

SUBMITTAL

Job:

Spec Section No:

Revision No:

Sent Date:

Required Date:

Submittal Package -

Item # Submittal Description

Submittal #

Action

MAKE REVISIONS NOTED

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR: DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF THEIR WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF HIS WORK.

MFIA, INC.

CONSULTING ENGINEERS 2007 S.E. ASH STREET PORTLAND, OR 97214

DATE: 12/12/21 BY: Scott Miller

This is a supplement to the submittal review dated 11/20/21. Per request we have ignored the non-compliance in this submittal relative to specified manufactures. Instead we reviewed based on an assumption of quality. We take no responsibility in the products performing in the same way as the specified materials. Where clearly the requirements of the basis of design are not followed a comment (in blue cloud) is provided. Proceed as you wish based on these comments. Unless the specifications are going to be followed we see no reason to review plumbing submittals related to this project further.

Action: A = Approved AN = Approved As Noted RR = Revise and Resubmit NOTE: Please strike out any rejected items and approve the balance as noted or submitted whenever possible

Architect Stamp

Contractor Stamp REVIEWED

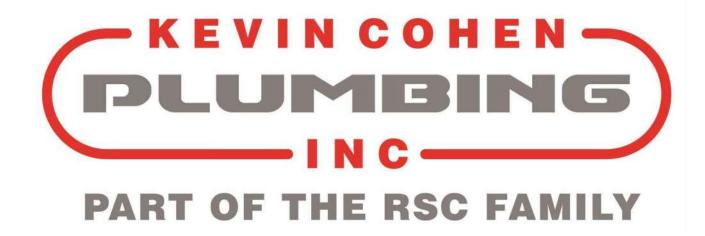
THIS REVIEW IS NOT AN APPROVAL OF ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

DATE: 11/03/2021

APPROVED BY: johnnyy

CONSTRUCTION
PDX: 503-252-3802 SALEM: 503-399-7223

Other/Comments:		



Submittal for Approval

Product

Finish Material

Project

Douglas Co-Op Kevin Cohen Plumbing Project #21-20003

Submitted By

Kevin Cohen Plumbing 11/2/2021



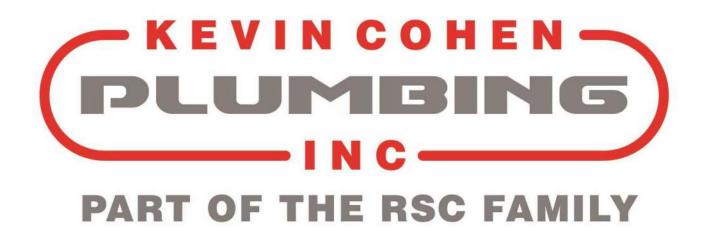
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CW-1 Washer Box

WASHING MACHINE OUTLET BOX

>> 696 SERIES

OxBox[™]

SPECIFICATION

Sioux Chief 696 series OxBoxTM outlet box shall be used where necessary in plumbing supply/drainage systems. Unit shall allow for mounting with supply lines from top or bottom, on-stud or between-studs. Supply and drain boxes can be connected using provided galvanized U-Clip or separated as desired. Supply box can be inverted. Arrester variations can be installed with arresters at any angle. Unit shall be available with 1/4-turn valves. Metal support bracket shall install into top/bottom tracks of box. Drain box shall have a 5/8" integral testable nipple on knockout. Outlet connections shall be generally 3/4". Outlet connections should generally be provided with a test/tamper-resistant cap. Valves should be plated. Arrester option handles can be operated together (single throw) or independently.

MATERIALS

Valve body: forged brass1,2

Valve shank: brass^{1,2}/copper/PPSU/CPVC, 304SS grip ring, Brass nut, Silicone seal

Outlet boxes/frame/arrester clip: ABS

Arrester body: stainless steel, C69300 NL brass1

Arrester piston: GFPP with EPDM o-rings Bracket/box clip: galvanized steel

CERTIFICATIONS/APPROVALS

NSF-372 compliant¹. IAPMO listed box and valves. ASSE 1010 arresters* Valves meet ASME A112.18.1

VALVE/ARRESTER WORKING LIMITS

Max working temperature: 200°F

Max air/water testing & working pressure: 150 PSIG

DIMENSIONS

A: Frame width 111/2" B: Frame height 71/4" C: Frame opening width 35%" **D:** Frame opening height 51/8"

E: Rough-in box width 4" (single box) or 10" (double with clip)

31/2" F: Rough-in box depth G: Rough-in box height 5½"

½" nominal, 2" 0.C. **H:** Supply connection 2" Sch. 40 Hub 1: Drain connection 3/4" male hose thread Outlet connection

Test nipple 5/8" O.D.

Secondary drainage funnel accepts 1/2", 3/4" or 1" pipe

knockout† M: Bracket length 18"



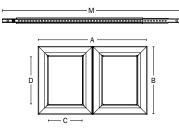


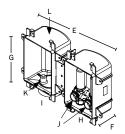


696-G2313WF



696-G2303WR











Create Item Number

696A23B3CD

e.g. 696-2313MF: Washing machine outlet boxes with arresters, MIP/F.SWT connection, frame included

VAIVES A

- = Standard brass valve2

-G = No-lead brass1

ARRESTER B

0 = Without arrester 1 = With arresters*

M = 1/2" MIP/F.SWT **P** = ½" Male sweat/press/push V = 1/2" Viega PureFlow® PEX

> $\mathbf{W} = \frac{1}{2}$ " PEX F1960 GripTM $X = \frac{1}{2}$ " PEX F1807/F2159 CrimpTM

FRAME OPTION D

F = Standard pack (supply and drain box, frame, bracket, debris cover) **FPK4** = Display box (supply and drain box, frame, bracket, debris cover)

R = Rough-in pack (supply and drain box, bracket, debris cover)

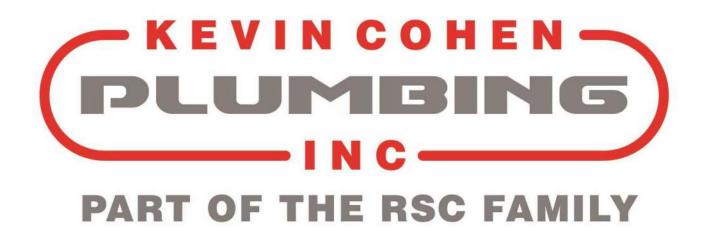
Available Separately: 696-2F: Frame only

696-CF: †Secondary drainage funnel

¹No-Lead options include C69300 dezincification and SCC resistant material. and are compliant with NSF-61 Annex G and California No Lead Plumbing Law ²Leaded brass options are C37700 and C36000

SUPPLY CONNECTION C

C = ½" Male CPVC



SS-1 Service Sink

PFMB2424

Mop Basin



Product Features

- Molded, high-density composite basin
- · Integral drain is molded into basin
- Designed to connect to 3" drain pipe
- 10" deep

Model Numbers

PFMB2424

24" x 24" Mop service basin with

integral molded drain

PFBG24S 24" stainless steel bumper guard

PFBG24V 24" vinyl bumper guard

PFWG24S* 24" stainless steel wall guard set

*Wall guard height: 12"



PFMB2424

Available Parts

PFMBDRN 3" strainer and gasket for PFMB2424

PF245 Mop hanger
PFSSHE Service hose

PF296 Service hose bracket

PFMB32 QIC32. 3" x 2" pipe reducer gasket – for use with PFMB2424 **PFMB3SN** QIC3SN. Gasket for 3" soil pipe – for use with PFMB2424

Warranty and Codes

These products come complete with installation, operating, care and maintenance instructions. All PROFLO basins carry a 1-year limited warranty. These products meet or exceed ANSI Z124.2. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.

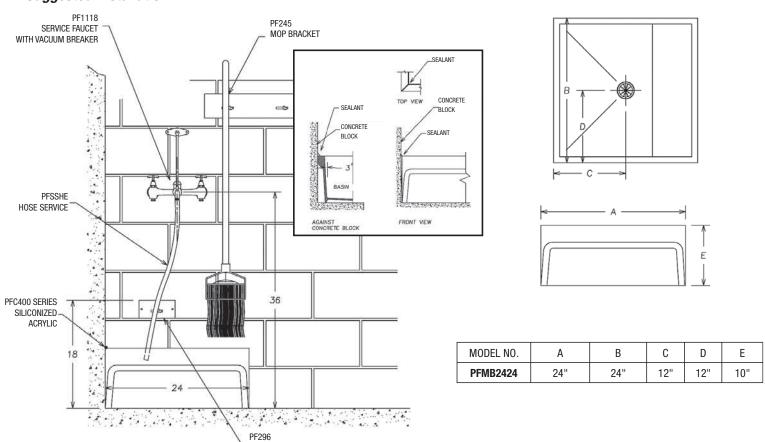




Mop Basin

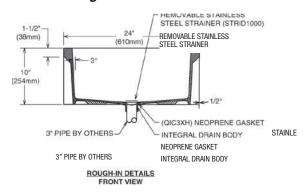


Suggested Installation



Rough-In Details Front View

HOSE BRACKET



PFMB2424



PF1119

Two-handle wall mount service sink faucet



Product Features

- Vacuum breaker Backflow Prevention
- Ceramic disc cartridges
- Integral stops
- 3/4" hose thread on spout
- Meets with ASME: A112.18.1
- ASSE1001 certified
- cUPC/IAPMO listed
- Solid brass waterways
- Chrome plated

Available Parts

PF6553889 Vacuum Breaker Cover Kit & Assembly

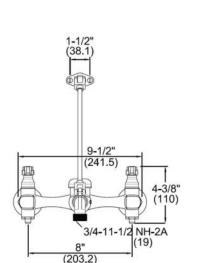
PF655390 Integral Stop Assembly

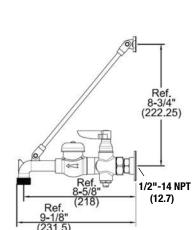
PF655385 **Ceramic Cartridge Assembly** PF6553834 Lever Handle Kit (Hot and Cold)

Optional Accessories

Works with Speakman SEF-9200 Eyewash hose attachment

Flow Rates		
Pressure (PSI) GPM		
20	5	
30	6	
40	7	
50	8	
60	9	
70	10	
80	10.5	





Product Specifications

PF1119

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO faucet carries a limited lifetime warranty when installed in residential applications. The warranty is five years in commercial applications.

This product meets ASME: A112.18.1-2011





PFMB2424

Mop Basin



Product Features

- · Molded, high-density composite basin
- · Integral drain is molded into basin
- Designed to connect to 3" drain pipe
- 10" deep

Model Numbers

PFMB2424 24" X 24" Mop service basin with

integral molded drain

PFBG24S 24" stainless steel bumper guard

PFBG24V 24" vinyl bumper guard

PFWG24S* 24" stainless steel wall guard set

*Wall guard height: 12"



PFMB2424

Available Parts

PFMBDRN 3" strainer and gasket for PFMB2424

PF245 Mop hanger
PFSSHE Service hose

PF296 Service hose bracket

PFMB32 QIC32. 3" x 2" pipe reducer gasket – for use with PFMB2424
PFMB3SN QIC3SN. Gasket for 3" soil pipe – for use with PFMB2424

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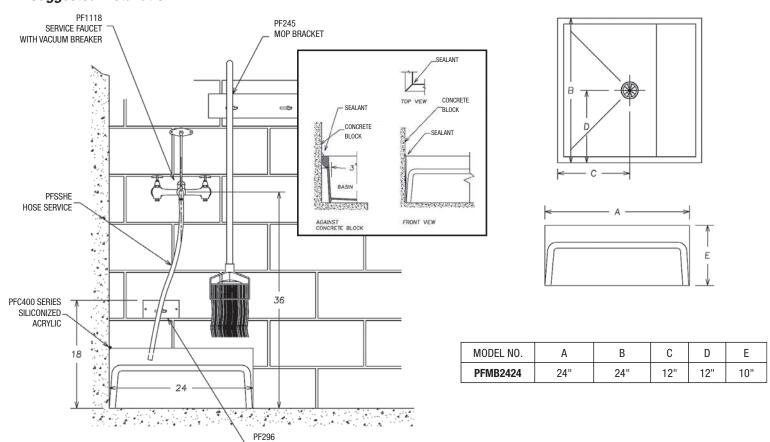




Mop Basin

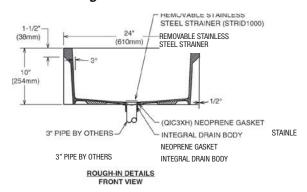


Suggested Installation



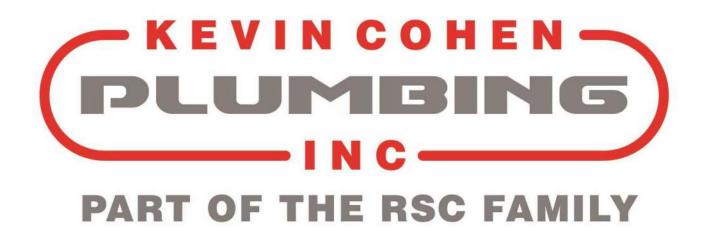
Rough-In Details Front View

HOSE BRACKET



PFMB2424





FD-1 Floor Drain

ADJUSTABLE ON-GRADE FLOOR DRAIN

>> 832 SERIES

FinishLine[™]

SPECIFICATION

Sioux Chief 832 series FinishLine™ adjustable floor drain shall be used where necessary in drainage systems. Floor drain shall allow adjustment before and AFTER the concrete pour. Strainer shall meet applicable load requirements for intended use. Trap primer port shall be threaded 1/2" FIP for optional connection. Designed in accordance with ASME A112.6.3-2001.

MATERIALS

Ring/strainer: Nickel-bronze, stainless steel

Coring Plug: High-impact polymer Head Adapter/Coring Sleeve: Gray ABS

Base Adapter: ABS, PVC

STRAINER LOAD RATING

Nickel-bronze: 1,000 lbs. (Light duty, heel-proof) Stainless Steel: 1,000 lbs. (Light duty, heel-proof)

STRAINER FREE AREA

Round nickel-bronze/stainless steel: 13.4 in² Square nickel-bronze/stainless steel: 16.4 in²

DIMENSIONS

A: Connection*

4" Sch. 40 hub B: Ring/strainer diameter

Round Square

C: Base adapter height**

D: Pre-pour height** $5^{3}/_{8}" - 6^{5}/_{8}"$

E: After-pour height

 $0" - 1^{1}/_{4}"$ Round $\frac{5}{16}$ " - $\frac{1^{1}}{4}$ " Square

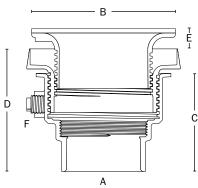
1/2" FIP thread, F: Trap primer port

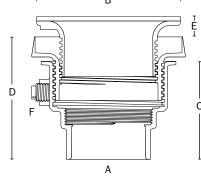
2" hub connection is a factory-installed 2×3 bushing in 3" hub model

ITEM # SUBMITTED JOB NAME LOCATION **ENGINEER** CONTRACTOR



832-36PNR





Create Item Number

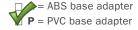
832-ABCD

e.g. 832-36PNRV: FinishLine™ floor drain with 3" PVC hub connection and vandal-resistant, nickel-bronze strainer

CONNECTION SIZE A

= 2" Sch. 40 hub **36** = 3×4" Sch. 40 hub ☐ **4** = 4" Sch. 40 hub

CONNECTION TYPE B



S832236PF - Rough-In Drain □ **E** = 1¹/₄" extended strainer rim¹ S8324HNR - Finish Fixture

NNG/COVER C

NR = Round nickel-bronze

for knockout connection

■ NQ = Square nickel-bronze

☐ SR = Round stainless steel

☐ **SQ** = Square stainless steel

INSTALLED OPTIONS D

□ V = Vandal-resistant strainer screws

☐ **B** = Complies with Buy American Act¹

☐ **H** = Hinged strainer (750 lbs. safe load)

ACCESSORIES (ordered separately)

☐ 832-S4 = Leveling shim kit

☐ **832-EX4** = Ductile extension adapter

☐ **832-W** = Flexible locating bristle kit

☐ 832-UM = Stainless mesh debris basket

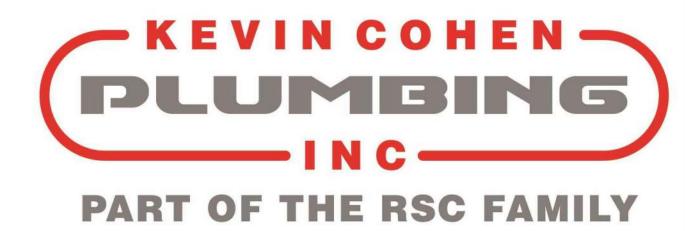
☐ **863-FN** = Round nickel-bronze condensate funnel

☐ **863-FA** = Round aluminum condensate funnel

☐ **863-FNO** = Oval nickel-bronze condensate funnel

1 Available for round nickel-bronze strainers only

Add 1/4" for 2" hub connection



FS-1 Floor Sink



Cast Iron Floor Sinks

Product Features

- · Acid-resistant porcelain finish
- No hub connection
- Includes aluminum dome strainer
- 12" sq x 6" deep
- Can withstand hot boiling water up to 248°F (120°C)
- Compliant to following standards except PF906B:
 - ASME A112.6.7
 - ASME A112.19.1/CSA B45.2



PF906K

Model Numbers

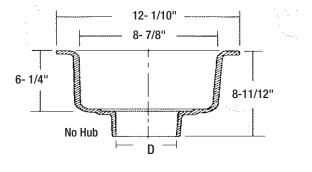
Product Code	Size	Outlet	Color and Finish
PF906K	12" sq x 6"	2"	Porcelain
PF906M	12" sq x 6"	3"	Porcelain
PF906P	12" sq x 6"	4"	Porcelain

Available Accessories	Description	Color and Finish
PF910	Full Grate	Porcelain
PF912	Half Grate	Porcelain
PF912S	Split Half Grate	Porcelain
PF934	Three Quarter Grate	Porcelain
PFADS	Dome Strainer	Aluminum
PF906B	Removable Basket	Plastic



PF906B

Cast Iron No Hub





Aluminium Dome Strainer

UPC C ®

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.



Cast Iron Floor Sinks

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PF906K

Model Numbers

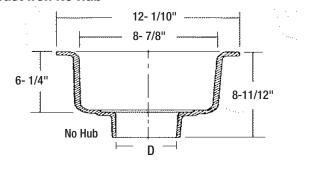
Product Code	Size	Outlet	Color and Finish
PF906K	12" sq x 6"	2"	Porcelain
PF906M	12" sq x 6"	3"	Porcelain
PF906P	12" sq x 6"	4"	Porcelain

Available Accessories	Description	Color and Finish
PF910	Full Grate	Porcelain
PF912	Half Grate	Porcelain
PF912S	Split Half Grate	Porcelain
PF934	Three Quarter Grate	Porcelain
PFADS	Dome Strainer	Aluminum
PF906B	Removable Basket	Plastic



PF906B

Cast Iron No Hub





Aluminium Dome Strainer



Warranty and Codes

This PROFLO product carries a 1-year limited warranty.



HB-1 Hose Bib



Light Commercial Wall Faucets

Product Features

- Brass body
- Maximum operating pressure: 125 psi
- Maximum operating temperature: 120°F
- 3/4" Male hose thread outlet
- VACUUM BREAKER ANTI-SIPHON:
 - -ASSE Standard 1011 approved
 - -IAPMO® listed / cUPC®



PFWFFCP

Model number	Description	Finish	Inlet	Outlet
PFWFDRB	*NP 1/2 FPT INL NF AREA WALL FCT RB	Rough Brass	1/2" NPT	3/4" MHT
PFWFDRC	*NP 1/2 FPT INL NF AREA WALL FCT RC	Rough Chrome	1/2" NPT	3/4" MHT
PFWFDCP	*NP 1/2 FPT INL NF AREA WALL FCT CP	Polished Chrome	1/2" NPT	3/4" MHT
PFWFFRB	*NP 3/4 FPT INL NF AREA WALL FCT RB	Rough Brass	3/4" NPT	3/4" MHT
PFWFFRC	*NP 3/4 FPT INL NF AREA WALL FCT RC	Rough Chrome	3/4" NPT	3/4" MHT
PFWFFCP	*NP 3/4 FPT INL NF AREA WALL FCT CP	Polished Chrome	3/4" NPT	3/4" MHT

Product Specifications

No.	Part	Material	QTY
1	Body	Brass	1
2	Stem	Brass	1
3	Washer	Brass	1
4	Packing Nut	Brass	1
5	Handle screw	Brass	1
6	Wheel handle	Zinc Alloy	1
7	Packing	Graphite	1
8	Gasket	NBR	1
9	Gasket Screw	Brass	1
10	Vacuum Breaker	Brass	1

^{*} Installed with a Zinc alloy wheel handle.

1 zinc alloy loose key and 1 polycarbonate handle.

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.



PROP65 WARNING FOR CALIFORNIA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

CAP 2018/08

^{*} Additional parts included:



Light Commercial Wall Faucets

Product Features

- Brass body
- Maximum operating pressure: 125 psi
- Maximum operating temperature: 120°F
- 3/4" Male hose thread outlet
- VACUUM BREAKER ANTI-SIPHON:
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PFWFDRB	*NP 1/2 FPT INL NF AREA WALL FCT RB	Rough Brass	1/2" NPT	3/4" MHT
PFWFDRC	*NP 1/2 FPT INL NF AREA WALL FCT RC	Rough Chrome	1/2" NPT	3/4" MHT
PFWFDCP	*NP 1/2 FPT INL NF AREA WALL FCT CP	Polished Chrome	1/2" NPT	3/4" MHT
PFWFFRB	*NP 3/4 FPT INL NF AREA WALL FCT RB	Rough Brass	3/4" NPT	3/4" MHT
PFWFFRC	*NP 3/4 FPT INL NF AREA WALL FCT RC	Rough Chrome	3/4" NPT	3/4" MHT
(PFWFFCP)	*NP 3/4 FPT INL NF AREA WALL FCT CP	Polished Chrome	3/4" NPT	3/4" MHT

Product Specifications

No.	Part	Material	QTY
1	Body	Brass	1
2	Stem	Brass	1
3	Washer	Brass	1
4	Packing Nut	Brass	1
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7	Packing	Graphite	1
8	Gasket	NBR	1
9	Gasket Screw	Brass	1
10	Vacuum Breaker	Brass	1

^{*} Installed with a Zinc alloy wheel handle.

1 zinc alloy loose key and 1 polycarbonate handle.

Warranty and Codes

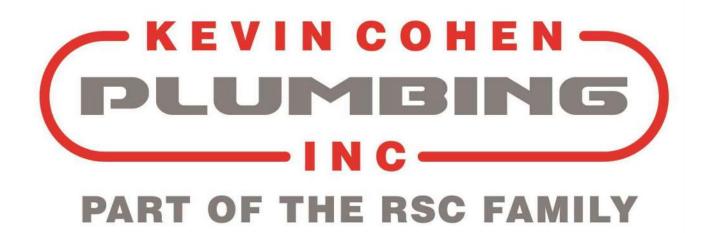
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PROP65 WARNING FOR CALIFORNIA RESIDENTS WARNING: Cancer and Reproductive Harm www.p65warnings.ca.gov

CAP 2018/08

^{*} Additional parts included:



HB-2 Hose Bib



C-634 Heavy Commercial Wall Hydrant



- Anti-Siphon
- Freezeless
- Commercial / Industrial
- Double Backflow Check Valve

MasterSpec*







With Integral P-004 Vacuum Breaker

PRIER C-634 provides a year round source of water to areas that are subject to freezing temperatures. The hydrant valve is connected to the supply piping in the heated portion of the structure, eliminating the possibility of freezing. To assure freeze protection, the hydrant will drain even with the hose attached and under pressure.

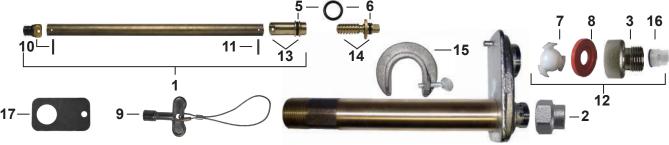
The integral vacuum breaker/backflow preventer provides protection against cross-connection with the potable water system, utilizing 2 check valves to prevent back pressure and a vacuum breaker to vent in the case of siphonage. This commercial wall hydrant is key operated, code approved, and flows up to 16 GPM. A removable operating key is provided to prevent unauthorized usage of the hydrant. No special installation tools are required.

FEATURES

- Field testable as required by ASSE 1052, pressure rated to 125 PSI, temperature to 140°
- Satin nickel plated body rmaintains an attractive finish
- Multiple vent holes ensure proper draining and reduce problems associated with insect nesting
- Patented PRIER "triple seal" positive shutoff system offers triple redundancy to assure shutoff
- High flow rate, 16 gallons per minute at 25 PSI differential
- Same key operates box lock and hydrant
- Tested to 250,000 cycles; designed to last the life of the plumbing system
- Heavy pattern cast brass hydrant for use with or without brass box or aluminum box
- Heavy duty brass piping, significantly stronger than copper, with threaded and sealed joints
- Simple, solderless design and solid non-ferrous operating rod for long wear life
- Design enables valve to be easily secured to any type of inner wall, utilizing the provided clamping ring
- Integral 3/8"-16 mounting lugs on box provide easy and secure installation.
- Round Box (RB1) installs through 6" hole or 6" Schedule 40 PVC sleeve
- Patented PRIER quick opening and modulating design requires less force and fewer turns to operate
- Gasket prevents water and air intrusion into the building

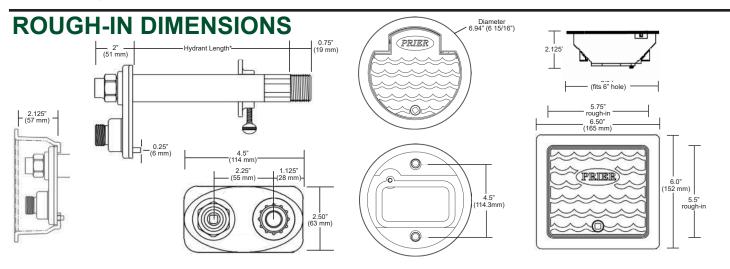


C-634 REPLACEMENT PARTS AND STEMS



ID	Part No.	Description	ID	Part No.	Description
1	See Below	Stem Assembly, Contains: 5, 6, 10, 11, 13	5	336-0001	O-Ring Worm Sleeve
	P-231-0604	Stem for 4" C-634 Hydrant, 4 11/16" OAL	6	336-6001	O-Ring Worm Drive
	P-231-0606	Stem for 6 " C-634 Hydrant, 6 ¹¹ / ₁₆ " OAL	7	337-6001	Check Spider-Vacuum Breaker
	P-231-0608	Stem for 8" C-634 Hydrant, 8 11/16" OAL	8	346-6001	Diaphragm-Vacuum Breaker
	P-231-0610	Stem for 10" C-634 Hydrant, 10 11/ ₁₆ " OAL	9	C-108KT-808	Loose Key on Lanyard
	P-231-0612	Stem for 12" C-634 Hydrant, 12 11/16" OAL	10	C-634KT-802	Stopper Kit, Includes Stopper and Pin, Contains: 5, 10
	P-231-0614	Stem for 14" C-634 Hydrant, 14 11/ ₁₆ " OAL	11	324-0004	Pin Only
	P-231-0616	Stem for 16" C-634 Hydrant, 16 11/16" OAL	12	C-634KT-806	Vacuum Breaker Assembly
	P-231-0618	Stem for 18" C-634 Hydrant, 18 11/16" OAL	13	C-634KT-808	Worm Sleeve with O-Ring, Pin and Tool
	P-231-0620	Stem for 20" C-634 Hydrant, 20 11/16" OAL	14	C-634KT-809	Worm Drive Assembly with O-Ring
	P-231-0622	Stem for 22" C-634 Hydrant, 22 11/16" OAL	15	C-634WCR	Wall Clamping Ring
	P-231-0624	Stem for 24" C-634 Hydrant, 24 11/16" OAL	16	399-0001	Secondary Check for ASSE 1052
2	300-6003	Valve Stem Cap (NP Brass)	17	346-0004	C-634 Gasket
3	300-6004	3/4" Hose Piece (NP Brass)		C-634KT-807	C-634 Overhaul Kit, Contains: 9, 10, 11, 12, 13, 14
	310-6009	1" Hose Piece for C-636 (NP Brass)			

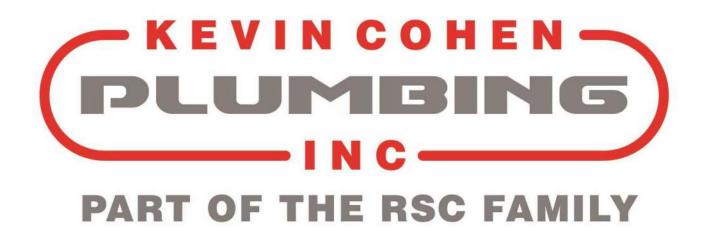
^{**}For the old style C-634 Series wall hydrant stems, see C-634 Series retired style spec sheet at PRIER.com.



SPECS

Furnish and install Model C-634 Heavy Commercial Wall Hydrant manufactured by PRIER Products, Inc. Hydrant shall be surface mount and installed through 1 $_3/8$ " round opening. Hydrant shall have automatic draining capabilities with integral vacuum breaker/double backflow preventor. Hydrant shall flow 16 gallons per minute minimum at 25 PSI Differential and be at full flow in 2 handle rotations. Hydrant shaft shall be brass with connections. Hydrant shall have $_3/4$ " or 1" (choose one) hose connection with freezeless water flow and self-draining functions, one piece valve plunger, satin nickel finish, brass operating rod with positive triple seal shutoff mechanism. Hydrant shall be approved under ASSE 1052 standard. Operating key & wall clamping ring to be furnished with each hydrant. Hydrant insertion length to be \underline{x} inches. (Length minimum of 4" to choice length in 2" increments.)

Optional: Furnish and install flush-mount hydrant box for each valve. Hydrant box shall be manufactured of solid cast brass or aluminum with a <u>rough brass</u>, <u>satin nickel plated brass</u> or <u>aluminum</u> (choose one) finish. Box shape may be round or square and round box only comes with satin nickel finish. Box may be installed separately and hydrant be insertable and removable from front of the box. Access to the hydrant box shall be provided by the same operating key as the valve. A gasket shall be installed between the box and hydrant to prevent water intrusion into the structure.



IM-1 Ice Maker Box

ICE MAKER OUTLET BOX

>> 696 SERIES

OxBox[™]

SPECIFICATION

Sioux Chief 696 series supply OxBox™ shall be used where necessary in residential or commercial plumbing supply systems. Access box can be secured directly to vertical stud or between studs using galvanized bracket. Supply line can be installed from above or below. Arrester variations can be installed with arrester at any angle. Unit shall be available with \(^1\frac{1}{4}\)-turn valves. Metal support bracket shall install into top/bottom tracks of box. Outlet connection shall be generally 1/4". Outlet connections should generally be provided with a test/tamper-resistant cap. Every unit shall include a debris cover for protection during rough-in. Valves will be plated.

MATERIALS

Valve body: no-lead brass1

Valve shank: no-lead brass1/copper/PPSU/CPVC, 304SS grip ring

Outlet box/frame: ABS

Arrester body: stainless steel, C69300 NL brass1

Arrester piston: GFPP with EPDM o-rings

Bracket: galvanized steel

CERTIFICATIONS/APPROVALS

NSF-372 compliant, IAPMO listed box and valve, ASSE 1010 arrester* Valve meets ASMF A112.18.1

VALVE/ARRESTER WORKING LIMITS

Max working temperature: 200°F

Max air/water testing & working pressure: 150 PSIG

DIMENSIONS

A:	Frame width	53/4"
B:	Frame height	71/4"
C:	Frame opening width	3%"
D:	Frame opening height	51/8"
E:	Rough-in box inner width	4"
F:	Rough-in box overall depth	3½"
G:	Rough-in box inner height	5½"

H: Supply connection ½" nominal **I:** Outlet connection 1/4" compression

18" J: Bracket length

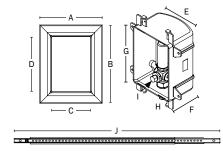




696-G1010XF



696-G1000WR









Create Item Number

696-G10A0BC

e.g. 696-G1010MF: Ice maker supply box with no lead FSWT valve with arrester and frame



SUPPLY CONNECTION B

 \square **C** = $\frac{1}{2}$ " Male CPVC

 \square **1** = With arrester* \square **M** = $\frac{1}{2}$ " MIP/F.SWT \square **P** = $\frac{1}{2}$ " Male sweat/press/push

> 1/2" Viega® PureFlow® PEX $\mathbf{W} = \frac{1}{2}$ " PEX F1960 GripTM

 \square **X** = ½" PEX F1807/F2159 CrimpTM \square **R** = Rough-in pack

RAME PACKAGING C

F = Standard pack

(supply box, frame, bracket, debris cover)

☐ **FPK4** = Display box

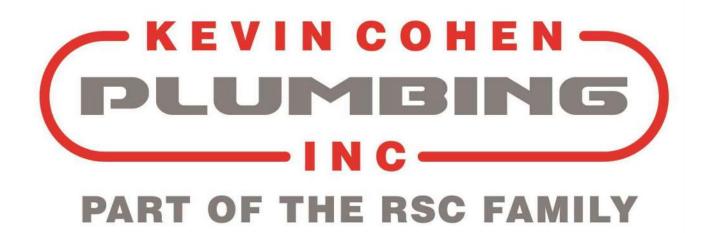
(supply box, frame, bracket, debris cover)

☐ **FS** = Standard pack w/6-ft. braided supply line

(supply box, bracket, debris cover)

Available Separately: 696-1F: frame only 696-SC1: frame insert w/ hose knockout

696-EX: frame extension



L-1 Lavatory

PF20171 / PF20174 / PF20178

Drop-in Lavatory Vitreous China - 20" x 17"



Product Features

- Vitreous china
- Self-rimming lavatory
- · Concealed front overflow drain
- Available 4CC, 8CC or single faucet hole
- Meets ASME/ANSI A112.19.2M
- UPC/IAPMO listed
- ADA compliant
- CSA B45



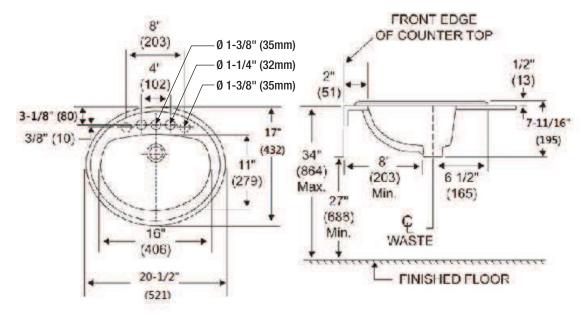
PF20174

Specified Model

Model	Model Description	Color Finishes			
(PF20171)	Drop-in lav 17" x 20 1/2"- single faucet hole	White			
PF20174	Drop-in lav 17" x 20 1/2" 4cc	O White	O Biscuit		
PF20178	Drop-in lav 17" x 20 1/2" 8cc	O White	O Biscuit		

Product Specification:

The self-rimming lavatory shall be 17" in length by 20-1/2" in width. Lavatory shall be made of vitreous china. Lavatory shall have 4" centers (PF20174), 8" centers (PF20178) or single faucet hole (PF20171).



Warranty and Codes:

These products come complete with installation, operating, care and maintenance instructions. All PROFLO fixtures carry a 1-year limited warranty.





(General Model Name: SF2400 CP FCT PED 4"TRIM PL HW W/BATTERY)

CODE NUMBER

3362130

DESCRIPTION

4" Trim Plate, Plug Adapter Power Supply, Back-Check Tee, Polished Chrome Finish, 0.5 gpm, Multi-Laminar Spray, Infrared Sensor, Sloan® Hardwired-Powered Deck-Mounted Mid Body Faucet.

DETAILS

• Flow Rate: 0.5 gpm (2 Lpm) (0.5GPM)

• Spray Type: Multi-Laminar (MLM)

• Spout Type: Pedestal

• Sensor Type: Infrared (IR)

• Mounting Type: Single Hole

• Trim Plate: 4" (102mm) (4)

• Power Supply: Plug Adapter (PLG)

Fower Supply. Flug Adapter (FLG)

Temperature Mixer: Back-Check Tee (⁷
 Finish: Polished Chrome (CP)

• Factory Default Timeout: 30s

• Factory Default GPC: 0.25

Faucet is not equal to specified. The distance from the shank to the outlet is less than the specified unit by an inch.

Same for LV-2

(115 mm)

FEATURES

Commercial Grade, ADA Compliant, Electronic, Sensor-Activated, Brass Pedestal Hand Washing Faucet with the following features:

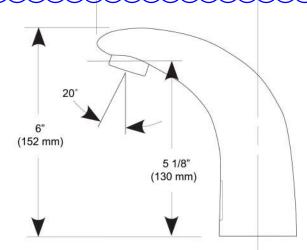
- Adjustable Infrared Sensor Range
- 36" (914 mm) Long Sensor Cable
- 24" (610 mm) Long Flex Hose
- Filtered Solenoid Valve with serviceable Strainer Filter
- Includes Four (4) AA-size Batteries for Battery Backup
- Includes appropriate Mounting Hardware

ELECTRICAL SPECIFICATIONS

- Battery Life: 2 years 8,000 cycles/month
- Sensor Range: 4"-12" (102-305mm)
- Timeout Adjustment Settings: 30s

DOWNLOADS

- SF Series Installation Instructions
- SF Series (FR) Installation Instructions
- SF Series (SP) Installation Instructions
- SFP 35-A Installation Instructions
- Trim Plate Guide
- Sloan 2400/2450 Repair and Maintenance Guide
- Additional Downloads



COMPLIANCES & CERTIFICATIONS



ASME CALGO















(ADA Compliant, ASME A112.18.1 Compliant, CalGreen Compliant, CEC Compliant, cUPC Certified, cUPC Low Lead Compliant, GPC 0.25 or less, NYC604.4, Proposition 65, TAS, UPC Certified, UPC Low Lead Compliant)

NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the SF-2400 product? View the general spec sheet with all options.

Find a matching soap dispenser for this faucet. Find a compatible sink for this faucet.

Sloan 10500 Seymour Ave, Franklin Park, IL 60131

Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com

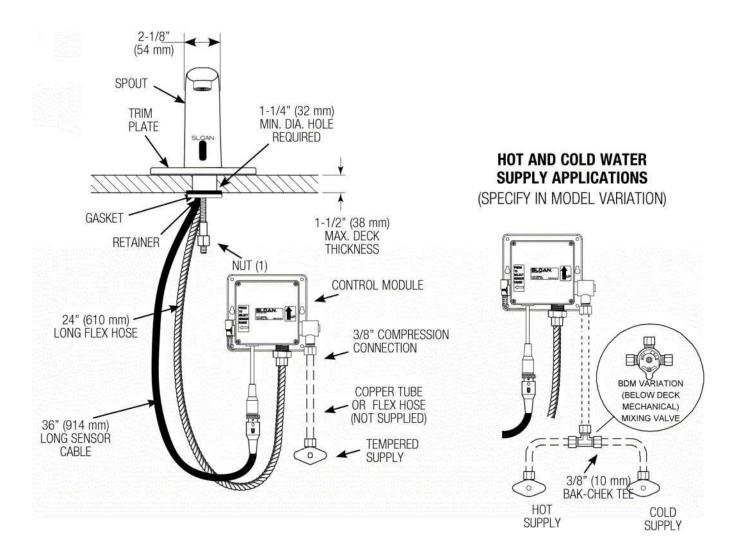


(General Model Name: SF2400 CP FCT PED 4"TRIM PL HW W/BATTERY)

WARRANTY

1 Year

ROUGH-IN



SinkMixer[™] Scald Protection Thermostatic mixing valve



95-120°F (35-50°C)

Submittal Data 03706 NA — Issue Date 01/2020

Application

The Caleffi SinkMixer™ provides water at a safe and usable temperature in situations where the control of the temperature of the water discharging from a terminal fixture is of the utmost importance, i.e. within hospitals, schools, nursing homes, etc. The SinkMixer is used in under sink and under counter applications where the user must be protected from the danger of scalding caused by hot water.

The valve is designed to prevent the flow of water discharging from the mixed water outlet in the event of the failure of hot or cold supply. The compact design provided with mounting bracket allows for easy installation. The cold water outlet to the fixture eliminates the need for additional piping and tee used with three-port mixing valves. The valve is complete with check valves on the hot and cold inlets and meets certification requirements for the Low Lead Plumbing Laws by ICC-ES, ASSE 1070 listed (temperature cannot exceed 120°F).

Typical Specification

Furnish and install on the plans described herein, a SinkMixer™ scald protection point of use four port thermostatic mxing valve as manufactured by Caleffi. Each mixing valve must be designed with a forged low-lead brass body, AISI 302 stainless steel spring, AISI 304 stainless steel hot inlet strainers, seals in peroxide-cured EPDM, and polysulphone shutter. Each valve must also be designed for ±3°F (±2°C) temperature stability with a tamper proof setting lock to lock the temperature at the set value. Provided with inlet port check valves and strainers. The valve shall be ASSE 1070 approved for point of use installation. Forged low-lead brass body (<0.25% Lead content) shall be certified by ICC-ES, file 1360. Meets requirements of ANSI/NSF 372. Each valve shall be Caleffi model 521201A or approved equal. (See product instructions for specific installation information.)

ASSE 1070



Use

The Caleffi SinkMixer anti-scald thermostatic mixing valve is intended for use in under sink and under counter applications in accordance with installation rules and indications specified in ASSE 1070 standards.

The system must be sized taking into account local codes with regard to the nominal flow rate of each outlet.

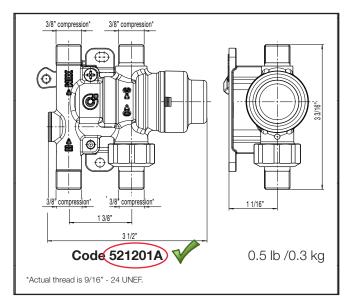
The SinkMixer is used to prevent accidental scalding with the outlet water temperature properly adjusted using a thermometer at the faucet to measure the desired temperature.

Technical specifications Materials:

Valve body, regulating spindle, spring holder, cold inlet union nut:

forged low-lead brass (< 0.25% lead content)
polysulfone
Hot inlet strainer:
Spring:
Seals:
Cover:
Mounting bracket and adjustment key:
AlSI 304 stainless steel
AlSI 302 stainless steel
Peroxide-cured EPDM
Cover:
ABS white
Polyamide Nylon

Dimensions



Performance

Temperature adjustment range: Temperature set:

must be commissioned on site to achieve desired temperature Temperature stability: $\pm 3^{\circ}\text{F (}\pm 2^{\circ}\text{C)}$

Cold inlet temperature: Minimum 39°F (4°C); Maximum 85°F (29°C) Hot inlet temperature: Minimum 120°F (49°C); Maximum 195°F (90°C)

Maximum operating differential pressure:

Static: 150 psi (10 bar); Dynamic: 70 psi (5 bar) Minimum operating differential pressure (dynamic): 1.5 psi (0.1 bar) Maximum unbalanced dynamic supply (hot/cold or cold/hot): 2:1 Minimum temperature differential between hot water inlet and mixed

water outlet to ensure thermal shutoff function: 18°F (10°C) Minimum temperature differential between mixed water outlet and cold water inlet to ensure stable operation: 9°F (5°C) Flow coefficient: Cv = 0.52 (Kv=0.45)

Minimum flow rate for optimum operation:

Maximum flow rate for optimum operation:

0.35 gpm (1.3 l/min)

2.3 gpm (8.5 l/min)

Connections

Main connections: 3/8" compression

Certifications

- 1. ASSE 1070/CSA B125.3-2012, certified by ICC-ES, file PMG-1358.
- NSF/ANSI 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, certified by ICC-ES, file PMG-1360.
- 3. Complies with codes IPC, IRC, UPC and NPC.

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system.

Job name	Size
Job location	Quantity
Engineer	Approval
Mechanical contractor	Service
Contractor's P.O. No.	Tag No.
Representative	Notes

BASKET STRAINERS



PREMIUM BRASS COLLECTION

PF151CP

For 3-1/2" diameter opening Solid forged brass body Adjustable post brass basket 8mm rubber locknut washer Solid brass locknut & slip nut



PF151ACP

For 3-1/2" diameter opening
Solid forged brass body
Adjustable post brass basket
Includes 1-1/2" x 4" chrome plated
20 gauge tailpiece
8mm rubber locknut washer
Solid brass locknut & slip nut



PF250PC/PF250BRCP

For 3-1/2" diameter opening
Solid brass body with deep cut threads
Fixed post stainless steel basket
mm rubber locknut washer
Die cast locknut & slip nut
*PF250BRCP includes solid
brass locknut & slip nut



STAINLESS STEEL COLLECTION

PF1432SS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with locking shell
Long shank with deep cut threads
Fixed post stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut

PF1433SS/PF1433BRSS

For 3-1/2" diameter opening Stainless steel threaded deep body Turn to close stainless steel basket 8mm rubber locknut washer Die cast locknut & slip nut *PF1433BRSS includes Brass locknut & slip nut

PF1434SS/PF1434BRSS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with
locking shell
Long shank with deep cut threads
Power Ball lock stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut
*PF1434BRSS includes Brass
locknut & slip nut

PF646443

For 3-1/2" diameter opening
Stainless steel body
Fixed post stainless steel basket (spring style)
8mm rubber locknut washer
Thumb screw locknut & ring
with three screws
Brass slip nut

PF647003

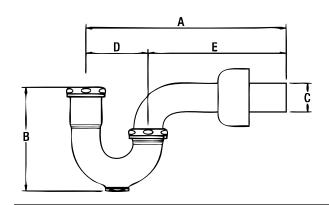
For 3-1/2" diameter opening Stainless steel threaded deep body Fixed post stainless steel basket 8mm rubber locknut washer Die cast wide locknut & slip nut

www.PROFLO.com

All Stainless Steel Baskets & Bodies are made from high quality Stainless Steel grade 430.



Adjustable Tubular P-Traps





PFPTB101

Model Numbber	Desc	Cleanout	Dimension (inch)				Cours	Others			Certificate	
Model Nullipper	Desc	Y/N	Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Germicate
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





Low LeadLavatory Supply Kits



Product Features

- Low lead brass body
- Low lead brass stem
- cUPC approved
- Certified to NSF 372 requirements
- Flexible chrome plated copper risers with chrome plated steel deep flanges and chrome plated stops

Model Numbers (*For use copper tube only)

Lavatory Supply Kits

PFXCAC32CL12* LF CP 5/8 comp X 3/8 comp lav kit

PFXCAC32CLKL12* LF CP 5/8 comp X 3/8 lav sply kit loose key PFXCAS32CL12* LF CP 1/2 SWT X 3/8 comp lav sply kit

PFXCAS32CLKL12* LF CP 1/2 SWT X 3/8 comp lav sply kit loose key

PFXCAZ32CL12 LF CP 1/2 SWT EXT X 3/8 lav sply kit

PFXCAZ32CLKL12 LF CP 1/2 SWT EXT X 3/8 comp lav sply kit loose key

PFXCAT22CL12 LF CP 3/8 IPS X 3/8 comp lav sply kit

PFXCAT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

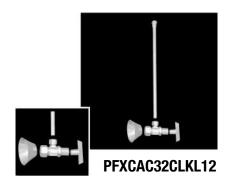
PFXCAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

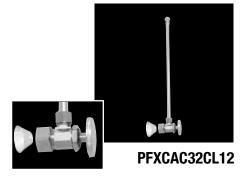
PFXCAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key

Operating pressure 125psi maximum

• Operating temperature 40°F-160°F







Heavy Duty Lavatory Supply Kits

PFXHAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXHAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key
PFXHAT33CLKL12 LF CP 1/2 IPS X 1/2 comp lav sply kit loose key
PFXHATT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05





PF200 Series

Trap Covers



Product Features

- ADA & UFAS Compliant
- No tools required contractor friendly Tear-To-Fit feature makes trimming fast
- Universal design fits virtually all lavatory applications
- Smooth, flush SnapClip[™] fasteners firmly secure piping covers in place and are nonabrassive and reusable
- · Antimicrobial vinyl maintain sanitary conditions
- Lock Lid[™] on valve stops tampering and allows service
- Cleanout nut cap allows service on trap without disassembly
- Internal ribs enhance K valve and soften impact cushioning
- Fire retardant

Model Numbers

PF200WH	PF202WH	PF205WH	PFEXT200WH
PF201WH	PF203WH	PF299WH	

Material	Soft, resilient molded vinyl
Nominal Wall	1/8" constant with internal ribs
Durometer	70-80 – Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming	E-Z Tear-To-Fit trim feature (no tools needed)
Fasteners	Internal E-Z Grip fasteners, reusable
Color	China white
Compatibility	Fits all 1-1/4" or 1-1/2" cast brass or tubular P-trap assemblies and 3/8" or 1/2" angle stop assemblies
Paintability	Apply latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) mm (AEB)
Bacterial/Fungus Resistance	ASTM G21 and G22 – Result: 0 growth
Maintenance	Wipe clean using common detergents

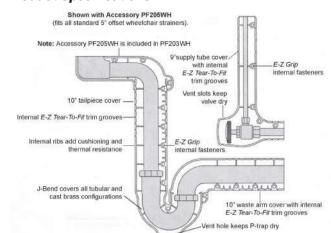
New E-Z Tear-To-Fit feature and E-Z Grip built-in fasteners make installation fast and easy!

- Tear-To-Fit on internal, dimensioned tear lines for quick, clean, accurate trimming to fit virtually any piping configuration. Covers flex to install over pipes.
- Press seams together at finger recesses to engage E-Z Grip internal fasteners for a secure, safe, tamper-resistant installation. To remove cover, firmly pull seam apart using a strong grip. To reinstall, press seams back together.



Product Specifications

PF201WH



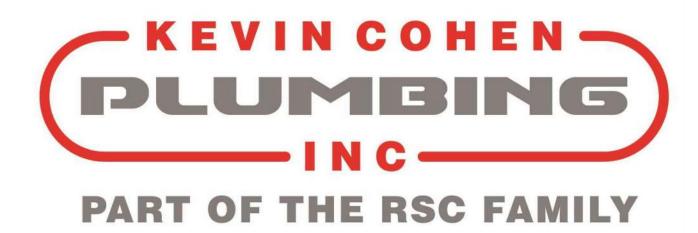
PF200WH	one P-trap cover
PF201WH	one P-trap cover, one angle valve and supply
	cover
PF202WH	one P-trap cover, two angle valves and supply covers
PF203WH	one P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover
PF299WH	one angle valve and supply cover
ACCESSORIES	
PF205WH	one 5" offset tailpiece wheelchair strainer assembly
EXTENSIONS	
PFEXT200WH	one 16" extension for drain waste or tailpiece
	· · · · · · · · · · · · · · · · · · ·

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. This product meets ADA article 4.19.4; CABO/ANSI 4.20.4; UFAS 4.19.4; California Title 24; UPC/IAPMO ICC; Canada Barrier-Free Code. Made in USA.







L-2 Lavatory

PF5514/PF5518 Wall Hung Lavatories



Product Features

- 20" x 18" Wall hung lavatory
- Available with 4" and 8" faucet drillings
- ADA compliant
- · High back splash
- Concealed arm carrier connection (arm carriers not included)
- Wall mount bracket included
- Concealed front overflow



PF5518WH

Color Specifications

White

Model Numbers

PF5511WH

20" x 18" single hole lavatory, white

PF5514WH 20" x 18" 3 hole,

4" centerset lavatory, white

PF5518WH 20" x 18" 3 hole,

8" widespread lavatory, white

Available Parts

PFWMBKT Replacement wall mount bracket

Warranty and Codes

These products come complete with installation, operating, care and maintenance instructions. All PROFLO fixtures carry a 1-year limited warranty. In an effort to continually improve our products, FEI will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise. This product meets or exceeds ASME/ANSI A112.19.2M.







PF5514/PF5518 Wall Hung Lavatories



Product Features

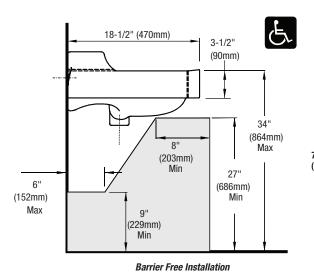
The wall mount lavatory shall be 20" x 18". Lavatory shall be made of vitreous china. Lavatory shall have 8" centers (PF5518), or 4" centers (PF5514). Lavatory shall include overflow.

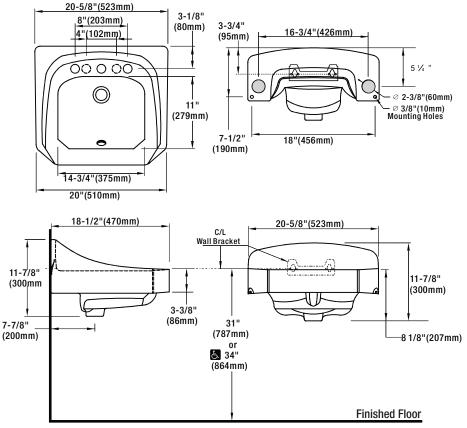
Nominal Dimensions:

20-5/8" x 18-1/2" (532mm x 470mm)

Bowl Size:

14-3/4" (375mm) wide 11" (279mm) front to back 6-1/8" (156mm) deep







(General Model Name: SF2400 CP FCT PED 4"TRIM PL HW W/BATTERY)

CODE NUMBER

3362130

DESCRIPTION

4" Trim Plate, Plug Adapter Power Supply, Back-Check Tee, Polished Chrome Finish, 0.5 gpm, Multi-Laminar Spray, Infrared Sensor, Sloan® Hardwired-Powered Deck-Mounted Mid Body Faucet.

DETAILS

Flow Rate: 0.5 gpm (2 Lpm) (0.5GPM)
Spray Type: Multi-Laminar (MLM)

Spout Type: Pedestal
Sensor Type: Infrared (IR)
Mounting Type: Single Hole
Trim Plate: 4" (102mm) (4)
Power Supply: Plug Adapter (PLG)

• Temperature Mixer: Back-Check Tee (TEE)

Finish: Polished Chrome (CP)
 Factory Default Timeout: 30s
 Factory Default GPC: 0.25

FEATURES

Commercial Grade, ADA Compliant, Electronic, Sensor-Activated, Brass Pedestal Hand Washing Faucet with the following features:

- Adjustable Infrared Sensor Range
- 36" (914 mm) Long Sensor Cable
- 24" (610 mm) Long Flex Hose
- Filtered Solenoid Valve with serviceable Strainer Filter
- Includes Four (4) AA-size Batteries for Battery Backup
- Includes appropriate Mounting Hardware

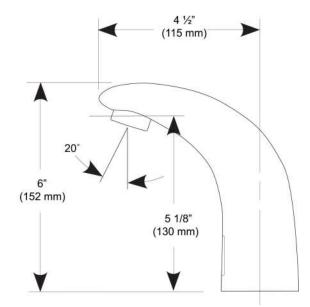
ELECTRICAL SPECIFICATIONS

- Battery Life: 2 years 8,000 cycles/month
- Sensor Range: 4"-12" (102-305mm)
- Timeout Adjustment Settings: 30s

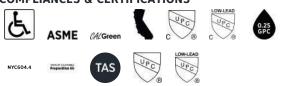
DOWNLOADS

- SF Series Installation Instructions
- SF Series (FR) Installation Instructions
- SF Series (SP) Installation Instructions
- SFP 35-A Installation Instructions
- Trim Plate Guide
- Sloan 2400/2450 Repair and Maintenance Guide
- Additional Downloads





COMPLIANCES & CERTIFICATIONS



(ADA Compliant, ASME A112.18.1 Compliant, CalGreen Compliant, CEC Compliant, cUPC Certified, cUPC Low Lead Compliant, GPC 0.25 or less, NYC604.4, Proposition 65, TAS, UPC Certified, UPC Low Lead Compliant)

NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the SF-2400 product? View the general spec sheet with all options.

Find a matching soap dispenser for this faucet. Find a compatible sink for this faucet.

Sloan 10500 Seymour Ave, Franklin Park, IL 60131

Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com

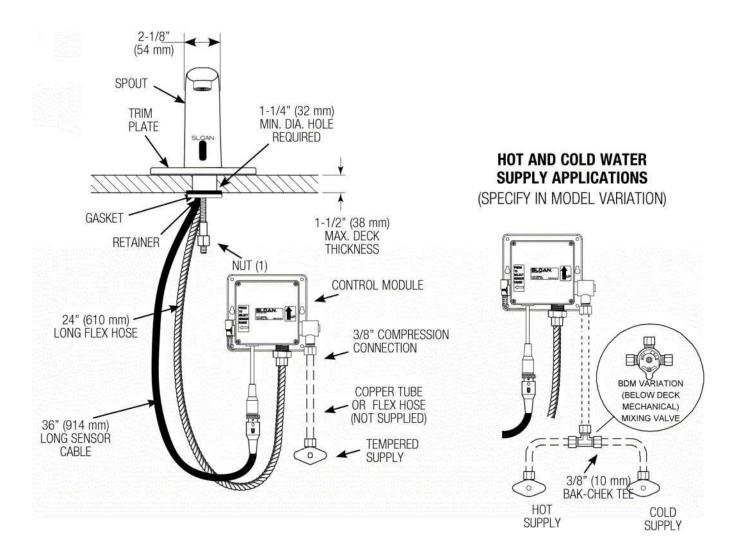


(General Model Name: SF2400 CP FCT PED 4"TRIM PL HW W/BATTERY)

WARRANTY

1 Year

ROUGH-IN



SinkMixer[™] Scald Protection Thermostatic mixing valve



95-120°F (35-50°C)

Submittal Data 03706 NA — Issue Date 01/2020

Application

The Caleffi SinkMixer™ provides water at a safe and usable temperature in situations where the control of the temperature of the water discharging from a terminal fixture is of the utmost importance, i.e. within hospitals, schools, nursing homes, etc. The SinkMixer is used in under sink and under counter applications where the user must be protected from the danger of scalding caused by hot water.

The valve is designed to prevent the flow of water discharging from the mixed water outlet in the event of the failure of hot or cold supply. The compact design provided with mounting bracket allows for easy installation. The cold water outlet to the fixture eliminates the need for additional piping and tee used with three-port mixing valves. The valve is complete with check valves on the hot and cold inlets and meets certification requirements for the Low Lead Plumbing Laws by ICC-ES, ASSE 1070 listed (temperature cannot exceed 120°F).

Typical Specification

Furnish and install on the plans described herein, a SinkMixer™ scald protection point of use four port thermostatic mxing valve as manufactured by Caleffi. Each mixing valve must be designed with a forged low-lead brass body, AISI 302 stainless steel spring, AISI 304 stainless steel hot inlet strainers, seals in peroxide-cured EPDM, and polysulphone shutter. Each valve must also be designed for ±3°F (±2°C) temperature stability with a tamper proof setting lock to lock the temperature at the set value. Provided with inlet port check valves and strainers. The valve shall be ASSE 1070 approved for point of use installation. Forged low-lead brass body (<0.25% Lead content) shall be certified by ICC-ES, file 1360. Meets requirements of ANSI/NSF 372. Each valve shall be Caleffi model 521201A or approved equal. (See product instructions for specific installation information.)

ASSE 1070



Use

The Caleffi SinkMixer anti-scald thermostatic mixing valve is intended for use in under sink and under counter applications in accordance with installation rules and indications specified in ASSE 1070 standards.

The system must be sized taking into account local codes with regard to the nominal flow rate of each outlet.

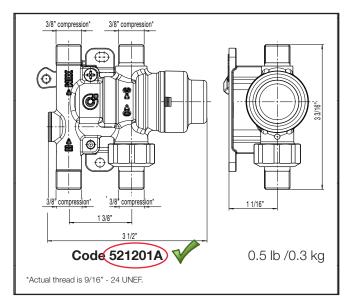
The SinkMixer is used to prevent accidental scalding with the outlet water temperature properly adjusted using a thermometer at the faucet to measure the desired temperature.

Technical specifications Materials:

Valve body, regulating spindle, spring holder, cold inlet union nut:

forged low-lead brass (< 0.25% lead content)
polysulfone
Hot inlet strainer:
Spring:
Seals:
Cover:
Mounting bracket and adjustment key:
AlSI 304 stainless steel
AlSI 302 stainless steel
Peroxide-cured EPDM
Cover:
ABS white
Polyamide Nylon

Dimensions



Performance

Temperature adjustment range: Temperature set:

must be commissioned on site to achieve desired temperature Temperature stability: $\pm 3^{\circ}\text{F (}\pm 2^{\circ}\text{C)}$

Cold inlet temperature: Minimum 39°F (4°C); Maximum 85°F (29°C) Hot inlet temperature: Minimum 120°F (49°C); Maximum 195°F (90°C)

Maximum operating differential pressure:

Static: 150 psi (10 bar); Dynamic: 70 psi (5 bar) Minimum operating differential pressure (dynamic): 1.5 psi (0.1 bar) Maximum unbalanced dynamic supply (hot/cold or cold/hot): 2:1 Minimum temperature differential between hot water inlet and mixed

water outlet to ensure thermal shutoff function: 18°F (10°C) Minimum temperature differential between mixed water outlet and cold water inlet to ensure stable operation: 9°F (5°C) Flow coefficient: Cv = 0.52 (Kv=0.45)

Minimum flow rate for optimum operation:

Maximum flow rate for optimum operation:

0.35 gpm (1.3 l/min)

2.3 gpm (8.5 l/min)

Connections

Main connections: 3/8" compression

Certifications

- 1. ASSE 1070/CSA B125.3-2012, certified by ICC-ES, file PMG-1358.
- NSF/ANSI 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, certified by ICC-ES, file PMG-1360.
- 3. Complies with codes IPC, IRC, UPC and NPC.

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system.

Job name	Size
Job location	Quantity
Engineer	Approval
Mechanical contractor	Service
Contractor's P.O. No.	Tag No
Representative	Notes

BASKET STRAINERS



PREMIUM BRASS COLLECTION

PF151CP

For 3-1/2" diameter opening Solid forged brass body Adjustable post brass basket 8mm rubber locknut washer Solid brass locknut & slip nut



PF151ACP

For 3-1/2" diameter opening
Solid forged brass body
Adjustable post brass basket
Includes 1-1/2" x 4" chrome plated
20 gauge tailpiece
8mm rubber locknut washer
Solid brass locknut & slip nut



PF250PC/PF250BRCP

For 3-1/2" diameter opening
Solid brass body with deep cut threads
Fixed post stainless steel basket
mm rubber locknut washer
Die cast locknut & slip nut
*PF250BRCP includes solid
brass locknut & slip nut



STAINLESS STEEL COLLECTION

PF1432SS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with locking shell
Long shank with deep cut threads
Fixed post stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut

PF1433SS/PF1433BRSS

For 3-1/2" diameter opening Stainless steel threaded deep body Turn to close stainless steel basket 8mm rubber locknut washer Die cast locknut & slip nut *PF1433BRSS includes Brass locknut & slip nut

PF1434SS/PF1434BRSS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with
locking shell
Long shank with deep cut threads
Power Ball lock stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut
*PF1434BRSS includes Brass
locknut & slip nut

PF646443

For 3-1/2" diameter opening
Stainless steel body
Fixed post stainless steel basket (spring style)
8mm rubber locknut washer
Thumb screw locknut & ring
with three screws
Brass slip nut

PF647003

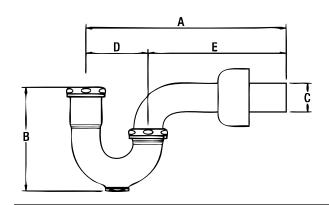
For 3-1/2" diameter opening Stainless steel threaded deep body Fixed post stainless steel basket 8mm rubber locknut washer Die cast wide locknut & slip nut

www.PROFLO.com

All Stainless Steel Baskets & Bodies are made from high quality Stainless Steel grade 430.



Adjustable Tubular P-Traps





PFPTB101

Model Numbber	Desc	Cleanout		Dime	nsion (i	nch)		Cours		Others	Certificate	
Model Nullipper	Desc	Y/N	Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Cermicale
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





Low LeadLavatory Supply Kits



Product Features

- Low lead brass body
- Low lead brass stem
- cUPC approved
- Certified to NSF 372 requirements
- Flexible chrome plated copper risers with chrome plated steel deep flanges and chrome plated stops

Model Numbers (*For use copper tube only)

Lavatory Supply Kits

PFXCAC32CL12* LF CP 5/8 comp X 3/8 comp lav kit

PFXCAC32CLKL12* LF CP 5/8 comp X 3/8 lav sply kit loose key PFXCAS32CL12* LF CP 1/2 SWT X 3/8 comp lav sply kit

PFXCAS32CLKL12* LF CP 1/2 SWT X 3/8 comp lav sply kit loose key

PFXCAZ32CL12 LF CP 1/2 SWT EXT X 3/8 lav sply kit

PFXCAZ32CLKL12 LF CP 1/2 SWT EXT X 3/8 comp lav sply kit loose key

PFXCAT22CL12 LF CP 3/8 IPS X 3/8 comp lav sply kit

PFXCAT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

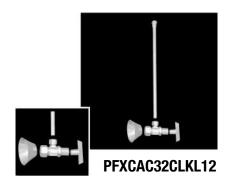
PFXCAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

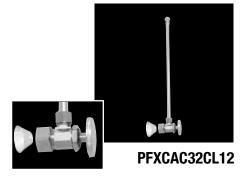
PFXCAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key

Operating pressure 125psi maximum

• Operating temperature 40°F-160°F







Heavy Duty Lavatory Supply Kits

PFXHAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXHAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key
PFXHAT33CLKL12 LF CP 1/2 IPS X 1/2 comp lav sply kit loose key
PFXHATT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05





PF200 Series

Trap Covers



Product Features

- ADA & UFAS Compliant
- No tools required contractor friendly Tear-To-Fit feature makes trimming fast
- Universal design fits virtually all lavatory applications
- Smooth, flush SnapClip[™] fasteners firmly secure piping covers in place and are nonabrassive and reusable
- · Antimicrobial vinyl maintain sanitary conditions
- Lock Lid[™] on valve stops tampering and allows service
- Cleanout nut cap allows service on trap without disassembly
- Internal ribs enhance K valve and soften impact cushioning
- Fire retardant

Model Numbers

PF200WH	PF202WH	PF205WH	PFEXT200WH
PF201WH	PF203WH	PF299WH	

Material	Soft, resilient molded vinyl
Nominal Wall	1/8" constant with internal ribs
Durometer	70-80 – Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming	E-Z Tear-To-Fit trim feature (no tools needed)
Fasteners	Internal E-Z Grip fasteners, reusable
Color	China white
Compatibility	Fits all 1-1/4" or 1-1/2" cast brass or tubular P-trap assemblies and 3/8" or 1/2" angle stop assemblies
Paintability	Apply latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) mm (AEB)
Bacterial/Fungus Resistance	ASTM G21 and G22 – Result: 0 growth
Maintenance	Wipe clean using common detergents

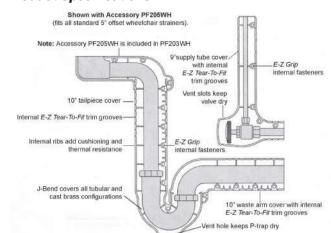
New E-Z Tear-To-Fit feature and E-Z Grip built-in fasteners make installation fast and easy!

- Tear-To-Fit on internal, dimensioned tear lines for quick, clean, accurate trimming to fit virtually any piping configuration. Covers flex to install over pipes.
- Press seams together at finger recesses to engage E-Z Grip internal fasteners for a secure, safe, tamper-resistant installation. To remove cover, firmly pull seam apart using a strong grip. To reinstall, press seams back together.



Product Specifications

PF201WH



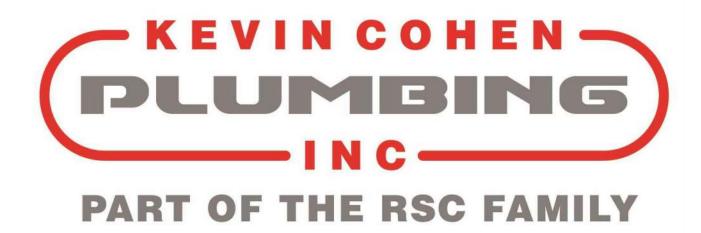
PF200WH	one P-trap cover								
PF201WH	one P-trap cover, one angle valve and supply								
	cover								
PF202WH	one P-trap cover, two angle valves and supply covers								
PF203WH	one P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover								
PF299WH	one angle valve and supply cover								
ACCESSORIES									
PF205WH	one 5" offset tailpiece wheelchair strainer assembly								
EXTENSIONS									
PFEXT200WH	one 16" extension for drain waste or tailpiece								

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. This product meets ADA article 4.19.4; CABO/ANSI 4.20.4; UFAS 4.19.4; California Title 24; UPC/IAPMO ICC; Canada Barrier-Free Code. Made in USA.







Lavatory Carrier

DRAWING NUMBEF

SUPERSEDED OR VOID DATA

Р USE

WE CAN ASSUME NO RESPONSIBILITY FOR

TOLERANCE AND CHANGE WITHOUT NOTICE

DIMENSIONS ARE SUBJECT TO MANUFACTURERS

UMBER

2-20-85

DATE:

APPROVED BY

SJM CHECKED BY

DRAWN BY

LAVATORY SUPPORTS WITH CONCEALED ARMS

FLOOR MOUNTED WITH "PRO-SET" UPRIGHTS

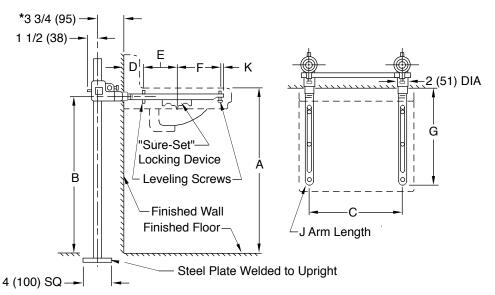
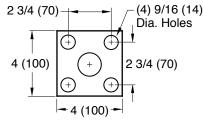


Fig. 0700 . . . FOR HIGH BACK LAVATORIES (shown)

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

NOTE: Dimensions shown in parentheses are in millimeters.



BASE DETAIL

ROUGHING-IN TABLE

FIXTURE MFG.	NAME	NUMBER	SIZE	Α	В	С	D	E	F	G	J	K
AM. STD.	LUCERNE	0355.012	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.015	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.421	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	LUCERNE	0356.439	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 3/4 (425)	4 (100)	6 (150)	6 (150)	16 1/2 (420)	19 (485)	1/2 (13)
AM. STD.	MURRO	0954.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
AM. STD.	MURRO	0955.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
AM. STD.	MURRO	0958.000	22 (560) x 21 (535)	34 (865)	32 3/8 (823)	16 3/4 (425)	4 (100)	6 (150)	4 (100)	14 1/2 (370)	17M (430)	1/2 (13)
CRANE	HARWICH	1-412	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 1/4 (415)	4 (100)	5 5/8 (143)	4 3/8 (111)	16 1/2 (420)	18 (455)	2 1/2 (64)
ELJER	DELWYN	051-1634, 1838	18 (455) x 15 (380)	31 (785)	29 1/4 (745)	15 1/2 (395)	3 (76)	5 (125)	4 3/4 (120)	13 1/2 (345)	17M (430)	3/4 (19)
ELJER	SIGNATURE	051-2101, 4, 8	20 (510) x 18 (455)	34 (865)	32 (815)	17 (430)	4 (100)	5 5/8 (143)	5 5/8 (143)	15 3/4 (400)	18 (455)	1/2 (13)
KOHLER	GREENWICH	K-2030, 1, 2, 4, 6	20 (510) x 18 (455)	31 (785)	29 (735)	17 1/4 (440)	3 1/4 (83)	5 1/4 (135)	5 1/4 (135)	14 1/4 (360)	16 (405)	1/2 (13)
KOHLER	SOHO	K-2053, 4	20 (510) x 18 (455)	31 (785)	29 1/4 (745)	16 1/2 (420)	3 1/4 (83)	5 1/4 (135)	5 1/4 (135)	14 1/4 (360)	17M (430)	1/2 (13)
U. RUNDLE	NEW CAMDEN	4648, 9	20 (510) x 18 (455)	31 (785)	29 3/8 (746)	16 1/4 (415)	4 1/2 (115)	2 1/2 (64)	4 (345)	13 1/2 (345)	16 (405)	2 1/2 (64)

*NOTE: This dimension can be increased when fixture support is to be installed behind the wall. (Specify when required and wall thickness).

っェG	11/23/05	Updated Drawing Revised Roughing-in Table Revised Roughing-in Table	11 11 11	CL CL	_	VOLUME CUBIC FEET	FIGURE NUMBER 0700
REV.	DATE	DESCRIPTION	BY	CKD. BY			0,00

S0700 INS

4

NONE

8-8-85

SUPERSEDED

NO RESPONSIBILITY FOR USE OF

WE CAN ASSUME

NOTICE

WITHOUT

AND CHANGE

UMBER

MONTGOMERY, ALABAMA 36109-0237 (USA) TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith



LOCATION

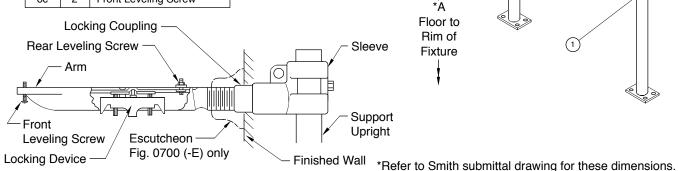
INSTALLATION INSTRUCTIONS FOR CONCEALED ARM CARRIERS

BEFORE starting rough-in be certain you:

- a) know correct fixture number and name
- b) have a copy of Smith submittal (rough-in) drawing with dimensions for fixture to be used.

NOTE: The rough-in dimensions listed on this drawing are based on current information available to Jay R. Smith by the fixture manufacturers. We recommend that you verify these dimensions with the fixture manufacturer. We will not accept responsibility for rough-in dimension changes by the fixture manufacturer.

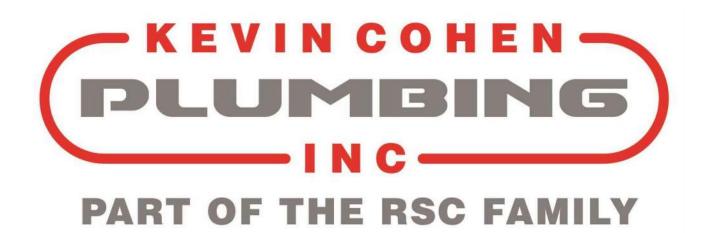
PART	QTY	DESCRIPTION
1	2	Upright (w/welded base)
2	2	Sleeve Assembly
3	1	Alighnment Bar
4	2	Locking Coupling
5	2	Escutcheon Fig. 0700 (-E)
6	2	Arm Assembly
6a	2	Rear Leveling Screw Assy
6b	2	Locking Device
6c	2	Front Leveling Screw



INSTALLATION INSTRUCTIONS FOR CONCEALED ARM CARRIERS

- 1. Uprights (Part #1) must be spaced according to the "C" dimension (shown on the submittal drawing). Uprights should not be bolted rigidly to the floor at this time.
- 2. Position sleeves (Part #2) by using the "B" dimension (shown on the submittal drawing). Secure to uprights with 5/16 (8)-18 hex head bolts (furnished) on the back of the sleeve.
- 3. Slide alignment bar (Part #3) into the sleeves. Recheck the "C" dimension at the center of the uprights. Secure the alignment bar with 5/16 (8) hex head bolts (furnished). Uprights should now be bolted securely to the floor. Uprights must be plumb: if necessary, shim to compensate for uneven floors.
- 4. Thread escutcheon (Part #5), Fig. 0700 (-E) only onto arm (Part #6). Thread locking coupling (Part #4) onto arm. Thread arms into sleeves (Part #2) to dimension "G" (shown on the submittal drawing). Lock arms in place by tightening locking coupling (Part #4). Recheck "C" dimension at the end of the arms.
- 5. Rear leveling screw assemblies (Part #6a) must be set according to the "D" dimension (shown on the submittal drawing). Position the locking devices (Part #6b) to the "E" dimension (shown on the submittal drawing). Install the front leveling screws (Part #6c) to the "E" dimension (shown on the submittal
- 6. Level lavatory with leveling screws as required and secure in place with locking device.

FEDC		Revised Callouts Updated Drawing Revisied Submittal Revised Base Plate	TBW JJ RN JJ	CL CL BS	WEIGHT POUNDS	VOLUME FIGURE CUBIC FEET 070	NUMBER 0, 0700 (-E)
REV.	DATE	DESCRIPTION	BY	CKD. BY		I <mark>NSTAL</mark> I	ATION INSTRUCTIONS



S-1 Sink

PFSR33228 Series

Bealeton Stainless Steel Sinks



18 gauge specified, 20

gauge is not equal.

- Product Features
- 20 gauge stainless steel
- Self-rimming
- Available with 3 or 4 faucet holes
- · Sink clips included
- Overall size 33" X 22"
- Bowl size 14" X 16"

- . Bowl depth:8"
- Drain diameter: 3-1/2
- . Minimum cabinet size: 36"
- Under spray coating and pads for sound deadening and insulation

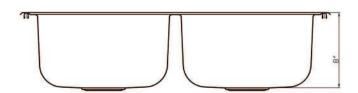


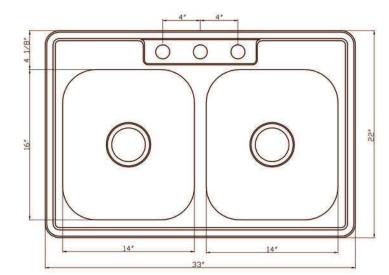
PFSR332283A

Model Numbers

PFSR332283A 33X22 3H 8.0 20 GA 2B SS SINK PFSR332284A 33X22 4H 8.0 20 GA 2B SS SINK

Product Specifications





*All measurements are nominal.Please verify before actual installation.

Warranty and Codes

This PROFLO stainless steel sink carries a limited lifetime warranty. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless it is agreed in writing to do otherwise.

Sink complies with ASME A112.19.3-2008 / CSA B45.4-08.



PFXU308

Two Handle Commercial Widespread Faucet



Product Features

- Heavy duty 6"-16" cast brass undermount faucet
- Flow rate: 1.5 GPM aerator
- Non-swivel spout
- ADA wrist blade handles with color indexed caps
- Ceramic disc cartridges with brass stems
- Polished chrome
- Complies with ASME:A112.18.1-2011/CSA:B125.1-11
- NSF61 compliant
- cUPC/IAPMO Listed



Available Parts

PF654509 Cold lever handle kit Hot lever handle kit PF654510 Cold cartridge PF654512 Hot cartridge PF654513 **Spout** PF654515 PF654516 Aerator Coupling nut kit PF654519 PF654524 Water way Canopy W/O'ring kit PF654527

spout specified. Recommend using common escutcheon fauget per specs to provide a less flexible installation.

Certainly with the submitted 20 gauge

sink this would not be acceptable.

6"~16"(152mm~406mm)

Optional Accessories

3-3/4"(95mm) PFXAER05 0.5 GPM Aerator insert Canopy O.D. PFXSPT8 Spout assembly with 8" reach 6-1/2"(165mm) Lock nut O.D. 7"(178mm) 2-1/4"(58mm) Shanks 0 D

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO faucet carries a limited lifetime warranty when installed in residential applications. The warranty is five years in commercial applications. This product meets ASME: A112.18.1-2011 *Compliant with lead content requirements of US Senate Bill S.3874



1-1/8"(28mm)





RFXU308

5-1/2"(140mm)

BASKET STRAINERS



PREMIUM BRASS COLLECTION

PF151CP

For 3-1/2" diameter opening Solid forged brass body Adjustable post brass basket 8mm rubber locknut washer Solid brass locknut & slip nut



PF151ACP

For 3-1/2" diameter opening
Solid forged brass body
Adjustable post brass basket
Includes 1-1/2" x 4" chrome plated
20 gauge tailpiece
8mm rubber locknut washer
Solid brass locknut & slip nut



PF250PC/PF250BRCP

For 3-1/2" diameter opening
Solid brass body with deep cut threads
Fixed post stainless steel basket
mm rubber locknut washer
Die cast locknut & slip nut
*PF250BRCP includes solid
brass locknut & slip nut



STAINLESS STEEL COLLECTION

PF1432SS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with locking shell
Long shank with deep cut threads
Fixed post stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut

PF1433SS/PF1433BRSS

For 3-1/2" diameter opening Stainless steel threaded deep body Turn to close stainless steel basket 8mm rubber locknut washer Die cast locknut & slip nut *PF1433BRSS includes Brass locknut & slip nut

PF1434SS/PF1434BRSS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with
locking shell
Long shank with deep cut threads
Power Ball lock stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut
*PF1434BRSS includes Brass
locknut & slip nut

PF646443

For 3-1/2" diameter opening
Stainless steel body
Fixed post stainless steel basket (spring style)
8mm rubber locknut washer
Thumb screw locknut & ring
with three screws
Brass slip nut

PF647003

For 3-1/2" diameter opening Stainless steel threaded deep body Fixed post stainless steel basket 8mm rubber locknut washer Die cast wide locknut & slip nut

www.PROFLO.com

All Stainless Steel Baskets & Bodies are made from high quality Stainless Steel grade 430.



Food Waste Disposers

STANDARD SERIES

Badger[®] 5 ✓



- 1/2 Horsepower Heavy Duty Motor (Quiet Dura-Drive® Induction Motor)
- We Come To You® 3-Year
- Rugged Galvanized Steel Construction (For Disposer Durability)
- Space-Saving Compact Design

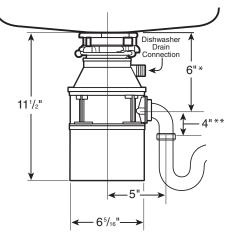


Submittal Sheet

This popular model offers the following features and benefits:

In-Home Limited Warranty

Dimensions



- Distance from bottom of sink to center line of disposer outlet. Add 1/2" when stainless steel sinks are used.
- Length of tailpipe from center line of disposer outlet to end of tailpipe.

Sample Specification

Food Waste Disposer(s) shall be InSinkErator Badger® 5, continuous feed, with 1/2 H.P. motor, galvanized steel grinding elements with two stainless steel 360° swivel lugs. Self-service wrench.

Available with or without a factory installed power cord

- 3-Year parts and in-home service.
- * The complete InSinkErator warranty is included in the Care & Use Booklet packed with each unit.

Specifications

Type of Feed	Continuous
On/Off Control	Wall Switch
Motor	Single Phase
HP	1/2
Volts	120
HZ	60
RPM	1725
Amp. (Avg. Load)	6.3
Time Rating	Intermittent
Lubrication	Permanently Lubricated Upper & Lower Bearings
Shipping Weight (Approx.)	13 lbs. 10 oz. (without cord) 13 lbs. 14 oz. (with cord)
Unit Finish	Condor Grey
Overall Height	11-1/2"
Grind Chamber Capacity	26 oz.
Motor Protection	Manual Reset Overload
Average Water Usage	Approx. 1 Gallon per Person Per Day
Average Electrical Usage	3-4 KWh per Year
Drain Connection	1-1/2" Cushioned Slip Joint
Dishwasher Drain Connection	Yes
Factory Installed Power Cord	Available withor without



Food waste is roughly 80% water. By using your disposal regularly, you can help divert food waste from landfills and reduce greenhouse gas emissions. Make sustainability a family affair by using your disposal. After all, the smallest changes can make the biggest impact.

Job Specifications

The Badger is not equal to the Evolution specified.







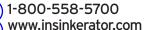






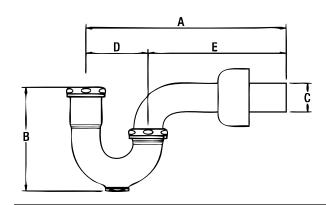
The Emerson logo is a trademark and service mark of Emerson Electric Co. The mounting collar configuration is a trademark of Emerson Electric Co.

InSinkErator may make improvements and/or changes in the specifications at any time, in its sole discretion, without notice or obligation and further reserves the right to change or discontinue models





Adjustable Tubular P-Traps





PFPTB101

Madal Numbbar	Desc	Cleanout		Dime	nsion (i	nch)		Cours		Cautitianta		
Model Numbber	Desc	Y/N	Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Certificate
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





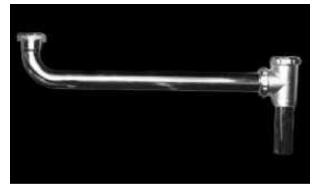
PFEWB100 Series



Brass End Outlet Waste

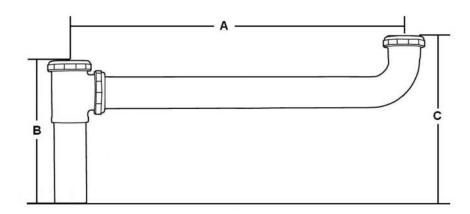
Product Features

- 1-1/2" End Outlet Waste
- 16" or 21" Waste Arm
- Slip Joint / Direct Connect Connection
- Material: 17/20/22 GA Brass Tube



PFEWB100

✓ For	Model				Dimer	nsions						
Submittal		Description	A	1	В		C		Gauge	Connection	Finish	Nuts
Subillittai	Nullibei		in	mm	in	mm	in	mm				
	PFEWB100	1-1/2X16 End Outlet Waste w/ Baffle Tee	16	406.4	6 3/4	171.5	8 1/8	206.4	17	Slip Joint	Chrome	Brass
	PFEWB101	1-1/2X21 End Outlet Waste	21	533.4	6 3/4	171.5	8 1/8	206.4	20	Slip Joint	Chrome	Zinc
	PFEWB102	1-1/2X21 End Outlet Waste	21	533.4	6 3/4	171.5	8 1/8	206.4	17	Slip Joint	Chrome	Zinc
~/>	PFEWB103	1-1/2X16 End Outlet Waste	16	406.4	7 3/8	187.3	7	177.8	20	Direct Connect	Chrome	Zinc
	PFEWB104	1-1/2X16 End Outlet Waste	16	406.4	6 3/4	171.5	8 1/8	206.4	20	Slip Joint	Chrome	Zinc
	PFEWB105	1-1/2X16 End Outlet Waste	16	406.4	7 3/8	187.3	7	177.8	17	Direct Connect	Chrome	Zinc
	PFEWB106	1-1/2X16 End Outlet Waste	16	406.4	6 3/4	171.5	8 1/8	206.4	17	Slip Joint	Chrome	Zinc
	PFEWB107	1-1/2X16 End Outlet Waste w/ Baffle Tee	16	406.4	6 3/4	171.5	8 1/8	206.4	20	Slip Joint	Chrome	Zinc
	PFEWB108	1-1/2X16 End Outlet Waste w/ Baffle Tee	16	406.4	6 3/4	171.5	8 1/8	206.4	20	Slip Joint	Rough	Brass
	PFEWB109	1-1/2X21 End Outlet Waste	21	533.4	6 3/4	171.5	8 1/8	206.4	22	Slip Joint	Chrome	Zinc
	PFEWB110	1-1/2X16 End Outlet Waste	16	406.4	7 3/8	187.3	7	177.8	22	Direct Connect	Chrome	Zinc
	PFEWB111	1-1/2X16 End Outlet Waste - Tube Tee	16 1/8	409.6	6 5/8	168.3	6	152.4	22	Direct Connect	Chrome	Zinc
	PFEWB112	1-1/2X16 End Outlet Waste	16	406.4	6 3/4	171.5	8 1/8	206.4	22	Slip Joint	Chrome	Zinc



Warranty and Codes

This PROFLO product carries a 1-year limited warranty.

Low LeadLavatory Supply Kits



Product Features

- Low lead brass body
- Low lead brass stem
- cUPC approved
- Certified to NSF 372 requirements
- Flexible chrome plated copper risers with chrome plated steel deep flanges and chrome plated stops

Model Numbers (*For use copper tube only)

Lavatory Supply Kits

PFXCAC32CL12* LF CP 5/8 comp X 3/8 comp lav kit

PFXCAC32CLKL12* LF CP 5/8 comp X 3/8 lav sply kit loose key PFXCAS32CL12* LF CP 1/2 SWT X 3/8 comp lav sply kit

PFXCAS32CLKL12* LF CP 1/2 SWT X 3/8 comp lav sply kit loose key

PFXCAZ32CL12 LF CP 1/2 SWT EXT X 3/8 lav sply kit

PFXCAZ32CLKL12 LF CP 1/2 SWT EXT X 3/8 comp lav sply kit loose key

PFXCAT22CL12 LF CP 3/8 IPS X 3/8 comp lav sply kit

PFXCAT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

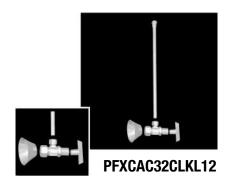
PFXCAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

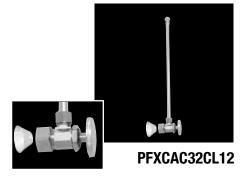
PFXCAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key

Operating pressure 125psi maximum

• Operating temperature 40°F-160°F







Heavy Duty Lavatory Supply Kits

PFXHAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

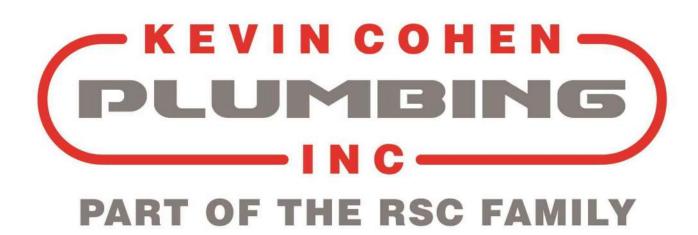
PFXHAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key
PFXHAT33CLKL12 LF CP 1/2 IPS X 1/2 comp lav sply kit loose key
PFXHATT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05







S-2 Sink

PFSR15156 Series

Stainless Steel Bar Sinks



18 gauge specified, 22 gauge is really not equal.

- 22 gauge stainless steel bar sink
- *Self-rimming \ \ \ \ \
- Available with 1 or 2 faucet holes
- -Sink clips included

Product Features

- Overall size 15" X 15"
- Bowl size 12-1/4" X 10-1/2"
- Type 304 stainless steel

- · Bowl depth: 6"
- Drain diameter: 3-1/2"
- Minimum cabinet size: 18"
- Under spray coating and pads for sound deadening and insulation
- ADA compliant when installed to ADA guidelines



PFSR151561A

Model Numbers

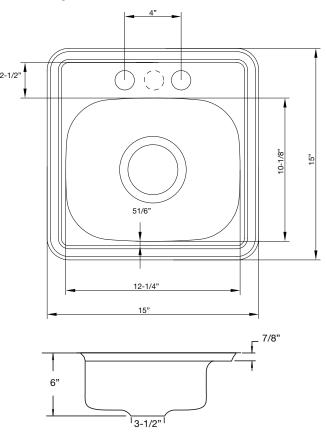
PFSR151561A 15X15 1H 6.0 22 GA SS BAR SINK **PFSR151562A** 15X15 2H 6.0 22 GA SS BAR SINK

Warranty and Codes

This PROFLO stainless steel sink carries a limited lifetime warranty. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless it is agreed in writing to do otherwise.

These products meet or exceed ASME/ANSI A112.19.3m.

Product Specifications



^{*} All measurements are nominal. Please verify before actual installation.







Two Handle Commercial Bar Faucet



Product Features

- Heavy duty 4" cast brass bar faucet
- Flow rate: 1.5 GPM aerator
- Non-swivel spout
- ADA wrist blade handles with color indexed caps
- · Ceramic disc cartridges with brass stems
- Polished chrome
- Complies with ASME:A112.18.1-2011/CSA:B125.1-11
- NSF61 compliant
- cUPC/IAPMO Listed

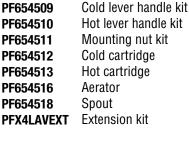


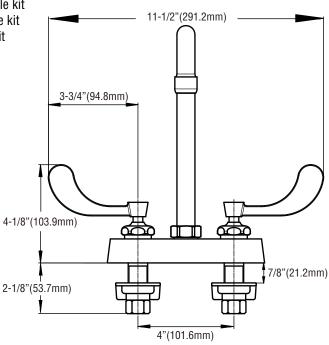
PFXB304

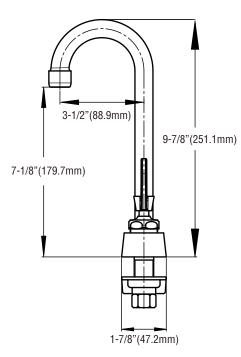
8" spout specified. This is not even close.

Available Parts

Product Specifications







Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO faucet carries a limited lifetime warranty when installed in residential applications. The warranty is five years in commercial applications. This product meets ASME: A112.18.1-2011 *Compliant with lead content requirements of US Senate Bill S.3874







BASKET STRAINERS



PREMIUM BRASS COLLECTION

PF151CP

For 3-1/2" diameter opening Solid forged brass body Adjustable post brass basket 8mm rubber locknut washer Solid brass locknut & slip nut



PF151ACP

For 3-1/2" diameter opening
Solid forged brass body
Adjustable post brass basket
Includes 1-1/2" x 4" chrome plated
20 gauge tailpiece
8mm rubber locknut washer
Solid brass locknut & slip nut



PF250PC/PF250BRCP

For 3-1/2" diameter opening
Solid brass body with deep cut threads
Fixed post stainless steel basket
mm rubber locknut washer
Die cast locknut & slip nut
*PF250BRCP includes solid
brass locknut & slip nut



STAINLESS STEEL COLLECTION

PF1432SS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with locking shell
Long shank with deep cut threads
Fixed post stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut

PF1433SS/PF1433BRSS

For 3-1/2" diameter opening Stainless steel threaded deep body Turn to close stainless steel basket 8mm rubber locknut washer Die cast locknut & slip nut *PF1433BRSS includes Brass locknut & slip nut

PF1434SS/PF1434BRSS

For 3-1/2" diameter opening
Extra deep cup stainless steel body with
locking shell
Long shank with deep cut threads
Power Ball lock stainless steel basket
8mm rubber locknut washer
Die cast locknut & slip nut
*PF1434BRSS includes Brass
locknut & slip nut

PF646443

For 3-1/2" diameter opening
Stainless steel body
Fixed post stainless steel basket (spring style)
8mm rubber locknut washer
Thumb screw locknut & ring
with three screws
Brass slip nut

PF647003

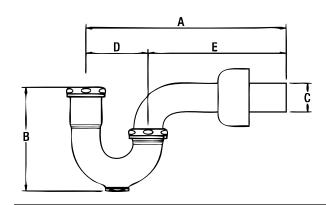
For 3-1/2" diameter opening Stainless steel threaded deep body Fixed post stainless steel basket 8mm rubber locknut washer Die cast wide locknut & slip nut

www.PROFLO.com

All Stainless Steel Baskets & Bodies are made from high quality Stainless Steel grade 430.



Adjustable Tubular P-Traps





PFPTB101

Madal Numbbar	Desc	Cleanout		Dime	nsion (i	nch)		Gauge		Others		Certificate
Model Numbber	Desc	Y/N	Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Cermicale
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





Low LeadLavatory Supply Kits



Product Features

- Low lead brass body
- Low lead brass stem
- cUPC approved
- Certified to NSF 372 requirements
- Flexible chrome plated copper risers with chrome plated steel deep flanges and chrome plated stops

Model Numbers (*For use copper tube only)

Lavatory Supply Kits

PFXCAC32CLKL12* LF CP 5/8 comp X 3/8 lav sply kit loose key PFXCAS32CL12* LF CP 1/2 SWT X 3/8 comp lav sply kit

PFXCAS32CLKL12* LF CP 1/2 SWT X 3/8 comp lav sply kit loose key

PFXCAZ32CL12 LF CP 1/2 SWT EXT X 3/8 lav sply kit

PFXCAZ32CLKL12 LF CP 1/2 SWT EXT X 3/8 comp lav sply kit loose key

PFXCAT22CL12 LF CP 3/8 IPS X 3/8 comp lav sply kit

PFXCAT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

PFXCAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXCAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key

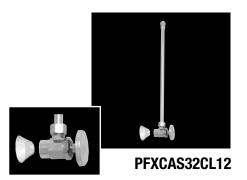
Heavy Duty Lavatory Supply Kits

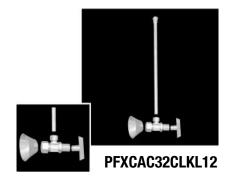
PFXHAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXHAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key
PFXHAT33CLKL12 LF CP 1/2 IPS X 1/2 comp lav sply kit loose key
PFXHATT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key



• Operating temperature 40°F-160°F







Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05





PF200 Series

Trap Covers



Product Features

- ADA & UFAS Compliant
- No tools required contractor friendly Tear-To-Fit feature makes trimming fast
- Universal design fits virtually all lavatory applications
- Smooth, flush SnapClip[™] fasteners firmly secure piping covers in place and are nonabrassive and reusable
- · Antimicrobial vinyl maintain sanitary conditions
- Lock Lid[™] on valve stops tampering and allows service
- Cleanout nut cap allows service on trap without disassembly
- Internal ribs enhance K valve and soften impact cushioning
- Fire retardant

Model Numbers

PF200WH	PF202WH	PF205WH	PFEXT200WH
PF201WH	PF203WH	PF299WH	

Material	Soft, resilient molded vinyl
Nominal Wall	1/8" constant with internal ribs
Durometer	70-80 – Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming	E-Z Tear-To-Fit trim feature (no tools needed)
Fasteners	Internal E-Z Grip fasteners, reusable
Color	China white
Compatibility	Fits all 1-1/4" or 1-1/2" cast brass or tubular P-trap assemblies and 3/8" or 1/2" angle stop assemblies
Paintability	Apply latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) mm (AEB)
Bacterial/Fungus Resistance	ASTM G21 and G22 – Result: 0 growth
Maintenance	Wipe clean using common detergents

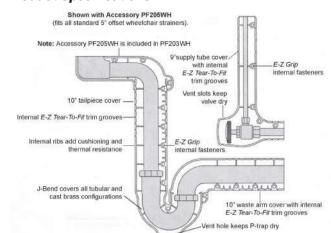
New E-Z Tear-To-Fit feature and E-Z Grip built-in fasteners make installation fast and easy!

- Tear-To-Fit on internal, dimensioned tear lines for quick, clean, accurate trimming to fit virtually any piping configuration. Covers flex to install over pipes.
- Press seams together at finger recesses to engage E-Z Grip internal fasteners for a secure, safe, tamper-resistant installation. To remove cover, firmly pull seam apart using a strong grip. To reinstall, press seams back together.



Product Specifications

PF201WH



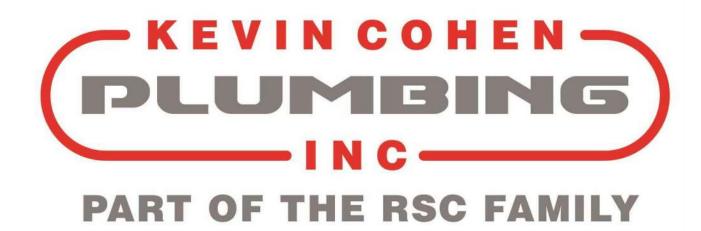
PF200WH	one P-trap cover
PF201WH	one P-trap cover, one angle valve and supply
	cover
PF202WH	one P-trap cover, two angle valves and supply covers
PF203WH	one P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover
PF299WH	one angle valve and supply cover
ACCESSORIES	
PF205WH	one 5" offset tailpiece wheelchair strainer assembly
EXTENSIONS	
PFEXT200WH	one 16" extension for drain waste or tailpiece

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. This product meets ADA article 4.19.4; CABO/ANSI 4.20.4; UFAS 4.19.4; California Title 24; UPC/IAPMO ICC; Canada Barrier-Free Code. Made in USA.



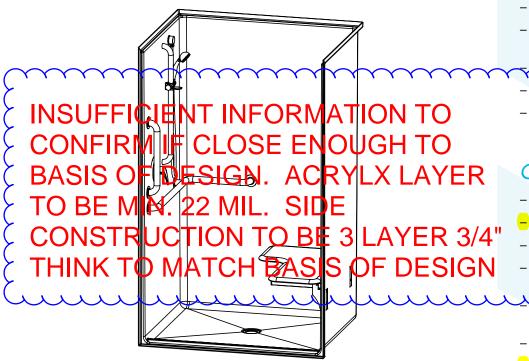




SH-1 Shower

Interior: $46 \times 36 \times 75 \frac{1}{4}$ Exterior: $48 \times 38 \frac{1}{4} \times 77 \frac{1}{4}$

The 1483BFSD accessible shower features innovative installation design, including an engineered leveled base and improved front threshold. A true time and money saver, our pre-leveled base lets you install directly on a **level** floor. And its front threshold is engineered to keep a constant level without the use of brackets during installation.



COLOR & TRIM OPTIONS

Stock	Upgraded
White	Almond Biscuit Bone

^{**}Additional custom colors available. (Contact Customer Service)

FEATURES

- Pre-leveled base
- AcrylX[™] applied acrylic surface
- 3/4" skirt
- 1/2" interior threshold
- Barrier free when properly installed
 - Smooth wall
- Center drain
- Lifetime limited warranty (20 year commercial)

ORTIONS

- RH or LH fixture wall
- Grab bars
- Fold-up seat
- Hand-held shower assembly with skde bar
- Pressure balancing mixing valve
- Soap dish
- Curtain rod and/ or shower curtain

CODE COMPLIANCE

- IAPMO Z124-2017
- CSA B45-11



AQUATIC ADVANTAGE

- Private fleet

- Field support

- 7 manufacturing facilities

- Centralized customer service

Aquatic products may be specified as Lasco Bathware.

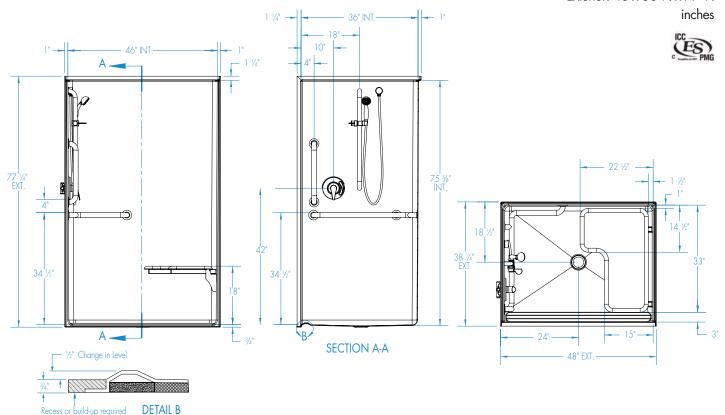




Aquatic products may be specified as Lasco Bathware.

1483BFSD

Interior: 46 x 36 x 75 1/4 Exterior: 48 x 38 1/4 x 77 1/4



FEATURES Dimensional Tolerance ± %". Dimensions needed for site preparation should be measured from the unit. Aquatic assumes no responsibility for preparatory work.

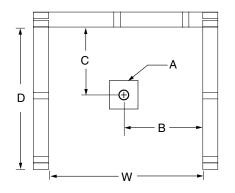
Type and Model #	Material	Wall Finish	Pieces	Drain	Dam/Skirt Height	Net Wt.	Pkg. Wt.
Shower #1483BFSD	AcrylX™	Smooth	1	Center	3/4" skirt 1/2" interior threshold	118	128

DIMENSIONS

inches
48 / 46
38 ¼ / 36
77 1/4 / 75 1/4
46
3/4
18 1/2
24

FRAMING DIMENSIONS inches

Туре	D Depth	W Width	H Height	А	В	С
Alcove	38 1/4	48 1/8	_	Box Out	24	18 ½





9601-PLR, 9601-PLR-TRM, 9601PLRTRMTC **Shower Trim**

Specification Submittal





Feature Highlights	Options/Modifications		
 Origins Shower System or Trim Requires Temptrol® Pressure Balancing Shower Valve (included with 9601-PLR) Adjustable stop screw to limit handle turn (included with 9601-PLR) Metal lever handle 1 mode showerhead with easy to clean nozzles 2.5 gpm (9.5 L/min) flow restrictor Tub spout not included Components shall be metal and nonmetallic construction, plated in standard Polished Chrome finish Available with TA-10 flow control spindle and T-12A cap assembly for Temptrol valve bodies installed with Test Cap (order p/n 9601PLRTRMTC) 	□ 1.2		
Model Numbers			

Note: Append appropriate -suffix to model number.

Model Numbers



Shower Trim with Temptrol Pressure Balancing Shower Valve

Shower Trim, Temptrol Pressure Balancing Shower Valve ordered separately

9601PLRTRMTC

Shower Trim with TA-10 flow control spindle and T-12A cap assembly, must order Temptrol valve with Test Cap

Compliance

- ASME A112.18.1/CSA B125.1
- WaterSense @ 2.0 gpm/1.75 gpm/1.5 gpm
- Buy American Act (9601-PLR only)





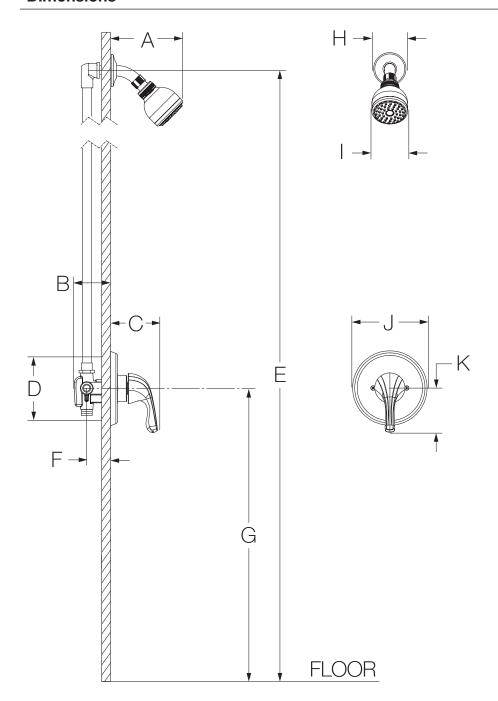
Warranty

Limited Lifetime - to the original end purchaser in consumer/residential installations.

5 Years - for industrial/commercial installations.

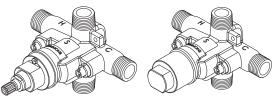
Refer to www.symmons.com/warranty for complete warranty information. Go to www.symmons.com/register to register your Symmons product.

Dimensions



	Measurements
Α	6-3/8", 162 mm
В	3-1/2", 89 mm
С	3-5/8", 92 mm
	Shower Valve Hole Size
D	Min. Ø 3", 76 mm
	Max. Ø 4", 102 mm
Е	Ref. 77", 1956 mm
F	Rough-in
Г	2-3/8" ± 1/2", 60 mm ± 13 mm
G	Ref. 42", 1067 mm
Н	Ø 2-1/2", 64 mm
I	Ø 2-3/4", 70 mm
J	Ø 5-3/4", 146 mm
K	3-3/8", 86 mm





162XBODY

PRESSURE BALANCING TUB/SHOWER VALVE BODY SPECIFICATION SUBMITTAL

262XBODY

MODEL NUMBERS

☐ 262XBODY

Pressure Balancing tub/shower valve body with service stops

☐ 162XBODY

Pressure Balancing tub/shower valve body with pressure testing cap and service stops

FEATURE HIGHLIGHTS

- Brass, bronze and stainless steel construction
- Pressure balancing mixing valve to maintain safe shower temperature
- Adjustable stop screw to control maximum hot water temperature to valve
- Integral service stops allow water shut-off for valve servicing
- 4 port valve body in common plane
- Inlets: 1/2" IPS and 1/2" sweat
- Outlets: 1/2" IPS and 1/2" sweat
- Accommodates back to back installations
- Accommodates thin wall installations
- Stringer mounts included

OPTIONS/MODIFICATIONS

□ -BR Temptrol Rapid Install™ Bracket
□ -CHKS Integral check stops for use in installations where a positive shut-off device is used downstream of valve

-RV Reverse seat for back to back installations

INLET ADAPTERS

CP CPVC fittings
 P1 PEX crimp fittings
 P2 PEX expansion fittings
 P3 ProPress fittings

COMPLIANCE

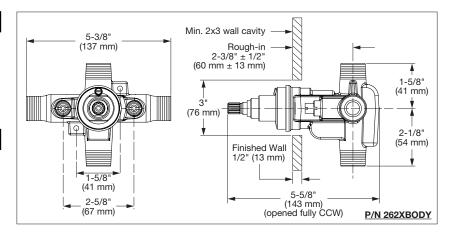
- ASME A112.18.1/CSA B125.1
- ASSE 1016
- Buy American Act Compliant

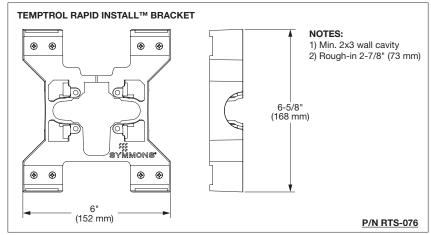


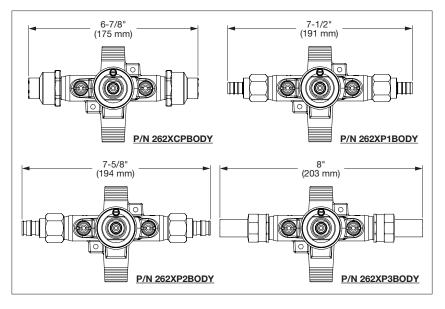
WARRANTY

Limited Lifetime - to the original end purchaser in consumer installations.

5 Years - for commercial installations. Refer to www.symmons.com/warranty for complete warranty information.









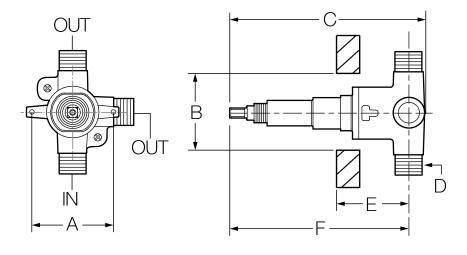
2DIVBODYNSSRT Dual Outlet Diverter Valve Body **Specification Submittal**



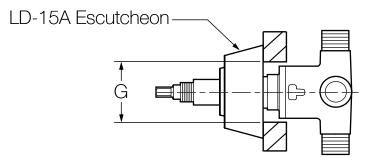


Feature Highlights	Compliance		
 Symmons dual outlet diverter valve 2 discreet positions, no sharing functionality Defined detents Male IPS and sweat inlet/outlet connections Inlet/outlet connections in common plane Components shall be metal construction 	ASME A112.18.1/CSA B125.1 CUS		
Model Numbers	Warranty		
□ 2DIVBODYNSSRT Symmons Dual Outlet Diverter Valve Body	Limited Lifetime - to the original end purchaser in consumer/residential installations. 5 Years - for industrial/commercial installations. Refer to www.symmons.com/warranty for complete warranty information. Go to www.symmons.com/register to register your Symmons product.		

Dimensions



Measurements
2-5/8", 67 mm
Hole Size
Min. Ø 3", 76 mm
Max. Ø 3-1/4", 83 mm
5-1/4", 133 mm
(3x) 1/2" male IPS &
(3x) 1/2" female sweat
See note 1
4-7/8", 124 mm
Hole Size
Min. Ø 1-3/4", 44 mm
Max. Ø 1-7/8", 48 mm
LD-15A Escutcheon:
2DIV
Temptrol Commercial
Safetymix
Visu-Temp



Notes:

- Figure is determined by style of trim attached to shower valve.
 See rough-in dimension drawing for shower valve application with diverter valve.
- 2) Dimensions subject to change without notice.

SHOWER MODULE DRAIN

>> 827 & 828 SERIES

SPECIFICATION

Sioux Chief 827 or 828 series shower module drain shall be used where necessary in drainage systems. Shower drain shall have an outer locknut design with compression gasket connection for Sch. 40 ABS/PVC pipe. Snap-in strainer shall meet all applicable load and flow requirements for intended use. Designed in accordance with ASME A112.18.2-2005/CSA B125.2-05.

MATERIALS

Strainer: Stainless steel Body, locknut, compression nut:

827 SERIES: Brass

828 SERIES: Glass-filled polypropylene

Washers: Rubber, polyethylene Compression gasket: Elastomer

STRAINER LOAD RATING

300 lbs. (19 gauge)

STRAINER FREE AREA

3.25 in²

FLOW RATE*

4.5 GPM

DIMENSIONS

A: Connection 2" Sch. 40 compression gasket

B: Top diameter 41/4" C: Overall height 2"

* Flow rate at which water in drain area does not exceed 0.375"

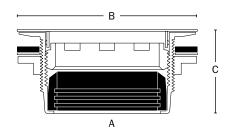




827-2B

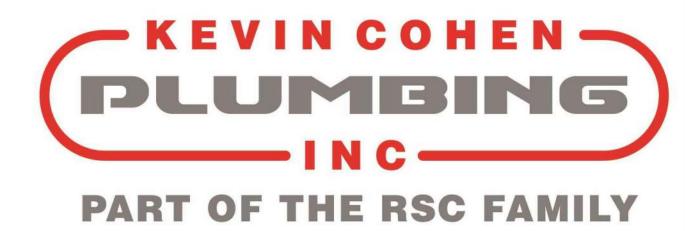


828-2



Choose Item Number

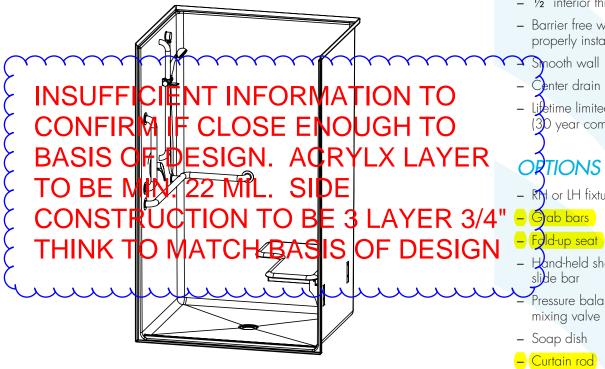




SH-2 Shower

Interior: 46 x 36 x 75 1/4 Exterior: 48 x 38 \(\frac{1}{4} \) x 77 \(\frac{1}{4} \)

The 1483BFSD accessible shower features innovative installation design, including an engineered leveled base and improved front threshold. A true time and money saver, our pre-leveled base lets you install directly on a level floor. And its front threshold is engineered to keep a constant level without the use of brackets during installation.



AQUATIC ADVANTAGE

- 7 manufacturing facilities
- Private fleet
- Centralized customer service
- Field support

COLOR & TRIM OPTIONS

Stock	Upgraded
White	Almond Biscuit Bone

^{* *}Additional custom colors available. (Contact Customer Service)

FEATURES

- Pre-leveled base
- AcrylX[™] applied acrylic surface
- 3/4" skirt
- 1/2" interior threshold
- Barrier free when properly installed
- Lifetime limited warranty (3) year commercial)
- RM or LH fixture wall
- Hand-held shower assembly with
- Pressure balancing
- and/ or shower curtain

CODE COMPLIANCE

- IAPMO Z124-2017
- CSA B45-11



Aquatic products may be specified as Lasco Bathware.

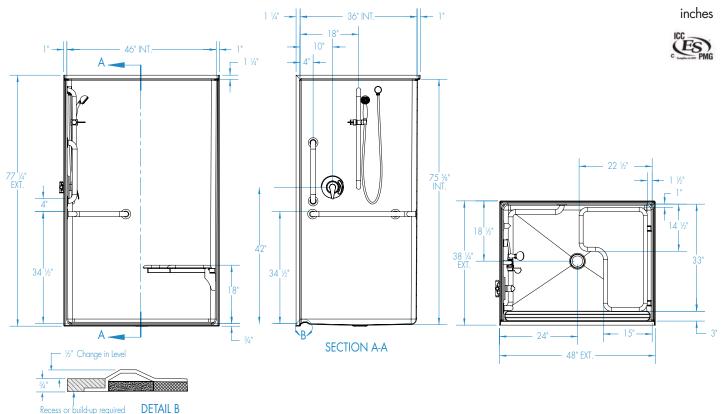




Aquatic products may be specified as Lasco Bathware.

1483BFSD

Interior: 46 x 36 x 75 1/4 Exterior: 48 x 38 1/4 x 77 1/4



FEATURES Dimensional Tolerance ± %". Dimensions needed for site preparation should be measured from the unit. Aquatic assumes no responsibility for preparatory work.

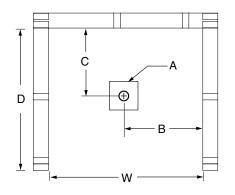
Type and Model #	Material	Wall Finish	Pieces	Drain	Dam/Skirt Height	Net Wt. Ibs	Pkg. Wt.
Shower #1483BFSD	$AcrylX^{TM}$	Smooth	nooth 1 Center 3/4" skirt 1/2" interio		3⁄4" skirt 1⁄2" interior threshold	118	128

DIMENSIONS

Specifications	inches
Width: Overall / Net	48 / 46
Depth: Overall / Net	38 ¼ / 36
Height: Overall / Net	77 1/4 / 75 1/4
Enclosure Opening:	46
Skirt Height:	3/4
Drain Rough-In (from Back Wall)	18 1/2
Drain Rough-In (from Side Wall)	24

FRAMING DIMENSIONS inches

Туре	D Depth	W Width	H Height	Α	В	С		
Alcove	38 1/4	48 1/8	_	Box Out	24	18 1/2		



Location:



9605-PLR. 9605-PLR-TRM. 9605PLRTRMTC Shower/Hand Shower Trim **Specification Submittal**





Feature Highlights Options/Modifications Origins Shower/Hand Shower System or Trim □ 1.5 1.5 gpm (5.7 L/min) flow restrictor Requires Temptrol® Pressure Balancing Shower Valve 2.0 2.0 gpm (7.6 L/min) flow restrictor (included with 9605-PLR) Requires Symmons Dual Outlet Diverter Valve L1 Less showerhead (included with 9605-PLR) 12 Less hand shower wand Adjustable stop screw to limit handle turn (included with 9605-PLR) П Less showerhead & hand shower wand Metal lever handles 13 ADA 36" grab bar for hand shower wand L4 Less head, arm & flange Dual checks for backflow protection L5 Less hand shower system 60" flexible metal hose ADA 1 mode hand shower wand with non-positive shutoff L6 Less tub spout 1 mode showerhead with easy to clean nozzles VP Vandal resistant escutcheon screws in place of 2.5 gpm (9.5 L/min) flow restrictors Tub spout not included standard screws Components shall be metal and nonmetallic construction, plated in STN Satin Nickel finish standard Polished Chrome finish Available with TA-10 flow control spindle and T-12A cap assembly for Temptrol valve bodies installed with Test Cap Note: Append appropriate -suffix to model number. (order p/n 9605PLRTRMTC)

Model Numbers



Shower/Hand Shower Trim with Temptrol Pressure Balancing Shower Valve and Symmons Dual Outlet Diverter Valve

9605-PLR-TRM

Shower/Hand Shower Trim. Temptrol Pressure Balancing Shower Valve and Symmons Dual Outlet Diverter valve ordered separately

For optional in-line vacuum breaker order p/n EF-109

9605PLRTRMTC

Shower/Hand Shower Trim with TA-10 flow control spindle and T-12A cap assembly, must order Temptrol valve with Test Cap

Compliance

- ASME A112.18.1/CSA B125.1
- Buy American Act (9605-PLR only)
- WaterSense @ 1.5 gpm and 2.0 gpm (does not apply to L3 modification)







Warranty

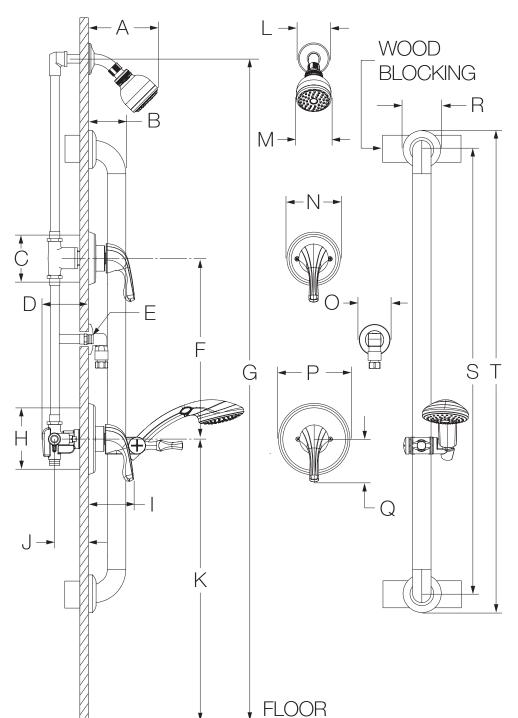
Limited Lifetime - to the original end purchaser in consumer/residential installations.

5 Years - for industrial/commercial installations.

Refer to www.symmons.com/warranty for complete warranty information. Go to www.symmons.com/register to register your Symmons product.

DISCONNECT FOR HAND SHOWER PER

Dimensions

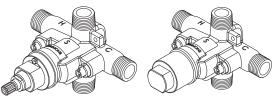


	Measurements						
Α	6-3/8", 162 mm						
В	3", 76 mm						
	Diverter Valve Hole Size						
С	Min. Ø 3", 76 mm						
	Max. Ø 3-1/4", 83 mm						
D	3-1/2", 89 mm						
	Male 1/2" NPT fitting must						
E	protrude 3/8" from						
	finished wall						
F	Ref. 10", 254 mm						
G	Ref. 77", 1956 mm						
	Shower Valve Hole Size						
Н	Min. Ø 3", 76 mm						
	Max. Ø 4", 102 mm						
- 1	3-5/8", 92 mm						
J	Rough-in						
	2-3/8" ± 1/2", 60 mm ± 13 mm						
K	Ref. 42", 1067 mm						
L	Ø 2-1/2", 64 mm						
М	Ø 2-3/4", 70 mm						
N	Ø 4-1/4", 108 mm						
0	Ø 2-1/2", 64 mm						
Р	Ø 5-3/4", 146 mm						
Q	3-3/8", 86 mm						
R	Ø 3-1/8", 79 mm						
S	36", 914 mm						
Т	39", 991 mm						

Notes:

- 1) Valve body and piping not included and shown as reference only.
- 2) Plaster shield (p/n T-176) for dry wall, plaster or other type walls 1/2" or greater.
- 3) All dimensions measured from nominal rough-in (see J as reference).
- 4) Dimensions subject to change without notice.





162XBODY

PRESSURE BALANCING TUB/SHOWER VALVE BODY SPECIFICATION SUBMITTAL

262XBODY

MODEL NUMBERS

☐ 262XBODY

Pressure Balancing tub/shower valve body with service stops

☐ 162XBODY

Pressure Balancing tub/shower valve body with pressure testing cap and service stops

FEATURE HIGHLIGHTS

- Brass, bronze and stainless steel construction
- Pressure balancing mixing valve to maintain safe shower temperature
- Adjustable stop screw to control maximum hot water temperature to valve
- Integral service stops allow water shut-off for valve servicing
- 4 port valve body in common plane
- Inlets: 1/2" IPS and 1/2" sweat
- Outlets: 1/2" IPS and 1/2" sweat
- Accommodates back to back installations
- Accommodates thin wall installations
- Stringer mounts included

OPTIONS/MODIFICATIONS

□ -BR Temptrol Rapid Install™ Bracket
□ -CHKS Integral check stops for use in installations where a positive shut-off device is used downstream of valve

-RV Reverse seat for back to back installations

INLET ADAPTERS

CP CPVC fittings
 P1 PEX crimp fittings
 P2 PEX expansion fittings
 P3 ProPress fittings

COMPLIANCE

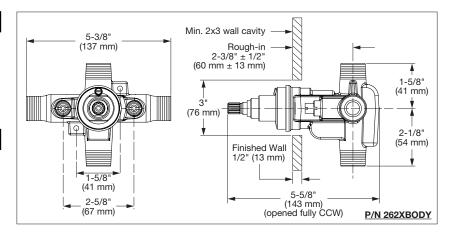
- ASME A112.18.1/CSA B125.1
- ASSE 1016
- Buy American Act Compliant

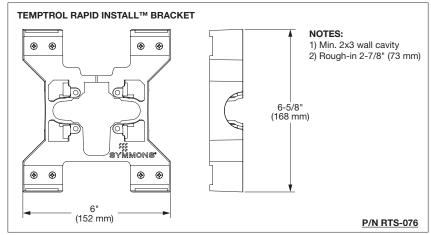


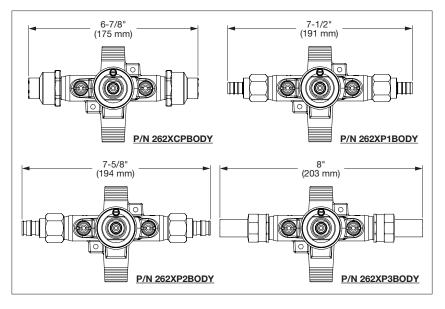
WARRANTY

Limited Lifetime - to the original end purchaser in consumer installations.

5 Years - for commercial installations. Refer to www.symmons.com/warranty for complete warranty information.









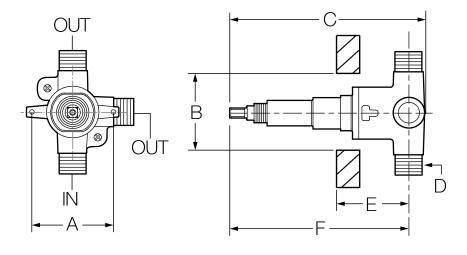
2DIVBODYNSSRT Dual Outlet Diverter Valve Body **Specification Submittal**



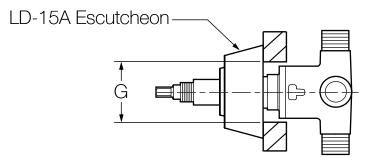


Feature Highlights	Compliance						
 Symmons dual outlet diverter valve 2 discreet positions, no sharing functionality Defined detents Male IPS and sweat inlet/outlet connections Inlet/outlet connections in common plane Components shall be metal construction 	ASME A112.18.1/CSA B125.1 CUS						
Model Numbers	Warranty						
□ 2DIVBODYNSSRT Symmons Dual Outlet Diverter Valve Body	Limited Lifetime - to the original end purchaser in consumer/residential installations. 5 Years - for industrial/commercial installations. Refer to www.symmons.com/warranty for complete warranty information. Go to www.symmons.com/register to register your Symmons product.						

Dimensions



Measurements
2-5/8", 67 mm
Hole Size
Min. Ø 3", 76 mm
Max. Ø 3-1/4", 83 mm
5-1/4", 133 mm
(3x) 1/2" male IPS &
(3x) 1/2" female sweat
See note 1
4-7/8", 124 mm
Hole Size
Min. Ø 1-3/4", 44 mm
Max. Ø 1-7/8", 48 mm
LD-15A Escutcheon:
2DIV
Temptrol Commercial
Safetymix
Visu-Temp



Notes:

- Figure is determined by style of trim attached to shower valve.
 See rough-in dimension drawing for shower valve application with diverter valve.
- 2) Dimensions subject to change without notice.

SHOWER MODULE DRAIN

>> 827 & 828 SERIES

SPECIFICATION

Sioux Chief 827 or 828 series shower module drain shall be used where necessary in drainage systems. Shower drain shall have an outer locknut design with compression gasket connection for Sch. 40 ABS/PVC pipe. Snap-in strainer shall meet all applicable load and flow requirements for intended use. Designed in accordance with ASME A112.18.2-2005/CSA B125.2-05.

MATERIALS

Strainer: Stainless steel Body, locknut, compression nut:

827 SERIES: Brass

828 SERIES: Glass-filled polypropylene

Washers: Rubber, polyethylene Compression gasket: Elastomer

STRAINER LOAD RATING

300 lbs. (19 gauge)

STRAINER FREE AREA

3.25 in²

FLOW RATE*

4.5 GPM

DIMENSIONS

A: Connection 2" Sch. 40 compression gasket

B: Top diameter 41/4" C: Overall height 2"

* Flow rate at which water in drain area does not exceed 0.375"

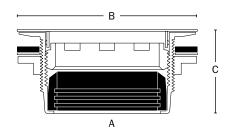




827-2B

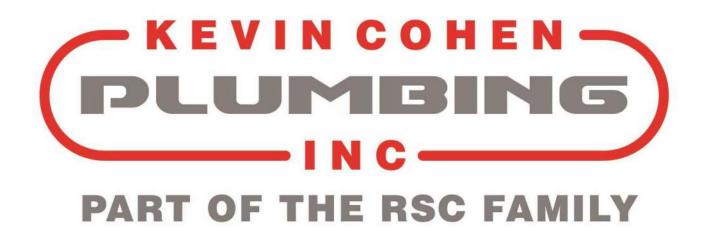


828-2



Choose Item Number





UR-1 Urinal

High-Efficiency Urinal Washout, Rear Outlet PF1825PTAWH



Product Features

- · Vitreous china
- · High-efficiency urinal (HEU)
- · Washout flushing: 0.125 gpf / 0.47 lpf (one pint) to 1.0 gpf / 3.8 lpf
- · 3/4" top inlet spud
- · 2" NPT inside thread outlet
- · Elongated 14-7/8" rim
- · Hanging bracket included
- · Flush valve not included

Codes and Standards

- · ADA
- · IAPMO/UPC
- · ASME A112.19.2
- · CSA
- WaterSense: WaterSense compliant when used with a 0.125 gpf or 0.5 gpf WaterSense compliant flushometer

Included Components

- · Mounting brackets
- · Inlet spud
- · Outlet spud

Specified Model

Model	Model Description	Color Finish			
PF1825PTAWH	Washout, 3/4" T/S rear outlet	○ White			

Technical Information

Model	Model Description					
Configuration washout urinal, rear outlet						
Water per flush	0.125gpf-1.0 gpf / 0.47lpf-3.8lpf					
Spud size	3/4" top					
Passageway	2" outlet					



PF1825PTAWH





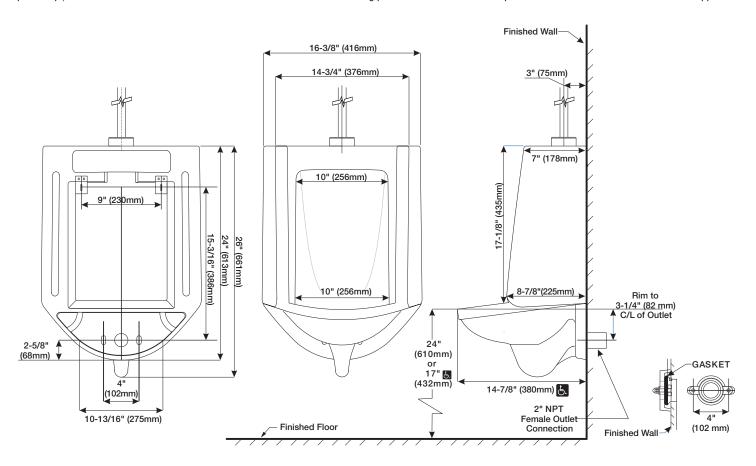


High-Efficiency Urinal Washout, Rear Outlet PF1825PTAWH



Product Specification

Washout urinal shall be made of vitreous china with a 3/4" top spud. Urinal shall include inlet and spuds and brackets. Urinal shall use 0.125 gpf - 1.0 gpf (0.47 lpf - 3.8 lpf). Urinal shall be PROFLO model PF1825PTAWH. Recommended working pressure between 25 and 80 psi. Provide suitable reinforcement for wall support.



Critical Dimension for ADA Installation

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. All PROFLO fixtures carry a 5-year limited warranty on parts and fittings and a limited lifetime warranty on the porcelain. This product meets or exceeds ASME/ANSI A112.19.2/CSAB45.1-13. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise. Meets the Americans with Disabilities Act guidelines and ANSI A11.17.1 when installed to 17" height from finished floor.









CODE NUMBER

3452642

DESCRIPTION

0.5 gpf, Polished Chrome Finish, Fixture Connection Top Spud, Single Flush, True Mechanical Override, Hardwired, Sensor-Operated, Royal® Exposed Sensor Hardwired Urinal Flushometer.

DETAILS

• Flush Volume: 0.5 gpf (1.9 Lpf) • Finish: Polished Chrome (CP) Power Type: Hardwired (HW)

Valve: Diaphragm

• Valve Body Material: Semi-red Brass

• Fixture Type: Urinal

• Fixture Connection: Top Spud

• Rough-In Dimension: 11 ½" (292mm)

• Spud Coupling: 3/4" (19mm) • Supply Pipe: 3/4" (19mm)

• Override: True Mechanical (TMO)

FEATURES

- PERMEX® Synthetic Rubber Diaphragm with Dual Filtered Fixed **Bypass**
- Handle Packing, Main Seat, Stop Seat and Vacuum Breaker Molded from PERMEX® Rubber Compound for Chloramine resistance
- User friendly three (3) second Flush Delay
- Sweat solder adapter with cover tube and cast wall flange with set
- OPTIMA® EL-1500 Self-Adaptive Infrared Sensor with Indicator Light
- "Walk By" Delay of Eight (8) Seconds Prevents Unintentional
- Non-Hold-Open True Mechanical Override
- Non-Hold-Open Integral Solenoid Operator, Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Courtesy FlushTM Non-Hold-Open True Mechanical Override
- High Back Pressure Vacuum Breaker Flush Connection with One-Piece Bottom Hex Coupling Nut, Spud Coupling and Flange for 3/4" Top Spud
- 3/4" I.P.S. Screwdriver Bak-Chek® Angle Stop with Vandal Resistant Stop Cap

VIDEOS

ESS Flushometer

PVD Special Finishes



COMPLIANCES & CERTIFICATIONS



















(ADA Compliant, BAA Compliant, BREEAM Water Credit, cUPC Certified, cUPC Green Certified, Green Globes Water Credit, LEED V4 Water Efficiency Credit, Satisfies LEED Credits, UL Certified, WaterSense Listed)

RECOMMENDED SPECIFICATION

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

ELECTRICAL SPECIFICATIONS

• Arming Delay: 8 seconds

• Control Circuit: 24 VAC Input/24 VAC Output/Solid State

Flush Delay: 3s

Self-Adaptive Window: ±8

• Sensor Range: 15"-30" (381-762mm)

Solenoid Operator: 24 VAC

Transformers:

0345154

0345999

VALVE OPERATING PRESSURE (FLOWING)

15-80 PSI (103-552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

DOWNLOADS

- Royal ESS TMO Installation Instructions
- Royal ESS Concealed and Exposed Installation Instructions
- Control Stop Repair and Maintenance Guide
- Flush Connections Flanges Repair and Maintenance Guide

Sloan 10500 Seymour Ave, Franklin Park, IL 60131

Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com



- Tail Piece Repair and Maintenance Guide
- Optima ESS Repair and Maintenance Guide
- Additional Downloads

NOTES

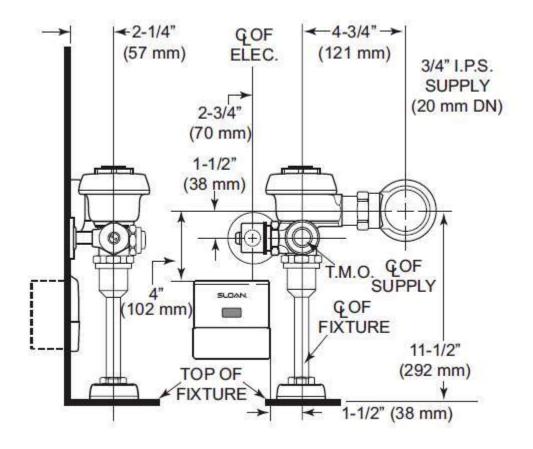
All information contained within this document subject to change without notice.

Looking for other variations of the ROYAL 186 ESS product? View the general spec sheet with all options.

Find a compatible urinal for this flushometer. Find a compatible water closet for this flushometer.

WaterSense compliant when used with a WaterSense compliant fixture

ROUGH-IN



Sloan 10500 Seymour Ave, Franklin Park, IL 60131





DESCRIPTION

EL-154 (Box Mount) 120 VAC Input/24 VAC Output, 50/60 Hz, 50 VA. One EL-154 transformer will power up to ten (10) OPTIMA "ES-S" water closet or urinal (any combination) flushometers..

FEATURES

When using Sloan Optima \$ "ES-S" flushometers, the transformer must be specified and ordered separately. The following transformers are recommended:

- EL-154 (Box Mount) 120 V AC Input/24 V AC Output, 50/60 Hz, 50 VA (0345154PK)
- EL-342 (Box Mount) 240 V AC Input/24 V AC Output, 50/60 Hz, 50 VA (0345999PK)
- EL-208 (Foot Mount) 120 V AC Input/24 V AC Output, 50/60 Hz, 100 VA (0345211PK)

When using Sloan Optima® ETF or ESF Series faucets, the transformer must be specified and ordered separately. Sloan Optima® ETF Series faucets are typically supplied with a transformer. Transformers supplied with ETF Series faucets:

- ETF-416 (Plug-in for Canada) 120 V AC Input/24 V AC Output, 50/60 Hz, 35 VA (0365879)
- ETF-233 (Plug-in) 120 V AC Input/24 V AC Output, 50/60 Hz, 35 V A (0365534PK) (not shown)
- Some Optima® faucet installations can be powered by a single transformer, provided the transformer is properly sized. Allow a minimum of 15 VA of current rating for each faucet or solenoid valve being used. Specify and order the transformer separately. To order an "ETF" Series faucet less the transformer, specify the "LT" Variation.

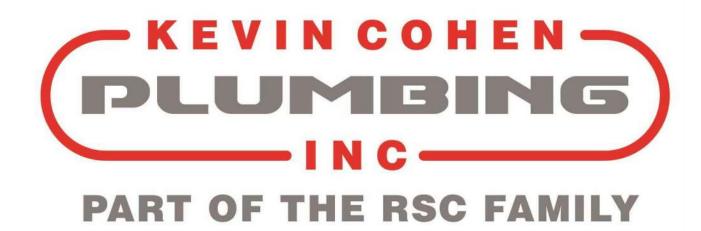
NOTES

All information contained within this document subject to change without notice.



DOWNLOADS

Additional Downloads



Urinal Carrier

⋖

NONE

1-10-74

APPROVED BY:

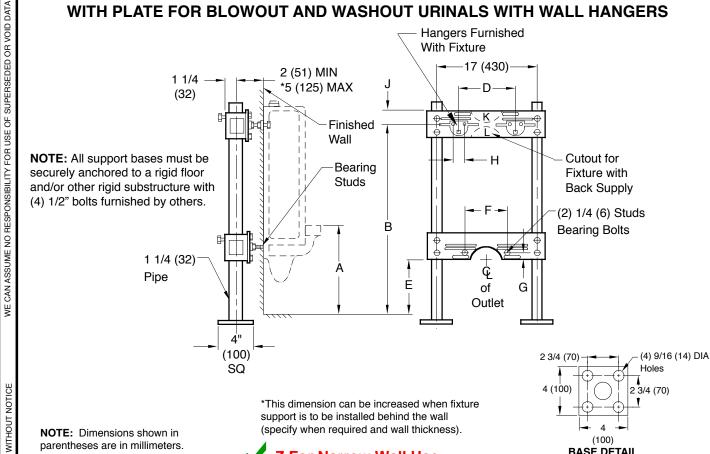
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FIGURE NUMBER

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE

URINAL SUPPORTS FOR OFF-THE-FLOOR URINALS

WITH PLATE FOR BLOWOUT AND WASHOUT URINALS WITH WALL HANGERS



NOTE: Dimensions shown in parentheses are in millimeters.

*This dimension can be increased when fixture support is to be installed behind the wall (specify when required and wall thickness).



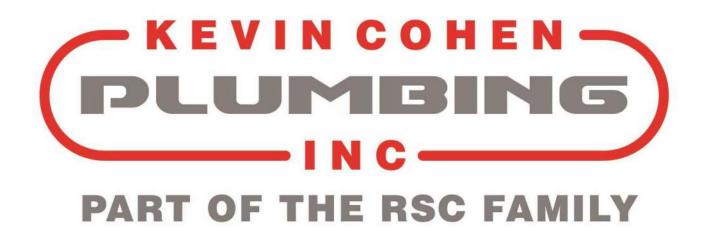
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BASE DETAIL

ROUGH-IN TABLE

FIXTURE MFG.	NAME	NUMBER	Α	В	D	E	F	G	Н	J	K	L
Am. Std.	Washbrook	6501.010	24 (610)	39 (990)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	2 (51)	Х	-
Am. Std.	Washbrook	6506.011	24 (610)	39 (990)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	2 (51)	Х	-
Am. Std.	Lynbrook	6538.010	24 (610)	40 (1015)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	1 (25)	Х	-
Am. Std.	Lynbrook	6531.019	24 (610)	40 (1015)	13 1/2 (345)	21 (535)	7 (180)	1/2 (13)	1 3/16 (30)	1 (25)	Χ	-
Am. Std.	Trimbrook	6560.015	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	Х	-
Am. Std.	Trimbrook	6560.023	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	Х	-
Am. Std.	Trimbrook	6565.014	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	Х	-
Am. Std.	Trimbrook	6565.022	24 (610)	37 5/8 (955)	11 (280)	16 3/8 (416)	5 (125)	1 (25)	1 3/16 (30)	1 (25)	Х	-
Eljer	Correcto	161-1030, 45	24 (610)	39 3/8 (1000)	12 (305)	21 (535)	5 1/4 (135)	1 (25)	1 (25)	1 (25)	Х	
		161-1060, 75										
Eljer	Terminal	161-1100, 3	25 1/2 (650)	33 7/8 (860)	9 1/2 (240)	23 1/4 (590)	6 (150)	2 (51)	1 (25)	1 (25)	Х	-
Eljer	Dover	161-1160, 75	24 (610)	32 3/8 (822)	6 (150)	17 (430)	6 (150)	1 (25)	1 (25)	1 (25)	Х	-
Kohler	Stanwell	K-4970-T, R	24 (610)	40 (1015)	12 (305)	22 (560)	5 3/8 (137)	1 (25)	1 (25)	1 (25)	Х	-
Kohler	Bardon	K-4980-T, R	24 (610)	40 1/2 (1030)	12 (305)	21 (535)	8 1/4 (210)	1 (25)	1 (25)	1 (25)	Χ	-
Kohler	Derry	K-5007-T, R	24 (610)	29 1/2 (750)	6 (150)	22 (560)	6 (150)	1 (25)	1 (25)	1 (25)	-	Х
Kohler	Dexter	K-5014-T, R	24 (610)	32 1/8 (816)	6 1/2 (165)	17 5/8 (448)	8 (205)	1 (25)	1 (25)	1 (25)	Х	-

F E	04/22/09 07/17/02	Added Note Changed Table	JJ RN		_	VOLUME CUBIC FEET	FIGURE NUMBER 0637
REV.	DATE	DESCRIPTION	BY	CKD. BY			



US-1 Utility Sink





Product Features

- Made from a Sheet Molding Compound (SMC), a plastic composite made up of filler, fire retardant, thickener, and internal mold release that have been mixed with liquid resin and a catalyst, and molded under extreme heat and pressure to create a laundry tub with unparalleled strength.
- Floor-mounted units are equipped with white baked enamel steel angle legs with leveling devices.
- Knock-out holes provided for 4" center set faucet holes.
- Internal Basin Depth: 13"
- · Capacity: 76 Liters (20 gal)
- Integrally molded drain with rubber stopper



PFLT2123

Model Numbers



Available Parts

Part #	Description
PFLTLEGS	LEGS F/PFLT SET 4 WHITE
PFLTWM	WM PART KIT F/PFLT

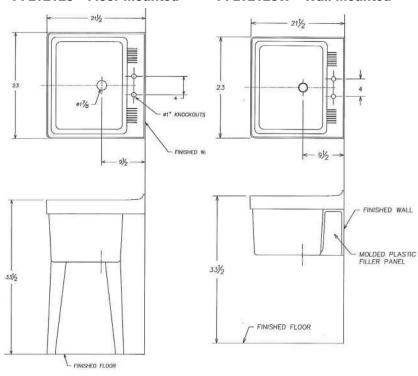
Optional Accessories

PF83BRSS Chrome plated stainless steel sink strainer

PF93SS Stainless steel sink strainer

Product Features

PFLT2123 - Floor Mounted PFLT2123W - Wall Mounted



Warranty and Codes

These products come complete with installation, operating, care and maintenance instructions. All PROFLO laundry sinks carry a 1- year limited warranty. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.



PFWSC1120 Series

Two Handle Laundry Faucet



Product Features

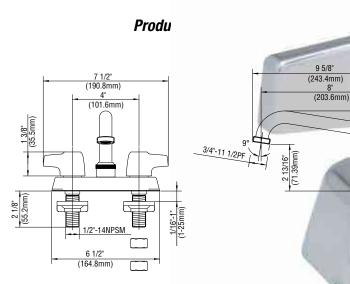
- Ceramic Cartridges
- Metal Lever Handles
- Flow Rate (with hose thread adapter): Min. 4.0 GPM
- Flow Rate (with optional aerator): Max. 1.2 GPM
- Meets ANSI: A112.18.1M
- ADA Compliant



2 1/8" (53.5mm)

Model Numbers

PFWSC1120CP Polished chrome



Warranty and Codes

This product comes complete with installation, operating, care and maintenance instruction warranty when installed in residential applications.

The warranty is five years in commercial applications.

This product meets ANSI: A112.18.1M.

Compliant with lead content requirements of California AB 1953.





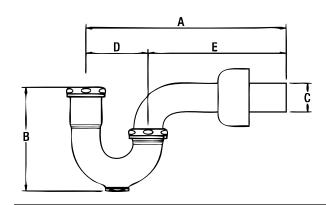


* All m





Adjustable Tubular P-Traps





PFPTB101

Madal Numbbar	Door	Cleanout		Dime	nsion (i	nch)		Cours	Others			Certificate
Model Numbber	Numbber Desc		Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Cermicale
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





Low LeadLavatory Supply Kits



Product Features

- Low lead brass body
- Low lead brass stem
- cUPC approved
- Certified to NSF 372 requirements
- Flexible chrome plated copper risers with chrome plated steel deep flanges and chrome plated stops

Model Numbers (*For use copper tube only)

Lavatory Supply Kits

PFXCAC32CLKL12* LF CP 5/8 comp X 3/8 lav sply kit loose key PFXCAS32CL12* LF CP 1/2 SWT X 3/8 comp lav sply kit

PFXCAS32CLKL12* LF CP 1/2 SWT X 3/8 comp lav sply kit loose key

PFXCAZ32CL12 LF CP 1/2 SWT EXT X 3/8 lav sply kit

PFXCAZ32CLKL12 LF CP 1/2 SWT EXT X 3/8 comp lav sply kit loose key

PFXCAT22CL12 LF CP 3/8 IPS X 3/8 comp lav sply kit

PFXCAT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key

PFXCAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXCAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key

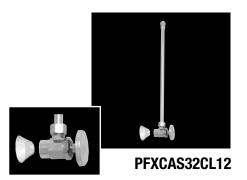
Heavy Duty Lavatory Supply Kits

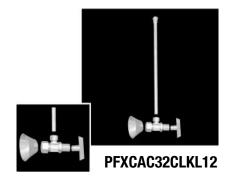
PFXHAT32CL12 LF CP 1/2 IPS X 3/8 comp lav sply kit

PFXHAT32CLKL12 LF CP 1/2 IPS X 3/8 comp lav sply kit loose key
PFXHAT33CLKL12 LF CP 1/2 IPS X 1/2 comp lav sply kit loose key
PFXHATT22CLKL12 LF CP 3/8 IPS X 3/8 comp lav sply kit loose key



• Operating temperature 40°F-160°F





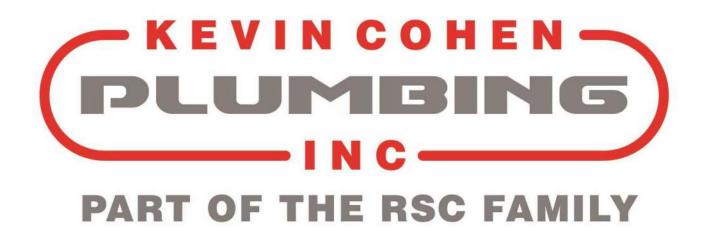


Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05







WC-1 Water Closet

Dual Flush Two-P<u>iece Toilet</u>



2.125" TRAPWAY PROVIDED IN

Product Features BASIS OF DESIGN DEVICE

- Choose either (.6 or 1.1 gallons per flush
- HET, High-Efficiency Toilet
- Two-piece vitreous china
- 2" fully glazed trapway
- 6"x 5-1/4" (RF) / 7"x 6" (EL) water surface
- Anti-siphon fill valve
- Gravity fed, box rim
- Close coupled tank with cover
- Quick connect, two-bolt tank-to-bowl installation
- 2" flush valve

- · PF9312 tank comes standard with a
- color/matching trip lever
- PF9312P tank comes standard with chrome push button actuator
- Sanitary bar on all bowls
- Seat and supply not included
- Available round front, elongated and ADA
- EPA WaterSense certified
- Meets ASME/ANSI A112.19.2M
- 1,000G MaP rated



PF1401T/PF9312

Model Numbers

	PF1400TWH	1.1-1.6 12 RI RF UNIV BOWL WHIT
*	PF1401TWH	1.1-1.6 12 RI EL UNIV BOWL WHIT
**	PF1403TWH	1 1-1 6 12 RI ADA IINIV ROWI WHIT
	PF9312WH	Tank HET Dual Flush 1.1/1.6 gpf, 12" rough-in, white
	PF9310WH	Tank HET Dual Flush 1.1/1.6 gpf, 10" rough-in, white
	PF9312PWH	Tank HET Dual Flush 1.1/1.6 gpf, push button, white
	PF9312RWH	Tank HET Dual Flush 1.1/1.6 gpf, right hand, white
	* = Complies with CSA B651	

^{** =} Complies with ADA & CSA B651 &



PF1401T/PF9312P

Available Parts

PF9312FLPK Fill valve assembly

PF9312FVPK Flush valve assembly for PF9312WH (includes chrome trip lever)

PFTGPK Tank gasket w/bolts

PF9312PFVPK Flush valve assembly for PF9312PWH

PF9312PBCP Push button actuator for PF9312PWH, chrome

PF5112LIDWH Tank lid white

Detailed Use Instructions

The Dual Flush enables a 1.1 gallon flush by pushing the small button or the flush lever back for liquid or light waste. The 1.6 gallon flush can be utilized by pushing the large button or pulling forward on the trip lever providing a strong flushing action for bulk or solid waste.

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. All PROFLO fixtures carry a lifetime limited warranty on the vitreous china and a 5-year limited warranty on the fittings. This product meets or exceeds ASME/ANSI A112.19.2M. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.









Dual Flush Two-P<u>iece Toilet</u>

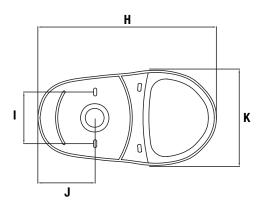


Certifications

Meets strict flushing performance guidelines established by the EPA (Environmental Protection Agency) WaterSense program. Leadership in Energy and Environmental Design (LEED) Compliant. Los Angeles Department of Water and Power (LADWP) Compliant.

	PF9310 /1400T	PF9310 /1401T	PF9310 /1403T
Α	26-1/2"	28-1/2"	28-1/2"
В	16-1/2"	18-1/2"	18-1/2"
С	15"	15"	17"
D	29-3/4"	29-3/4"	31-3/4"
Ε	6-1/4"	6-1/4"	6-1/4"
F	10"	10"	10"
G	17-1/2"	17-1/2"	17-1/2"

	PF9312 /1400T	PF9312 /1401T	PF9312 /1403T	
Α	28-1/2"	30-1/2"	30-1/2"	
В	16-1/2"	18-1/2"	18-1/2"	
С	15"	15"	17"	
D	29-3/4"	29-3/4"	31-3/4"	
Е	8-1/2"	8-1/2"	8-1/2"	
F	12"	12"	12"	
G	15-3/4"	15-3/4"	15-3/4"	



Footprint

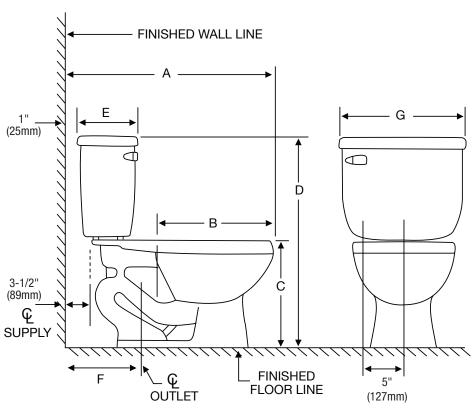
	RF	EL	ADA	
	PF1400T	PF1401T	PF1403T	
Н	18-1/2"	18-1/2"	18-1/2"	
I	6"	6"	6"	
J	6-1/8"	6-1/2"	6-1/2"	
K	9"	9"	9"	











PFTSC0F2000WH, PFTSC0FA2000WH

Commercial Toilet Seat



Product Features

- · Heavy weight molded solid plastic
- · Open front less cover
- External self-sustaining check hinge holds seat in any raised position up to 11° beyond vertical
- 304 Series stainless steel hardware
- Easy installation
- · Large, molded in bumpers
- Slip resistant pads
- Elongated only
- Conforms to ANSI Z124.5



External self-sustaining check hinge w/304 Series stainless steel hinge posts holds seat in any raised position up to 11° beyond vertical



PFTSC0F2000WH

Color Palette

White (WH)

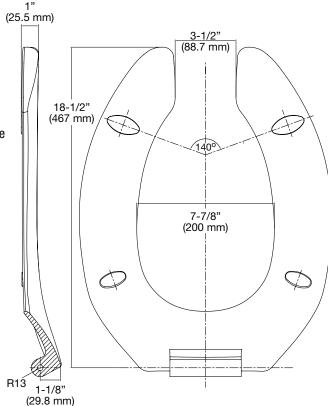
Model Numbers



Elongated commercial toilet seat, black Elongated commercial toilet seat, white

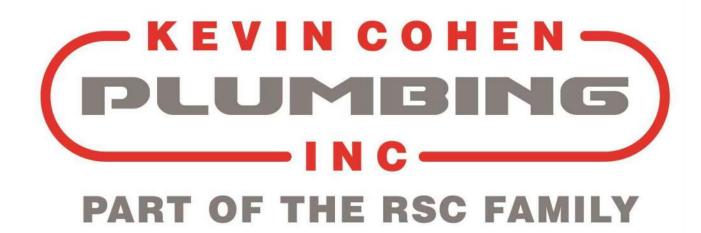
PFTSCOFA2000WH Anti-Microbial, Elongated commercial toilet seat, white

Product Specifications



Warranty and Codes

PROFLO toilet seats carry a 1-year limited warranty. In an effort to continually improve our products, FEI will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.



WC-1 Water Closet Option



Kingston™

elongated toilet bowl

K-25086

Features

- Ideal for commercial installations.
- Elongated bowl offers added room and comfort.
- 2-1/8" (54 mm) fully glazed trapway.

 Combines with a K-25100, K-25100-RA, K-25100-T or K-25100-TR tank to create a complete K-25087, K-25087-RA, K-25087-T or K-25087-TR Kingston™ two-piece toilet.

Installation

- Three-bolt quick-connect installation.
- Standard 12" (305 mm) rough-in.
- Seat sold separately.

Recommended Products/Accessories

K-23726 Drain treatment

Included Components

Additional Components:

Hardware accessory pack

THIS MATCHES BASIS OF DESIGN DEVICE



Codes/Standards

ASME A112.19.2/CSA B45.1

KOHLER® Toilets and Seats Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

Color Code Description









No image available.

This product is a component and not intended to be a standalone installation.

Technical Information

All product dimensions are nominal.

Toilet type: Two-piece, Floor-mount

Waste Outlet: Floor
Bowl shape: Elongated
Trap passageway: 2-1/8" (54 mm)

Water Consumption

Full: 1.28 gpf (4.8 lpf)

Water surface size: 10-13/16" x 7-1/4" (274 mm x 183 mm)

Rim to water 5-5/8" (143 mm)

surface:

Rough-in: 12" (305 mm)

Notes

Install this product according to the installation instructions.





KOHLER

Kingston™ Toilet tank, 1.28 gpf K-25100

Features

- Ideal for commercial installations.
- 1.28 gpf (4.8 lpf).
- Durable metal left-hand Polished Chrome trip lever.
- Combines with a K-25076 or K-25076-SS bowl to create a complete K-25077 or K-25077-SS Kingston two-piece toilet.

Technology

- Single-flush gravity uses the force of gravity and a precisionengineered tank, bowl, and trapway to create a strong siphon during flushing.
- Class Five® flushing technology offers virtually plug-free performance and rinsing power for a clean bowl.
- Class Five® canister allows water to flow out of the tank from all sides (360 degrees), increasing the power and effectiveness of the flush.
- Flush valve's 3:2 ratio harnesses the natural force of gravity and optimizes flush performance.
- Durable canister design has 90% less exposed seal material than a 3" flapper for leak-free performance.

Installation

- Three-bolt quick-connect installation.
- Supply line sold separately.

Recommended Products/Accessories

K-23726 Drain treatment

Included Components

Additional Components:

Tank Cover, Trip Lever, and Hardware kit



Codes/Standards

ASME A112.19.2/CSA B45.1

KOHLER® Toilets and Seats Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

Color Code Description

0 White







No image available.

This product is a component and not intended to be a standalone installation.

Technical Information

All product dimensions are nominal.

Toilet type: Two-piece, Bowl-mount

Waste Outlet: Floor

Flush type: Gravity siphon jet

Water Consumption

Full: 1.28 gpf (4.8 lpf)

Notes

Install this product according to the installation instructions.

Install this product according to the installation instructions.



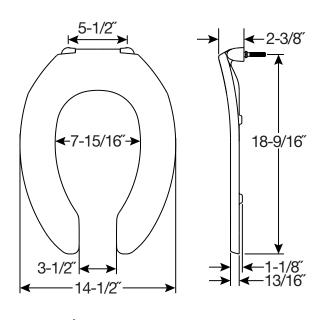


COMMERCIAL HEAVY-DUTY PLASTIC TOILET SEAT



FEATURES:

• STA-TITE® Commercial Fastening System™ Eliminates callbacks for loosened seats







SPECIFICATIONS:

Size: Elongated

Material: Plastic

Style: Open Front less Cover

Ring Bumpers: Four

Hinges: Plastic Non Self-Sustaining Check Hinges (1955CT) or Self-Sustaining Check Hinges (1955SSCT) with Non-Corroding

300 Series Stainless Steel Posts and Pintles

Hardware: STA-TITE[®] Commercial Fastening System[™]

Codes & Standards:

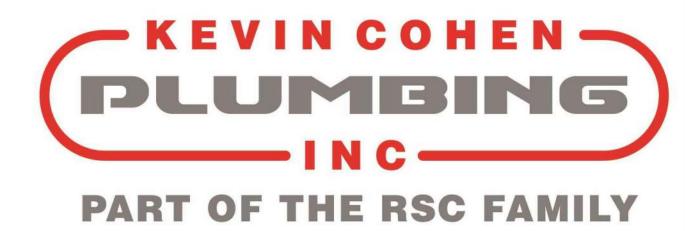


Complies with IAPMO/ANSI Z124.5 Performance Standards Heavy-Duty Commercial

ph: 800.558.7651







WC-2 Water Closet

Dual Flush Two-P<u>iece Toilet</u>



SEE COMMENTS FOR WC-1

Product Features

- Choose either 1.6 or 1.1 gallons per flush
- HET, High-Efficiency Toilet
- · Two-piece vitreous china
- 2" fully glazed trapway
- 6"x 5-1/4" (RF) / 7"x 6" (EL) water surface
- · Anti-siphon fill valve
- · Gravity fed, box rim
- Close coupled tank with cover
- Quick connect, two-bolt tank-to-bowl installation
- 2" flush valve

- PF9312 tank comes standard with a color matching trip lever
- PF9312P tank comes standard with chrome push button actuator
- Sanitary bar on all bowls
- Seat and supply not included
- · Available round front, elongated and ADA
- EPA WaterSense certified
- Meets ASME/ANSI A112.19.2M
- 1,000G MaP rated



PF1401T/PF9312

Model Numbers

*	PF1400TWH	1.1-1.6 12 RI RF UNIV BOWL WHIT
*	PF1401TWH	1.1-1.6 12 RI EL UNIV BOWL WHIT
**		1.1-1.6 12 RI ADA UNIV BOWL WHIT
	PF9312WH	Tank HET Dual Flush 1.1/1.6 gpf, 12" rough-in, white
	PF9310WH	Tank HET Dual Flush 1.1/1.6 gpf, 10" rough-in, white
	PF9312PWH	Tank HET Dual Flush 1.1/1.6 gpf, push button, white
	PF9312RWH	Tank HET Dual Flush 1.1/1.6 gpf, right hand, white
	* - Complies with CCA DGE1	

^{* =} Complies with CSA B651

PF1401T/PF9312P

Available Parts

PF9312FLPK Fill valve assembly

PF9312FVPK Flush valve assembly for PF9312WH (includes chrome trip lever)

PFTGPK Tank gasket w/bolts

PF9312PFVPK Flush valve assembly for PF9312PWH

PF9312PBCP Push button actuator for PF9312PWH, chrome

PF5112LIDWH Tank lid white

Detailed Use Instructions

The Dual Flush enables a 1.1 gallon flush by pushing the small button or the flush lever back for liquid or light waste. The 1.6 gallon flush can be utilized by pushing the large button or pulling forward on the trip lever providing a strong flushing action for bulk or solid waste.

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. All PROFLO fixtures carry a lifetime limited warranty on the vitreous china and a 5-year limited warranty on the fittings. This product meets or exceeds ASME/ANSI A112.19.2M. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.









^{** =} Complies with ADA & CSA B651

Dual Flush Two-Piece Toilet

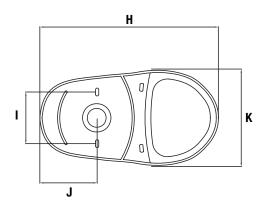


Certifications

Meets strict flushing performance guidelines established by the EPA (Environmental Protection Agency) WaterSense program. Leadership in Energy and Environmental Design (LEED) Compliant. Los Angeles Department of Water and Power (LADWP) Compliant.

	PF9310 /1400T	PF9310 /1401T	PF9310 /1403T
Α	26-1/2"	28-1/2"	28-1/2"
В	16-1/2"	18-1/2"	18-1/2"
С	15"	15"	17"
D	29-3/4"	29-3/4"	31-3/4"
Е	6-1/4"	6-1/4"	6-1/4"
F	10"	10"	10"
G	17-1/2"	17-1/2"	17-1/2"

		V	
	PF9312 /1400T	PF9312 /1401T	PF9312 /1403T
Α	28-1/2"	30-1/2"	30-1/2"
В	16-1/2"	18-1/2"	18-1/2"
С	15"	15"	17"
D	29-3/4"	29-3/4"	31-3/4"
Е	8-1/2"	8-1/2"	8-1/2"
F	12"	12"	12"
G	15-3/4"	15-3/4"	15-3/4"



Footprint

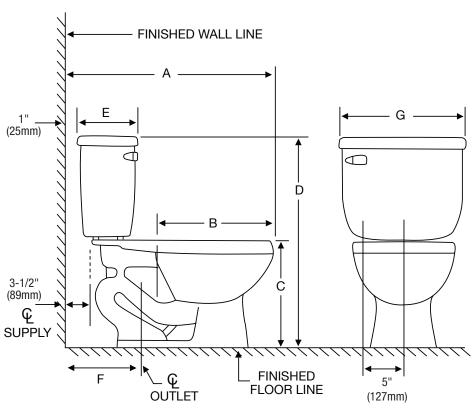
	RF	EL	ADA
	PF1400T	PF1401T	PF1403T
Н	18-1/2"	18-1/2"	18-1/2"
- 1	6"	6"	6"
J	6-1/8"	6-1/2"	6-1/2"
K	9"	9"	9"











PFTSC0F2000WH, PFTSC0FA2000WH

Commercial Toilet Seat



Product Features

- · Heavy weight molded solid plastic
- · Open front less cover
- External self-sustaining check hinge holds seat in any raised position up to 11° beyond vertical
- 304 Series stainless steel hardware
- Easy installation
- · Large, molded in bumpers
- Slip resistant pads
- Elongated only
- Conforms to ANSI Z124.5



External self-sustaining check hinge w/304 Series stainless steel hinge posts holds seat in any raised position up to 11° beyond vertical

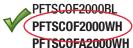


PFTSC0F2000WH

Color Palette

White (WH)

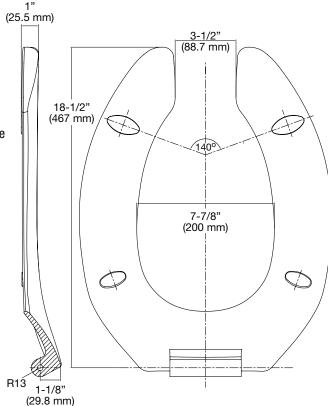
Model Numbers



Elongated commercial toilet seat, black Elongated commercial toilet seat, white

PFTSCOFA2000WH Anti-Microbial, Elongated commercial toilet seat, white

Product Specifications



Warranty and Codes

PROFLO toilet seats carry a 1-year limited warranty. In an effort to continually improve our products, FEI will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.



WC-2 Water Closet Option



Kingston™ Comfort Height®

Elongated chair height toilet bowl **K-25076**

Features

- Ideal for commercial installations.
- Elongated bowl offers added room and comfort.
- 2-1/8" (54 mm) fully glazed trapway.
- Combines with a K-25100, K-25100-RA, K-25100-T or K-25100-TR tank to create a complete K-25077, K-25077-RA, K-25077-T or K-25077-TR Kingston two-piece toilet.

Installation

- Three-bolt quick-connect installation.
- Standard 12" (305 mm) rough-in.
- Seat sold separately.

Recommended Products/Accessories

K-23726 Drain treatment

Included Components

Additional Components:

Hardware accessory pack



ADA CSA B651 OBC

Codes/Standards

ASME A112.19.2/CSA B45.1 ADA ICC/ANSI A117.1 CSA B651 OBC

KOHLER® Toilets and Seats Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

Color Code Description

0 White





Kingston™ Comfort Height®

Elongated chair height toilet bowl K-25076

No image available.

This product is a component and not intended to be a standalone installation.

Technical Information

All product dimensions are nominal.

Toilet type: Two-piece, Floor-mount

Waste Outlet: Floor
Bowl shape: Elongated

Flush type: Gravity siphon jet Trap passageway: 2-1/8" (54 mm)

Water Consumption

Full: 1.28 gpf (4.8 lpf)

Water surface size: 10-5/8" x 6-15/16" (269 mm x 176 mm)

Rim to water 5-5/8" (143 mm)

surface:

Rough-in: 12" (305 mm)

Notes

Install this product according to the installation instructions.

ADA, OBC, CSA B651 compliant when installed to the specific requirements of these regulations.

Plumbing codes may require elongated toilets and elongated, open-front seats in public bathrooms.

Accessibility standards may require controls to be located on the open side of the toilet.





KOHLER

Kingston™ Toilet tank, 1.28 gpf K-25100

Features

- Ideal for commercial installations.
- 1.28 gpf (4.8 lpf).
- Durable metal left-hand Polished Chrome trip lever.
- Combines with a K-25076 or K-25076-SS bowl to create a complete K-25077 or K-25077-SS Kingston two-piece toilet.

Technology

- Single-flush gravity uses the force of gravity and a precisionengineered tank, bowl, and trapway to create a strong siphon during flushing.
- Class Five® flushing technology offers virtually plug-free performance and rinsing power for a clean bowl.
- Class Five® canister allows water to flow out of the tank from all sides (360 degrees), increasing the power and effectiveness of the flush.
- Flush valve's 3:2 ratio harnesses the natural force of gravity and optimizes flush performance.
- Durable canister design has 90% less exposed seal material than a 3" flapper for leak-free performance.

Installation

- Three-bolt quick-connect installation.
- Supply line sold separately.

Recommended Products/Accessories

K-23726 Drain treatment

Included Components

Additional Components:

Tank Cover, Trip Lever, and Hardware kit



Codes/Standards

ASME A112.19.2/CSA B45.1

KOHLER® Toilets and Seats Limited Warranty

See website for detailed warranty information.

Available Colors/Finishes

Color tiles intended for reference only.

Color Code Description

0 White







No image available.

This product is a component and not intended to be a standalone installation.

Technical Information

All product dimensions are nominal.

Toilet type: Two-piece, Bowl-mount

Waste Outlet: Floor

Flush type: Gravity siphon jet

Water Consumption

Full: 1.28 gpf (4.8 lpf)

Notes

Install this product according to the installation instructions.

Install this product according to the installation instructions.



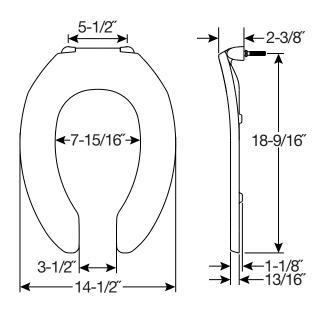


COMMERCIAL HEAVY-DUTY PLASTIC TOILET SEAT



FEATURES:

• STA-TITE® Commercial Fastening System™ Eliminates callbacks for loosened seats



SPECIFICATIONS:

Size: Elongated

Material: Plastic

Style: Open Front less Cover

Ring Bumpers: Four

Hinges: Plastic Non Self-Sustaining Check Hinges (1955CT) or Self-Sustaining Check Hinges (1955SSCT) with Non-Corroding

300 Series Stainless Steel Posts and Pintles

000-White

Hardware: STA-TITE[®] Commercial Fastening System[™]

Codes & Standards:



Complies with IAPMO/ANSI Z124.5 Performance Standards Heavy-Duty Commercial

ph: 800.558.7651





DS-1 Downspout Boot

THIS DEVICE WOULD SEEM TO BE MORE EXPENSIVE THAN THE DETAILED DEVICE.

DRAWING NUMBEF

OR

SUPERSEDED

USE OF

NO RESPONSIBILITY FOR

WE CAN ASSUME

WITHOUT NOTICE

AND CHANGE

TOLERANCE

SUBJECT TO MANUFACTURERS

₽

DRAWN BY

1785,1786,1787

4

NONE

5-24-85

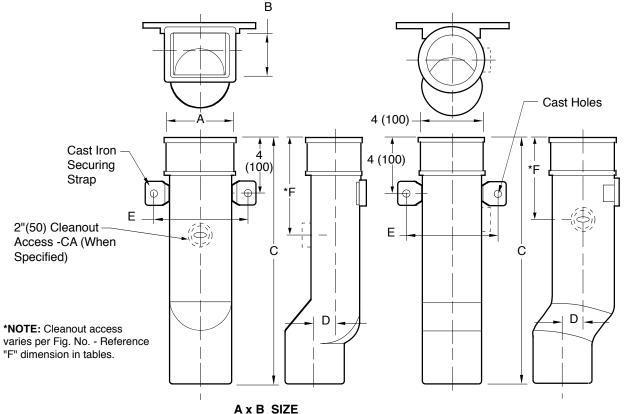
APPROVED BY **TD** MEMBER OF MORRIS GROUP INTERNATIONAL POST OFFICE BOX 3237 MONTGOMERY, ALABAMA 36109-0237 (USA) TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith



LOCATION

DOWNSPOUT BOOTS

FUNCTION: Used as a transition piece for connecting sheet metal exposed downspout to underground cast iron soil piping. Sturdy cast iron construction provides the necessary protection of the lower part of the exposed downspout from damage.



A X D SIZ

Fig. 1785 Series . . . 4(100) x 3"(76) RECTANGULAR Fig. 1786 Series . . . 5(125) x 4"(100) RECTANGULAR

Fig. 1787 Series . . . 4"(100) ROUND

*Specify Model/Size When Ordering

	4(100)	x 3"(7	′6) SIZ	<u>'E</u>
Figure	С	D	E	F
No.	Length			
1785-12	12(305)			4 1/2(114)
1785-18				9
1785-24	24(610)	(38)	(168)	(229)
· · · · · · · · · · · · · · · · · · ·				

	5(125) x 4"(100) SIZE								
Figure	С	D	E	F					
No.	Length								
1786-24	24(610)	1(25)	7 5/8(194)	9(229)					
1786-36	36(915)	1(25)	7 5/8(194)	9(229)					

4"(100) ROUND SIZE								
С	D	Е	F					
Length								
18(455)	1(25)	6 1/8(155)	5(125)					
	C Length	C D Length	C D E					

NOTE: All downspout boots have 4"(100) spigot end for connection with 4"(100) pipe.

REGULARLY FURNISHED:

Cast iron body and strap with 5/16"(8) Dia. cast holes for flat head bolts, typical. All shapes unpainted.

VARIATIONS:

2" Cleanout Access -CA

OPTIONAL MATERIALS:

Galvanized Cast Iron -G

NOTE: Dimensions shown in parentheses are in millimeters.

TWK
CL
BW
CL
CKD. BY

WEIGHT VOLUME POUNDS CUBIC FEET FIGURE NUMBER

1785,1786,1787



GWH-1 Gas Water Heater

UNIT IS LARGER THAN SPECIFIED. NO OTHER ISSUES. SEEMS LIKE A GOOD ALTERNATIVE.

Commercial Hybrid Water Heating System Demand Duo™ H-Series



119 Gallon Model

80 Gallon Model





Vertical Double Units

Horizontal Double Units

OPTIONAL ACCESSORIES

Room Air Screen, Condensate Neutralizer, Scale Cutter, Control-R $^{\text{TM}}$ Wi-Fi Module, Wireless Accessories, and many more.

Visit rinnai.us for a complete list of accessories.

EASE OF INSTALLATION AND SERVICEABILITY

- Wi-Fi Technology for Remote Monitoring and Management
- Simple Gas Conversion

SUPER-HIGH-EFFICIEN SYSTEM	NCY (CONDENSING) HYE	BRID WATER HEATING			
Installation Type	Internal (Indoor) Comme	rcial Applications			
Model Numbers	CHS398100HV, CHS398 CHS398100Hi, CHS1991 CHS19980Hi, CHS16080				
Approved Gas Types	Natural and Propane				
Maximum System Gas Consumption	Up to 398,000 BTU/h (See specific models on f	ollowing pages)			
	ALE CERTIFIED	UEF up to 0.93			
Efficiency	Ratings Not Certified by AHRI	Thermal Efficiency: Up to 97%			
High Altitude Approved	Up to 10,200 Ft (3,109 M)				
Water Flow Control	Water Flow Sensor, Elect Control and Bypass Cont	tronic Water trol			
Controller	Standard: Integrated Cor Optional: MC-91-2US	ntroller			
Certifications	AHRI, ANSI Z21.10.3, CSA (Tankless Water Heater)				
Storage Tank	 2" Eco-friendly foam insulation Glass-lined inner tank 1-1/2" MNPT dielectric hot and cold connections Pre-installed temperature & Pressure relief valve Brass drain valve Dual magnesium anode rods Hand hole clean-out 				
Warranty	 Heat Exchanger: 8 year hours, whichever occu Tank: 6 years All Other Parts and Corollous Reasonable Labor: 1 Year (Refer to the Installation a for further warranty information) 	mponents: 5 Years ear and Operation Manual			
Safety Devices	Flame Failure - Flame Ro Combustion Fan RPM Ch Fuse, Remaining Flame (O Protection	d, Boiling Protection, neck, Over Current - Glass OHS) and Automatic Freeze			
Additional Features	 Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx Emission Levels Ultra Low NOx 				
Venting Options:	 Concentric or schedule Direct Vent (Concentries Non-Direct Vent (Room Common Vent (Direct Vent (c and Twin Pipe) n Air) Vent and Room Air) Vent			
Maximum Equivalent Ve	nt Lengths:				

Twin Pipe		
Vent Sizes	2 in. (51 mm)	3 in. (76 mm)
Vent Lengths	65 ft (20 m)	150 ft (46 m)
Concentric		
Vent Sizes	2 in. X 4 in.	3 in. X 5 in.
Vent Lengths	65 ft (20 m)	150 ft (46 m)

Note: Sizes and lengths apply to single engine or non-common vent double engine systems.



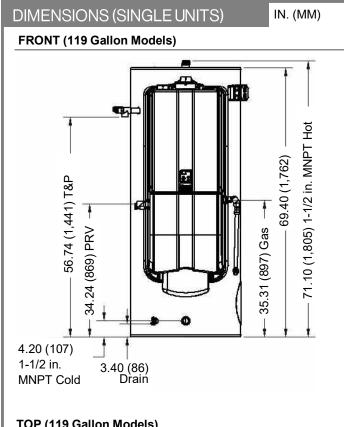






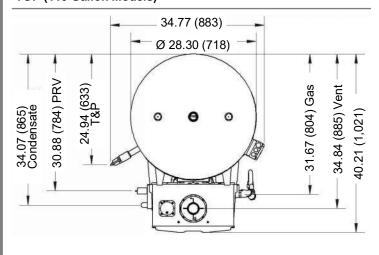


CERTIFIED TO ANSI Z21.10.3 — CSA 4.3



FRONT (80 Gallon Models) 64.71 (1,643) 1-1/2 in. MNPT Hot 62.69 (1,592) 54.28 (1,379) T&P 4.19 (106)1-1/2 in.

TOP (119 Gallon Models)

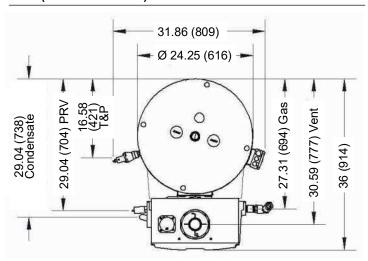




3.54 (90)

Drain

MNPT Cold



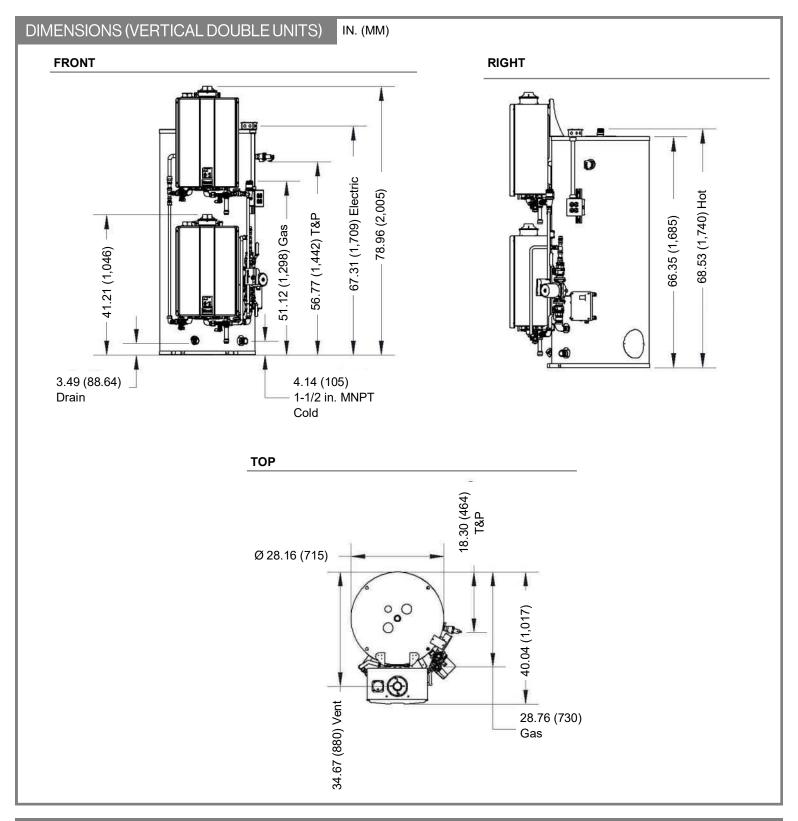
RECOVERY CAPACITIES

			Input				U.S	. Gallo	n / HR	Liters /	HR at	Tempe	rature	Rise In	dicated	t		
Produc Numbe		Gas Type	iliput		Tank	°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
		,,	BTU/HR	kW	Capacity	°C	17°C	22°C	28°C	33°C	39°C	44°C	50°C	56°C	61°C	67°C	72°C	78°C
CHS1991	OOH:	NG/LP	199,000	58	119 Gals.	GPH	780	585	468	390	334	292	260	234	213	195	180	167
C1131991	00111	NGJLF	199,000	50	450 Liters	LPH	2,953	2,214	1,771	1,476	1,264	1,105	984	886	806	738	681	632
CHS1601	∩∩⊔;	NG/LP	160,000	58	119 Gals.	GPH	627	470	376	314	269	235	209	188	171	157	145	134
C1131001	OOLII	NG/LF	100,000	50	450 Liters	LPH	2,374	1,780	1,424	1,187	1,017	890	791	712	647	593	548	509
CHS1998	onu:	NG/LP	199,000	58	80 Gals.	GPH	780	585	468	390	334	292	260	234	213	195	180	167
CH3 1990	וחטכ	NG/LP	199,000	56	303 Liters	LPH	2,953	2,214	1,771	1,476	1,264	1,105	984	886	806	738	681	632
CHS1608	illo	NG/LP	160.000	58	80 Gals.	GPH	627	470	376	314	269	235	209	188	171	157	145	134
CH3 1000	וחטכ	NG/LP	100,000	56	303 Liters	LPH	2,374	1,780	1,424	1,187	1,017	890	791	712	647	593	548	509
CHS1308	SULI:	NG/LP	130,000	58	80 Gals.	GPH	509	382	306	255	218	191	170	153	139	127	118	109
C1131300	וו וטכ	ING/LP	130,000	50	303 Liters	LPH	1,929	1446	1,157	964	827	723	643	579	526	482	445	413

DIMENSIONS (HORIZONTAL DOUBLE UNITS) IN. (MM) **RIGHT** LEFT 0 0 0 88 58.55 in.* (1,487 mm) 42.71 in. (1,085 mm) GAS 🗻 *Temperature and Pressure Relief Valve 44.21 in. (1,123 mm) -TOP **FRONT** Ø 28.16 in. (715 mm) Gas Vent 64.49 in. (1,638 mm) Concentric Vent 23.75 in.* (603 mm) 38.92 in. (989 mm) 44.28 in. (1,125 mm) 66.35 in. (1,685 mm) Tank Height 42.79 in. (1,087 mm) 67.31 in. (1,710 mm) Building Electric 65.77 in. (1,671 mm) PVC/PP Gas 68.94 in. (1,751 mm) Hot 34.02 in. (864 mm) 5.91 in. (150 mm) Typical 20.50 in. (521 mm) 38.81 in. (986 mm) 3.61 in. (92 mm) Drain 4.14 in. (105 mm) Cold * Temperature and Pressure Relief Valve

RECOVERY CAPACITIES

	U.S. Gallons/Hour Liters/Hour at Temperature Rise Indicated												
Tank Capacity	°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
тапк Сараспу	°C	17°C	22°C	28°C	33°C	39°C	44°C	50°C	56°C	61°C	67°C	72°C	78°C
119 Gal.	GPH	1,528	1,147	917	764	655	573	510	459	417	382	353	328
450 Liters	LPH	5,784	4,342	3,471	2,892	2,479	2,169	1,931	1,738	1,579	1,446	1,336	1,242



RECOVERY CAPACITIES

U.S. Gallons/Hour Liters/Hour at Temperature Rise Indicated													
Tonk Consoits	°F 30°F 40°F 50°F 6					70°F	80°F	90°F	100°F	110°F	120°F	130°F	140°F
Tank Capacity	°C	17°C	22°C	28°C	33°C	39°C	44°C	50°C	56°C	61°C	67°C	72°C	78°C
119 Gal.	GPH	1,254	941	752	627	537	470	418	376	342	314	289	269
450 Liters	LPH	4,747	3,561	2,848	2,374	2,035	1,780	1,582	1,424	1,295	1,187	1,096	1,017

TECHNICAL SPECIFICATIONS (For Single Units)

Model Number		CHS199100Hi	CHS160100Hi	CHS19980Hi	CHS16080Hi	CHS13080Hi		
Minimum Gas Consum	nption Btu/hr (kW/hr)			15,000 (4.3)				
Maximum Gas Consur	mption Btu/hr (kW/hr)	199,000 (58.3)	160,000 (46.9)	199,000 (58.3)	160,000 (46.9)	130,000 (38.1)		
Tank Volume		119 Gallons	(450 Liters)	80	Gallons (303 L	iters)		
First Hour Delivery at	317 Gallons (1,200 Liters)	271 Gallons (1,026 Liters)	290 Gallons (1,098 Liters)	244 Gallons (924 Liters)	209 Gallons (791 Liters)			
Product Weight		431 lb (195 kg)	429 lb (195kg)	307 lb (139 kg)	305lb (138 kg)	305lb (138 kg)		
Sound Level		49 dB	48 dB	49 dB	48 dB	48 dB		
Installation Type			Internal (Indo	or) Commercial	Applications			
Category				Category IV				
Ignition System			Direc	t Electronic Ign	ition			
Water Supply Pressure	Э		15	0 PSI (Maximu	m)			
Temperature Setting		98°F (37°C) to 185°F (85°C) 98°F (3140°F (
	Normal	265 W	223 W	265 W	233 W	219 W		
	Standby	44 W	44 W	44 W	44 W	44 W		
Electrical Data	Freeze Protection	148 W	148 W	148 W	148 W	148 W		
	Max Current	5.5 A	5.5 A	5.5 A	5.5 A	5.5 A		
	Fuse	Tankless Water Heater Engine: 10 Amps, Controller: 10 Amps						
Gas Supply Pressure	Natural		3	.5 - 10.5 in. w.c).			
Gas Supply Flessure	Propane		8	.0 - 13.5 in. w.c	;.			
By-Pass Flow Control				Electronic				
Connections		Gas Supply Inlet: 3/4 in. MNPT Hot Water Outlet: 1-1/2 in. MNPT Cold Water Inlet: 1-1/2 in. MNPT						
Electric Connections		Appliance: AC 120 Volts, 60Hz. Integrated Temperature Controller: DC 12 Volts (Digital)						
Water Temperature Co	ontrol	Simulation Feed Forward and Feedback						
ENERGY STAR® Cer	tified (Tankless	Yes						

^{*}First Hour Delivery Rating is a theoretical calculation based on 70% usable tank capacity (Tank Capacity x 0.70 + (recovery) = First Hour Delivery Rating

Rinnai products are continually being updated and improved; therefore, specifications are subject to change without prior notice.

^{**}The maximum gas supply pressure must not exceed the value specified by the manufacturer.

^{***}Temperature limit of 185°F can be achieved using optional MCC-91 controller.

TECHNICAL SPECIFICATIONS (For Horizontal Double Units)

Model Number	CHS398100Hi				
Dimensions (Assembled) in. (mm)	w x h x d: 38.81 x 69.60 x 40.96 (985.8 x 1,767.8 x 1,040.4)				
Weight	Rack (with 2 Tankless Water Heaters): 220 lbs (100 kg); Tank: 310 lbs (141 kg) Complete System: 530 lbs (240 kg)				
Installation Type	Internal (Indoor) Commercial Applications				
Category and Ignition System	Category IV, Direct Electronic Ignition				
Gas Consumption Btu/h (kW/h)	Minimum: 30,400 (9) Maximum: 398,000 (116.6)				
Water Supply Pressure	150 PSI (Maximum)				
Temperature Setting	98°F (37°C) to 185°F (85°C)				
Tank Volume	119 Gallons (450 Liters)				
First Hour Delivery Rating*	551 Gallons (2,085 Liters)				
Sound Level (Single unit)	49 dB				
Electrical Data	Normal: 265 W, Standby: 44 W, Freeze Protection: 148 W, Max Current: 5.5 A				
(Tankless Water Heater)	Fuse: Tankless Water Heater Engine: 10 Amps, Controller: 10 Amps				
Gas Supply Pressure**	Natural: 3.5 - 10.5 in. w.c. Propane: 8.0 - 13.5 in. w.c.				
By-Pass Flow Control	Electronic				
Connections	Gas Supply Inlet: 1-1/2 in. MNPT Hot Water Outlet: 1-1/2 in. MNPT Cold Water Inlet: 1-1/2 in. MNPT				
Electric Connections	Appliance: AC 120 Volts, 60Hz.				
Liectife Confidentials	Integrated Temperature Controller: DC 12 Volts (Digital)				
Water Flow Control	Water Flow Sensor, Electronic Water Control and Bypass Control				
Water Temperature Control	Simulation Feed Forward and Feedback				
Recovery	459 GPH @ 100° ∆T				
High Altitude Approved	Up to 10,200 ft (3,109 m)				
Ultra Low NOx	Yes				
Certifications	AHRI, ANSI Z21.10.3, CSA 4.3 and ENERGY STAR® Certified (CU199i)				
Controller	MCC-91-2US				
Recovery Pump	Grundfos UPS 26-150 (S)F; 3 Speed				
Venting Material	Polypropylene, PVC, CPVC				
Venting Options	Concentric Polypropylene, Twin Pipe, or Common Vent Polypropylene/ PVC/CPVC. Vent lengths up to 150 ft.				
Wi-Fi Ready	Yes				

^{*}First Hour Delivery Rating is a theoretical calculation based on 70% usable tank capacity. Tank Capacity x 0.70 + (recovery) = First Hour Delivery Rating

^{**} Maximum gas supply pressure must not exceed the value specified by the manufacturer.

TECHNICAL SPECIFICATIONS (For Vertical Double Units)

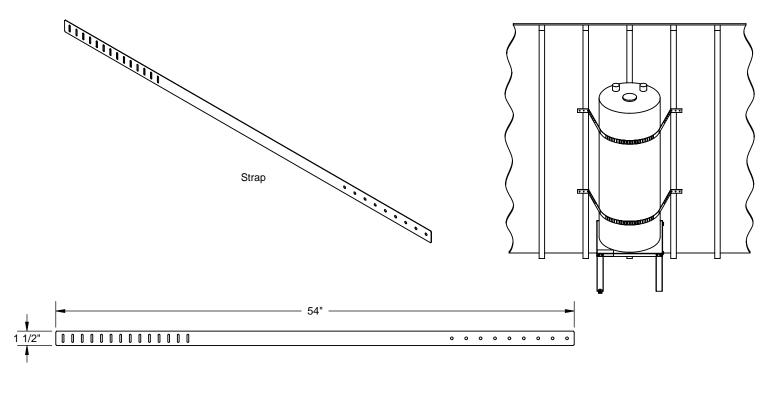
Model Number	CHS398100HV CHS398100HVA***	CHS320100HV					
Dimensions (Assembled) in. (mm)	w x h x d: 32.4 x 78.8 x 40.	2 (822.7 x 2,001.5 x 1,021.1)					
Weight	Tank: 310 lbs (141 kg) Comր	olete System: 530 lbs (240 kg)					
Installation Type	Internal (Indoor) Co	nmercial Applications					
Category and Ignition System	Category IV, Direct Electronic Ignition						
Gas Consumption Btu/h (kW/h)	Minimum: 30,400 (9) Maximum: 398,000 (116.6)	Minimum: 30,400 (9) Maximum: 320,000 (93.7)					
Water Supply Pressure	150 PSI (Maximum)					
Temperature Setting	98°F (37°C) t	o 185°F (85°C)					
Tank Volume	119 Gallons	s (450 Liters)					
First Hour Delivery Rating*	551 Gallons (2,085 Liters)	460 Gallons (1,741 Liters)					
Sound Level (Single unit)	49 dB	48 dB					
Electrical Data	Normal: 265 W, Standby: 44 W, Freeze Protection: 148 W, Max Current: 5.5 A	Normal: 233 W, Standby: 44 W, Freeze Protection: 148 W, Max Current: 5.5 A					
(Tankless Water Heater)	Fuse: Tankless Water Heater Engine: 10 Amps, Controller: 10 Amps						
Gas Supply Pressure**	Natural: 3.5 - 10.5 in. w.c. Propane: 8.0 - 13.5 in. w.c.						
By-Pass Flow Control	Electronic						
Connections	Gas Supply Inlet: 1-1/2 in. MNPT Hot V Cold Water Inlet: 1-1/2 in. MNPT	Vater Outlet: 1-1/2 in. MNPT					
Electric Connections	Appliance: AC	120 Volts, 60Hz.					
Electric Confidentions	Integrated Temperature Co	ntroller: DC 12 Volts (Digital)					
Water Flow Control	Water Flow Sensor, Electronic V	Vater Control and Bypass Control					
Water Temperature Control	Simulation Feed Fo	rward and Feedback					
Recovery	459 GPH @ 100° ΔT	376 GPH @100° ΔT					
High Altitude Approved	Up to 10,200) Ft (3,109 M)					
Ultra Low NOx	Yes						
Certifications	AHRI, ANSI Z21.10.3, CSA 4.3 and ENERGY STAR® Certified (CU199i)						
Controller	MCC-91-2US						
Recovery Pump	Grundfos UPS 26-150 (S)F; 3 Speed						
Venting Material	Polypropylene, PVC, CPVC						
Venting Options	Concentric Polypropylene, Twin Pipe, or Vent length:	Common Vent Polypropylene/PVC/CPVC. s up to 150 ft.					
Wi-Fi Ready	Y	es es					

First Hour Delivery Rating is a theoretical calculation based on 70% usable tank capacity.
 Tank Capacity x .70 + (recovery) = First Hour Delivery Rating

^{**} Maximum gas supply pressure must not exceed the value specified by the manufacturer.

^{***} Model includes an ASME rated tank.

PRODUCT SPECIFICATION DRAWING QUICK STRAP® #QS-120 Seismic support for water heaters









ALL DIMENSIONS IN INCHES

The QUICK STRAP® #QS-120 is a seismic/earthquake support system for water heaters up to 120 U.S. gallons in size. The system includes: (4) Straps, (2) J-Clips, (2) 3/8" Carriage Bolts and (2) 3/8" Hex Nuts. The Quick Link® system allows for full adjustment from the front side of the water heater.

Product Information:

- Material: Strap, 24 gage CRS, galvanized
- California Division State Architect (DSA) approval #98-018
- UPC / IPC / IAPMO listed



CONVERTING MAKESHIFT METHODS INTO ENGINEERED SOLUTIONSSM 800-321-0316 OR 760-744-6944 / FAX: 760-744-0507 / WWW.HOLDRITE.COM spec_QS-120_RevI





Product Sub	mittal
Job Name:	antine in most on i
Date:	
Part Number:	Qty
Architect / Owner:	
Contractor:	
Notes:	



Commercial Gas Water Heaters

OPTIONAL KITS



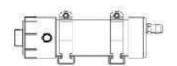
OPTIONAL CONCENTRIC VENT KITS

- BTH-120 250 vent kit p/n 100111100
- BTH-300 500 vent kit p/n 100113124



OPTIONAL LOW PROFILE TERMINATION VENT KITS

- 3" Flush Mount Vent Kit p/n 100187887
- 4" Flush Mount Vent Kit p/n 100187888
- 6" Flush Mount Vent Kit p/n 100187889



OPTIONAL CONDENSATE NEUTRALIZATION KITS

- BTH-120-199 kit p/n 100112380
- BTH-250-500 kit p/n 100112381

COMMON VENTING KITS FOR UP TO 3 WATER HEATERS (ONE KIT PER WATER HEATER REQUIRED)

Kit	Description			
100227396	PVC Common Vent Kit, 120 – 250 Models			
100223775	PVC Common Vent Kit, 300 – 500 Models			
100227395	Polypropylene Common Vent Kit, 120 -250 Models			
100223774	Polypropylene Common Vent Kit, 300 - 500 Models			

Installations must comply with all national, state and local codes.

See kit instructions and corresponding water heater manual for detailed installation instructions and additional information.

50 Feet maximum equivalent length of straight pipe common vent and elbows

NOTE: Order 1 kit for each water heater.

See the Common Vent Kit manual or spec sheet for detailed information.

SPECIFICATION

(Natural or Propane) gas water heater(s) shall be A. O. Smith Cyclone Mxi model # _______ or equal, minimum 95% thermal efficiency, a storage capacity of ______ gallons, an input rating of ______ BTUs per hour, a recovery rating of ______ gallons per hour (gph) at 100°F rise and a maximum hydrostatic working pressure of 160 psi. Water heater(s) shall: 1. Modulating gas burner that automatically adjusts the input based on demand. 2. Powered anodes that are non sacrificial and maintenance free. 3. Have seamless glass-lined steel tank construction, with glass lining applied to all waterside surfaces after the tank has been assembled and welded; 4. Meets the thermal efficiency and/or standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IES 90.1; 5. Have foam insulation and a CSA Certified and ASME rated T&P relief valve; 6. Have a down-fired power burner designed for precise mixing of air and gas for optimum efficiency, requiring no special calibration on start-up; 7. Be approved for 0" clearance to combustibles.

The control shall be an integrated solid-state temperature and ignition control device with integral diagnostics, graphic user interface, fault history display, and shall have digital temperature readout. 1. All models are design contributed by ladourities absorbatics.

and shall have digital temperature readout. 1. All models are design certified by Underwriters Laboratories (UL), Inc., according to ANSI Z21.10.3 - CSA 4.3 standards governing storage type water heaters; 2. Meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition ASHRAE/IES 90.1. Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for low NOx emissions.

120K-250K BTU Input: For Standard Power Venting: Water heater(s) shall be suitable for power venting using a (3" or 4") _______ diameter PVC pipe for a total distance of (50 ft or 120 ft.) ______ equivalent feet of vent piping. For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (3" or 4") ______ diameter PVC pipe for a total distance of (50 ft or 120 ft.) ______ equivalent feet of vent piping and (50 ft. or 120 ft.) ______ equivalent feet of intake air piping.

300K - 500K BTU Input: For Standard Power Venting: Water heater(s) shall be suitable for standard power venting using a (4" or 6") ______ diameter PVC pipe for a total distance of (70 ft. or 120 ft.) _____ equivalent feet of vent piping. For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (4" or 6") _____ diameter PVC pipe for a total distance of (70 ft or 120 ft.) _____ equivalent feet of vent piping and (70 ft. or 120 ft.) _____ equivalent feet of intake air piping.

Operation of the water heater(s) in a closed system where thermal expansion has not been compensated for (with a properly sized thermal expansion tank) will void the warranty.

Water heater should incorporate the iCOMM™ system for remote monitoring, leak detection and fault alert.

For Technical Information, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.





Condensate Neutralizing Kits

CONDENSATE NEUTRALIZING KITS

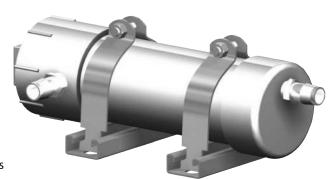
A. O. Smith flue-side neutralizing tubes are designed to raise the pH level of the condensate discharged by high-efficiency boilers and water heaters.

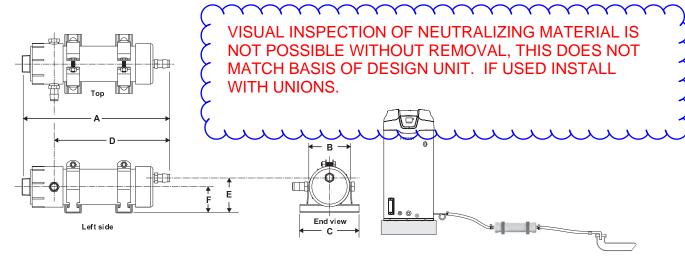
INCREASES pH OF CONDENSATE BY 1-3 TIMES

■ Results in a reduction of acidity of 10 to 30 times of the condensate leaving the appliance.

PREVENTS POSSIBLE DAMAGE TO:

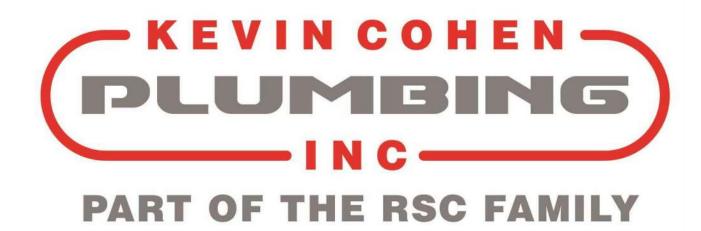
- Cast Iron Soil Pipe
- ABS Pipe
- Septic Tanks
- Plants
- Waste Water Treatment Plants
- Other Waste Water Equipment and Components





			Ratings and Dimensions (Inches)							
	Model	BTUH Input Capacity	GPH	Α	В	С	D	E	F	
1	CNS-2	75,000 to 199,000	2	15	2-3/4	3-1/2	N/A	2-1/4	2-1/4	
	CNS-6	200,000 to 500,000	6	14-1/4	4	6	10-3/4	3-1/2	2-1/2	
	CNS-10	501,000 to 1M	10	19	4	6	16-1/4	3-1/2	2-1/2	
	CNS-20	1.1M to 2M	20	19-1/2	5	6	16-1/4	4-1/2	3-1/2	
	CNS-30	2.1M to 3.4M	30	24-1/2	5	6	21	4-1/2	3-1/2	
	CNS-20	1.1M to 2M	20	19-1/2	5	6	16-1/4	4-1/2		





ET Expansion Tank - GWH

PFXT

Thermal Expansion Tanks



Product Features

- Diaphragm-type
- Pre-pressurized expansion tank
- Designed for potable hot water systems
- Eliminates relief valve spills
- · Controls pressure build-up
- Protects plumbing fixtures



- Extends water heater life
- · Eliminates hot water waste
- · Factory precharged to 40 PSI
- · Made in USA
- Low lead compliant
- 3/4" SS NPTM connection

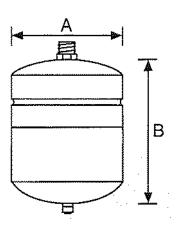


PFXT5

Product Specifications

Model No.	Total Volume Gals.	Max Accept. Factor	Diameter A	Height B	System Connection	Ship Weight Lbs.
PFXT5	2.0	.45	8"	12-5/8"	3/4" NPTM	5
PFXT12	4.4	.73	11"	15"	3/4" NPTM	9

Water Heater				
Size/Volume	130°F	140°F	160°F	180°F
30 gallons	PFXT5	PFXT5	PFXT5	PFXT5
40 gallons	PFTX5	PFXT5	PFXT5	PFXT5
50 gallons	PFXT5	PFXT5	PFXT5	PFXT12
60 gallons	PFXT5	PFXT5	PFXT5	PFXT12
80 gallons	PFXT5	PFXT12	PFXT12	PFXT12
100 gallons	PFXT12	PFXT12	PFXT12	*
120 gallons	PFXT12	PFXT12	PFXT12	*
150 gallons	PFXT12	PFXT12	*	*
175 gallons	PFXT12	*	*	*



Maximum Operating Conditions

Operating Temperature - 200°F

Working Pressure - 150 psig (10.5 kg/cm²)

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. All PROFLO tanks carry a 1-year limited warranty. NSF 61 approved.







EWH-1 Electric Water Heater

IS THIS FOR THE WAREHOUSE? DESIGN DOES NOT INCLUDE AN ELECTRIC UNIT FOR THIS BUILDING.



RESIDENTIAL ELECTRIC WATER HEATERS

PROLINE® SPECIALTY ELECTRIC

COMMERCIAL-GRADE RESIDENTIAL

TABLE TOP

• Features a convenient flat porcelain surface at 36" height, providing extra "counter space" wherever installed. All plumbing and electrical connections are made through the back of the water heater. This heater is equipped with a PEX cross-linked polymer dip tube.

POINT-OF-USE

• Designed for low-demand, such as office lavatories or buildings with remote restrooms.

COMPACT

• Side-mounted plumbing and electrical connections (optional top-mounted water connections for field conversion). Designed for installation under a counter, in a crawl space or in other tight spaces.

BLUE DIAMOND® GLASS COATING

 Provides superior corrosion resistance compared to industry standard glass linina.

ENHANCED-FLOW BRASS DRAIN VALVE

- Our standard residential water heaters have a solid brass, tamper resistant, enhanced-flow, ball type, drain valve.
- Uses a standard female hose fitting that allows for fast and easy draining during maintenance.
- Designed for easy operation, this valve includes an integral screwdriver slot that features a 1/4 turn (open/close) radius, which not only permits full straightthrough water flow but also a quick and positive shut off.

CODE COMPLIANCE

- Meets UBC, CEC and HUD National Codes.
- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IES 90.1.
- Complies with the Federal Energy Conservation Standards effective April 16, 2015, in accordance with the Energy Policy and Conservation Act (EPCA), as amended.

APPROVED FOR MANUFACTURED HOUSING

• All residential electric water heaters are compliant with HUD standards for mobile homes/manufactured housing.

CERTIFIED TO UL 174 FOR HOUSEHOLD ELECTRIC WATER HEATERS

CSA CERTIFIED AND ASME RATED T&P **RELIEF VALVE**

DESIGN-LISTED BY UNDERWRITERS LABORATORIES

- Certified at 300 psi test pressure and 150 psi working pressure.
- Listed according to UL 174 standards governing storage tank-type electric water heaters.

6-YEAR LIMITED TANK AND PARTS WARRANTY

• For complete information consult the written warranty or go to hotwater.com.













√ 1.65kW - 120V - 1PH

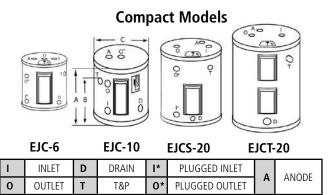
Model	Nominal	Rated	First Hour Rating	UEF	Element	Wattage	Recovery @ 90°F Rise	Di	mensions in Inch	ies	Approx.
Number	Capacity Storage Volume		(Gallons)	UEF	Standard	Maximum	Gallons Per Hour	А	В	С	Shipping Weight (lbs)
Compact Mo	odels				120V	240V					
EJC-6	6	6	N/A	N/A	1650	3000	8	15-1/4	10-3/4	14-1/4	35
EJC-10	10	9	N/A	N/A	1650	6000	8	18-1/4	12-1/4	16	41
EJCS-20	19	17	N/A	N/A	2500	6000	11	24-3/4	18-5/8	18	68
EJCT-20	19.9	18	N/A	N/A	2500	6000	11	31-5/8	25-3/4	16	68
Lowboy Side-Connect Model		1odel			24	0V					
ENJB-30*	28	26	47	0.90	4500	6000	21	30	21-3/4	22	101
ENJ-30	28	26	43	0.91	4500	6000	21	31-1/4	21-3/4	24	115
ENJB-40*	38	35	57	0.94	4500	6000	21	31-3/4	24	24	118
ENJB-40W*	38	35	38	0.91	•	4000	18	31-3/4	24	24	118
ENJ-40	38	35	54	0.93	4500	6000	21	33-1/2	24	26	118
ENJ-40W	38	35	38	0.91	-	4000	18	33-1/2	24	26	118
Table Top M	odel				24	0V					
ENTT-38	38	35	55	0.90	4500	5500	21	36	24	25	150
Point-Of-Use-Models			12	0V							
EPU-2.5	2.5	2.6	N/A	N/A	1440 @	2 120V	7	14-1/2"	10 3/8	11 3/4	17
EPU-4	4	3.8	N/A	N/A	1440 @	2 120V	7	19-1/4	10 3/8	11 3/4	20
EPU-6	6	5.9	N/A	N/A	1440 @	2 120V	7	20	12 1/2	13-3/4	24

^{*}Models ship with a supplied insulation blanket.

When ordering models ENJ-40 or ENJB-40 the model number will change for wattages of 4kW to 1kW. The new model number will include a "W" suffix (example: ENJB-40W) Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

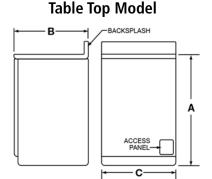
Top mounted T&P adds approximately 3" to overall installation height.

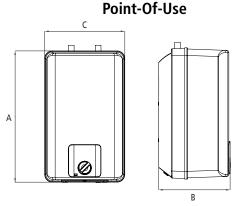
Water connection is 3/4" on Table Top and Compact models and 1/2" NPT on Point-Of-Use Models



Lowboy

ENJ-30, ENJB-30 **ENJ-40, ENJB-40**

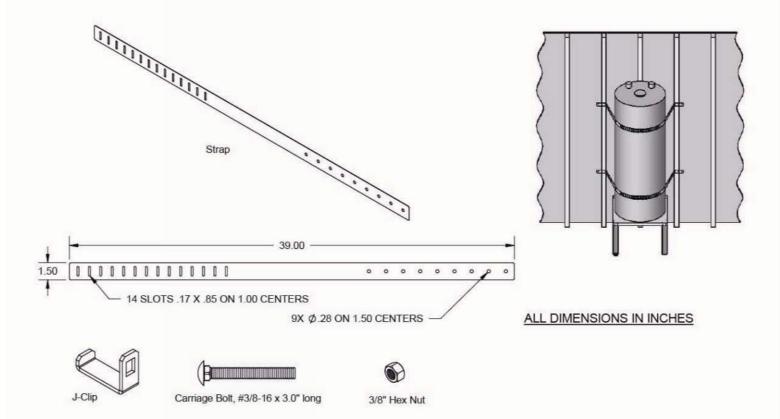




For Technical Information, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.

PRODUCT SPECIFICATION DRAWING QUICK STRAP® #QS-50

Seismic support for water heaters



The QUICK STRAP® #QS-50 is a seismic/earth quake support system for water heaters up to 80 gallons in size. The system includes (4) Straps, (2) J-Clips, (2) 3/8" Carriage Bolts, and (2) 3/8" Hex Nuts. The Quick Link® system allows for full adjustment from the front side of the water heater.

Product Information:

- · Strap Material: 24 gage CRS, galvanized
- · California Division State Architect (DSA) approval #97-010
- IAPMO listed



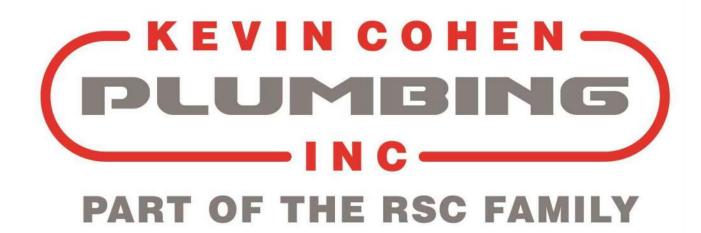


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····•HUBBARD ENTERPH	

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HOL	LDR	

"Converting Makeshift Plumbing Methods into Engineered Solutions"

Product Sub	mittal
Job Name:	
Date:	
Part Number:	Qty:
Architect / Owner:	
Contractor:	
Notes:	



ET Expansion Tank - EWH

PFXT

Thermal Expansion Tanks



Product Features

- Diaphragm-type
- Pre-pressurized expansion tank
- Designed for potable hot water systems
- Eliminates relief valve spills
- · Controls pressure build-up
- Protects plumbing fixtures



- Extends water heater life
- · Eliminates hot water waste
- · Factory precharged to 40 PSI
- · Made in USA
- Low lead compliant
- 3/4" SS NPTM connection

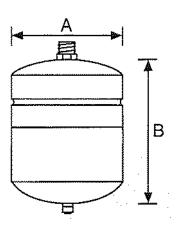


PFXT5

Product Specifications

Model No.	Total Volume Gals.	Max Accept. Factor	Diameter A	Height B	System Connection	Ship Weight Lbs.
PFXT5	2.0	.45	8"	12-5/8"	3/4" NPTM	5
PFXT12	4.4	.73	11"	15"	3/4" NPTM	9

Water Heater				
Size/Volume	130°F	140°F	160°F	180°F
30 gallons	PFXT5	PFXT5	PFXT5	PFXT5
40 gallons	PFTX5	PFXT5	PFXT5	PFXT5
50 gallons	PFXT5	PFXT5	PFXT5	PFXT12
60 gallons	PFXT5	PFXT5	PFXT5	PFXT12
80 gallons	PFXT5	PFXT12	PFXT12	PFXT12
100 gallons	PFXT12	PFXT12	PFXT12	*
120 gallons	PFXT12	PFXT12	PFXT12	*
150 gallons	PFXT12	PFXT12	*	*
175 gallons	PFXT12	*	*	*



Maximum Operating Conditions

Operating Temperature - 200°F

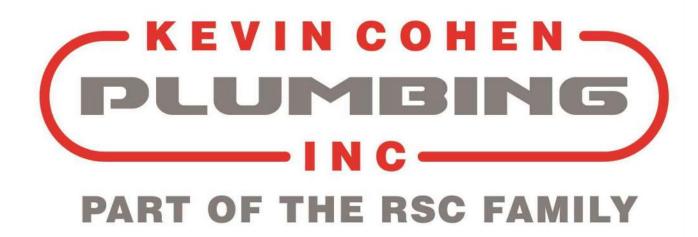
Working Pressure - 150 psig (10.5 kg/cm²)

Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. All PROFLO tanks carry a 1-year limited warranty. NSF 61 approved.







RCP-1 Recirc Pump

THE PROPOSED PUMP WITH SEPARATE AQUA-STAT AND TIME CLOCK IS ACCEPTABLE. GRUNDFOS SHOULD HAVE A UNIT WITH ONE OR BOTH OF THESE FEATURES BUILT IN.



Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:



UPS 26-99 SFC

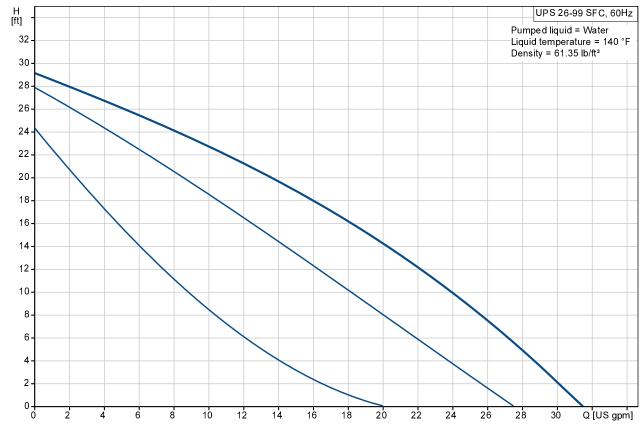
Circulator pumps

Product photo could vary from the actual product

Conditions of Service						
Flow:						
Head:						
Efficiency:						
Liquid:	Water					
Temperature:	140 °F					
NPSH required:	ft					
Viscosity:						
Specific Gravity:	0.985					

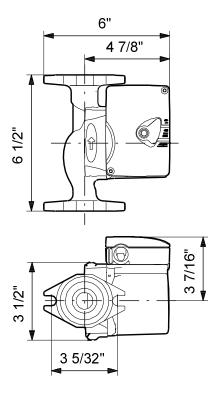
Pump Data						
Maximum operating press	sure:	145 psi				
Liquid temperature range:		35.6 230 °F				
Maximum ambient temper	rature:	104 °F				
Approvals:		UL, CSA				
Type of connection:	Stainle	ess Steel Flange				
Flange standard:		USA Oval				
Pipe connection:		2 - Bolt Flange				
Product number:		98961763				

Motor Data							
Max. power input:	197 W						
Rated power - P2:	0.16 HP						
Rated voltage:	115 V						
Main frequency:	60 Hz						
Insulation class:	F						
Motor protection:	CONTACT						
Thermal protection:	internal						





Submittal Data



Materials:

Pump housing: Stainless Steel

DIN W.-Nr. 2.1176.01

Impeller: Composite, PES



Company name: Created by: Phone:

Date: 3/30/2016

Position | Count | Description

1 UPS 26-99 SFC

Product No.: 98961763

The pump is of the canned rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing.

The bearings are lubricated by the pumped liquid.

The pump is characterized by:

- * Ceramic shaft and radial bearings.
- * Carbon axial bearing.
- * Stainless steel rotor can and bearing plate.
- * Corrosion-resistant impeller, Composite, PES.
- * Bronze pump housing.

The motor is a 1-phase motor.

No additional motor protection is required.

Liquid:

Pumped liquid: Water

Liquid temperature range: 35.6 .. 230 °F Liquid temp: 140 °F Density: 61.35 lb/ft³

Technical:

Approvals on nameplate: UL, CSA, NSF/ANSI 64

Materials:

Pump housing: Stainless Steel

DIN W.-Nr. 2.1176.01

Impeller: Composite, PES

Installation:

Maximum ambient temperature: 104 °F
Ambient max at 176°F liquid: 176 °F
Maximum operating pressure: 145 psi
Flange standard: USA Oval
Type of connection: S.S.

Pipe connection: 2 - Bolt Flange

Pressure stage: 10
Port-to-port length: 6 1/2 in

Electrical data:

20 µF C run: Power input in speed 1: 150 W Power input in speed 2: 179 W Max. power input: 197 W Rated power - P2: 0.16 HP Main frequency: 60 Hz Rated voltage: 1 x 115 V Current in speed 1: 1.3 A Current in speed 2: 1.5 A Current in speed 3: 1.8 A Capacitor size - run: 20 µF/180 V

Number of poles: 2 Insulation class (IEC 85): F

Others:

Gross weight: 10.3 lb

AccessoriesUP Series

Packaged dielectric isolation valve sets



Pump _connection		Pipe connection type and size		Material number	Approx. shipping weight	Face to face [A*]	Center of port to top [B*]	Flange diameter [C*]	Center of valve to handle end [D*]
		NPT	Solder		[lb/oz.] 1 kit	[inch]	[mm / inch]	[inch]	[inch]
	-0	1/2"		96806129	2 / 13	2 27/32	51 / 2	4 3/16	3 29/64
	V.	3/4"		96806130	3/2	3 3/64	57 / 2 1/4	4 3/16	33/4
a)		1"		96806131	4/8	3 35/64	67 / 2 21/32	4 3/16	4 17/32
15/26 flange		1-1/4"		96806132	4 / 13	4 1/32	75 / 2 31/32	4 3/16	4 35/64
9	ıze	1-1/2"		96806133	4 / 14	4 7/64	75 / 2 31/32	4 3/16	4 5/8
2/2	Bron		1/2"	96806134	2 / 12	2 49/64	51 / 2	4 3/16	3 15/32
GF 1			3/4"	96806135	3 / 4	3 1/4	57 / 2 1/4	4 3/16	3 47/64
			1"	96806136	4/8	3 55/64	67 / 2 21/32	4 3/16	4 1/2
	•		1-1/4"	96806137	4 / 13	4 1/2	75 / 2 31/32	4 3/16	4 35/64
	-		1-1/2"	96806138	4 / 15	4 37/64	75 / 2 31/32	4 3/16	4 9/16

Note: Each set contains

2 each - rotating flanges, lever-handled full-ported ball valve, EPDM gaskets, dielectric sleeves.

4 each - 7/16" X 1-3/4" bolts with nuts.

Dimensions in inches unless otherwise noted.

Materials of construction				
Flange	Chrome plated steel			
Valve body	Brass			
Valve ball	Chrome plated brass			
Valve seat	PTFE			
Dielectric sleeve	Composite			
Bolt	Chrome plated steel			
Nut	Chrome plated steel			
Gaskets	EPDM			
Maximum temperature	230 °F (110 °C)			
Maximum presure	150 psi			

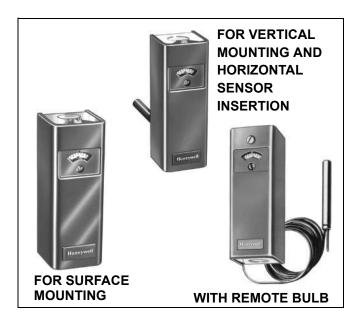
Approvals

IAPMO - #6591

Honeywell

L4006,7,8; L6006,7,8 Aquastat[®] Controllers

PRODUCT DATA



GENERAL

Aquastat[®] Controllers are immersion type devices for limiting or regulating the temperature of liquids in boilers, storage tanks, and other applications where temperature control is required.

FEATURES

- L4006, 7, and 8 provide Spst switching for high or low limit or circulator control.
- L4006G includes two Spst switches that provide high limit and circulator control.
- L4006,7; L6006,7 models are available for insertion in: vertical or horizontal immersion well, vertical or horizontal direct immersion, and surface mounting.
- L4008, L6008 include remote bulb for mounting controller at a location away from the sensing element.
- Totally enclosed Micro Switch™ snap-acting switches operate on temperature rise to set point.
- Models calibrated for high limit use are also suitable for low limit control if a separate high limit controller is used.
- Visible control point scale and external adjustment screw, permit easy setting.
- Remote bulb models may be used to sense air temperature in ducts and in outside air sensing applications.

Contents

General	1
Features	1
Specifications	2
Ordering Information	2



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SPECIFICATIONS

IMPORTANT

The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

SUPER TRADELINE®/TRADELINE MODELS

SUPER TRADELINE controls offer features not available on TRADELINE or standard models, and are designed to replace a wide range of Honeywell and competitive controls.

TRADELINE models are selected and packaged to provide ease of stocking, ease of handling, and maximum replacement value. Specifications of SUPER TRADELINE and TRADELINE controls are the same as those of standard models except as noted below.

SUPER TRADELINE Model: L6006A Aguastat Controller.

SUPER TRADELINE Features:

SUPER TRADELINE package with cross reference label and special instructions.

Factory-set stop at 240° F (116° C).

Vertical or horizontal mount.

Tube of heat-conductive compound.

Insulation: 1-1/2 in. to 3 in. (38 mm to 76 mm).

 $\textbf{TRADELINE Models:} \ L4006A,B,E; \ L4008E; \ L6006C;$

L6008A Aquastat Controllers.

TRADELINE Features Available:

TRADELINE package with cross reference label and special instructions.

Some TRADELINE models include immersion well.

Factory-set stops at 180° F, 240° F, or 250° F (82° C, 116° C, or 121° C).

Vertical or horizontal mount.

Tube of heat-conductive compound.

Insulation depths of 1-1/2 in. or 3 in. (38 or 76 mm).

NOTE: The following specifications are standard. Variances, available as options, are listed in Tables 1 and 2.

Electrical Ratings (A):

Models with 2° F (1° C) fixed differential:

	120 Vac	240 Vac
Full Load	2.6	1.3
Locked Rotor	15.6	7.8

Models with 5° F (3° C) fixed differential or 5° F to 30° F (3° C to 17° C) adjustable differential:

	110/120 Vac	200/240 Vac	277 Vac ^a		
Full Load	8.0	5.1	4.2		
Locked Rotor	48.0	30.6	25.2		
Millivoltage	0.25 at 0.25 to 12 Vdc				

a L6008G only.

Switching:

L4006, L4007, L4008: Spst.

L6006, L6007, L6008: Spdt (breaks R-B and makes R-W on temperature rise at setpoint).

Pressure Rating:

Capillary Bulb (Direct Immersion): 200 psi (1379 kPa).

Immersion Well: 255 psi (1758 kPa).

Sensing Bulb Material: Copper.

Sensing Bulb Fill: Liquid—toluene or silicone oil.

Sensing Bulb Dimensions: 2-7/8 in. (73 mm) long,

3/8 in. (10 mm) diameter.

Wiring: Screw terminals.

Maximum Ambient Temperature: 150° F (66° C).

ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

- 1. Your local Honeywell Automation and Control Products Sales Office (check white pages of your phone directory).
- 2. Honeywell Customer Care 1885 Douglas Drive North

Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9. International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

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Approvals:

Underwriters Laboratories Inc:

Remote bulb devices and well-mounted devices shipped without well are component recognized:

File No. MP466, Guide No. MBPR2.

L4006A shipped with well, L4006G, L4007A,B; L6006C for surface mounting, L6006B for direct immersion mounting, and L6007A are listed: File No. MP466, Guide No. MBPR.

L6008G is listed: File No. E4436, Guide No. XAPX. Canadian Standards Association: File No. LR1620, Guide No. 400-E-O.

ANSI Miswiring: Models with 1/4 in. (6.35 mm) tab terminal meet ANSI Appliance Miswiring Standard.

Mounting:

Horizontal and vertical models mount directly to an immersion well installed in a boiler fitting. L4006H and L6006C contain a bracket and clamp for surface mounting on the pipe or tank. Remote bulb models have three mounting holes in rear of case for screw mounting to a vertical surface. The L6006B direct immersion model also mounts directly to a boiler fitting.

Finish: Gray.

Dimensions:

Installation: (See Figures 1, 2, and 3).

Immersion Well: (See Fig. 4).

Boiler Fitting and Bulb: (See Fig. 5).

Accessories and Parts:

137536A Scale Lock Assembly: Includes one 137536-767 Scale Lock and one 80844C-767 Screw, No. 3-48 x 3/16 (5 mm).

Q615A1004 Weatherproof Enclosure (for remote bulb devices only).

107408 Heat-Conductive Compound (4-oz. can).

104488 Spring Clip (stainless steel).

124904 Well Adapter.

Immersion Well Assemblies and Compression Fittings: See form no. 68-0040, Wells and Fittings for Temperature Controllers, for list and ordering information.

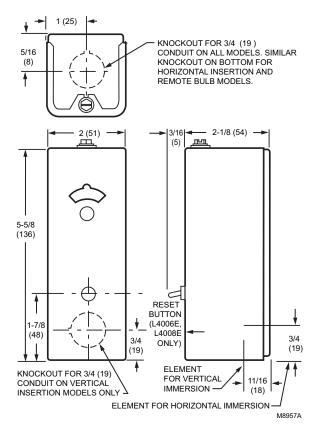


Fig. 1. Approximate case installation dimensions in inches (mm) for direct insertion models.

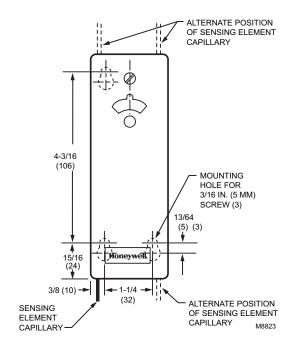


Fig. 2. Approximate installation dimensions in inches (mm) for remote bulb models. Other dimensions are the same as Fig. 1.

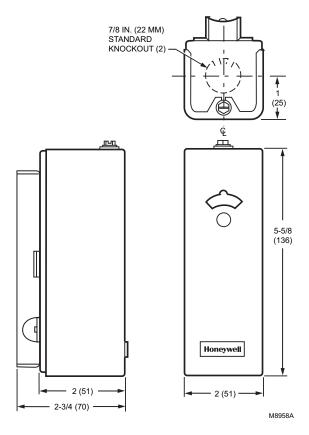


Fig. 3. Approximate installation dimensions in inches (mm) for surface mount models.

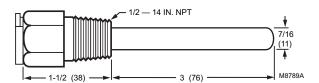


Fig. 4. Approximate immersion well dimensions in inches (mm) for all models except L4006C and L6006B.

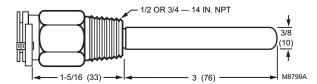


Fig. 5. Approximate boiler fitting and bulb dimensions in inches (mm) for L4006C and L6006B.

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Standard Models:

L4006,A,B,C,E,G; L4007,A,B; L4008A,B.E; L6006A,B,C; L6007A, L6008,A,G,H

Table 1. L4006, L4007, L4008 Controller (SPST Switching) Specifications.

Medal	Amplication	Range	Midscale Differential	Incorticus?	Switching On Temperature	Available Ontions
Model L4006A	Application High or low limit	°F (°C) 40° F to 180° F (4° C to 82° C) or	°F (°C) 2° F or 5° F fixed (1° C or 3° C) or 5° F to 30° F adjustable (3° C to 17° C)	Insertion ^a Horizontal	Rise	Available Options TRADELINE models available. NPT brass spud 1/2 in. or 3/4 in. (13 mm to 19 mm) Special capillary assembly. Insertion 3-3/8 in. or 5 in. (86 or 127 mm) Celsius scale markings. Factory-set stops at 160°, 180°, 185°, 200°, 220°, or 230° F (71°, 82°, 85°, 93°, 104°, or 110° C). Insulation depths of 1-1/2 in., 3 in. or 4 in. (38 mm, 76 mm, or 102 mm). Screw and mounting brackets. Plastic tubing over well.
L4006B	Circulator	100° F to 240° F (38° C to 116° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Horizontal	Makes	 Modified dial with stop. Special cover and knobs. With ground screw. TRADELINE model available. Insulation depth 1-1/2 in. or 3 in. (38 mm or 76 mm). NPT brass spud 3/4 in. (19 mm) Screw in front of case on dial suitable for Powerpile® control. Factory-set stop at 240° F (116° C).
L4006C	High or low limit	65° F to 200° F (18° C to 93° C)	3-1/2° F (2° C) fixed	Horizontal direct immersion	Breaks	 TRADELINE model available. Less cover. Capillary 10 in. (254 mm). NPT brass spud 3/4 in. (19 mm).
L4006E ^b	High limit	130° F to 290° F (54° C to 141° C)	Manual reset	Horizontal or vertical	Breaks	 TRADELINE model available. Insulation depth 1-1/2 in. or 3 in. (38 or 76 mm). NPT brass spud 1/2 in. (13 mm) Factory-set stop at 250° F (121° C). Capillary 8 in. (203 mm).

^a Some models include copper well or fitting; specify when ordering. Also specify boiler tapping size 1/2 or 3/4 in. (13 to 19 mm) NPT and insulation depth.

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^b Manual reset (trip-free) switch breaks circuit and locks out when controlled medium reaches setpoint. Controlled temperature must drop 20° F (11° C) below setpoint before contacts can be manually reset.

Table 1. L4006, L4007, L4008 Controller (SPST Switching) Specifications. (Cont.)

Model	Application	Range °F (°C)	Midscale Differential °F (°C)	Insertion ^a	Switching On Temperature Rise	Available Options
L4006G	High limit and circulator control	100° F to 200° F (38° C to 93° C)	10° F (6° C) fixed	Horizontal	Two switches break simultaneously	 External adjustment knob. Insulation depth 4 in. (102 mm). Factory-set stop at 160° F (71° C). Celsius scale markings. Without well.
L4007A	High or low limit	100° F to 240° F (38° C to 116° C)	2° F or 5° F (1° C or 3° C) fixed, 5° F to 30° F (3° C to 17° C) adjustable	Horizontal or vertical	Breaks	Insulation depth1-1/2 in. or 3 in.(38 mm or 76 mm).
L4007B	Circulator	100° F to 240° F (38° C to 116° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Vertical	Makes	Celsius scale markings.
L4008A	High or low limit	100° F to 240° F (38° C to 116° C) or 130° F to 270° F (54° C to 132° C)	5° F (3° C) fixed, 5° F to 30° F (3° C to 17° C) adjustable	Remote bulb direct immersion	Breaks	 Remote capillary 5-1/2 ft (1.7 m), 8-1/2 ft (2.6 m) or 10 ft (3.0 m). Factory-set scale stops at 120°, 170°, or 200° F (49°, 77°, or 93° C) Celsius scale markings. Front cover screw.
L4008B	Circulator	100° F to 240° F (38° C to 116° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Remote bulb direct immersion	Makes	— Capillary 5-1/2 ft (1.7 m).
L4008E ^b	High limit	40° F to 80° F (4° C to 27° C) or 130° F to 270° F (54° C to 132° C)	Manual reset	Remote bulb	Breaks	 Factory-set scale stops at 140°, 200°, or 250° F (60°, 93°, or 121° C). Capillary 5-1/2 ft or 20 ft (1.7m or 6.1 m).

^a Some models include copper well or fitting; specify when ordering. Also specify boiler tapping size 1/2 or 3/4 in. (13 to 19 mm) NPT and insulation depth.

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b Manual reset (trip-free) switch breaks circuit and locks out when controlled medium reaches setpoint. Controlled temperature must drop 20° F (11° C) below setpoint before contacts can be manually reset.

Table 2. L6006, L6007, L6008 Controller (SPDT Switching) Specifications.

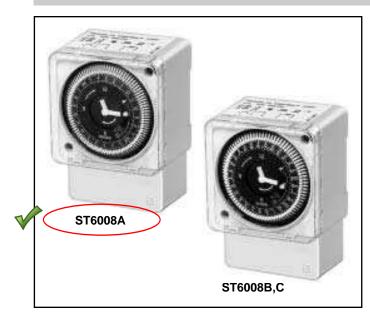
	Midscale Different Control of the Co						
Model	Application	Range °F (°C)	Differential °F (°C)	Insertion ^a	Available Options		
L6006A	Circulator and low limit or high limit	100° F to 240° F (38° C to 116° C) or 100° F to 290° F (38° C to 143° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Horizontal	 SUPER TRADELINE model available. Modified dial with stop. NPT brass spud 1/2 in. or 3/4 in. (13 mm to 19 mm) 3-3/8 in. (86 mm) insertion. Without well. Adapter for horizontal or vertical mount. Insulation depth 1-1/2 in. or 3 in. (38 mm or 76 mm). 		
L6006B	Circulator and low limit or high limit	100° F to 240° F (38° C to 116° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable, or 30° F (17° C) fixed.	Horizontal	 Direct immersion. Insulation depth 1-1/2 in. (38 mm). 3/4 in. (19 mm) brass compression fitting. 		
L6006C	Circulator, low limit, and high limit	65° F to 200° F (18° C to 93° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Horizontal or vertical surface mounted	 TRADELINE model available. Strap-on, surface mount. 		
L6007A	Circulator and low limit or high limit	40° F to 180° F (4° C to 82° C)	Fixed	Horizontal or vertical	Insulation depth 1-1/2 in. or 3 in. (38 mm or 76 mm).		
L6008A	Circulator and low limit cooling	100° F to 240° F (38° C to 116° C) or -30° F to +70° F (-35° C to +21° C)	5° F (3° C) fixed or 5° F to 30° F (3° C to 17° C) adjustable	Remote bulb	 TRADELINE models available. Modified dial with stop. Capillary 5-1/2 ft (1.7 m). 		
L6008G	Two-stage Aquastat Controller to cycle two-stage gas valve.	(54° C to 110° C) or 60° F to 160° F (16° C to 71° C)	3-1/2° F (2° C) fixed	Remote bulb	Capillary 6 ft (1.8 m). Adjustable interstage differential; 5° F to 10° F (2° C to 6° C).		
L6008H (maximum temperature of element 405° F (207° C))	Low fire Aquastat Controller	150° F to 200° F (66° C to 93° C)	15° F (8° C) fixed	Remote bulb	— Capillary 33 in. (0.8 m).		

^a Some models include copper well or fitting; specify when ordering. Also specify boiler tapping size 1/2 or 3/4 in. NPT and insulation depth.

ST6008A,B,C Energy Management Timers

24-HOUR OR 7-DAY TIME SWITCHES

SPECIFICATION DATA



FEATURES

- Universal application with 24-hour or 7-day programming.
- · UL and CSA recognized components.
- · Battery backup (quartz drive).
- Screw wiring terminals.
- · Three-way override.
- Captive trippers.

GENERAL

The ST6008 family of Programmable Timers are compact synchronous and quartz time controls that provide 24-hour or 7-day time-based switching. Heavy duty 21A contacts can switch low or line voltage loads.

Minimum on-off times are 15 minutes for the 24-hour timer and two hours for the 7-day timer.

APPLICATION

Time-based control of lighting, ventilation, heating and cooling or other electrical loads in commercial and industrial applications. The ST6008 time switches are available with 24-hour or 7-day program dial and a single pole double pole switch.

The ST6008 series is intended for surface or DIN rail mounting. The control is completely enclosed in a plastic housing and includes a terminal cover and subbase for installation and hard wiring.



SPECIFICATIONS

IMPORTANT

The specifications given in this publication do not include normal manufacturing tolerances; therefore, an individual unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.

Models:

ST6008A1006: 24-hour time-based switching with synchronous drive.

ST6008B1005: 7-day time-based switching with synchronous drive.

ST6008C1004: 7-day time-based switching with quartz drive and battery backup.

Model		Туре	Input Voltage	Relay Output	Battery Reserve
$\sqrt{}$	ST6008A1006	24-hour synchronous	120V, 60 Hz	1 spdt	N/A
	ST6008B1005	7-day synchronous	120V, 50 Hz	1 spdt	N/A
	ST6008C1004	7-day quartz	120V, 50/60 Hz	1 spdt	7-day

Supply Voltage:

Synchronous: 120V, 60 Hz. Quartz: 120V, 50/60 Hz.

Switch Type:

spdt.

Switch Rating:

21A, 250V resistive. 1350W tungsten. 1 hp at 120V. 2 hp at 240V. 16 FLA, 96 LRA, 120V inductive. 12 FLA, 72 LRA, 240V inductive.

Power Consumption:

0.5 VA.

Ambient Temperature Range:

-40°F (4°C) to 180°F (82°C), synchronous units. -14°F (26°C) to 131°F (55°C), quartz units.

Reserve Carryover:

150 hours for quartz units.

Dimensions:

See Fig. 1.

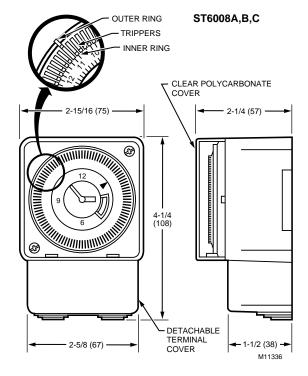


Fig. 1. ST6008A,B,C dimensions in in. (mm).

68-3002 2

PROGRAMMING

ST6008B,C 7-day Timer

The weekly program dial displays the seven days of the week and the AM and PM indications for each day. The 24-hour dial is marked in two-hour and AM and PM indications.

Set the Time Switch:

NOTE: Each tripper represents two hours.

- Push the desired number of trippers to the outer ring position for the entire period the load is on. This places the switch in the on position.
- Push the desired number of trippers to the inner ring position to turn off the load. This places the switch in the off position. See Fig. 1.

Set the Time:

NOTE: Rotate the outer dial clockwise by turning the minute hand.

Turn the minute hand clockwise until the day and time on the outer dial are aligned with the triangle marker (2:00 position) on the inner dial.

Example: To set the dial to Monday, 10:30 AM: Turn the minute hand clockwise to rotate the outer dial until Monday 10:30 AM is aligned with the triangle on the inner dial. The hour and the minute hand show 10:30 AM.

ST6008A 24-hour Timer

The 24-hour dial is marked in quarter-hour and AM and PM indications.

Set the Time Switch:

NOTE: Each tripper represents 15 minutes.

- Push the desired number of trippers to the outer ring position for the entire period the load is on. This places the switch in the on position.
- Push the desired number of trippers to the inner ring position to turn off the load. This places the switch in the off position. See Fig. 1.

Set the Time:

NOTE: Rotate the outer dial clockwise by turning the minute hand

Turn the minute hand clockwise until the time on the outer dial is aligned with the triangle marker (2:00 position) on the inner dial.

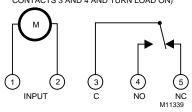
Example: To set the dial to10:30 AM: Turn the minute hand clockwise to rotate the outer dial until 10:30 AM is aligned with the triangle on the inner dial. The hour and the minute hand show 10:30 AM.

Manual Override

All ST6008 units have an optional three-way manual override.

TERMINAL DESIGNATIONS

OFF POSITION WITH TRIPPERS PUSHED IN (TRIPPERS PUSHED OUT WILL CLOSE CONTACTS 3 AND 4 AND TURN LOAD ON)



68-3002

3

Home and Building Control

Honeywell Inc. Honeywell Plaza P.O. Box 524 Minneapolis MN 55408-0524

Honeywell Latin American Division

Miami Lakes Headquarters 14505 Commerce Way Suite 500 Miami Lakes FL 33016

Home and Building Control

Honeywell Limited-Honeywell Limitée 155 Gordon Baker Road North York, Ontario M2H 2C9

Honeywell Europe S.A.

3 Avenue du Bourget B-1140 Brussels Belgium

Honeywell Asia Pacific Inc.

Room 3213-3225 Sun Hung Kai Centre No. 30 Harbour Road Wanchai Hong Kong

Honeywell





MV-1 Mixing Valve

ENSURE CONTRACTOR HAS THE LATEST DOCUMENTS. DEVICE WAS REMOVED IN ADDENDA #2

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

LEAD FREE*

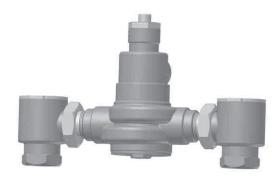
HydroGuard® XP Master Tempering Valves

Series LFMM430

Features

- Lead Free* brass body and checkstops for durability and to comply with Lead Free* installation requirements.
- Valve utilizes paraffin-based advanced thermal actuation technology to sense and adjust outlet temperature
- Dirt and lime resistant poppet and seat design
- Virtual shutoff if supply pressure fails
- Vandal-resistant locking mechanism to secure temperature setting
- Factory tested
- Rotatable union triple-duty checkstops
- Rough bronze and chrome finishes

Specifications









Advanced Thermal Activation

- * The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.
- ** With equal pressure
- *** Minimum flow when the valve is installed at or near hot water source w/re-circulated tempered water with a properly sized continuously operating re-circulating pump

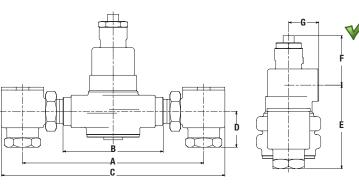
Capacity

Flow Capacity at 50-50 mixed ratio										
Pressure Drop Across Valve										
Model	Min. Flow		5psi	10psi	20psi	30psi	45psi	60psi	70psi	
	to ASSE 1017	Cv	(34 kPa)	(69 kPa)	(138 kPa)	(207 kPa)	(310 kPa)	(414 kPa)	(517 kPa)	
LFMM431	3 gpm	0.00	14 gpm	20 gpm	28 gpm	35 gpm	42 gpm	49 gpm	53 gpm	
	11 lpm	6.32	53 lpm	76 lpm	106 lpm	132 lpm	159 lpm	185 lpm	201 lpm	
LFMM432	4 gpm	0.40	21 gpm	30 gpm	42 gpm	52 gpm	64 gpm	74 gpm	79 gpm	
	15 lpm	9.49	80 lpm	114 lpm	159 lpm	197 lpm	242 lpm	280 lpm	299 lpm	
LFMM433	5 gpm	16.44	37 gpm	52 gpm	74 gpm	90 gpm	110 gpm	127 gpm	138 gpm	
	19 lpm	10.44	140 lpm	197 lpm	280 lpm	341 lpm	416 lpm	481 lpm	522 lpm	
LFMM434	7 gpm	01.50	48 gpm	68 gpm	96 gpm	118 gpm	144 gpm	167 gpm	180 gpm	
	26 lpm	21.50	182 lpm	257 lpm	363 lpm	447 lpm	545 lpm	632 lpm	681 lpm	
LFMM435	10 gpm	21.00	69 gpm	98 gpm	139 gpm	170 gpm	208 gpm	240 gpm	259 gpm	
	38 lpm	31.00	261 lpm	371 lpm	526 lpm	644 lpm	787 lpm	908 lpm	980 lpm	

POWERS

A WATTS Brand

Dimensions



Valve	Α	В	C	D	E	F	G
LFMM431	9-7/16"	4-3/4"	11-%"	1-%"	4"	3-1/4"	1-5/8"
LFIVIIVI43 I	(240)	(121)	(295)	(48)	(102)	(83)	(41)
LFMM432	9-7/16"	4-3/4"	11-%"	1-%"	4"	3-1/4"	1-5/8"
LFIVIIVI432	(240)	(121)	(295)	(48)	(102)	(83)	(41)
LFMM433	12-1/4"	7"	15-1/4"	2-1/2"	5-¾"	3-1/2"	2-1/16"
LFIVIIVI433	(311)	(178)	(387)	(64)	(146)	(89)	(52)
LFMM434	12-1⁄4"	7"	15-1/4"	2-1/2"	5-¾"	3-1/2"	2-1/16"
LFIVIIVI434	(311)	(178)	(387)	(64)	(146)	(89)	(52)
LFMM435	15-%"	7-1/8"	19-1/4"	2-¾"	7-%"	4-3/8"	2-3/8"
LFIVIIVI433	(397)	(181)	(489)	(70)	(200)	(111)	(60)

Ordering	Information
Ciucinig	II II OI I I I I I I I I I I I I I I I

	LF	M M 4 3 2-1						
<u>Valve</u>	Order Code							
42 gpm (159 lpm)	LFMM431							
64 gpm (242 lpm)	LFMM432							
110 gpm (416 lpm)	LFMM433							
144 gpm (545 lpm)	LFMM434							
208 gpm (787 lpm)	LFMM435							
Finish/ Temperature Range								
Rough Bronze, Standard	1							
Chrome Plated, Standard	2							
Rough Bronze, Low	3							
Chrome Plated, Low	4							

Valve	Inlets NPT	Outlet NPT
LFMM431	3/4"	3/4"
LFMM432	3/4"	1"
LFMM433	1-1/4"	1-1/4"
LFMM434	1-1/4"	1-1/2"
LFMM435	2"	2"

Note

Dimensions are shown ±1/411
Dimensions in brackets are in mm

Recirculating Piping Diagram

Please see Piping Diagram Section of this Catalog.

Typical Specification

Master mixing valve shall feature paraffin-based, thermal actuation technology for precise temperature control. Valve shall be listed to ASSE 1017 and certified to CSA B125 and have an approach temperature of $5^\circ F$ (3°C). Valve shall have an outlet temperature range from 90 - 160°F (32 - 71°C) with a lockable temperature-setting feature. Body shall be constructed using Lead Free* brass material which shall comply with state codes and standards, where applicable, requiring reduced lead content. Valve shall also be manufactured of corrosion resistant materials and feature a single-seat design for positive shutoff. Valves shall come standard with union check stops. Minimum flows to ASSE 1017 shall be LFMM431 (3.0 gpm) (11 Lpm), LFMM432 (4.0 gpm) (15 Lpm), LFMM433 (5.0 gpm) (19 Lpm), LFMM434 (7.0 gpm) (26 Lpm), LFMM435 (10.0 gpm) (38 Lpm).

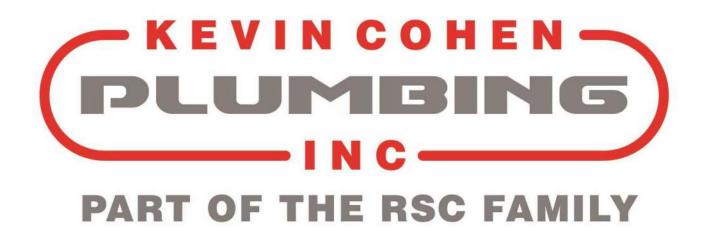
Master mixing valves shall be of Powers series LFMM430. Any alternate must have a written approval prior to bidding.



A **WATTS** Brand

USA: Tel: (800) 669-5430 • Fax: (847) 229-0526 • PowersControls.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • PowersControls.ca
Latin America: Tel: (52) 81-1001-8600 • PowersControls.com

ES-P-LFMM430 1406 © 2017 Powers



SP-1 Sump Pump

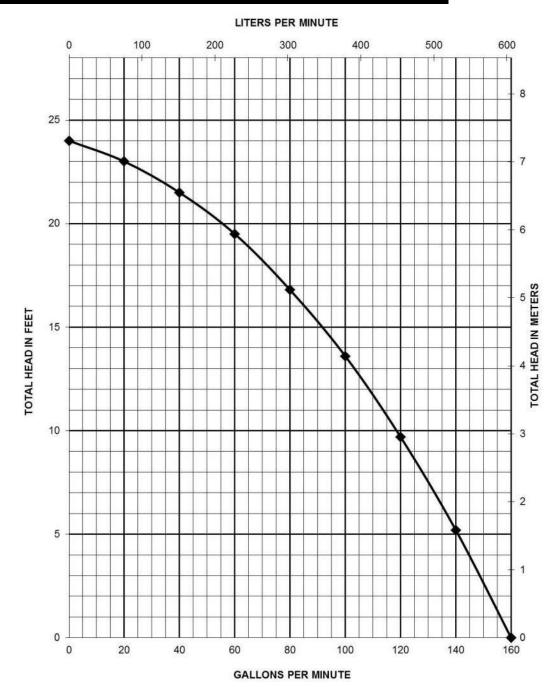


Pump Specifications

LE50 Series

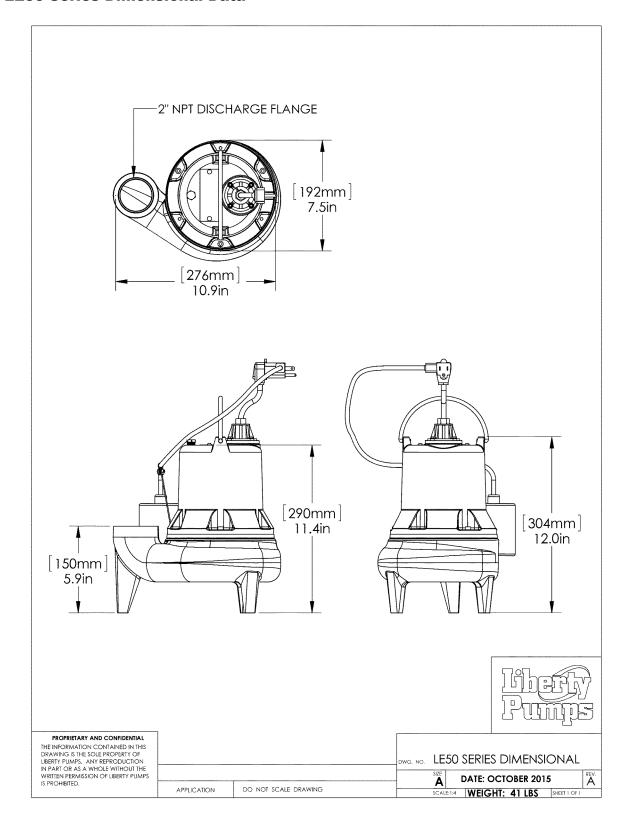
1/2 HP Submersible Sewage Pump



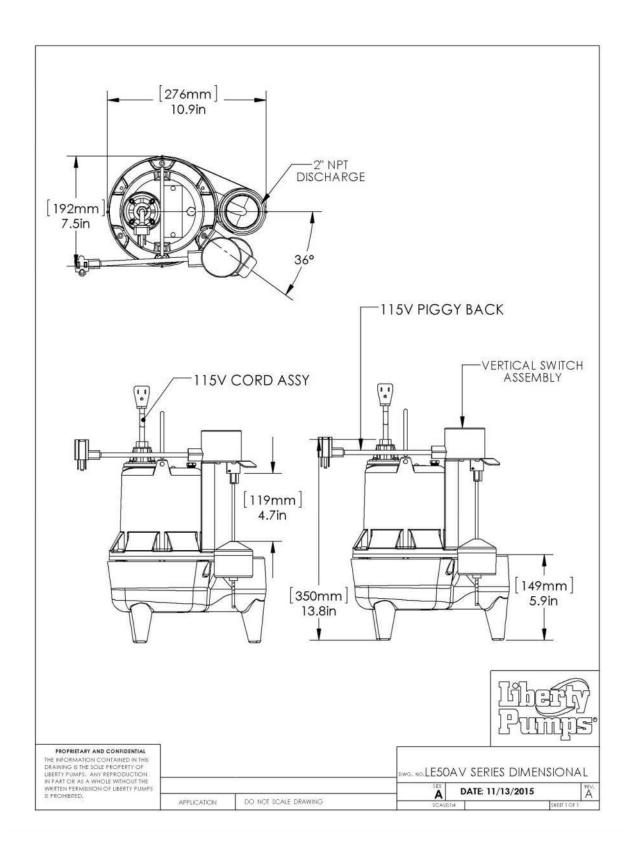




LE50-Series Dimensional Data









LE50-Series Electrical Data

MODEL	НР	VOLTAGE	PHASE	SF	FULL LOAD AMPS	LOCKED ROTOR AMPS	THERMAL OVERLOAD TEMP	STATOR WINDING CLASS	CORD LENGTH FT	DISCHARGE	AUTOMATIC
LE51A	1/2	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	WIDE ANGLE
LE51A -2	1/2	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	WIDE ANGLE
LE51AV	1/2	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	VERTICAL SWITCH
LE51AV -2	1/2	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	VERTICAL SWITCH
LE51M	1/2	115	1	1.00	12	22.5	105°C 221°F	В	10	2"	NO
LE51M-2	1/2	115	1	1.00	12	22.5	105°C 221°F	В	25	2"	NO
LE52A	1/2	208-230	1	1.00	6.8	12	105°C 221°F	В	10	2"	WIDE ANGLE
LE52A-2	1/2	208-230	1	1.00	6.8	12	105°C 221°F	В	25	2"	WIDE ANGLE
LE52M	1/2	208-230	1	1.00	6.8	12	105°C 221°F	В	10	2"	NO
LE52M-2	1/2	208-230	1	1.00	6.8	12	105°C 221°F	В	25	2"	NO

LE50-Series Technical Data

	2 VANE ENGINEERED
	THERMOPLASTIC
	ELASTOMER
IMPELLER	2" SOLIDS HANDLING
SOLIDS HANDLING SIZE	2"
PAINT	POWDER COAT
MAX LIQUID TEMP	60°C 140°F
MAX STATOR TEMP	130°C 266°F
THERMAL OVERLOAD	105°C 221°F
POWER CORD TYPE	SJTW
MOTOR HOUSING	CLASS 25 CAST IRON
VOLUTE	CLASS 25 CAST IRON
SHAFT	STAINLESS
HARDWARE	STAINLESS
ORINGS	BUNA N
MECHANICAL SEAL	UNITIZED CERAMIC CARBON
WEIGHT	43 LBS

LE50-Series Specifications



1.01 GENERAL:
The contractor shall provide labor, material, equipment, and incidentals required to provide(QTY) centrifugal pumps as specified
herein. The pump models covered in this specification are Series LE50 single phase pumps. The pump furnished for this application shall
pe modelas manufactured by Liberty pumps.
2.01 OPERATING CONDITIONS:
Each submersible pump shall be rated at 1/2 hpvolts, single phase, 60 Hz. 1725 RPM. The unit shall produceG.P.M. at
feet of total dynamic head.
The submersible pump shall be capable of handling residential sewage with 2" solid handling capability. The submersible pump shall have
a shut-off head of 24 feet and a maximum flow of 141 GPM @ 5 feet of total dynamic head.
The pump shall be controlled with:
A piggy back style on/off float switch
A pre-assembled HD vertical switch
A NEMA 4X outdoor simplex control panel with three float switches and a high water alarm.
A NEMA 1 indoor simplex control panel with three float switches and a high water alarm.
A NEMA 4X outdoor duplex control panel with three float switches and a high water alarm.
A NEMA 1 indoor duplex control panel with three float switches and a high water alarm.
A NEMA 4X outdoor duplex control panel with four float switches and a high water alarm.
A NEMA 1 indoor duplex control panel with four float switches and a high water alarm.

3.01 CONSTRUCTION:

Each centrifugal sewage pump shall be equal to the course certified Series LE50 SERIES pumps as manufactured by Liberty Pumps, Bergen NY. The castings shall be constructed of class 25 cast iron. The motor housing shall be oil filled to dissipate heat. Air filled motors shall not be considered equal since they do not properly dissipate heat from the motor. All mating parts shall be machined and sealed with a Buna-N o-ring. All fasteners exposed to the liquid shall be stainless steel. The motor shall be protected on the top side with sealed cord entry plate with molded pins to conduct electricity eliminating the ability of water to enter internally through the cord. The motor shall be protected on the lower side with a unitized ceramic/carbon seal with stainless steel housings and spring. The pump shall be furnished with stainless steel handle.

4.01 ELECTRICAL POWER CORD

The submersible pump shall be supplied with 10 or 25 feet of multiconductor power cord. It shall be cord type SJTW, capable of continued exposure to the pumped liquid. The power cord shall be sized for the rated full load amps of the pump in accordance with the National Electric Code. The power cable shall not enter the motor housing directly but will conduct electricity to the motor by means of a water tight compression fitting cord plate assembly, with molded pins to conduct electricity. This will eliminate the ability of water to enter internally through the cord, by means of a damaged or wicking cord.



5.01 MOTORS

Single phase motors shall be oil filled, permanent split capacitor, class B insulated NEMA B design, rated for continuous duty. At maximum load the winding temperature shall not exceed 130 degrees C unsubmerged. Since air filled motors are not capable of dissipating heat they shall not be considered equal. The pump motor shall have an integral thermal overload switch in the windings for protecting the motor. The capacitor circuit shall be mounted internally in the pump.

6.01 BEARINGS AND SHAFT

An upper and lower ball bearing are required. Both bearings shall be permanently lubricated by the oil, which fills the motor housing. The motor shaft shall be made of 300 or 400 series stainless steel and have a minimum diameter of .50".

7.01 SEALS

The pump shall have a unitized carbon / ceramic seal with stainless steel housings and spring equal to Crane Type 6A. The motor plate / housing interface shall be sealed with a Buna-N o-ring.

8.01 IMPELLER

The impeller shall be engineered thermoplastic elastomer, with pump out vanes on the back shroud to keep debris away from the seal area. It shall be threaded to the motor shaft.

9.01 CONTROLS

All units can be supplied with CSA and UL approved automatic wide angle tilt float switches or pre-installed heavy duty vertical switches. The switches shall be equipped with piggy back style plug that allows the pump to be operated manually without the removal of the pump in the event that a switch becomes inoperable. Manual Pumps are operable by means of a pump control panel.

10.01 PAINT

The exterior of the casting shall be protected with Powder Coat paint.

11.01 SUPPORT

The pump shall have cast iron support legs, enabling it to be a free standing unit. The legs will be high enough to allow 2" solids to enter the volute.

12.01 SERVICEABILTY

Components required for the repair of the pump shall be shipped within a period of 24 hours.



grommets or o-rings. The Discharge piping shall be schedule 80 PVC and furnished with a check valve and PVC shut-off ball valve. The Tank shall be wound fiberglass or roto-molded plastic. An inlet hub shall be provided with the fiberglass systems. Stainless steel Guide Rail Zinc plated steel Guide Rail "diameter of basin size "height of basin size "distance from top of tank to discharge pipe outlet Fiberglass cover Structural foam polymer cover Steel cover Simplex System with Outdoor panel and alarm Duplex System with Outdoor panel and alarm Duplex System with Indoor panel and alarm Simplex System with Indoor panel and alarm Remote Outdoor Alarm 14.01 TESTING The pump shall have a ground continuity check and the motor chamber shall be Hi-potted to test for electrical integrity, moisture content and insulation defects. The motor and volute housing shall be pressurized, and an air leak decay test is performed to ensure integrity of the motor housing. The pump shall be run, voltage current monitored, and the tester checks for noise or other malfunction. 15.01 QUALITY CONTROL The pump shall be manufactured in an ISO 9001 certified Facility.	Guide factory mounted rail system with pump suspended by means of bolt on quick disconnect which is sea	aled by means of nitrile
Stainless steel Guide Rail Zinc plated steel Guide Rail "diameter of basin size "height of basin size "distance from top of tank to discharge pipe outlet Fiberglass cover Structural foam polymer cover Streel cover Simplex System with Outdoor panel and alarm Duplex System with Outdoor panel and alarm Duplex System with Indoor panel and alarm Duplex System with Indoor panel and alarm Simplex System with Indoor panel and alarm Duplex System with Indoor panel and alarm Remote Outdoor Alarm Remote Outdoor Alarm 14.01 TESTING The pump shall have a ground continuity check and the motor chamber shall be Hi-potted to test for electrical integrity, moisture content and insulation defects. The motor and volute housing shall be pressurized, and an air leak decay test is performed to ensure integrity of the motor housing. The pump shall be run, voltage current monitored, and the tester checks for noise or other malfunction. 15.01 QUALITY CONTROL The pump shall be manufactured in an ISO 9001 certified Facility.	grommets or o-rings. The Discharge piping shall be schedule 80 PVC and furnished with a check valve and PVC sh	nut-off ball valve. The
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16.01 WARRANTY	15.01 QUALITY CONTROL	
	The pump shall be manufactured in an ISO 9001 certified Facility.	
Standard limited warranty shall be 3 years.	16.01 WARRANTY	
	Standard limited warranty shall be 3 years.	



PF92751 Stainless / Cast Iron Sump Pump



Product Features

- Rugged stainless steel and cast iron pump body for durability
- Vertical float switch
- 2" NPT Discharge
- 2" x 1-1/2" NPT Adapter
- Handles up to 1/2" solids
- Non-clogging stainless steel vortex impeller
- Integrated carrying handle

- 10' power supply cord
- Built-in thermal overload protection for safety
- Permanent split capacitor continuous duty motor



PF92751

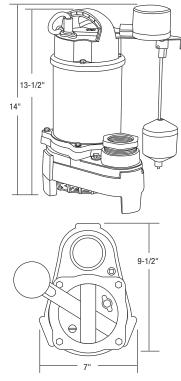
CLARIFY IF LIBERTY OR PROFLO IS BEING SUBMITTED.

Motor Performance

• 3/4 HP 120 Volt AC (7.5 amps)

Performance Chart										
Lift	0'	5'	10'	15'	20'	25'	30'	35'	40'	45'
GPM	80	75	69	61	55	45	38	25	16	2
GPH	4800	4500	4140	3660	3300	2700	2280	1500	960	2700

Product Specifications



* All measurements are nominal. Please verify before actual installation.



Warranty and Codes

This product comes complete with installation, operating, care and maintenance instructions. This PROFLO sump pump carries a 5 year warranty when installed in residential applications. See owners manual for warranty details.

This PROFLO sump pump carries a 5 year limited warranty. In an effort to continually improve our products, we will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless it is agreed in writing to do otherwise.

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



FM2939 0616 Supersedes New

TECHNICAL DATA SHEET



For indoor use only.
All electrical and safety codes must be followed in addition to the National Electrical Code and all applicable local codes.

SPECIFICATIONS

This alarm unit monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, and other non-potable water applications.

STANDARD FEATURES

- Green POWER light
- Red INPUT light
- Audible buzzer rated at 80 + db at 10' (3 m)
- Silence/Reset/Test button
- 120V, 60 Hz receptacle
- Battery backup power is supplied by 2 AA batteries, which are not included and must be purchased separately.
- NEMA 1 enclosure
- 6' (2 m) power cord

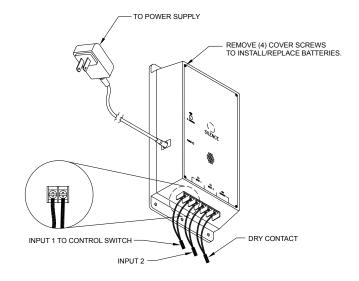
10-4011 comes with reed sensor

10-4012 comes with mechanical float switch

Z CONTROL® MODEL FEATURES

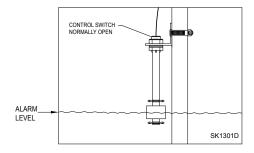
In addition to all standard features, Z Control® Model includes:

- Second input for additional monitoring ability
- Dry contacts for connection to home security system
- Z Control[®] Enabled
 - · Internet connected through existing router
 - iPhone and Android app
 - · Text, email, and push notifications
 - Remote monitoring of alarm status and battery levels; user can also remotely Silence and Reset the alarm
- 10-4013 comes with reed sensor
- 10-4014 comes with mechanical float switch

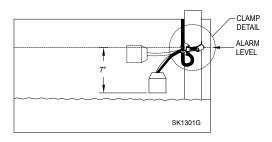


Z Control® model shown

SK3102



Reed Sensor Models 10-4011 Standard 10-4013 Z Control®



Mechanical Float Models 10-4012 Standard 10-4014 Z Control®

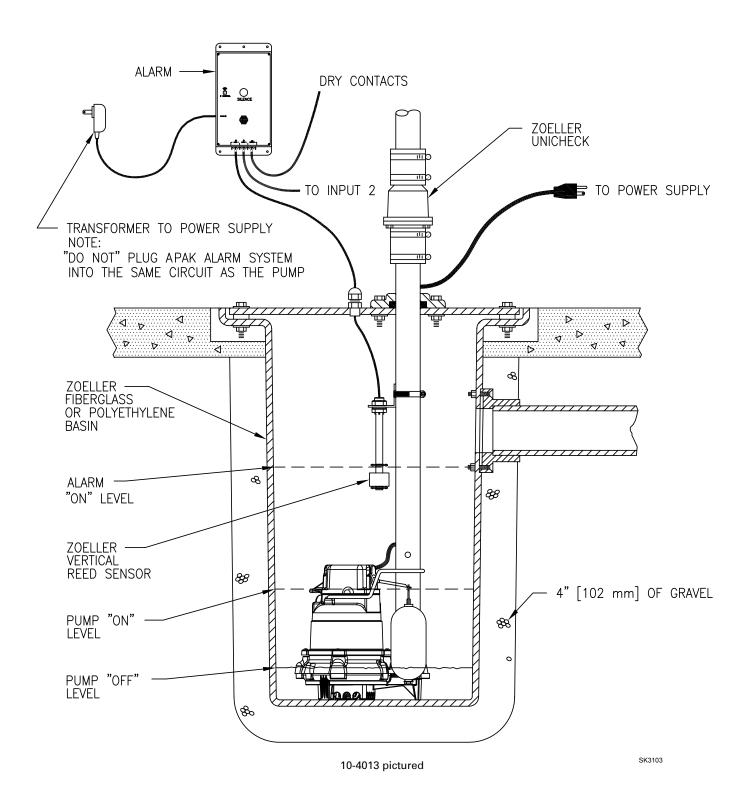


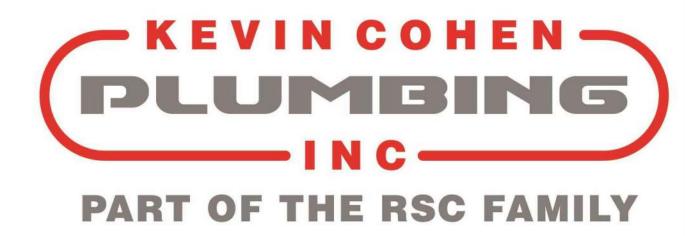


The APak® alarm can be used as AC-only, DC-only, or both:

Power choice	Resulting alarm behavior	Do this
AC & batteries	Power outage and low battery alarms	Insert batteries and connect to power.
AC only	Power outage. No low battery alarm.	Hold button while powering up the alarm for about 5 seconds until green power LED turns on. This setting will be remembered by the alarm even after a power outage. If this setting is no longer desired, simply adding batteries will remove this setting.
Batteries only	Low battery alarm. No power outage alarm.	Insert batteries. The alarm will not detect loss of AC power if it is never applied.

NOTE: Additional alarm behaviors described in installation instructions.





DF-1 Drinking Fountain

DEVICE NOT REQUIRED PER CURRENT DRAWINGS



Elkay EZH2O Bottle Filling Station with Integral SwirlFlo Fountain Refrigerated Non-Filtered Stainless

Model EZWS-ERPBM28K

PRODUCT SPECIFICATIONS

Elkay ezH2O® Bottle Filling Station with Integral SwirlFlo® Fountain, Refrigerated Non-Filtered Stainless. Chilling Capacity of 8.0 GPH (gallons per hour) of 50° F drinking water, based on 80° F inlet water and 90° F ambient, per ASHRAE 18 testing. Features shall include Hands-Free, Green Ticker™, Laminar Flow, Antimicrobial, Real Drain. Furnished with Flexi-Guard™ Safety bubbler. Electronic Bottle Filler Sensor With Mechanical Front Bubbler Button activation. Product shall be Wall Mount (In-Wall Frame/Plate), for Indoor applications, serving 2 station(s). Unit shall be certified to UL 399 and CAN/CSA C22.2 No. 120. Unit shall be lead-free design which is certified to NSF/ANSI 61 & 372 (lead free) and meets Federal and State low-lead requirements.

Special Features:	Hands-Free, Green Ticker™,			
	Laminar Flow, Antimicrobial, Real			
	Drain			
Finish:	Stainless Steel			
Power:	115V/60Hz			
Bubbler Style:	Flexi-Guard™ Safety			
Activation by:	Electronic Bottle Filler Sensor With			
	Mechanical Front Bubbler Button			
Mounting Type:	Wall Mount (In-Wall Frame/Plate)			
Chilling Option*:	8.0 GPH			
Full Load Amps	1			
Rated Watts:	370			
Dimensions (L x W x H):	38-1/2" x 19" x 55-1/16"			
Approx. Shipping Weight:	170 lbs.			
Installation Location:	Indoor			
No. of Stations Served:	2			
*Based on 80° F inlet water & 90° F ambient air temp for 50° F chilled drinking water.				

- Mechanically-Activated bubbler continues to supply water in event of service disruptions.
- Touchless, sensor-activation, designed for easy use.
- Green Ticker: Informs user of number of 20 oz. plastic water bottles saved from waste.
- Laminar flow provides clean fill with minimal splash.
- Silver Ion Antimicrobial protection on key plastic components to inhibit the growth of mold and mildew.
- · Real Drain System eliminates standing water.
- Exclusive Flexi-Guard Safety Bubbler: Innovative design utilizes a pliable polyester elastomer to prevent accidental mouth injuries. Flexes on impact, then returns to original position. Strong. Abrasion-resistant. Anti-sweat. Keyed in location to prevent rotation.

COOLING SYSTEM

• Compressor: Hermetically-sealed, reciprocating type, single phase. Sealed-in lifetime lubrication.

PART:	QTY:
PROJECT:	
CONTACT:	
DATE:	
NOTES:	
APPROVAL:	



AMERICAN PRIDE. A LIFETIME TRADITION. Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family-owned and operated company, providing thousands of jobs that support our families and communities.



Included with Product: Fountain with Integral Bottle Filling

Station (ERPBD28WSC), Mounting Frame (MFWS210), Chiller (ECH8)

PRODUCT COMPLIANCE

ADA

Buy American Act CAN/CSA C22.2 No. 120 GreenSpec[®] NSF/ANSI 61 & 372 (lead free) UL 399









Installation Instructions (PDF) - 1000003097 Installation Instructions (PDF) - 0000001030 Installation Instructions (PDF) - 0000001027

5 Year Limited Warranty on the refrigeration system of the unit. Electrical components and water system are warranted for 12 months from date of installation. Warranty pertains to drinking water applications only. Non-drinking water applications are not covered under warranty.

Warranty (PDF)

OPTIONAL ACCESSORIES

EWF3000 - WaterSentry Plus Filter System Kit (Bottle Fillers)
LKAPR1 - Accessory - Cane Apron for SwirlFlo®
ACCESS12X38-5 - Accessory - Access Panel



Elkay EZH2O Bottle Filling Station with Integral SwirlFlo Fountain Refrigerated Non-Filtered Stainless Model EZWS-ERPBM28K

- Condenser: Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.
- Cooling Unit: Combination tube-tank type. Continuous copper tubing with is fully insulated with EPS foam that meets UL requirements for self-extinguishing material.
- Refrigerant Control: Refrigerant R-134a is controlled by accurately calibrated capillary tube.
- Temperature Control: Easily accessible enclosed adjustable thermostat is factory preset. Requires no adjustment other than for altitude requirements.



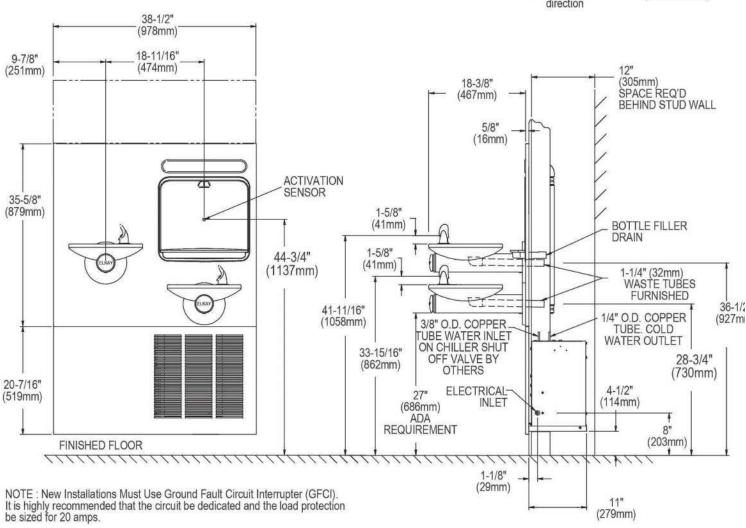
IMPORTANT! INSTALLER PLEASE NOTE:

The grounding of electrical equipment such as telephone, computers, etc., to water lines is a common procedure. This grounding may be in the building or may occur away from the building. This grounding can cause electrical feedback into a water cooler, creating an electrolysis which causes a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by using the proper materials as indicated below. The drain fittings which are provided by the installer should also be plastic to electrically isolate the cooler from the building plumbing system.

These products are designed to operate on 20 psi to 105 psi supply line pressure. Simultaneous operation of both bubblers on a bi-level unit may not be possible depending on water supply pressure. If simultaneous operation is desired, please ensure a minimum of 50 psi supply.

OPERATION OF QUICK CONNECT FITTINGS Simply push in |Tube is secured |Push in collet to tube to attach in position release tube -0107 В Pushing tube in before pulling it out helps to release tube 1/4" O.D. tube 3/8" O.D. Tube connect **Building water** water inlet to cold water supply inlet cooler Servicé stop NOTE: Waterflow (Not furnished) direction

BOTTLE FILLER SPECIFICATIONS





Elkay EZH2O Bottle Filling Station with Integral SwirlFlo Fountain Refrigerated Non-Filtered Stainless

Model EZWS-ERPBM28K

WALL OPENING

IMPORTANT: It is necessary to create a wall opening 37-1/2" W x 52-1/8" H and 4-1/2" above the floor

ELECTRICAL DATA

Junction box for a (3) wire 10AMP branch circuit. Standard 120 Volt, 60 HZ, single phase. Electical outlet, three (3) conductor grounded. Locate withing safe reach of power cord.

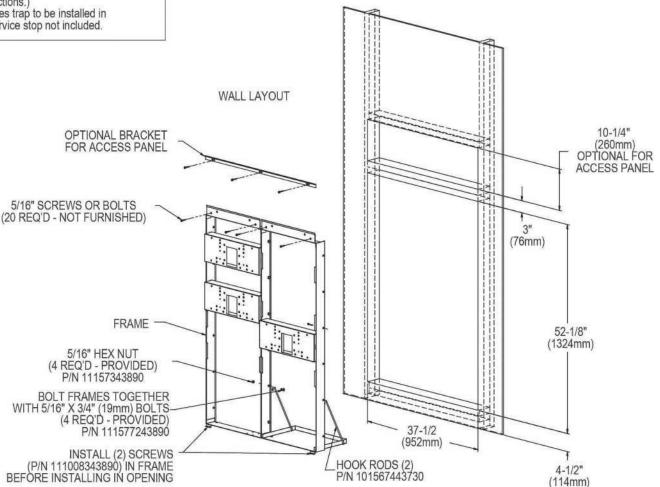
MOUNTING FRAME MFWS210

INSTALLER NOTE

This drinking fountain is furnished with a bubbler and valve including all connecting fittings which are manufactured of completely lead free material. Shut off valve (not furnished) to accept 3/8" O.D. unplated copper tube.

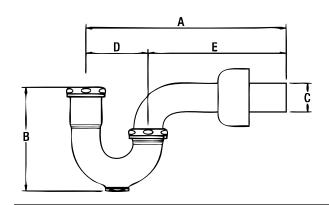
MOUNTING INSTRUCTIONS

Refer to rough-in for location of plumbing and electrical sources. The support frame is to be installed first. Hang upper panel to hanger on frame. Fountains are to be attached to panel and wall frame. Water service lines, waste lines and electrical are assembled as required. Perform a final check for leaks and correct functions of fountains and chiller. (For details see the installation instructions.)
Installation requires trap to be installed in wall. Trap and service stop not included.





Adjustable Tubular P-Traps





PFPTB101

Model Numbber	Doc-	Cleanout	Dimension (inch)				Cours	Others			Certificate	
Model Nullipper	Desc	Y/N	Α	В	C	D	E	Gauge	Finish	Flange	Nuts	Cermicale
PFPTB100	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	17	Chrome	Box	Brass	cUPC
PFPTB101	1-1/4 x 1-1/4	Yes	11	5-1/4	1-1/4	3	8	17	Chrome	Box	Brass	C-IAPMO
PFPTB102	1-1/4 x 1-1/4 w/semi-cast design	Yes	10-1/8	4-5/8	1-1/4	2-5/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB103	1-1/4 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB104	1-1/4 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB105	1-1/4 x 1-1/2 w/ground joint	No	10-3/4	5-1/8	1-1/2	3-1/4	7-1/2	17	Chrome	Shallow	Brass	cUPC
PFPTB106	1-1/4 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB107	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB108	1-1/2 x 1-1/2	Yes	12-1/4	5-1/4	1-1/2	3-1/4	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB109	1-1/2 x 1-1/2 w/semi-cast design	Yes	10-3/8	5	1-1/2	2-7/8	7-1/2	17	Chrome	Shallow	Zinc	C-IAPMO
PFPTB110	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Box	Brass	cUPC
PFPTB111	1-1/2 x 1-1/2 w/ground joint	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Unfinished	Box	Brass	cUPC
PFPTB112	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	17	Chrome	Shallow	Brass	cUPC
PFPTB200	1-1/4 x 1-1/4	No	11	5	1-1/4	3	8	20	Chrome	Box	Zinc	C-IAPMO
PFPTB201	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Chrome	Box	Zinc	C-IAPMO
PFPTB202	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	20	Unfinished	Shallow	Brass	C-IAPMO
PFPTB300	1-1/4 x 1-1/4	No	10	5	1-1/4	3	7	22	Chrome	Box	Zinc	non
PFPTB301	1-1/2 x 1-1/2	No	12-1/4	5-1/8	1-1/2	3-1/4	9	22	Chrome	Box	Zinc	non
PFPTB400	1-1/4 x 1-1/4 w/semi-cast design	Yes	11-1/8	4-5/8	1-1/4	2-5/8	8-1/2	17	Chrome	Box	Brass	C-IAPMO
PFPTB401	1-1/2 x 1-1/4 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB402	1-1/2 x 1-1/4 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC
PFPTB403	1-1/2 x 1-1/2 w/semi-cast design	Yes	11-7/8	5	1-1/2	2-7/8	9	17	Chrome	Box	Brass	C-IAPMO
PFPTB404	1-1/2 x 1-1/2 w/semi-cast design	No	11-7/8	4-7/8	1-1/2	2-7/8	9	17	Chrome	Box	Brass	cUPC

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.





Low Lead

Commercial and Heavy Duty Stops



Product Features

- Low lead brass body
- Low lead brass stem
- NSF 372 & cUPC approved

- Operating pressure 125psi maximum
- Operating temperature 40°F-160°F

Model Numbers (*For use copper tube only)

Individual Stops

PFXCAC32C* LF CP 5/8 comp X 3/8 comp angle stop PFXCAS32C* LF CP 1/2 SWT X 3/8 comp sply stop PFXCAZ32C LF CP1/2 SWT W/ EXT X 3/8 comp stop PFXCAT22C LF CP 3/8 IPS X 3/8 comp sply stop PFXCAT32C LF CP 1/2 IPS X 3/8 comp sply stop PFXCAT33C LF CP 1/2 IPS X 1/2 comp sply stop



PFXCAC32C



LF CP 3/8 IPS X 3/8 comp stop loose key LF CP 1/2 IPS X 3/8 comp stop loose key PFXCAC32CLK* LF CP 5/8 comp X 3/8 comp stop loose key PFXCAS32CLK* LF CP 1/2 SWT X 3/8 comp stop loose key PFXCAZ32CLK LF CP 1/2 SWT W/ EXT X 3/8 comp stop loose key



PFXCAZ32CLK

Heavy Duty

PFXHAC32C* LF CP 5/8 comp X 3/8 comp stop

PFXHAC32CLK* LF CP 5/8 comp X 3/8 comp stop loose key PFXHAT32CLK LF CP 1/2 IPS X 3/8 comp stop loose key PFXHATT33LK LF CP 1/2 IPS X 1/2 IPS comp stop loose key



PFXHAT32CLK

Warranty and Codes

This PROFLO product carries a 1-year limited warranty. ASME A112.18.1-2005/CSA B125.1-05





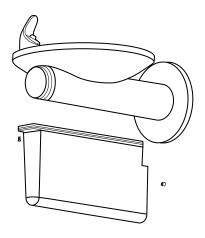


GENERAL

Accessory apron designed to bring Elkay SwirlFlo® models into compliance with the American with Disabilities Act (A.D.A) when units are mounted on an exposed wall. This apron provides the mandatory 27" (686mm) floor to underside requirement, when properly installed.

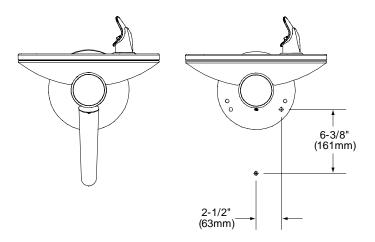
CONSTRUCTION

Roto molded low density polyethylene cane apron. Gray color only.

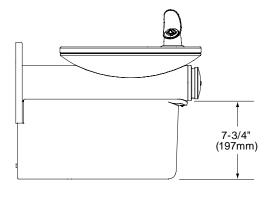


ERPBM28K (low unit only) shown with accessory apron LKAPR1

FRONT VIEWS



SIDE VIEW



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice.

This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

elkayusa.com

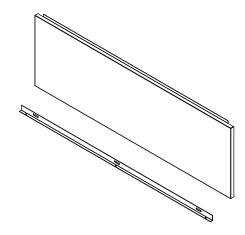


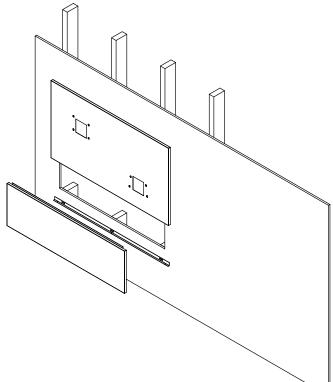
GENERAL

Access panel designed for use with SwirlFlo® and Soft Sides® bi-level fountains. Allows easy access for servicing.

CONSTRUCTION

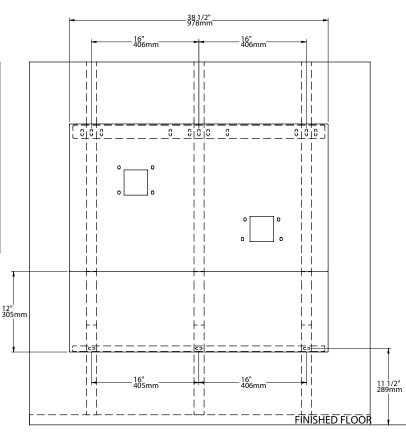
Type 300 series stainless steel





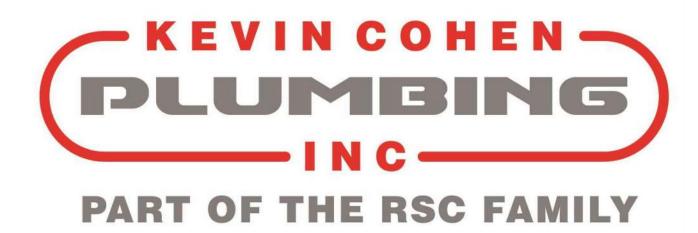
Includes the access panel and L-bracket for mounting. The access panel has a tab along the top which secures behind the fountain back panel. L-bracket is mounted to the wall. Access panel is secured to L-bracket with screws.

Note - upper panel portion is not included with this item. Shown only for mounting reference.



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkayusa.com for most current version.

This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.



FCO Floor Cleanout - Tile

ADJUSTABLE ON-GRADE CLEANOUT

>> 834 SERIES

FinishLine[™]

SPECIFICATION

Sioux Chief 834 series FinishLine™ adjustable on-grade cleanout shall be used where necessary in drainage systems. Cleanout shall allow adjustment before and AFTER the concrete pour. Scoriated cleanout cover shall meet applicable load requirements for intended use. Cleanout shall include a slotted, polypropylene or brass cleanout plug, situated in base adapter. Designed in accordance with ASME A112.36.2M-2002.

MATERIALS

Ring/cover: Nickel-bronze, stainless steel, tenzalloy

Coring plug: High-impact polymer Head adapter/coring sleeve: Gray ABS

Base adapter: ABS, PVC

Cleanout plug: Polypropylene, brass



834-4PNO

STRAINER LOAD RATING

Nickel-bronze: 4,000 lbs. (Medium duty) Stainless steel: 4,000 lbs. (Medium duty)

Tenzalloy: 1,250 lbs. (Light duty)

DIMENSIONS

" Sch. 40 hub A: Connection

B: Ring/strainer diameter

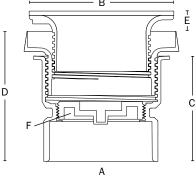
Round 61/2" Square 65/8" 41/2" C: Base adapter height

 $5^3/8" - 6^5/8"$ D: Pre-pour height

E: After-pour height

 $0" - 1^{1}/_{4}"$ Round 5/16" - 11/4" Square

31/2" male thread F: Cleanout plug



8343PF - Rough-In Cleanout Only 8344HNR - Finish Fixture

Create Item Number

834-ABCD

e.g. 834-4PNRV: FinishLineTM cleanout with 4" PVC hub connection and vandal-resistant nickel-bronze cover



CONNECTION TYPE B

= ABS base adapter = PVC base adapter

NNG/COVER C

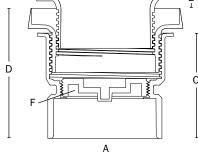
NR = Round nickel-bronze

- □ NQ = Square nickel-bronze
- ☐ **SR** = Round stainless steel
- ☐ **SQ** = Square stainless steel
- \square **TR** = Round tenzalloy

INSTALLED OPTIONS D

- □ V = Vandal-resistant cover screws
- ☐ S = Stamping: specify letters
- □ C = Carpet marker
- \square **Z** = Complies with Buy American Act¹

1 Available for round nickel-bronze covers only

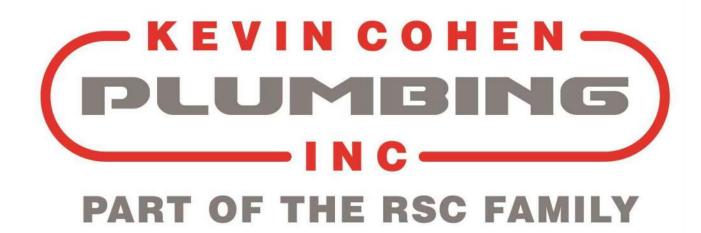


ACCESSORIES (ordered separately)

☐ **832-EX4** = Ductile extension adapter

☐ 832-W = Flexible locating bristle kit

■ 832-S4 = Leveling shim kit



FCO Floor Cleanout - Carpet/Concrete

ADJUSTABLE ON-GRADE CLEANOUT

>> 834 SERIES

FinishLine[™]

SPECIFICATION

Sioux Chief 834 series FinishLine™ adjustable on-grade cleanout shall be used where necessary in drainage systems. Cleanout shall allow adjustment before and AFTER the concrete pour. Scoriated cleanout cover shall meet applicable load requirements for intended use. Cleanout shall include a slotted, polypropylene or brass cleanout plug, situated in base adapter. Designed in accordance with ASME A112.36.2M-2002.

MATERIALS

Ring/cover: Nickel-bronze, stainless steel, tenzalloy

Coring plug: High-impact polymer Head adapter/coring sleeve: Gray ABS

Base adapter: ABS, PVC

Cleanout plug: Polypropylene, brass



834-4PNO

STRAINER LOAD RATING

Nickel-bronze: 4,000 lbs. (Medium duty) Stainless steel: 4,000 lbs. (Medium duty)

Tenzalloy: 1,250 lbs. (Light duty)

DIMENSIONS

" Sch. 40 hub A: Connection

B: Ring/strainer diameter

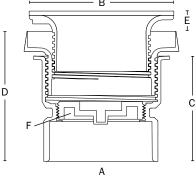
Round 61/2" Square 65/8" 41/2" C: Base adapter height

 $5^3/8" - 6^5/8"$ D: Pre-pour height

E: After-pour height

 $0" - 1^{1}/_{4}"$ Round 5/16" - 11/4" Square

31/2" male thread F: Cleanout plug



8343PF - Rough-In Cleanout Only 8344HNR - Finish Fixture

Create Item Number

834-ABCD

e.g. 834-4PNRV: FinishLineTM cleanout with 4" PVC hub connection and vandal-resistant nickel-bronze cover



CONNECTION TYPE B

= ABS base adapter = PVC base adapter

NNG/COVER C

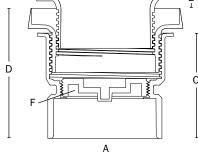
NR = Round nickel-bronze

- □ NQ = Square nickel-bronze
- ☐ **SR** = Round stainless steel
- ☐ **SQ** = Square stainless steel
- \square **TR** = Round tenzalloy

INSTALLED OPTIONS D

- □ V = Vandal-resistant cover screws
- ☐ S = Stamping: specify letters
- □ C = Carpet marker
- \square **Z** = Complies with Buy American Act¹

1 Available for round nickel-bronze covers only

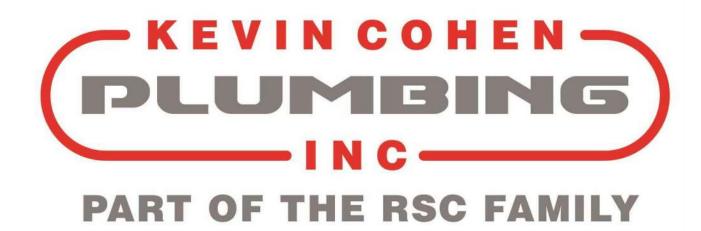


ACCESSORIES (ordered separately)

☐ **832-EX4** = Ductile extension adapter

☐ 832-W = Flexible locating bristle kit

■ 832-S4 = Leveling shim kit



WCO Wall Cleanout

WALL CLEANOUT COVER KIT

>> 873 SERIES

SPECIFICATION

Sioux Chief 873 Series cleanout cover kit shall be used where necessary in drainage systems. Kit shall include a removable stainless steel access cover, which shall fasten with a stainless steel screw to a cast brass cleanout plug. Plug shall be tapped to accept screw. Kits shall be available for large, medium or small access holes

MATERIALS

Access cover: 20 gauge, 430 stainless steel Screw: stainless steel, 1/4-20 thread

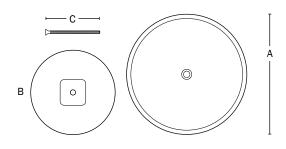
Plug: Brass, tapped for screw, countersunk square head

DIMENSIONS

A:	Cover diameter	4"	5"	6"
B:	Plug size (thread)	2"	3"	4"
C:	Screw	21/4" I	ong,	1/4-20 thread







Create Item Number

873-AB

e.g. 873-460: Wall cleanout cover kit including 4" brass plug, 6" access cover and 21/4" screw

*Specify Size When Ordering



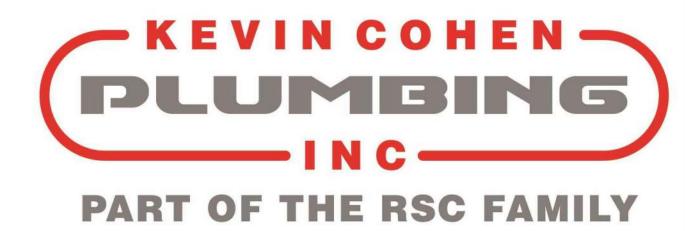
INSTALLED	OPTIONS <u>E</u>
-----------	------------------

□ **P** = Slotted, polypro plug¹ □ **V** = Vandal-resistant screw

1 In place of standard brass plug

ACCESSORIES (ordered separately)

□ 870-B Tapped behind-the-wall bar - 9" long □ 874-1 1/4-20 screw, stainless, 11/2" long 1/4-20 screw, stainless, 21/4" long □ 874-2 □ 874-4 1/4-20 screw, stainless, 4" long □ 874-6 1/4-20 screw, stainless, 6" long



GCO Grade Cleanout

HEAVY-DUTY ACCESS HOUSING

>> 850 SERIES

SPECIFICATION

Sioux Chief 850 Series heavy-duty access housing shall be used where necessary in drainage systems. Housing shall be used to provide access to cleanouts, valves or other fixtures in heavy-traffic areas. Housing shall incorporate dual outer flanges which lock into concrete to support the housing independently of fixture. Cover shall meet applicable load requirements for intended use. Designed in accordance with ASME A112.36.2M

MATERIALS

Housing body: Ductile Iron

Cover: Ductile Iron Optional ring/cover veneer: Nickel-bronze

Cover lifting device: Nickel-bronze

COVER LOAD RATING

7,500 lbs. (Extra-heavy duty)

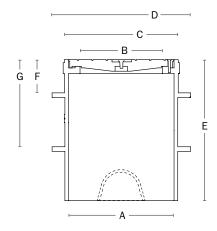
DIMENSIONS

A:	Inner diameter	8-1/2"
B:	Clear opening	6-1/2"
C:	Top diameter ¹	9-1/4"
D:	Flange diameter	11-1/4"
E:	Overall height ²	11-1/2"
F:	Top to upper flange	2-3/4"
G:	Top to lower flange	7-1/8"

1 add 7/16" for nickel-bronze veneer 2 add 1/4" for nickel-bronze veneer







Create Item Number

850-AB

e.g. 850-9i: Heavy-duty access housing with ductile iron cover

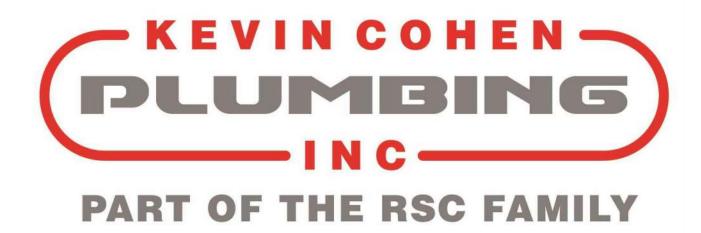


9i = Ductile iron cover with lifting device

□ 9iN = Ductile iron cover with Nickel-bronze ring/cover veneer and lifting device

INSTALLED OPTIONS B

□ V = Vandal-resistant cover screws



Water Hammer Arrestor

WATER HAMMER ARRESTERS

>> 650 SERIES

HydraRester™

SPECIFICATION

Sioux Chief 650 Series piston-type water hammer arresters shall be required in piping systems. Water hammer arresters shall have sufficient volume of air to dissipate the calculated kinetic energy generated in the piping system. Arresters shall be effective when installed at any angle. Arresters shall be approved for installation with no access panel required. Water hammer arresters shall be ANSI/ASSE 1010 2004 certified. Arresters shall be sized and placed per manufacturer's instructions.

INSTALLATION

May be installed at any angle. No access panels required. Compatible with Press Fittings or Push Fittings. Refer to instructions on product package, catalog or website.

MATERIALS

Arrester body: type L copper tube Piston: poly piston with two EPDM o-rings Male thread fitting: copper MIP thread

Piston lubrication: Dow-Corning, 111 FDA approved silicone compound

PEX F1960 fitting: No Lead EcoBrass 69300

CERTIFICATIONS/APPROVALS

Certified by ASSE to the ANSI/ASSE 1010-2004 standard

WORKING LIMITS*

Max working temperature: 250° Max working pressure: 350 PSIG Burst tested: to 2,900 PSIG

*PEX and CPVC connection specifications are limited to those called out in their respective ASTM Standards for Fittings (CPVC D2846, PEX F1807, PEX 1960).

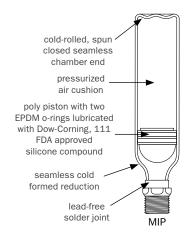
DIMENSIONS

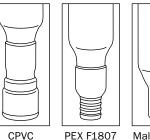
Α	В	C	D	E	F
6½"	83/4"	11"	101/8"	12%	151/8"
81/4"	10"	12½"	11"	13½"	16"
7½"	91/2"	12"	_	_	
6½"	83/4"	11"	_	_	_
6½"	83/4"	11"	_	_	_
1%"	13/8"	13/8"	21/8"	21/8"	21/8"
1/2"	3/4"	1"	1"	1"	1"
5	7	11	20	29	36
1–11	12–32	33–60	61–113	114–154	155–330
	6½" 8¼" 7½" 6½" 1¾" 5	6½" 8¾" 8¼" 10" 7½" 9½" 6½" 8¾" 6½" 8¾" 1½" 3¾" 1½" ¾"	6½" 8¾" 11" 8¼" 10" 12½" 7½" 9½" 12" 6½" 8¾" 11" 6½" 8¾" 11" 1¾" 1¾" 1¾" ½" ¾" 1" 5 7 11	6½" 8¾" 11" 10½" 8¼" 10" 12½" 11" 7½" 9½" 12" — 6½" 8¾" 11" — 6½" 8¾" 11" — 1¾" 1¾" 1¾" 2½" ½" ¾" 1" 1" 5 7 11 20	6½" 8¾" 11" 10½" 12½ 8¼" 10" 12½" 11" 13½" 7½" 9½" 12" — — 6½" 8¾" 11" — — 6½" 8¾" 11" — — 1½" 1¾" 2½" 2½" 2½" 5 7 11 20 29

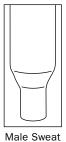




652-A









PEX F1960





*Specify Size When Ordering

Choose Item Number



\square 652-AS = Sweat/Press-	Fit
\square 653-BS = Sweat/Press	-Fit

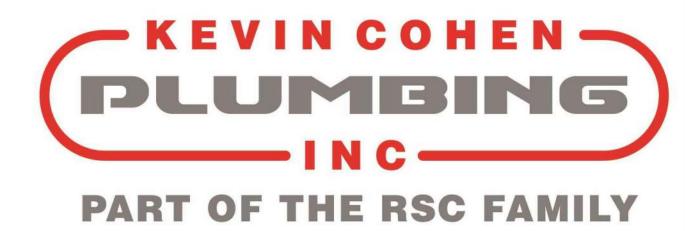
 \square **654-CS** = Sweat/Press-Fit

 \square **655-DS** = Sweat/Press-Fit \square **656-ES** = Sweat/Press-Fit \Box **657-FS** = Sweat/Press-Fit

☐ **652-AX** = A size, PEX 1807 ☐ **653-BX** = B size, PEX 1807

☐ **654-CX** = C size, PEX 1807 ☐ **652-AWG** = A size, PEX 1960

☐ **653-BWG** = B size, PEX 1960 ☐ **654-CWG** = C size. PEX 1960 ☐ **654-CC** = C size, CPVC socket



TP-1 Trap Primer



Precision Plumbing Products

"Specify with Confidence - Install with Pride"

PRIME-TIME ELECTRONIC TRAP PRIMING ASSEMBLY **FLUSH MOUNT**

www.pppinc.net

It's PRIME-TIME to meet your floor drain trap priming needs. This unique trap priming assembly Automatically maintains a constant water seal in floor drain traps and is available in 4 through 30 opening configurations and all the contractor needs to do is simply supply the potable water and power, Precision supplies the rest...

FEATURES:

- ATMOSPHERIC VACUUM BREAKER
- PRE-SET 24 HOUR ADJUSTABLE TIMER
- MANUAL OVER RIDE SWITCH
- 120v OR 220v SOLENOID VALVE
- 3/WIRE SINGLE POINT CONNECTION
- 3/4" FNPT CONNECTION
- CALIBRATED MANIFOLD FOR EQUAL WATER DISTRIBUTION
- 5/8" OR 1/2" OUTLET COMPRESSION OR 1/2" PEX AND PROPEX FITTINGS
- FOUR OPENING MANIFOLD TO THIRTY **OPENING MANIFOLD**
- FLUSH MOUNT CABINETS AVAILABLE AS FIRE RATED, CALL FACTORY FOR QUOTE

The Electronic Priming Assembly pictured is available in a single configuration but is capable of priming from thirteen to twenty separate floor drain traps from a single control unit. The manifold is available in either 1/2" or 5/8" compression, 1/2" PEX or PROPEX fittings. This model serves 13 to 20 drains.

Part Number:

PT-1320 🔻 Cabinet Dimension: ID 20-1/2" W x 16-1/2" H x 3-3/8" D **Access Door Part** Number: **D-1620PC D-1620SS**



FLUSH MOUNT CABINETS

The Electronic Priming Assembly pictured is available in five separate configurations. The model PT-4 offers a four opening manifold capable of priming four separate floor drain traps from a single control unit. Models PT-6 through PT-12 provide the same features only expanding to a total of twelve floor drains. All manifolds are available in either 1/2" or 5/8" compression, 1/2" PEX or PROPEX fittings.

Part Number:

PT-4. PT-6. PT-8. PT-10, PT-12

Cabinet Dimension: ID 14" W x 16" H x 3-3/8"D

Access Door Part Number: **D-1416PC D-1416SS**



The Electronic Priming Assembly pictured is available in a single configuration but is capable of priming from twenty one to thirty separate floor drain traps from a single control unit. The manifold is available in either 1/2" or 5/8" compression, 1/2" PEX or PROPEX fittings. This model serves 21 to 30 drains.

Part Number:

PT-2130 V

Cabinet Dimension: ID 30-1/2" W x 20-1/2" H x 3-3/8"D

Access Door Part Number:

D-2030PC

D-2030SS



The PRIME-TIME PRIMING ASSEMBLY will supply a minimum of 2 oz. of potable water at 20 PSIG at a preset factory setting of 6 seconds every 24 hours. The entire unit is pre-assembled in a steel cabinet ready to be flush wall mounted.

24 Hour Timer

SPECIFICATIONS

VOLTAGE:

MODEL # PT-

COMP	RESSION FITTINGS:
	1/2" Comp. for 3/8" ID Copper Line
	5/8" Comp. for 1/2" ID Copper Line.
	This line is the floor drain trap make-up water line.
	1/2" PEX
	1/2" ProPEX Uponor
CABIN	IET: 16 Gauge Steel
	Dry Wall, Flush Mount (In Wall)
	Cabinet Depth 4", Mounting Anchor Provided
	Fire Rated, Flush Mount (In Wall)
	Cabinet Depth 6", Mounting Anchors Provided
ACCE	SS DOOR: Dry Wall
	Prime Coat
	Stainless Steel
ACCE	SS DOOR LATCH:
	Screw Driver - Standard
	Allen Key
	Cylinder Lock
ACCE	SS DOOR: Fire Rated
	Prime Coat
	Stainless Steel
ACCE	SS DOOR LATCH:
	Ring Pull - Standard
	Cylinder Lock

120 Volt 60 Hz./110 Volt 50 Hz.

PT-1320 - # of drains served: PT-2130 - # of drains served:

240 Volts 60 Hz./220 Volts 50 Hz.

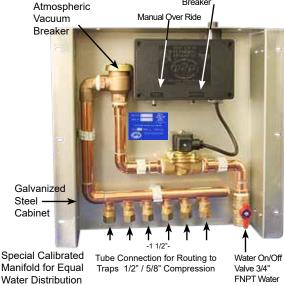
ELECTRICAL SPECIFICATIONS:

120 VOLT PT

120/60 6. Watts 110/50 16 VA Holding 34 VA In Rush

240 VOLT PT

240/60 Watts 220/50 16 VA Holding 34 VA In Rush



2 Amp. Circuit

Manifold for Equal Water Distribution to Floor Drains

Source Connection

CABINET DIMENSIONS:

MODEL # PT-4 - PT-12 ID Width 14" x Height 16" MODEL # PT-1320 ID Width 20 1/2" x Height 16 1/2" MODEL # PT-2130 ID Width 30 1/2" x Height 20 1/2"

DEPTH OF CABINET:

Standard 3-3/8", Fire Rated 6"

INLET:

3/4" inch NPT female, ANSI/ASME BI.20.1.

5/8" or 1/2" inch compression fitting. SAEJ512.

MANIFOLD:

3/4" Type "L" copper tubing. ASTM B88.

SOLDERED JOINTS:

95-5 lead free containing lead not in excess of 0.2%.

ELECTRICAL COMPONENTS:

Circuit Breaker, Test Switch, Timer, Solenoid Valve marked as UL listed. Electronic assembly tested and certified per UL #73.

BACKFLOW PREVENTION:

Anti-Siphon atmospheric vacuum breaker meets Los Angeles code, IAPMO. New York Board of Standards. ASSE 1001 and CSA.

METAL CABINET:

16 gauge steel, galvanized.

ACCESS DOOR:

Optional: Prime Coat, Stainless Steel, and Fire Rated.

TEMPERATURE/PRESSURE:

32°F - 125°F, 20 PSI - 150 PSI.

NOTE: UNIT MUST BE INSTALLED PLUMB.

- MUST BE INSTALLED WITH ACCESS.
- All PRIME-TIME FLUSH MOUNT UNITS ARE AVAILABLE IN FIRE RATED CABINETS - 6" IN DEPTH.

Prepared By: _____

Precision Plumbing Products

Division of JL Industries, Inc.

802 SE 199th Ave. Portland, Oregon 97233

(Please refer to list on the right for dimensions of cabinet models).

Unit must be installed plumb and must be installed with access.

Must be installed above finished floor. Allow one foot of elevation

for every 20 feet of distance ran for floor drain make up line.

Contractor:

Engineer: ____

Date Submitted:

T (503) 256-4010 F (503) 253-8165

www.pppinc.net











PATENT NO. 5,253,670

Rev 02/20

<u> Kindustries, inc.</u>

PROJECT SUBMITTAL

Project: _



Precision Plumbing Products

"Specify with Confidence - Install with Pride"

ACCESS DOORS Dry Wall Series

other wall surfaces.

mounting holes.

(CL) Cylinder Lock

(AKL) Allen Key Lock

squarely.

DOOR SPECIFICATIONS:

LATCH (SL) Screwdriver Latch

Other Special Order Latches:

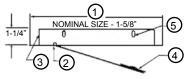
DOOR Suited for new or remodel installations, in masonry, tile, wood, or

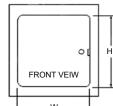
DOOR & FRAME Fabricated from 16 gauge steel with prime coat finish.

FRAME One piece construction, 1" wide. Wall frame is provided with 1/4"

HINGE Concealed pivoting rod hinge preventing distortion, closes door

www.pppinc.net





Notes: Top View

- 1. Overall outside size
- 2. Concealed hinge
- 3. Wall Frame
- 4. Screwdriver latch
- 5. 1/4" Mounting Holes

*Specify Size When Ordering

	Part Number	Wall Opening	Nominal Door
		Prime Coat	t
	D-88PC	8 1/2 x 8 1/2"	8 x 8" Prime Coat
	D-814PC	8 1/2 x 14 1/2"	8 x 14" Prime Coat
	D-1212PC	12 1/2 x 12 1/2"	12 x 12" Prime Coat
$/\!\!/$	D-1416PC	14 1/2 x 16 1/2"	14 x 16" Prime Coat
	D-1620PC	16 1/2 x 20 1/2"	16 x 20" Prime Coat
	D-2030PC	20 1/2 x 30 1/2"	20 x 30" Prime Coat
Ī	D-2424PC	24 1/2 x 24 1/2"	24 x 24" Prime Coat
		Stainless Ste	eel
	D-88SS	8 1/2 x 8 1/2"	8 x 8" Stainless Steel
	D-814SS	8 1/2 x 14 1/2"	8 x 14" Stainless Steel
	D-1212SS	12 1/2 x 12 1/2"	12 x 12" Stainless Steel
	D-1416SS	14 1/2 x 16 1/2"	14 x 16" Stainless Steel
	D-1620SS	16 1/2 x 20 1/2"	16 x 20" Stainless Steel
	D-2030SS	20 1/2 x 30 1/2"	20 x 30" Stainless Steel
Ī	D-2424SS	24 1/2 x 24 1/2"	24 x 24" Stainless Steel

FINISH:

The Dry Wall Series door is available in a prime coat suitable for painting or a brushed stainless steel.

PROJECT SUBMITTAL

Model #:
Project:
Contractor:
Engineer:
Date Submitted:
Drangrad Dur
Prepared By:



Precision Plumbing Products

Division of JL Industries, Inc.

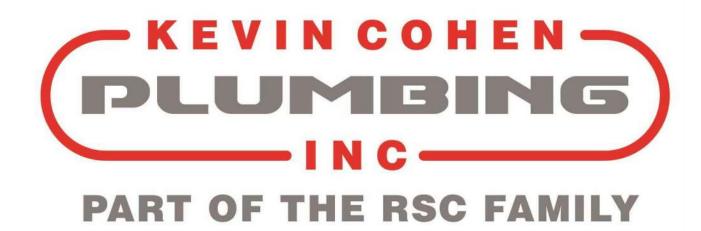
802 SE 199th Ave Portland, Oregon 97233

T (503) 256-4010 F (503) 253-8165

www.pppinc.net







TP-2 Trap Primer

S2699

4

NONE

5-17-85

APPROVED BY

₽

₽

2

2699, 2699-1

FIGURE NUMBER

DRAWN

QQ.

SUPERSEDED

Р USE

NO RESPONSIBILITY

WE CAN ASSUME

NOTICE

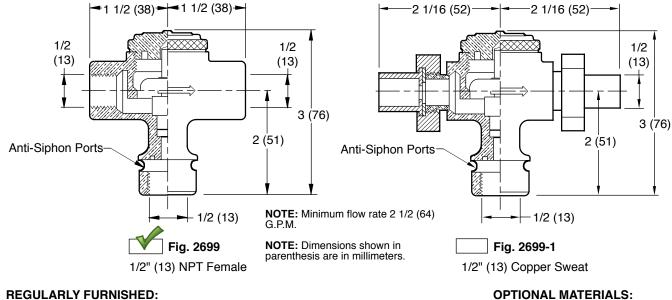
WITHOUT

LOCATION

TRAP PRIMERS

AUTOMATIC TRAP PRIMER

FUNCTION: Used where trapped drains are installed in locations used infrequently or other conditions might permit water seal to evaporate, allowing sewer gas or objectionable and contaminating odors to escape through drain. A trap primer is recommended to compensate for evaporation while providing a water seal in the trap at all times.

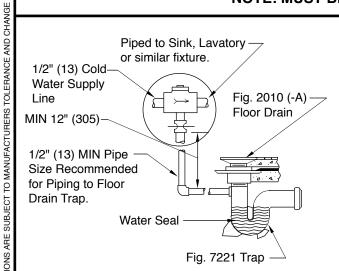


REGULARLY FURNISHED:

Cast Bronze with 1/2" (13) Connection as indicated by Figure Number Selected.

Satin Finish Chrome Plated -CP

NOTE: MUST BE LOCATED IN AN ACCESSIBLE LOCATION.



APPLICATION, INSTALLATION AND OPERATING PRINCIPLE

The Smith Trap Seal Primer Valve, when properly installed in a cold water supply line, running to a frequently used fixture and connected to a floor drain trap, provides a constant seal of fresh water in the drain trap.

When water is drawn at the plumbing fixture the resulting flow activates the Trap Primer valve mechanism. A pulse of water is dispensed into the trap at the beginning and end of flow in the fixture supply line.

Air ports in the primer body prevent siphonage of trap water and backflow into the potable water supply line.

If the trap water seal is not constantly maintained, the water will evaporate from the trap, allowing sewer gas to escape into building from the sewer lines.

> **COMPLIES with LEAD PLUMBING LAW** "CERTIFIED by IAPMO R & T" **FILE NO. 8477** (NSF/ANSI 372)



N M L		Added File No. 8477 Note Updated Logo Changed Text	TBW JJ JJ	JM TW CL	_	VOLUME CUBIC FEET	FIGURE NUMBER 2699. 2699-1
REV.	DATE	DESCRIPTION	BY	CKD. BY			

SUPERSEDED OR VOID DATA

Р

RESPONSIBILITY FOR USE

9

WE CAN ASSUME

NOTICE

WITHOUT

AND CHANGE

TOLERANCE

SUBJECT TO MANUFACTURERS

4

REV.

DATE

LOCATION

ATTENTION INSTALLER: After Installation, Please Leave This Instruction Sheet For Occupant's Information.

INSTRUCTIONS FOR INSTALLING 2699 WATER SAVING TRAP PRIMER

INSTALLATION

The 2699 Trap Primer should be connected to the cold line only. <u>For effective priming it should never be connected to a dual hot and cold combination faucet</u> unless the minimum flow on the cold demand exceeds the amount listed on the chart at various operating pressures. See Chart A. <u>Do not install on a cold line serving a drinking fountain only.</u>

These devices should be installed in the horizontal position, as shown, on the supply line leading to a frequenty used fixture. Before installing 2699, be sure to flush out the line to remove dirt and scale which might lodge on the valve seat and disc. Device should be installed a minimum of 12" (305) above the trap and should be accessible for servicing.

Maximum supply pressure 125 psi.

Note: For supply pressures below 20 psi consult factory.

Note: The Data & Instruction on this sheet is also appliable to fig. nos. 2699-NYC & 2699-1-NYC.

... HOW IT WORKS

Smith Fig. No. 2699 is a unique design which assures delivery of water to the trap to assure against evaporation of the water seal. Fig. No. 2699 operates by the water flow acting against the main reaction disc (1), which forces the reaction disc in the upward position and removes the trap disc (2) from the plastic trap seat (3). A spurt of water is then delivered to the trap. However, with increased flow, the main reaction disc continues to lift and seals off the closing ring (4) to stop flow to the trap. When the flow through the valve is stopped, the trap disc (2) is returned to the closed position, and in the process, delivers a spurt of water to the trap before closing off.

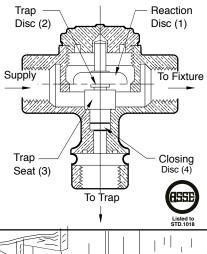
The importance of this design is that a complete flow cycle through the valve from open to close will actuate the primer twice with two definite pulses; once on opening and once on closing, thus providing a tremendous water savings over competitive modes.

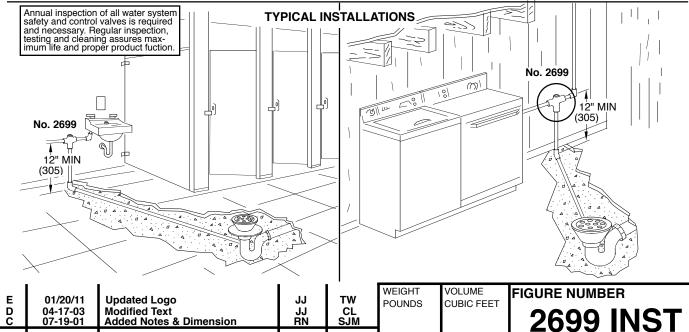
Fig. No. 2699 is furnished with 1/2"(13) NPT female inlet and outlet connections. Fig. No. 2699-1 is furnished with 1/2" (13) union sweat connections.

LIMITED WARRANTY: The Company warrants each product against defects in material and workmanship for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the exclusive remedy for breach of warranty, and the installation, damages or other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse air conditions, chemicals, or any other circumstances over which the Company has no control. This warranty shall be invalidated by and abuse, misuse, misapplication of improper installation of the product. THE COMPANY MAKES NO OTHER WARRANTIES EXPRESS OF IMPLIED EXCEPT AS PROVIDED IN THIS LIMITED WARRANTY.

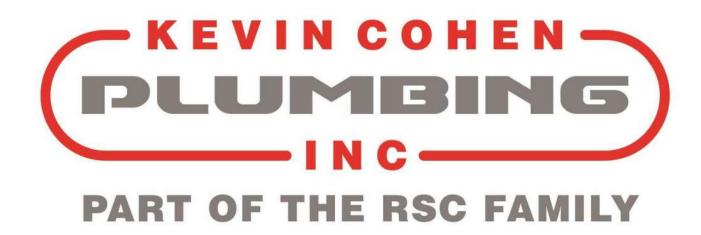
CHART A | Inlet | Pressure | 25 | 50 | 75 | 100 | 125 | | *GPM | 1.1 | 1.6 | 2.0 | 2.3 | 2.4 |

*Minimum cold flow required for proper trap priming.





CKD. BY

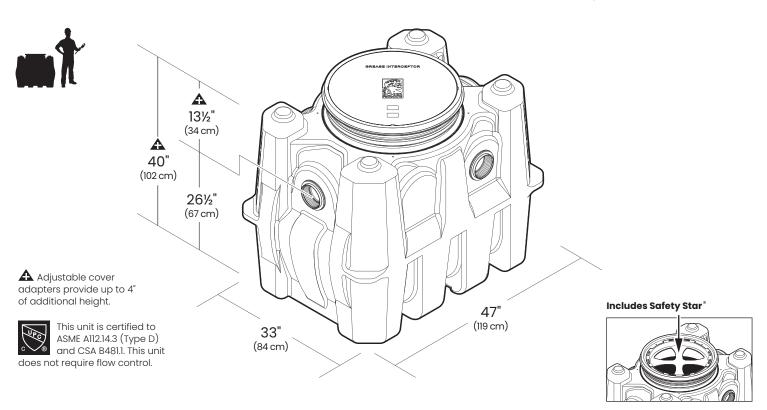


GI-1 Grease Interceptor

DEVICE REMOVED IN ADDENDA #2

SPECIFICATION AND SUBMITTAL

GB-75 75 GPM Great Basin™ Indoor/Outdoor Grease Interceptor



SUBMITTAL

Standard

Location: Indoor/outdoor

Installation: Above/below grade Flow Rate / Grease Capacity:

75 GPM (4.7 L/s) / 861 lbs. (391 kg), 118 gal. (447 L)

Removal Efficiency at the Rated Capacity: 95.8% Solids Capacity: 31 gal. (117 L) Liquid Capacity: 125 gal. (473 L) Weight: 190 lbs. (86 kg)

Connections: 4" FPT with 4" plain end adapters,

single inlet and triple outlet

Covers: Cast iron cover, pickable 24" gas/water tight, H-20 rated, proof-load tested to 40,000 lbs. Access Restrictor: Safety Star* (450 lb. rating)

built into cover adapter

Options

- ☐ 6" plain end inlet/outlet (straight-through) with dual pumpout port connections
- ☐ 6" MPT inlet/outlet
- (stainless steel, straight-through)
- ☐ **-FO** (fixed outlet)
- C24H2 Composite covers, bolted 24" gas/water tight, traffic load rated for 16,000 lbs.

Accessories

- ☐ **FCR2** >4" 34" field cut riser
- ☐ **FCR2 (x2)** >34" 64" field cut risers
- ☐ FCR2 (x3) >64" 94" field cut risers ☐ CA2 Adapter for 24" corrugated
- jipe riser
- ☐ **PP3** Pumpout port
- ☐ AK1 High water anchor kit
- ATD1 Cover adapter tie-down kit
- □ PLAIN-EA-24 2" plain end fitting□ PLAIN-EA-34 3" plain end fitting
- ☐ **FPT-EA-34** 4" x 3" FPT fitting
- FPT-EA-23 3" x 2" FPT fitting
- CC2 Integral membrane clamping collar kit

Approval

Signature:	Date:		Company:
Specifying Engineer:		Engine	ering Firm:



MODEL NUMBER: GB-75 **DESCRIPTION:** 75 GPM Polyethylene Grease Interceptor

PART #: 4045-007-01 DWG BY: B. Karrer DATE: 8/28/2020 REV: ECO:



SPECIAL PRECAUTIONS

For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

A۱

WARNING! DO NOT AIR TEST UNIT OR RISER SYSTEM!

Doing so may result in property damage, personal injury or death.

CAUTION! Do not install this unit in any manner except as described in these instructions.

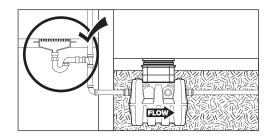
Installation Instructions

Installation instructions and additional components are included with the interceptor. Read all instructions prior to installation. This interceptor is intended to be installed by a licensed plumber in conformance with all local codes.



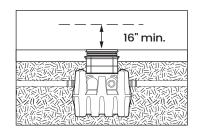
ODOR ALERT!

Interceptor is not a sewer gas trap. All upstream fixtures must be trapped



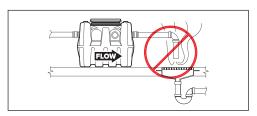
Install interceptor as close as possible to fixtures being served

Provide at least 16" clearance above unit for routine maintenance.

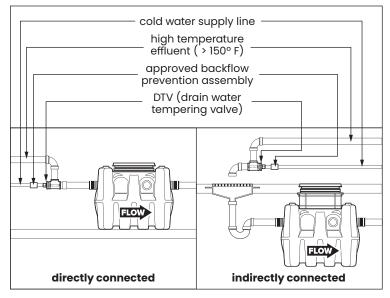


ODOR ALERT!

Do not install air gap on outlet side of interceptor.



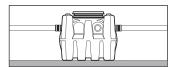
High Temperature Kitchen Water



If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will weaken or deform PVC Schedule 40 pipe, poly drainage fixtures like interceptors and erode the coating of cast iron (leading to eventual failure).

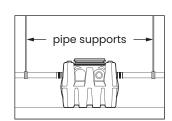
Fully Support Base of Unit

Install unit on solid, level surface in contact with the entire footprint of unit base



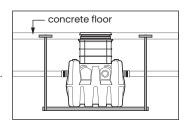
Support Inlet and Outlet Piping

For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.



Suspended Installations

Design trapeze to support the wet weight of the unit. Do not partially support unit or suspend unit using metal U-channel to create a trapeze.



DO NOT USE CAST IRON COVERS IN ABOVE GRADE OR INDOOR INSTALLATIONS

Use composite cover C24H2 for above grade installations





MODEL NUMBER:

DESCRIPTION: 75 GPM Polyethylene Grease Interceptor

PART #: 4045-007-01

DWG BY: B. Karrer

DATE: 8/28/2020 REV:

ECO:

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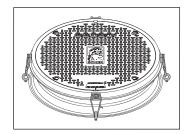


SPECIAL PRECAUTIONS

For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

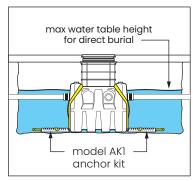
Secure Cover Adapters

Cover adapters must be secured to base units in above grade installations with increased head pressure conditions. Use cover adapter tie-down kit model ATD1.



High Water Table Installations

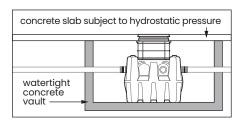
Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor). At



risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water. Great Basin™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model GB-75 uses model AK1 anchor kit.

Hydrostatic/ Pressure Slabs

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.



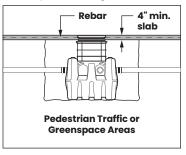
DO NOT COMPACT BACKFILL MECHANICALLY

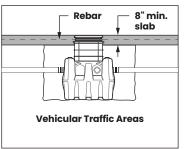
Compact by hand only



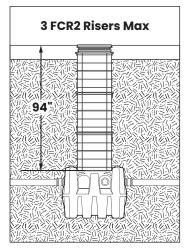
Below Grade Installation Slab Requirements

A concrete slab to finished grade with rebar is required when installing interceptor below grade.





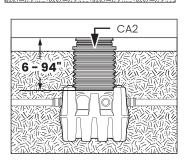
Installations with Risers



Max Water Level Risers are not designed to retain water

Corrugated Riser Pipe Requirements

Riser adapter model CA2 must be used when installing interceptors using 24" diameter corrugated pipe as a riser. This will adequately embed the cover adapter in the concrete slab, preventing cover/cover adapture failure under traffic rated loads.





MODEL NUMBER: GB-75

DESCRIPTION: 75 GPM Polyethylene Grease Interceptor

PART #: 4045-007-01 DWG BY: B. Karrer

DATE: 8/28/2020 REV:

ECO:

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SPECIFICATIONS

NOTES

- 1. 4" FPT with 4" plain end adapters, single inlet and triple outlet
- Unit weight w/cast iron cover: 190 lbs.; w/composite cover: 135 lbs. (For wet weight add 1,043 lbs.)
- Maximum operating temperature: 150° F continuous
- Capacities Liquid: 125 gal.; Grease: 861 lbs.
- Solids: 31 gal.
 This unit does not require flow control.
- For gravity drainage applications only.
- Do not use for pressure applications.
- 8. Cover placement allows full access to tank for proper maintenance.
- Vent not required unless per local code.
- 10. Engineered inlet and outlet diffusers are removable to inspect / clean piping. Integral air relief / Anti-siphon /
- Sampling access.
- 12. Adjustable cover adapters provide up to 4" of additional height.
- 13. Fixed outlet models (-FO) have inlet and outlet permanently welded at the factory in the straight-through (B) positions.

 14. Flow rates are based on 2-minute drain time.
- 15. Safety Star®, access restrictor built into cover adapter, prevents accidental entry to tanks (450 lb rating)

DIFFUSION FLOW TECHNOLOGY

The inlet diffuser reduces turbulence, creates laminar flow and allows the entire tank volume to be utilized for efficient grease separation and minimal disturbance to existing grease and sediment layers. The integral air relief / anti-siphon at the outlet diffuser top allows pressure stabilization within the unit during operation. The outlet diffuser can easily be attached to any of the three outlets provided to ease job site piping layouts.

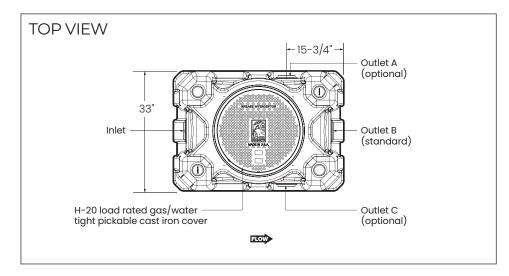
ENGINEER SPECIFICATION GUIDE

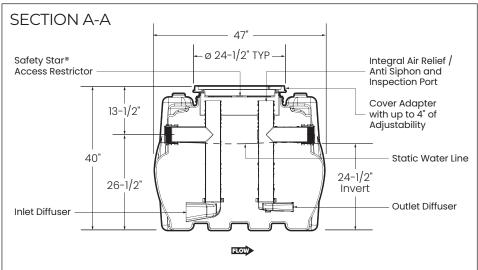
Schier Great Basin™ grease interceptor model # GB-75 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Interceptor shall be furnished for above or below grade installation. Interceptor shall be certified to ASME A112.14.3 (Type D) and CSA B481.1, with adjustable cover adapter, Safety Star® access restrictor built into cover adapter, and three outlet options. Interceptor flow rate shall be 75 GPM. Interceptor grease capacity shall be 861 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

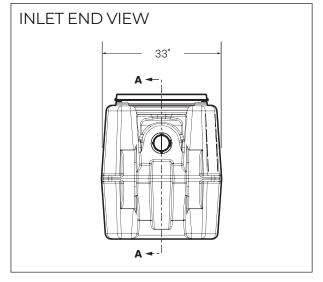
CERTIFIED PERFORMANCE

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.









Rated Grease Capacities for Units **Piped in Series**

No. of	Removal Efficiency		
Units in	75 GPM		
Series	95.8%		
2	1,722 lbs.		
3	2,583 lbs.		
4	3,444 lbs.		



MODEL NUMBER:

DESCRIPTION: 75 GPM Polyethylene Grease Interceptor

PART #: 4045-007-01

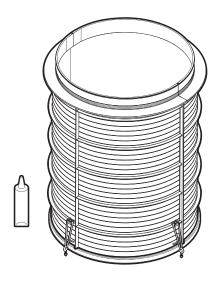
DWG BY: B. Karrer

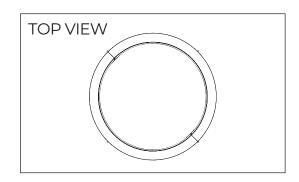
DATE: 8/28/2020 REV: FCO:

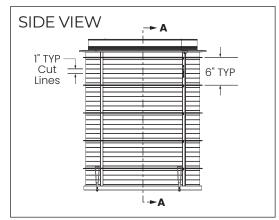
SPECIFICATION AND INSTALLATION GUIDE

FCR2 Field Cut Riser System

For use with grease interceptor models GB-50, GB-75, GB-250, GB-500, GB-1000, GGI-500, GGI-750, GGI-1000, GGI-1500 and GGI-2000; solids interceptor models SI-50, SI-75, SI-250 and SI-500; sampling port models SV24 and SV24-O; and wastewater flow distributor FS-DUO







Contents

Specifications	1
Special Precautions2-3	3
Getting to Know the FCR2	1
Installation 5-9)
FCR2 Compatible Models)

Notes

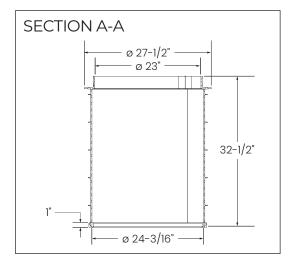
- 1. Unit weight: 32 lbs.
- 2. Riser not designed to hold water

Engineer Specification Guide:

Field-cut adjustable riser system to consist of injection molded polypropylene body, 100% Silicone Sealant for assembly of riser components, butyl mastic sealant for tank-riser or riser-riser joints, stainless steel fastening hardware and heavy duty nylon cable ties and mounts. Riser shall allow field adjustability of cover to grade.

Installation Note

Minimum install height: 4". Maximum install height: 34". Riser system may be stacked no more than three units high to a maximum of 94" extension. Access to internal components will not be compromised.



Riser Height Needed	Risers Required (per accessway)		
0" - 4"	None (use adapter)		
>4" - 34"	FCR2		
>34" - 64"	FCR2 (x2)		
>64" - 94"	FCR2 (x3)		



MODEL NUMBER:

DESCRIPTION: 34" Field Cut Riser System

PART #: 8010-006-01 DWG BY: B. Karrer

DATE: 6/24/2020 REV: ECO:



SPECIAL PRECAUTIONS

For Schier riser Installations - Failure to follow this guidance voids your warranty

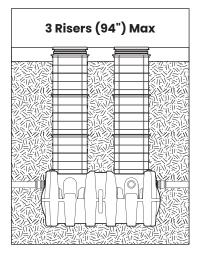
WARNING! DO NOT AIR TEST UNIT OR RISER SYSTEM! Doing so may result in property damage, personal injury or death.

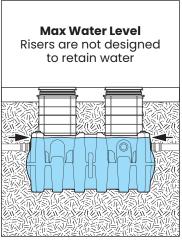
CAUTION! Do not install this unit in any manner except as described in these instructions.

Installation Instructions

Installation instructions and additional components are included with the base unit. Read all instructions prior to installation. This riser is intended to be installed by a licensed plumber in conformance with all local codes

Installations with Risers





CAUTION!

Do not add any form of lubricant to cover adapter/ gasket assembly or risers during installation.

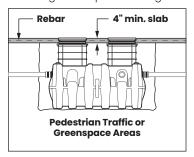


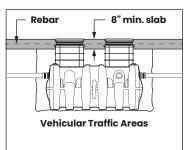
CAUTION!

Make Sure Parts Are Clean When Applying Silicone or **Mastic Sealant**

Below Grade Installation Slab Requirements

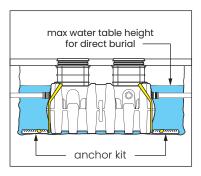
A concrete slab to finished grade with rebar is required when installing interceptor below grade.





High Water Table Installations

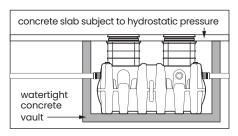
Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in



stages to avoid crushing the interceptor). At risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water. Models that are direct buried in high water table scenarios must be installed with an anchor kit. See base unit installation instructions for selecting appropriate anchor kit.

Hydrostatic/ **Pressure Slabs**

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.



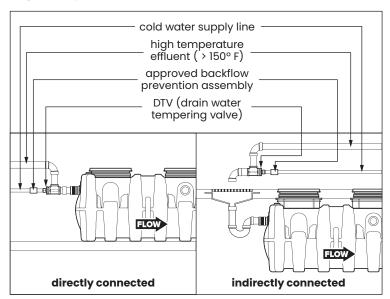
DO NOT COMPACT **BACKFILL**



Schier | FCR2 Installation Guide page 2 of 10

For Schier riser Installations - Failure to follow this guidance voids your warranty

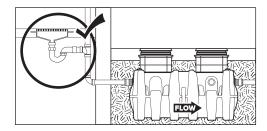
High Temperature Kitchen Water



If water is entering the interceptor at excessive temperature (over 150° F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150° F being discharged into the sanitary sewer. Water above 150° F will weaken or deform PVC Schedule 40 pipe, poly drainage fixtures like interceptors and erode the coating of cast iron (leading to eventual failure).

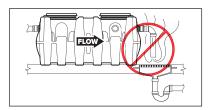
ODOR ALERT!

Interceptor is not a sewer gas trap. All upstream fixtures must be trapped



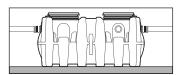
ODOR ALERT!

Do not install air gap on outlet side of interceptor.



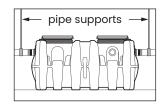
Fully Support Base of Unit

Install unit on solid, level surface in contact with the entire footprint of unit base



Support Inlet and Outlet Piping

For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.

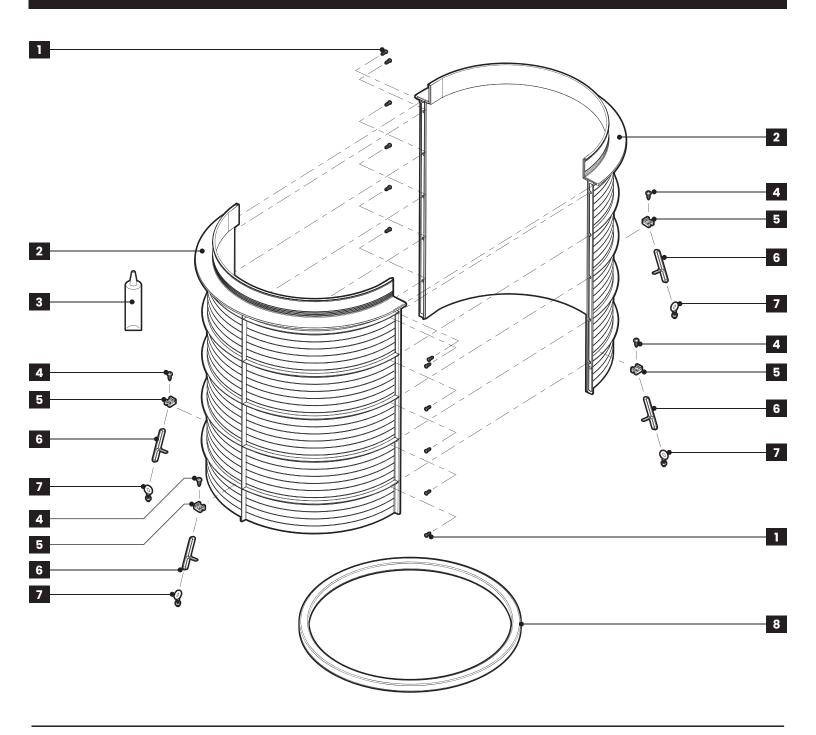


DO NOT USE CAST IRON
COVERS IN ABOVE GRADE OR
INDOOR INSTALLATIONS



Schier | FCR2 Installation Guide page 3 of 10

GETTING TO KNOW THE FCR2



- 1. $\#8 \times 5/8$ " riser body assembly screw (x12)
- 2. Riser body half (x2)
- 3. 100% silicone sealant
- **4.** #10 x 3/4" phillips head stainless steel screws (x4)
- **5.** Cable tie mounts(x4)
- 6. Heavy duty 18" 120 lb. cable tie (x4)
- 7. Stainless steel eyebolt and nut (x4)
- 8. 1" square x 80" block butyl mastic sealant

page 4 of 10 Schier | FCR2 Installation Guide

INSTALLATION

Tools You Will Need



Tape

Measure



Screwdriver



Reciprocating Saw, Circular Saw or Jigsaw



Drill with 1/2" Chuck



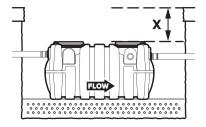
1/4" Drill Bit

INCLUDED WITH BASE UNIT

7/16" Nut Driver Bit

Determine riser height needed and trim risers.



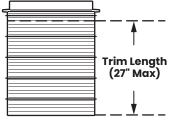


Riser Height Needed (X)	Risers Required (per accessway)
0" - 4"	None (use adapter)
>4" - 34"	FCR2 (x1)
>34" - 64"	FCR2 (x2)
>64" - 94"	FCR2 (x3)

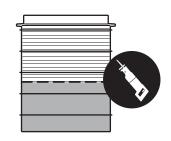


Determine trim length (round up all fractions to next inch).
Only one FCR2 riser per cover will need to be cut.

Riser Height Needed	Trim Length =	
0" - 4"	-	
>4" - 34"	31" - Riser Height (X)	
>34" - 64"	62" - Riser Height (X)	
>64" - 94"	93" - Riser Height (X)	



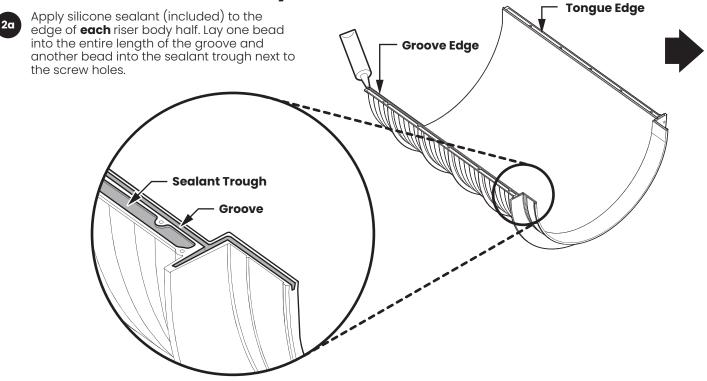
Measuring from bottom of riser, mark trim length and cut riser halves.

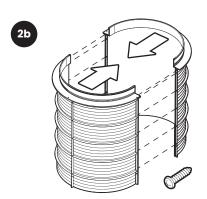


NOTE: If trim length is 0 or less, no cutting is required. Trimming risers using these guidelines will result in risers that are 0-2" shorter than the exact riser height needed. Cover Adapter adjustability will allow for final adjustments to grade.

Schier | FCR2 Installation Guide page 5 of 10

2 Assemble riser body halves.

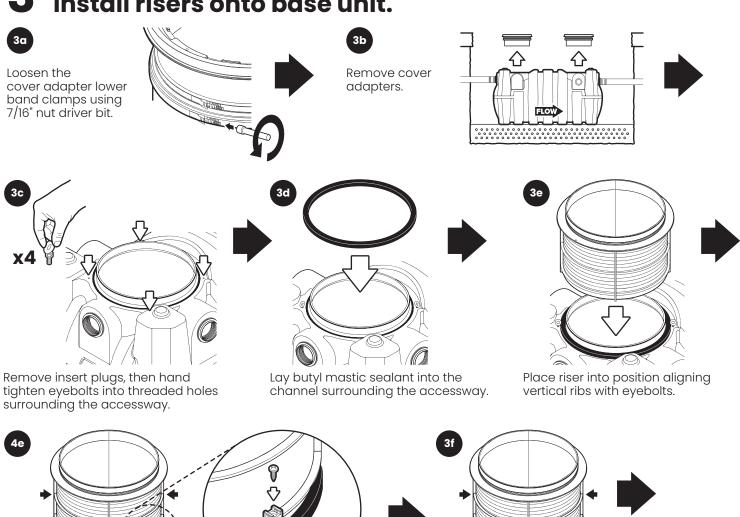


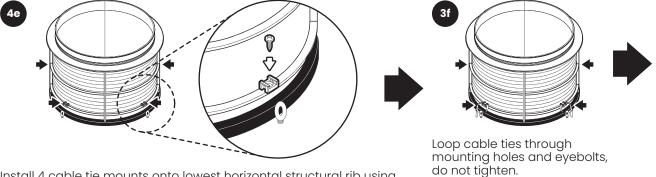


Immediately assemble riser halves after applying sealant and fasten using supplied screws.

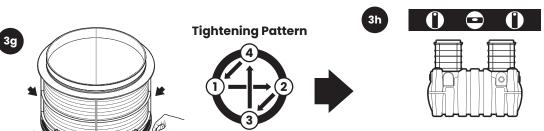
page 6 of 10 Schier | FCR2 Installation Guide

3 Install risers onto base unit.





Install 4 cable tie mounts onto lowest horizontal structural rib using #10 x 3/4" screws. Make sure mounts are located directly above eyebolts and are positioned for horizontal cable tie placement.

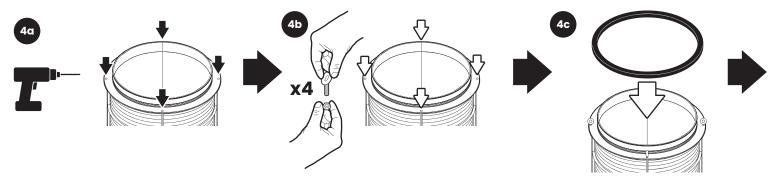


Make final adjustments to cable ties to ensure riser is level.

Tighten cable ties, a little bit at a time in a star pattern going around the riser to evenly force the riser into the mastic sealant. Riser should go 1/2" - 3/4" into the sealant.

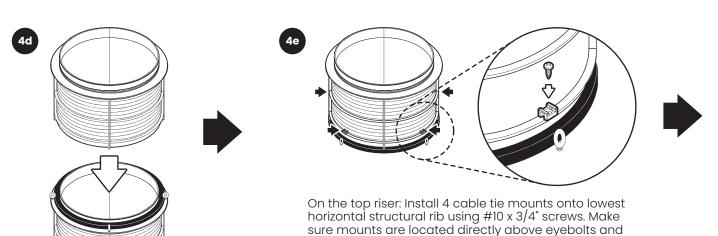
Schier | FCR2 Installation Guide page 7 of 10

4 Install risers onto risers (34"+).

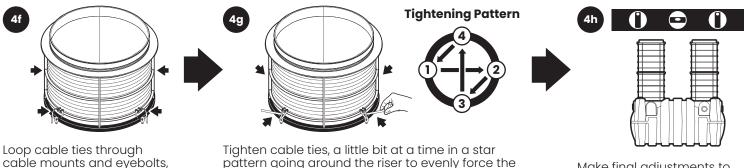


On bottom riser: drill (4) 1/4" mounting holes through flange.

On bottom riser: install eyebolts into holes in riser flange using supplied stainless steel nuts. Hand tighten only. On bottom riser: lay butyl mastic sealant onto the flange surrounding the accessway.



Place top riser onto bottom riser.



are positioned for horizontal cable tie placement.

cable mounts and eyebolts, do not tighten.

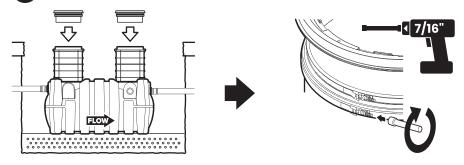
pattern going around the riser to evenly force the riser into the mastic sealant. riser should go 1/2" -3/4" into the sealant.

Make final adjustments to cable ties to énsure riser system is level.

Schier | FCR2 Installation Guide page 8 of 10

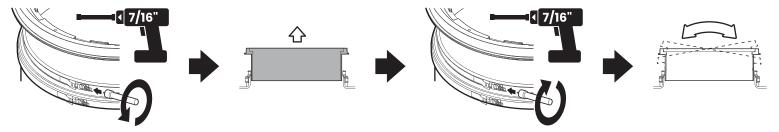
5 Install cover adapters.

5a Secure cover adapters onto risers.



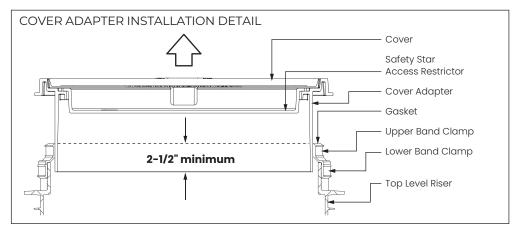
Place cover adapter/gasket assembly onto top level riser(s). Tighten lower band clamp to 5 -8 ft. lbs. of torque using 7/16" nut driver bit.

5b Make final cover adapter adjustments



Loosen the cover adapter upper band clamp using 7/16" nut driver bit. Adjust cover adapter heights as needed.

Maintain a minimum 2-1/2" insertion depth. Tighten upper band clamp to 5 -8 ft. lbs. of torque using 7/16" nut driver bit. If required, cover adapters may now be tilted up to 10° in any direction using gasket flexibility.



Schier | FCR2 Installation Guide page 9 of 10

FCR2 COMPATIBILE MODELS

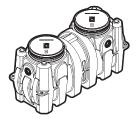
Great Basin™ Grease Interceptors



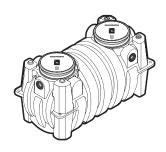




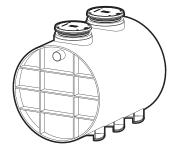
GB-75



GB-250

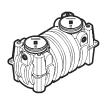


GB-500



GB-1000

Big Foot™ Gravity Grease Interceptors



GGI-500



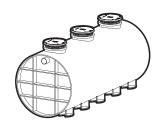
GGI-750



GGI-1000



GGI-1500



GGI-2000

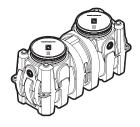
Billy Goat™ Kitchen Solids Interceptors



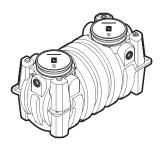
SI-50



SI-75



SI-250



SI-500

Sewer Viewer™ Wastewater Sampling Ports



SV24



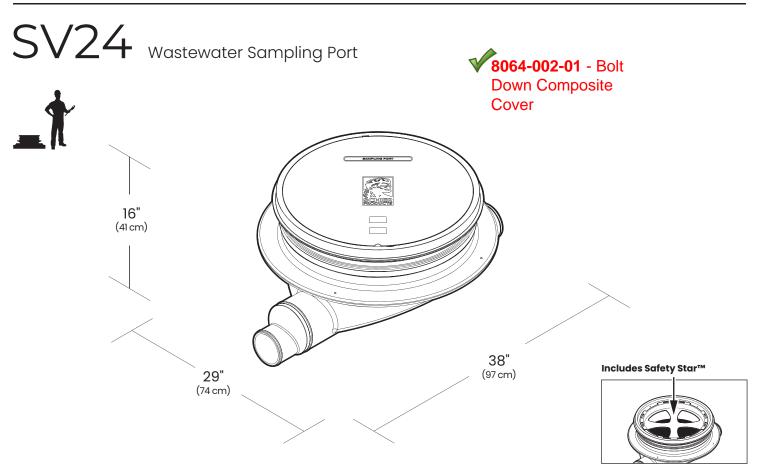
SV24-0

Flow Splitter™ Wastwater Flow Distributors



FS-DUO

SPECIFICATION AND SUBMITTAL



SUBMITTAL

Standard

Location: Indoor/Outdoor Installation: Above/Below grade

Weight: 110 lbs.

Connections: 4" (100 mm) and

6" (150 mm) Plain End

Cover: cast iron cover, pickable 24" gas/water tight, H-20 rated, proof-load tested to 40,000 lbs.

Access Restrictor: Safety Star[™] (450 lb. rating)

built into each cover adapter

Options

- C24H2: composite cover, bolted 24" gas/water tight, traffic load rated for 16,000 lbs.
- ☐ FCR2 >4" 34" Field Cut Riser
- ☐ **FCR2** (x2) >34" 64" Field Cut Risers ☐ **FCR2** (x3) >64" 94" Field Cut Risers

Approval

Signature:	Date:		Company:
Specifying Engineer:		Engine	ering Firm:

SCHIER	MODEL NUMBER: SV24		DESCRIPTION: Polyethylene Wastewater Sampling Port				
Can be a second of the second	PART #: 8064-001-01	DWG BY: B.	Karrer	DATE: 4/2/2020	REV:	ECO:	



SPECIAL PRECAUTIONS

For Schier SV24 Sampling Port Installations - Failure to follow this guidance voids your warranty



WARNING! DO NOT AIR TEST UNIT OR RISER SYSTEM!

Doing so may result in property damage, personal injury or death.

CAUTION! Do not install this unit in any manner except as described in these instructions.

Read all instructions before installation

Install in conformance with all local codes

Installation Instructions

Installation instructions and additional components are included with the sampling port. Read all instructions prior to installation. This sampling port is intended to be installed by a licensed plumber in conformance with all local codes.

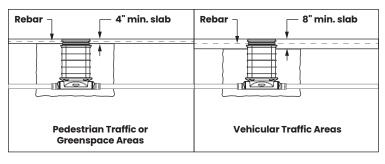


DO NOT COMPACT BACKFILL



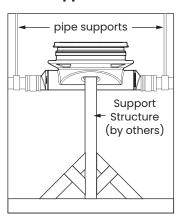
Below Grade Installation Slab Requirements

A concrete slab to finished grade with rebar is required when installing interceptor below grade.



Above Grade Installation Additional Support

To prevent connection failure or damage to fittings, ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during entire installation process. To prevent unit tipping, above grade installations must be supported by a platform or trapeze (not included) that contacts the unit at the built-in Support Detents. Composite cover C24H2 is recommended for use in above grade installations.



DO NOT USE CAST IRON COVERS IN ABOVE GRADE OR INDOOR INSTALLATIONS





MODEL NUMBER:

DESCRIPTION: Polyethylene Wastewater Sampling Port

PART #: 8064-001-01

DWG BY: B. Karrer

DATE: 4/2/2020 REV: ECO:

9500 Woodend Road | Edwardsville, KS 66111 | 913-951-3300 | schierproducts.com

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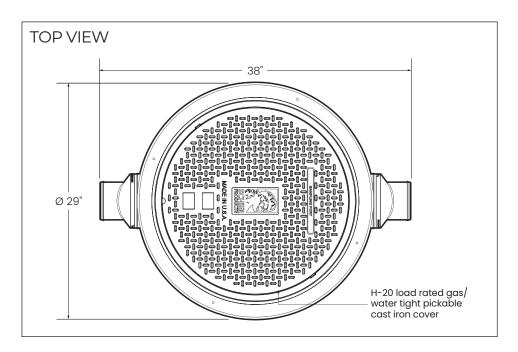
SPECIFICATIONS

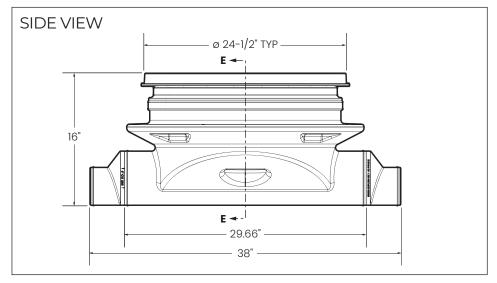
NOTES

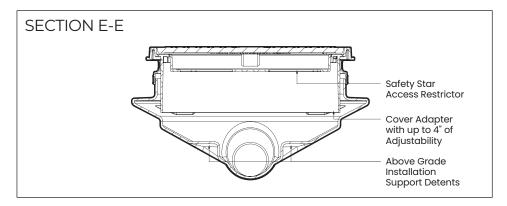
- 1. 4" plain end inlet/outlet (field modifiable to 6" plain end)
- 2. Unit weight w/cast iron cover: 110 lbs.; w/composite cover: 58 lbs.
- 3. Maximum operating temperature: 150° F continuous
- 4. Level connections
- 5. Safety Star™, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating)

ENGINEER SPECIFICATION GUIDE

Schier Sewer Viewer™ sampling port model # SV24 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Sampling port shall be furnished for above or below grade installation with field adjustable riser system and Safety Star™ access restrictor built into cover adapter. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.









MODEL NUMBER: SV24

DESCRIPTION: Polyethylene Wastewater Sampling Port

PART #: 8064-001-01 DWG BY: B. Karrer DATE: 4/2/2020 REV:

ECO:

SPECIFICATION AND INSTALLATION GUIDE

AK1

Anti-flotation Anchor Kit for use with Grease and Solids Interceptors

For Legacy Models



Great Basin™ Legacy Grease Interceptors GB-50, GB-75 and GB-250 Billy Goat™ Legacy Solids Interceptors SI-50, SI-75 and SI-250





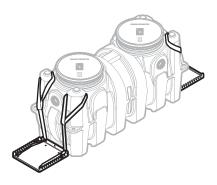




Hook and Bar for Legacy Models

ANCHOR PLATE DETAIL © 0.75" 2.25"

For New Models



Great Basin™ Grease Interceptors GB-50, GB-75, GB-250 and GB-500

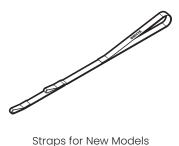
Billy Goat™ Solids Interceptors SI-50, SI-75, SI-250 and SI-500

July 2020 July 2020 March 2020









Contents

Specifications
Special Precautions
Getting to Know the AK1 2
Standard Models Installation
Legacy Models Installation4

Notes

- 1. GB-500 requires use of 2 AK1 anchor kits (4 total anchor plates)
- 2. Unit weight: 25 lbs.

Engineer Specification Guide:

Anti-flotation high water table anchor kit for use with models GB-50, GB-75, GB-250 and GB-500. To consist of (4) polypropylene sling style tie-down straps rated for 2,200 lb. working load each, (2) aluminum anchor plates and stainless steel hardware (for use with legacy models only).



MODEL NUMBER:

DESCRIPTION: Anti-flotation Anchor Kit

PART #: 8020-001-01

DWG BY: B. Karrer

DATE: 6/24/2020

REV:

ECO:



SPECIAL PRECAUTIONS

For Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

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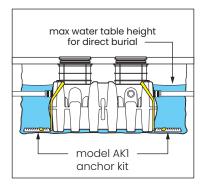
CAUTION! Do not install this unit in any manner except as described in these instructions.

Read all instructions before installation

Install in conformance with all local a

High Water Table Installations

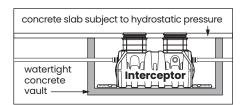
Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor). At risk areas include but are not limited to tidal surge



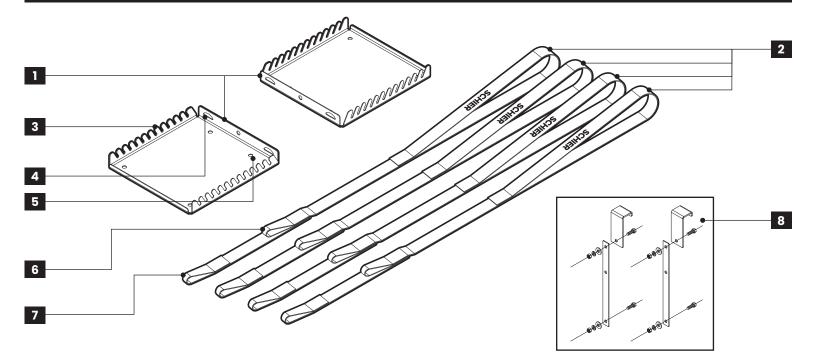
areas, floodplains and areas that receive storm water. Great Basin™ and Billy Goat™ models that are direct buried in high water table scenarios must be installed with an anchor kit.

Hydrostatic/Pressure Slabs

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.



GETTING TO KNOW THE AKI

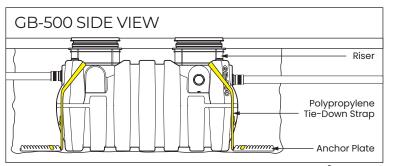


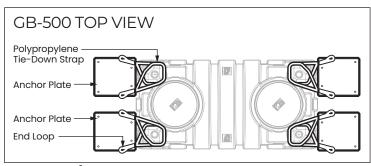
- 1. Aluminum Anchor Plate (x2)
- 2. Polypropylene Tie-Down Straps (x4)
- 3. Anchor Plate Side Hooks
- 4. Anchor Plate Tie-Down Slots
- 5. Holes provided for additional mounting hardware (optional)
- **6.** Midway Loop for securing anchor plate to GB-250
- 7. End Loop for securing anchor plate to GB-500
- 8. Stainless Steel Hook and Bar Assemblies for securing Anchor Plate to Legacy Models GB-50, GB-75 and GB-250 (x2)

AK1 Installation Guide page 2 of 4

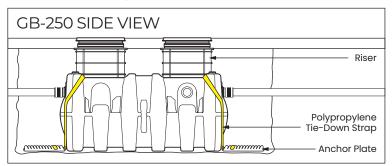
INSTALLATION - STANDARD MODELS

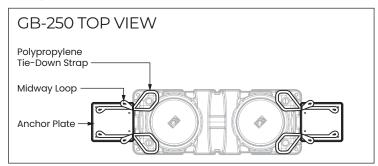
GENERAL ARRANGEMENT AND ANCHOR STRAP PLACEMENT

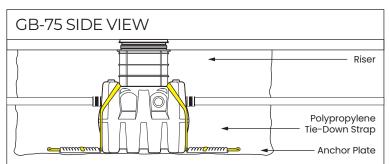


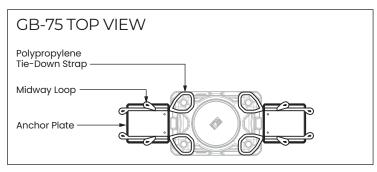


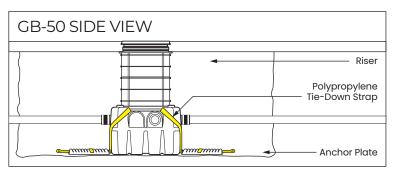
NOTE: GB-500 requires use of 2 AK1 anchor kits (4 total anchor plates)

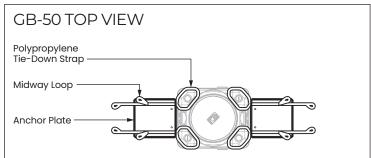




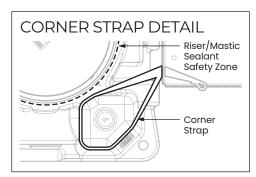








- 1. Place anchor plates to either side of the interceptor as shown; level with unit bottom and adjacent to unit footprint.
- 2. Install corner straps as shown. First, place large loop around the upper interceptor corner post. Next, feed the strap through the anchor plate tie-down slot. Pull tight and attach the midway or end strap loop onto the furthest side hook possible. There are multiple end loops and multiple hooks to allow for field adjustments and multiple model compatibility. For best results, lift plate a few inches when attaching loops, then step on the plate to level it and tighten the straps.
- 3. Fill tank with water prior to anchoring and backfill
- 4. Note all excavation and backfill instructions in tank installation document.



NOTE: Ensure that tie-down strap does not touch riser or mastic or tank to riser seal will be compromised

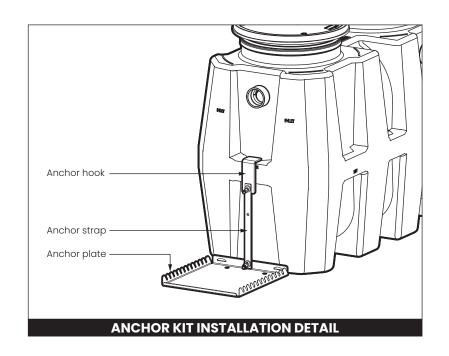
AKI Installation Guide page 3 of 4

INSTALLATION - LEGACY MODELS

ANTI-FLOTATION STAINLESS STEEL HIGH WATER TABLE ANCHOR KIT INSTALLATION

Stainless steel anchor kit is recommended for installation in high water table conditions to prevent float out. Necessity to be determined by specifying engineer. Hold down force achieved by backfill weight acting on Anchor Plates.

Slide Anchor Hook over tie down point on inlet end wall and bolt to Anchor Strap. Bolt Anchor Strap to Anchor Plate using provided stainless steel hardware. Repeat process to install second anchor plate on outlet end wall. If required, Anchor Plates may be bolted to concrete slab using the provided 3/4" holes.

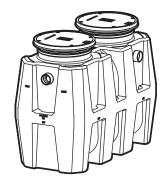




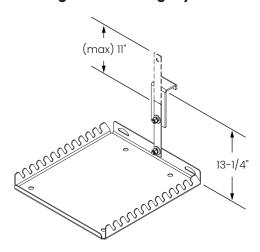


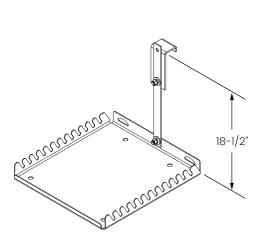


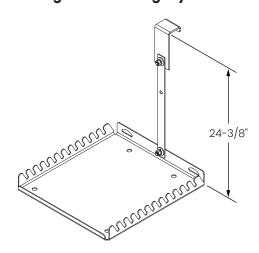
Configuration for Legacy GB-75



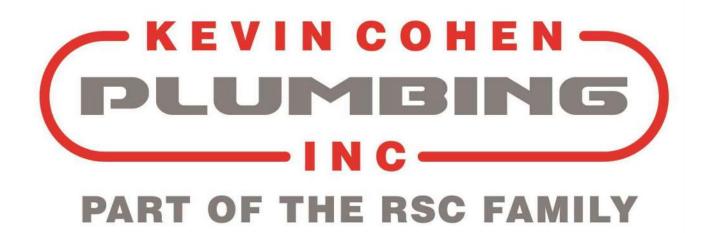
Configuration for Legacy GB-250







AKI Installation Guide page 4 of 4



Disclaimer



"AS IS" Disclaimers

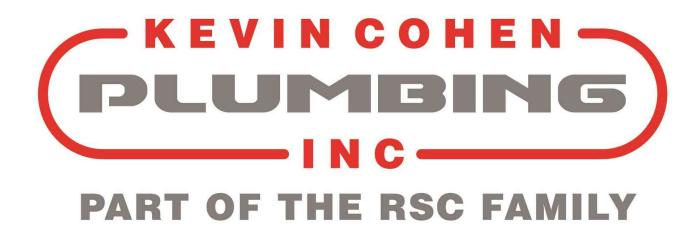
The information contained in this submittal is a compilation of product information made available by manufactures or other suppliers about their products, and while Ferguson Enterprises, INC. ("Ferguson") makes reasonable efforts to present current information in the form in which it is received by Ferguson, the information is provided to you "AS IS," for your internal informational purposes only, without any representation or warranty of accuracy or completeness of information or other warranty of any kind, including any implied warranty of quality, merchantability, fitness for a particular purpose, or noninfringement. In no event will Ferguson be liable to any party for any direct, indirect, incidental, special or consequential damages for use of or reliance upon any information or material presented including, but not limited to, damages arising from loss of profits, business interruption or any other damages, even if Ferguson is expressly advised about the possibility of such damages, to the fullest extent allowable by law. The material in this submittal could contain technical inaccuracies or typographical errors, and information will be changed, updated and deleted without notice. Manufacturers or other suppliers may make improvements and/or changes in the products described in this material at any time.

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Ferguson enterprises, Inc. is unconditionally committed to customer service satisfaction.

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Submittal for Approval

Product

Rough Plumbing

Project

Douglas Co-Op Kevin Cohen Plumbing Project #21-20003

Submitted By

Kevin Cohen Plumbing 11/2/2021



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AquaPEX	7
ProPEX - EP	
ProPEX LF	
Schedule 40 PVC Solid/Foam Core	<mark>17</mark>
Hangers & Supports	



Copper - Press



Mueller Streamline Co. 8285 Tournament Drive, Suite 150 Memphis, TN 38125 P 901.753.3200

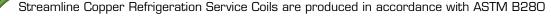
STANDARD COPPER TUBE

Mueller Copper Tube products are manufactured in the USA. All tubing produced in Fulton, MS, and Wynne, AR, is seamless and of UNS C12200 grade of copper and is manufactured to meet the chemical, mechanical, cleanness, and eddy current testing requirements of the applicable ASTM specifications set forth below.

Although Mueller Copper Tube strives to meet all requirements specified in ASTM, Standard Tube may not fully meet ASTM dimensional requirements. Standard Tube will be provided unless Certified Tube is clearly defined on the Purchase Order. When specified at order placement, Mueller Copper Tube can supply Certified Tube to meet all requirements of the current applicable ASTM specification, at an additional cost.



Streamline Copper Water Tube (Types K,L,M) is produced in accordance with, ASTM B88 and ANSI/



- Streamline Nitrogenized ACR Hard Drawn Copper Tube is produced in accordance with ASTM B280
- Streamline Copper Drainage Tube (DWV) is produced in accordance with ASTM B306
- Oxygen & Medical Service Tube To ASTM B819 (Types K & L) Hard Drawn Straight Lengths Only in accordance to CGA Cleanness Specification; CGA G4.1 (Compressed Gas Association); & NFPA 99 (Health Care Facilities).

** NSF 61 Restriction Statement Copper Tube (Alloy C12200) is certified by NSF to ANSI/NSF Standard 61 for public water supplies meeting or in the process of meeting the U.S. EPA Lead and Copper Rule (56FR 26460, June 7, 1991). Water supplies with pH less than 6.5 may require corrosion control to limit copper solubility in drinking water."

Last revision: March 11, 2011





Copper - Braze



TECHNICAL INFORMATION SHEET

STAY-SILV® 15 BRAZING FILLER METAL

NOMINAL CHEMICAL COMPOSITION%:

Phosphorus 4.8-5.2 Copper Remainder Silver 14.5-15.5 Other (Total) 0.15

TYPICAL PHYSICAL PROPERTIES:

Solidus 1190°F (643°C) Liquidus 1475°F (802°C)

Brazing Range 1300°F- 1500°F (704°C -816°C)

Electrical Conductivity 9.9 (%IACS)

Electrical Resistivity 17.4

BRAZING PROPERTIES:

Stay Silv 15 brazing filler metal is a frequent choice for brazing copper, especially in brazing air conditioning and refrigeration connections. The alloy has a wide melting range which allows the operator to fill loose connections and "cap" or build up around the finished joint. When heated above its liquidus temperature, however, it will flow into tight connections.

Stay Silv 15 can be used to braze brass with the use of appropriate brazing flux. Stay Silv 15 is not recommended for brazing steel or other ferrous metals due to sufficient lack of joint ductility. It is generally suitable for brazing low nickel, (10% maximum), copper/nickel base metals.

CORROSION RESISTANCE

Generally similar to the copper base metal, but phosphorus containing alloys, including Stay Silv 15, should not be used if the braze is exposed to sulfur or sulfur compounds in service.

AVAILABLE FORMS

Standard wire diameters, strip, preform rings, and wound on spools.

RECOMMENDED FLUX:

No flux is required for copper brazing. For brazing brass or copper to brass Stay-Silv® white flux is suitable for most applications. Harris ECO SMART® boric acid free flux, (powder or paste), is also an excellent choice to promote sound brazed assemblies and comply with European REACH requirements

SPECIFICATION COMPLIANCE:

ANSI/AWS A5.8 Class BCuP-5, ASME SFA 5.8 Class BCuP-5, QQ-B-654A BCuP-5, ISO 17672 CuP 284

SAFETY INFORMATION:

WARNING: PROTECT yourself and others. Read and understand this information.
FUMES AND GASES can be hazardous to your health.
HEAT RAYS, (infrared radiation) from flame or hot metal of

HEAT RAYS, (infrared radiation) from flame or hot metal can injure eyes.

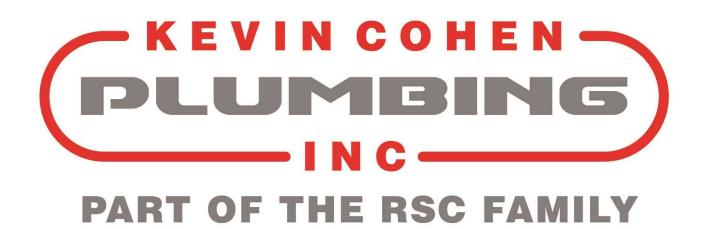
- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the flame, or heat source, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- See American National Standard Z49.1, Safety in Welding, Cutting, and Allied Processes, published by the American Welding Society, 8669 Doral Blvd., Doral, Florida 33166; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

STATEMENT OF LIABILITY- DISCLAIMER

Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. The Harris Products Group and its affiliates shall have no liability in respect thereof.

THE HARRIS PRODUCTS GROUP

A LINCOLN ELECTRIC COMPANY
4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015
Additional information available at our web site: www.harrisproductsgroup.com



AquaPEX



Uponor AquaPEX® White, Straight Length

uponor

Submittal Information Revision C: Oct. 7, 2009

Project Information

Job Name:

Location:Part No. Ordered:Engineer:Date Submitted:Contractor:Submitted By:

Manufacturer's Representative:

Technical Data

Material: Crosslinked polyethylene PEX-a Engel Method

Standard Grade

Hydrostatic Ratings (PPI): 200°F (93°C) at 80 psi 180°F (82°C) at 100 psi 73.4°F (23°C) at 160 psi

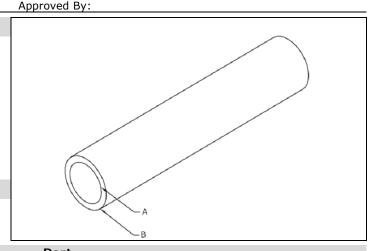
1/2" Uponor AquaPEX® tubing only: 120°F

(49°C) at 130 psi

Linear Expansion Rate: 1.10"/10°F (12°C)/100'

Product Information and Application Use

Uponor AquaPEX White, straight length tubing, is used primarily in hot and cold potable water distribution systems and AquaSAFE $^{\text{TM}}$ Residential Fire Safety systems.



✓	Description	Number	Α	В	Weight
½" Uponor Aqı	uaPEX White, 20-ft. straight length, 500 ft.	F1930500	0.475"	0.625"	28.0 lbs.
34" Uponor Aqı	uaPEX White, 20-ft. straight length, 300 ft.	F1930750	0.671"	0.875"	31.0 lbs.
1" Uponor Aqu	aPEX White, 20-ft. straight length, 200 ft.	F1921000	0.862"	1.125"	35.0 lbs.
1¼" Uponor Ad	quaPEX White, 20-ft. straight length, 100 ft.	F1921250	1.054"	1.375"	32.0 lbs.
1½" Uponor Ad	quaPEX White, 20-ft. straight length, 100 ft.	F1921500	1.244"	1.625"	42.0 lbs.
2" Uponor Aqu	aPEX White, 20-ft. straight length, 100 ft.	F1922000	1.629"	2.125"	68.1 lbs.
3" Uponor Aqu	aPEX White, 20-ft. straight length, 60 ft.	F1923000	2.400"	3.125"	77.0 lbs.
Locatelleties					

Installation

Approved fittings are ProPEX[®] fittings¹ for sizes ¾" through 2" AquaPEX. Use WIPEX[™] fittings for 3" AquaPEX. Refer to the AquaPEX Professional Plumbing Installation Handbook or AquaSAFE Fire Safety Installation Guide for additional information.

Standards

CSA B137.5; ASTM F876; ASTM F877; ASTM F1960; ASTM-E84; ASTM-E119/UL 263

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

½", ¾", 1" UL 1821; ULC/ORD - C 199 P; IAPMO; CSA; HUD; WARNOCK HERSEY; NSF; ITS; UL; ICC; PPI; ANSI/NSF 14- and 61-certified; CAN/ULC S102.2; U.S.: ¾" diameter and smaller; Canada: 1" diameter and smaller

Related Applications

PEX-a Plumbing Systems

AguaSAFE Residential Fire Safety Systems

Contact Information

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: (800) 321-4739

Fax: (952) 891-2008 www.uponor-usa.com Uponor Ltd.

2000 Argentia Rd., Plaza 1, Ste. 200 Mississauga, ON L5N 1W1 CANADA

Phone: (888) 994-7726 Fax: (800) 638-9517 www.uponor.ca

 $^{^1}$ ProPEX $^{\otimes}$ is a registered trademark of Uponor, Inc. ProPEX $^{^{ imes}}$ is a trademark of Uponor Ltd.



ProPEX - EP

ProPEX® Engineered Polymer (EP) Coupling (up to 11/2")



Revision H: Feb. 1, 2016

Project Information

Job Name:

Location: Part No. Ordered:

Date Submitted: Engineer: Submitted By: Contractor:

Manufacturer's Representative:

Approved By: **Technical Data**

Material: Polysulfone, 20% Glass-reinforced (%" - 1")

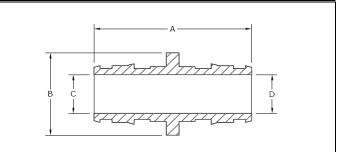
Modified Polyphenylsulfone (11/4" - 11/2")

320°F (160°C) Max. Temp. (no pressure):

Max. Working Temp./Pressure: 210°F (99°C) at 150 psi (1,034 kPa)

Product Information and Application Use

The ProPEX® Engineered Polymer (EP) Coupling is available for use in hot and cold domestic potable water distribution, residential fire safety and radiant heating and cooling systems. Each end of the coupling is manufactured with an Uponor ProPEX fitting for connections to Uponor AquaPEX® or Wirsbo hePEX™ tubing.



~	Description	Part Number	Α	В	С	D	Weight	Equivalent Length (ft.)	Cv
	ProPEX EP Coupling, %" PEX x %" PEX	Q4773838	1.300"	0.70"	0.280"	0.280"	0.01 lbs.	N/A	N/A
	ProPEX EP Coupling, ½" PEX x ½" PEX*	Q4775050	1.600"	0.85"	0.405"	0.405"	0.01 lbs.	0.8	8.3
	ProPEX EP Coupling, ½" PEX x ¾" PEX*	Q4775075	1.800"	1.08"	0.405"	0.615"	0.03 lbs.	2.6	5.2
	ProPEX EP Coupling, 5%" PEX x 5%" PEX	Q4776363	1.860"	1.00"	0.538"	0.538"	0.01 lbs.	N/A	N/A
	ProPEX EP Coupling, ¾" PEX x ¾" PEX*	Q4777575	2.000"	1.18"	0.615"	0.615"	0.02 lbs.	0.9	19.0
	ProPEX EP Coupling, 3/4" PEX x 1" PEX*	Q4777510	2.300"	1.34"	0.615"	0.818"	0.04 lbs.	2.7	12.5
	ProPEX EP Coupling, 1" PEX x 1" PEX*	Q4771010	2.500"	1.42"	0.818"	0.818"	0.04 lbs.	0.9	33.8
	ProPEX EP Coupling, 11/4" PEX x 3/4" PEX*	Q4771307	2.625"	1.75"	0.989"	0.615"	0.05 lbs.	3.6	10.9
	ProPEX EP Coupling, 11/4" PEX x 1" PEX*	Q4771310	2.875"	1.75"	0.989"	0.818"	0.06 lbs.	2.6	22.3
	ProPEX EP Coupling, 11/4" PEX x 11/4" PEX*	Q4771313	3.000"	1.75"	0.989"	0.989"	0.07 lbs.	1.1	53.3
	ProPEX EP Coupling, 1½" PEX x ¾" PEX*	Q4771507	2.875"	2.13"	1.109"	0.615"	0.07 lbs.	3.5	10.8
	ProPEX EP Coupling, 1½" PEX x 1" PEX*	Q4771510	3.125"	2.13"	1.109"	0.818"	0.08 lbs.	4.3	19.0
	ProPEX EP Coupling, 1½" PEX x 1¼" PEX*	Q4771513	3.500"	2.13"	1.109"	0.989"	0.09 lbs.	3.7	33.9
	ProPEX EP Coupling, 1½" PEX x 1½" PEX*	Q4771515	3.625"	2.13"	1.109"	1.109"	0.10 lbs.	1.4	69.5

Use ProPEX Rings to make the fitting. Refer to the Uponor Professional Plumbing Installation Guide, Radiant Floor Heating Installation Handbook or AquaSAFE™ Residential Fire Sprinkler Installation Guide for more information

Standards

ASTM E84; ASTM E119; ASTM E814;

ASTM F877; ASTM F1960; CAN/CSA B137.5;

NSF 14; NSF 61

IBC; IMC; IPC; IRC;

NPC of Canada; NSPC; UMC; UPC

Listings

cNSFus-pw; cNSFus-rfh; cQAIus P321;

*HUD MR 1269; ICC-ES-PMG-1006;

ICC-ES-PMG-1012; *UL 1821; *ULC/ORD-C199P;

U.P. Code

Related Applications

PEX-a Plumbing Systems Hydronic Radiant Heating and Cooling Systems Snow and Ice Melting Systems Permafrost Protection Systems Turf Conditioning Systems AquaSAFE Fire Safety Systems

Contact Information

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: 800.321.4739 Fax: 952.891.2008 www.uponorpro.com

Uponor Ltd. 2000 Argentia Rd., Plaza 1, Ste. 200 Mississauga, ON L5N 1W1 CANADA

Phone: 888.994.7726 Fax: 800.638.9517 www.uponorpro.com



ProPEX® Engineered Polymer (EP) Tee

Submittal Information

Revision G: Feb. 2, 2016

Project Information

Job Name:

Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Polysulfone, 20% Glass-reinforced (1/2" to 1") Material:

Modified Polyphenylsulfone (11/4" to 11/2")

Polyphenylsulfone (2" to 3")

Maximum Temperature

(no pressure): 320°F (160°C)

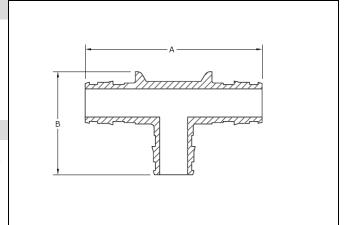
Maximum Working

210°F (99°C) at 150 psi (1,034 kPa) Temperature/Pressure:

Product Information and Application Use

The ProPEX® Engineered Polymer (EP) Tee makes diverting connections for Uponor crosslinked polyethylene (PEX-a) tubing for use in hot and cold domestic potable water systems, residential fire sprinkler systems and hydronic radiant heating and cooling systems. Each end of the tee is manufactured with an Uponor ProPEX fitting for connections to Uponor AquaPEX® or Wirsbo hePEX™ tubing.1

Note: Branch size is listed last in the part descriptions.



✓ Description	Part Number	Α	В	Weight	Equivalent Length (ft.) Through	Equivalent Length (ft.) Branch	Cv Through	Cv Branch
□ ProPEX EP Tee, ½" PEX x ½" PEX x ½" PEX*	Q4755050	2.50"	1.53"	0.02 lbs.	1.0	6.3	7.7	3.4
□ ProPEX EP Tee, ¾" PEX x ¾" PEX x ¾" PEX*	Q4757575	3.30"	1.94"	0.05 lbs.	1.5	15.6	15.7	5.4
□ ProPEX EP Tee, 1" PEX x 1" PEX x 1" PEX*	Q4751010	4.10"	2.47"	0.07 lbs.	1.3	12.7	30.5	11.3
□ ProPEX EP Tee, 1¼" PEX x 1¼" PEX x 1¼" PEX*	Q4751313	4.80"	3.22"	0.15 lbs.	3.8	8.6	34.0	23.9
□ ProPEX EP Tee, 1½" PEX x 1½" PEX x 1½" PEX*	Q4751515	5.80"	3.82"	0.25 lbs.	1.8	10.6	63.7	31.0
■ ProPEX EP Tee, 2" PEX x 2" PEX x 2" PEX*	Q4752000	7.45"	4.79"	0.38 lbs.	0.8	15.5	150.7	52.5
□ ProPEX EP Tee, 2½" PEX x 2½" PEX x 2½" PEX	Q4752500	10.56"	5.45"	1.14 lbs.	2.7	22.3	197.2	81.5
■ ProPEX EP Tee, 3" PEX x 3" PEX x 3" PEX	Q4753000	12.26"	6.37"	1.86 lbs.	2.8	23.9	286.6	122.8
Installation								

Installation

Use the appropriate ProPEX Ring for PEX-a tubing. Refer to the Uponor Professional Plumbing Installation Guide, AquaSAFE™ Residential Fire Sprinkler Installation Guide or Uponor Radiant Installation Handbook for additional information.

Standards

ASTM E84; ASTM E119; ASTM E814; ASTM F877; ASTM F1960; CAN/CSA B137.5; NSF 14; NSF 61

Codes

IBC; IMC; IPC; IRC; NPC of Canada; NSPC; UMC; UPC

Listings

cNSFus-pw; cNSFus-rfh; cQAIus P321; *HUD MR 1269; ICC-ES-PMG-1006; ICC-ES-PMG-1012; *UL 1821; *ULC/ORD-C199P; U.P. Code

Related Applications

PEX-a Plumbing Systems Hydronic Radiant Heating and Cooling Systems **Snow Melting Systems** Turf Conditioning Systems Permafrost Prevention Systems AquaSAFE Fire Safety Systems

Contact Information

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: 800.321.4739 Fax: 952.891.2008 www.uponorpro.com

Uponor Ltd.

2000 Argentia Road, Plaza 1, Suite 200 Mississauga, ON L5N 1W1 CANADA

Phone: 888.994.7726 Fax: 800.638.9517 www.uponorpro.com

¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.





Submittal Information

Revision B: Sept. 18, 2008

Project Information

Job Name:

 Location:
 Part No. Ordered:

 Engineer:
 Date Submitted:

 Contractor:
 Submitted By:

 Manufacturer's Representative:
 Approved By:

Technical Data

Material: UDEL® Polysulfone, 20% Glass-reinforced (½" to 1")

Acudel® Modified Polyphenylsulfone (11/4" to 11/2")

Radel® Polyphenylsulfone (2")

Maximum Temperature

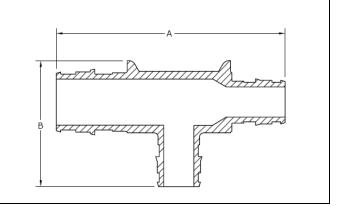
(no pressure): 320°F (160°C)

Maximum Working

Temperature/Pressure: 210°F (99°C) at 150 psi

Product Information and Application Use

ProPEX® Engineered Plastic (EP) Reducing Tees are available for use in hot and cold domestic potable water systems.¹ Each end features an Uponor ProPEX Fitting for connections to Uponor PEX tubing. The branch size is listed last in the part description.



✓ Description	Part Number	Α	В	Weight
ProPEX EP Reducing Tee, 1/2" PEX x 1/2" PEX x 3/4" PEX	Q4755575	2.86"	1.76"	0.05 lbs.
ProPEX EP Reducing Tee, 34" PEX x 1/2" PEX x 1/2" PEX	Q4757555	3.10"	1.70"	0.04 lbs.
ProPEX EP Reducing Tee, 34" PEX x 1/2" PEX x 34" PEX	Q4757557	3.10"	1.94"	0.04 lbs.
ProPEX EP Reducing Tee, 34" PEX x 34" PEX x 1/2" PEX	Q4757550	3.30"	1.70"	0.04 lbs.
ProPEX EP Reducing Tee, 3/4" PEX x 3/4" PEX x 1" PEX	Q4757710	3.64"	2.32"	0.08 lbs.
ProPEX EP Reducing Tee, 1" PEX x 3/4" PEX x 3/4" PEX	Q4751775	3.90"	2.24"	0.08 lbs.
ProPEX EP Reducing Tee, 1" PEX x 3/4" PEX x 1" PEX	Q4751751	3.90"	2.47"	0.08 lbs.
ProPEX EP Reducing Tee, 1" PEX x 1" PEX x ½" PEX	Q4751150	4.10"	2.00"	0.08 lbs.
ProPEX EP Reducing Tee, 1" PEX x 1" PEX x 34" PEX	Q4751175	4.10"	2.24"	0.09 lbs.
ProPEX EP Reducing Tee, 11/4" PEX x 1" PEX x 3/4" PEX	Q4751317	4.60"	2.73"	0.11 lbs.
ProPEX EP Reducing Tee, 11/4" PEX x 1" PEX x 1" PEX	Q4751311	4.60"	2.97"	0.12 lbs.
ProPEX EP Reducing Tee, 11/4" PEX x 11/4" PEX x 3/4" PEX	Q4751337	4.80"	2.73"	0.13 lbs.
ProPEX EP Reducing Tee, 11/4" PEX x 11/4" PEX x 1" PEX	Q4751331	4.80"	2.97"	0.14 lbs.
ProPEX EP Reducing Tee, 11/2" PEX x 1" PEX x 3/4" PEX	Q4751517	5.25"	3.06"	0.17 lbs.
ProPEX EP Reducing Tee, 11/2" PEX x 1" PEX x 1" PEX	Q4751511	5.25"	3.30"	0.18 lbs.
ProPEX EP Reducing Tee, 11/2" PEX x 11/2" PEX x 3/4" PEX	Q4751557	5.80"	3.06"	0.20 lbs.
ProPEX EP Reducing Tee, 11/2" PEX x 11/2" PEX x 1" PEX	Q4751551	5.75"	3.30"	0.21 lbs.
ProPEX EP Reducing Tee, 11/2" PEX x 11/2" PEX x 11/4" PEX	Q4751553	5.80"	3.56"	0.22 lbs.
ProPEX EP Reducing Tee, 2" PEX x 11/2" PEX x 1" PEX	Q4752051	6.51"	3.54"	0.24 lbs.
ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 1" PEX	Q4752210	6.95"	3.54"	0.27 lbs.
ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 11/2" PEX	Q4752215	6.95"	4.10"	0.29 lbs.
ProPEX EP Reducing Tee, 2" PEX x 2" PEX x 34" PEX	Q4752275	6.95"	3.25"	0.27 lbs.

Installation

Use the appropriate ProPEX Ring for the tubing. For more information, refer to the AQUAPEX® Professional Plumbing Installation Handbook or Uponor Radiant Installation Handbook.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; ICC ESR 1099; IAPMO 3558

Related Applications Contact Information

PEX-a Plumbing Systems Radiant Heating and Cooling Systems Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: (800) 321-4739 Fax: (952) 891-2008 www.uponor-usa.com Uponor Ltd. 2000 Argentia Road, Plaza 1, Suite 200 Mississauga, ON L5N 1W1 CANADA Phone: (888) 994-7726 Fax: (800) 638-9517

www.uponor.ca

 $^{1}\text{ProPEX}^{\circledast}$ is a registered trademark of Uponor, Inc. $\text{ProPEX}^{^{\text{\tiny{TM}}}}$ is a trademark of Uponor Ltd.





Revision B: Sept. 18, 2008

Project Information

Job Name:

Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved By:

Technical Data

Material: UDEL® Polysulfone, 20% Glass-reinforced (½ to 1")

Acudel® Modified Polyphenylsulfone (11/4" to 11/2")

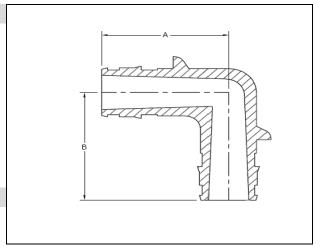
Radel® Polyphenylsulfone (2")

Maximum Temperature

320°F (160°C) (no pressure):

Maximum Working

Temperature/Pressure: 210°F (99°C) at 150 psi



Product Information and Application Use

ProPEX® Engineered Plastic (EP) Elbow makes 90-degree connections for Uponor PEX tubing in supply and return mains. 1

✓ Description	Part Number	Α	В	Weight
Propex ep elbow, ½" pex x ½" pex	Q4760500	1.30"	1.30"	0.02 lbs.
ProPEX EP Elbow, 34" PEX x 34" PEX	Q4760750	1.60"	1.60"	0.03 lbs.
ProPEX EP Elbow, 1" PEX x 1" PEX	Q4761000	2.10"	2.10"	0.07 lbs.
ProPEX EP Elbow, 1¼" PEX x 1¼" PEX	Q4761250	2.45"	2.45"	0.11 lbs.
ProPEX EP Elbow, 1½" PEX x 1½" PEX	Q4761500	2.77"	2.77"	0.18 lbs.
ProPEX EP Elbow, 2" PEX x 2" PEX	Q4762000	3.76"	3.76"	0.30 lbs.
Installation				

Installation

Use the appropriate ProPEX Ring for PEX tubing. Refer to the AQUAPEX® Professional Plumbing Installation Handbook or Uponor Radiant Installation Handbook for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

IAPMO 3558; ANSI/NSF 14- and 61-certified; HUD MR 1269; ICC ESR 1099

Related Applications Contact Information

PEX-a Plumbing Systems Radiant Heating and Cooling Systems

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: (800) 321-4739 Fax: (952) 891-2008

www.uponor-usa.com

2000 Argentia Road, Plaza 1, Suite 200 Mississauga, ON L5N 1W1 CANADA

Phone: (888) 994-7726 Fax: (800) 638-9517 www.uponor.ca

¹ProPEX[®] is a registered trademark of Uponor, Inc. ProPEX[™] is a trademark of Uponor Ltd.



ProPEX - LF



ProPEX® Lead-free (LF) Brass Female Threaded Adapter

Submittal Information

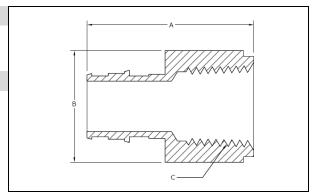
Revision A. Jan. 20, 2010	
Project Information	
Job Name:	
Location:	Part No. Ordered:
Engineer:	Date Submitted:
Contractor:	Submitted By:
Manufacturer's Representative:	Approved Ry

Technical Data

Material: C69300 Brass

Product Information and Application Use

The ProPEX® Lead-free Brass Female Threaded Adapter connects Uponor PEX tubing to female NPT threads.¹ Use these fittings in hot and cold domestic potable water systems or in any radiant heating system. One end of the adapter is manufactured with the Uponor ProPEX Fitting for connections to Wirsbo hePEX™ tubing or Uponor AquaPEX® tubing. The other end of the adapter connects to copper. These adapters are safe for direct burial in soil.



✓	Description	Part Number	Α	В	С	Weight
	ProPEX LF Brass Female Threaded Adapter, $\frac{1}{2}$ " PEX x $\frac{1}{2}$ " NPT	LF4575050	1.57"	1" HEX	½" NPT	0.20 lbs.
	ProPEX LF Brass Female Threaded Adapter, $1/2$ " PEX x $3/4$ " NPT	LF4575075	1.75"	1³/ ₁₆ " HEX	34" NPT	0.40 lbs.
	ProPEX LF Brass Female Threaded Adapter, 34 " PEX x 34 " NPT*	LF4577575	1.87"	1%" HEX	34" NPT	0.20 lbs.
	ProPEX LF Brass Female Threaded Adapter, 34 " PEX x 1" NPT	LF4577510	2.21"	1½" HEX	1" NPT	0.40 lbs.
	ProPEX LF Brass Female Threaded Adapter, 1" PEX x 1" NPT	LF4571010	2.44"	11/2" HEX	1" NPT	0.45 lbs.
	ProPEX LF Brass Female Threaded Adapter, 1¼" PEX x 1¼" NPT	LF4571313	2.57"	2" HEX	1¼" NPT	1.00 lbs.
	ProPEX LF Brass Female Threaded Adapter, 1½" PEX x 1½" NPT	LF4571515	2.75"	21/2" HEX	1½" NPT	2.20 lbs.
	ProPEX Brass Female Threaded Adapter, 2" PEX x 2" NPT	LF4572020	3.53"	3" HEX	2" NPT	2.20 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. For more information, refer to the AquaPEX Professional Plumbing Installation Guide or the Radiant Floor Heating Installation Handbook.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; ICC ESR 1099; HUD MR 1269; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems Radiant Heating and Cooling Systems Snow and Ice Melting Systems Permafrost Protection Systems Turf Conditioning Systems

Contact Information

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: (800) 321-4739 Fax: (952) 891-1409 www.uponor-usa.com Uponor Ltd. 2000 Argentia Rd., Plaza 1, Ste. 200 Mississauga, ON L5N 1W1 CANADA Phone: (888) 994-7726 Fax: (800) 638-9517 www.uponor.ca

¹ProPEX[®] is a registered trademark of Uponor, Inc. ProPEX[™] is a trademark of Uponor Ltd.



ProPEX® Lead-free (LF) Brass Male Threaded Adapter

Submittal Information

Revision A: Jan. 28, 2010

Project Information

Job Name:

Location:

Engineer:

Contractor:

Manufacturer's Representative:

Part No. Ordered:

Date Submitted:

Submitted By:

Approved By:

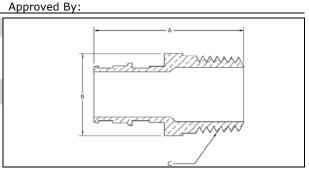
Technical Data

Material:

C69300 Brass

Product Information and Application Use

ProPEX® Lead-free Male Threaded Adapters connect Uponor PEX tubing to male NPT threads.¹ These adapters are safe for direct burial in soil.



✓	Description	Part Number	Α	В	С	Weight
	ProPEX LF Brass Male Threaded Adapter, 3% " PEX x 1% " NPT	LF4523850	1.62"	%" HEX	½" NPT	0.11 lbs.
	ProPEX LF Brass Male Threaded Adapter, $\frac{1}{2}$ " PEX x $\frac{1}{2}$ " NPT	LF4525050	1.73"	%" HEX	½" NPT	0.32 lbs.
	ProPEX LF Brass Male Threaded Adapter, $\frac{1}{2}$ " PEX x $\frac{3}{4}$ " NPT	LF4525075	1.78"	11/8" HEX	34" NPT	0.18 lbs.
	ProPEX LF Brass Male Threaded Adapter, 34 " PEX x 34 " NPT*	LF4527575	2.02"	11/8" HEX	34" NPT	0.20 lbs.
	ProPEX LF Brass Male Threaded Adapter, 34 " PEX x 1" NPT*	LF4527510	2.22"	1%" HEX	1" NPT	0.35 lbs.
	ProPEX LF Brass Male Threaded Adapter, 1" PEX x 34 " NPT	LF4521075	2.25"	1¼" HEX	34" NPT	0.30 lbs.
	ProPEX LF Brass Male Threaded Adapter, 1" PEX x 1" NPT*	LF4521010	2.46"	1%" HEX	1" NPT	0.44 lbs.
	ProPEX LF Brass Male Threaded Adapter, 1 $\%$ " PEX x 1 $\%$ " NPT	LF4521313	2.72"	1¾" HEX	1¼" NPT	0.75 lbs.
	ProPEX LF Brass Male Threaded Adapter, 1½" PEX x 1½" NPT	LF4521515	3.00"	21/4" HEX	11/2" NPT	0.80 lbs.
	ProPEX Brass Male Threaded Adapter, 2" PEX x 2" NPT	LF4522020	3.86"	21/2" HEX	2" NPT	1.90 lbs.

Installation

ProPEX Tool and ProPEX Rings (sold separately) are required for connecting the PEX tubing. Refer to the AquaPEX[®] Professional Plumbing Installation Guide or Radiant Floor Heating Installation Handbook for additional information.

Standards

CAN/CSA B137.5; ASTM F877; ASTM F1960

Codes

IPC; UPC; NSPC; NPC of Canada

Listings

ANSI/NSF 14- and 61-certified; HUD MR 1269; ICC ESR 1099; IAPMO 3558; U.P. Code, Annex G; *UL 1821; *ULC/ORD C199P

Related Applications

PEX-a Plumbing Systems Radiant Heating and Cooling Systems Snow and Ice Melting Systems Permafrost Protection Systems Turf Conditioning Systems

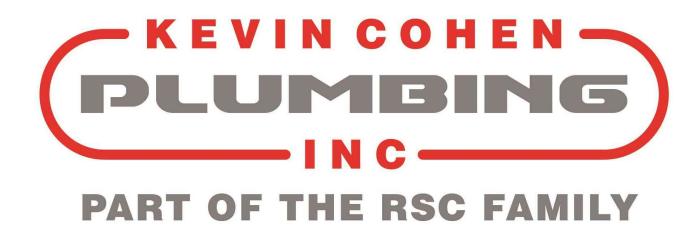
Contact Information

Uponor, Inc. 5925 148th Street West Apple Valley, MN 55124 USA Phone: (800) 321-4739 Fax: (952) 891-1409 www.uponor-usa.com Uponor Ltd.

2000 Argentia Rd., Plaza 1, Ste. 200 Mississauga, ON L5N 1W1 CANADA Phone: (888) 994-7726

Fax: (800) 638-9517 www.uponor.ca

¹ProPEX® is a registered trademark of Uponor, Inc. ProPEX™ is a trademark of Uponor Ltd.



Schedule 40 PVC Solid/Foam Core

FOAM CORE NOT ALLOWED



SUBMITTAL FOR CHARLOTTE PIPE® PVC SCHEDULE 40 SOLID WALL PIPE AND PVC DWV FITTING SYSTEM

Date:	
Job Name:	Location:
Engineer:	Contractor:

Scope:

This specification covers PVC Schedule 40 solid wall pipe and PVC DWV fittings used in sanitary drain, waste and vent (DWV), sewer and storm drainage applications. This system is intended for use in non-pressure applications where the operating temperature will not exceed 140° F.

Specification:

Pipe shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784. PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785 and ASTM D 2665. Injection molded PVC DWV fittings shall conform to ASTM D 2665. Fabricated PVC DWV fittings shall conform to ASTM F 1866. All pipe and fittings shall be manufactured in the United States. All systems shall utilize a separate waste and vent system. Pipe and fittings shall conform to NSF International Standard 14.

Installation:

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, fire, and building code requirements. Buried pipe shall be installed in accordance with ASTM D 2321 and ASTM F 1668. Solvent cement joints shall be made in a two-step process with primer conforming to ASTM F 656 and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation.

WARNING! Never test with or transport/store compressed air or gas in PVC pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

Referenced Standards:

ASTM D 1784: Rigid Vinyl Compounds

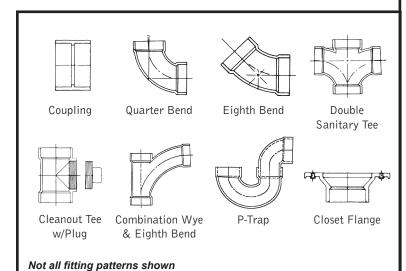
ASTM D 1785: PVC Plastic Pipe, Schedule 40

ASTM D 2665: PVC Drain, Waste and Vent Pipe and Fittings ASTM D 2564: Solvent Cements for PVC Pipe and Fittings Underground Installation of Thermoplastic

Pipe (non-pressure applications)

ASTM F 656: Primers for PVC Pipe and Fittings
ASTM F 1668: Procedures for Buried Plastic Pipe
ASTM F 1866: Fabricated PVC DWV Fittings
NSF Standard 14: Plastic Piping Components and

Related Materials





NICE

PVC Schedule 40 DWV Pipe

PVC Schedule 40 DWV Pipe								
PVC SCHEDU	LE 40 (WHITE)	PLA	IN END	PVC 11:	PVC 1120 A			
PART NO.	NOM. SIZE	UPC # 611942-	QTY. PER SKID	AVG. OD (IN.)	MIN. WALL (IN.)	WT. PER 100 FT. (LBS.)		
PVC 7100*	11/4"X10'	03945	2120′	1.660	.140	42.4		
PVC 7100*	11/4"x20'	03946	4240′	1.660	.140	42.4		
PVC 7112*	11/2"x10'	03947	1650′	1.900	.145	51.8		
PVC 7112*	11/2"x20'	03948	3300′	1.900	.145	51.8		
PVC 7200*	2"x10'	03949	1110′	2.375	.154	69.5		
PVC 7200*	2"x20'	03950	2220′	2.375	.154	69.5		
PVC 7300*	3"x10'	03951	1130′	3.500	.216	144.2		
PVC 7300*	3"x20"	03952	1000′	3.500	.216	144.2		
PVC 7400†	4"x10"	03953	670′	4.500	.237	205.5		
PVC 7400†	4"x20"	03954	1340′	4.500	.237	205.5		
PVC 7500†	5"x20"	04837	760′	5.563	.258	272.5		
PVC 7600†	6"x10"	03955	330′	6.625	.280	361.2		
PVC 7600†	6"x20"	03956	660′	6.625	.280	361.2		
PVC 7800†	8"x10"	13087	180′	8.625	.322	543.6		
PVC 7800†	8"x20"	03958	360′	8.625	.322	543.6		
PVC 7910†	10"x20'	03959	220′	10.750	.365	770.7		
PVC 7912†	12"x20'	03961	120′	12.750	.406	1019.0		
PVC 7914†	14"x20'	04862	60′	14.000	.437	1205.0		
PVC 7916†	16"x20'	04918	60′	16.000	.500	1575.7		

* Dual Marked ASTM D 1785 & ASTM D 2665.

† Triple Marked ASTM D 1785 & ASTM D 2665 & ASTM F 480.

Charlotte Pipe and Foundry Company • P.O. Box 35430 Charlotte, NC 28235 • (800) 438-6091 • www.charlottepipe.com



SUBMITTAL FOR CHARLOTTE PIPE® PVC CELLULAR (FOAM CORE) PIPE AND PVC DWV FITTING SYSTEM

Date:	
Job Name:	Location:
Engineer:	Contractor:

Scope:

This specification covers PVC cellular (foam core) pipe and PVC DWV fittings used in sanitary drain, waste and vent (DWV), sewer, and storm drainage applications. This system is intended for use in non-pressure applications where the operating temperature will not exceed 140° F.

Specification:

Pipe shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 11432 as identified in ASTM D 4396. Fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784.

PVC cellular core pipe shall be Iron Pipe Size (IPS) conforming to ASTM F 891. Injection molded PVC DWV fittings shall conform to ASTM D 2665. Farbricated PVC DWV fittings shall conform to ASTM F 1866. All systems shall utilize a separate waste and vent system. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to NSF International Standard 14.

Installation:

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, fire, and building code requirements. Buried pipe shall be installed in accordance with ASTM D 2321 and ASTM F 1668. Solvent cement joints shall be made in a two-step process with primer conforming to ASTM F 656 and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation.

WARNING! Never test with or transport/store compressed air or gas in PVC pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

Referenced Standards:

ASTM D 4396: Compounds for Cellular Core

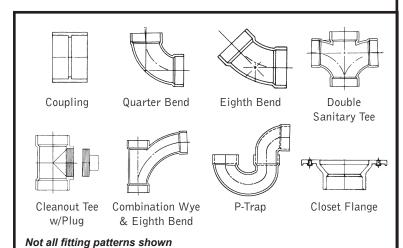
ASTM F 891: Co-extruded PVC Pipe with Cellular Core
ASTM D 2665: PVC Drain, Waste and Vent Fittings
ASTM D 2564: Solvent Cements for PVC Pipe and Fittings

ASTM D 2321: Underground Installation of Thermoplastic

Pipe (non-pressure applications)

ASTM F 1668: Procedures for Buried Plastic Pipe Fabricated PVC DWV Fittings NSF Standard 14: Plastic Piping Components and

Related Materials





PVC Foam Core Pipe

PVC Schedule 40 DWV Pipe (For Non-Pressure Applications)

/	/	
(N	S

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PVC SCHEDULE 40 FOAM CORE (WHITE) PLAIN END AST									
PART NO.	NOM. SIZE	UPC # 611942-	QTY. PER SKID	AVG. OD (IN.)	MIN. WALL (IN.)	WT. PER 100 FT. (LBS.)			
PVC 4112	1½" x 10'	04178	1650′	1.900	0.145	32.3			
PVC 4112	1½" x 20'	04177	3300′	1.900	0.145	32.3			
PVC 4200	2" x 10'	04174	1110′	2.375	0.154	43.9			
PVC 4200	2" x 20'	04173	2220′	2.375	0.154	43.9			
PVC 4300	3" x 10'	03934	1130′	3.500	0.216	89.7			
PVC 4300	3" x 20'	03935	1000′	3.500	0.216	89.7			
PVC 4400	4" x 10'	03936	670′	4.500	0.237	123.8			
PVC 4400	4" x 20'	03937	1340′	4.500	0.237	123.8			
PVC 4600	6" x 10'	03938	330′	6.625	0.280	235.0			
PVC 4600	6" x 20'	03939	660′	6.625	0.280	235.0			
PVC 4800	8" x 20'	03941	360′	8.625	0.322	371.0			
PVC 4910	10" x 20'	03942	220′	10.750	0.365	566.3			
PVC 4912	12" x 20'	03943	120′	12.750	0.406	700.0			

Charlotte Pipe and Foundry Company • P.O. Box 35430 Charlotte, NC 28235 • (800) 438-6091 • www.charlottepipe.com



Hangers & Supports

FERROUS HANGERS SHALL BE ISOLATED FROM COPPER PIPE PER SPECS.

SUPPORT FOR HORIZONTAL PEX SHALL INCLUDE MANUFACTURES SUPPORT CHANNEL.

UNIVERSAL PIPE HANGER

>> 553-0 SERIES

ZipStickTM

SPECIFICATION

Sioux Chief ZipStick™ Universal Pipe Hanger shall be used where necessary to support DWV piping according to all national code requirements. Hanger shall feature I-beam stem design for strength and rigidity and a high heat strap with a releasable locking mechanism. Hanger shall be noncorrosive and UV-resistant. Hanger shall be impact resistant to 0°F, and be able to withstand temperatures up to 140°F. Hanger shall include two pre-loaded zinc plated, rust resistant nails. Nails shall have a continuous rink shank to provide a more permanent installation. Hanger stem may be snapped off or cut to create a shorter stem in tight spaces. Hanger stem may be extended buy using optional stainless steel L-bracket (purchase separately) and all-thread rod with approved hardware. L-bracket shall be secured to hanger stem using two #8 screws (provided).

Hanger may be used to support wrapped or insulated pipe, bundles of flexible tube, or wire or supporting vent pipe in attics. Universal strap can support 1" CTS to 6" IPS. Additional straps may be used to extend the strap length to hang flexible ducting or similar objects of larger diameter, which do not exceed the load ratings listed on this specification. Hanger shall be IAPMO certified.

INSTALLATION

Nail stem of hanger to joist or stud location using ring shank nails (provided). Position strap around pipe then insert strap into square locking mechanism then pull down on strap until strap cinches tightly around pipe. Excess strap may be cut if desired.

MATERIALS

Stem: ABS, U.V. resistant, corrosion-proof, impact-resistant

Strap: High-heat polypropylene

Nail: 15/8" rust-resistant, zinc-plated, continuous rink shank

L-bracket: 14-gauge, stainless steel Screw: #8 × 1" zinc-plated hex

SAFE WORKING LOADS

50 lbs @ 32°F 50 lbs @ 72°F

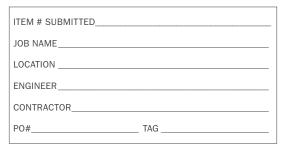
25 lbs @ 140°F (140°F is maximum safe working temperature)

SAFE WORKING TEMPERATURE

Impact resistant to 0°F Maximum temperature: 140°F

DIMENSIONS

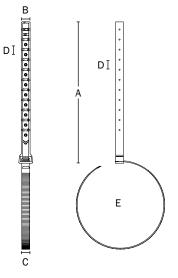
		-014	-026
A:	ZipStick length	14.0"	26.0"
B:	ZipStick width	0.875"	0.875"
C:	ZipStrap width	0.75"	0.75"
D:	Nailway spacing	1.0"	1.0"
E:	Strap length	23.5"	23.5"







553-STRP 521-210



Made in USA

Create Item Number

553-A

e.g. 553-014: 14" ZipStick™

LENGTH A

 \Box **014** = 14" long

 \Box **026** = 26" long

Available separately: 521-210: I-bracket 553-STRP: ZipStrap strap only

DOUBLE-DUTY DRIVE HOOK

555 series Twin Talon™

SPECIFICATION

Sioux Chief's 555 Series Twin Talon™ CTS tube fasteners shall be used where necessary to secure CTS tube in piping system. Fastener shall be 100% corrosion proof and U.V. resistant. Fastener shall be impact resistant to 0°F, and be able to withstand continuous temperatures up to 160°F. Fastener shall be compatible with copper, PEX or CPVC tube.

| Item # Submitted _______ | | Job Name ______ | | Location _____ | | Engineer _____ | | Contractor _____ | | PO# _____ TAG _____ |

INSTALLATION

Fastener shall be secured to any building structure and in accordance with plumbing code. Fastener shall snap onto CTS tube for easy installation, and shall allow for expansion and contraction of tube with less noise. Fastener shall be designed to avoid tube damage if nail is overdriven.

MATERIALS

fastener body: High density black polyethylene; 100% corrosion proof; U.V. resistant; impact resistant to 0°F; max temp: 160°F continuous nail: Rust resistant; zinc plated yellow irradiate; continuous rink shank screw: Rust resistant, zinc-plated Phillips pan head, self-drilling tip



SAFE WORKING LOAD

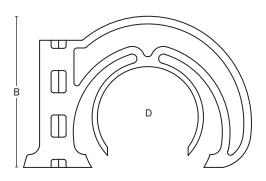
555-23: 21 lbs. 555-45: 18 lbs.

DIMENSIONS

	555-23	555-45
A: width	1.525"	2.375"
B: height	1.02"	1.57"
C: depth	0.4"	0.5"

D: tube size $\frac{1}{2}$ "- $\frac{3}{4}$ " CTS $\frac{3}{4}$ " IPS- $\frac{11}{4}$ " CTS





Create Item Number

555-AB

e.g. $555-45S = \frac{3}{4}$ " IPS $-\frac{1}{4}$ " CTS Twin Talon with screw

A TUBE RANGE

□ 23 ½"-¾" CTS
□ 45 ¾" IPS-1¼" CTS

B FASTENER

□ _ nail (leave blank)

□ S screw

FIGURE 7005E

HANGERS



STANDARD DUTY ADJUSTABLE CLEVIS HANGERS

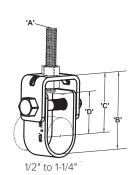
FEATURES

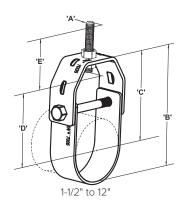
- · Finish Epoxy plated
- Color Zinc
- UL/FM Approved sizes 2-1/2" to 8"
- Hanger Body ASTM A240

PRODUCT SPECIFICATIONS

Standards

- Design MSS SP-58, Type 1
- Federal Specification WW-H-171, Type 1









Note: A - Rod size (hanger rod and nuts not included), B - Bottom of pipe to top of hanger, C - Center of pipe to top of hanger, D - Rod take out (center of pipe to bottom of hanger rod) E - Minimum thread length of hanger rod, F - Adjustment, top of cross bolt to bottom of hanger rod nut inside hanger

DIMENSIONS

Catalog Number	Pipe	Size	Α	1	3	(С		D
Catalog Number	in.	mm	Rod Size	in.	mm	in.	mm	in.	mm
FNW7005EP0050	1/2	21.3	3/8 - 16	2	50	1-1/2	39	3/8	9.5
FNW7005EP0075	3/4	26.7	3/8 - 16	2-2/7	58	1-3/4	44	5/8	15.3
FNW7005EP0100	1	33.4	3/8 -1 6	2-2/3	68	2	51	7/8	22.5
FNW7005EP0125	1-1/4	42.2	3/8 - 16	3-1/3	84	2-4/9	62	1-1/4	31.90
FNW7005EP0150	1-1/2	48.3	3/8 - 16	3-6/7	98	2-7/8	73	1-3/4	44.9
FNW7005EP0200	2	60.3	3/8 - 16	4-2/5	112	3-1/5	81	1/15/16	49.4
FNW7005EP0250	2-1/2	73.0	1/2 - 13	5-1/8	130	3-2/3	93	2/5/16	57.9
FNW7005EP0300	3	88.9	1/2 - 13	6	151	4-1/7	105	2-3/4	69.2
FNW7005EP0350	3-1/2	101.6	1/2 - 13	6-1/2	166	4-1/2	114	3/1/16	78.2
FNW7005EP0400	4	114.3	5/8 - 11	7-1/2	190	5-1/6	131	3/11/16	93.6
FNW7005EP0500	5	141.3	5/8 - 11	9-1/5	234	6-3/8	162	4-5/8	117.0
FNW7005EP0600	6	168.3	3/4 - 10	10-1/2	267	7-1/8	181	5/5/16	134.8
FNW7005EP0800	8	219.1	3/4 - 10	13	328	8-1/2	216	6-1/2	164.7
FNW7005EP1000	10	273.1	7/8 - 9	15-1/2	394	10	254	7-5/8	194.2
FNW7005EP1200	12	323.9	7/8 - 9	18-5/8	473	12-1/8	308	9-3/4	247.6

Catalog Number	Pipe Size E F		=	Bolt Size	Design Load		Weight			
Catalog Number	in.	mm	in.	mm	in.	mm	DOIL SIZE	Lbs.	kN	Lbs.
FNW7005EP0050	1/2	21.3	2-1/2	63.5	7/16	11.1	1/4 - 20UNC	610	2.71	0.12
FNW7005EP0075	3/4	26.7	2-1/2	63.5	1/2	12.7	1/4 - 20UNC	610	2.71	0.14
FNW7005EP0100	1	33.4	2-1/2	63.5	5/8	15.9	1/4 - 20UNC	610	2.71	0.16
FNW7005EP0125	1-1/4	42.2	2-1/2	63.5	7/8	22.2	1/4 - 20UNC	610	2.71	0.24
FNW7005EP0150	1-1/2	48.3	2-1/2	63.5	1/3/16	30.2	1/4 - 20UNC	610	2.71	0.25
FNW7005EP0200	2	60.3	2-1/2	63.5	1-5/8	41.3	1/4 - 20UNC	610	2.71	0.35
FNW7005EP0250	2-1/2	73.0	2-1/2	63.5	2	50.8	3/8 - 16UNC	1130	5.02	0.61
FNW7005EP0300	3	88.9	2-1/2	63.5	2	50.8	3/8 - 16UNC	1130	5.02	0.71
FNW7005EP0350	3-1/2	101.6	2-1/2	63.5	2	50.8	3/8 - 16UNC	1130	5.02	0.79
FNW7005EP0400	4	114.3	2-1/2	63.5	2	50.8	3/8 - 16UNC	1430	6.36	1.00
FNW7005EP0500	5	141.3	2-1/2	63.5	2	50.8	1/2 - 13UNC	1430	6.36	1.67
FNW7005EP0600	6	168.3	3	76.2	2	50.8	1/2 - 13UNC	1940	8.62	3.05
FNW7005EP0800	8	219.1	3-1/2	88.9	2/5/16	58.7	5/8 - 11UNC	2000	8.89	4.11
FNW7005EP1000	10	273.1	3-1/2	88.9	2/5/16	58.7	3/4 - 10UNC	3600	16.00	6.75
FNW7005EP1200	12	323.9	3-1/2	88.9	2/5/16	66.7	3/4 - 10UNC	3800	16.89	7.88

FNW.COM

FIGURE 7005E

HANGERS



STANDARD DUTY LARGE DIAMETER ADJUSTABLE CLEVIS HANGER

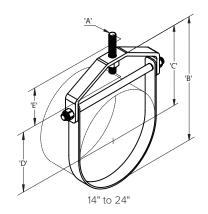
FEATURES

- · Finish Epoxy plated
- Color Zinc

PRODUCT SPECIFICATIONS

Standards

- Design MSS SP-58, Type 1
- Federal Specification WW-H-171, Type 1



Note: A - Rod size (hanger rod and nuts not included), B - Bottom of pipe to top of hanger C - Center of pipe to top of hanger, D - Rod take out (center of pipe to bottom of hanger rod), E - Minimum thread length of hanger rod, F - Adjustment, top of cross bolt to bottom of hanger rod nut inside hanger

DIMENSIONS

Catalog Number	Pipe	Size	Α	A B			С	D		
Catalog Number	in.	mm	Rod Size	in.	mm	in.	mm	in.	mm	
FNW7005EP1400	14	355.6	1 - 8	21-1/6	537.5	13-5/8	347.2	11/3/16	281.6	
FNW7005EP1600	16	406.4	1 - 8	23-1/2	596.5	14-3/4	380.8	12-7/8	327.0	
FNW7005EP1800	18	457.2	1 - 8	27	683.5	17-3/8	442.4	13-15/16	354.0	
FNW7005EP2000	20	508.0	1-1/4 - 7	29-2/3	754.0	19	486.0	17/7/16	442.9	
FNW7005EP2400	24	609.6	1-1/4 - 7	33-7/9	858.0	21-1/8	539.2	20"	485.5	

Catalog Number	Pipe	e Size	ı	E	F	:	Bolt Size	Design Load		Weight
Catalog Number	in.	mm	in.	mm	in.	mm	Boil Size	Lbs.	kN	Lbs.
FNW7005EP1400	14	355.6	4	101.6	2-7/8	73.0	1 - 8UNC	4200	18.67	18.15
FNW7005EP1600	16	406.4	4	101.6	3-3/8	85.7	1 - 8UNC	4600	20.44	23.84
FNW7005EP1800	18	457.2	4-1/2	114.3	3-3/8	85.7	1 - 8UNC	4800	21.33	26.79
FNW7005EP2000	20	508.0	5	127.0	4/13/16	122.2	1-1/4 - 7UNC	4800	21.33	43.53
FNW7005EP2400	24	609.6	5	127.0	5-1/4	133.3	1-1/4 - 7UNC	4800	21.33	50.39

POLYETHYLENE CTS PIPE FASTENER

555 series Tube Talon™

SPECIFICATION

Sioux Chief 555 Series Tube Talon™ CTS pipe fasteners shall be used where necessary to secure CTS tube in piping systems. Fastener shall be 100% corrosion proof and U.V. resistant. Fastener shall be impact resistant to 0°F, and be able to withstand continuous temperatures up to 160°F. Fastener shall have a preloaded nail, which shall be rust resistant, zinc plated yellow irradite. Preloaded nail shall have a continuous ring shank to provide a more permanent installation. Fastener shall snap onto CTS tube for easy installation, and shall allow for expansion and contraction of tube with less noise. Fastener shall be designed to avoid tube damage if nail is over driven.

MATERIALS

fastener body: High density black polyethylene; 100% corrosion proof; U.V. resistant; impact resistant to 0°F; max temp: 160°F continuous.

nail: Rust resistant; zinc-plated yellow irradite; continuous ring shank.

MAXIMUM LOAD RATING

555-1: 3 lbs.

555-2: 5 lbs.

555-3: 8 lbs.

555-4: 12 lbs.

APPROVED USES

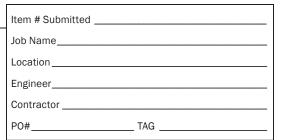
Manufacturer has approved the Tube Talon for use with: copper tube, CPVC tube, PEX/PB tube, CSST lines, flexible gas tubing, plastic/steel conduit, low voltage DataCom cable.

INSTALLATION

Manufacturer suggests the Tube Talon be installed in alternating directions (so that the fastener's nail is on alternating sides of the tube being fastened) to ensure secure installation. Install fasteners at intervals described in local plumbing code for the type of pipe or tube being fastened. To install IPS tube, use the next larger size fastener, e.g. if you are fastening $\frac{1}{2}$ " IPS tube, use a $\frac{3}{4}$ " fastener.

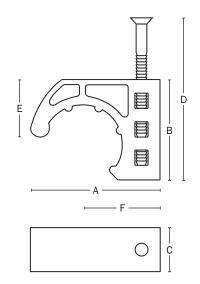
DIMENSIONS:

	222-1	555-2	555-3	555-4
A: width	0.848"	1.125"	1.375"	1.6875"
B: height	0.735"	0.875"	1.1875"	1.4375"
C: depth	0.375"	0.375"	0.4375"	0.5"
D: nail length	1.625"	1.625"	2.125"	2.375"
E: hook height	0.468"	0.5625"	0.75"	0.9063"
F: width to center of tube	0.5"	0.6563"	0.75"	0.9375"





555-2



Create Item Number

555-A

e.g. 555-3 = Tube Talon for $\frac{3}{4}$ " CTS piping

A TUBE SIZE

□ 1 ³/₈" CTS

□ 2 ½" CTS

□ 3 ¾" CTS

□ 4 1" CTS

Sioux Chief —

PF34250 Suspension Pipe Clamps



Product Features

- · Gray polypropylene plastic
- · Provides fast and easy installation and support for all types of copper tube size piping
- · Can be used as an insulator when running water distribution lines through wooden framing
- · Can be used with hydronic heating systems



PF34250

Installation Instructions

- \cdot Open clamp and snap over pipe or tube.
- · Slide into position and secure with barbed nail or screw.
- · Check with local codes to ensure proper spacing requirements for piping support.

Precautions

- · Read cautions and directions on packaging carefully before using this product.
- · Keep out of reach of children.

Technical Information

Product Number	Description
PF34250	1/2" Suspension Clamp (100 per bag)
PF34251	3/4" Suspension Clamp (100 per bag)
PF34252	1" Suspension Clamp (50 per bag)
PF34260	1-1/4" Suspension Clamp (25 per bag)
PF34261	1-1/2" Suspension Clamp (25 per bag)
PF34262	2" Suspension Clamp (25 per bag)

Warranty and Codes

This PROFLO product carries a 1-year limited warranty.

