
132659AFC	1" sweat union	2.0—7.0	2.4	314.00

Code	Description	Flow scale (gpm)	Lbs	USD
132438AFC	1/2" sweat union	0.5—1.8	2.4	313.00
132538AFC	3/4" sweat union	0.5—1.8	2.6	325.00
132638AFC	1" sweat union	0.5—1.8	2.8	352.00
132458AFC	1/2" sweat union	2.0—7.0	2.4	313.00
132558AFC	3/4" sweat union	2.0—7.0	2.6	325.00
132658AFC	1" sweat union	2.0—7.0	2.8	352.00



132 QuickSetter+™ press

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%



132 QuickSetter+™ press

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132436AFC	1/2" press union	0.5—1.8	1.8	314.00
132536AFC	3/4" press union	0.5—1.8	1.8	327.00
132636AFC	1" press union	0.5—1.8	2.2	362.00
132456AFC	1/2" press union	2.0—7.0	1.8	314.00
132556AFC	3/4" press union	2.0—7.0	1.8	327.00
132656AFC	1" press union	2.0—7.0	2.2	362.00

Code	Description	Flow scale (gpm)	Lbs	USD
132437AFC	1/2" press union	0.5—1.8	1.8	359.00
132537AFC	3/4" press union	0.5—1.8	2.2	375.00
132637AFC	1" press union	0.5—1.8	2.6	404.00
132457AFC	1/2" press union	2.0—7.0	1.8	359.00
132557AFC	3/4" press union	2.0—7.0	2.2	375.00
132657AFC	1" press union	2.0—7.0	2.6	404.00

Connection size	Recommended Flow Rates					
	1/2"	3/4"	1"	1/2"	3/4"	1"
Flow rate (gpm)	0.5—1.8	0.5—1.8	0.5—1.8	2.0—7.0	2.0—7.0	2.0—7.0
Fully open Cv	1	1	1	6.3	6.3	6.3

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER



132 QuickSetter+™ NPT

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%



132 QuickSetter+™ NPT

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132430AFC	½" NPT male union	0.5—1.8	1.8	278.00
132530AFC	¾" NPT male union	0.5—1.8	2.0	289.00
132630AFC	1" NPT male union	0.5—1.8	2.4	319.00
132450AFC	½" NPT male union	2.0—7.0	1.8	278.00
132550AFC	¾" NPT male union	2.0—7.0	2.0	289.00
132650AFC	1" NPT male union	2.0—7.0	2.4	319.00

Code	Description	Flow scale (gpm)	Lbs	USD
132431AFC	½" NPT male union	0.5—1.8	2.4	318.00
132531AFC	¾" NPT male union	0.5—1.8	2.6	331.00
132631AFC	1" NPT male union	0.5—1.8	2.8	361.00
132451AFC	½" NPT male union	2.0—7.0	2.4	318.00
132551AFC	¾" NPT male union	2.0—7.0	2.6	331.00
132651AFC	1" NPT male union	2.0—7.0	2.8	361.00



132 QuickSetter+™ PEX

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%



132 QuickSetter+™ PEX

Adjustable static balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Built-in flow meter for direct reading
- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132434AFC	½" PEX crimp union	0.5—1.8	1.8	273.00
132432AFC	½" PEX expansion union	0.5—1.8	1.8	273.00
132534AFC	¾" PEX crimp union	0.5—1.8	2.0	284.00
132532AFC	¾" PEX expansion union	0.5—1.8	2.0	284.00
132634AFC	1" PEX crimp union	0.5—1.8	2.2	329.00
132632AFC	1" PEX expansion union	0.5—1.8	2.2	329.00
132454AFC	½" PEX crimp union	2.0—7.0	1.8	273.00
132452AFC	½" PEX expansion union	2.0—7.0	1.8	273.00
132554AFC	¾" PEX crimp union	2.0—7.0	2.0	284.00
132552AFC	¾" PEX expansion union	2.0—7.0	2.0	284.00
132654AFC	1" PEX crimp union	2.0—7.0	2.2	329.00
132652AFC	1" PEX expansion union	2.0—7.0	2.2	329.00

Code	Description	Flow scale (gpm)	Lbs	USD
132435AFC	½" PEX crimp union	0.5—1.8	2.2	313.00
132433AFC	½" PEX expansion union	0.5—1.8	2.2	313.00
132535AFC	¾" PEX crimp union	0.5—1.8	2.4	325.00
132533AFC	¾" PEX expansion union	0.5—1.8	2.4	325.00
132635AFC	1" PEX crimp union	0.5—1.8	2.6	368.00
132633AFC	1" PEX expansion union	0.5—1.8	2.6	368.00
132455AFC	½" PEX crimp union	2.0—7.0	2.2	313.00
132453AFC	½" PEX expansion union	2.0—7.0	2.2	313.00
132555AFC	¾" PEX crimp union	2.0—7.0	2.4	325.00
132553AFC	¾" PEX expansion union	2.0—7.0	2.4	325.00
132655AFC	1" PEX crimp union	2.0—7.0	2.6	368.00
132653AFC	1" PEX expansion union	2.0—7.0	2.6	368.00

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

STATIC BALANCING VALVES WITH BUILT-IN FLOWMETER



132 QuickSetter™ press

Adjustable static balancing valve.
Brass body for use in hydronic applications.
Complete with:
- Built-in flow meter for direct reading
- Insulation jacket

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132436A	½" press	0.5 – 1.8	2.2	233.00
132556A	¾" press	2.0 – 7.0	2.0	262.00
132666A	1" press	3.0 – 10	2.4	307.00
132776A	1¼" press	5.0 – 19	2.8	406.00
132886A	1½" press	8.0 – 32	3.4	483.00
132996A	2" press	12 – 50	4.4	591.00



132 QuickSetter™

Adjustable static balancing valve.
Brass body for use in hydronic applications.
Complete with:
- Built-in flow meter for direct reading
- Insulation jacket

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132432A	½" FNPT	0.5 – 1.8	2.0	216.00
132552A	¾" FNPT	2.0 – 7.0	1.8	233.00
132662A	1" FNPT	3.0 – 10	2.4	272.00
132772A	1¼" FNPT	5.0 – 19	2.8	362.00
132882A	1½" FNPT	8.0 – 32	3.4	428.00
132992A	2" FNPT	12 – 50	4.4	524.00

Connection size	Recommended Flow Rates					
	½"	¾"	1"	1¼"	1½"	2"
Flow rate (gpm)	0.5 – 1.8	2.0 – 7.0	3.0 – 10	5.0 – 19	8.0 – 32	12 – 50
Fully open Cv	3	6.3	8.3	15	32	54



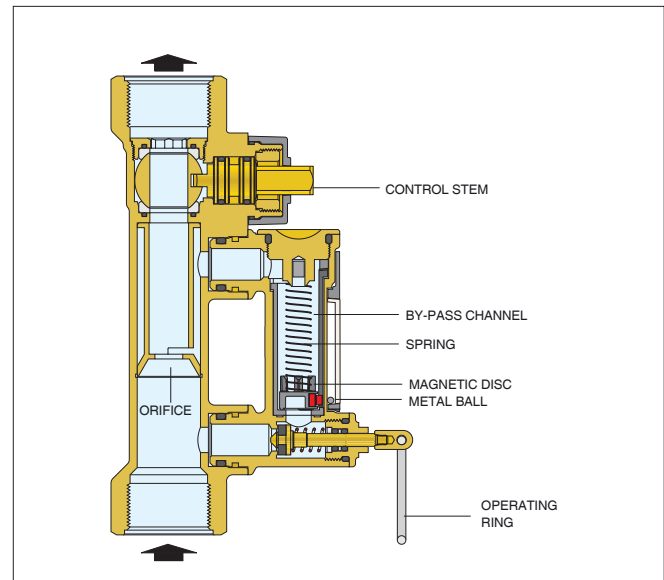
132 QuickSetter™ flange

Adjustable static balancing valve.
Cast iron body for use in hydronic applications.
Complete with:
- Built-in flow meter for direct reading

Fluid temperature range: 14 – 230 °F
Max. working pressure: 150 psi
Max. percentage of glycol: 50%

Code	Description	Flow scale (gpm)	Lbs	USD
132060A	2½" ANSI 125 flange	30 – 105	35	1,294.00
132080A	3" ANSI 125 flange	38 – 148	62	1,725.00
132100A	4" ANSI 125 flange	55 – 210	67	2,633.00

Construction details for 132 QuickSetter™



QUICKSETTER ACCESSORIES



Compatible with QuickSetter FNPT codes.
Full port ball valve with extended handle.
Low-lead/lead free brass.
Compatible nipples found in section 12.

Code	Description	Lbs	USD
NA10824	½" FNPT ball valve	0.4	39.60
NA10825	¾" FNPT ball valve	0.6	48.50
NA10826	1" FNPT ball valve	1.0	62.90
NA10827	1¼" FNPT ball valve	1.6	105.00
NA10828	1½" FNPT ball valve	1.9	133.00
NA10829	2" FNPT ball valve	3.0	323.00



Insulation jackets for QuickSetter+ and QuickSetter.

Code	Description	Lbs	USD
F0000926	For QuickSetter+ union models	0.1	43.70
112001	For ½", ¾" QuickSetter	0.1	43.10
112003	For 1" QuickSetter	0.1	57.30
F0002097	For 1¼" QuickSetter	0.1	46.40
F0002098	For 1½" QuickSetter	0.1	51.50
F0002099	For 2" QuickSetter	0.1	56.70



Union isolation ball valves.
Compatible with QuickSetter+.

Code	Description	Lbs	USD
290030	1" M x 1" F union ball valve	1.0	49.00
290031*	1" M x 1" F union ball valve	1.0	77.30

*With extended handle



QuickSetter+ and QuickSetter replacement flow meter.

Code	Description	Lbs	USD
F0000940	Replacement flow meter 0.5 to 1.8 GPM	0.2	119.00
F0000941	Replacement flow meter 2.0 to 7.0 GPM	0.2	119.00
F0000942	Replacement flow meter 3.0 to 10 GPM	0.2	119.00
F0000943	Replacement flow meter 5.0 to 19 GPM	0.2	127.00
F0000944	Replacement flow meter 8.0 to 32 GPM	0.2	127.00
F0000945	Replacement flow meter 12 to 50 GPM	0.2	127.00
F0000946	Replacement flow meter 30 to 105GPM	0.2	133.00
F0000947	Replacement flow meter 38 to 148 GPM	0.2	133.00
F0000948	Replacement flow meter 55 to 210 GPM	0.2	133.00
F19346*	Replacement by-pass valve stem	0.2	43.80

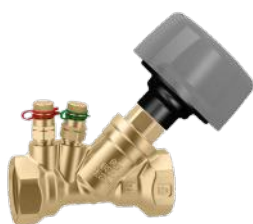
*With operating ring pull



QuickSetter+ replacement bodies.
See fitting selection in Section 13.

Code	Description	Lbs	USD
132637	Replacement body 0.5 - 1.8 GPM	1.0	216.00
132657	Replacement body 2.0 - 7.0 GPM	1.0	228.00

STATIC BALANCING VALVES (FIXED ORIFICE)



130 Flo-Set™ Fixed Orifice Balancing Valve

Adjustable static balancing valve.
Fixed orifice design.
Low-lead/lead free DZR brass body.

Complete with:

- Multi-turn adjustment knob
- Memory stop function
- PT ports

Fluid temperature range: -4 – 250 °F

Max. working pressure: 232 psi

Max. percentage of glycol: 50%

Code	Description	Max Cv	Lbs	USD
130400A	½" FNPT	3.7	1.0	146.00
130500A	¾" FNPT	5.1	1.2	161.00
130600A	1" FNPT	8.8	1.5	191.00
130700A	1¼" FNPT	14	2.0	239.00
130800A	1½" FNPT	20	2.3	297.00
130900A	2" FNPT	31	2.5	396.00



Accessory insulation jacket, compatible with 130 Flo-Set™.

Code	Description	Lbs	USD
CBN130400	Fits ½" FNPT	0.1	32.10
CBN130500	Fits ¾" FNPT	0.1	34.90
CBN130600	Fits 1" FNPT	0.1	41.90
CBN130700	Fits 1¼" FNPT	0.1	52.20
CBN130800	Fits 1½" FNPT	0.1	65.20
CBN130900	Fits 2" FNPT	0.1	86.90

STATIC BALANCING VALVES (VARIABLE ORIFICE)



142 Flo-Set™ Variable Orifice Balancing Valve

Adjustable static balancing valve.
Variable orifice.
Low-lead/lead free DZR brass body.

Complete with:

- Memory stop function
- PT ports

Fluid temperature range: 14 – 250 °F

Max. working pressure: 232 psi

Max. percentage of glycol: 50%

Code	Description	Max Cv	Lbs	USD
142241A	½" FNPT	3.4	1.0	114.00
142251A	¾" FNPT	5.0	1.2	123.00
142261A	1" FNPT	7.5	1.5	166.00
142271A	1¼" FNPT	13	2.3	238.00
142281A	1½" FNPT	17	3.0	266.00
142291A	2" FNPT	22	3.5	340.00



Accessory insulation jacket, compatible with 142 Flo-Set™.

Code	Description	Lbs	USD
CBN142241A	Fits ½" FNPT	0.1	29.50
CBN142251A	Fits ¾" FNPT	0.1	31.30
CBN142261A	Fits 1" FNPT	0.1	42.60
CBN142271A	Fits 1¼" FNPT	0.1	60.90
CBN142281A	Fits 1½" FNPT	0.1	68.50

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

DYNAMIC BALANCING VALVES



128 FlowCal+™ sweat

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- Outlet temperature gauge
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)



128 FlowCal+™ press

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- Outlet temperature gauge
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow rates: 0.35 – 10 GPM (± 10%)

Code	Description	Lbs	USD
128448AFC***	½" sweat union	2.0	167.00
128458AFC***	¾" sweat union	2.0	195.00
128468AFC***	1" sweat union	2.2	204.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128447AFC***	½" press union	2.0	190.00
128457AFC***	¾" press union	2.0	213.00
128467AFC***	1" press union	2.2	221.00

***: Select desired flow rate on page 79 to complete orderable part number



128 FlowCal+™ PEX

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- Outlet temperature gauge
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)



128 FlowCal+™ NPT

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- Outlet temperature gauge
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)

Code	Description	Lbs	USD
128445AFC***	½" PEX crimp union	2.0	167.00
128455AFC***	¾" PEX crimp union	2.0	195.00
128465AFC***	1" PEX crimp union	2.2	204.00
128443AFC***	½" PEX expansion union	2.0	167.00
128453AFC***	¾" PEX expansion union	2.0	195.00
128463AFC***	1" PEX expansion union	2.2	204.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128440AFC***	½" NPT male union	2.0	172.00
128450AFC***	¾" NPT male union	2.0	200.00
128460AFC***	1" NPT male union	2.2	206.00

***: Select desired flow rate on page 79 to complete orderable part number

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

DYNAMIC BALANCING VALVES



128 FlowCal+™ sweat

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow rates: 0.35 – 10 GPM (± 10%)



128 FlowCal+™ press

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)

Code	Description	Lbs	USD
128449AFC***	1/2" sweat union	1.8	134.00
128459AFC***	3/4" sweat union	1.8	141.00
128469AFC***	1" sweat union	2.0	170.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128446AFC***	1/2" press union	1.8	145.00
128456AFC***	3/4" press union	1.8	160.00
128466AFC***	1" press union	2.0	178.00

***: Select desired flow rate on page 79 to complete orderable part number



128 FlowCal+™ PEX

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)



128 FlowCal+™ NPT

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)

Code	Description	Lbs	USD
128444AFC***	1/2" PEX crimp union	1.8	134.00
128454AFC***	3/4" PEX crimp union	1.8	141.00
128464AFC***	1" PEX crimp union	2.0	170.00
128442AFC***	1/2" PEX expansion union	1.8	134.00
128452AFC***	3/4" PEX expansion union	1.8	141.00
128462AFC***	1" PEX expansion union	2.0	170.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128441AFC***	1/2" NPT male union	1.8	135.00
128451AFC***	3/4" NPT male union	1.8	142.00
128461AFC***	1" NPT male union	2.0	172.00

***: Select desired flow rate on page 79 to complete orderable part number

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

DYNAMIC BALANCING VALVES



128 FlowCal™ sweat

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)



128 FlowCal™ NPT

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)

Code	Description	Lbs	USD
128549AF***	1/2" sweat union	1.8	124.00
128559AF***	3/4" sweat union	2.0	129.00
128569AF***	1" sweat union	2.2	145.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128541AF***	1/2" NPT male union	2.0	129.00
128551AF***	3/4" NPT male union	2.1	134.00
128561AF***	1" NPT male union	2.2	149.00

***: Select desired flow rate on page 79 to complete orderable part number



128 FlowCal™ PEX

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)



128 FlowCal™ press

Y-body automatic balancing valve.
Low-lead/lead free DZR brass body.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 400 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%)

Code	Description	Lbs	USD
128544AF***	1/2" PEX crimp	2.0	124.00
128554AF***	3/4" PEX crimp	2.1	129.00
128564AF***	1" PEX crimp	2.2	145.00
128542AF***	1/2" PEX expansion	2.0	124.00
128552AF***	3/4" PEX expansion	2.1	129.00
128562AF***	1" PEX expansion	2.2	145.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
128546AF***	1/2" press union	2.0	140.00
128556AF***	3/4" press union	2.1	151.00
128566AF***	1" press union	2.2	180.00

***: Select desired flow rate on page 79 to complete orderable part number

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

DYNAMIC BALANCING VALVES



127 FlowCal+™ sweat

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:

- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).



127 FlowCal+™ press

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:

- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127148AFC***	½" sweat union	0.8	161.00
127158AFC***	¾" sweat union	0.8	175.00
127168AFC***	1" sweat union	1.0	204.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
127147AFC***	½" press union	1.0	156.00
127157AFC***	¾" press union	1.0	194.00
127167AFC***	1" press union	1.2	213.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal+™ PEX

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:

- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).



127 FlowCal+™ NPT

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:

- Inlet check valve
- Outlet temperature gauge

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127145AFC***	½" PEX crimp union	1.0	161.00
127143AFC***	½" PEX expansion union	1.0	161.00
127155AFC***	¾" PEX crimp union	1.0	175.00
127153AFC***	¾" PEX expansion union	1.0	175.00
127165AFC***	1" PEX crimp union	1.3	204.00
127163AFC***	1" PEX expansion union	1.3	204.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
127140AFC***	½" NPT male union	1.0	166.00
127150AFC***	¾" NPT male union	1.0	199.00
127160AFC***	1" NPT male union	1.2	206.00

***: Select desired flow rate on page 79 to complete orderable part number

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES. codes. U.S. Patent 7,246,635 B2.

DYNAMIC BALANCING VALVES



127 FlowCal+™ sweat

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).



127 FlowCal+™ press

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127149AFC***	½" press union	1.0	123.00
127159AFC***	¾" press union	1.2	133.00
127169AFC***	1" press union	1.3	164.00

***: Select desired flow rate on page 79 to complete orderable part number

Code	Description	Lbs	USD
127146AFC***	½" press union	1.2	123.00
127156AFC***	¾" press union	1.2	151.00
127166AFC***	1" press union	1.2	174.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal+™ PEX

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127144AFC***	½" PEX crimp union	1.0	123.00
127142AFC***	½" PEX expansion union	1.0	123.00
127154AFC***	¾" PEX crimp union	1.3	133.00
127152AFC***	¾" PEX expansion union	1.0	133.00
127164AFC***	1" PEX crimp union	1.0	164.00
127162AFC***	1" PEX expansion union	1.3	164.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal+™ NPT

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.
Complete as shown with:
- Inlet check valve

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127141AFC***	½" NPT male union	1.0	124.00
127151AFC***	¾" NPT male union	1.0	132.00
127161AFC***	1" NPT male union	1.2	166.00

***: Select desired flow rate on page 79 to complete orderable part number

Flow rate selection for 127 and 128 FlowCal™

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

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

DYNAMIC BALANCING VALVES



127 FlowCal™ sweat

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127349AF***	½" sweat union	1.2	111.00
127359AF***	¾" sweat union	1.2	117.00
127369AF***	1" sweat union	1.4	135.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal™ press

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127346AF***	½" press union	0.9	131.00
127356AF***	¾" press union	1.0	144.00
127366AF***	1" press union	1.3	176.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal™ PEX

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127344AF***	½" PEX crimp union	1.0	111.00
127342AF***	½" PEX expansion union	1.0	111.00
127354AF***	¾" PEX crimp union	1.3	117.00
127352AF***	¾" PEX expansion union	1.0	117.00
127364AF***	1" PEX crimp union	1.0	135.00
127362AF***	1" PEX expansion union	1.3	135.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal™ NPT

Compact automatic balancing valve.
Patented anti-scale, low noise cartridge.

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35–10 GPM (±10%).

Code	Description	Lbs	USD
127341AF***	½" NPT male union	1.0	118.00
127351AF***	¾" NPT male union	1.0	123.00
127361AF***	1" NPT male union	1.2	139.00

***: Select desired flow rate on page 79 to complete orderable part number



127 FlowCal™ body

Replacement body for FlowCal+™ and FlowCal™ series.

See fittings selection in Section 13.

Code	Description	Lbs	USD
127000A***	Body including flow cartridge	1.0	84.70



Union isolation ball valves.
Compatible with 127, 128 FlowCal+ and FlowCal series.

Code	Description	Lbs	USD
290030	1" M x 1" F union ball valve	1.0	49.00
290031*	1" M x 1" F union ball valve	1.0	77.30

*With extended handle

Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES. US Patent 7,246,635 B2.

DYNAMIC BALANCING VALVES FOR HYDRONICS



121 FlowCal™

Y-body automatic flow balancing valve.
For use in hydronic applications ONLY.
Complete with:
- Integral isolation ball valve

Optional: Factory installed PT ports

Fluid temperature range: 32 – 212 °F
Max. working pressure: 230 psi
Max percentage of glycol: 50%
Flow Rates: 0.35 – 21 GPM (±10%)

Code	Description	Lbs	USD
121141A ...	½" NPT female	2.7	146.00
121149A ...	½" sweat	2.7	140.00
121151A ...	¾" NPT female	2.7	147.00
121159A ...	¾" sweat	2.7	141.00
121161A ...	1" NPT female	5.0	303.00
121169A ...	1" sweat	5.0	288.00
121171A ...	1¼" NPT female	5.0	340.00
121179A ...	1¼" sweat	5.0	323.00
121341A ...	½" NPT female with PT test ports	3.2	158.00
121349A ...	½" sweat with PT test ports	3.2	149.00
121351A ...	¾" NPT female with PT test ports	3.2	162.00
121359A ...	¾" sweat with PT test ports	3.2	150.00
121361A ...	1" NPT female with PT test ports	5.5	313.00
121369A ...	1" sweat with PT test ports	5.5	299.00
121371A ...	1¼" NPT female with PT test ports	5.5	350.00
121379A ...	1¼" sweat with PT test ports	5.5	333.00

Select desired flow rate to complete full part number.

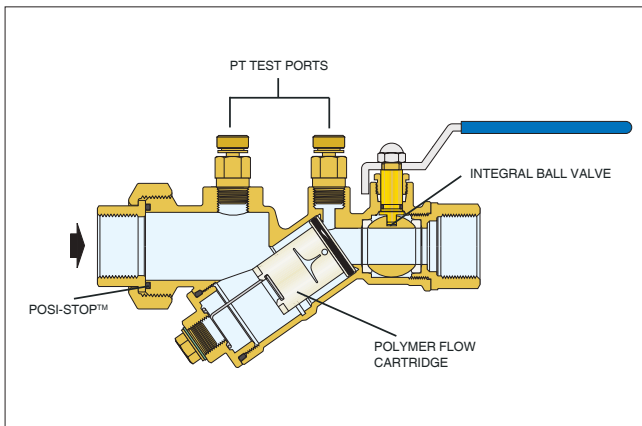
Size	GPM	Last 3 digits ...	Differential Pressure Control Ranges (psid)
½", ¾"	0.35	G35	2 – 14
½", ¾"	0.5	G50	
½", ¾"	0.75	G75	
½", ¾"	1	1G0	2 – 32
½", ¾"	1.3	1G3	
½", ¾"	1.5	1G5	
½", ¾"	1.7	1G7	
½", ¾"	2	2G0	
½", ¾"	2.2	2G2	
½", ¾"	2.5	2G5	
½", ¾", 1"	2.6	2G6	
½", ¾", 1"	3	3G0	
½", ¾", 1"	3.5	3G5	
½", ¾", 1", 1¼"	4	4G0	4 – 34
½", ¾", 1", 1¼"	4.5	4G5	
½", ¾", 1", 1¼"	5	5G0	
½", ¾", 1", 1¼"	6	6G0	
½", ¾", 1", 1¼"	7	7G0	
½", ¾", 1", 1¼"	8	8G0	

Size	GPM	Last 3 digits ...	Differential Pressure Control Ranges (psid)
½", ¾", 1", 1¼"	9	9G0	5 – 35
½", ¾", 1", 1¼"	10	10G	
1", 1¼"	11	11G	3 – 32
1", 1¼"	12	12G	
1", 1¼"	13	13G	
1", 1¼"	14	14G	4 – 35
1", 1¼"	15	15G	
1", 1¼"	16	16G	
1", 1¼"	17	17G	
1", 1¼"	18	18G	
1", 1¼"	19	19G	
1", 1¼"	20	20G	
1", 1¼"	21	21G	

Size	Flow Rates
½"	.35 – 10 GPM
¾"	.35 – 10 GPM
1"	2.5 – 21 GPM
1¼"	4 – 21 GPM

Replacement flow cartridge kits are available. Consult factory.

Construction details for 121 FlowCal™



COMPACT THERMAL BALANCING VALVES



1164 ThermoSetter™ NPT

Compact adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Outlet check valve
Optional:
- Temperature gauge
- Union Isolation Valves

Adjustment temperature range: 105 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116440AC 002	½" NPT female union	1.6	267.00
116440AC 102*	½" NPT female union	2.4	374.00
116441AC 002	½" NPT female union, gauge	1.8	284.00
116441AC 102*	½" NPT female union, gauge	2.6	398.00
116450AC 002	¾" NPT female union	1.8	294.00
116450AC 102*	¾" NPT female union	2.6	411.00
116451AC 002	¾" NPT female union, gauge	2.0	307.00
116451AC 102*	¾" NPT female union, gauge	2.8	430.00

*With isolation valves.



1164 ThermoSetter™ sweat

Compact adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Outlet check valve
Optional:
- Temperature gauge
- Union Isolation Valves

Adjustment temperature range: 105 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116440AC 009	½" sweat union	1.4	253.00
116440AC 109*	½" sweat union	2.2	355.00
116441AC 009	½" sweat union, gauge	1.6	270.00
116441AC 109*	½" sweat union, gauge	2.4	378.00
116450AC 009	¾" sweat union	1.6	279.00
116450AC 109*	¾" sweat union	2.4	390.00
116451AC 009	¾" sweat union, gauge	1.8	291.00
116451AC 109*	¾" sweat union, gauge	2.6	408.00

*With isolation valves.



1164 ThermoSetter™ PEX

Compact adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Outlet check valve
Optional:
- Temperature gauge
- Union Isolation Valves

Adjustment temperature range: 105 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116440AC 008	½" PEX expansion union	1.6	253.00
116440AC 108*	½" PEX expansion union	2.4	355.00
116440AC 007	½" PEX crimp union	1.6	253.00
116440AC 107*	½" PEX crimp union	2.4	355.00
116441AC 008	½" PEX expansion union, gauge	1.8	270.00
116441AC 108*	½" PEX expansion union, gauge	2.6	378.00
116441AC 007	½" PEX crimp union, gauge	1.8	270.00
116441AC 107*	½" PEX crimp union, gauge	2.6	378.00
116450AC 008	¾" PEX expansion union	1.8	279.00
116450AC 108*	¾" PEX expansion union	2.6	390.00
116450AC 007	¾" PEX crimp union	2	279.00
116450AC 107*	¾" PEX crimp union	2.8	390.00
116451AC 008	¾" PEX expansion union, gauge	2.0	291.00
116451AC 108*	¾" PEX expansion union, gauge	2.8	408.00
116451AC 007	¾" PEX crimp union, gauge	2.0	291.00
116451AC 107*	¾" PEX crimp union, gauge	2.8	408.00

*With isolation valves.



1164 ThermoSetter™ press

Compact adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Outlet check valve
Optional:
- Temperature gauge
- Union Isolation Valves

Adjustment temperature range: 105 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116440AC 006	½" press union	1.4	280.00
116440AC 106*	½" press union	2.2	392.00
116441AC 006	½" press union, gauge	1.6	299.00
116441AC 106*	½" press union, gauge	2.4	417.00
116450AC 006	¾" press union	1.6	308.00
116450AC 106*	¾" press union	2.4	432.00
116451AC 006	¾" press union, gauge	1.8	322.00
116451AC 106*	¾" press union, gauge	2.6	451.00

*With isolation valves.

Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372. Certified by ICC-ES.

THERMAL BALANCING VALVES

1162, 1166 ThermoSetter™ NPT



Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:

- Thermal disinfection bypass cartridge
- Outlet check valve
- Temperature gauge

Optional: Union isolation valves

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116240AC 002	½" NPT female union, 160 °F bypass	1.8	364.00
116240AC 102*	½" NPT female union, 160 °F bypass	2.4	509.00
116250AC 002	¾" NPT female union, 160 °F bypass	2.0	390.00
116250AC 102*	¾" NPT female union, 160 °F bypass	3.2	547.00
116640AC 002	½" NPT female union, 140 °F bypass	1.8	364.00
116640AC 102*	½" NPT female union, 140 °F bypass	2.4	509.00
116650AC 002	¾" NPT female union, 140 °F bypass	2.0	390.00
116650AC 102*	¾" NPT female union, 140 °F bypass	3.2	547.00

*With isolation valves.

1162, 1166 ThermoSetter™ sweat



Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:

- Thermal disinfection bypass cartridge
- Outlet check valve
- Temperature gauge

Optional: Union isolation valves

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116240AC 009	½" sweat union, 160 °F bypass	1.7	345.00
116240AC 109*	½" sweat union, 160 °F bypass	2.3	483.00
116250AC 009	¾" sweat union, 160 °F bypass	1.9	371.00
116250AC 109*	¾" sweat union, 160 °F bypass	3.1	519.00
116640AC 009	½" sweat union, 140 °F bypass	1.7	345.00
116640AC 109*	½" sweat union, 140 °F bypass	2.3	483.00
116650AC 009	¾" sweat union, 140 °F bypass	1.9	371.00
116650AC 109*	¾" sweat union, 140 °F bypass	3.1	519.00

*With isolation valves.

1162, 1166 ThermoSetter™ PEX



Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:

- Thermal disinfection bypass cartridge
- Outlet check valve
- Temperature gauge

Optional: Union isolation valves

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116240AC 008	½" PEX expansion union, 160 °F bypass	1.8	345.00
116240AC 108*	½" PEX expansion union, 160 °F bypass	2.4	483.00
116240AC 007	½" PEX crimp union, 160 °F bypass	1.8	345.00
116240AC 107*	½" PEX crimp union, 160 °F bypass	2.4	483.00
116250AC 008	¾" PEX expansion union, 160 °F bypass	2.0	371.00
116250AC 108*	¾" PEX expansion union, 160 °F bypass	3.2	519.00
116250AC 007	¾" PEX crimp union, 160 °F bypass	2.0	371.00
116250AC 107*	¾" PEX crimp union, 160 °F bypass	3.2	519.00
116640AC 008	½" PEX expansion union, 140 °F bypass	1.8	345.00
116640AC 108*	½" PEX expansion union, 140 °F bypass	2.4	483.00
116640AC 007	½" PEX crimp union, 140 °F bypass	1.8	345.00
116640AC 107*	½" PEX crimp union, 140 °F bypass	2.4	483.00
116650AC 008	¾" PEX expansion union, 140 °F bypass	2.0	371.00
116650AC 108*	¾" PEX expansion union, 140 °F bypass	3.2	519.00
116650AC 007	¾" PEX crimp union, 140 °F bypass	2.0	371.00
116650AC 107*	¾" PEX crimp union, 140 °F bypass	3.2	519.00

*With isolation valves.

1162, 1166 ThermoSetter™ press



Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:

- Thermal disinfection bypass cartridge
- Outlet check valve
- Temperature gauge

Optional: Union isolation valves

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116240AC 006	½" press union, 160 °F bypass	1.7	382.00
116240AC 106*	½" press union, 160 °F bypass	2.3	535.00
116250AC 006	¾" press union, 160 °F bypass	1.9	410.00
116250AC 106*	¾" press union, 160 °F bypass	2.1	575.00
116640AC 006	½" press union, 140 °F bypass	1.7	382.00
116640AC 106*	½" press union, 140 °F bypass	2.3	535.00
116650AC 006	¾" press union, 140 °F bypass	1.9	410.00
116650AC 106*	¾" press union, 140 °F bypass	2.1	575.00

*With isolation valves.

Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372. Certified by ICC-ES.

THERMAL BALANCING VALVES



1161 ThermoSetter™ NPT

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.

Complete with:

- Cavity for bypass cartridge
- Outlet check valve

Optional:

- Union isolation valves
- Temperature gauge

Adjustment temperature range: 95 – 140 °F

Max fluid temperature: 195 °F

Max. working pressure: 230 psi

Code	Description	Lbs	USD
116140AC 002	½" NPT female unions	1.7	322.00
116140AC 102*	½" NPT female unions	2.3	451.00
116141AC 002	½" NPT female unions, gauge	1.8	342.00
116141AC 102*	½" NPT female unions, gauge	2.4	479.00
116150AC 002	¾" NPT female unions	1.9	350.00
116150AC 102*	¾" NPT female unions	3.1	490.00
116151AC 002	¾" NPT female unions, gauge	2.0	370.00
116151AC 102*	¾" NPT female unions, gauge	3.2	518.00

*With isolation valves.



1161 ThermoSetter™ sweat

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.

Complete with:

- Cavity for bypass cartridge
- Outlet check valve

Optional:

- Union isolation valves
- Temperature gauge

Adjustment temperature range: 95 – 140 °F

Max fluid temperature: 195 °F

Max. working pressure: 230 psi

Code	Description	Lbs	USD
116140AC 009	½" sweat union	1.6	306.00
116140AC 109*	½" sweat union	2.2	428.00
116141AC 009	½" sweat union, gauge	1.7	324.00
116141AC 109*	½" sweat union, gauge	2.3	455.00
116150AC 009	¾" sweat union	1.8	333.00
116150AC 109*	¾" sweat union	3.0	466.00
116151AC 009	¾" sweat union, gauge	1.9	351.00
116151AC 109*	¾" sweat union, gauge	3.1	492.00

*With isolation valves.



1161 ThermoSetter™ PEX

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.

Complete with:

- Cavity for bypass cartridge
- Outlet check valve

Optional:

- Union isolation valves
- Temperature gauge

Adjustment temperature range: 95 – 140 °F

Max fluid temperature: 195 °F

Max. working pressure: 230 psi

Code	Description	Lbs	USD
116140AC 008	½" PEX expansion unions	1.7	306.00
116140AC 108*	½" PEX expansion unions	2.3	428.00
116140AC 007	½" PEX crimp unions	1.7	306.00
116140AC 107*	½" PEX crimp unions	2.3	428.00
116141AC 008	½" PEX expansion unions, gauge	1.8	324.00
116141AC 108*	½" PEX expansion unions, gauge	2.4	455.00
116141AC 007	½" PEX crimp unions, gauge	1.8	324.00
116141AC 107*	½" PEX crimp unions, gauge	2.4	455.00
116150AC 008	¾" PEX expansion unions	1.9	333.00
116150AC 108*	¾" PEX expansion unions	3.1	466.00
116150AC 007	¾" PEX crimp unions	1.9	333.00
116150AC 107*	¾" PEX crimp unions, check	3.1	466.00
116151AC 008	¾" PEX expansion unions, gauge	2.0	351.00
116151AC 108*	¾" PEX expansion unions, gauge	3.2	492.00
116151AC 007	¾" PEX crimp unions, gauge	2.0	351.00
116151AC 107*	¾" PEX crimp unions, gauge	3.2	492.00

*With isolation valves.



1161 ThermoSetter™ press

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.

Complete with:

- Cavity for bypass cartridge
- Outlet check valve

Optional:

- Union isolation valves
- Temperature gauge

Adjustment temperature range: 95 – 140 °F

Max fluid temperature: 195 °F

Max. working pressure: 230 psi

Code	Description	Lbs	USD
116140AC 006	½" press union	1.6	339.00
116140AC 106*	½" press union	2.2	474.00
116141AC 006	½" press union, gauge	1.7	359.00
116141AC 106*	½" press union, gauge	2.3	503.00
116150AC 006	¾" press union	1.9	368.00
116150AC 106*	¾" press union	3.1	515.00
116151AC 006	¾" press union, gauge	1.9	388.00
116151AC 106*	¾" press union, gauge	3.1	544.00

*With isolation valves.

Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372. Certified by ICC-ES.

THERMAL BALANCING VALVES



1163 ThermoSetter™ NPT

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermo-electric bypass valve
- Outlet check valve & temperature gauge
Optional: Union isolation valves
Purchase 656 actuator separately, page 32

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116340AC 002	½" NPT female union	1.8	382.00
116340AC 102*	½" NPT female union	2.4	535.00
116350AC 002	¾" NPT female union	2.0	407.00
116350AC 102*	¾" NPT female union	3.2	570.00

*With isolation valves.



1163 ThermoSetter™ sweat

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermo-electric bypass valve
- Outlet check valve & temperature gauge
Optional: Union isolation valves
Purchase 656 actuator separately, page 32

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116340AC 009	½" sweat union	1.7	363.00
116340AC 109*	½" sweat union	2.3	508.00
116350AC 009	¾" sweat union	1.9	386.00
116350AC 109*	¾" sweat union	3.1	541.00

*With isolation valves.



1163 ThermoSetter™ PEX

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermo-electric bypass valve
- Outlet check valve & temperature gauge
Optional: Union isolation valves
Purchase 656 actuator separately, page 32

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116340AC 008	½" PEX expansion union	1.8	363.00
116340AC 108*	½" PEX expansion union	2.4	508.00
116340AC 007	½" PEX crimp union	1.8	363.00
116340AC 107*	½" PEX crimp union	2.4	508.00
116350AC 008	¾" PEX expansion union	2.0	386.00
116350AC 108*	¾" PEX expansion union	3.2	541.00
116350AC 007	¾" PEX crimp union	2.0	386.00
116350AC 107*	¾" PEX crimp union	3.2	541.00

*With isolation valves.



1163 ThermoSetter™ press

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermo-electric bypass valve
- Outlet check valve & temperature gauge
Optional: Union isolation valves
Purchase 656 actuator separately, page 32

Adjustment temperature range: 95 – 140 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116340AC 006	½" press union	1.7	402.00
116340AC 106*	½" press union	2.3	561.00
116350AC 006	¾" press union	1.9	427.00
116350AC 106*	¾" press union	2.1	598.00

*With isolation valves.

Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372. Certified by ICC-ES.

THERMAL BALANCING VALVES



1162,1166 ThermoSetter™

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermal disinfection bypass cartridge
- Temperature gauge
Optional:
- Outlet check valve
- Isolation valves

Adjustment temperature range: 95 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116260A	1" FNPT, 160°F bypass	1.8	423.00
116260AC	1" FNPT, check, 160°F bypass	2.0	559.00
116270A	1¼" FNPT, 160°F bypass	1.7	451.00
116270AC	1¼" FNPT, check, 160°F bypass	1.9	600.00
116660A	1" FNPT, 140°F bypass	2.3	423.00
116660AC	1" FNPT, check, 140°F bypass	2.5	559.00
116670A	1¼" FNPT, 140°F bypass	2.2	451.00
116670AC	1¼" FNPT, check, 140°F bypass	2.4	600.00

Note: Add '001' suffix for versions with isolation valves



1161 ThermoSetter™

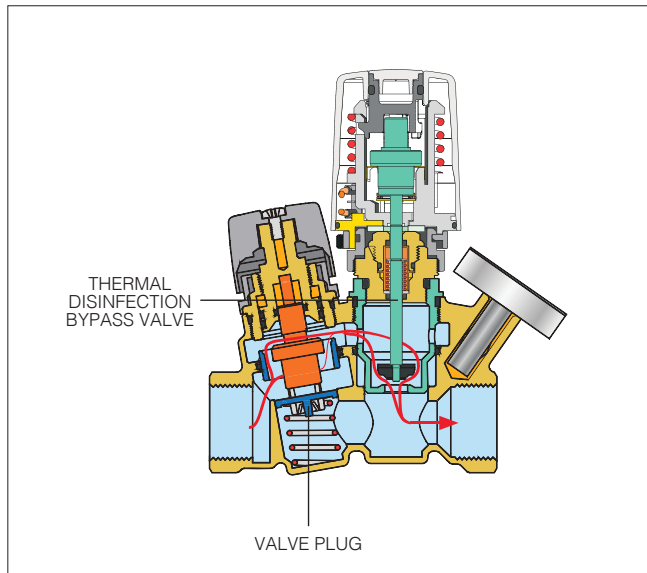
Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Cavity for bypass cartridge
Optional:
- Temperature gauge
- Outlet check valve
- Isolation valves

Adjustment temperature range: 95 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116160A	1" FNPT	2.1	353.00
116160AC	1" FNPT, check	2.3	490.00
116161A	1" FNPT, gauge	2.2	369.00
116161AC	1" FNPT, gauge, check	2.4	507.00
116170A	1¼" FNPT	2.0	380.00
116170AC	1¼" FNPT, check	2.2	530.00
116171A	1¼" FNPT, gauge	2.1	394.00
116171AC	1¼" FNPT, gauge, check	2.3	546.00

Note: Add '001' suffix for versions with isolation valves

Construction details for 1163 ThermoSetter™



1163 ThermoSetter™

Adjustable thermal balancing valve.
Low-lead/lead free DZR brass body.
Complete with:
- Thermo-electric bypass valve
- Temperature gauge
Optional:
- Outlet check valve
- Isolation valves

Purchase 656 actuator separately, page 32

Adjustment temperature range: 95 – 150 °F
Max fluid temperature: 195 °F
Max. working pressure: 230 psi

Code	Description	Lbs	USD
116360A	1" FNPT, gauge	2.3	439.00
116360AC	1" FNPT, gauge, check valve	2.5	576.00
116370A	1¼" FNPT, gauge	2.2	465.00
116370AC	1¼" FNPT, gauge, check valve	2.4	615.00

Note: Add '001' suffix for versions with isolation valves

Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372. Certified by ICC-ES.

THERMAL BALANCING VALVES



Replacement thermal disinfection bypass cartridges.
Compatible with 1162, 1163 ThermoSetter.
Upgrade option for 1161 ThermoSetter.

Code	Description	Lbs	USD
F0001286	140 °F bypass cartridge	0.1	54.30
F0000580	160 °F bypass cartridge	0.1	54.30



Replacement balancing cartridge for ThermoSetter.

Code	Description	Lbs	USD
F0001516	1/2", 3/4" balancing cartridge	0.1	54.30



Replacement temperature gauge for ThermoSetter.

Code	Description	Lbs	USD
116010	1 1/2" dial temperature gauge	0.1	15.50



Insulation jacket for ThermoSetter™.

Code	Description	Lbs	USD
CBN116140	Fits 1/2" and 3/4" - 1161, 1162, 1163, 1166	0.1	37.50
CBN116440	Fits 1/2" and 3/4" - 1164	0.1	36.80
CBN116160	Fits 1" and 1 1/4" - 1161, 1162, 1163, 1166	0.1	40.10



Replacement actuator bypass cartridge compatible with 1163 ThermoSetter.

Code	Description	Lbs	USD
116000	Replacement actuator bypass cartridge	0.1	70.00



Replacement isolation ball valves and nipples for ThermoSetter.



Replacement check valve for 1" and 1 1/4" ThermoSetter.

Code	Description	Lbs	USD
NA51361	1" MNPT in, 1" FNPT out	1.1	135.00
NA51371	1 1/4" MNPT in, 1 1/4" FNPT out	1.3	148.00

Code	Description	Lbs	USD
290030	1" M x 1" F union ball valve	1.1	49.00
290031	1" M x 1" F union ball valve, extended handle	1.3	77.00
NA10826	1" FNPT ball valve	1.0	62.90
NA10836	1" NPT nipple	0.1	12.30
NA10827	1 1/4" FNPT ball valve	1.6	105.00
NA10837	1 1/4" NPT nipple	0.3	21.20



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PRESCAL™ PRVS

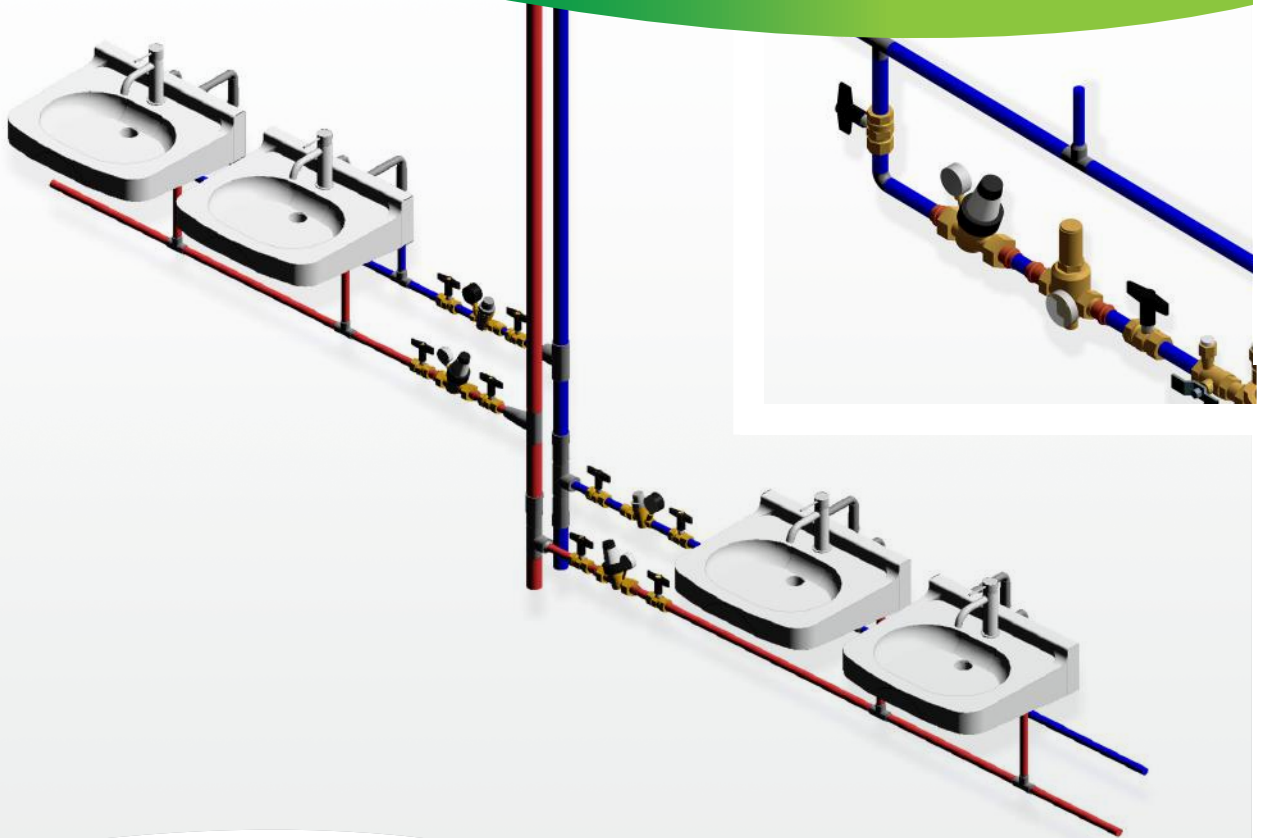
PRECISION ENGINEERED
FOR DURABLE PERFORMANCE



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.**



PRESSURE REDUCING VALVES



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

Pressure reducing valves - diaphragm type

Pressure reducing valves - piston type

Two stage pressure reducing kit

Compact pressure reducing valves - diaphragm type

PRESSURE REDUCING VALVES - DIAPHRAGM TYPE



535H PresCal™ sweat

Adjustable pressure reducing valve.
Low lead/lead free DZR brass body.
Field serviceable cartridge.

Complete with UV protective cover.
Optional pressure gauge.

Adjustable range: 15 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
535940HA	½" sweat union	1.9	117.00
535941HA	½" sweat union, gauge	2.0	128.00
535950HA	¾" sweat union	2.2	128.00
535951HA	¾" sweat union, gauge	2.3	140.00
535960HA	1" sweat union	2.9	168.00
535961HA	1" sweat union, gauge	3.0	180.00
535970HA	1¼" sweat union	5.6	372.00
535971HA	1¼" sweat union, gauge	5.7	383.00
535980HA	1½" sweat union	7.3	522.00
535981HA	1½" sweat union, gauge	7.4	533.00
535990HA	2" sweat union	9.7	677.00
535991HA	2" sweat union, gauge	9.8	689.00



535H PresCal™ NPT

Adjustable pressure reducing valve.
Low lead/lead free DZR brass body.
Field serviceable cartridge.

Complete with UV protective cover.
Optional pressure gauge.

Adjustable range: 15 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
535340HA	½" NPT female union	2.0	128.00
535341HA	½" NPT female union, gauge	2.1	140.00
535350HA	¾" NPT female union	2.3	137.00
535351HA	¾" NPT female union, gauge	2.4	148.00
535360HA	1" NPT female union	3.0	179.00
535361HA	1" NPT female union, gauge	3.1	190.00
535370HA	1¼" NPT female union	5.7	383.00
535371HA	1¼" NPT female union, gauge	5.8	395.00
535380HA	1½" NPT female union	7.3	549.00
535381HA	1½" NPT female union, gauge	7.4	560.00
535390HA	2" NPT female union	9.7	677.00
535391HA	2" NPT female union, gauge	9.8	689.00



535H PresCal™ press

Adjustable pressure reducing valve.
Low lead/lead free DZR brass body.
Field serviceable cartridge.

Complete with UV protective cover.
Optional pressure gauge.

Adjustable range: 15 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
535640HA	½" press union	1.9	141.00
535641HA	½" press union, gauge	2	152.00
535650HA	¾" press union	2.3	144.00
535651HA	¾" press union, gauge	2.4	155.00
535660HA	1" press union	3	195.00
535661HA	1" press union, gauge	3.1	207.00
535670HA	1¼" press union	5.8	543.00
535671HA	1¼" press union, gauge	5.8	554.00
535680HA	1½" press union	7.3	779.00
535681HA	1½" press union, gauge	7.4	791.00
535690HA	2" press union	9.7	960.00
535691HA	2" press union, gauge	9.8	971.00



535H PresCal™ PEX

Adjustable pressure reducing valve.
Low lead/lead free DZR brass body.
Field serviceable cartridge.

Complete with UV protective cover.
Optional pressure gauge.

Adjustable range: 15 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
535750HA	¾" PEX crimp union	2.3	128.00
535751HA	¾" PEX crimp union, gauge	2.4	140.00
535550HA	¾" PEX expansion union	2.3	128.00
535551HA	¾" PEX expansion union, gauge	2.4	140.00
535760HA	1" PEX crimp union	3.0	168.00
535761HA	1" PEX crimp union, gauge	3.1	180.00
535560HA	1" PEX expansion union	3.0	168.00
535561HA	1" PEX expansion union, gauge	3.1	180.00

Complies with standards ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.
Plenum rated: compliant with the requirements of standard UL 2043.

PRESCAL ACCESSORIES



535H PresCal™ Body

Replacement valve body for PresCal.
Low lead/lead free DZR brass.
Optional pressure gauge.
See fittings selection in Section 13.



PVC jumper nipple, male union thread.
Matches face-to-face length of
corresponding 535H body size.
Allows piping completion before valve
installation.

Code	Description	Lbs	USD
NA535840HA	1/2" body	1.9	89.10
NA535841HA	1/2" body, gauge	2	101.00
NA535850HA	3/4" body	2.2	93.90
NA535851HA	3/4" body, gauge	2.3	105.00
NA535860HA	1" body	2.9	124.00
NA535861HA	1" body, gauge	3	136.00
NA535870HA	1 1/4" body	6.1	271.00
NA535871HA	1 1/4" body, gauge	6.2	283.00
NA535880HA	1 1/2" body	7.3	382.00
NA535881HA	1 1/2" body, gauge	7.4	394.00
NA535890HA	2" body	9.7	443.00
NA535891HA	2" body, gauge	9.8	456.00



Replacement pressure gauge.
Pressure range: 0 – 100 psi
Dial size: 2"

Code	Description	Lbs	USD
NA11304	Jumper nipple for 535H 1/2"	0.1	16.40
NA11375*	Jumper nipple for 535H 3/4"	0.1	22.10
NA11376*	Jumper nipple for 535H 1"	0.2	23.10
NA11307	Jumper nipple for 535H 1 1/4"	0.3	20.70
NA11308	Jumper nipple for 535H 1 1/2"	0.3	22.60
NA11309	Jumper nipple for 535H 2"	0.5	65.10

*With filter screen.



Replacement cartridge for 535H PresCal.
Check code description for compatibility.

Code	Description	Lbs	USD
NA10273	1/8" NPT male	0.1	15.00

Code	Description	Lbs	USD
535006HA	Fits 535H 1/2", 3/4", 1"	0.3	65.70
535009HA	Fits 535H 1 1/4", 1 1/2", 2"	0.5	198.00

Complies with standards ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.
Plenum rated: compliant with the requirements of standard UL 2043.

PRESSURE REDUCING VALVES - PISTON TYPE



536 PresCal™ HP sweat High Range

High-performance piston type pressure reducing valve for high pressure applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 90 – 150 psi
Max. working pressure: 360 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536043A 109	½" sweat union	3.3	331.00
536053A 109	¾" sweat union	4.4	365.00
536063A 109	1" sweat union	5	482.00
536073A 109	1¼" sweat union	7.5	667.00
536083A 109	1½" sweat union	8.8	817.00
536093A 109	2" sweat union	12	1,051.00



536 PresCal™ HP NPT High Range

High-performance piston type pressure reducing valve for high pressure applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 90 – 150 psi
Max. working pressure: 360 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536043A 103	½" NPT female union	3.3	348.00
536053A 103	¾" NPT female union	4.4	383.00
536063A 103	1" NPT female union	5.0	506.00
536073A 103	1¼" NPT female union	7.5	700.00
536083A 103	1½" NPT female union	8.8	860.00
536093A 103	2" NPT female union	11	1,105.00



536 PresCal™ HP press High Range

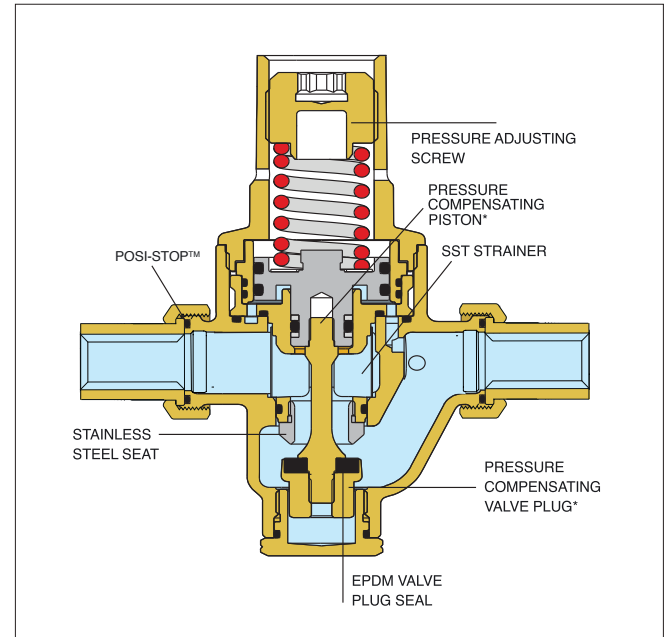
High-performance piston type pressure reducing valve for high pressure applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 90 – 150 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536043A 106	½" press union	3.3	364.00
536053A 106	¾" press union	4.4	421.00
536063A 106	1" press union	5	556.00
536073A 106	1¼" press union	7.5	771.00
536083A 106	1½" press union	8.8	988.00
536093A 106	2" press union	12	1,448.00

Construction details for 536 PresCal™ HP



Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.

PRESSURE REDUCING VALVES - PISTON TYPE



536 PresCal™ HP sweat Low Range

High-performance piston type pressure reducing valve for severe service or water hammer applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 10 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536044A 109	½" sweat union	3.3	331.00
536054A 109	¾" sweat union	4.4	365.00
536064A 109	1" sweat union	5	482.00
536074A 109	1¼" sweat union	7.5	667.00
536084A 109	1½" sweat union	8.8	817.00



536 PresCal™ HP NPT Low Range

High-performance piston type pressure reducing valve for severe service or water hammer applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 10 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536044A 103	½" NPT female union	3.3	348.00
536054A 103	¾" NPT female union	4.4	383.00
536064A 103	1" NPT female union	5.0	506.00
536074A 103	1¼" NPT female union	7.5	700.00
536084A 103	1½" NPT female union	8.8	860.00



536 PresCal™ HP press Low Range

High-performance piston type pressure reducing valve for severe service or water hammer applications.

Low lead/lead free DZR brass body.
Complete with pressure gauge.

Adjustable range: 10 – 90 psi
Max. working pressure: 300 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
536044A 106	½" press union	3.3	340.00
536054A 106	¾" press union	4.4	421.00
536064A 106	1" press union	5	556.00
536074A 106	1¼" press union	7.5	771.00
536084A 106	1½" press union	8.8	988.00

PRESCAL HP ACCESSORIES



Replacement pressure gauge for 536 PresCal™ HP
Dual scale: psi/kPa
Dial size: 2½"

Check code description for compatibility.

Code	Description	Lbs	USD
NA10817	0-100 psi gauge, low range	0.4	54.10
NA10813	0-200 psi gauge, high range	0.4	55.70



Replacement pressure gauge adapter parts.
Compatible with both low and high range 536 Prescal™ HP.

Code	Description	Lbs	USD
R57264	O-ring seal for NA10810 gauge adapter	0.1	1.00
NA10810	¼" G male x ¼" FNPT gauge adapter fitting	0.3	25.60

Complies with standards ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.

TWO STAGE PRESSURE REDUCING KIT

NEW

KIT536



Two stage pressure reduction kit for managing demanding pressure reduction ratios.
Complete with:
- Low lead/lead free coupler
- Expansion relief accessory

1st stage adjustment range: 90–150 psi
2nd stage adjustment range: 15–90 psi
Max working pressure: 360 psi
Max fluid temperature: 180°F

NEW

KIT536



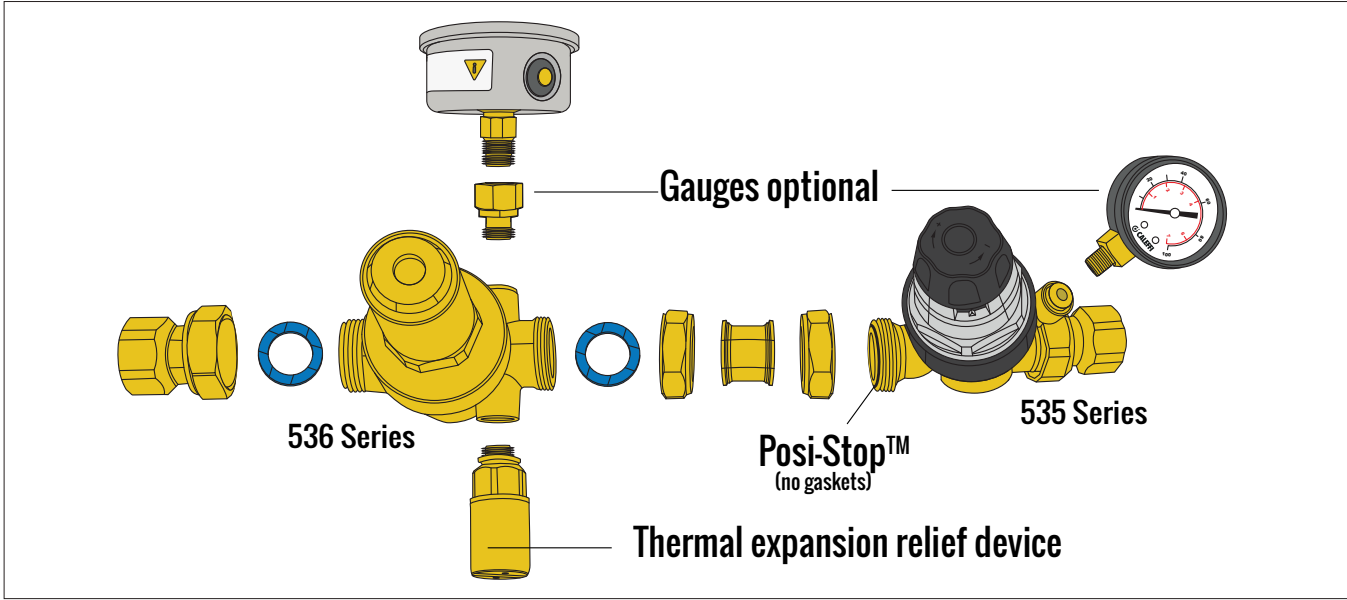
Two stage pressure reduction kit for managing demanding pressure reduction ratios.
Complete with:
- Low lead/lead free coupler
- Expansion relief accessory

1st stage adjustment range: 90–150 psi
2nd stage adjustment range: 15–90 psi
Max working pressure: 360 psi
Max fluid temperature: 180°F

Code	Description	Lbs	USD
KIT536535A 153	¾" NPT female union, pressure gauges	6.8	589.00
KIT536535A 156	¾" press union, pressure gauges	6.8	639.00
KIT536535A 159	¾" sweat union, pressure gauges	6.7	559.00
KIT536535A 163	1" NPT female union, pressure gauges	8.1	771.00
KIT536535A 166	1" press union, pressure gauges	8.1	847.00
KIT536535A 169	1" sweat union, pressure gauges	8.0	734.00

Code	Description	Lbs	USD
KIT536535A 053	¾" NPT female union	6.6	549.00
KIT536535A 056	¾" press union	6.6	599.00
KIT536535A 059	¾" sweat union	6.5	519.00
KIT536535A 063	1" NPT female union	7.9	721.00
KIT536535A 066	1" press union	7.9	797.00
KIT536535A 069	1" sweat union	7.8	684.00

Construction details for KIT536



COMPACT PRESSURE REDUCING VALVES - DIAPHRAGM TYPE



533H PresCal™ Compact sweat

Compact, inlet union pressure reducing valve. Low lead/lead free DZR brass body. Field serviceable cartridge.

Complete with tamper resistant cap. Optional pressure gauge.

Adjustable range: 15 – 80 psi
Max. working pressure: 250 psi
Max fluid temperature: 180 °F

Code	Description	Lbs	USD
533940HA	½", sweat union in, FNPT out	2	94.00
533941HA	½", sweat union in, FNPT out, gauge	2.1	107.00
533950HA	¾", sweat union in, FNPT out	2.3	67.90
533951HA	¾", sweat union in, FNPT out, gauge	2.4	79.60



533H PresCal™ Compact press

Compact, inlet union pressure reducing valve. Low lead/lead free DZR brass body. Field serviceable cartridge.

Complete with tamper resistant cap. Optional pressure gauge.

Adjustable range: 15 – 80 psi
Max. working pressure: 250 psi
Max fluid temperature: 180 °F

Code	Description	Lbs	USD
533640HA	½", press union in, FNPT out	2.3	113.00
533641HA*	½", press union in, FNPT out, gauge	2.4	125.00
533650HA	¾", press union in, FNPT out	2.3	67.90
533651HA*	¾", press union in, FNPT out, gauge	2.4	79.60



533H PresCal™ Compact NPT

Compact, inlet union pressure reducing valve. Low lead/lead free DZR brass body. Field serviceable cartridge.

Complete with tamper resistant cap. Optional pressure gauge.

Adjustable range: 15 – 80 psi
Max. working pressure: 250 psi
Max fluid temperature: 180 °F

Code	Description	Lbs	USD
533340HA	½", NPT female union in, FNPT out	1.9	103.00
533341HA	½", NPT female union in, FNPT out, gauge	2.0	116.00
533350HA	¾", NPT female union in, FNPT out	2.2	67.90
533351HA	¾", NPT female union in, FNPT out, gauge	2.3	79.60



533H PresCal™ Compact PEX

Compact, inlet union pressure reducing valve. Low lead/lead free DZR brass body. Field serviceable cartridge.

Complete with tamper resistant cap. Optional pressure gauge.

Adjustable range: 15 – 80 psi
Max. working pressure: 250 psi
Max fluid temperature: 180 °F

Code	Description	Lbs	USD
533750HA	¾", PEX crimp union in, FNPT out	2.3	67.90
533751HA	¾", PEX crimp union in, FNPT out, gauge	2.4	79.60
533850HA	¾", PEX expansion union in, FNPT out	2.3	67.90
533851HA	¾", PEX expansion union in, FNPT out, gauge	2.3	79.60

Complies with standards ASSE 1003, CSA B356, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.

PRESCAL COMPACT ACCESSORIES



Replacement cartridge for 533H PresCal Compact. Check code description for compatibility.

Code	Description	Lbs	USD
533000H	Fits 533H ½", ¾"	0.2	50.60



Replacement pressure gauge. Pressure range: 0 – 100 psi
Dial size: 2"

Code	Description	Lbs	USD
NA10273	1/8" NPT male	0.1	15.00



533H PresCal™ Body

Replacement valve body for 533 PresCal Compact
Low lead/lead free DZR brass.
Gauge port plug included with body.
See fittings selection in Section 13.

Code	Description	Lbs	USD
NA533449HA	½" body	0.7	84.00
NA533459HA	¾" body	0.9	88.90



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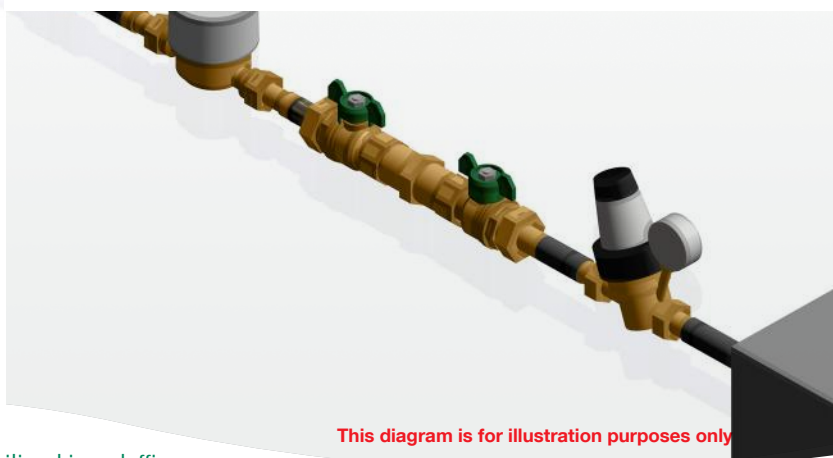
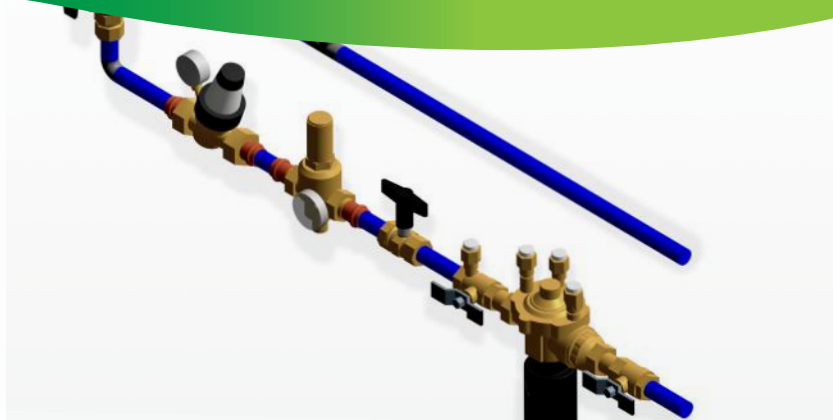
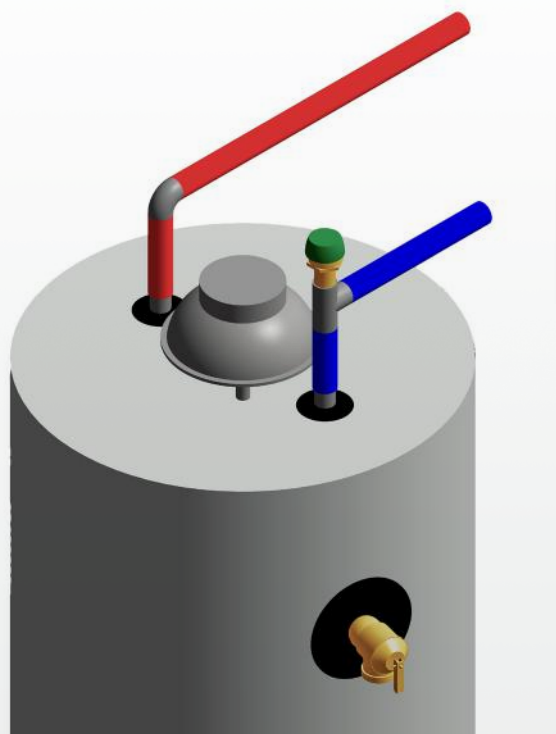
PODCAST SERIES EXCELLENCE IN EDUCATION

The Ask Caleffi podcast Series follows our tech support team as they discuss **tricky heating and plumbing system problems**. Learn how to incorporate best practices and hear what industry expert guests are up to. **CALEFFI GUARANTEED.**



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BACKFLOW PREVENTION AND SAFETY DEVICES



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Backflow preventers, reduced pressure (RP)
- Backflow preventers, dual check (DuC)
- Backflow preventers, dual check, atmospheric vent (DuC-AV)
- Vacuum relief valve

BACKFLOW PREVENTERS, REDUCED PRESSURE (RP)



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



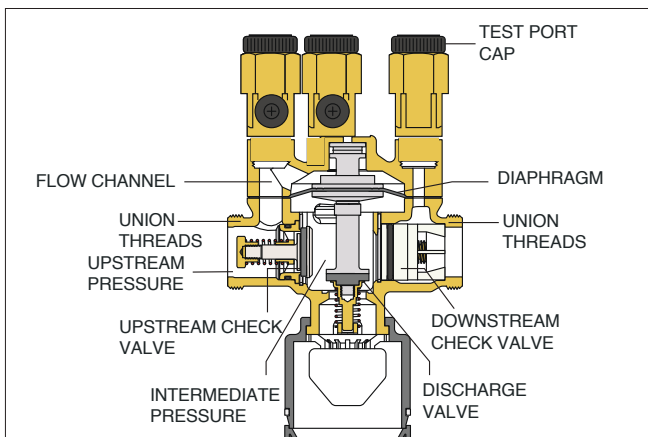
Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574004A	½" FNPT, includes discharge air gap	5.0	372.00
574064A	½" press, includes discharge air gap	5.1	393.00
NA11604**	Complete rebuild kit	0.7	82.40
59977*	Upstream check valve assembly	0.1	23.10
59978*	Relief valve assembly	0.2	41.40
59979*	Downstream check valve assembly	0.1	26.70
59980*	Discharge air gap	0.1	55.70
F0001006*	⅛" NPT test cock	0.2	25.40

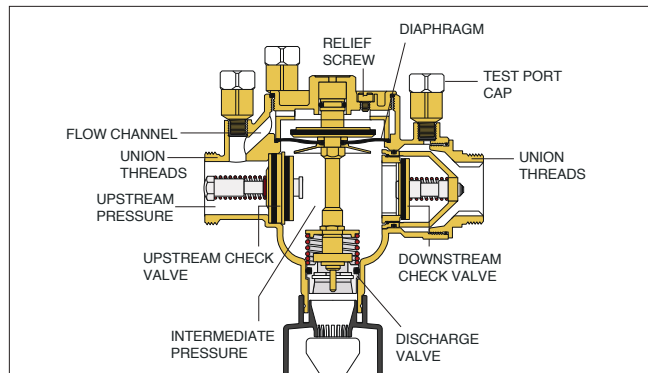
* Replacement parts.

**Includes: upstream, downstream check valve and relief valve assembly.

Construction details for ½" 574 FlowShield™ RP



Construction details for 1¼" and 1½" 574 FlowShield™ RP



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



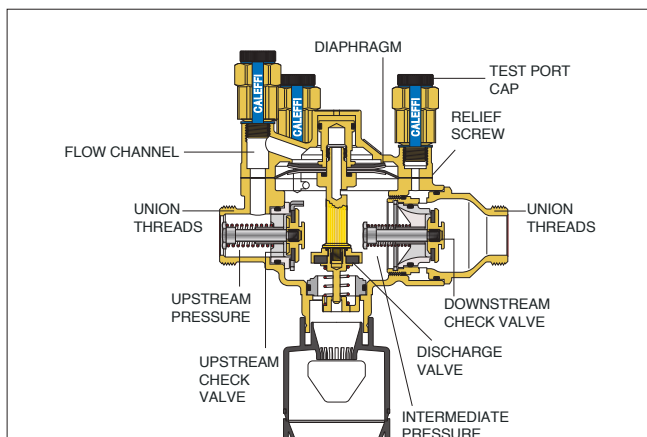
Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574050A	¾" FNPT, includes discharge air gap	9.5	446.00
574056A	¾" press, includes discharge air gap	9.6	485.00
NA11605**	Complete rebuild kit	0.8	266.00
59469*	Upstream check valve assembly	0.2	59.30
59470*	Downstream check valve assembly	0.2	63.00
59471*	Relief valve assembly	0.3	126.00
59472*	Relief valve seat	0.1	44.50
39623*	Discharge air gap	0.2	61.30
F0001006*	⅛" NPT test cock	0.2	25.40

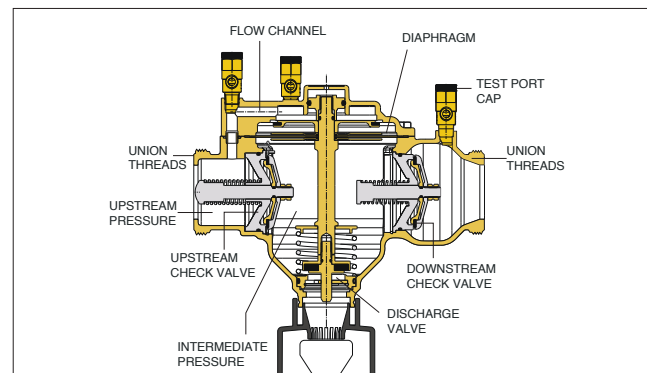
*Replacement parts for 574050A and 574056A.

**Includes: Upstream and downstream check valves, relief valve assembly and seat.

Construction details for ¾" and 1" 574 FlowShield™ RP



Construction details for 2" 574 FlowShield™ RP



Listed and certified by ASSE to standard 1013. Listed and certified by CSA to standard B64.4. Complies with AWWA C511, NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.

BACKFLOW PREVENTERS, REDUCED PRESSURE (RP)



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574006A	1" FNPT, includes air gap	11	465.00
574066A	1" Press, includes air gap	11	516.00
NA11606**	Complete rebuild kit	0.8	312.00
59469*	Upstream check valve assembly	0.3	59.30
F0001637*	Downstream check valve assembly	0.3	63.00
59471*	Relief valve assembly	0.3	126.00
59472*	Relief valve seat	0.1	44.50
39623*	Discharge air gap	0.2	61.30
F0001006*	1/8" NPT test cock	0.2	25.40

*Replacement parts for 574006A and 574066A.

**Includes: Upstream and downstream check valves, relief valve assembly and seat.



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574700A	1 1/4" FNPT, includes air gap	14	846.00
574706A	1 1/4" press, includes air gap	14	962.00
NA11607**	Complete rebuild kit	1.4	378.00
59455*	Upstream check valve assembly	0.3	96.90
59456*	Downstream check valve assembly	0.3	96.90
59457*	Relief valve assembly	0.6	137.00
59458*	Relief valve seat	0.2	46.80
39623*	Discharge air gap	0.2	61.30
F0001901*	1/4" NPT test cock	0.2	20.70

*Replacement parts for 574700A and 574706A.

**Includes: Upstream and downstream check valves, relief valve assembly and seat.



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574801A	1 1/2" FNPT, includes air gap	14	914.00
574806A	1 1/2" press, includes air gap	14	1,036.00
NA11608**	Complete rebuild kit	1.4	378.00
59455*	Upstream check valve assembly	0.3	96.90
F0001636*	Downstream check valve assembly	0.6	96.90
59457*	Relief valve assembly	0.6	137.00
59458*	Relief valve seat	0.2	46.80
39623*	Discharge air gap	0.2	61.30
F0001901*	1/4" NPT test cock	0.2	20.70

*Replacement parts for 574801A and 574806A.

**Includes: Upstream and downstream check valves, relief valve assembly and seat.



574 FlowShield™ RP

Testable reduced pressure principle backflow preventer.
Low lead/Lead free DZR brass body.

Complete with discharge air gap.



Max. operating pressure: 150 psi
Max. fluid temperature: 150°F

Code	Description	Lbs	USD
574900A	2" FNPT, includes air gap	20	1,438.00
574906A	2" press, includes air gap	20	1,654.00
NA11609**	Complete rebuild kit	1.8	730.00
59459*	Upstream check valve assembly	0.4	157.00
59460*	Downstream check valve assembly	0.4	139.00
59461*	Relief valve assembly	0.7	266.00
59462*	Relief valve seat	0.3	53.50
39623*	Discharge air gap	0.2	61.30
F0001901*	1/4" NPT test cock	0.2	20.70

*Replacement parts for 574900A and 574906A.

**Includes: Upstream and downstream check valves, relief valve assembly and seat.

Listed and certified by ASSE to standard 1013. Listed and certified by CSA to standard B64.4. Complies with AWWA C511, NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372.

BACKFLOW PREVENTERS, DUAL CHECK (DuC)



3048 FlowShield™ DuC sweat

Dual check backflow preventer.

Dual union, Low lead/lead free DZR brass body.

Max. operating pressure: 175 psi
Max. fluid temperature: 180°F

Code	Description	Lbs	USD
304849A	½" sweat union	1.2	81.40
304859A	¾" sweat union	1.6	82.40
304869A	1" sweat union	1.6	91.70



3048 FlowShield™ DuC MNPT

Dual check backflow preventer.

Dual union, Low lead/lead free DZR brass body.

Max. operating pressure: 175 psi
Max. fluid temperature: 180°F

Code	Description	Lbs	USD
304840A	½" NPT male union	1	87.60
304850A	¾" NPT male union	1.2	88.60
304860A	1" NPT male union	1.6	96.80



3048 FlowShield™ DuC FNPT

Dual check backflow preventer.

Dual union, Low lead/lead free DZR brass body.

Max. operating pressure: 175 psi
Max. fluid temperature: 180°F

Code	Description	Lbs	USD
304843A	½" NPT female union	1.2	87.60
304853A	¾" NPT female union	1.6	88.60



3048 FlowShield™ DuC PEX

Dual check backflow preventer.

Dual union, Low lead/lead free DZR brass body.

Max. operating pressure: 175 psi
Max. fluid temperature: 180°F

Code	Description	Lbs	USD
304847A	½" PEX crimp union	1	81.40
304857A	¾" PEX crimp union	1	82.40
304867A	1" PEX crimp union	1.2	91.70
304848A	½" PEX expansion union	1.2	81.40
304858A	¾" PEX expansion union	1.4	82.40
304868A	1" PEX expansion union	1.4	91.70



3048 FlowShield™ DuC press

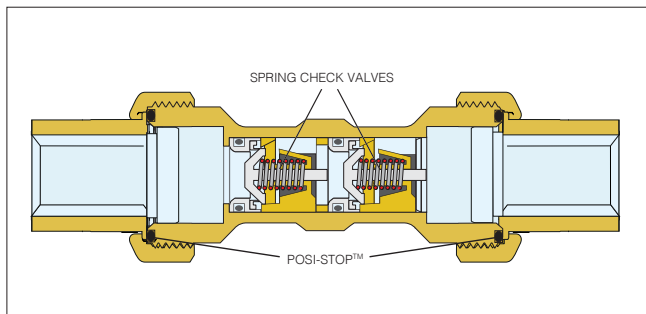
Dual check backflow preventer.

Dual union, Low lead/lead free DZR brass body.

Max. operating pressure: 175 psi

Code	Description	Lbs	USD
304846A	½" press union	1	94.80
304856A	¾" press union	1.2	95.80
304866A	1" press union	1.4	105.00

Construction details for 3048 FlowShield™ DuC



Complies with standards ASSE 1024, CSA B64.6, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC.

BACKFLOW PREVENTERS, DUAL CHECK, ATMOSPHERIC VENT (DuC-AV)

573 FlowShield™ DuC-AV



Dual check backflow preventer with an intermediate atmospheric vent.

Dual union, low lead/lead free DZR brass body.

Max. operating pressure: 175 psi

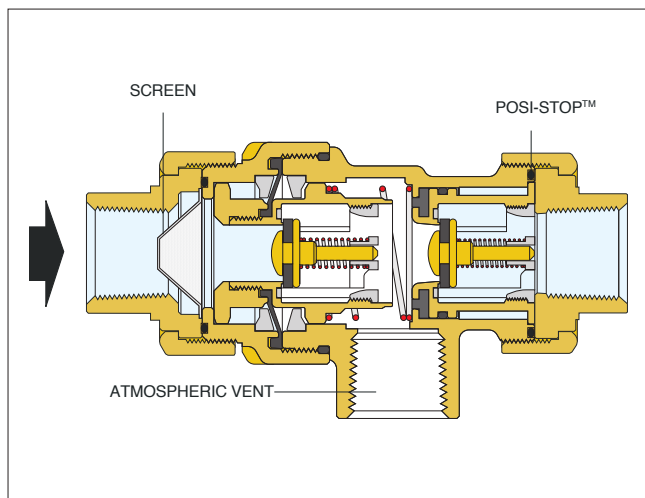
Max. fluid temperature: 210°F

Code	Description	Lbs	USD
573403A	½" NPT female union	1.7	100.00
573406A	½" press union	1.7	123.00
573409A	½" sweat union	1.7	95.50
573493A	½" sweat union inlet, ½" FNPT union outlet	1.7	98.30
573503A	¾" NPT female union	1.7	105.00
573100A*	Replacement body	1.5	73.70

*See fitting selection in Section 13.

Complies with standards ASSE 1012, CSA B64.3, NSF/ANSI/CAN 372 and with codes IPC, IRC, UPC. Certified by ICC-ES.

Construction details for 573 FlowShield™ DuC-AV



VACUUM RELIEF VALVE

304 Vacu-Stop™ (VRV)



Vacuum relief valve for water and low pressure steam service applications.

Low lead/lead free DZR brass body.

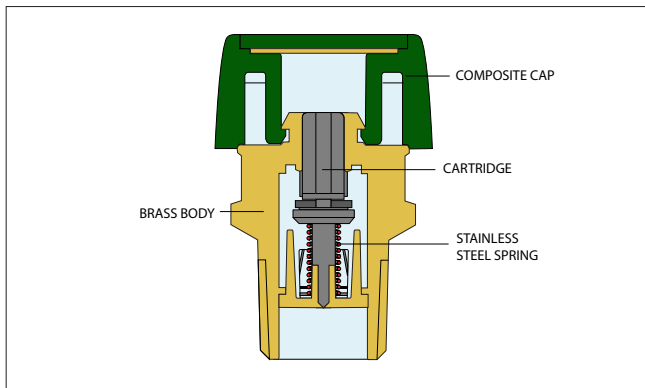
Max. operating pressure: 200 psi

Operating fluid range: 32 - 250°F

Code	Description	Lbs	USD
304040A	½" MNPT	0.8	36.10
304050A	¾" MNPT	0.8	39.10

Complies with standards ANSI Z21.22, CSA 4.4, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 and codes IPC, IRC, UPC, NPC. Certified by ICC-ES.

Construction details for 304 Vacu-Stop™





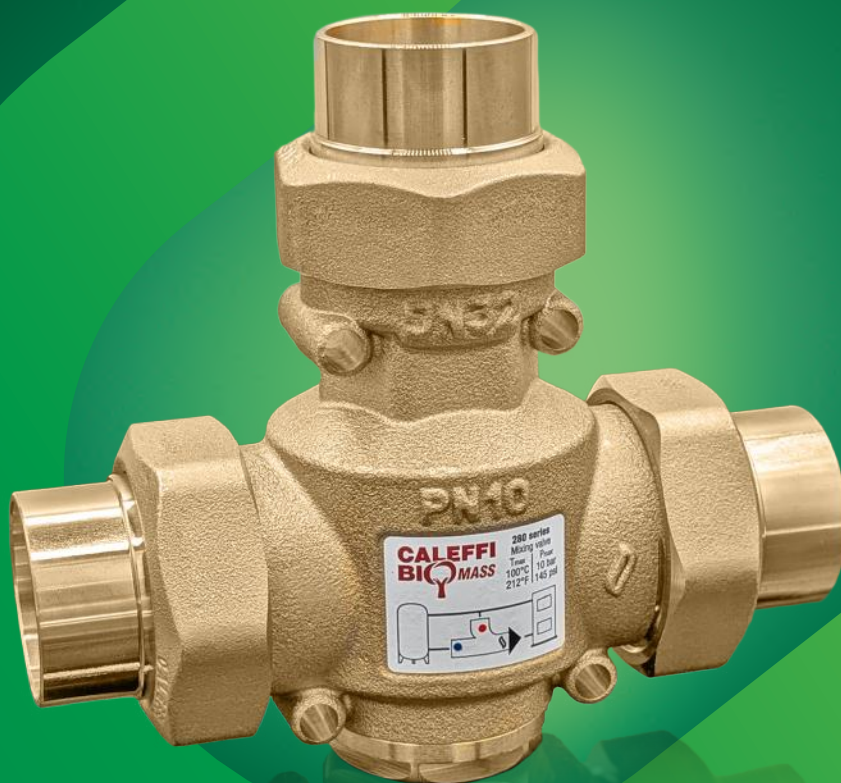
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Hydronic Solutions

THERMOPROTEC™

BOILER PROTECTION

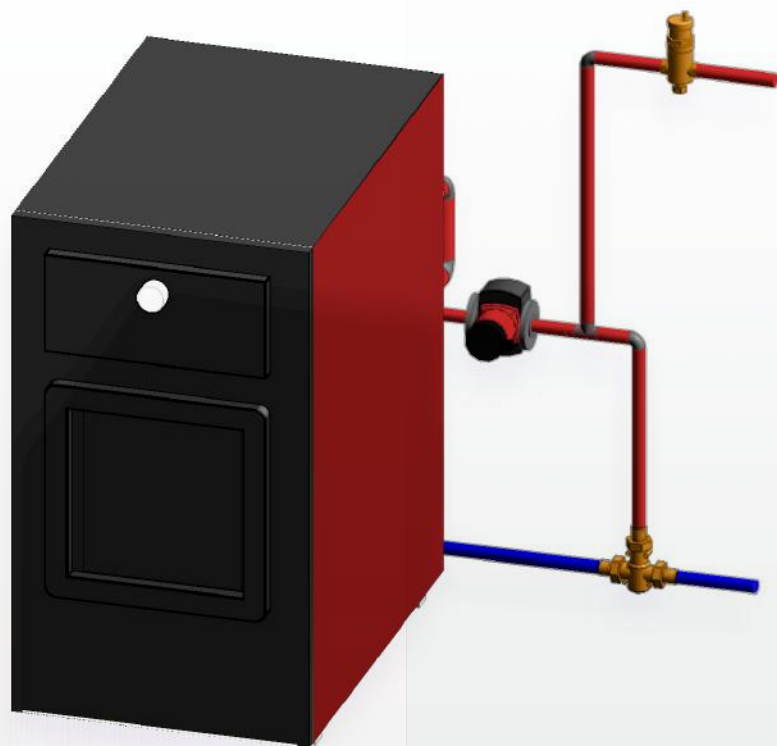
THERMOSTATIC MIXING



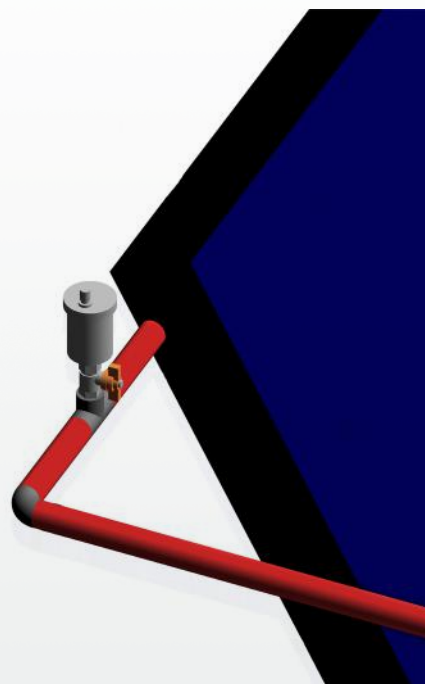
Simple condensation prevention, without wires. The ThermoProtec™ boiler protection high-flow thermostatic mixing valve is used in hydronic heating systems to automatically control the return water temperature to prevent condensation in non-condensing appliances. Great for solid fuel, biomass, gas, LP or oil-fired appliances. **CALEFFI GUARANTEED.**



RENEWABLE COMPONENTS



Diagrams made with BIM families: bim.caleffi.com



This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

Boiler protection high-flow thermostatic mixing valves
Boiler protection recirculation and distribution units
Boiler protection accessories
Air separator and safety relief valves
Automatic air vents

BOILER PROTECTION RECIRCULATION AND DISTRIBUTION UNITS



281 ThermoBloc™

ThermoBloc replacement pump only
Fits 281 series

Code	Description	Lbs	USD
F19379	Replacement pump	5	428.00



F295

Dual scale temperature gauge fits 280 and 281 series boiler protection valves

Working temperature range: 32 – 250 °F

Code	Description	Lbs	USD
F29571	Replacement temperature gauge	0.2	28.10

BOILER PROTECTION HIGH-FLOW THERMOSTATIC MIXING VALVES



280 ThermoProtec™

Boiler protection high-flow thermostatic mixing valve
Changeable thermostatic sensor cartridge
Complete with:
- 130 OR 140 °F sensor cartridge (field replaceable with 115 or 160 °F options)

Maximum operating pressure: 150 psi
Fluid temperature range: 40 – 212 °F
By-pass from boiler complete closing temperature: Tset +18 °F

Code	Description	Lbs	USD
280965A	1" sweat union 130°F Tset	11	329.00
280165A	1" NPT female union 130°F Tset	11	351.00
280966A	1" sweat union 140°F Tset	11	329.00
280166A	1" NPT female union 140°F Tset	11	351.00
280975A	1¼" sweat union 130°F Tset	11	386.00
280175A	1¼" NPT female union 130°F Tset	11	403.00
280976A	1¼" sweat union 140°F Tset	11	386.00
280176A	1¼" NPT female union 140°F Tset	11	403.00

BOILER PROTECTION ACCESSORIES



F296

Replacement thermostatic sensor cartridge for 280 and 281 valves
Bypass from boiler complete closing temperature: Tset+18°F

Code	Description	Lbs	USD
F29633	Replacement 115°F Tset	0.2	33.20
F29634	Replacement 130°F Tset	0.2	33.20
F29635	Replacement 140°F Tset	0.2	33.20
F29636	Replacement 160°F Tset	0.2	33.20

AIR SEPARATOR AND SAFETY RELIEF VALVES



251 DISCAL®

Air separator for solar heating systems
1/2" FNPT bottom thread

Maximum operating pressure: 150 psi
Maximum discharge pressure: 150 psi
Fluid temperature range: -20 – 320° F
Material: Chrome plated brass



253

Safety relief valve for solar systems

Outlet connection: 3/4" straight female
Maximum operating pressure: 150 psi
Fluid temperature range: -20 – 320° F
Discharge capacity: 171,000 BTU
Material: Chrome plated brass



TÜV Rheinland is an approved U.S. Nationally Recognized Testing Laboratory (NRTL) Certification Body for Pressure Equipment. Meets ANSI Z21.22

Code	Description	Lbs	USD
251003A	3/4" FNPT	2	194.00

Code	Description	Lbs	USD
253042	factory set to 35 psi	0.3	64.90
253043	factory set to 45 psi	0.3	64.90
253044	factory set to 60 psi	0.3	64.90
253046	factory set to 90 psi	0.3	64.90
253048	factory set to 120 psi	0.3	64.90
253040	factory set to 150 psi	0.3	64.90

AUTOMATIC AIR VENTS



250

Automatic air vent for solar systems

Maximum operating pressure: 150 psi
Maximum discharge pressure: 75 psi
Fluid temperature range: -20 – 360° F
Material: Chrome plated brass



251 DISCALAIR®

High discharge automatic air vent for solar systems

Maximum operating pressure: 150 psi
Maximum discharge pressure: 150 psi
Fluid temperature range: -20 – 320° F
Material: Chrome plated brass

Code	Description	Lbs	USD
250041A	1/2" MNPT	0.3	68.50

Code	Description	Lbs	USD
251004A	1/2" FNPT and 3/4" MNPT	0.8	146.00



NA292

Shut-off valve for automatic air vent

Maximum operating pressure: 150 psi
Fluid temperature range: -20 – 360° F
Material: Chrome plated brass



NA102

Air vent cap adapter fits all air vents and air separators (except for 5026 and 5027 ROBOCAL™)

Code	Description	Lbs	USD
NA29284	1/2" FNPT x 1/2" MNPT	0.2	53.10

Code	Description	Lbs	USD
NA10204	1/4" MNPT	0.1	23.10



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CALEFFI
Hydronic Solutions

SERIES 290

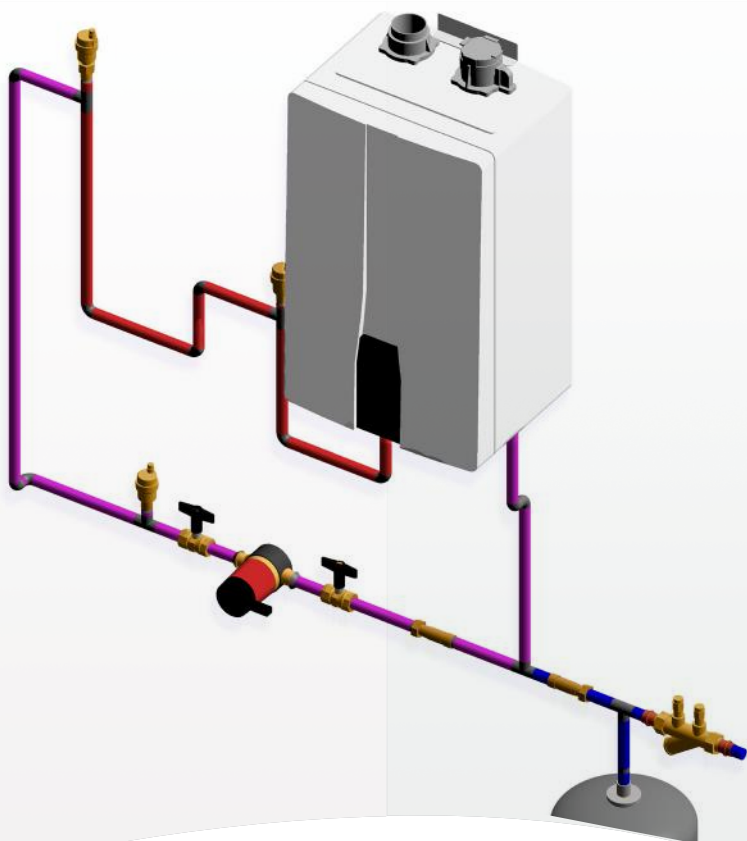
TANKLESS WATER HEATER SERVICE VALVE KIT



Compact and engineered for quick, easy servicing. The Series 290 Tankless Water Heater Service Valve Kit connects directly to standard $\frac{3}{4}$ " MNPT nipples on the heater, allowing for convenient isolation, flushing, and maintenance. Also available as the TankMixer™ Combi for combi boiler applications. **CALEFFI GUARANTEED.**



SPECIALTY COMPONENTS AND KITS



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- Union Y-strainers
- Y-strainer with ball valve
- Serviceable low low lead check valves
- Automatic air vent for plumbing
- Uni-Switch™ universal flow switch
- Antifreeze valve
- Tankless water heater service valve kit
- Differential pressure bypass
- NPT Y-strainers
- Isolation ball valves

UNION Y-STRAINERS



128 Y-strainer sweat

Y-strainer for plumbing or hydronics.
Low lead/Lead free DZR brass body.
Complete with:
- PT ports
- ½" FNPT blowdown port

Max. working pressure: 400 psi
Fluid temperature range: 32–250 °F
Max. percentage of glycol: 50%

Code	Description	Lbs	USD
128749A 000	½" sweat union	1.3	137.00
128759A 000	¾" sweat union	1.5	140.00
128769A 000	1" sweat union	1.7	145.00



128 Y-strainer NPT

Y-strainer for plumbing or hydronics.
Low lead/Lead free DZR brass body.
Complete with:
- PT ports
- ½" FNPT blowdown port

Max. working pressure: 400 psi
Fluid temperature range: 32–250 °F
Max. percentage of glycol: 50%

Code	Description	Lbs	USD
128741A 000	½" NPT male union	1.5	148.00
128751A 000	¾" NPT male union	1.5	151.00
128761A 000	1" NPT male union	1.7	153.00



128 Y-strainer press

Y-strainer for plumbing or hydronics.
Low lead/Lead free DZR brass body.
Complete with:
- PT ports
- ½" FNPT blowdown port

Max. working pressure: 400 psi
Fluid temperature range: 32–250 °F
Max. percentage of glycol: 50%

Code	Description	Lbs	USD
128746A 000	½" press union	1.5	158.00
128756A 000	¾" press union	1.5	153.00
128766A 000	1" press union	1.7	171.00



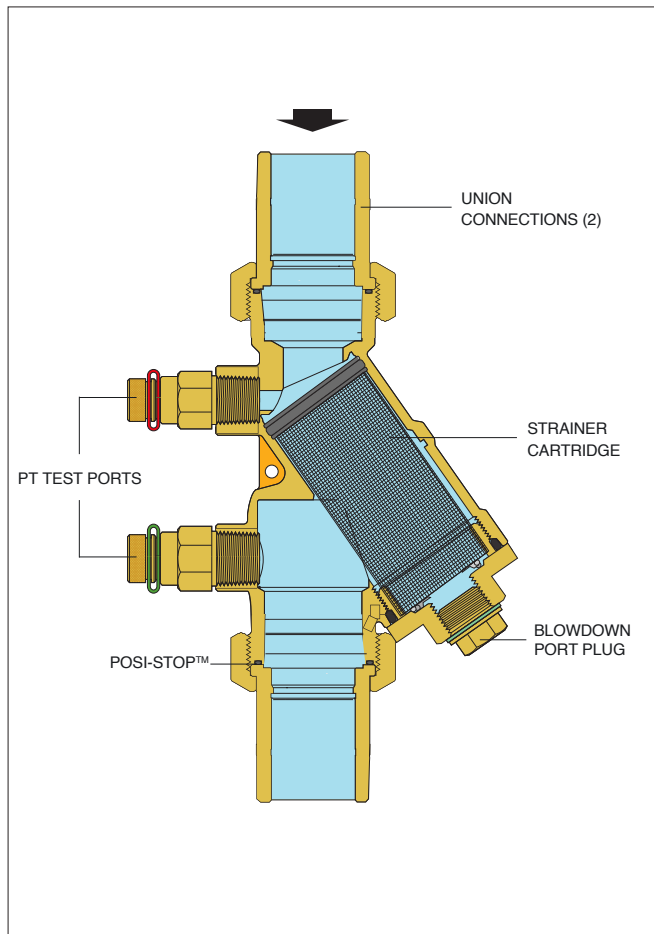
128 Y-strainer PEX

Y-strainer for plumbing or hydronics.
Low lead/Lead free DZR brass body.
Complete with:
- PT ports
- ½" FNPT blowdown port

Max. working pressure: 400 psi
Fluid temperature range: 32–250 °F
Max. percentage of glycol: 50%

Code	Description	Lbs	USD
128744A 000	½" PEX crimp union	1.5	141.00
128754A 000	¾" PEX crimp union	1.5	145.00
128764A 000	1" PEX crimp union	1.7	147.00
128742A 000	½" PEX expansion union	1.5	141.00
128752A 000	¾" PEX expansion union	1.5	145.00
128762A 000	1" PEX expansion union	1.7	147.00

Construction details for 128 Y-strainer



Complies with standard NSF/ANSI/CAN 372. Certified by ICC-ES.

UNION Y-STRAINERS ACCESORIES



Drain valves, compatible with:

- 128 FlowCal
- 128 Y-strainer
- 120 Y-strainer



Pressure test port pairs

- Compatible with:
- 128 FlowCal
 - 128 Y-strainer
 - 120 Y-strainer

Code	Description	Lbs	USD
538202 FD	¼" NPT male for ½" & ¾"	0.3	15.70
538402 FD	½" NPT male for 1" & 1¼"	0.3	16.10

Code	Description	Lbs	USD
100001A	¼" NPT male x ¾"-24 UNF	0.5	16.60

Y-STRAINER WITH BALL VALVE



120 Y-strainer

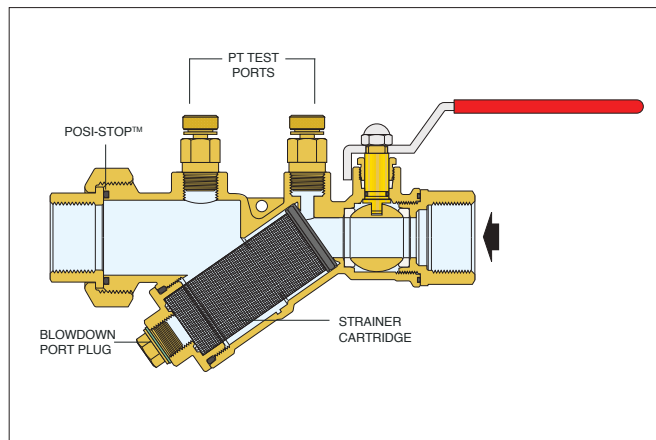
Y-strainer for plumbing or hydronics.
Brass body.

Accessory components not included.

Max. working pressure: 400 psi
Fluid temperature range: 32–212 °F
Max. percentage of glycol: 50%

Code	Description	Cv	Lbs	USD
120141A 000	½" NPT female	8.0	3.0	133.00
120149A 000	½" sweat	8.0	3.0	127.00
120151A 000	¾" NPT female	8.4	3.0	134.00
120159A 000	¾" sweat	8.4	3.0	128.00
120161A 000	1" NPT female	19	6.0	266.00
120169A 000	1" sweat	19	6.0	252.00
120171A 000	1¼" NPT female	20	6.0	303.00
120179A 000	1¼" sweat	20	6.0	288.00
120341A 000	½" NPT female with PT	8.0	3.5	143.00
120349A 000	½" sweat with PT	8.0	3.5	138.00
120351A 000	¾" NPT female with PT	8.4	3.5	145.00
120359A 000	¾" sweat with PT	8.4	3.5	139.00
120361A 000	1" NPT female with PT	19	6.5	277.00
120369A 000	1" sweat with PT	19	6.5	263.00
120371A 000	1¼" NPT female with PT	20	6.5	313.00
120379A 000	1¼" sweat with PT	20	6.5	299.00

Construction details for 120 Y-strainer



SERVICEABLE LOW LEAD CHECK VALVES



3047 sweat

Serviceable in-line spring check valve.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
304749A	½" sweat union	17	0.4	71.40
304759A	¾" sweat union	17	0.4	71.40
304769A	1" sweat union	30	0.9	105.00
304779A	1¼" sweat union	30	1.1	120.00
304789A	1½" sweat union	75	2.4	301.00
304799A	2" sweat union	75	2.4	325.00



3047 press

Serviceable in-line spring check valve.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
304746A	½" press union	17	0.4	82.10
304756A	¾" press union	17	0.6	82.10
304766A	1" press union	30	1.1	142.00
304776A	1¼" press union	30	1.3	275.00
304786A	1½" press union	75	2.6	452.00
304796A	2" press union	75	2.6	550.00



3047 MNPT

Serviceable in-line spring check valve.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
304740A	½" NPT male union	17	0.4	78.50
304750A	¾" NPT male union	17	0.6	78.50
304760A	1" NPT male union	30	1.1	111.00
304770A	1¼" NPT male union	30	1.3	132.00
304780A	1½" NPT male union	75	2.6	331.00
304790A	2" NPT male union	75	2.6	364.00



3047 PEX

Serviceable in-line spring check valve.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
304747A	½" PEX crimp union	17	0.4	71.40
304757A	¾" PEX crimp union	17	0.6	71.40
304748A	½" PEX expansion union	17	0.4	71.40
304758A	¾" PEX expansion union	17	0.6	71.40



3047 body

Replacement body, no fittings.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
NA30474A	½", ¾" body w/o fittings	17.0	0.2	57.70
NA30476A	1", 1¼" body w/o fittings	30.0	0.5	73.50
NA30478A	1½", 2" body w/o fittings	75.0	1.8	192.00

See fittings selection in Section 13.



3047 FNPT

Serviceable in-line spring check valve.
Low lead/Lead free DZR brass body.
Dual union body.

Max. working pressure: 150 psi
Fluid temperature range: 32–250 °F

Code	Description	Cv	Lbs	USD
304743A	½" NPT female union	17	0.4	78.50
304753A	¾" NPT female union	17	0.6	78.50
304763A	1" NPT female union	30	1.1	111.00
304773A	1¼" NPT female union	30	1.3	132.00
304793A	2" NPT female union	75	2.6	364.00



Replacement spring check valves for
3047 series.

Code	Description	Cv	Lbs	USD
NA10117	Fits ½", ¾" body	17.0	0.1	10.60
NA10370	Fits 1", 1¼" body	30.0	0.1	10.60
NA10371	Fits 1½", 2" body	75.0	0.2	18.30

AUTOMATIC AIR VENT FOR PLUMBING

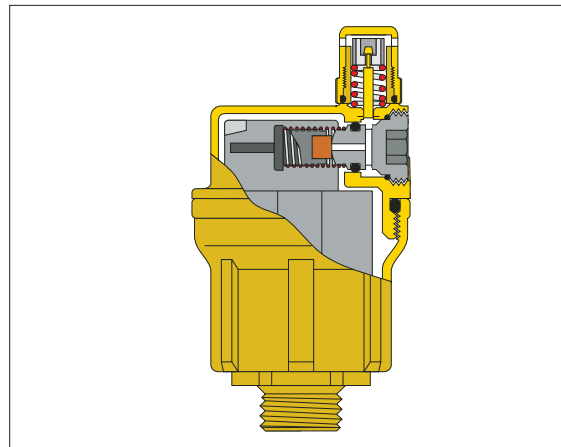


NA5026 PLUMBVENT™

Automatic air vent for plumbing systems.
Low lead/Lead free DZR brass body.

Max. working pressure: 150 psi
Max. fluid temperature: 240 °F
Max. discharge rate: 1.75 SCFM

Operating principle for NA5026 PLUMBVENT™



Code	Description	Lbs	USD
NA502640A	½" MNPT	0.6	52.50

UNIVERSAL FLOW SWITCH



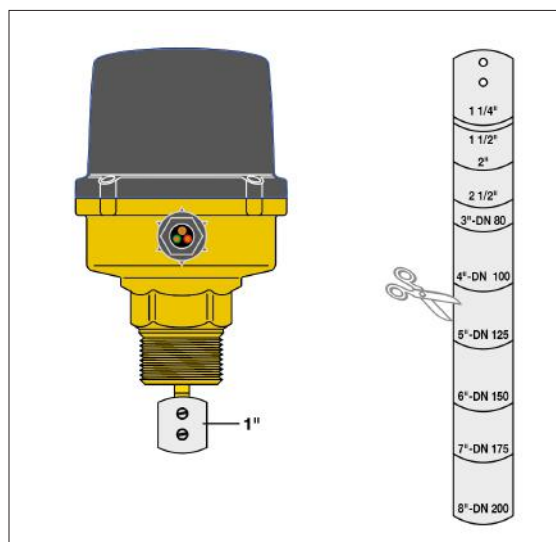
626 Uni-Switch™

Universal flow switch.
Compatible with 1" to 8" pipe size.

Max working pressure: 150 psi
Fluid temperature range: -20–250 °F
Required minimum flow: 5.7 GPM



Construction detail for 626 Uni-Switch™



Code	Description	Lbs	USD
626600A	1" NPT male	2.3	271.00
626009*	Replacement paddle assembly	0.1	25.30

* stainless steel

ANTIFREEZE VALVE



108 iStop®

Antifreeze valve for air-to-water hydronic
heat pump applications.
Brass body.

Minimum ambient temperature: -22 °F
Discharge at fluid temperature: 37 °F
Max. working pressure: 150 psi

Code	Description	Lbs	USD
108860A	1" NPT female union	2.7	241.00
108866A	1" press union	3.1	312.00
108869A	1" sweat union	2.5	248.00
108870A	1¼" NPT female union	3.5	280.00
108876A	1¼" press union	3.6	342.00
108879A	1¼" sweat union	2.6	262.00

TANKLESS WATER HEATER SERVICE VALVE KIT



290 Tankless Water Heater Service Valve Kit

Service valve kit for tankless water heater applications.
Low lead/Lead free DZR brass body.

Optional:
- Pressure relief valve (KIT versions)

Max. working pressure: 400 psi
Fluid temperature range: 32–210 °F

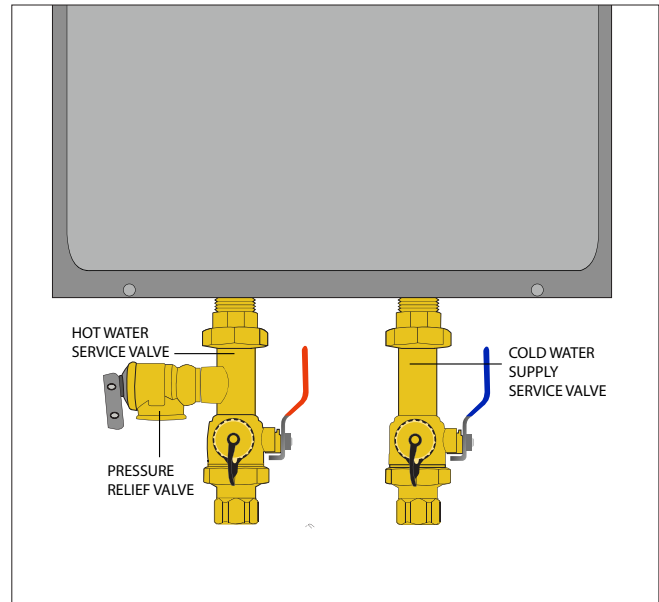
Code	Description	Lbs	USD
KIT290503A*	¾" FNPT	5.0	140.00
KIT290504A8*	¾" FNPT equal lay length	5.2	150.00
290503A**	¾" FNPT	4.5	161.00
290504A**	¾" FNPT equal lay length	4.7	150.00

*With pressure relief valve.

** Certified to Section 1417(d) of the Safe Drinking Water Act, and the lead content requirements of Section 116875 of the California Health & Safety Code, by IAPMO R&T.

TankMixer™ complies with standards **ASSE 1017, CSA B125.3, NSF/ANSI/CAN 372** and codes **IPC, IRC, UPC, NPC**. Certified by **ICC-ES**.

Construction details for 290 Tankless Water Heater Service Valve Kit



DIFFERENTIAL PRESSURE BYPASS



519

Differential pressure bypass valve for hydronic systems.
Brass body.

Adjustable range: 2–10 psi
Max. working pressure: 150 psi
Fluid temperature range: 32–230 °F

Code	Description	Lbs	USD
519502A	¾" NPT male union	1.0	138.00
519566A	¾" press union	1.0	157.00
519599A	¾" sweat union	1.0	137.00
519600A	1" FNPT in, 1" NPT male union out	1.4	216.00
519609A	1" FNPT in, 1" sweat union out	1.4	216.00
519700A	1¼" FNPT in, 1¼" NPT male union out	1.5	260.00
519709A	1¼" FNPT in, 1¼" sweat union out	1.5	260.00

NPT Y-STRAINERS



NA109 Y-strainer

Y-strainer for plumbing or hydronics.
Low lead/Lead free DZR brass body.

Max. working pressure: 360 psi
Fluid temperature range: 14–285 °F
Max. percentage of glycol: 50%

Code	Description	Lbs	USD
NA10904	½" FNPT	0.5	55.60
NA10905	¾" FNPT	0.9	88.60
NA10906	1" FNPT	1.4	110.00
NA10907	1¼" FNPT	1.9	185.00
NA10908	1½" FNPT	2.4	243.00
NA10909	2" FNPT	3.0	418.00

Complies with standards NSF/ANSI/CAN 61 & NSF/ANSI/CAN 372.
Certified and listed by IAPMO R&T.

ISOLATION BALL VALVES



NA108

NPT full port isolation valve.
Low lead/Lead free DZR brass body.

Code	Description	Lbs	USD
NA10824	½" FNPT ball valve	0.4	39.60
NA10825	¾" FNPT ball valve	0.6	48.50
NA10826	1" FNPT ball valve	1.0	62.90
NA10827	1¼" FNPT ball valve	1.6	105.00
NA10828	1½" FNPT ball valve	1.9	133.00
NA10829	2" FNPT ball valve	3.0	323.00



Low lead/Lead free DZR brass pipe nipples.
Compatible with FNPT Caleffi Products.

Code	Description	Lbs	USD
NA10834	½" NPT nipple	0.1	4.90
NA10835	¾" NPT nipple	0.1	7.80
NA10836	1" NPT nipple	0.1	12.30
NA10837	1¼" NPT nipple	0.3	21.20
NA10838	1½" NPT nipple	0.3	22.20
NA10839	2" NPT nipple	0.5	32.30



290 Isolation Valve

Union isolation valves.
Low lead/Lead free DZR brass body.

Code	Description	Lbs	USD
290030	1" M x 1" F union ball valve	1.0	49.00
290031*	1" M x 1" F union ball valve, ext. handle	1.0	77.30

*With extended handle

**Complies with standards NSF/ANSI/CAN 61, NSF/ANSI/CAN 372.
Certified by ICC-ES.**

MISCELLANEOUS COMPONENTS



NA503

Dual pressure and temperature gauge for boiler applications.

Max. working pressure: 75 psi
Fluid temperature range: 60–320 °F

Code	Description	Lbs	USD
NA503040	¼" NPT male center back	0.2	39.20



538

Drain valve, brass body.

Max. working pressure: 150 psi
Max. working temperature: 250 °F

Code	Description	Lbs	USD
538202 FD	¼" NPT male x ¾" GHT	0.3	15.70
538402 FD	½" NPT male x ¾" GHT	0.3	16.10



NA510

Check valve for hydronic applications.

Max. working pressure: 150 psi
Fluid temperature range: 32–150 °F

Code	Description	Cv	Lbs	USD
NA51069	1" sweat union	17	1.0	78.80



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POSI-STOP™

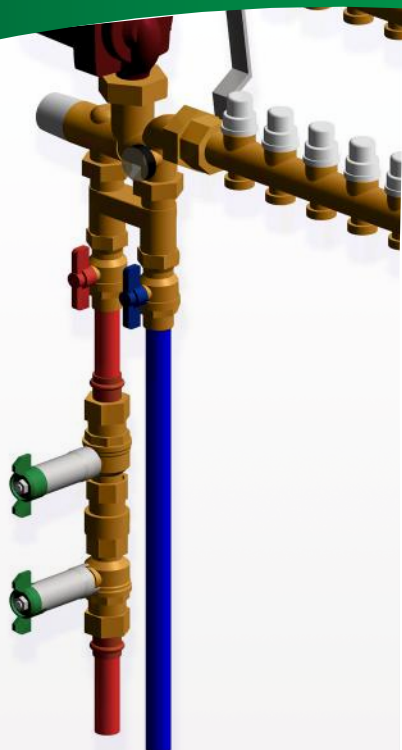
A SUPERIOR UNION CONNECTION



Our advanced technology named Posi-Stop™ incorporates an embedded O-ring into a product's union connection. This design results in a consistent and superior seal over the broad range of conditions encountered in plumbing and hydronic applications. **To identify products with Posi-Stop, look for this sticker on the box label. CALEFFI GUARANTEED.**



FITTINGS



Diagrams made with BIM families: bim.caleffi.com

This diagram is for illustration purposes only

PRODUCTS INCLUDED IN SECTION

- | | |
|----------------------------------|--|
| 520 AngleMix | 573 Flowshield DuC-AV |
| 520 AngleMix+ | 3048 Flowshield DuC |
| 520 AngleMix DL | 577 CALEFFI XF |
| 520 TankMixer | 108 iStop |
| 520 TankMixer Combi | 5495 SEP4, 548 hydro separator, & 5461 |
| 520 TankMixer Compact Combi | DISCALDIRTMAG |
| 521 MixCal, 5213 TubMixer | 638 Motorized ball valves |
| 5231 MixCal+ | 553 & 5350 Autofill |
| 6000 LEGIOMIX & 6003 LEGIOMIXevo | 145 Flowmatic |
| 127 FlowCal+, 128 FlowCal+, 128 | 116 ThermoSetter & 1164 ThermoSetter |
| Y-Strainer, & 132 QuickSetter+ | compact |
| 535 PresCal & 536 PresCal HP | Z-one union, 6442 & 6443 series |
| 533 PresCal Compact | 6767 Twistop+ & 6762 Twistop |

520 ANGLEMIX



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
R31981	½" NPT male requires 1" union nut	0.3	11.90
31901A	¾" NPT male requires 1" union nut	0.4	15.60
59817A	1" NPT male includes union nut	0.4	33.90



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10002	½" sweat requires 1" union nut	0.2	8.70
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes union nut	0.4	30.60



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10403	½" press requires 1" union nut	0.3	23.60
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001007	½" PEX exp. requires 1" union nut	0.1	8.70
F0001008	¾" PEX exp. requires 1" union nut	0.1	11.90
F0001009	1" PEX exp. requires 1" union slip nut	0.1	25.60



NPT male tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59893A	½" NPT male requires 1" union nut	0.2	22.50
59840A	¾" NPT male requires 1" union nut	0.3	30.70
59894A	1" NPT male includes check and union nut	0.5	49.20



Sweat tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59904A	½" sweat requires 1" union nut	0.2	19.60
59905A	¾" sweat requires 1" union nut	0.3	27.40
59906A	1" sweat includes 1" union nut	0.5	46.00



Copper press tailpiece with **check valve**, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10864LC	½" press includes 1" union nut	0.3	23.70
NA16265LC	¾" press includes 1" union slip nut	0.3	57.90
NA16266LC	1" press includes 1" union slip nut	0.3	71.00



PEX expansion (ASTM F1960) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10634	½" PEX exp. requires 1" union nut	0.2	19.60
NA10635	¾" PEX exp. requires 1" union nut	0.2	27.40
NA10636	1" PEX exp. requires 1" union slip nut	0.2	41.10

520 ANGLEMIX



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



PEX crimp (ASTM F1807) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0000492	½" PEX crimp requires 1" union nut	0.1	8.70
F0000520	¾" PEX crimp requires 1" union nut	0.1	11.90
F0000521	1" PEX crimp requires 1" union slip nut	0.1	25.60

Code	Description	Lbs	USD
NA10484	½" PEX crimp requires 1" union nut	0.2	19.60
NA10485	¾" PEX crimp requires 1" union nut	0.2	27.40
NA10486	1" PEX crimp requires 1" union slip nut	0.2	41.10



Replacement check valves



Union nut, brass.

Code	Description	Lbs	USD
R39204	For sweat, NPT male fittings	0.1	3.60
NA10405	For press and PEX fittings	0.1	2.60

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union sealing gasket for legacy non-Posi-Stop™ valves



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

Code	Description	Lbs	USD
NA10999	Replacement o-rings for 520 AngleMix	0.1	14.40

520 ANGLEMIX+



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



NPT male tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA20760	1" NPT male includes union nut and gasket	0.4	31.20

Code	Description	Lbs	USD
NA20760C	1" NPT male includes union nut and gasket	0.6	34.80



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



Sweat tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA20769	1" sweat includes union nut and gasket	0.5	25.30

Code	Description	Lbs	USD
NA20769C	1" sweat includes union nut and gasket	0.5	28.90

520 ANGLEMIX+



Copper press tailpiece, low lead
Sealing gasket required for legacy valves
without Posi-Stop™



Copper press tailpiece with **check valve**,
low lead
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
NA20766	1" press includes union nut and gasket	0.5	41.40

Code	Description	Lbs	USD
NA20766C	1" press includes union nut and gasket	0.5	44.00



PEX expansion (ASTM F1960) tailpiece, low
lead brass
Sealing gasket required for legacy valves
without Posi-Stop™



PEX expansion (ASTM F1960) tailpiece with
check valve, low lead brass
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
NA20768	1" PEX exp. includes union nut and gasket	0.5	32.10

Code	Description	Lbs	USD
NA20768C	1" PEX exp. includes union nut and gasket	0.6	34.70



PEX crimp (ASTM F1807) tailpiece, low
lead brass
Sealing gasket required for legacy valves
without Posi-Stop™



PEX crimp (ASTM F1807) tailpiece with
check valve, low lead brass
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
NA20767	1" PEX crimp includes union nut and gasket	0.5	32.90

Code	Description	Lbs	USD
NA20767C	1" PEX crimp includes union nut and gasket	0.6	35.40



Replacement check valves



Union nut, brass.

Code	Description	Lbs	USD
NA10117	Check valve for 5206 AngleMix+	0.1	10.60

Code	Description	Lbs	USD
R31495	1¼" union nut	0.2	7.80
R11222	1¼" union slip nut	0.2	7.80



Union sealing gasket for legacy
non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001454	1¼" union gasket	0.1	2.60

520 ANGLEMIX DL



NPT male tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



Sweat tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59893A	½" NPT male requires 1" union nut	0.2	22.50
59840A	¾" NPT male requires 1" union nut	0.3	30.70
59894A	1" NPT male includes 1" union nut	0.5	49.20

Code	Description	Lbs	USD
59904A	½" sweat requires 1" union nut	0.2	19.60
59905A	¾" sweat requires 1" union nut	0.3	27.40
59906A	1" sweat includes 1" union nut	0.5	46.00



Copper press tailpiece with **check valve**, low lead
Sealing gasket required for legacy valves without Posi-Stop™



PEX expansion (ASTM F1960) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10864LC	½" press includes 1" union nut	0.3	23.70
NA16265LC	¾" press includes 1" union slip nut	0.4	57.90
NA16266LC	1" press includes 1" union slip nut	0.5	71.00

Code	Description	Lbs	USD
NA10634	½" press requires 1" union nut	0.2	19.60
NA10635	¾" press requires 1" union slip nut	0.2	27.40
NA10636	1" press requires 1" union slip nut	0.2	41.10



PEX crimp (ASTM F1807) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



Replacement check valves

Code	Description	Lbs	USD
NA10484	½" PEX crimp requires 1" union nut	0.2	19.60
NA10485	¾" PEX crimp requires 1" union nut	0.2	27.40
NA10486	1" PEX crimp requires 1" union nut	0.2	41.10

Code	Description	Lbs	USD
R39204	For sweat, NPT male fittings	0.1	3.60
NA10405	For press and PEX fittings	0.1	2.60



Union nut, brass.



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

520 TANKMIXER



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.4	15.60



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



NPT female tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F49645	¾" NPT female includes 1" union nut	0.2	23.70



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

520 TANKMIXER COMBI



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.4	15.60



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0000520	¾" PEX crimp requires 1" union nut	0.1	11.90



PEX expansion (ASTM F1960) tailpiece with check valve, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001008	¾" PEX exp. requires 1" union nut	0.1	11.90

520 TANKMIXER COMBI



Union nut, brass.



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

520 TANKMIXER COMPACT COMBI



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.4	15.60

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™



Union nut, brass.

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

521 MIXCAL, 5213 TUBMIXER



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0002181	1/2" NPT male requires 1" union nut	0.3	11.90
31901A	3/4" NPT male requires 1" union nut	0.4	15.60
59817A	1" NPT male includes 1" union nut	0.4	33.90



NPT male tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59893A	1/2" NPT male requires 1" union nut	0.2	22.50
59840A	3/4" NPT male requires 1" union nut	0.3	30.70
59894A	1" NPT male includes check and union nut	0.5	49.20



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10002	1/2" sweat requires 1" union nut	0.2	8.70
NA10003	3/4" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes union nut	0.4	30.60



Sweat tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59904A	1/2" sweat requires 1" union nut	0.2	19.60
59905A	3/4" sweat requires 1" union nut	0.3	27.40
59906A	1" sweat includes 1" union nut	0.5	46.00



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10403	1/2" press requires 1" union nut	0.3	23.60
NA10744	3/4" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60



Copper press tailpiece with **check valve**, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10864LC	1/2" press includes 1" union nut	0.3	23.70
NA16265LC	3/4" press includes 1" union slip nut	0.3	57.90
NA16266LC	1" press includes 1" union slip nut	0.3	71.00



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001007	1/2" PEX exp. requires 1" union nut	0.1	8.70
F0001008	3/4" PEX exp. requires 1" union nut	0.1	11.90
F0001009	1" PEX exp. requires 1" union slip nut	0.1	25.60



PEX expansion (ASTM F1960) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10634	1/2" PEX exp. requires 1" union nut	0.2	19.60
NA10635	3/4" PEX exp. requires 1" union nut	0.2	27.40
NA10636	1" PEX exp. requires 1" union slip nut	0.2	41.10



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0000492	1/2" PEX crimp requires 1" union nut	0.1	8.70
F0000520	3/4" PEX crimp requires 1" union nut	0.1	11.90
F0000521	1" PEX crimp requires 1" union slip nut	0.1	25.60



PEX crimp (ASTM F1807) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10484	1/2" PEX crimp requires 1" union nut	0.2	19.60
NA10485	3/4" PEX crimp requires 1" union nut	0.2	27.40
NA10486	1" PEX crimp requires 1" union slip nut	0.2	41.10

521 MIXCAL, 5213 TUBMIXER



Replacement check valves

Code	Description	Lbs	USD
R39204	For sweat, NPT male fittings	0.1	3.60
NA10405	For press and PEX fittings	0.1	2.60
NA10479	For 5213 TubMixer 3/8" compression	0.1	2.40



Compression tailpiece, low lead brass
For 5213 TubMixer ONLY

Code	Description	Lbs	USD
F0000718	3/8" compression requires 1" nut	0.3	17.60



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10999	Replacement o-rings for 521 and 5213s	0.1	14.40



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union sealing gasket for legacy
non-Posi-Stop™ valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

5231 MIXCAL



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
NA10009	1" NPT male requires 1½" union nut	0.3	47.20
R41660	1¼" NPT male requires 1½" union nut	0.3	54.00
41371A	1½" NPT male requires 2½" union nut	0.4	60.90
41372A	2" NPT male requires 2½" union nut	0.5	78.80



Copper press tailpiece, low lead
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
NA10706	1" press requires 1½" union nut	0.4	47.20
NA10707	1¼" press requires 1½" union slip nut	0.4	86.70
NA10708	1½" press requires 2½" union nut	0.5	125.00
NA10709	2" press includes 2½" union nut	0.5	220.00



Union sealing gasket for legacy
non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001457	1½" union gasket	0.1	3.70
R0001460	2½" union gasket	0.1	17.50



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves
without Posi-Stop™

Code	Description	Lbs	USD
31554 FD	1" sweat requires 1½" union nut	0.3	37.60
41787 CST	1¼" sweat requires 1½" union nut	0.3	36.90
41788 CST	1½" sweat requires 2½" union nut	0.4	58.50
41789 CST	2" sweat requires 2½" union nut	0.5	76.10



Union nut, brass.

Code	Description	Lbs	USD
R31589	1½" union nut	0.2	16.10
R11221	1½" union slip nut	0.2	15.70
R51838	2½" union nut	0.3	39.20

6000 LEGIOMIX AND 6003 LEGIOMIXevo



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.3	15.60
59817A	1" NPT male includes 1" union nut	0.3	33.90
NA10009	1" NPT male requires 1½" union nut	0.3	47.20
R41660	1¼" NPT male requires 1½" union nut	0.3	54.00
41371A	1½" NPT male requires 2½" union nut	0.4	60.90
41372A	2" NPT male requires 2½" union nut	0.5	78.80



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes 1" union nut	0.3	30.60
31554 FD	1" sweat requires 1½" union nut	0.3	37.60
41787 CST	1¼" sweat requires 1½" union nut	0.4	36.90
41788 CST	1½" sweat requires 2½" union nut	0.4	58.50
41789 CST	2" sweat requires 2½" union nut	0.5	76.10



Copper press tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.2	17.00
NA10404	1" press requires 1" union slip nut	0.2	35.60
NA10706	1" press requires 1½" union nut	0.4	47.20
NA10707	1¼" press requires 1½" union slip nut	0.4	86.70
NA10708	1½" press requires 2½" union nut	0.5	125.00
NA10709	2" press includes 2½" union nut	0.5	220.00



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60
R31589	1½" union nut	0.3	16.10
R11221	1½" union slip nut	0.3	15.70
R51838	2½" union nut	0.3	39.20



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001462	1" union gasket	0.1	1.60
R0001457	1½" union gasket	0.1	3.70
R0001460	2½" union gasket	0.1	17.50



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for ¾" only	0.1	12.40

127 FLOWCAL+, 128 FLOWCAL+, 128 Y-STRAINER, 132 QUICKSETTER+



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
R31981	½" NPT male requires 1" union nut	0.3	11.90
31901A	¾" NPT male requires 1" union nut	0.4	15.60
59817A	1" NPT male includes union nut	0.4	33.90



NPT male tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59893A	½" NPT male requires 1" union nut	0.2	22.50
59840A	¾" NPT male requires 1" union nut	0.3	30.70
59894A	1" NPT male includes check and union nut	0.5	49.20



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10002	½" sweat requires 1" union nut	0.2	8.70
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes union nut	0.4	30.60



Sweat tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
59904A	½" sweat requires 1" union nut	0.2	19.60
59905A	¾" sweat requires 1" union nut	0.3	27.40
59906A	1" sweat includes 1" union nut	0.5	46.00

127 FLOWCAL+, 128 FLOWCAL+, 128 Y-STRAINER, 132 QUICKSETTER+



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™



Copper press tailpiece with **check valve**, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10403	1/2" press requires 1" union nut	0.3	23.60
NA10744	3/4" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60

Code	Description	Lbs	USD
NA10864LC	1/2" press includes 1" union nut	0.3	23.70
NA16265LC	3/4" press includes 1" union slip nut	0.3	57.90
NA16266LC	1" press includes 1" union slip nut	0.3	71.00



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



PEX expansion (ASTM F1960) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001007	1/2" PEX exp. requires 1" union nut	0.1	8.70
F0001008	3/4" PEX exp. requires 1" union nut	0.1	11.90
F0001009	1" PEX exp. requires 1" union slip nut	0.1	25.60

Code	Description	Lbs	USD
NA10634	1/2" PEX exp. requires 1" union nut	0.2	19.60
NA10635	3/4" PEX exp. requires 1" union nut	0.2	27.40
NA10636	1" PEX exp. requires 1" union slip nut	0.2	41.10



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



PEX crimp (ASTM F1807) tailpiece with **check valve**, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0000492	1/2" PEX crimp requires 1" union nut	0.1	8.70
F0000520	3/4" PEX crimp requires 1" union nut	0.1	11.90
F0000521	1" PEX crimp requires 1" union slip nut	0.1	25.60

Code	Description	Lbs	USD
NA10484	1/2" PEX crimp requires 1" union nut	0.2	19.60
NA10485	3/4" PEX crimp requires 1" union nut	0.2	27.40
NA10486	1" PEX crimp. requires 1" union slip nut	0.2	41.10



Union sealing gasket for legacy non-Posi-Stop™ valves



Replacement check valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

Code	Description	Lbs	USD
R39204	Replacement for sweat, NPT male fittings	0.1	3.60
NA10405	Replacement for press and PEX fittings	0.1	2.60



Union nut, brass.



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60

Code	Description	Lbs	USD
NA10998	Replacement o-rings for 132 QuickSetter+	0.1	12.40
NA10999	Replacement o-rings for 127 FlowCal	0.1	14.40

535 PRESCAL AND 536 PRESCAL HP



NPT female tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F49644	½" NPT female includes ¾" union nut	0.4	20.90
F49645	¾" NPT female includes 1" union nut	0.5	23.70
F49646	1" NPT female includes 1¼" union nut	0.6	31.50
F49647	1¼" NPT female includes 1½" union nut	0.7	52.50
F0000493	1½" NPT female includes 2" union nut	0.9	94.50
F0000495*	2" NPT female includes 2½" union nut	1	112.00

*536 PresCal HP Low range not offered in this size



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10001	½" sweat requires ¾" union nut	0.1	10.50
NA10003	¾" sweat requires 1" union nut	0.2	11.90
F49657	1" sweat includes 1¼" nut	0.4	20.90
41787 CST	1¼" sweat requires 1½" union nut	0.3	36.90
F0000494	1½" sweat includes 2" union nut	0.7	71.00
F0000496*	2" sweat includes 2½" union nut	0.8	97.10

*536 PresCal HP Low range not offered in this size



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10809	½" press requires ¾" union slip nut	0.2	17.00
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10747	1" press requires 1¼" union slip nut	0.6	23.50
NA10707	1¼" press requires 1½" union slip nut	0.8	86.70
NA10715	1½" press includes 2" union nut	0.9	172.00
NA10709*	2" press includes 2½" union nut	2	220.00

*536 PresCal HP Low range not offered in this size



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0002077	¾" PEX crimp requires 1" union nut	0.1	21.60
NA10496	1" PEX crimp requires 1¼" union nut	0.2	27.90

Union nut, brass.



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001008	¾" PEX expansion requires 1" union nut	0.1	11.90
NA10556	1" PEX expansion requires 1¼" union nut	0.2	15.70

Code	Description	Lbs	USD
F41186	¾" union nut	0.1	3.90
R21176	¾" union slip nut	0.1	6.60
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60
R31495	1¼" union nut	0.3	7.80
R11222	1¼" union slip nut	0.3	7.80
R31589	1½" union nut	0.4	16.10
R11221	1½" union slip nut	0.4	15.70
R51838	2½" union nut	0.5	39.20



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001458	¾" union gasket	0.1	1.50
R20011	1" union gasket	0.1	1.60
R0001454	1¼" union gasket	0.1	2.60
R0001457	1½" union gasket	0.1	3.70
R0001459	2" union gasket	0.1	7.10
R0001460	2½" union gasket	0.1	17.50



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10989	Replacement o-rings for ½" 535's	0.1	10.30
NA10998	Replacement o-rings for ¾" 535's	0.1	12.40
NA10995	Replacement o-rings for 1" 535's	0.1	18.50
NA10992	Replacement o-rings for 1¼" 535's	0.1	22.70
NA10990	Replacement o-rings for 1½" 535's	0.1	34.00
NA10993	Replacement o-rings for 2" 535's	0.1	45.30

533 PRESCAL COMPACT



NPT female tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F49644	1/2" NPT female includes 3/4" union nut	0.4	20.90
F49645	3/4" NPT female includes 1" union nut	0.5	23.70



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10001	1/2" sweat tailpiece requires 3/4" union nut	0.1	10.50
NA10003	3/4" sweat tailpiece requires 1" union nut	0.2	11.90



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10809	1/2" press requires 3/4" union slip nut	0.2	17.00
NA10744	3/4" press requires 1" union slip nut	0.4	17.00



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0002077	3/4" PEX crimp requires 1" union nut	0.1	21.60



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0002108	3/4" PEX expansion requires 1" union nut	0.1	11.90



Union nut, brass.

Code	Description	Lbs	USD
F41186	3/4" union nut	0.1	3.90
R21176	3/4" union slip nut	0.1	6.60
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001458	3/4" union gasket	0.1	1.50
R20011	1" union gasket	0.1	1.60



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-ring for 533's	0.1	12.40

5517 DISCAL ROTATING COLLAR, NA5453 DIRTMAG



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.3	15.60
59817A	1" NPT male includes 1" union nut	0.3	33.90



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes union nut	0.4	30.60



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

573 FLOWSHIELD DUC-AV



NPT female tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
R0000892	½" NPT female	0.2	15.70
R0002057	¾" NPT female	0.3	23.70



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10001	½" sweat tailpiece requires ¾" union nut	0.1	10.50
NA10003	¾" sweat tailpiece requires 1" union nut	0.2	11.90



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
41380A	½" sweat	0.1	14.90



Union nut, brass.

Code	Description	Lbs	USD
R0000582	Union nut for 573 series	0.2	3.10



Copper press adapter, low lead

Code	Description	Lbs	USD
NA10494	½" press adapter, MNPT x Press	0.3	23.70



Replacement Posi-Stop O-Rings for 573 Flowshield DuC-AV
Sold in packs of 10

Contact Tech Support for orderable o-ring codes



Union sealing gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001622	Replacement gasket for 573 series	0.1	3.60

3048 FLOWSHIELD DUC



NPT male tailpiece, low lead brass

Code	Description	Lbs	USD
F0002181	1/2" NPT male requires 1" union nut	0.2	11.90
31901A	3/4" NPT male requires 1" union nut	0.3	15.60
59817A	1" NPT male includes 1" union nut	0.3	33.90



NPT female tailpiece, low lead brass

Code	Description	Lbs	USD
NA10569	1/2" NPT female requires 1" union slip nut	0.2	20.90
NA10745	3/4" NPT female requires 1" union slip nut	0.3	22.00



Copper press tailpiece, low lead

Code	Description	Lbs	USD
NA10403	1/2" press requires 1" union nut	0.3	23.60
NA10744	3/4" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60



Sweat tailpiece, low lead brass

Code	Description	Lbs	USD
NA10002	1/2" sweat requires 1" union nut	0.2	8.70
NA10003	3/4" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes union nut	0.4	30.60



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™



Union nut, brass.

Code	Description	Lbs	USD
F0002152	1/2" PEX exp. requires 1" union nut	0.1	8.70
F0002108	3/4" PEX exp. requires 1" union nut	0.1	11.90
F0002153	1" PEX exp. requires 1" union slip nut	0.1	25.60

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Replacement Posi-Stop O-Rings
Sold in packs of 10



PEX crimp (ASTM F1807) tailpiece, low lead brass

Code	Description	Lbs	USD
NA10998	Replacement o-rings for 3048's	0.1	12.40

Code	Description	Lbs	USD
F0002151	1/2" PEX crimp requires 1" union nut	0.1	8.70
F0002077	3/4" PEX crimp requires 1" union nut	0.1	21.60
F0002150	1" PEX crimp. requires 1" union slip nut	0.1	25.60

3047 SERVICEABLE CHECK VALVE



NPT male tailpiece, low lead brass

Code	Description	Lbs	USD
F0002181	½" NPT male requires 1" union nut	0.2	11.90
31901A	¾" NPT male requires 1" union nut	0.3	15.60
NA10009	1" NPT male requires 1½" union nut	0.3	47.20
R41660	1¼" NPT male requires 1½" union nut	0.3	54.00
41371A	1½" NPT male requires 2½" union nut	0.4	60.90
41372A	2" NPT male requires 2½" union nut	0.5	78.80



NPT female tailpiece, low lead brass

Code	Description	Lbs	USD
NA10569	½" NPT female requires 1" union slip nut	0.2	20.90
F49645	¾" NPT female includes 1" union nut	0.2	23.70
31553 FD	1" NPT female requires 1½" union nut	0.3	18.60
F49647	1¼" NPT female includes 1½" union nut	0.7	52.50
F0000495	2" NPT female includes 2½" union nut	1	112.00



Copper press tailpiece, low lead

Code	Description	Lbs	USD
NA10403	½" press requires 1" union nut	0.3	23.60
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10706	1" press requires 1½" union nut	0.4	47.20
NA10707	1¼" press requires 1½" union slip nut	0.4	86.70
NA10708	1½" press requires 2½" union nut	0.5	125.00
NA10709	2" press includes 2½" union nut	0.5	220.00



Sweat tailpiece, low lead brass

Code	Description	Lbs	USD
NA10002	½" sweat requires 1" union nut	0.3	8.70
NA10003	¾" sweat requires 1" union nut	0.3	11.90
31554 FD	1" sweat requires 1½" union nut	0.3	37.60
41787 CST	1¼" sweat requires 1½" union nut	0.3	36.90
41788 CST	1½" sweat requires 2½" union nut	0.4	58.50
F0000496	2" sweat includes 2½" union nut	0.8	97.10



PEX expansion (ASTM F1960) tailpiece, low lead brass

Code	Description	Lbs	USD
F0002152	½" PEX exp. requires 1" union nut	0.1	8.70
F0002108	¾" PEX exp. requires 1" union nut	0.1	11.90



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60
R31589	1½" union nut	0.4	16.10
R11221	1½" union slip nut	0.4	15.70
R51838	2½" union nut	0.5	39.20



PEX crimp (ASTM F1807) tailpiece, low lead brass

Code	Description	Lbs	USD
F0002151	½" PEX Crimp requires 1" union nut	0.1	8.70
F0002077	¾" PEX Crimp requires 1" union nut	0.1	21.60


Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for ½" and ¾"	0.1	12.40
NA10992	Replacement o-rings for 1" and 1¼"	0.1	22.70
NA10993	Replacement o-rings for 1½" and 2"	0.1	45.30

577 CALEFFI XF



NPT male tailpiece, low lead brass

Code	Description	Lbs	USD
59817A	1" NPT male includes 1" union nut	0.3	33.90



NPT female tailpiece, low lead brass

Code	Description	Lbs	USD
F0002160	1 1/4" FNPT includes 1 1/2" union nut	0.7	52.50
F0000493	1 1/2" FNPT includes 2" union nut	0.9	94.50



Copper press tailpiece, low lead

Code	Description	Lbs	USD
NA10404	1" press requires 1" union slip nut	0.5	35.60
NA10707	1 1/4" press requires 1 1/2" union slip nut	0.8	86.70
NA10715	1 1/2" press includes 2" union nut	0.9	172.00



Sweat tailpiece, low lead brass

Code	Description	Lbs	USD
59834A	1" sweat includes 1" union nut	0.4	30.60
41787 CST	1 1/4" sweat requires 1 1/2" union nut	0.3	36.90
F0000494	1 1/2" sweat includes 2" union nut	0.7	71.00



Union nut, brass.

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60
R31589	1 1/2" union nut	0.4	16.10
R11221	1 1/2" union slip nut	0.4	15.70


Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for 1" 577's	0.1	12.40
NA10992	Replacement o-rings for 1 1/4" 577's	0.1	22.70
NA10990	Replacement o-rings for 1 1/2" 577's	0.1	34.00

108 ISTOP



NPT female tailpiece, brass

Code	Description	Lbs	USD
31553 FD	1" FNPT requires 1 1/2" union nut	0.3	18.60
F49647	1 1/4" FNPT includes 1 1/2" union nut	0.7	52.50



Sweat tailpiece, brass

Code	Description	Lbs	USD
31554 FD	1" sweat requires 1 1/2" union nut	0.3	37.60
41787 CST	1 1/4" sweat requires 1 1/2" union nut	0.3	36.90



Copper press tailpiece

Code	Description	Lbs	USD
NA10406	1" press requires 1 1/2" union nut	0.4	48.50
NA10707	1 1/4" press requires 1 1/2" union slip nut	0.4	86.70



Union nut, brass

Code	Description	Lbs	USD
R31589	1 1/2" union nut	0.4	16.10
R11221	1 1/2" union slip nut	0.4	15.70



Union gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001457	1 1/2" union gasket	0.1	3.70

5495 SEP4, 548 HYDRO SEPARATOR, 5461 DISCALDIRTMAG



NPT female tailpiece, brass

Code	Description	Lbs	USD
31553 FD	1" NPT female requires 1½" steel union nut	0.3	18.60
31401 FD	1¼" NPT female requires 2" steel union nut	0.3	40.40
R41441	1½" NPT female requires 2¼" steel union nut	0.3	40.80
31426 FD	2" NPT female requires 2¾" steel union nut	0.4	79.80



Sweat tailpiece, brass

Code	Description	Lbs	USD
31554 FD	1" sweat requires 1½" steel union nut	0.3	37.60
31403 FD	1¼" sweat requires 2" steel union nut	0.3	69.80
41882A	1½" sweat requires 2¼" steel union nut	0.3	66.10
31428 FD	2" sweat requires 2¾" steel union nut	0.4	108.00



Copper press tailpiece

Code	Description	Lbs	USD
NA10406	1" press tailpiece requires 1½" steel union nut	0.4	48.50
NA10407	1¼" press tailpiece requires 2" steel union nut	0.4	72.20
NA10408	1½" press tailpiece requires 2¼" steel union nut	0.5	102.00
NA10409	2" press tailpiece requires 2¾" steel union nut	0.5	168.00



Union nut, steel

Code	Description	Lbs	USD
R0001452	1½" steel union nut	0.4	15.60
R53003	2" steel union nut	0.4	31.90
R53004	2¼" steel union nut	0.4	31.90
R53005	2¾" steel union nut	0.4	36.60



Union gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R50005	1½" union gasket	0.2	3.70
R50008	2" union gasket	0.2	7.40
R50047	2¼" union gasket	0.2	14.90
R50048	2¾" union gasket	0.2	18.10

638 MOTORIZED BALL VALVES



NPT female tailpiece, brass



Sweat tailpiece, brass

Code	Description	Lbs	USD
31901A	¾" NPT male requires 1" union nut	0.3	15.60
NA20760	1" NPT male includes 1¼" union nut	0.4	31.20
R41660	1¼" NPT male requires 1½" union nut	0.3	54.00
41371A	1½" NPT male requires 2½" union nut	0.4	60.90
41372A	1" NPT male includes 2½" union nut	0.3	78.80

Code	Description	Lbs	USD
NA10003	¾" sweat requires 1" union nut	0.3	11.90
NA20769	1" sweat includes 1¼" union nut	0.3	25.30
41787 CST	1¼" sweat requires 1½" union nut	0.3	36.90
41788 CST	1½" sweat requires 2½" union nut	0.4	58.50
41789 CST	2" sweat requires 2½" union nut	0.5	76.10



Copper press tailpiece



Union nut, brass

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10747	1" press requires 1¼" union slip nut	0.5	23.50
NA10707	1¼" press requires 1½" union slip nut	0.4	86.70
NA10708	1½" press requires 2½" union nut	0.5	125.00
NA10709	2" press includes 2½" union nut	0.5	220.00

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60
R31495	1¼" union nut	0.3	7.80
R11222	1¼" union slip nut	0.2	7.80
R31589	1½" union nut	0.2	16.10
R11221	1½" union slip nut	0.2	15.70
R51838	2½" union nut	0.3	39.20


Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for ¾" 638's	0.1	12.40
NA10995	Replacement o-rings for 1" 638's	0.1	18.50
NA10992	Replacement o-rings for 1¼" 638's	0.1	22.70

553 AND 5350 AUTOFILL



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10001*	½" sweat requires ¾" union nut	0.3	10.50
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes 1" union nut	0.4	30.60

*for 553 AutoFill ONLY



NPT male tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F31868*	½" NPT male requires ¾" union nut	0.1	12.60
31901A	¾" NPT male requires 1" union nut	0.3	15.60
59817A	1" NPT male includes 1" union nut	0.3	33.90

*for 553 AutoFill ONLY



Press tailpiece, low lead copper
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.5	35.60



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001008	¾" PEX exp. requires 1" union nut	0.1	11.90
F0001009	1" PEX exp. requires 1" union slip nut	0.1	25.60

Union nut, brass



Code	Description	Lbs	USD
F41186	¾" union nut	0.1	3.90
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R0001458	¾" union gasket	0.1	1.50
R20011	1" union gasket	0.1	1.60



PEX crimp (ASTM F1807) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0000520	¾" PEX crimp requires 1" union nut	0.1	11.90
F0000521	1" PEX crimp requires 1" union slip nut	0.1	25.60

145 FLOWMATIC



NPT female tailpiece, low lead brass



Sweat tailpiece, low lead brass

Code	Description	Lbs	USD
F49644	½" NPT female includes ¾" union nut	0.3	20.90
F49645	¾" NPT female includes 1" union nut	0.3	23.70
F49646	1" NPT female includes 1¼" union nut	0.3	31.50

Code	Description	Lbs	USD
NA10001	½" sweat requires ¾" union nut	0.3	10.50
NA10003	¾" sweat requires 1" union nut	0.3	11.90
F49657	1" sweat includes 1¼" union nut	0.3	20.90



Copper press tailpiece, low lead



Union nut, brass

Code	Description	Lbs	USD
NA10809	½" press requires ¾" union slip nut	0.4	17.00
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10747	1" press requires 1¼" union slip nut	0.5	23.50

Code	Description	Lbs	USD
F41186	¾" union nut	0.4	3.90
R21176	¾" union slip nut	0.4	6.60
F61008	1" union nut	0.4	4.70
F0000698	1" union slip nut	0.4	6.60
R31495	1¼" union nut	0.4	7.80
R11222	1¼" union slip nut	0.4	7.80


Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10994	Replacement o-rings for ½" 145's	0.1	10.30
NA10998	Replacement o-rings for ¾" 145's	0.1	12.40
NA10995	Replacement o-rings for 1" 145's	0.1	18.50

116 THERMOSETTER & 1164 THERMOSETTER COMPACT



NPT female tailpiece, low lead brass

Code	Description	Lbs	USD
NA10569	1/2" NPT female requires 1" union slip nut	0.2	20.90
F49645	3/4" NPT female includes 1" union nut	0.5	23.70



Sweat tailpiece, low lead brass

Code	Description	Lbs	USD
NA10002	1/2" sweat requires 1" union nut	0.2	8.70
NA10003	3/4" sweat requires 1" union nut	0.3	11.90



Press tailpiece, low lead copper

Code	Description	Lbs	USD
NA10403	1/2" press requires 1" union nut	0.3	23.60
NA10744	3/4" press requires 1" union nut	0.4	17.00



PEX expansion (ASTM F1960) tailpiece, low lead brass

Code	Description	Lbs	USD
F0002152	1/2" PEX exp. requires 1" union nut	0.1	8.70
F0001008	3/4" PEX exp. requires 1" union nut	0.1	11.90



PEX crimp (ASTM F1807) tailpiece, low lead brass

Code	Description	Lbs	USD
F0002151	1/2" PEX crimp requires 1" union nut	0.1	8.70
F0000520	3/4" PEX crimp requires 1" union nut	0.1	11.90



Union nut, brass

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for 116 and 1164s	0.1	12.40

Z-ONE UNION, 6442 AND 6443 SERIES

Sweat tailpiece, low lead brass



Code	Description	Lbs	USD
NA10002	1/2" sweat requires 1" union nut	0.2	8.70
NA10003	3/4" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes 1" union nut	0.4	30.60

NPT male tailpiece, low lead brass



Code	Description	Lbs	USD
R31981	1/2" NPT male requires 1" union nut	0.2	11.90
31901A	3/4" NPT male requires 1" union nut	0.3	15.60
59817A	1" NPT male includes 1" union nut	0.4	33.90



Replacement Posi-Stop O-Rings
Sold in packs of 10

Code	Description	Lbs	USD
NA10998	Replacement o-rings for Z-one, 6442/6443	0.1	12.40

Copper press tailpiece, low lead



Code	Description	Lbs	USD
NA10403	1/2" press requires 1" union nut	0.3	23.60
NA10744	3/4" press requires 1" union slip nut	0.4	17.00
NA16265L*	3/4" long press includes 1" union slip nut	0.4	45.70
NA10404	1" press requires 1" union slip nut	0.4	35.60

*for Z-one Union zone valves ONLY

Union nut, brass



Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60

6767 TWISTOP+ AND 6762 TWISTOP



Sweat tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10002	½" sweat requires 1" union nut	0.2	8.70
NA10003	¾" sweat requires 1" union nut	0.3	11.90
59834A	1" sweat includes 1" union nut	0.4	30.60



Copper press tailpiece, low lead
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
NA10403	½" press requires 1" union nut	0.3	23.60
NA10744	¾" press requires 1" union slip nut	0.4	17.00
NA10404	1" press requires 1" union slip nut	0.4	35.60



PEX expansion (ASTM F1960) tailpiece, low lead brass
Sealing gasket required for legacy valves without Posi-Stop™

Code	Description	Lbs	USD
F0001007	½" PEX exp. requires 1" union nut	0.1	8.70
F0001008	¾" PEX exp. requires 1" union nut	0.1	11.90
F0001009	1" PEX exp. requires 1" union slip nut	0.1	25.60



Union nut, brass

Code	Description	Lbs	USD
F61008	1" union nut	0.2	4.70
F0000698	1" union slip nut	0.2	6.60



Union gasket for legacy non-Posi-Stop™ valves

Code	Description	Lbs	USD
R20011	1" union gasket	0.1	1.60

MISCELLANEOUS FITTINGS



Sweat adapter

Code	Description	Lbs	USD
NA10062	1" sweat adapter w/ 1" male thd.	0.1	24.50



Nipple

Code	Description	Lbs	USD
NA10064	1" NPT w/ 1" male thread	0.2	25.40



Sweat adapter

Code	Description	Lbs	USD
NA10119	1" sweat adapter x 1 1/4" union thread	0.4	31.10



Bushing

Code	Description	Lbs	USD
NA10087	1" female x 1 1/4" male thread bushing	0.4	22.80



Double nipple

Code	Description	Lbs	USD
NA12173	1" NPT x 1" NPT	0.4	28.20



Nipple

Code	Description	Lbs	USD
NA12162	3/4" male w/ O-ring x 1" male thread	0.2	26.10



Bushing

Code	Description	Lbs	USD
61215A	1" NPT F x 1 1/4" M thread bushing	0.8	22.70



Nipple

Code	Description	Lbs	USD
R31706	1" male x 1 1/4" male nipple	0.3	28.20



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Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)
100001A	109	116250AC 106	83	116640AC 008	83	127161AFC	79	128752A 000	108
108860A	111	116250AC 107	83	116640AC 009	83	127162AFC	79	128754A 000	108
108866A	111	116250AC 108	83	116640AC 102	83	127163AFC	78	128756A 000	108
108869A	111	116250AC 109	83	116640AC 106	83	127164AFC	79	128759A 000	108
108870A	111	116260A	86	116640AC 107	83	127165AFC	78	128761A 000	108
108876A	111	116260AC	86	116640AC 108	83	127166AFC	79	128762A 000	108
108879A	111	116270A	86	116640AC 109	83	127167AFC	78	128764A 000	108
112001	73	116270AC	86	116650AC 002	83	127168AFC	78	128766A 000	108
112003	73	116340AC 002	85	116650AC 006	83	127169AFC	79	128769A 000	108
116000	87	116340AC 006	85	116650AC 007	83	127341AF	80	130400A	74
116010	87	116340AC 007	85	116650AC 008	83	127342AF	80	130500A	74
116140AC 002	84	116340AC 008	85	116650AC 009	83	127344AF	80	130600A	74
116140AC 006	84	116340AC 009	85	116650AC 102	83	127346AF	80	130700A	74
116140AC 007	84	116340AC 102	85	116650AC 106	83	127349AF	80	130800A	74
116140AC 008	84	116340AC 106	85	116650AC 107	83	127351AF	80	130900A	74
116140AC 009	84	116340AC 107	85	116650AC 108	83	127352AF	80	132060A	72
116140AC 102	84	116340AC 108	85	116650AC 109	83	127354AF	80	132080A	72
116140AC 106	84	116340AC 109	85	116660A	86	127356AF	80	132100A	72
116140AC 107	84	116350AC 002	85	116660AC	86	127359AF	80	132430AFC	71
116140AC 108	84	116350AC 006	85	116670A	86	127361AF	80	132431AFC	71
116140AC 109	84	116350AC 007	85	116670AC	86	127362AF	80	132432A	72
116141AC 002	84	116350AC 008	85	120141A 000	109	127364AF	80	132432AFC	71
116141AC 006	84	116350AC 009	85	120149A 000	109	127366AF	80	132433AFC	71
116141AC 007	84	116350AC 102	85	120151A 000	109	127369AF	80	132434AFC	71
116141AC 008	84	116350AC 106	85	120159A 000	109	128440AFC	75	132435AFC	71
116141AC 009	84	116350AC 107	85	120161A 000	109	128441AFC	76	132436A	72
116141AC 102	84	116350AC 108	85	120169A 000	109	128442AFC	76	132436AFC	70
116141AC 106	84	116350AC 109	85	120171A 000	109	128443AFC	75	132437AFC	70
116141AC 107	84	116360A	86	120179A 000	109	128444AFC	76	132438AFC	70
116141AC 108	84	116360AC	86	120341A 000	109	128445AFC	75	132439AFC	70
116141AC 109	84	116370A	86	120349A 000	109	128446AFC	76	132450AFC	71
116150AC 002	84	116370AC	86	120351A 000	109	128447AFC	75	132451AFC	71
116150AC 006	84	116440AC 002	82	120359A 000	109	128448AFC	75	132452AFC	71
116150AC 007	84	116440AC 006	82	120361A 000	109	128449AFC	76	132453AFC	71
116150AC 008	84	116440AC 007	82	120369A 000	109	128450AFC	75	132454AFC	71
116150AC 009	84	116440AC 008	82	120371A 000	109	128451AFC	76	132455AFC	71
116150AC 102	84	116440AC 009	82	120379A 000	109	128452AFC	76	132456AFC	70
116150AC 106	84	116440AC 102	82	121141A	81	128453AFC	75	132457AFC	70
116150AC 107	84	116440AC 106	82	121149A	81	128454AFC	76	132458AFC	70
116150AC 108	84	116440AC 107	82	121151A	81	128455AFC	75	132459AFC	70
116150AC 109	84	116440AC 108	82	121159A	81	128456AFC	76	132530AFC	71
116151AC 002	84	116440AC 109	82	121161A	81	128457AFC	75	132531AFC	71
116151AC 006	84	116441AC 002	82	121169A	81	128458AFC	75	132532AFC	71
116151AC 007	84	116441AC 006	82	121171A	81	128459AFC	76	132533AFC	71
116151AC 008	84	116441AC 007	82	121179A	81	128460AFC	75	132534AFC	71
116151AC 009	84	116441AC 008	82	121341A	81	128461AFC	76	132535AFC	71
116151AC 102	84	116441AC 009	82	121349A	81	128462AFC	76	132536AFC	70
116151AC 106	84	116441AC 102	82	121351A	81	128463AFC	75	132537AFC	70
116151AC 107	84	116441AC 106	82	121359A	81	128464AFC	76	132538AFC	70
116151AC 108	84	116441AC 107	82	121361A	81	128465AFC	75	132539AFC	70
116151AC 109	84	116441AC 108	82	121369A	81	128466AFC	76	132550AFC	71
116160A	86	116441AC 109	82	121371A	81	128467AFC	75	132551AFC	71
116160AC	86	116450AC 002	82	121379A	81	128468AFC	75	132552A	72
116161A	86	116450AC 006	82	127000A	80	128469AFC	76	132552AFC	71
116161AC	86	116450AC 007	82	127140AFC	78	128541AF	77	132553AFC	71
116170A	86	116450AC 008	82	127141AFC	79	128542AF	77	132554AFC	71
116170AC	86	116450AC 009	82	127142AFC	79	128544AF	77	132555AFC	71
116171A	86	116450AC 102	82	127143AFC	78	128546AF	77	132556A	72
116171AC	86	116450AC 106	82	127144AFC	79	128549AF	77	132556AFC	70
116240AC 002	83	116450AC 107	82	127145AFC	78	128551AF	77	132557AFC	70
116240AC 006	83	116450AC 108	82	127146AFC	79	128552AF	77	132558AFC	70
116240AC 007	83	116450AC 109	82	127147AFC	78	128554AF	77	132559AFC	70
116240AC 008	83	116451AC 002	82	127148AFC	78	128556AF	77	132637	73
116240AC 009	83	116451AC 006	82	127149AFC	79	128559AF	77	132657	73
116240AC 102	83	116451AC 007	82	127150AFC	78	128561AF	77	132630AFC	71
116240AC 106	83	116451AC 008	82	127151AFC	79	128562AF	77	132631AFC	71
116240AC 107	83	116451AC 009	82	127152AFC	79	128564AF	77	132632AFC	71
116240AC 108	83	116451AC 102	82	127153AFC	78	128566AF	77	132633AFC	71
116240AC 109	83	116451AC 106	82	127154AFC	79	128569AF	77	132634AFC	71
116250AC 002	83	116451AC 107	82	127155AFC	78	128741A 000	108	132635AFC	71
116250AC 006	83	116451AC 108	82	127156AFC	79	128742A 000	108	132636AFC	70
116250AC 007	83	116451AC 109	82	127157AFC	78	128744A 000	108	132637AFC	70
116250AC 008	83	116640AC 002	83	127158AFC	78	128746A 000	108	132638AFC	70
116250AC 009	83	116640AC 006	83	127159AFC	79	128749A 000	108	132639AFC	70
116250AC 102	83	116640AC 007	83	127160AFC	78	128751A 000	108	132650AFC	71

Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)
132651AFC	71	1725C1A	40	301341	26	49684A	9, 21	520614A 001	58
132652AFC	71	1725C1A IN	40	304040A	101	49685A	21	520614AC	59
132653AFC	71	1725C1AHE	40	304050A	101	501502A	9, 19	520614AC 001	58
132654AFC	71	1725C1AHE IN	40	304740A	110	502015A	18	520614AC DL	59
132655AFC	71	1725D1A	40	304743A	110	502040A	18	520615A	59
132656AFC	70	1725D1A IN	40	304746A	110	502043 CST	45	520615A 001	58
132657AFC	70	1725D1AHE	40	304747A	110	502043A	18	520615AC	59
132658AFC	70	1725D1AHE IN	40	304748A	110	502113A	18	520615AC 001	58
132659AFC	70	1725E1A	40	304749A	110	502115A	18	520615AC DL	59
132662A	72	1725E1A IN	40	304750A	110	502243A	18	520616A	59
132666A	72	1725E1AHE	40	304753A	110	502343A	9, 18	520616A 001	58
132772A	72	1725E1AHE IN	40	304756A	110	502420	19	520616AC	59
132776A	72	1725F1A	40	304757A	110	502630	19	520616AC 001	58
132882A	72	1725F1A IN	40	304758A	110	502640	19	520616AC DL	59
132886A	72	1725F1AHE	40	304759A	110	502610A	19	520619A	59
132992A	72	1725F1AHE IN	40	304760A	110	502620A	19	520619A 001	58
132996A	72	1725G1A	40	304763A	110	502710A	18	520619AC	59
142241A	74	1725G1A IN	40	304766A	110	502720A	18	520619AC 001	58
142251A	74	1725G1AHE	40	304769A	110	508013A	18	520619AC DL	59
142261A	74	1725G1AHE IN	40	304770A	110	508100A	19	521101A	57
142271A	74	1725H1A	40	304773A	110	519006	43	521201A	67
142281A	74	1725H1A IN	40	304776A	110	519502A	112	521201AP	67
142291A	74	1725H1AHE	40	304779A	110	519566A	112	521204A	67
145013	30	1725H1AHE IN	40	304780A	110	519599A	112	521301A	66
145018	30	1725I1A	40	304786A	110	519600A	112	521333A	66
145443A 1G8	30	1725I1A IN	40	304789A	110	519609A	112	521333A 002	66
145443A 3G5	30	1725I1AHE	40	304790A	110	519700A	112	521342A	66
145443A G90	30	1725I1AHE IN	40	304793A	110	519709A	112	521342A 002	66
145446A 1G8	30	1725L1A	40	304796A	110	520051A	59	521346A	66
145446A 3G5	30	1725L1A IN	40	304799A	110	520061A	59	521346A 002	66
145446A G90	30	1725L1AHE	40	304840A	100	520410A	58	521347A	66
145449A 1G8	30	1725L1AHE IN	40	304843A	100	520410AC	58	521347A 002	66
145449A 3G5	30	1725M1A	40	304846A	100	520410AC DL	59	521348A	66
145449A G90	30	1725M1A IN	40	304847A	100	520414A	58	521348A 002	66
145553A 1G8	30	1725M1AHE	40	304848A	100	520414AC	58	521349A	66
145553A 3G5	30	1725M1AHE IN	40	304849A	100	520414AC DL	59	521349A 002	66
145553A 5G3	30	1725N1A	40	304850A	100	520415A	58	521352A	66
145553A G90	30	1725N1A IN	40	304853A	100	520415AC	58	521352A 002	66
145556A 1G8	30	1725N1AHE	40	304856A	100	520415AC DL	59	521356A	66
145556A 3G5	30	1725N1AHE IN	40	304857A	100	520416A	58	521356A 002	66
145556A 5G3	30	1725O1A	40	304858A	100	520416AC	58	521357A	66
145556A G90	30	1725O1A IN	40	304859A	100	520416AC DL	59	521357A 002	66
145559A 1G8	30	1725O1AHE	40	304860A	100	520419A	58	521358A	66
145559A 3G5	30	1725O1AHE IN	40	304866A	100	520419AC	58	521358A 002	66
145559A 5G3	30	200000	24	304867A	100	520419AC DL	59	521359A	66
145559A G90	30	201000	24	304868A	100	520500AX	60	521359A 002	66
145663A 13G	30	203502	24	304869A	100	520506AX	60	521362A	66
145663A 16G	30	220400A	25	31401 FD	Section 13	520509AX	60	521362A 002	66
145663A 7G9	30	220500A	25	31403 FD	Section 13	520510A	58	521366A	66
145666A 13G	30	221400A	25	31426 FD	Section 13	520510AC	58	521366A 002	66
145666A 16G	30	221500A	25	31428 FD	Section 13	520510AC DL	59	521367A	66
145666A 7G9	30	250041A	105	31553 FD	Section 13	520510AP	60	521367A 002	66
145669A 13G	30	251003A	105	31554 FD	Section 13	520510AX	60	521368A	66
145669A 16G	30	251004A	105	31901A	Section 13	520514A	58	521368A 002	66
145669A 7G9	30	253040	105	337221A	19	520514AC	58	521369A	66
149400A 1G8	31	253042	105	338452	25	520514AC DL	59	521369A 002	66
149400A 3G5	31	253043	105	339452	25	520515A	58	521400A	54
149400A G40	31	253044	105	342452	25	520515AC	58	521400AC	54
149400A G90	31	253046	105	343452	25	520515AC DL	59	521406A	54
149500A 1G8	31	253048	105	386500	44	520516A	58	521406AC	54
149500A 3G5	31	280165A	104	387100	27, 44	520516AC	58	521407A	54
149500A 5G3	31	280166A	104	387127	25	520516AC DL	59	521407AC	54
149500A G90	31	280175A	104	39623	98, 99	520516AP	60	521408A	54
149600A 13G	31	280176A	104	41371A	Section 13	520516AX	60	521408AC	54
149600A 16G	31	280965A	104	41372A	Section 13	520519A	58	521409A	54
149600A 7G9	31	280966A	104	41380A	Section 13	520519AC	58	521409AC	54
165001	43	280975A	104	41787 CST	Section 13	520519AC DL	59	521410A	55
166600A	43	280976A	104	41788 CST	Section 13	520519AP	60	521410AC	55
166602A	43	290030	35, 73, 80, 87, 113	41789 CST	Section 13	520519AX	60	521416A	55
166610A	43	290031	35, 73, 80, 87, 113	41882A	Section 13	520610A	59	521416AC	55
166612A	43	290503A	112	437516	27	520610A 001	58	521417A	55
167600A	43	290504A	112	449000	45	520610AC	59	521417AC	55
167602A	43	301040	26	449010	24	520610AC 001	58	521418A	55
167610A	43	301143	26	449740	26	520610AC DL	59	521418AC	55
167612A	43	301241	26	472000	24	520614A	59	521419A	55

Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)
521419AC	55	535009HA	91	536073A 106	92	549508A	6	573403A	101
521500A	54	535051A	49	536073A 109	92	549508US 001	6	573406A	101
521500AC	54	535056A	49	536074A 103	93	549509A	6	573409A	101
521506A	54	535057A	49	536074A 106	93	549509US 001	6	573493A	101
521506AC	54	535058A	49	536074A 109	93	549510A	6	573503A	101
521507A	54	535059A	49	536083A 103	92	549552A	6	574002A	48
521507AC	54	535061A	49	536083A 106	92	549562A	6	574004A	98
521508A	54	535066A	49	536083A 109	92	549566A	6	574006A	99
521508AC	54	535067A	49	536084A 103	93	549567A	6	574012A	48
521509A	54	535068A	49	536084A 106	93	549568A	6	574050A	98
521509AC	54	535069A	49	536084A 109	93	549569A	6	574056A	98
521510A	55	535340HA	90	536093A 103	92	549582A	6	574064A	98
521510AC	55	535341HA	90	536093A 106	92	549596A	6	574066A	99
521516A	55	535350HA	90	536093A 109	92	549597A	6	574151A	49
521516AC	55	535351HA	90	538202 FD	109, 113	549598A	6	574156A	49
521517A	55	535360HA	90	538402 FD	9, 21, 109, 113	549599A	6	574157A	49
521517AC	55	535361HA	90	546016A	14	551003A	13	574161A	49
521518A	55	535370HA	90	546050A	14	551003AC	13	574166A	49
521518AC	55	535371HA	90	546060A	14	551004A	19	574167A	49
521519A	55	535380HA	90	546080A	14	551005A	12	574206A	48
521519AC	55	535381HA	90	546096A	14	551005AC	12	574207A	48
521600A	54	535390HA	90	546097A	14	551006A	12	574216A	48
521600AC	54	535391HA	90	546100A	14	551006AC	12	574217A	48
521606A	54	535550HA	90	546108A	14	551007A	12	574700A	99
521606AC	54	535551HA	90	546109A	14	551007AC	12	574706A	99
521607A	54	535560HA	90	546116A	14	551008A	12	574801A	99
521607AC	54	535561HA	90	546120A	14	551008AC	12	574806A	99
521608A	54	535640HA	90	546166A	14	551009A	12	574900A	99
521608AC	54	535641HA	90	546167A	14	551009AC	12	574906A	99
521609A	54	535650HA	90	546168A	14	551022A	13	577660A	16
521609AC	54	535651HA	90	546169A	14	551022AC	13	577666A	16
521610A	55	535660HA	90	546196A	14	551028A	12	577669A	16
521610AC	55	535661HA	90	546197A	14	551028AC	12	577870A	16
521616A	55	535670HA	90	546198A	14	551035A	12	577876A	16
521616AC	55	535671HA	90	546199A	14	551035AC	12	577879A	16
521617A	55	535680HA	90	546306AM	16	551041A	12	577980A	16
521617AC	55	535681HA	90	546307AM	16	551041AC	12	577986A	16
521618A	55	535690HA	90	546308AM	16	551050A	13	577989A	16
521618AC	55	535691HA	90	546309AM	16	551050AT	13	59455	99
521619A	55	535750HA	90	546328AM	16	551054A	12	59456	99
521619AC	55	535751HA	90	546335AM	16	551054AC	12	59457	99
523160A	56	535760HA	90	546341AM	16	551060A	13	59458	99
523166A	56	535761HA	90	546354AM	16	551060AT	13	59459	99
523168A	56	535940HA	90	546366AM	16	551066A	12	59460	99
523170A	56	535941HA	90	546367AM	16	551066AC	12	59461	99
523176A	56	535950HA	90	546368AM	16	551067A	12	59462	99
523177A	56	535951A	49	546369AM	16	551067AC	12	59469	98, 99
523178A	56	535951HA	90	546510AM	17	551068A	12	59470	98
523179A	57	535960HA	90	546550AM	17	551068AC	12	59471	98, 99
523180A	56	535961HA	90	546560AM	17	551069A	12	59472	98, 99
523186A	56	535970HA	90	546580AM	17	551069AC	12	59474A	21
523188A	56	535971HA	90	548006A	8	551080A	13	59756	20
523190A	56	535980HA	90	548006US 001	8	551100A	13	59804A	21
523196A	56	535981HA	90	548007A	8	551716	12	59817A	Section 13
523198A	56	535990HA	90	548007US 001	8	551705A	12	59829	9, 20
523199A	57	535991HA	90	548008A	8	551706A	12	59834A	Section 13
533000H	95	536043A 103	92	548008US 001	8	551765A	12	59840A	Section 13
533340HA	95	536043A 106	92	548009A	8	551766A	12	59893A	Section 13
533341HA	95	536043A 109	92	548009US 001	8	551795A	12	59894A	Section 13
533350HA	95	536044A 103	93	548052A	8	551796A	12	59904A	Section 13
533351HA	95	536044A 106	93	548062A	8	553542A	48	59905A	Section 13
533640HA	95	536044A 109	93	548066A	8	553549A	48	59906A	Section 13
533641HA	95	536053A 103	92	548067A	8	553642A	48	59977	98
533650HA	95	536053A 106	92	548068A	8	553649A	48	59978	98
533651HA	95	536053A 109	92	548069A	8	561402A	21	59979	98
533750HA	95	536054A 103	93	548082A	8	562100	20	59980	98
533751HA	95	536054A 106	93	548096A	8	573002A	48	600003	65
533850HA	95	536054A 109	93	548097A	8	573006A	48	600054A	63
533851HA	95	536063A 103	92	548098A	8	573007A	48	600056A	63
533940HA	95	536063A 106	92	548099A	8	573009A	48	600059A	63
533941HA	95	536063A 109	92	548102A	8	573012A	48	600060A	63
533950HA	95	536064A 103	93	549506A	6	573016A	48	600064A	63
533951HA	95	536064A 106	93	549506US 001	6	573017A	48	600064A 001	63
535004	49	536064A 109	93	549507A	6	573019A	48	600066A	63
535006HA	91	536073A 103	92	549507US 001	6	573100A	101	600066A 001	63

Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)
600069A	63	638094A 103	37	6687L5S1A IN	42	F0000495	Section 13	F69888	64
600069A 001	63	638094A 106	37	6687M5S1A	42	F0000496	Section 13	KIT290503A	112
600074A	63	638094A 109	37	6687M5S1A IN	42	F0000520	Section 13	KIT290504A	112
600076A	63	644004	36	6687N5S1A	42	F0000521	Section 13	KIT520510AP	60
600079A	63	644250A	36	6687N5S1A IN	42	F0000580	87	KIT520510AX	60
600080A	63	644256A	36	6687O5S1A	42	F0000698	Section 13	KIT520516AP	60
600084A	63	644259A	36	6687O5S1A IN	42	F0000718	Section 13	KIT520516AX	60
600086A	63	644260A	36	675900A	45	F0000926	73	KIT520517AX	60
600089A	63	644266A	36	676000A	32	F0000940	73	KIT520518AX	60
600094A	63	644269A	36	676246A	32	F0000941	73	KIT520519AP	60
600096A	63	644350A	36	676248A	32	F0000942	73	KIT520519AX	60
600099A	63	644350A 3BY	36	676249A	32	F0000943	73	KIT536535A 053	94
600204	64	644356A	36	676256A	32	F0000944	73	KIT536535A 056	94
600214	64	644356A 3BY	36	676258A	32	F0000945	73	KIT536535A 059	94
600224	64	644359A	36	676259A	32	F0000946	73	KIT536535A 063	94
600354A	61	644359A 3BY	36	676266A	32	F0000947	73	KIT536535A 066	94
600354AF	61	644360A	36	676268A	32	F0000948	73	KIT536535A 069	94
600356A	61	644360A 3BY	36	676269A	32	F0000962	64	KIT536535A 153	94
600356AF	61	644366A	36	676500A	32	F0001006	98, 99	KIT536535A 156	94
600359A	61	644366A 3BY	36	676746A	32	F0001007	Section 13	KIT536535A 159	94
600359AF	61	644369A	36	676748A	32	F0001008	Section 13	KIT536535A 163	94
600360A	61	644369A 3BY	36	676749A	32	F0001009	Section 13	KIT536535A 166	94
600360AF	61	645114	64	676756A	32	F0001179	21	KIT536535A 169	94
600360AFS	62	645124	64	676758A	32	F0001270	67	NA10001	Section 13
600364A	61	656344	32, 44	676759A	32	F0001286	87	NA10002	Section 13
600364A 001	61	656354	32, 44	676766A	32	F0001470	21	NA10003	Section 13
600364AF	61	656354R	44	676768A	32	F0001516	87	NA10005	33
600364AF 001	61	656404	24, 32, 44	676769A	32	F0001636	99	NA10006	33
600366A	61	656414	24, 32, 44	680507	44	F0001637	99	NA10007	33
600366A 001	61	656504	31	680503A	44	F0001771	31	NA10009	Section 13
600366AF	61	656524	30	680504A	44	F0001901	99	NA10038	41
600366AF 001	61	656604	31	680505A	44	F0002077	Section 13	NA10056	57
600366AFS	62	659044	43	680555A	44	F0002097	73	NA10058	57
600369A	61	659064	43	681524	27	F0002098	73	NA10062	Section 13
600369A 001	61	659084	43	681555	27	F0002099	73	NA10064	Section 13
600369AF	61	659104	43	681503A	27	F0002108	Section 13	NA10087	Section 13
600369AF 001	61	659124	43	682530A	44	F0002150	Section 13	NA10117	59, 110, 118
600374A	61	668000	45	682540A	27, 44	F0002151	Section 13	NA10119	Section 13
600374AF	61	6686C5S1A	42	682545A	44	F0002152	Section 13	NA10197	48
600376A	61	6686C5S1A IN	42	682550A	44	F0002153	Section 13	NA10204	20, 105
600376AF	61	6686D5S1A	42	688003A	45, 57	F0002160	Section 13	NA10262	27
600376AFS	62	6686D5S1A IN	42	69122 CST	45	F0002181	Section 13	NA10273	49, 91, 96
600379A	61	6686E5S1A	42	755052	64	F0007676	64	NA10313	27
600379AF	61	6686E5S1A IN	42	940451	27	F0007678	65	NA10315	57
600380A	61	6686F5S1A	42	942550	44	F0007680	65	NA10328	57
600380AF	61	6686F5S1A IN	42	CBN116140	87	F19153	41	NA10342	35
600384A	61	6686G5S1A	42	CBN116160	87	F19346	73	NA10343	35
600384AF	61	6686G5S1A IN	42	CBN116440	87	F19379	104	NA10358	57
600386A	61	6686H5S1A	42	CBN130400	74	F29571	104	NA10363	48
600386AF	61	6686H5S1A IN	42	CBN130500	74	F29633	104	NA10366	57, 64
600386AFS	62	6686I5S1A	42	CBN130600	74	F29634	104	NA10367	57, 64
600389A	61	6686I5S1A IN	42	CBN130700	74	F29635	104	NA10370	110
600389AF	61	6686L5S1A	42	CBN130800	74	F29636	104	NA10371	110
600394A	61	6686L5S1A IN	42	CBN130900	74	F31868	Section 13	NA10403	Section 13
600394AF	61	6686M5S1A	42	CBN142241A	74	F39807	21	NA10404	Section 13
600396A	61	6686M5S1A IN	42	CBN142251A	74	F41186	Section 13	NA10405	57, 59, Section 13
600396AF	61	6686N5S1A	42	CBN142261A	74	F49644	Section 13	NA10406	Section 13
600396AFS	62	6686N5S1A IN	42	CBN142271A	74	F49645	Section 13	NA10407	Section 13
600399A	61	6686O5S1A	42	CBN142281A	74	F49646	Section 13	NA10408	Section 13
600399AF	61	6686O5S1A IN	42	CBN145437	31	F49647	Section 13	NA10409	Section 13
61215A	Section 13	6687C5S1A	42	CBN145667	31	F49657	Section 13	NA10425	9
626009	111	6687C5S1A IN	42	CBN546002	14	F52429	57, 60	NA10461	57
626600A	111	6687D5S1A	42	CBN546118	14	F57312 DDT	17	NA10476	57
638054A 103	37	6687D5S1A IN	42	CBN546119	14	F59650	48	NA10479	Section 13
638054A 106	37	6687E5S1A	42	CBN546205	16	F59917	21	NA10484	Section 13
638054A 109	37	6687E5S1A IN	42	CBN546207	16	F61008	Section 13	NA10485	Section 13
638064A 103	37	6687F5S1A	42	CBN546209	16	F67037	45	NA10486	Section 13
638064A 106	37	6687F5S1A IN	42	CBN551005	12	F69293	35	NA10496	Section 13
638064A 109	37	6687G5S1A	42	CBN551007	12	F69294	35	NA10498	45, 57
638074A 103	37	6687G5S1A IN	42	CBN551009	12	F69381	65	NA10556	Section 13
638074A 106	37	6687H5S1A	42	F0000349	9, 21	F69590	45	NA10569	Section 13
638074A 109	37	6687H5S1A IN	42	F0000435	9	F69591	65	NA10615	64
638084A 103	37	6687I5S1A	42	F0000492	Section 13	F69600	45	NA10616	64
638084A 106	37	6687I5S1A IN	42	F0000493	Section 13	F69804	65	NA10634	Section 13
638084A 109	37	6687L5S1A	42	F0000494	Section 13	F69807	65	NA10635	Section 13

Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)	Code	Page(s)
NA10636	Section 13	NA11605	98	NA546060AM	15	NA553376	50	Z200053	34
NA10706	Section 13	NA11606	99	NA546080A	15	NA553376R	50	Z200411	34
NA10707	Section 13	NA11607	99	NA546080AM	15	NA553379	50	Z200412	34
NA10708	Section 13	NA11608	99	NA546100A	15	NA553379R	50	Z200413	34
NA10709	Section 13	NA11609	99	NA546100AM	15	NA57092	50	Z200431	34
NA10715	Section 13	NA11655	64	NA546120A	15	NA57093	50	Z200432	34
NA10741	67	NA11656	64	NA546120AM	15	NA57094	50	Z200512	34
NA10744	Section 13	NA11657	64	NA546150A	15	NA570971	50	Z200513	34
NA10745	Section 13	NA11658	64	NA546150AM	15	NA570974	50	Z200515	34
NA10747	Section 13	NA11659	64	NA546200A	15	NA573022	50	Z200517	34
NA10758	64	NA11660	64	NA546200AM	15	NA573100	50	Z200532	34
NA10759	65	NA11661	64	NA546250A	15	NA573102	50	Z200535	34
NA10778	9	NA12162	Section 13	NA546250AM	15	NA59600	9, 21	Z200537	34
NA10796	9	NA12173	Section 13	NA546300A	15	NA61241	33	Z200617	34
NA10797	9	NA16060	43	NA546300AM	15	NA644200	36	Z200635	34
NA10801	9	NA16069	43	NA546350A	15	NA644300	36	Z200637	34
NA10802	9	NA16160	43	NA546350AM	15	NA644300 3BY	36	Z200683	35
NA10803	9	NA16169	43	NA546510AM	17	NA669150	45	Z200687	35
NA10804	9	NA16265L	Section 13	NA546512AM	17	NA669250	45	Z200737	34
NA10805	9	NA16265LC	Section 13	NA546515AM	17	R0000582	Section 13	Z207411	34
NA10806	9	NA16266LC	Section 13	NA546520AM	17	R0000892	Section 13	Z207433	34
NA10807	9	NA20760	Section 13	NA546525AM	17	R0001397	65	Z207533	34
NA10808	9	NA20760C	Section 13	NA546530AM	17	R0001452	Section 13	Z207537	34
NA10809	Section 13	NA20766	Section 13	NA546535AM	17	R0001454	Section 13	Z300411	34
NA10817	93	NA20766C	Section 13	NA546550AM	17	R0001457	Section 13	Z300412	34
NA10824	73, 113	NA20767	Section 13	NA546560AM	17	R0001458	Section 13	Z300413	34
NA10825	73, 113	NA20767C	Section 13	NA546580AM	17	R0001459	Section 13	Z300431	34
NA10826	73, 113	NA20768	Section 13	NA548052A	8	R0001460	Section 13	Z300432	34
NA10827	73, 113	NA20768C	Section 13	NA548062A	8	R0001462	Section 13	Z300512	34
NA10828	73, 113	NA20769	Section 13	NA548082A	8	R0001622	Section 13	Z300513	34
NA10829	73, 113	NA20769C	Section 13	NA548102A	8	R0002057	Section 13	Z300515	34
NA10834	113	NA25510	51	NA548120A	8	R11221	Section 13	Z300517	34
NA10835	113	NA29284	105	NA548150A	8	R11222	Section 13	Z300532	34
NA10836	87, 113	NA30474A	110	NA548200A	8	R19101	64	Z300533	34
NA10837	87, 113	NA30476A	110	NA548250A	8	R20011	Section 13	Z300535	34
NA10838	113	NA30478A	110	NA548300A	8	R21176	Section 13	Z300617	34
NA10839	113	NA39588	9	NA548350A	8	R31495	Section 13	Z300635	34
NA10864LC	Section 13	NA39589	9	NA549052A	8	R31589	Section 13	Z300637	34
NA10904	112	NA39753	9, 21	NA549052AM	6	R31706	Section 13	Z300687	35
NA10905	112	NA502640A	111	NA549062A	8	R31981	Section 13	Z300737	34
NA10906	112	NA502740A	18	NA549062AM	6	R39204	57, 59, Section 13	Z307433	34
NA10907	112	NA503040	113	NA549082A	8	R39949	21	Z307537	34
NA10908	112	NA51069	113	NA549082AM	6	R41441	Section 13	Z40	33
NA10909	112	NA51361	87	NA549102A	8	R41660	Section 13	Z40F	33
NA10964	64	NA51371	87	NA549102AM	6	R49418	21	Z42	33
NA10970	31	NA533449HA	95	NA549120A	8	R50005	Section 13	Z44	33
NA10971	31	NA533449HA	95	NA549120AM	6	R50008	Section 13	Z44P	33
NA10972	31	NA535840HA	91	NA549150A	8	R50047	Section 13	Z45	33
NA10973	31	NA535841HA	91	NA549150AM	6	R50048	Section 13	Z45P	33
NA10974	31	NA535850HA	91	NA549200A	8	R51838	Section 13	Z45P3	33
NA10975	31	NA535851HA	91	NA549200AM	6	R53003	Section 13	Z45PL	33
NA10976	31	NA535860HA	91	NA549250A	8	R53004	Section 13	Z46	33
NA10977	31	NA535861HA	91	NA549250AM	6	R53005	Section 13	Z46P	33
NA10978	31	NA535870HA	91	NA549300A	8	R56142	20	Z47	33
NA10979	65	NA535871HA	91	NA549300AM	6	R56214	20, 45	Z50	33
NA10989	Section 13	NA535880HA	91	NA549350A	8	R57264	93	Z50F	33
NA10990	Section 13	NA535881HA	91	NA549350AM	6	R59119	20	Z54	33
NA10992	Section 13	NA535890HA	91	NA551050A	13	R59681	20	Z54P	33
NA10993	Section 13	NA535891HA	91	NA551060A	13	R69413	45	Z55	33
NA10994	Section 13	NA545305	16	NA551080A	13	Z111000	34	Z55P	33
NA10995	Section 13	NA545306	16	NA551100A	13	Z111900	34	Z55P3	33
NA10998	Section 13	NA545355	17	NA551120A	13	Z116000	34	Z55PL	33
NA10999	Section 13	NA545356	17	NA551150A	13	Z121000	34	Z55S	33
NA11031	45, 57	NA545365	16	NA551200A	13	Z126000	34	Z56	33
NA11304	91	NA545366	16	NA551250A	13	Z131000	34	Z56P	33
NA11307	91	NA545375	17	NA551300A	13	Z136000	34	Z57	33
NA11308	91	NA545376	17	NA553362	50	Z141000	34	ZSR101	35
NA11309	91	NA545385	17	NA553362R	50	Z146000	34	ZSR103	35
NA11313	51	NA545386	17	NA553366	50	Z151000	34	ZSR104	35
NA11338	51	NA545395	16	NA553366R	50	Z161000	34	ZSR106	35
NA11360	41	NA545396	16	NA553369	50	Z200041	34	ZVR103	35
NA11375	91	NA546050T	15	NA553369R	50	Z200042	34	ZVR104	35
NA11376	91	NA546050TM	15	NA553372	50	Z200043	34	ZVR106	35
NA11604	98	NA546060A	15	NA553372R	50				

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 component of the PRODUCT or refund the purchase price for that particular PRODUCT. In the event that PURCHASER submits a warranty claim that, in the sole reasonable discretion of the WARRANTOR, is unfounded, the PURCHASER shall reimburse the WARRANTOR all reasonable costs incurred by the WARRANTOR in evaluating the warranty claim (i.e. travel, lodging, expert evaluations, etc.). 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 courts 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.

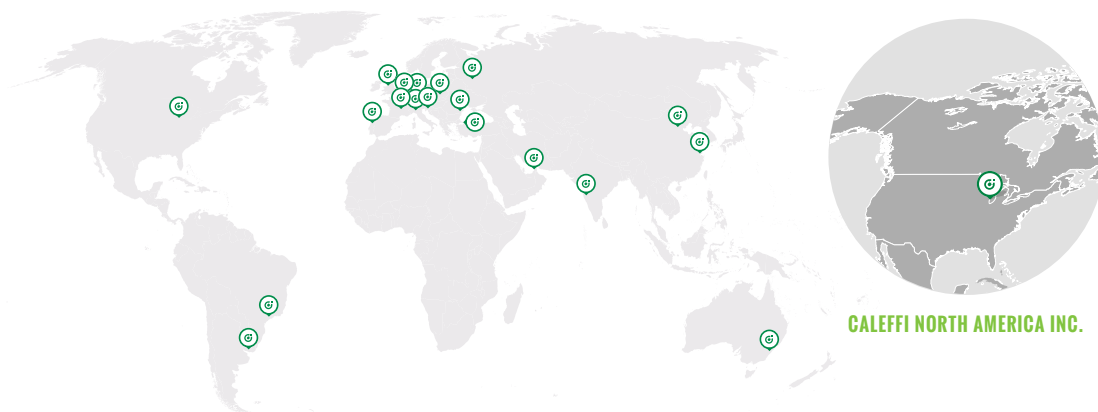
ENTIRE AGREEMENT: This document alone contains the entire Limited Warranty given by WARRANTOR in respect of the PRODUCT. Nothing in WARRANTOR's product literature, marketing materials, advertisements and technical specifications expand or enlarge the scope of this Limited Warranty. There are no terms, 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 any 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™ journals.



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