



Shakespeare®

THE SHAKESPEARE DIFFERENCE...

Dedication to our craft has established us as the leader in antenna design, technology, and quality of manufacture.

It's why command/control/communication centers aboard ships of the U.S. Coast Guard, U.S. Navy, and military services around the globe continue to count on Shakespeare. Shouldn't you?



GALAXY®
by Shakespeare®

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THETFORD MARINE

The Best Holding Tank Deodorants

Green EcoSmart™ and always reliable Aqua-Kem®

EasyFit ▶



◀ Porta Potti 260



Aqua-KEM

The Industry's Best Heads

Features you prefer; more choices to fit your lifestyle

Norcold: The industry's best refrigerator/freezers



DE-0061
Compact design
great performance

DE-0740 & DE-0751
in Wrapped Stainless



THETFORD MARINE



SILENCE AND SILENCE PLUS TOILETS

Modern and elegant design combined with a high capacity centrifugal grinding pump that is virtually impossible to clog makes for a superior marine toilet. The amazingly quiet turbine pump immediately macerates and pushes waste directly to the holding tank. The solid porcelain base/bowl with molded plastic seat and cover blends elegance, comfort, functionality and durability. Its ecologically friendly design minimizes water consumption and waste water output. The solid state wall mounted switch allows the owner to set the amount of water used to flush and decide how much water remains in the bowl. Available in two heights .

- Super quiet with European styling
- Electronic controls with programmable water usage
- Powerful nozzle flush for robust flush coverage
- Lock out electronics prevent flushing when tank is full
- Capable of pumping 300 feet with a 20 foot rise
- Self contained: no need for external pumps or macerators

Silence high profile dimensions: 17.7"H x 14.4"W x 16.9"D

Silence low profile dimensions: 14.2"H x 14.6"W x 16.9D

Silence plus high profile dimensions: 17.7"H x 15"W x 19.7"D

Silence plus low profile dimensions: 13.4"H x 15"W x 19.7"D

Low profile models requires space approximately 11.5' x 11' below floor level for hoses because of its shorter height

12 volt models with white bowls are stocked.

24volt power options and other colours can be ordered.

Model	High profile#	Low profile#	Intake type
Silence	TEC38097	TEC38103	Fresh water solenoid
Silence	TEC38117	TEC38121	Supply water pump
Silence Plus	TEC38101	TEC38355	Fresh water solenoid
Silence Plus	TEC38119	TEC38363	Supply water pump



EASYFIT ECO TOILETS

From the experts in macerating toilets, EasyFit Eco utilizes Turbine Technology to produce a powerful, clog-resistant flush. (Requires installation kit)

- 6' of vertical lift for installation flexibility
- Eco-friendly – saves water and money
- Space-saving design
- Ultra quiet
- Comfortable wood seats
- Limited 2-Year Warranty
- Attractive, contemporary styling
- Leaves a clean, dry bowl after every powerful flush
- Simple switch – add water (press up) and flush (press down)
- Available in White, 12V



Dimensions:

High: 17.4" H x 14.3" W x 18.7" D

Low: 14.3" H x 14.3" W x 18.7" D

TEC38485 High, white, 12V

TEC38486 Low, white, 12V

24V models and other colours available by special order

Installation kits

TEC38670 12V solenoid, wire harness & wall switch

TEC38671 12V wire harness & wall switch (owner supplied raw water pump)

TEC38679 12V raw water pump, wire harness & wall switch





EASYFIT™ PREMIUM & PREMIUM PLUS TOILETS

With compact designs, exquisite china exterior and electric flush, the EasyFit Premium & Premium Plus are powerful performers. The wall switches are back-lit and programmable to increase or decrease water use.

Installation kit must be ordered with toilet

Premium & Premium Plus features:

- Whisper-quiet flush operation
- Vitreous china for homelike feel, maximum flush coverage
- Easy cleaning and minimal maintenance
- Saves water
- Completely self contained to save space
- Optimized for minimal water use
- Available in high and low profile

Premium Plus features:

- Lock-Out electronics prevent flushing when tank is full
- Tank status is monitored by a new generation, non-invasive sensor

Dimensions:

High: 17.4" H x 13" W x 18.7" D

Low: 14.3" H x 13" W x 18.7" D

TEC38508 Premium high, white, 12V

TEC38510 Premium low, white, 12V

TEC38830 Premium Plus high, white, 12V

TEC38832 Premium Plus low, white, 12V

24V models & bone colour versions available by special order

Installation kits for Premium & Premium Plus models:

TEC38859 Solenoid, 12V

TEC38861 Raw water fitting & electrical connector 12/24V

TEC38862 Raw water pump & fittings, 12V



ATLANTES FREEDOM®

Freedom from clogging and small marine size bowls, excellent performance even in commercial applications. Powerful bronze cutting blades designed to "shred" most objects.

- One piece china bowl
- Quiet "whisper flush" models available
- Simple flexible installation
- Heavy duty attractive stainless steel flush handle
- Low power consumption
- Three modes of operation - fill, dry flush or fill and flush
- Handle with timer operation has "fail-safe" mode
- Easy to clean and maintain
- Diaphragm intake pump can be run dry
- Pressurized freshwater or raw water intake models
- Microprocessor control and solid state circuit breaker
- No fuses or relays inside the unit

Size: 14-3/4"H x 18-3/4"D x 13-5/8"W

12 Volts DC

Colour: White

Bowl: Household size

Models:

Self contained	Freshwater Solenoid	Remote Intake pump	Flush Type
A712	A7F12	A7R12	Momentary lever
A812	A8F12	A8R12	Timed lever
A912	A9F12	A9R12	Wall switch

Note: Other voltages and elongated bowl model available by special order.





MARINE ELEGANCE TOILET

Raritan's vortex-vac technology eliminates the need for vacuum pumps and tanks as well as foot pedals and other mechanical components that can fail. This results in a system that is easier to install and maintain. The vacuum is created in the bowl eliminating old style below deck components. The turbo flushing action combined with the remote switch that offers many water usage options team up to conserve water. These are 12v models with white bowls; 24v option and bone bowls are available.

- Small footprint for compact installation
- Available in slant or straight back to fit more hull shapes
- One piece vitreous china bowl means great hygiene and looks
- Quiet operation
- Built in shredder reduces clogs
- Built in loop design eliminates odors
- Fully programmable and easy to use control

Elegance dimensions: 14"W x 18 3/8" D

Low profile height: 14"H

Tall profile height: 17"H

221HF012	Low profile, straight back with 12V fresh water solenoid
221HR012	Low profile, straight back with 12V supply water pump
220HF012	Low profile, slanted back with 12V fresh water solenoid
220HR012	Low profile, slanted back with 12V supply water pump
231HF012	High profile, straight back with 12V fresh water solenoid
231HR012	High profile, straight back with 12V supply water pump
230HF012	High profile, slanted back with 12V fresh water solenoid
230HR012	High profile, slanted back with 12V supply water pump



JABSCO

DELUXE FLUSH ELECTRIC TOILET

Deluxe Flush toilets feature a multifunction 'one touch' control pad offering 4 rinse and flush options, using as little as 1 liter of water.

- Household size seat
- Virtually silent operation for comfort on board
- Fresh or salt water flush options
- Anti-blocking centrifugal flush pump
- No 'dirt traps' for maximum hygiene and easy cleaning
- Low power consumption

Dimensions: 14-3/4"W x 17-5/8"D

Power: 12VDC (25A Fuse rating)

Inlet: 3/4"

Outlet: 1-1/2"



14-3/8" High#	17-1/4" High#	
58060-1012	58020-1012	Slanted back bowl with solenoid valve
58260-1012	58220-1012	Slanted back bowl with 12VDC intake pump
58080-1012	58040-1012	Straight back bowl with solenoid valve
58280-1012	58240-1012	Straight back bowl with 12VDC intake pump



JABSCO®

LITE FLUSH TOILET

Retro-fit your existing manual toilet or to give your bathroom a modern stylish look. The innovative design offers both low power and water consumption with an integral rinse and waste pump system.

- Virtually silent operation
- Choice of leaving bowl wet or dry after use
- Non-clogging large bore flush pump
- Macerates waste

Internally mounted, high speed, non-clogging, centrifugal, waste macerating pump driven by powerful 240 watt, 12 or 24 VDC, permanent magnet motor with ball bearings and robust ceramic seal.

Dimensions: 14-3/4"H x 15-3/4"W x 15-3/4"D

Power: 12VDC (25A Fuse rating)

Inlet/outlet: Inlet 3/4" / outlet 1-1/2"

58500-0012 12V with foot switch

58500-1012 12V with control panel


JABSCO®

QUIET-FLUSH ELECTRIC TOILET

Incorporates the same powerful macerating discharge pump of the 37010-Series Electric Toilet, but receives its bowl rinse water from any on-board pressurized water system that provides 3-1/2 gallons per minute.

The system includes an easy to use multi-function control panel. It allows the operator to select between a normal flush cycle or alternatively a bowl fill or empty function. Also included is an electric solenoid valve to control the supply of rinse water to the bowl. It is assembled on a stainless steel mounting bracket with integral anti-siphon breaker to prevent contamination of the vessel's potable water supply.

Power: 12VDC (25A Fuse rating)

Inlet: 3/4"

Outlet: 1" (1" to 1-1/2" hose adaptor included)

37045-0092 Compact bowl model 13-3/4"H x 13-7/8"W x 17-5/8"L

37045-1092 Household bowl model 14-3/8"H x 14-5/8"W x 19-3/4"L



SEAERA™ ELECTRIC TOILET

A quality, economical, high performance electric macerating marine toilet that meets boaters' demand for a small size.

- Simple, flexible installation for mounting above or below waterline
- Bowl can be rotated 90° for mounting into confined spaces
- Heavy-duty marine push-button switch included
- Sea water models include an in-line strainer
- Fits 1-1/2" or 1" discharge line with no adapters
- Can be run dry without damaging the pump

Bowl Dimensions: 16-3/4"D x 3"W

Base Dimensions: 14-1/2"H X 13-3/8"D x 6-5/8"W

160MF012 12VDC w/solenoid standard bowl

160MI012 12VDC w/integral pump standard bowl

160HI012 12VDC w/integral pump household size bowl

(24,32 VDC and 120/240 VAC models are available by special order)





ELECTRIC MARINE TOILET

With the simple push of a button, the self-priming flush pump rinses the bowl as the macerator and high capacity scavenger pump grinds up waste and pumps it out. Included with the toilet is a heavy duty push-button switch.

Power: 12VDC (25A Fuse rating)

Inlet: 3/4"

Outlet: 1" (1" to 1-1/2" hose adaptor included)

37010-0090 Compact bowl model 13-3/4"H x 13-7/8"W x 17-5/8"L

37010-1090 Household bowl model 14-3/8"H x 14-5/8"W x 19-3/4"L

37040-0000 Seal & Gasket kit

37041-0010 Replacement motor pump assembly



COMFORTMATE™ ELECTRIC FLUSH TOILET

The ComfortMate™ toilet offers a "revolutionary new design" that combines best-in-class comfort with a compact footprint and residential styling.

- Easy-to-clean full china bowl with residential-size seat
- Convenient pushbutton control
- Attractive "just-like-home" look
- Powerful nozzle flush for robust flush coverage
- Compact footprint fits in the tightest of spaces

T41211 12V white



ELECTRIC TOILET BASE ASSEMBLY

Converts manual toilets to full electric operation with no need to change inlet and outlet hose size.

- Converts most toilets with 4 bolt screw pattern (3-3/4" bolt circle)
- Push button flushing
- Flushing pump self priming up to 4ft
- May be installed 3ft (1m) below the water line

Inlet: 3/4", Discharge: 1" or 1-1/2"

	Volts	Fuse/Breaker
37010-0092	12 VDC	25
37010-0097	24 VDC	15



SEAERA CONVERSION KIT

An economical way to replace your electric or convert manual toilet to electric.

- Heavy duty marine push button switch included
- With integral seawater pump - includes strainer
- Fits most existing bowls
- Straight discharge fits both 1-1/2"(38mm) and 1"(25mm) discharge line with no adapters required.

160LI012 12 Volt DC, 18amp
(24,32VDC and 120/ 240VAC available on special order)



PHC MANUAL TOILET

All the benefits of the world-renowned PHII toilet on a simpler base at a better price! Ideal for small sailboats and powerboats - New retractable handle enables owners to install toilet in confined areas more easily.

- Lever handle pumping – More efficient, simpler and cleaner than competing vertical piston pumps
- Powerful flushing action - 66% Larger diameter housing and piston clears bowl quickly using less strokes
- Pump construction - Engineered polymer offers superior strength and durability over PVC.
- Precision check valves that ensure self priming capabilities up to 4 feet.
- Full size joker valve – reduces clogs and increases pump performance
- Conserves water – Simple ¼ turn valve allows boaters to easily utilize dry pump option
- Simple and flexible installation allows for mounting above or below waterline
- Each unit is assembled by hand, individually tested and built 100% in the USA.

PHC PHII Pump on a Compact II Base, compact bowl

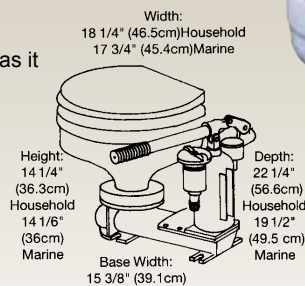


PHII MANUAL TOILET

Reliable, high quality, non-macerating manual or electric toilet. Designed to use sea water.

- Simple design means economical, trouble-free quiet operation
- Powerful flushing action
- Easy to dry pump
- Double action piston pump simultaneously draws new flush water as it discharges the wastewater
- Easy to convert from manual to electric with upgrade kit
- Can be mounted for pumping on either left or right side

PHII Manual, marine-size bowl
PHECKII12 Electric conversion kit (manual to electric) 12V
PHRKII Repair kit for PHII (pre 1992)
PHRKIIC Repair kit for PHII (after 1992)



TWIST 'N' LOCK™ MANUAL TOILET

The Jabsco Manual Toilet has just got better thanks to the introduction of the NEW Twist N Lock™ feature. The intuitive, simple to use Twist N Lock handle works by locking the re-designed piston assembly into place, helping to prevent back flow of any waste water into the bowl. This is achieved by a bayonet style lock incorporated into the handle that is locked by putting slight pressure and twisting when in the lower position. This applied pressure pushes the redesigned plunger down onto the base valve gasket holding it firmly shut.

The Jabsco Twist N Lock manual toilet still includes all of the original features such as the rotating outlet nozzle, the angled powerful self priming pump, and the comfortable handle and easy to use flush control. This, coupled with the easy to clean crevice free design, still makes Jabsco the number one manual toilet manufacturer in the world.

29090-3000 Compact bowl model 13-3/16"H x 17-3/4"W x 16-3/4"L
29120-3000 Household bowl model 13-5/8"H x 18-5/8"W x 19-5/16"L
29045-3000 Major service kit (2008)
29040-3000 Complete pump assembly



COMFORTMATE™ MANUAL FLUSH TOILET

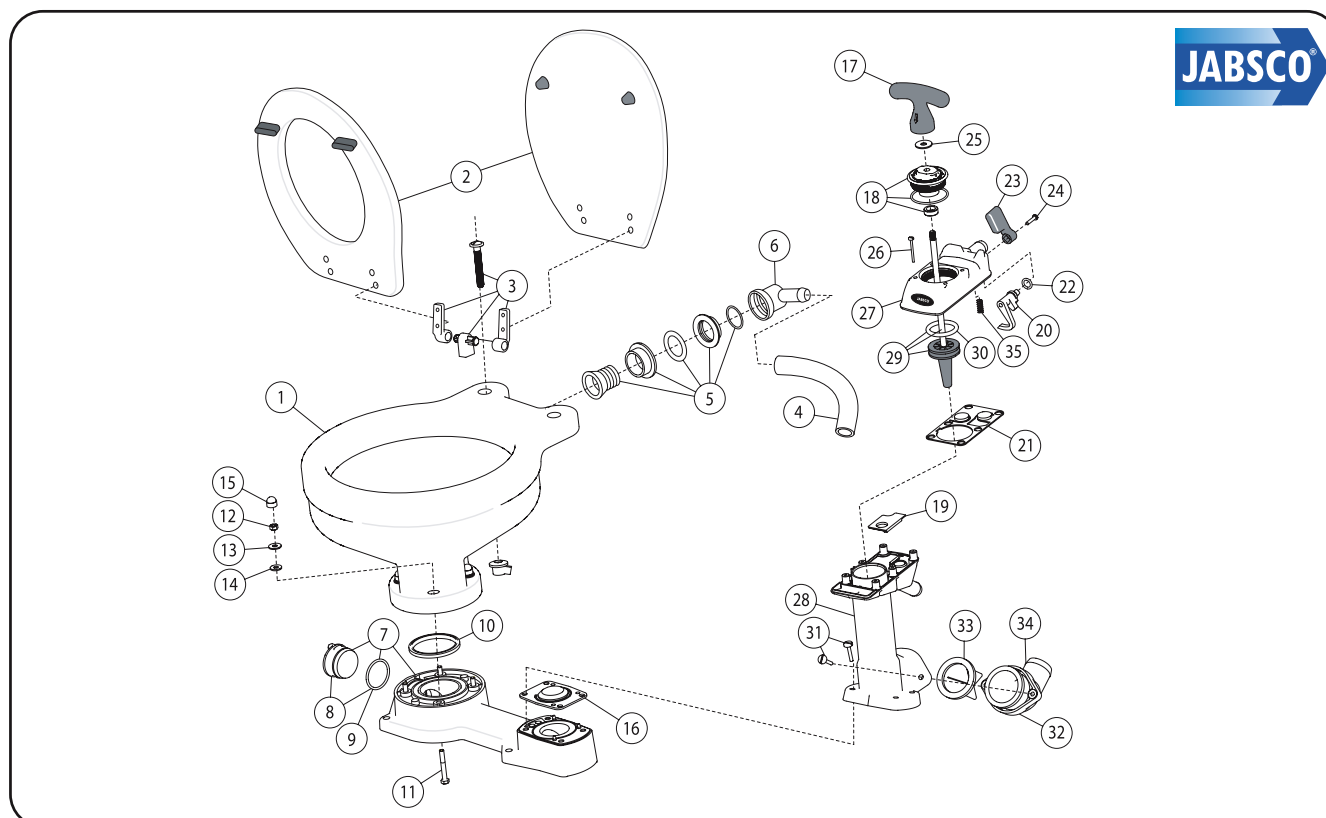
This unique toilet, with separate manual pump, offers installation options never possible before. Easily switched for left or right hand applications. Set your own distances as the pump and bowl are joined only by hose. With all of the quality that you have come to expect from Thetford.

- Easy-to-clean full china bowl with residential-size seat
- Easy-to-grip handle and easy-to-use pump mechanism
- Powerful nozzle flush for robust flush coverage
- Compact footprint fits in the tightest of spaces

T41160



29090-3 & 29120-3 Series Jabsco Twist 'n' Lock Manual Toilets (2008 onwards)



Repair Kits Available		
Kit	Part No	Description
A	29045-3000	SERVICE KIT (FROM 2008)
B	29040-3000	PUMP ASSEMBLY
C	29094-3000	VALVE COVER ASSEMBLY
D	29051-2000	PUMP CYLINDER ASSEMBLY
E	29047-0000	BASE TO BOWL MOUNTING KIT

Key	Description	Qty Per Toilet	Part No	Qty per Repair Kit				
				A	B	C	D	E
1	BOWL COMPACT TOILET	1	29096-0000					
	BOWL REGULAR TOILET	1	29126-0000					
2	SEAT, LID & HINGE SET	1						
	COMPACT TOILET		29097-1000					
	REGULAR TOILET		29127-1000					
3	HINGE SET (1 PAIR)	1						
	COMPACT TOILET		29098-1000					
	REGULAR TOILET		29098-2000					
4	HOSE COMPACT TOILET	1	29035-1000					
	HOSE REGULAR TOILET	1	29035-1001					



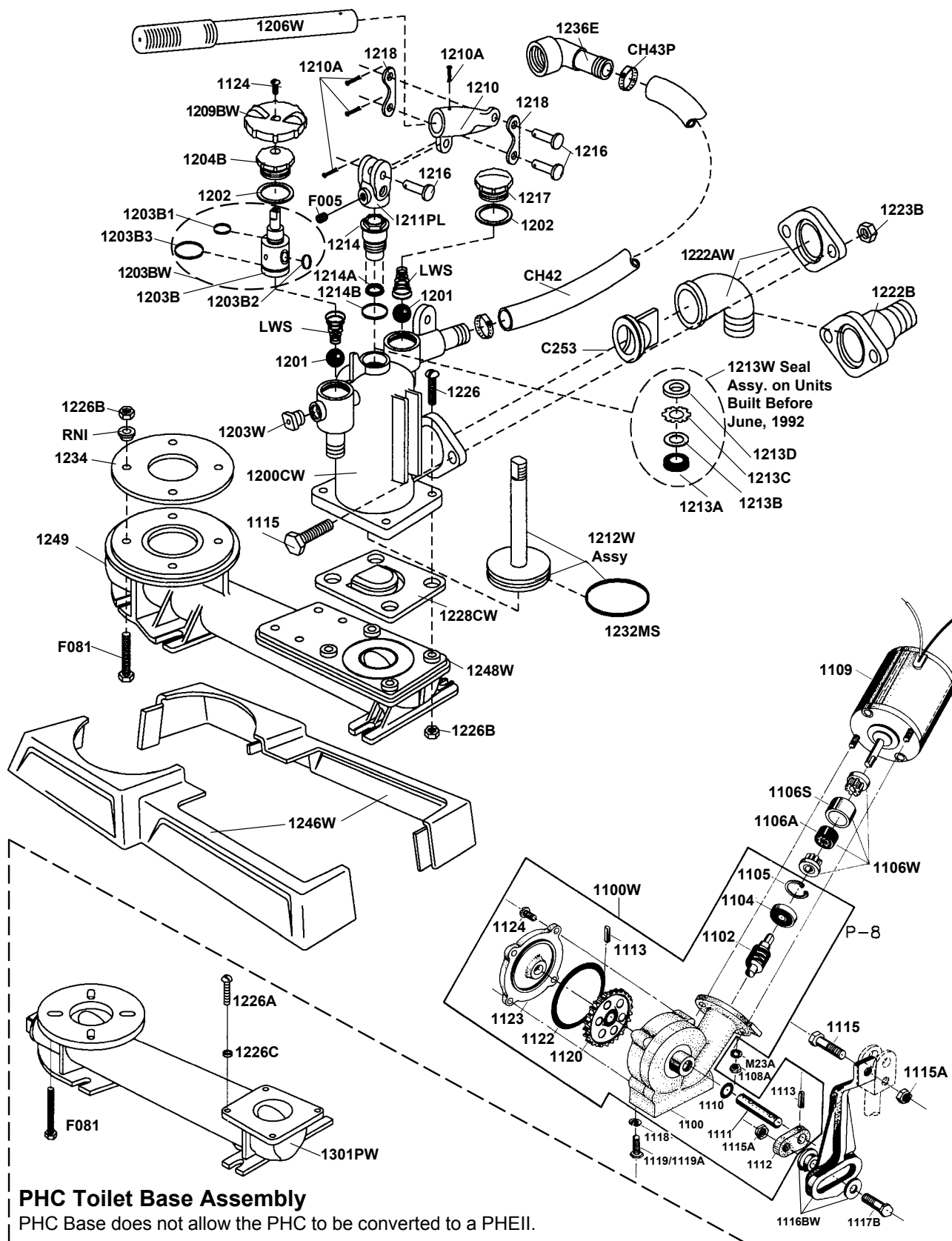
MAJOR SERVICE KITS:

- 29045-3000** For year 2008 & up models with Twist N' Lock
29045-2000 For year 1998 to 2007 models with grey handle
29045-0000 For years Up To 1997 models with black handle

Key	Description	Qty Per Toilet	Part No	Qty per Repair Kit				
				A	B	C	D	E
5	INTAKE SEAL +	1						
6	INTAKE ELBOW	1	29048-0000					
7	BASE, PLUG + O-RING ASSY	1	29041-1000					
8	PLUG + O-RING ASSY (FROM 2003 - BAYONET)	1	29028-2000					
9	O-RING (PLUG)	1						
10	O-RING (BOWL)	1						1
11	BOLT (S.S)	4						4
12	NUT (S.S)	4						4
13	WASHER (S.S)	4						4
14	WASHER (NYLON)	4						4
15	CAP	4				2		4
16	BASE VALVE GASKET	1	29043-0000	1	1		1	
17	HANDLE	1				1	1	
18	SEAL HOUSING ASSY (FROM 2008)	1	29044-3000	1	1	1		
19	TOP VALVE SEAT	1		1	1	1	1	
20	CAM	1				1	1	
21	TOP VALVE GASKET	1	29042-0000	1	1			
22	O-RING (FLUSH LEVER)	1		1	1	1		
23	FLUSH CONTROL LEVER	1				1	1	
24	SCREW (FLUSH LEVER)	1		1	1	1		
25	BUFFER	1		1	1			
26	SCREW (VALVE COVER)	6		1	6	6	1	
27	VALVE COVER	1			1	1		
28	PUMP CYLINDER	1				1	1	
29	PISTON, ROD & O-RING ASSY	1	29046-3000			1		
30	O-RING (PISTON)	1				1	1	
31	SCREW (PUMP CYLINDER)	6		1	3		3	
32	DISCHARGE FLANGE	1	29091-1000			1	1	
33	JOKER VALVE	1	29092-1000	1	1		1	
34	DISCHARGE ELBOW	1	29029-1000			1	1	
35	VALVE SPRING (ONLY FROM 1998)	1		1	1	1	1	



EXPLODED PARTS VIEWS, PHII MARINE TOILET AND PHECKII ELECTRIC CONVERSION UNIT





PARTS FOR RARITAN PHII AND PHEII MARINE TOILET

Part No.	Description	Part No.	Description
1115	3/8"-16 x 1 1/2" Hex Head S/S Bolt(2)	1106W	Coupling w/Sleeve, complete
1124	1/4"- 20 x 1/2" R.H. Machine Screw	1108A	Motor Mounting Nut (2)
1200CW	Pump Housing	1109*	Motor (12, 24, 32, 120V DC)
1201	Intake and Discharge Valve Ball (2)	1110	"O" Ring
1202	Intake and Discharge Valve Gasket (2)	1112	Link
1203BW	Intake Valve Body w/"O" Rings (1203B, 1203B1, 1203B2, 1203B3)	1113	Link Pin, Worm Gear Pin
1203W	Air Valve Assembly	1115	3/8" - 16 x 1 1/2" Hex Head S/S Bolt
1204B	Intake Valve Cap	1115A	3/8" - 16 Hex Jam Nut S/S
1206W	Handle	1116BW	Connecting Rod Assy. (1116B, 1114B, 1114D)
1209BW	Valve Handle	1117B	Crank Bolt
1210	Handle Socket	1118	Lock Washer (4)
1210A	Cotter Pin (4)	1119/1119A	Hex Head Screw (4)
1211PL	Piston Rod Yoke	1120W	Worm Gear Assy.(1111, 1113, 1120)
1212W	Piston Rod Assembly w/"O" Ring (1232MS)	1122	"O" Ring
1213W	Piston Rod Seal Assembly, Pre-6/92, (Incl. 1213A, B, C, D)	1123	Gear Box Cover
1213A	"U" Cup Seal (Pre-6/92)	1124	1/4"- 20 x 1/2" R.H. Machine Screw(4)
1213B	Delrin Washer (Pre-6/92)	M23A	#10 Lockwasher S/S (2)
1213C	Snap Ring (Pre-6/92)		
1213D	White Neoprene Washer (Pre-6/92)		
1214W	Piston Shaft Seal Cartridge Assy (1214, 1214A, 1214B) Fits pumps mfg. after 6/92		
1216	Clevis Pin (3)		
1217	Discharge Valve Cap		
1218	Fulcrum Link (2)		
1222AW	90° Discharge w/Flange (Std.)		
1222B	Straight Discharge (Opt.)		
1223B	Flange Nut 3/8"-16 S/S (2)		
1226	Housing Screw 1/4"-20 x 1" S/S (4)		
1226B	Nut, 1/4"-20 S/S (8)		
1228CW	Flapper Valve Assembly (1/2" Holes)		
1232MS	Piston "O" Ring		
1234	Bowl Gasket		
1236E	Bowl Elbow		
1246W	Base Cover (2 pcs.)		
1248W	Base w/Plug		
1249	Base Plug		
1250W	Base and Cover Assy.(1246W and 1248W)		
C253	Joker Valve		
CH42	Hose (3/4" I.D.)		
CH43P	Hose Clamp (2)		
F005	1/4"- 20 x 5/16" S/S Socket Set Screw		
F081	Bowl Bolt 1/4"-20 x 2 S/S Hex head		
LWS	Intake and Discharge Valve Spring (2)		
RNI	Nylon Shoulder Washer		

PARTS FOR ELECTRIC DRIVE

Part No.	Part Name
1100W	Gear Box Housing Assembly
1102	Worm
1104	Ball Bearing
1105	Snap Ring
1106AS	Rubber Connection w/Sleeve

PHC PARTS

Part No.	Description
1226A	Housing Screw 1/4"-20 x 1 1/4" S/S (4)
1226C	Plastic Spacer Washer (4)
1301PW	Toilet Base Assembly (1301P, 1343)
F081	Bowl Bolt 1/4"- 20 x 2" S/S Hex head

RARITAN INSTALLATION ACCESSORIES

Part No.	Description
163000	In-Line Strainer
164000	Push button switch
CHTII	Compact holding tank - 5 gallons
CON22	Concentrate 22 oz. bottle
SH	Sanitation Hose (sold by the foot)
SL	Super Lube 1/2 oz. tube
TWK	Toilet Water Marine Head Disinfectant Kit
VL 3/4	Vented Loop 3/4"
VL 1 1/2	Vented Loop 1 1/2"
YV	"Y" Valve

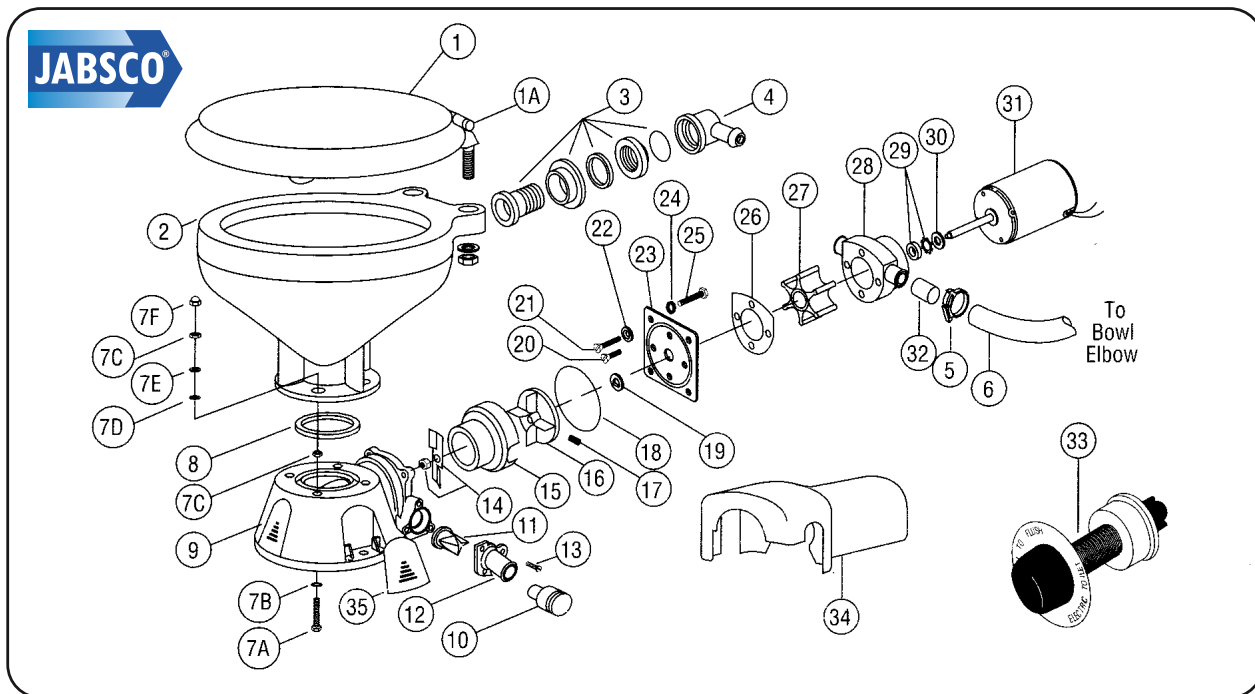
BOWL & SEAT

Part No.	Description
1236AW	Spud assy.
1237W	Marine-size Bowl assy.
1244W	White Household-style Bowl assy.
1238A	Marine-size seat & cover
1245	Household-style seat & cover
VCAP	Vinyl Cap

OVERHAUL KITS

Part No.	Description
PHRKII	PHII&PHEII-U-cup Seal (mfg.before 6/92)
PHRKIIC	PHII&PHEII-Cartridge Seal (mfg.after 6/92)
PHIIPUMP	PHII Pump replacement assembly
*Specify Voltage	

37010 Series Electric Toilets SERVICE PARTS AND KITS



Key	Description	Qty per Toilet	Part No
1	Seat & Cover, Compact Size	1	29097-1000
	Seat & Cover, Regular Size	1	29127-1000
1A	Hinge Set (1 pair)	1	
	Compact Toilet		29098-1000
	Regular Toilet		29098-2000
2	Bowl, Compact Size	1	29096-0000
	Bowl, Regular Size	1	29126-0000
3&4	Bowl Spud & Intake	1	29048-0000
	Elbow & O-ring		
5	Clamp	1	18753-0044
6	Hose	1	29035-0001
7	Bowl Installation Hardware	1	18753-0637
	7A Philips Head Screw**	4	
	7B Washer, Starlock**	4	
	7C Hex Nut** (two places)	4	
	7D Washer, Plastic**	4	
	7E Washer Stainless steel**	8	
	7F Nut Cap**	4	
8	O-Ring Bowl/Seal	1	44101-1000



Key	Description	Qty per Toilet	Part No
9	Base Assembly**	1	37004-1000
10	1"-1 1/2" Hose Adaptor	1	98023-0080
11	Joker Value* **	1	44106-1000
12	1" Discharge Port**	1	44107-1000
13	Screw**	3	96050-0568
14	Chopper Plate† with Lock Nut	1	37056-1000
15	Macerator Housing†	1	37014-0000
16	Centrifugal Impeller†	1	37006-0000
17	Set Screw†	1	18753-0492
18	O-ring*†	1	43990-0066
19	Sealing Sleeve†	1	37018-0000
20	Screw†	2	91009-0096
21	Screw†	2	91010-0130
22	Washer, Plastic*†	2	35445-0000
23	Wearplate††	1	37018-0000
24	Lock Washer #10, Stainless Kitt	4	
25	Screw†	4	91027-0011
26	Gasket*†	1	12558-0000
27	Flexible Impeller*†	1	6303-0003
28	Body†	1	12554-0000
29	Seal & Retainer*†	1	1040-0000
30	Slinger†	1	6342-0000
31	Motors:		
	Motor – 12 Volt†	1	37064-0000
	Motor – 24 Volt†	1	37065-0000
32	Adaptor	2	93003-0240
33	Switch and Plate	1	37020-0000
34	Motor Cover†	1	43990-0051
35	Screw Cover (3 each)	1	37003-1000
	Service Kit:		37040-0000
	Motor/Pump Assy. 12V†		37041-0010
	Motor/Pump Assy. 24V†		37041-0011

* Parts supplied with Service Kit 37040-0000

** Parts included with base 37004-1000

† Wearplate #23 includes Sealing Sleeve #19 and Pump/Base O-ring #18

‡ Parts included in Motor-Pump Assembly.

THETFORD PORTABLE TOILETS

Our Marine Porta Potti is ready to go aboard when you are. Compact and convenient, these portables can be secured with hold-downs when the boat is in motion. **MSD models:** are designed for dockside pumpout hookup, they have a 90° 1-1/2" pump out fitting and 3/4" vent fitting.

Porta-Potti Models

- Modern appearance
- Clean seat and cover design
- Ergonomic Carrying Handle
- Lid Latch
- Redesigned Valve Handle, Fill Cap & Pump
- Rotating Pour-Out Spout
- Deodorant sample included



THETFORD
MARINE

PORTA POTTI® 550P MSD MARINE

Dockside pumpout hookup included

Fresh Water Tank: 4.0 gallons

Waste Water Tank: 5.5 gallons

Average Flushes: 56

Pump type: Piston

T92856

THETFORD
MARINE

PORTA POTTI® 260P MSD MARINE

Dockside pumpout hookup included

Fresh Water Tank: 2.6 gallons

Waste Water Tank: 2.6 gallons

Average Flushes: 27

Pump type: Piston

T92868

THETFORD
MARINE

PORTA POTTI® 320P

Fresh Water Tank: 4.0 gallons

Waste Water Tank: 3.2 gallons

Average Flushes: 33

Pump type: Piston

T92850

THETFORD
MARINE

PORTA POTTI® 260B MARINE

Fresh Water Tank: 2.6 gallons

Waste Water Tank: 2.6 gallons

Average Flushes: 27

Pump type: Bellows

T92862

THETFORD
MARINE

PORTA POTTI® 260P MARINE

Fresh Water Tank: 2.6 gallons

Waste Water Tank: 2.6 gallons

Average Flushes: 27

Pump type: Piston

T92865



THETFORD
MARINE

PORTA POTTI® CURVE

The Porta Potti Curve features a user-friendly, battery-powered flush to complement its sleek, modern design. A raised seat height and increased bowl size create a more comfortable and relaxed sitting position. Controls are hidden to keep them in safe, working order and maintain a smooth appearance. An integrated toilet paper holder ensures the ultimate in convenience. Fresh and waste water tanks can be easily monitored with a simple check of the easy-to-read level indicators. The Curve also features an improved water tank carrying handle for easy transportation.

- Battery-powered flush
- Sleek, modern and homelike design
- Comfortable seat height
- Increased bowl size
- Hidden controls
- User-friendly Flush Lever
- Level Indicators for fresh and waste water tanks
- Integrated Toilet Paper Holder
- Improved Water Tank Carrying Handle
- Optional Hold-Down Plate

Fresh Water Tank: 4.0 gallons

Waste Water Tank: 5.5 gallons

Average Flushes: 56

T92360



DOCK EDGE INC.

DOCKEDGE PORTABLE TOILETS

A leak-proof, odour-proof seal with quick release separation latch(es) for the fresh water & waste holding tanks. Generous fresh water reservoirs mean the unit doesn't have to be refilled as often and there are several waste tank capacities available to suit your needs. Every model has a waste level indicator and smooth high-gloss finish that makes cleaning easy. All models include a bidirectional piston pump rinse.

The DOCF120101 & DOCF150101 models also incorporate a directional pour spout which is easily cleaned and stored in an integral storage compartment.

PASSPORT® POTTY MODELS

		Dimensions(HxWxD)	Fresh water Capacity.	Waste Capacity.	Water level indicator	Waste level indicator	Hold-Down Brackets
DOCF008002	8L Passport® Potty	11.75" x 13.5" x 14.5"	2.6 US Gal.	2.1 US Gal.	NO	YES	Optional
DOCF120101	12L Passport® Potty	13.6" x 13.5" x 14.5"	2.6 US Gal.	3.2 US Gal.	NO	YES	Optional

VISA® POTTY MSD MODELS with 90° rotatable pump out and vent fitting assembly

DOCF308	8L Visa® Potty	12.2" x 13.5" x 14.5"	2.9 US Gal.	2.1 US Gal.	YES	YES	Included
DOCF319	18L Visa® Potty	16.3" x 13.5" x 14.5"	2.9 US Gal.	4.8 US Gal.	YES	YES	Included





CAN AD HOLDING TANK TREATMENT

100% biodegradable and environmentally safe. CAN AD speeds up the natural process of "good" aerobic bacterial action with oxygen and preventing "bad" anaerobic bacterial action that produces hydrogen sulphide gas, "the smell". Breaks down waste and tissue, lubricates valves & prevents clogging.

CAP365 32oz Granular

CAP367 1L Liquid

CAP368 4L Liquid



HOLDING TANK TREATMENT

Decomposes waste into odorless by-products. Prevents recurrence of foul odors. Effective against organic waste, proteins, cellulose (tissue), oils and greases. Lime fresh fragrance

CAP360 1L Liquid



POWDER HOLDING TANK DEODORIZER

Unique dry mix neutralizes odors instantly. The all natural ingredients liquefy waste for easier pumping, dumping. Ingredients are edible - 100% safe around children & pets. Aids and boosts biological action in septic tanks & systems. Non-staining - odorless - accurate measuring scoop - reusable containers.

CAP363 150g

CAP364 450g



HEAD-O-MATIC SHOCK TREATMENT

Instant treatment. Add to whistle clean the holding tank at beginning and end of season. Also for use midseason if malodour conditions are present. Pour one bottle into the toilet and flush.

AMA4025 900 ml



CANNDURE ODOUR CHECK

Colourless and odourless (requires no perfume because it works). The most effective liquid treatment on the market today. Concentrated. No dye to stain.

AMA9951 1 litre



AQUA KEM® BLUE

- Liquefies waste and prevents clogging
- Works in all weather conditions, hot or cold
- Helps clean holding tank walls and drain lines
- Available in liquid or granular form

T24807 6 Pack of 8oz liquid

T14762 32oz liquid

T28729 1.9 litre (64oz) liquid

T24488 8 x 2oz Granular pouches



ECOSMART TOSS-INS HOLDING TANK DEODORANT

- The ultimate in convenience!
- Goof-proof - no measuring and no spills!
- Superior odor control
- Quickly breaks down and liquefies waste and tissue to prevent messy clogs
- Eco-Logo recognized!
- Formaldehyde-Free
- 12 Toss-Ins per foil pouch

T94012 12-pack



ECOSMART HOLDING TANK DEODORANT

- Superior odor control
- Quickly breaks down & liquefies waste and tissue to prevent messy clogs
- Detergent additive keeps tanks clean
- Non-staining green dye
- Liquid or Toss-Ins, the ultimate in convenience!
- Eco-Logo recognized!
- Formaldehyde-Free

T94004 36oz liquid



ECOSMART ENZYME HOLDING TANK DEODORANT

- Natural enzymatic deodorizer
- Quickly breaks down and liquefies waste and tissue to prevent messy clogs
- Detergent additive keeps tanks clean
- Non-staining orange dye
- Eco-Logo recognized!
- Formaldehyde-Free

T94008 36oz liquid



HEAD-O-MATIC BLUE GRANULAR

Easy to use granular, formulated for marine, RV, aircraft and transportation. Unique formula for long term odour control. Also contains a lubricant to protect shafts and seals. One ounce per gallon.

AMA4070 400 g



TANK-ETTE

Instantly solves head odours. Installs in minutes in the raw water intake on most manufacturer's marine head systems. Every month or so simply "pop" a Head-O-Matic "Bullet" into the "Tankette" (no more messy blue chemicals). This system treats intake line (where the majority of odours originate), the bowl, the discharge lines and the holding tank with each use.

AMA4106

AMA4105 Replacement bullets 6/pk





HOLDING TANK CLEANER

- Start out fresh
- Deodorizing cleanser
- Cleans and treats the ENTIRE sanitary system.
- Permanent or long lasting relief from odor is assured
- Septic compatible
- Biodegradable

CAP369 1L



DRAIN VALVE LUBRICANT

- Lubricates system and drain valves
- Prevents seal wear and sticky drain valves
- Coats drain lines from inside

T24451 20 oz bottle



TISSUE DIGESTER

- Breaks down toilet tissue in holding tanks
- Helps relieve a tissue clogged line
- Keeps drain lines clean and free flowing
- 100% biodegradable

T24452 16 oz bottle

Sudbury®



MARINE TOILET CONDITIONER

Cleans, lubricates and deodorizes. Contains a special non-mineral oil that will not harm leather, rubber or fittings. Conditions by impregnating and lubricating all parts. Eliminates rather than masks odours.

SUD825Q 32oz bottle



AQUA CLEAN® KITCHEN & BATH CLEANER

- Non abrasive - soft scouring
- Works in 15 min. without scrubbing
- Harmless to all plastic parts & seals

T20785 32 oz



AQUA SOFT® TOILET TISSUE

- Helps prevent messy clogs
- Flushes easily - rapidly dissolves
- Specially formulated
- 4 roll per pack
- Perfect for all holding tanks

T03300 2-ply (4 rolls per pack)

T20804 1-ply (4 rolls per pack)



TST® TOILET TISSUE

Fast-dissolving, clog-resistant, biodegradable and septic tank safe. Contains no dyes or perfumes.

CAM40276 1 Ply/4per bag, 280 sheets/roll

CAM40274 2 Ply/4per bag, 500 sheets/roll



OCEANair

DRYROLL

DRYROLL is an innovative waterproof toilet tissue dispenser ideal for combination shower/heads. Simple and inexpensive DRYROLL is a solution that will eliminate wet toilet paper completely.

- Waterproof
- Can be recessed or surface mounted
- All mounting hardware included
- Easy to install, operate and clean
- Hard wearing moulded ABS plastic

Colour options	White or beige
Fitting options	Surface or recessed

Part #	Description
DR-WH-S	Surface mount, White
DR-BE-S	Surface mount, Beige
DR-WH-R	Recessed mount, White
DR-BE-R	Recessed mount, Beige

For step by step measuring and installation guides visit: www.oceanair.co.uk/dryroll



Waterproof when closed



Automatic paper rewind



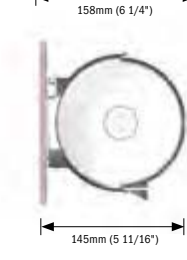
Automatic paper delivery



Recessed mounted



Surface mounted



185mm
(7 1/4")

155mm
(6 1/8")

188mm (7 3/8")

158mm (6 1/4")

74mm (2 15/16") 66mm (2 5/8")

145mm (5 11/16")



WATER/HOLDING TANKS

Every water and holding tank is manufactured from polyethylene that complies with FDA regulation CFR 177.1520 and meets Coast Guard standards. All openings are female National Pipe Threads (NPT). Each tank has two 1-1/2" openings, one 1/2" vent and one 1/2" supply opening.

	Gal.	Length	Width	Height
85-1859H	3	14"	11"	6-1/2"
85-1531H	6	16"	12"	8"
85-1667H	9	17"	14"	10"
85-1626H	13	24"	10"	14"
94-1627H	15	25"	11"	15"
85-1666H	20	30"	16"	10"
85-1532H	25	37"	17-1/2"	10"
85-1525H	35	36"	15-1/2"	16"
85-1533H	55	55"	13"	20"

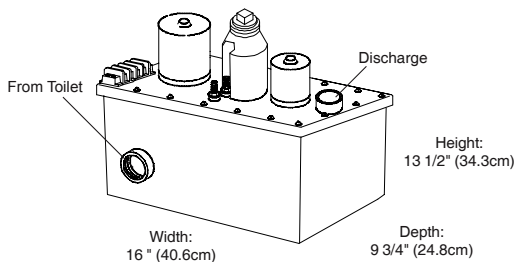


JABSCO

TYPE 3 WASTE MANAGEMENT SYSTEM

- Rugged 7.5 gallon (38 liter) polyethylene holding tank
 - Integral Run-Dry macerator pump
 - External linear sensor for fast and accurate level sensing
 - Touch-pad includes macerator activation control with auto shut-off, the activation feature has 3 second delay to avoid accidental operation
 - Illuminated level indication showing 8 level increments to full
 - Sleep mode so illuminated LED's don't create a disturbance
- Inlet: 1-1/2" hose barb
Outlet: 1-1/2" hose barb. Vent: 3/4"

38110-0092 7.5 gallon tank, 12VDC



ELECTRO SCAN WASTE TREATMENT SYSTEM

- US Coast Guard approved Type I marine sanitation device
- Generates its own natural disinfectant from salt water
- Coated electrodes use salt water to kill bacteria and viruses without adding harmful chemicals.
- Discharges with treatment levels that are safe for environmentally sensitive areas
- Microprocessor control monitors conditions inside the treatment unit and automatically informs user of changes in water conditions
- One-step activation with toilet switch or system status panel automatically activates toilet and treatment system
- LCD display that provides current system operation as well as historical data
- Treats each flush as waste is generated
- Can be used with two marine toilets
- Easy to install
- Can be used with both manual and electric toilets
- Available for 12, 24 and 32V DC

EST12 12 Volt DC
(24, 32 Volt DC units available by special order)



electro scan
A New Generation of Lectra/San

THE LEADER PURE AND SIMPLE

Simply stated, HRO is the #1 R.O. manufacturer in the world! From the original marine R.O. System in 1976 through today's leading edge technology, HRO Systems has conquered the industry for 25 years. Today's Horizon Seafari R.O. Systems have moved HRO Systems forward into the next quarter century.



Seafari



SEAFARI ESCAPE™ WATERMAKER

HRO's Seafari Escape Desalinator - with its unique EfficientSea Energy Transfer technology - brings efficient, compact, quiet watermaking to small and midsize sail or power boats. The unit's Energy Transfer Device eliminates the need for a high-pressure pump, reducing the electricity consumption of the R.O. system by as much as 75%. The R.O. process is achieved by recovering energy from the pressurized brine discharge and transferring that energy to relatively low-pressurized feed water. An ingeniously designed manifold and a two-valve flow control system deliver smooth, constant, fault-free automatic operation at a single touch of a button with no valves to adjust. Available as a compact self-contained unit (SEC) or a modular system (SEM) which allows the components to be installed separately.

Available in three output sizes:

200 & 400GPD Power options : 12VDC, 24VDC, 115VAC & 220VAC

600GPD Power options: 115VAC or 220VAC



Seafari



SEAFARI MINI COMPACT WATERMAKER

Ranging from 170 to 750 gallons of water per day, the Seafari Mini is the perfect solution for boats with little space to spare. Offering the largest production capacity for its size, you can be sure to have plenty of fresh water, without wasting precious storage or engine room space.

170GPD Power options: 12VDC, 24VDC, 115VAC & 220VAC

350 - 750GPD Power options: 115VAC or 220VAC



Seafari



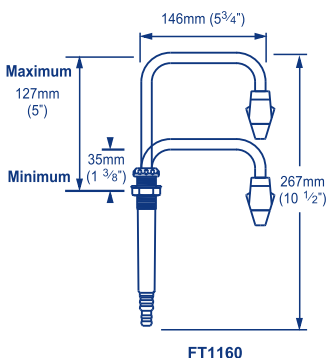
SEAFARI SFC/SFM VERSATILE WATERMAKER

The SFC Seafari Versatile has a hassle-free design and a versatile configuration which provides you with 5 inches of extra space for better fitting, access to membranes from either side of the system for easy maintenance, and better installation options. Its intuitive push button operating system gives users complete control over functions and settings. Simple and reliable, the new Seafari is the watermaker for every boater. Models available from 450-1800GPD with AC voltage options of 115/220VAC 1 or 3 phase & 440VAC 3 phase. Also available in modular (SFM) configuration. The modular design allows flexibility in the location of the components.

These units use a high pressure & booster pump.



Please contact our Sales Department for further information and pricing.

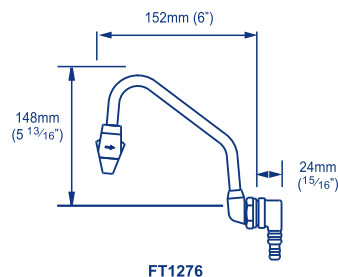


Whale® TELESCOPIC FAUCET

Outlet swivels through 360° and can be pushed down when not in use. When located centrally, two sinks can be serviced by one faucet. 1/2" ID hose. White.

FT1152 Faucet

FT1160 On/Off type faucet

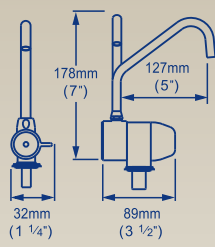
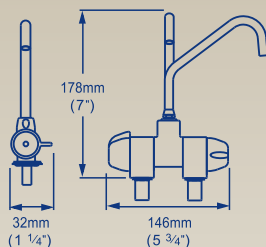


Whale® TUCKAWAY FAUCET

Fits neatly inside a rectangular or round sink bowl secured through the side wall. Swivels vertically and horizontally for storage allowing the sink to be covered over, giving additional worktop space. 1/2" ID hose. White.

FT1268 Faucet

FT1276 Faucet with twist on/off flow control



Whale® COMPACT RANGE

- Modern design ensures total flow control with only 90 degree movement of controls
- Ideal for sink areas where space is limited
- Spout neatly swivels and folds down
- High quality ceramic valves
- Connects directly to Whale system 15mm plumbing 1/2" male BSP thread

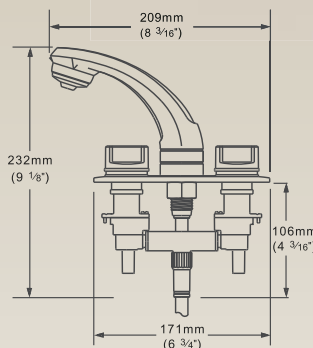
TB4110B Single cold chrome

TB4112B Mixer hot and cold Chrome

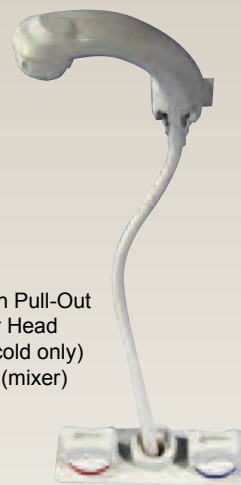
To connect to System 15 tubing, use WX1532B



Faucet
RT2210 (mixer)



Models with Pull-Out
Shower Head
RT1470 (cold only)
RT2498 (mixer)



Whale® ELEGANCE RANGE

- For pressure or microswitch systems
 - Ideal for tight spaces
 - Robust ABS construction
 - For use with all types of Whale galley pumps
 - Connects to Whale Quick Connect 15mm pipework
- Connection: 1/2" male thread (use WX1532B to connect to System 15)

RT2210 Mixer faucet, white

RT1470 Cold only faucet, white with pull-out Shower head (5' hose)

RT2498 Mixer faucet, white with pull-out Shower head (5' hose)



Whale® COMBO TAP/SHOWER

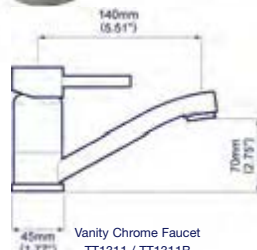
- Single operating lever and ceramic valves
 - Swivelling spouts available for both galley and washroom units
 - Attractive styling
 - Combination tap and shower head with retracting hose
 - Connects to Whale Quick Connect 15mm pipework
- Connection: 1/2" female BSP thread,
To connect to System 15 use WX1515B
Chrome finish

TT4180B

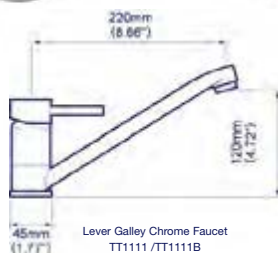
Combo mixer tap/shower with retracting hose



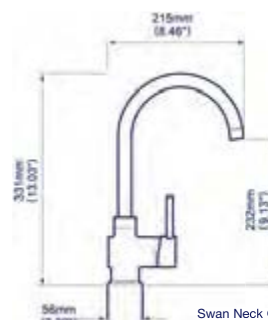
TT1311

Vanity Chrome Faucet
TT1311 / TT1311B

TT1111

Lever Galley Chrome Faucet
TT1111 / TT1111B

TT1211

Swan Neck Galley Chrome Faucet
TT1211 / TT1211B

METAL FAUCET RANGE

High quality modern style. Supplied with 1/2" BSP faucet tails and securing kit: rubber C washer, metal C clamp Threaded bar with nut and sealing O ring.

TT1111 Single lever galley chrome faucet-swiveling

TT1311 Single lever vanity chrome faucet-swiveling

TT1211 Single lever swan neck galley chrome faucet-swiveling

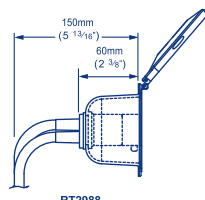


SHOWER FAUCETS

White plastic handle and chrome plate brass elbow

- 1/2" female BSP thread
- Handset with elbow
- 7' of hose

TB4172B PVC hose



RT2988



COMPACT SHOWER

- Modern styling adds a touch of flair to the transom
- Compact design is ideal where space is limited
- Stainless steel cover
- Chromed brass handset
- 2.1m (7') hose
- Mixer valve and handset sold separately

Hose Connection 3/8" male threaded

RT2988 Mixer valve w / s.s. cover



100-S STOWAWAY SHOWER SYSTEM

Designed to hook up to the cooling system of smaller boats. Positive shut-off provided by the quick-release fitting, the valves can be preset at your desired temperature level. This allows you to mount the valve out of the way and out of sight. The 1.4 gpm 12 vdc ignition-protected demand pump provides plenty of pressure for this system. A 9' spray hose and 5-position spray head comes standard.

HEA101SC



SUN SHOWERS

Made of tough/flexible PVC. These black shower bags heat the water inside quickly. Just fill them up and put them in the sun.

582100 2-1/2 Gallon

582200 5 Gallon

OP58211 Replacement hose clip

OP58210 Replacement nozzle



MARINE/RV SHOWER HEAD KIT

Convenient on/off switch allows you to pause the flow of water while shampooing, greatly reducing the amount of water used. The showerhead allows you a choice of four spray patterns. Heavy-duty construction for years of use. Kit includes showerhead, flex hose, washers, wall mount and hardware.

CAM43713 Chrome showerhead Kit with hose

CAM43714 White showerhead Kit with hose

CAM43710 Chrome showerhead only

CAM43716 Chrome 60" hose only



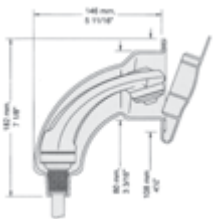
MARINE/RV SHOWER HEAD MOUNTS

Adjustable chrome showerhead wall mount gives you great flexibility in positioning your showerhead. Two-position chrome showerhead wall mount gives you a choice of two angles for your showerhead. Hardware included.

CAM43718 Chrome 2-Position

CAM43719 Chrome Adjustable





Whale® COMPACT SHOWER

- Neat compact housing
- Suitable where transom space is small
- Splash proof UV stabilized cover
- On/off control on shower handset
- Simple to install
- 2.1m (7') hose
- White
- 3/8" female thread connects to remote valves.

RT2878



Whale® SWIM N RINSE COMPACT SHOWER

Ideal for installation where space is limited on deck and behind the bulkhead -Simply swim and rinse without wasting water.

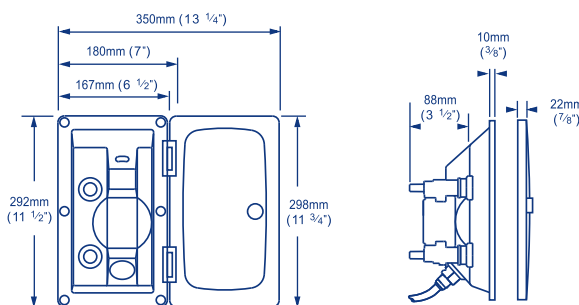
- Trigger to only use the water you need
- Extra long hose allows you to fit in most convenient location on deck
- Lightweight handset will not damage the gel coat if dropped on deck
- Simple installation - circular hole
- Standard connections - suitable for 3/8" BSP threaded connections/ Whale Quick Connect 15mm plumbing

RT3000 Cold only. with rubber cover



Whale® SWIM 'N' RINSE

- Attractive design
- Adds a touch of luxury to any boat
- Robust ABS plastic (UV stabilized)
- Simple to install
- 2.1m (7') hose
- On/off control on shower handset
- Hinged cover with latch to close
- Connects to Whale Quick Connect 15mm
- Available with/without cover
- Available in white or cream



RT1648

Cold only

RT2648

Hot and cold

RT2658

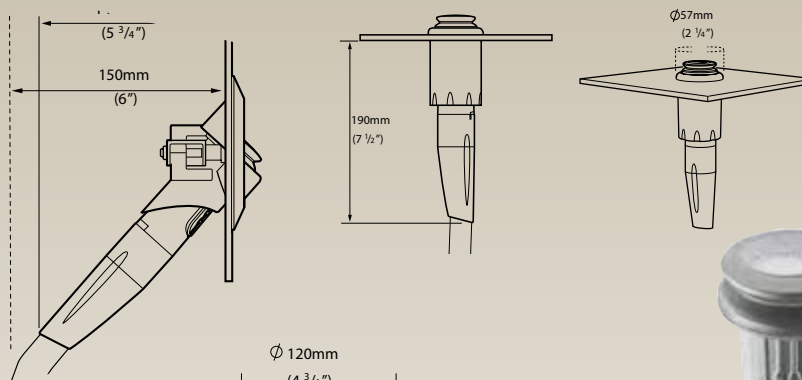
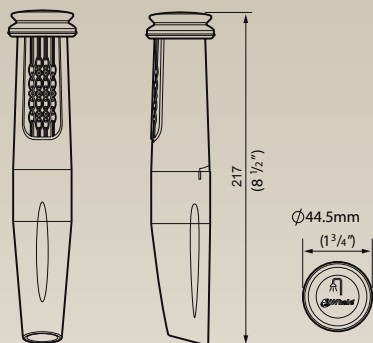
Hot and cold with cover

Colour Connection

White 1/2" male thread (NPT/BSP)

White 1/2" male thread (NPT/BSP)

White 1/2" male thread (NPT/BSP)



Whale® TWIST™ DECK SHOWER

A radical innovation in deck showers - putting control in your hands. unique integrated handset incorporates temperature and flow controls in an easy to use streamlined ergonomic design

- High quality UV resistant ASA materials mount in convenient locations
- Housing options can be mounted horizontally or vertically on a flat or curved surface. Easy to Install
- Compact unobtrusive housing.
- Only one hole to cut and simple plumbing connection. No lids or covers
- Deck Protect™ end cap creates a seal when stowed.

DS0005 Cold Only with straight & angled housing

DS0006 Hot & cold mixer with straight & angled housing

Twist™
Putting control in your hands




3M

FULL FLOW UNDER SINK WATER FILTRATION

3M™ Taste and Odor System (US-A1):

- Install under the sink for all the cold water in your galley
- Feature our exclusive Sanitary Quick Change Design
- Easy cartridge changing
- Patented carbon block for improved absorption
- Patented interconnect for ease-of-use and positive sealing
- Built-in bacteria inhibitor intended to reduce fouling of media
- Provides cleaner, better tasting and smelling water
- Reduces > 95% of Chlorine Taste and Odor
- Reduces sediment, dirt, rust, sand and silt to 1 micron
- NSF Listed
- 2,000 gallons @ 1.5 gpm (7,571 liters @ 5.7 lpm), 6 Month Cartridge Life
- 3/8" connections

5609225TM Filter kit

5610429TM Replacement element


TASTEPURE KDF/CARBON WATER FILTER

Larger capacity filter lasts an entire season. Greatly reduces bad taste, odors, chlorine and sediment in drinking water with a 100 micron fiber filter. Inline filter with garden hose fittings.

CAM40043


CX90™ CERAMIC WATER FILTER

Filters impurities down to .9 microns to provide premium protection against foul tastes, odours, sediment and chlorine. KDF® /Carbon core helps protect against bacteria, filter is renewable; cleans with an abrasive pad (included). Housing made from unbreakable UV stabilized polycarbonate resin. Wrenches included for easy cleaning or changing of cartridge.

CAM40651 Filter kit

CAM40671 Replacement cartridge

Whale®

AQUA SOURCE CLEAR

In-Line Water Filter

- Provides clear, fresh drinking water
- Removes nasty tastes and smells
- Contains silver which inhibits bacterial growth
- Slim and compact
- Easy to install
- Lasts one full season or 4500 liters (1188 us gals)
- Maintenance free
- 3/8" I.D. hose or connect to Whale system 15

WF1530 15mm


Sudbury®


Sudbury®

AQUA FRESH™

For fresh tasting, odor free drinking water from fiberglass, plastic or metal tanks. Simply deposit the contents of these handy packets into water tanks. Absolutely safe and nontoxic. 100% biodegradable earth-friendly formula.

Eight 2 oz. (0.6 kg) packets per box

SUD830


Sudbury®


Sudbury®

AQUA CLEAR®

For rust free water from potable water tanks. Also for use in automobile radiators, hot water heaters or wherever rusty water is a problem. Forms a microscopic film over all surfaces it touches so that corrosion in metal pipes or tank is controlled. Colorless, odorless, harmless and non-toxic. 100% biodegradable earth-friendly formula.

SUD835Q Quarts

 Captain
PHAB

DRINKING WATER FRESHENER

Gets rid of musty, moldy, plastic and anti-freeze tastes. No chlorine. Leaves no detectable after-taste. Saves you carting fresh water. Freshens refrigerators, trash cans and other surfaces that retain odours. 225 g powder.

CAP641

 Captain
PHAB

PURGE TANK CLEANSER

- Completely REMOVES organic slime from fresh water tanks... the source of recurring bad tastes
- No after taste whatsoever
- Quick spot deodorizing of gray and black water tanks
- Very effective on a wide variety of stains and odours

CAP228 450ml


PIPEWORK SYSTEMS

The WHALE quick connect fittings offer many benefits, all ensuring a high integrity, reliable, speedy plumbing system.

- Unique 'double gripper' provides secure lifelong tube retention even at excessive pressures
- Collet has internal support ring ensuring O-ring seal is held in position and does not distort or leak under pressure
- The innovative 'cage collet' eliminates leaks where fittings are close to tight bends
- High integrity single piece molding improves the strength of fittings
- Outer sleeve incorporates collet cover, thus preventing accidental tube release
- No collet clips necessary

The concept of the Whale Water System fittings is simple, reliable and cost effective. The design includes a number of innovative and unique features made available for the first time in a marine/RV plumbing system. The materials used for manufacture are non-toxic and of food grade quality. As such, they can be used for many different applications. Fitting and tube design ensures easy installation and re-usability.

To make a watertight connection, it's a small two step procedure with no special tools being required.

The patented Whale® plumbing system is specifically designed to be used in 'mobile' applications where best practice is adopted and excessive pressures and temperatures are avoided for health and safety reasons.

MATERIALS:

Quick connect fittings: Glass filled polypropylene

Quick connect tubing: Polypropylene

SPECIFICATIONS:

Pressure Temperature

Hot Water 6 bar (87 psi) 65°C (150°F)

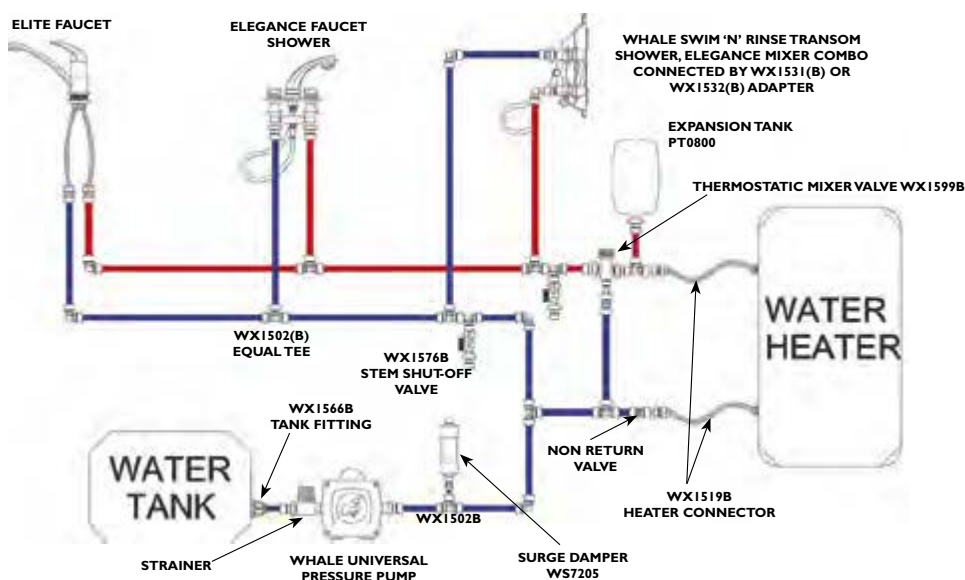
Cold Water 12 bar (174 psi) 20°C (68°F)

WHALE TUBING MIN. BEND RADIUS:

15mm, 5 x O.D. of Tubing

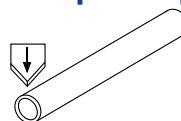
22mm, 7 x O.D. of Tubing

Typical Installation



To assemble - 2 simple steps

Fig. 1



Cut to length by making a straight clean cut
(use Whale tube cutters WX7950/WX7951)

Fig. 2



Simply push the tube into the fitting up to the 2nd internal stop

To disconnect

Fig. 3



Push back on the grey collet against the face of fitting

Fig. 4



Hold the collet in and pull out the tube

SYSTEM 15 (15MM) PIPEWORK SYSTEM FITTINGS

15mm Pipework Fittings (system 15)

WX1502B	Equal Tee	
WX1503B	Equal Elbow	
WX1504B	Equal Straight	
WX1546B	End Stop	
WX1508B	End Plug	
WX1521B	Stem Tee	
WX1522B	Stem Elbow	
WX1509B	Stem Adapter 1 2 mm-15 mm	
WX1511B	Stem Adapter 11mm - 15mm	
WX1582B	Check Valve	
WX1574B	Shut-Off Valve	
WX1576B	Stem Shut-Off Valve	
WX1577B	Stem Ice Maker Fitting	

3/4" Threaded (system 15)

WX1542B Female Adapter
3/4" BSP -15mm



WX1516B Straight Adapter Male
3/4" BSP-15mm



3/8" Threaded (system 15)

WX1539B 3/8" Female To 15mm Stem



WX1538B 3/8" Female To 15 mm - Brass



WX1563B Stem Adapter 3/8" NPT Male



1/2" Threaded (system 15)

WX1524B Stem Adapter Male



WX1534B Stem Nrv Adapter Male



WX1587B Stem Adapter



WX1533B Adapter
1/2" BSP Female



WX1513B Adapter
1/2" NPT Male Brass



WX1532B Female Adapter
1/2" BSP-15mm



WX1514B Straight Adapter Male
1/2" Bsp-15mm



WX1515B Faucet Tail Adapter Assy
1/2" Bsp-15mm



WX1531B Swivel 90° Elbow 1/2"BSP



WX1519B Flexible Heater Connector
1/2" NPT Male
To 1/2"BSP Female 14" Long



1/2" Flexible Hose (system 15)**WX1584B**Stem Adapter
1/2" Hose**WX1591B**Stem Elbow
1/2" Hose**WX1544B**1/2" Hose Connector
Brass**3/4" Flexible Hose Fittings (system 15)****WX1593B**Stem Adapter
3/4" Hose**WX1592B**Stem Elbow
3/4" Hose**Other Connectors (system 15)****WX1517B**Tap Tail Adapter
9/16" Brass**WX1537B**Stem Adapter Female
1/4" NPT-15mm**WX1528B**Adapter
5/8" X 15mm**WX1566B**Tank Fitting Assy
15mm**Plumbing Safety (system 15)****WX1595B**

Pressure Relief Valve

**WX1599B**Thermostat Mixer
& Check Valve**Flexible Hose Fittings (system 15)****WX1565B**Mounting Clip
Black 15mm**WX1548B**3/8" Hose Connector
Brass**15mm Tubing (system 15)****WX7162B**

Blue

**WX7164B**

Red

**WX7166B**

Green

**Tools (system 15)****WX7950**Tube Cutters
Heavy Duty

SYSTEM 22 (22MM) PIPEWORK SYSTEM FITTINGS

TEES**WS2202** 22-22-22mm**WS2233** 22-22-15mm**WS2234** 22-15-15mm**EQUAL ELBOW****WS2203** 22mm**EQUAL STRAIGHT****WS2204** 22mm**STEM REDUCER****WS2215** 22mm-15mm**STRAIGHT ADAPTOR MALE****WS2216** 3/4" BSP-22mm**STEM ADAPTORS****WS2242** 3/4" NPT-22mm**WS2239B** 3/4" FPT-22mm**WS2224B** 3/4" NPT-22mm**MOUNTING CLIP****WS2265** 22mm**TUBING**

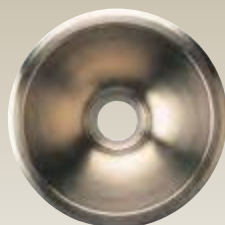
Sold by the foot (164' per roll)

WX7222 22 mm BLUE**WX7224** 22 mm RED**COLLET CLIP****WS2218B****COLLET COVER****WS2290**
RELEASE AID
WS2292


**SEADOG LINE****ROUND SINK**

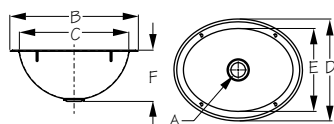
300 Series satin finish 16 ga. stainless steel, 1.09 lbs
Uses drain tube and strainer # 517525 or 517526

	A	B	C	D
517415	1-1/2"	10-1/2"	8-7/8"	4-1/4"

**SEADOG LINE****SINK DRAIN WITH STRAINER**

Zinc/Stainless/Nylon for 2" drain openings

517526 2" Straight drain

**SEADOG LINE****OVAL BOWL SINK**

300 Series satin finish 16 ga. stainless steel, 1.09 lbs
Uses drain tube and stopper # 517515

	A	B	C	D	E	F
517425	1-1/2"	13-1/4"	11-1/4"	10-1/2"	8-9/16"	5-5/16"

**SEADOG LINE****SINK DRAIN WITH STRAINER**

Zinc/Stainless for 2" drain openings

517525 Straight

**SEADOG LINE****OVAL BOWL SINK**

300 Series Satin Finish 16 ga. Stainless Steel
Uses drain fitting # 517525 or 517526

	A	B	C	D	E	F
517426	2"	14-1/4"	12-1/4"	11-1/2"	9-1/4"	4-7/8"

**SEADOG LINE****DRAIN TUBE WITH STOPPER**

Copper/Stainless for 1-1/4" drain openings

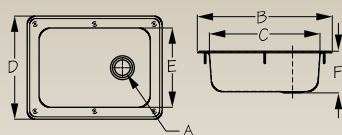
517515 1-1/4" Straight

**907017****907022****Forespar****SINK DRAINS**

Available in straight and 90° configurations. Made of bright chrome plated, non-corrosive plastic.

FSP907017 90° - for 1" ID hose, 1-3/4" flange, 1-5/16" cut-out

FSP907022 Straight - for 1" ID hose, 2-7/8" flange, 2" cut-out

**SEADOG LINE****SINGLE BOWL OFFSET DRAIN SINK**

300 Series satin finish 16 ga. stainless steel, 1 lb
Uses drain fitting # 517525 or 517526

	A	B	C	D	E	F
517445	2"	17"	14"	13"	10"	5-1/4"

**KINDRED****SINGLE GALLEY SINK**

Made of 18-8 stainless steel satin finished.
Includes 1-1/2" waste fitting.

Overall dimensions:
13-5/8"L x 11-1/4"W x 6"D

S9106-3 C/W drain assembly

**SEADOG LINE****DURACON SINK DRAINS**

This drain assembly is designed to fit
1-1/4" drain openings. Available in 2 styles
- 90° and straight.

517310 Straight 1"

517315 90° 1-1/8"

517390 Sink Stopper



CAMICO

PREMIUM DRINKING WATER HOSES

Heavy Duty reinforced 5/8" ID drinking water hoses are 20% thicker than our standard hoses. Anti-kink design features machined fittings and strain-relief ends for added durability. Drinking water safe.

CAM22833 5/8" x 25'

CAM22853 5/8" x 50'



CAMICO

TASTEPURE DRINKING WATER HOSES

Super heavy duty reinforced for maximum kink resistance. Especially useful when hooked with a Y-valve to your main faucet. Made of FDA approved materials; drinking water safe.

CAM22783 5/8" x 25'

CAM22793 5/8" x 25'

CAM22803 5/8" x 75'



TRIDENT MARINE

FLATLINE FLAT HOSE

White. Easy to store, drinking water safe.

167-0585 5/8" x 25'

167-0586 5/8" x 50'



JABSCO

HOSECOIL WASHDOWN ENCLOSURE SYSTEM

Constructed of a durable plastic material with all exposed surfaces UV stabilized. 15' HoseCoil™ and spray nozzle included. White.

- 3/8" ID polyurethane
- 90% usable length
- Self-coiling
- UV inhibitor

31910-3115 Side mount enclosure 15' hose



JABSCO

HIGH PRESSURE CHECK VALVE

When located at the pump outlet, these high pressure check valves protect your pump from the damaging high pressure of unregulated city water connections. Also can be located at the water heater inlet to prevent backflow of hot water into cold water system and pump.

34344-0000 1/2" slip-on hose inlet and outlet



JABSCO

WATER PRESSURE REGULATORS

Protect your boat water system appliances and pump from damaging pressures of unregulated marina water hook-ups. Reduce high water pressures [up to 100 psi (6.9 bar) down to 45 psi (3.1 bar)]. Built-In backflow preventer.

	Type	Intake	Discharge
44411-1045	White Flush	3/4" GHT	1/2" MPT
44411-2045	Chrome Flush	3/4" GHT	1/2" MPT
44411-0045	In-line 3/4" GHT	3/4" GHT	



SEADOG LINE

WASHDOWN WATER OUTLETS

Standard male garden hose fitting x 1/2" NPT

512120 Brass chrome plated

513120 316 Cast Stainless Steel



SEADOG LINE

FRESH WATER INLETS

Standard female garden hose fitting x 1/2" NPT

512110 Brass chrome plated

513110 316 Cast Stainless Steel



PERKO WATER OUTLET FITTING

Chrome plated bronze standard male hose connector. For 3/4" garden hose

504-DPCHR



PERKO WATER INLET FITTING

Chrome plated bronze fitting designed to connect to a standard 3/4" garden hose.

499-DPCHR



JABSCO

DECKWASH VALVE.

- 316 stainless steel
- Flush mount
- Automatic check valve
- Quick connect hose adapter/check valve

Size: 3-1/4" long. Top: 2-7/8" hole cutout: 1-3/8" Deck fitting, 1/2" NPT female inlet 3/4" GTH male hose adapter. Suitable for HoseCoil.

31911-0000 Deckwash valve

31911-0002 Extra 3/4" GTH male hose adapter

31911-0003 Service kit





WASHDOWN FAUCET

Suitable for deck washdown applications, this robust chrome-plated brass faucet features an innovative on/off flow control valve that prevents dirt and water from entering the moving parts ensuring trouble free maintenance.

Connections: Inlet: 1/2" male BSP thread use WX1532B to connect to System 15 tube.

Outlet: 3/4" garden hose thread.

TB4170B



WASHDOWN FAUCET

Brass chrome plated / zinc chrome plated handle.

512210 Lever handle



WASHDOWN FAUCET

Brass chrome plated.

512220 Round / rotary handle



IN-LINE STRAINER

Injection molded polypropylene body, polycarbonate lens with stainless steel filter screen. Removable clear lens for easy inspection and cleaning.

364135 For 1/2" hose (50 mesh screen)

364136 For 5/8" hose (50 mesh screen)

364137 For 3/4" hose (1/16" mesh screen)

364190 Replacement polycarbonate cover

364195 Replacement 50 mesh screen

364196 Replacement 1/16" mesh screen



PUMPGARD™ STRAINERS

Inlet strainer protects all electric diaphragm pumps. Prevents unnecessary pump breakdowns caused by particles in the water. Transparent housing allows instant inspection and quick, in-place cleaning of the 40 mesh stainless steel screen.

46400-0002 1/2" ID hose

46400-0012 1/2" hose 90° and direct plug into PAR-Max inlet port

46400-0000 3/4" ID hose x 3/4" ID hose

46400-0010 3/4" ID hose x plug-in 90°

46400-0004 1/2" MPT

46400-0014 1/2" MPT 90° and direct plug into Par-Max inlet

18753-0040 Replacement 40 mesh stainless steel screen



STRAINER

- Multi-directional port for top, side or angle entry
- Built-in non return valve
- Removable clip in body for easy cleaning

For 3/4" diameter hose.

SB3422



STRAINERS

These are moulded plastic strainers with optional synthetic rubber non return valves built-in.

Fits 1" or 1-1/2" hose.

SB5865 Top entry with non-return valve

SB4222 Side entry with non-return valve



CAST BRONZE STRAINER

709-DPPLB

Side entry 3-5/8" x 1-3/4" 5/8" hose barb

721-000PLB

Side entry 4-3/4" x 2-3/4", 1-1/4" NPT

722-000PLB

Top entry 4-1/2" x 2-3/4" 1-1/4" NPT



BILGE STRAINERS

Cast Bronze

	Length	Width	NPT
BS-750	1-7/8"	2-1/8"	3/4"
BS-1000	1-7/8"	1-7/8"	1"
BS-1500	3-3/8"	3-5/8"	1.5"
BS-2000	5-1/4"	5-1/4"	2"



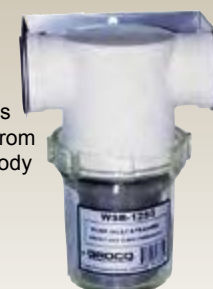
INLET STRAINER

The Groco inlet strainer has a 40 mesh stainless steel filter basket to keep debris and sediment from entering your pump. Simply unscrew the filter body to clean. Supplied with mounting bracket.

WSB750 3/4" FPT

WSB1000 1" FPT

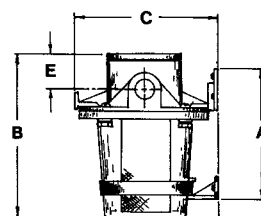
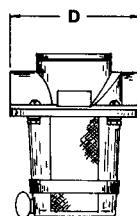
WSB1250 1-1/4" FPT



GROCO® ARG SERIES

- Stainless steel basket
- No tie rods
- Unique mounting system allows removal of entire strainer without tools
- Bronze castings
- O-ring seals at all joining surfaces
- Screw-on strainer cap allows for easy no-tools maintenance
- Strainer heads threaded internally for NPT pipe connections

Dimension	ARG500S	ARG750S	ARG1000S	ARG1250S	ARG1500S	ARG2000S	ARG2500S	ARG3000S
Pipe Size	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT	2-1/2" NPT	3" NPT
A	4.75"	6.25"	6.50"	8.50"	8.25"	10.56"	13.00"	16.13"
B	6.13"	8.13"	8.50"	10.50"	10.75"	13.06"	15.56"	18.63"
C	5.13"	5.13"	6.68"	6.68"	7.88"	7.88"	7.88"	7.88"
D	4.63"	4.63"	5.88"	5.88"	7.25"	7.25"	7.25"	7.25"
E	1.36"	1.36"	1.68"	1.63"	2.00"	2.31"	2.63"	2.68"
Ratio, open screen area to pipe	54:1	36:1	29:1	25:1	20:1	14:1	11:1	9:1



MARINE HARDWARE UNIVERSAL SWIVEL MOUNT SEA STRAINERS

Marine Hardware's universal mount sea strainers incorporate all the best features required by the US Navy. Starting with a cast 85-5-5-5 bronze housing, all units include a pull out strainer screen assembly for easy spill-proof maintenance. The inspection lens is heavy walled for maximum strength and is securely fastened to the housing with a bronze retainer ring plate. The unique design insures a firm mount to the engine stringers and allows full 360° rotation of the top housing to optimize plumbing fittings. A perfect choice for port and starboard engine installations.

SEAS-UM0.750	3/4" NPT inlet/outlet
SEAS-UM1.000	1" NPT inlet/outlet
SEAS-UM1.250	1-1/4" NPT inlet/outlet
SEAS-UM1.500	1-1/2" NPT inlet/outlet
SEAS-UM2.000	2" NPT inlet/outlet



PERKO® INTAKE WATER STRAINER

Perko water strainers are designed for easy installation and cleaning. Features include mounting lugs cast into both sides to assure universal mounting, four outside tie rods and a 304 stainless steel strainer basket to minimize electrolysis. Hinged lugs for the cast bronze cover permit easy removal and cleaning of the strainer basket. A drain plug in the bottom casting is provided for easily removing sediment and draining for winterization.

	Pipe Size Inches	Height Overall Inches	Width Overall Inches	Dimensions Cylinder Inches	Dimensions Basket Inches	Open Area To Pipe Size Ratio
493-004PLB	1/2	5-3/4	4-1/2	3-1/2 x 4	1-13/16 x 4-3/8	30:1
493-005PLB	3/4	8-3/8	4- 1/2	3-1/2 x 6	1-13/16 x 6-1/4	25:1
493-006PLB	1	9-1/2	5-1/2	4-1/2 x 5-1/2	2-5/8 x 5-7/8	20:1
493-007PLB	1-1/4	10	5-1/2	4-1/2 x 6	2-5/8 x 6-1/4	13:1
493-008PLB	1-1/2	11-1/2	7-1/4	6 x 8	3-5/16 x 8-7/16	17:1
493-009PLB	2	16	7-1/2	6 x 12	3-5/16 x 12-1/4	13:1
493-010PLB	2-1/2	16	7-1/2	6 x 12	3-5/16 x 12-1/2	10:1



Forespar® WATER STRAINER

This water strainer is made of Marelon®. It features an integral mounting bracket and clear polycarbonate lid for ready inspection. The stainless steel strainer basket can be easily removed for cleaning. Intake and exit ports are 1-1/2" ANP threads standard. Reducers for 3/4" ID hose are available separately. 6.3" diameter 6.1" H. The flow rate is 40gpm with 1-1/2" ports.

FSP906066	Water strainer
FSP906067	Gasket set
FSP906065	S/S basket only
FSP920178	Cover only

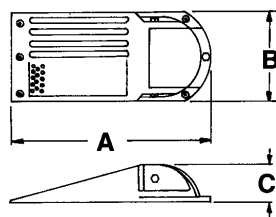


MARINE HARDWARE SEA STRAINER

The uniquely designed Sea Strainer is manufactured of the best 85-5-5-5 red bronze, precision machined, and assembled with the finest hardware available. This exclusive flow-through design allows water to tumble horizontally across the perforated stainless steel screen, where all debris is agitated until it is chopped into small pieces. This compact assembly has proven efficient and reliable for years in the field in many types of craft, from ski boats to sportfishers to cruisers. Floor or side mount.
Inlet: 1-1/4" ID Hose
Outlets: (2) 3/4" NPT (1) 1" NPT

SEAS-MP-NPT-DOME



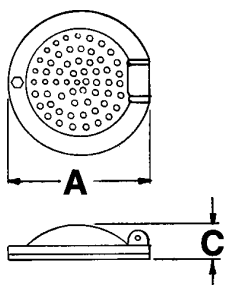
**GROCO®****PERFORATED STRAINER BRONZE**

Patented access door for easy cleaning. Now there is no need to remove the entire strainer to remove nuisance marine growth. Will accommodate up to 6" hull opening if a thru-hull fitting is not used.

	Max	A	B	C
	T-hull			
APHS-2000	2"	11.00	4.50	1.50
APHS-3000	3"	15.00	6.00	2.10

**PERKO®****BRONZE ROUND STRAINER**

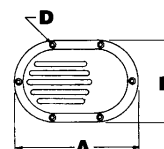
	OD	ID	For thru hull size
86-001PLB	2-1/2"	1-5/8"	3/8"-1/2"
86-DP2PLB	3"	2"	3/4"
86-003PLB	3-1/2"	2-3/8"	1"
86-004PLB	4"	3"	1-1/4"-1-1/2"
86-005PLB	5"	3-3/4"	2"

**GROCO®****ROUND HINGED STRAINER BRONZE**

	Max	A	C
	T-hull		
RSC-1000	1"	3.63	.56
RSC-2000	2"	5.20	.83

PERKO®**BRONZE HIGH SPEED PICK UP**

	Dimensions	For thruhull
66-001PLB	3-1/2" x 2-1/2"	3/8"-1/2"
66-002PLB	5" x 3-1/4"	3/4 - 1"
66-003PLB	6-1/4" x 4-1/4"	1-1/4"-1-1/2"
66-004PLB	8" x 5-1/8"	2"

**GROCO®****REMOVABLE SCOOP STRAINERS**

Mount the ring permanently. Fasten the strainer to the ring and remove as often as needed.

	Max	A	B	C	
	T-hull				
SC-1000	1"	6.13	3.38	1.38	Bronze
SC-1500	1-1/2"	9.13	4.50	1.50	Bronze
SC-2500	2-1/2"	12.38	5.44	2.00	Bronze
SC-4000	4"	15.13	6.10	2.25	Bronze

SEADOG LINE**SCOOP STRAINER**

Economical nylon scoop strainer. Size is 3 1/4" wide by 4 3/4" long.

365483

**Forespar****SCOOP STRAINERS**

These high strength, high speed, strainers are also made of glass reinforced non-corrosive Marelon®. Two piece construction allows for greater ease in installation.

FSP906059	3/4" Complete
FSP906060	1-1/4" Complete
FSP906061	3/4" Strainer only
FSP906062	1-1/4" Strainer only

**HIGH SPEED PICK UP WITH THRU HULL**

	Bronze	Pipe Size	Strainer Size
STH12	1/2"		2-1/16" x 3-5/16"
STH34	3/4"		3" x 4"
STH1	1"		2-1/2" x 4"
STH114	1-1/4"		4" x 6-1/2"
STH112	1-1/2"		4" x 6-1/2"
STH2	2"		5-1/2" x 8"



BRONZE THRU-HULLS

	Pipe size	Max hull thickness
THR38	3/8"	1-3/4"
THR12	1/2"	1-3/8"
THR34	3/4"	1-1/2"
THR1	1"	1-7/8"
THR114	1-1/4"	2"
THR112	1-1/2"	2-1/4"
THR2	2"	2-3/8"
THR212	2-1/2"	2-5/8"
THR3	3"	2-3/4"

**BRONZE LONG THRU-HULLS**

	Pipe size	Max hull thickness
THL12	1/2"	4"
THL34	3/4"	5"
THL1	1"	4-7/8"
THL114	1-1/4"	4-5/8"
THL112	1-1/2"	4-5/8"
THL2	2"	4-1/2"
THL212	2-1/2"	4-1/4"

**BRONZE FLUSH MOUNT THRU-HULLS**

	Pipe size	Max. hull thickness
FTH34	3/4"	1-3/4"
FTH1	1"	2"
FTH114	1-1/4"	2-1/4"
FTH112	1-1/2"	2-1/4"

**BRONZE THRU-HULL FOR HOSE**

	Hose size	Max hull thickness	Chrome
THH34	3/4"	1-5/8"	350-005CHR
	5/8"	1-1/16"	350-004DPC
THH1	1"	1-3/4"	350-006DPC
	1-1/8"	1-3/4"	350-06ADPC
THH114	1-1/4"	1-7/8"	350-007DPC
THH112	1-1/2"	1-7/8"	350-008DPC

**STAINLESS STEEL THRU-HULL FOR HOSE**

	Hose	Flange	Max. Hull
THHSS12	1/2"	1-1/2"	1"
THHSS34	3/4"	1-3/4"	1-1/2"
THHSS1	1"	2-1/4"	1-3/4"
THHSS118	1-1/8"	2-1/4"	1-3/4"
THHSS114	1-1/4"	2-3/4"	1-3/4"
THHSS112	1-1/2"	3"	2"

**REPLACEMENT BRONZE THRU-HULL NUTS**

75-003DPP	3/8"
75-004DPP	1/2"
75-005DPP	3/4"
75-006DPP	1"
75-007DPP	1-1/4"
75-008DPP	1-1/2"
75-009DPP	2"



MARINE HARDWARE

NYLON /STAINLESS THRU-HULLS

Nylon body with stainless steel cap on head

THMB0.500-N	1/2" hose
THMB0.750-N	3/4" hose
THMB1.000-N	1" hose
THMB1.125-N	1-1/8" hose
THMB1.250-N	1-1/4" hose
THMB1.500-N	1-1/2" hose
THMB2.000-N	2" hose



Forespar

THRU-HULLS

Forespar's series of Thru-Hull Connectors are precision moulded in high strength glass-reinforced Marelon®. Their great strength, light weight and complete freedom from corrosion and electrolysis make them the ideal thru-hull for use above or below the waterline. All threads are A.N.P. non-tapered pipe.

MUSHROOM HEAD

251 Series	Pipe size
FSP906010	1/2"
FSP906012	3/4"
FSP906014	1"
FSP906016	1-1/4"
FSP906018	1-1/2"
FSP906020	2"

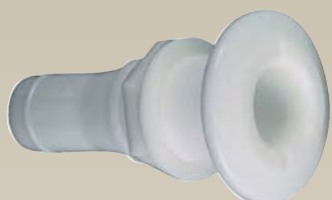
**FLUSH HEAD**

250 Series	Pipe size
FSP906000	1/2"
FSP906001	1/2" with screen
FSP906002	3/4"
FSP906003	3/4" with screen
FSP906004	1"
FSP906006	1-1/4"
FSP906008	1-1/2"
FSP906009	1-1/2" with screen

**MUSHROOM HEAD FOR HOSE**

253 Series	Hose size
FSP906022	1/2"
FSP906024	3/4"
FSP906026	1"
FSP906028	1-1/4"
FSP906030	1-1/2"
FSP906032	2"

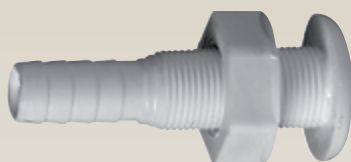




PERKO® MOLDED POLYMER THRU-HULL FOR HOSE

Not approved for use below the water line.

White	Black	Size	Max hull
328-004	328-004BLK	1/2"	1-1/4"
328-04A	328-04ABLK	5/8"	1-1/4"
328-005	328-005BLK	3/4"	1-7/16"
328-006	328-006BLK	1"	1-1/2"
328-06A	328-06ABLK	1-1/8"	1-1/2"
328-008	328-008BLK	1-1/2"	1-7/8"



DetMar® MOLDED NYLON THRU HULLS

Not approved for use below the water line. UV stabilized

White	Hose size	Max hull	Black
DET10-25-1	5/8"	1-1/4"	
DET10-25-2	3/4"	1-1/4"	DET10-25-14
DET10-25-3	1-1/8"-1-1/4"	1-1/8"	DET10-25-15
DET10-25-4	1-1/2"	1-1/4"	DET10-25-20

attwood® DOUBLE ENDED THRU HULL

Nylon. For 3/4" hose.

3878-3



DetMar / attwood® 90° THRU HULL FITTING

Nylon fittings - white.

DET10-25-24	3/4" hose
3879-3	1-1/8" hose



Whale® HOSE CONNECTIONS

These three plastic hose pieces are useful in many bilge pump applications.

YP6114	1-1/2" Y connector
EB3488	1-1/2" 90° elbow
EB3364	1" 90° elbow



Forespar

MARELON® VENTED LOOPS

If your toilet is below the waterline, a vented loop should be installed in the discharge line. An integral air vent in the nylon "U" loop automatically prevents back siphoning into the toilet, yet seals tightly so there can be no leakage.

FSP903008	1/2" ID hose
FSP903003	5/8" ID hose
FSP903001	3/4" ID hose
FSP903007	1" ID hose
FSP903000	1-1/2" ID hose
FSP903002	Vent only
FSP903004	Vent w/Barb



GROCO® BRONZE VENTED LOOPS

These vented loops are made of all bronze construction with an oversized vent valve for virtually clog-free use. The vent can easily be removed without tools for inspection or cleaning by unscrewing the threaded cap. Mounting hardware is included.

HVL-500	1/2" Hose
HVL-750	3/4" Hose
HVL-1000	1" Hose
HVL-1500	1- 1/2" Hose
VL-1501	Valve & cap assembly
VL-1504	Valve only



Whale® NON-RETURN VALVES

The Whale non-return valves will ensure and maintain prime, particularly if pump valves are weak. Very useful with any electric pumps and worth fitting as close to the water tank as possible. Designed to fit 1/2" hose.

FV1227	Plastic Body
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Whale® NON-RETURN VALVE

These are molded plastic non-return valves with synthetic rubber check valves built-in.

LV1215	1" or 1-1/2" hose
LV1219	3/4" hose





DIVERTER VALVE

A high quality two way valve normally installed in the suction or discharge hose of a bilge pump. It has many uses, including: Bilge water or waste discharge. This unit allows discharge or pickup from alternative points. Two sizes are available - 1" and 1-1/2" ID hose. The control lever allows easy movement of the spring loaded valve.



DV5606 1-1/2" Hose

DV5630 1" Hose



Y-VALVE

Robust Y valve for use in toilet applications. Allows waste to be pumped overboard or into a holding tank.

- Rotating ports allow for variable routing of hoses onto the valve
- Can be operated through bulkhead by use of optional handle extension
- Can be padlocked so that waste can only go to the holding tank to comply with some local regulations (padlock not included)
- Waste and corrosion resistant construction throughout

Fitting: Connections for 1-1/2" hose plus extra 1" inlet port included

Size: 7-5/8"L x 7-1/4"W x 4-5/8"H

45490-1000 Y Valve

45500-1000 Handle extension kit

45488-0000 Service kit



Y-VALVES

Made of fiber reinforced Marelon®.

FSP902007 3/4"

FSP902001 1"

FSP902000 1-1/2"

FSP902006 Rebuild Kit for 1" & 1-1/2" valves



Y-CONNECTORS

Made of fiber reinforced Marelon®.

FSP902002 1" With flange

FSP902003 1" No flange

FSP902004 1-1/2" With flange

FSP902005 1-1/2" No flange



SEACOCK

MF 850 series of Seacocks are precision molded in high strength glass-reinforced Marelon®. Their great strength, light weight and complete freedom from corrosion and electrolysis make them the ideal valve.

All valves have ANP type threads.

	Thread Size	Height	Height W/handle
FSP904009	1/2"	3"	4"
FSP904010	3/4"	3"	4"
FSP904011	1-1/2"	5"	8"



BRONZE SEACOCKS

- Ball valve design
- Cast bronze
- Plastic ball & seat assures tight seal & ease of operation
- Drain plug for winterizing
- 4 pre-drilled mounting holes & bonding screws
- UL marine listed



	Pipe Size	Flange Dia.	Overall Height*	Weight lbs
805-005PLB	3/4"	3-1/4"	3-3/8"	2.3
805-006PLB	1"	4-3/8"	3-3/4"	3.9
805-007PLB	1-1/4"	4-7/8"	4-1/4"	5.3
805-008PLB	1-1/2"	5-1/2"	4-1/2"	6.4
805-009PLB	2"	5-3/4"	5-3/4"	11.0
805-010PLB	2-1/2"	7-1/4"	7-1/2"	19.3

* Not including handle



BRONZE SEACOCKS

- Full flow
- Tri-flange base for easy retrofit
- Stainless steel ball and stem
- PTFE seats and seals
- Drain Plug on both sides.

Pipe size

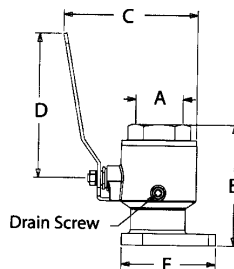
BV-750 3/4"

BV-1000 1"

BV-1250 1-1/4"

BV-1500 1-1/2"

BV-2000 2"



BRONZE SEACOCKS

UL Marine approved, housing cast of heavy duty 85-5-5 red bronze, machined with tapered pipe threads. Full port chrome ball.

	A	B	C	D	E
SEAC-0.750-B	3/4"	3-9/16"	3-1/16"	4-13/16"	3-1/2"
SEAC-1.000-B	1"	4-1/4"	4"	5-1/2"	3-5/8"
SEAC-1.250-B	1-1/4"	4-7/8"	4-1/4"	5-1/2"	4"
SEAC-1.500-B	1-1/2"	5-5/16"	4-3/4"	5-1/2"	4-1/2"
SEAC-2.000-B	2"	5-5/8"	5-1/2"	5-1/2"	5-1/8"



Forespar

BALL-VALVE

MF 850 series of Ball Valves are precision molded in high strength glass-reinforced Marelon®. Their great strength, light weight and complete freedom from corrosion and electrolysis make them the ideal valve. All valves have ANP type threads.

	Thread (ANP)	Body Dia.	Body length	Length w/Handle
FSP905100	1/2"	1-7/8"	3"	4"
FSP905101	3/4"	1-7/8"	3"	4"
FSP905102	1"	2-3/4"	4-3/4"	5 1/2"
FSP905103	1-1/4"	2-3/4"	4-7/8"	5-3/4"
FSP905104	1-1/2"	3-1/2"	5"	7 1/2"
FSP905105	2"	4-1/4"	5-7/8"	8"



MARINE HARDWARE

BRONZE BALL VALVES

UL Marine approved, housing cast of heavy duty 85-5-5 red bronze, machined with tapered pipe threads. Full port assures no constriction of the flow of fluid. Stainless steel ball for maximum corrosion resistance. Fasteners and handles are stainless steel and handles are coated with a thick, non-slip plastic for a sure grip.

	Pipe Size	Drain	Ground Screw	Full Port
BZBV38	3/8"	N	N	Y
BZBV12	1/2"	N	Y	Y
BZBV34	3/4"	Y	Y	Y
BZBV1	1"	Y	Y	Y
BZBV114	1-1/4"	Y	Y	Y
BZBV112	1-1/2"	Y	Y	Y
BZBV2	2"	Y	Y	Y
BZBV212	2-1/2"	N	N	N
BZBV3	3"	N	N	N

BRASS BALL VALVES

Two piece screwed type body. Blow out proof rated to 125 p.s.i.

	Pipe size
5044-14	1/4"
5044-38	3/8"
BVB12	1/2"
BVB34	3/4"
BVB1	1"
BVB114	1-1/4"
BVB112	1-1/2"



BRONZE PIPE TO HOSE ADAPTOR

Cast bronze pipe to hose adaptors. Fit all popular hose sizes.

	Pipe size	Hose size
PTH12	1/2"	1/2"
PTH58	1/2"	5/8"
PTH34	3/4"	3/4"
PTH34X1	3/4"	1"
PTH1	1"	1"
PTH1X118	1"	1-1/8"
PTH1X114	1"	1-1/4"
PTH114	1-1/4"	1-1/4"
FF-1250	1-1/4"	1-1/2"
PTH112	1-1/2"	1-1/2"
PTH2	2"	2"
PTH212	2-1/2"	2-1/2"
PTH3	3"	3"



MARINE HARDWARE

STAINLESS STEEL BALL VALVES

These are a full port valve constructed of 316 series stainless steel. The handles are stainless steel and vinyl coated.

	NPT Size
BVSS14	1/4"
BVSS38	3/8"
BVSS12	1/2"
BVSS34	3/4"
BVSS1	1"
BVSS114	1-1/4"
BVSS112	1-1/2"
BVSS2	2"



BRONZE 90° PIPE TO HOSE ADAPTOR

Cast bronze pipe to hose adaptors. Same as above except in a 90° fitting. Fits all popular hose sizes.

	Pipe size	Hose size
PTH9034	3/4"	3/4"
PTH901	1"	1"
PTH90114	1-1/4"	1-1/4"
PTH90112	1-1/2"	1-1/2"
PTH902	2"	2"
PTH90212	2-1/2"	2-1/2"
PTH903	3"	3"



BRONZE FEMALE PIPE TO HOSE ADAPTOR

	Pipe size	Hose
TP750	3/4"	3/4"
TP1000	1"	1"
TP1250	1-1/4"	1-1/4"
TP1500	1-1/2"	1-1/2"
TP2000	2"	2"



BRONZE FEMALE 90° PIPE TO HOSE ADAPTOR

	Pipe size	Hose
PTHF9034	3/4"	3/4"
PTHF901	1"	1"
PTHF90114	1-1/4"	1-1/4"
PTHF90112	1-1/2"	1-1/2"
PTHF902	2"	2"



BRASS HOSE BARB TO MALE PIPE

	Hose ID	Pipe
125-2A	1/8"	1/8"
125-2B	1/4"	1/8"
125-3A	1/8"	3/16"
125-3B	3/16"	1/4"
125-4A	1/4"	1/8"
125-4B	1/4"	1/4"
125-4C	1/4"	3/8"
125-4D	1/4"	1/2"
125-5A	5/16"	1/8"
125-5B	5/16"	1/4"
125-5C	5/16"	3/8"
125-6A	3/8"	1/8"
125-6B	3/8"	1/4"
125-6C	3/8"	3/8"
125-6D	3/8"	1/2"
125-8B	1/2"	1/4"
125-8C	1/2"	3/8"
125-8D	1/2"	1/2"
125-8E	1/2"	3/4"
125-10C	5/8"	3/8"
125-10D	5/8"	1/2"
125-10E	5/8"	3/4"
125-12D	3/4"	1/2"
125-12E	3/4"	3/4"
125-16E	1"	3/4"



BRASS HOSE BARB TO FEMALE PIPE

	Hose ID	Pipe
126-4B	1/4"	1/4"
126-5A	5/16"	1/8"
126-5B	5/16"	1/4"
126-5C	5/16"	3/8"
126-6B	3/8"	1/4"
126-6C	3/8"	3/8"
126-8B	1/2"	1/4"
126-8C	1/2"	3/8"
126-8D	1/2"	1/2"



BRASS 90° ELBOW HOSE BARB TO MALE PIPE

	Hose ID	Pipe
139-4A	1/4"	1/8"
139-4B	1/4"	1/4"
139-5A	5/16"	1/8"
139-5B	5/16"	1/4"
139-6B	3/8"	1/4"
139-6C	3/8"	3/8"
139-8B	1/2"	1/4"
139-8C	1/2"	3/8"
139-8D	1/2"	1/2"
139-10C	5/8"	3/8"
139-10D	5/8"	1/2"



BRASS SPLICER HEX SHOULDER

	Hose ID
129-3	3/16"
129-4	1/4"
129-5	5/16"
129-6	3/8"
129-8	1/2"



316 STAINLESS PIPE TO HOSE ADAPTORS

	Pipe size	Hose size
PTHSS12	1/2"	1/2"
PTHSS34	3/4"	3/4"
PTHSS1	1"	1"
PTHSS114	1-1/4"	1-1/4"
PTHSS112	1-1/2"	1-1/2"
PTHSS2	2"	2"



Forespar

**MARELON®
PIPE TO HOSE 90° ADAPTORS**

Manufactured from high impact resistant, glass reinforced Marelton®. These are A.N.P. Non tapered pipe sizing.

Male	Female	
FSP901000	FSP901006	5/8" hose x 1/2" pipe
FSP901001	FSP901007	3/4" hose x 3/4" pipe
FSP901002	FSP901008	1" hose x 1" pipe
FSP901003	FSP901009	1-1/4" hose x 1-1/4" pipe
FSP901004	FSP901010	1-1/2" hose x 1-1/2" pipe
FSP901005	FSP901011	2" hose x 2" pipe



Forespar

MARELON® TAIL PIPES

Manufactured from high impact resistant, glass reinforced Marelton®.
All threads are A.N.P. male non-tapered pipe.

FSP905006	1/2"
FSP905007	3/4"
FSP905008	1"
FSP905009	1-1/4"
FSP905010	1-1/2"
FSP905011	2"



Forespar

FEMALE THREADED BARBED FITTINGS

Manufactured from high impact resistant, glass reinforced Marelton®.

FSP901014	1/2" FTP to 1/2" HOSE BARB
FSP901015	3/4" FTP to 3/4" HOSE BARB
FSP905012	1-1/2" FTP to 3/4" HOSE BARB
FSP905013	1-1/2" FTP to 1" HOSE BARB
FSP905015	1-1/2" FTP to 1-1/8" HOSE BARB
FSP905014	1-1/2" FTP to 1-1/2" HOSE BARB



Green Line

NYLON HOSE JOINERS

Straight	90°	
G20N-038	G20N90-038	3/8" x 3/8"
G20N-050	G20N90-050	1/2" x 1/2"
G20N-050-038	G20N90-050-038	1/2" x 3/8"
G20N-063	G20N90-063	5/8" x 5/8"
G20N-063-050	N/A	5/8" x 1/2"
G20N-075	G20N90-075	3/4" x 3/4"
G20N-100	G20N90-100	1" x 1"
G20N-125	G20N90-125	1-1/4" x 1-1/4"
G20N-150	G20N90-150	1-1/2" x 1-1/2"
G20N-200	G20N90-200	2" x 2"



Green Line

NYLON MALE PIPE TO HOSE ADAPTORS

Straight	90°	Pipe x Hose
G21N-038-050	G21N90-038-050	3/8" x 1/2"
G21N-050-038	G21N90-050-038	1/2" x 3/8"
G21N-050-050	G21N90-050-050	1/2" x 1/2"
G21N-050-063		1/2" x 5/8"
G21N-050-075	G21N90-050-075	1/2" x 3/4"
G21N-075-050	G21N90-075-050	3/4" x 1/2"
G21N-075-063	G21N90-075-063	3/4" x 5/8"
G21N-075-075	G21N90-075-075	3/4" x 3/4"
G21N-075-100	G21N90-075-100	3/4" x 1"
	G21N90-050-063	1" x 5/8"
G21N-100-075		1" x 3/4"
G21N-100-100	G21N90-100-100	1" x 1"
G21N-100-125		1" x 1-1/4"
G21N-125-125	G21N90-125-125	1-1/4" x 1-1/4"
G21N-125-150		1-1/4" x 1-1/2"
G21N-150-125		1-1/2" x 1-1/4"
G21N-150-150	G21N90-150-150	1-1/2" x 1-1/2"



Green Line

NYLON HOSE TEE

G20NT-038	3/8" hose size
G20NT-050	1/2" hose size
G20NT-075	3/4" hose size
G20NT-100	1" hose size
G20NT-125	1-1/4" hose size
G20NT-150	1-1/2" hose size



rule

**PLASTIC
HOSE ADAPTOR**

Adapts 1-1/2" pump outlet to 1-1/8" hose. Ideal for installing a newer larger volume pump to existing plumbing.

67R



rule

**PLASTIC
DOUBLE ENDED ADAPTOR**

Plastic double stepped straight adaptor for adapting 1-1/8" outlet to 3/4" or 5/8" ID hose.

69



**BRASS ELBOWS**

90° #	90° Street #	45° #	45° Street #	Size
B9018	BSE90X18	B4518	BSE45X18	1/8"
B9014	BSE90X14	B4514	BSE45X14	1/4"
B9038	BSE90X38	B4538	BSE45X38	3/8"
B9012	BSE90X12	B4512	BSE45X12	1/2"
B9034	BSE90X34	B4534	BSE45X34	3/4"
B901	BSE90X1	B451	BSE45X1	1"
B90114	BSE90X114	B45114	BSE45X114	1-1/4"
B90112	BSE90X112	B45112	BSE45X112	1-1/2"
B902	BSE90X2	B452	BSE45X2	2"

**BRASS PIPE PLUGS**

BP14	1/4"
BP38	3/8"
BP12	1/2"
BP34	3/4"
BP1	1"
BP114	1-1/4"
BP112	1-1/2"
BP2	2"

**BRASS PIPE CAPS**

BCP18	1/8"
BCP14	1/4"
BCP38	3/8"
BCP12	1/2"
BCP34	3/4"
BCP1	1"
BCP114	1-1/4"
BCP112	1-1/2"
BCP2	2"

BRASS REDUCING COUPLING

BRC14X18	1/4X1/8"
BRC38X14	3/8X1/4"
BRC38X18	3/8X1/8"
BRC12X38	1/2X3/8"
BRC12X14	1/2X1/4"
BRC34X12	3/4X1/2"
BRC34X38	3/4X3/8"
BRC1X34	1X3/4"
BRC1X12	1X1/2"
BRC114X1	1 1/4X1"
BRC114X34	1 1/4X3/4"
BRC112X114	1 1/2X1 1/4"
BRC112X1	1 1/2X1"
BRC112X34	1 1/2X3/4"
BRC2X1	2X1"
BRC2X114	2X1 1/4"
BRC2X112	2X1 1/2"

**BRASS COUPLNGS**

BC18	1/8"
BC14	1/4"
BC38	3/8"
BC12	1/2"
BC34	3/4"
BC1	1"
BC114	1-1/4"
BC112	1-1/2"
BC2	2"

**BRASS UNIONS**

BU18	1/8"
BU14	1/4"
BU38	3/8"
BU12	1/2"
BU34	3/4"
BU1	1"
BU114	1-1/4"
BU112	1-1/2"
BU2	2"

**BRASS BUSHINGS**

BB14X18	1/4X1/8"
BB38X14	3/8X1/4"
BB38X18	3/8X1/8"
BB12X38	1/2X3/8"
BB12X14	1/2X1/4"
BB34X12	3/4X1/2"
BB34X38	3/4X3/8"
BB1X34	1X3/4"
BB1X12	1X1/2"
BB114X1	1 1/4X1"
BB114X34	1 1/4X3/4"
BB112X114	1 1/2X1 1/4"
BB112X1	1 1/2X1"
BB112X34	1 1/2X3/4"
BB2X1	2X1"
BB2X114	2X1 1/4"
BB2X112	2X1 1/2"

**BRASS TEE**

BT18	1/8"
BT14	1/4"
BT38	3/8"
BT12	1/2"
BT34	3/4"
BT1	1"
BT114	1-1/4"
BT112	1-1/2"
BT2	2"

BRASS NIPPLES

Brass nipples are available in 1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 5" and 6" lengths.

ie: a 1/2" x 6" nipple would have a part number of: **BN12X6**

BN18X_	1/8"x_
BN14X_	1/4"x_
BN38X_	3/8"x_
BN12X_	1/2"x_
BN34X_	3/4"x_
BN1X_	1"x_
BN114X_	1 1/4"x_
BN112X_	1 1/2"x_
BN2X_	2"x_

BRASS CLOSE NIPPLES

BN18XC	1/8"x Close
BN14XC	1/4"x Close
BN38XC	3/8"x Close
BN12XC	1/2"x Close
BN34XC	3/4"x Close
BN1XC	1"x Close
BN114XC	1 1/4"x Close
BN112XC	1 1/2"x Close
BN2XC	2"x Close



PERKO® CAST BRONZE COCKPIT SCUPPER

For use when discharge is below the waterline. Angle of discharge is 45°. Has built-in check ball for one way drainage. Available in 1" or 1-1/2" in both bronze or chrome bronze.

- 142-001CHR** 1" Chrome
142-002CHR 1-1/2" Chrome
142-001PLB 1" Bronze
142-002PLB 1-1/2" Bronze



PERKO® COCKPIT SCUPPER

For use when discharge is above the waterline. Insert prevents passage of large objects without restricting water flow. 1-1/2" hose size, max. hull thickness 1-1/2".

285-DP



PERKO® FLUSH MOUNT DRAIN

Chrome plated cast bronze body and brass screen. 1-1/4" pipe size, 2-15/16" max. deck thickness.

361-007CHR



SEADOGLINE® DECK DRAINS

Injection molded ABS.

- 340020** Black - 4-3/16" dia.
340021 White - 4-3/16" dia.
340022 Grey - 4-3/16" dia.
340040 Black - 5-5/8" dia.
340041 White - 5-5/8" dia.
340042 Grey - 5-5/8" dia.



PERKO® ADJUSTABLE THRU-HULL SCUPPER

Molded white plastic. Soft black flapper valve. Designed for surface thickness from 2" to 4-3/4". Female portion of scupper can be cut down by one rib for each 1/4" difference between hull thickness and 4-3/4". I.D.: 1-11/32", Maximum Hull Thickness: 4-3/4"

PER343



SEADOGLINE® SCUPPER VALVE ASSEMBLY

Scupper valve assembly without thru hull. For surface mount application.

520500



SEADOGLINE® THRU-HULL WITH SCUPPER

Injection molded acetel. For 1-1/2" I.D. hose

520510



PERKO® THRU-HULL SCUPPER WITH RECESSED FLAPPER

Molded white plastic. Soft black flapper valve. Complete with nut and mounting hardware. For mounting through the transom.

Hose Size: 1-1/2"
 Maximum Hull Thickness: 2-1/8"

333-DP

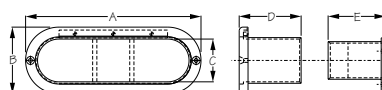


PERKO® THRU-HULL SCUPPER

Molded white plastic. Soft black flapper valve. Complete with nut and mounting hardware. For mounting through the transom.

Hose Size: 1-1/2"
 Maximum Hull Thickness: 2-1/8"

323-DP



SEADOGLINE® SCUPPER VALVE

Injection molded nylon/neoprene.

	A	B	C	D	E	Colour
520525	6"	2-1/4"	1-1/2"	2-1/8"	2"	White
520520	6"	2-1/4"	1-1/2"	2-1/8"	2"	Black



SEADOGLINE® SNAP HANDLE DRAIN PLUG

- 520070** Brass 1"
520070-5 POP display (25 pc) Brass
520071 Brass w/safety chain 1"
520072 Brass 1-1/4"
520075 Stainless Steel 1"
520077 Aluminum 1"
520077-5 POP display (25 pc) Aluminum



SEADOGLINE® T-HANDLE DRAIN PLUG

- 520080** Brass 1"
520080-5 POP display (30 pc) Brass
520085 Stainless Steel 1"



SEADOGLINE® BAITWELL PLUGS

Snap lock handle is adjustable to tighten plug size to fit most bait wells currently available.

- 520091** 3/8", pair
520092 1/2", pair
520092-5 POP display (50 pc)
520093 5/8", pair
520093-5 POP display (50 pc)
520094 3/4", pair
520094-5 POP display (45 pc)
520095 7/8", pair
520095-5 POP display (45 pc)



Scepter KOLLER
MARINE PRODUCTS

AUTOMATIC DRAIN PLUG

Flapper will automatically allow for water to drain from the hull when boat is under way and a water tight seal when the boat is at a stop. Flexible neoprene plug inserts in the transom drain hole. Fits 1" drains with up to 2-1/4" thick transoms.

051011



SEADOGLINE DRAIN TUBE

Designed for 1" diameter plugs.

- 520210** 1" x 1-7/8" Brass
- 520220** 1" x 2-3/8" Brass
- 520230** 1" x 2-7/8" Brass
- 520280** 1" x 8" Brass
- 520430** 1-1/4" x 2-7/8" Brass



SEADOGLINE DRAIN TUBE FLARING TOOL

Can be used to install all of our aluminum & brass drain tubes.

- 520290** For 1" tubes
- 520295** For 1-1/4" tubes



SEADOGLINE CAPTIVE GARBOARD DRAIN & PLUG

Investment cast 316 stainless. Direct replacement for the traditional style bronze garboards. Captive plug means no more lost plug.

520060



SEADOGLINE OBLONG CAPTIVE GARBOARD DRAIN & PLUG

The oblong captive garboard drain & plug sits lower in the stern for more water removal. Captive plug means no more lost plug.

520065



SEADOGLINE NYLON DRAIN PLUG

For use in 1" diameter holes.

- 520010** Complete unit
- 520021** Plug only 2/pk



SEADOGLINE CHROME BRASS DRAIN PLUG

For use in 1" diameter holes.

- 520020** Complete unit
- 520021** Plug only 2/pk



SEADOGLINE NYLON DRAIN PLUG

For use in 1" diameter holes.

- 520030** Complete unit
- 520021** Plug only 2/pk



PERKO GARBOARD DRAIN ASSEMBLY

Heavy cast bronze drain plugs. 3/4" pipe, for 3/4" thick hull.

- 363-DPPLB** Thru hull mount
- 266-DPPLB** Screw on mount

SEADOGLINE BRONZE GARBOARD DRAIN

Heavy cast bronze drain plug. 1/2" pipe size, 2" OD.

- 520040** Complete unit
- 520040-7** Clip-Strip display (10 pc)
- 520041** Plug only
- 520041-5** POP display (30 pc)



SEADOGLINE PLUGMATE™ GARBOARD WRENCH

Fits most standard and "T" style garboard plugs. Also has deck plate & shackle keys. Includes replacement plug #520041

520045



SEADOGLINE NYLON GARBOARD DRAIN

Nylon garboard drain with threaded drain plug. 1/2" pipe size.

- 520055** Complete unit
- 520056** Plug only (Bulk)



SEADOGLINE GARBOARD DRAIN & PLUG

Injection molded nylon/acetel. 2-3/16" OD, 2-3/16" length.

- 520050** Complete unit
- 520051** Plug only 2/pk



SEADOGLINE DRAIN TUBE

Injection molded HDPE. Fits 1" Hole, 3/4" - 2-1/2" hull thickness

520320



SEADOGLINE THRU-HULL ASSEMBLY

Nylon assembly, serrated press fit. Fits 1-1/8" hole, 1-7/8" maximum hull thickness.

- 520325** Complete unit



PERKO® DECK FILLS FOR PIPE

Cast Bronze. Plain or chrome plated. Complete with key.

Plain Bronze	Chrome Plated Bronze	Label	Pipe Size	O.D. Flange
528-008PLB	528-DP8CHR	None	1-1/2"	3-5/8"
528-009PLB	528-009CHR	None	2"	4-1/4"
528-G08PLB	528-DPGCHR	Gas	1-1/2"	3-5/8"
528-D08PLB	528-DPDCHR	Diesel	1-1/2"	3-5/8"
528-D09PLB	528-D09CHR	Diesel	2"	4-1/4"
528-W08PLB	528-DPWCHR	Water	1-1/2"	3-5/8"
	524-DPCHR	Waste	1-1/2"	3-5/8"



SEADOG LINE

STAINLESS DECK FILL FOR PIPE

Cast 316 stainless.

		Pipe Size
351350	Gas	1-1/2"
351351	Diesel	1-1/2"
351352	Water	1-1/2"
351353	Waste	1-1/2"
351391	Replacement cap	



PERKO® DECK FILLS FOR HOSE

Chrome plated bronze. Hose size 1-1/2".

520-DPGCHR	Gas
520-DPDCHR	Diesel
520-DPWCHR	Water
507-DPCHR	Waste



PERKO® DECK FILLS FOR HOSE

Chrome plated zinc, black plastic cap. Hose size 1-1/2".

1270-DPGCHR	Gas
1270-DPDCHR	Diesel
1270-DPWCHR	Water
1269-DPCHR	Waste



SEADOG LINE

DECK FILL WITH SPLASH GUARD FOR HOSE

Die cast zinc chrome plated

351750	Gas 1-1/2"
351755	Replacement cap



PERKO® GAS DECK FILLS FOR HOSE

Chrome plated zinc with black plastic flange and cap. For 1-1/2" pipe size.

1313-DPCHR

126-DPBLK Replacement cap



PERKO® LOCKING GAS FILL

Chrome plated zinc with black plastic flange and locking cap. Cap has cover for key hole.

1399-DPCHR



PERKO® LOCKING GAS CAPS

- Black Polymer with Gasket
- Built in Lock Cylinder

1324-DP0BLK Fits Perko Fills 1313 & 1399

1324-DP1BLK Fits Perko Fills 0520, 0527, 0528, 0557, 0599 & 1270

1324-DP0BLK 1-15/32" Dia.

1324-DP1BLK 1-7/8" Dia.



PERKO® LOCKING FUEL FILL INSERT

- Dual purpose key opens fill cap & locking insert
- Fits most PERKO vented fills

525-DP0BLK



SEADOG LINE

LOCKING HOSE DECK FILLS

Investment cast 316 stainless.

Locking hose deck fills include 2 keys.

351320L	Gas	1-1/2"
351321L	Diesel	1-1/2"
351330L	Gas	2"
351331L	Diesel	2"



SEADOGLINE**DECK FILL WITH KEYLESS COLOUR CODED CAP FOR HOSE**

Investment cast 316 stainless body, glass filled nylon cap

351310	Gas	1-1/2"
351311	Diesel	1-1/2"
351312	Water	1-1/2"
351313	Waste	1-1/2"
357090	Gas Replacement Cap (red)	
357091	Diesel Replacement Cap (green)	
357093	Water Replacement Cap (blue)	
357094	Waste Replacement Cap (black)	

**SEADOGLINE****STAINLESS DECK FILL WITH SPLASH GUARD**

Investment cast 316 stainless

351340	Gas	1-1/2"
351393	Replacement cap	

**SEADOGLINE****STAINLESS FLIP TOP GAS FILL FOR HOSE**

Cast 316 stainless

351100	2"
351110	1-1/2"
351119	Stainless lever rebuild kit

**SEADOGLINE****CAST STAINLESS DECK FILL FOR HOSE**

Cast 316 stainless

351320	Gas	1-1/2" Hose
351321	Diesel	1-1/2" Hose
351322	Water	1-1/2" Hose
351323	Waste	1-1/2" Hose
351330	Gas	2" Hose
351331	Diesel	2" Hose
351390	Replacement Cap 351320 - 351323	
351392	Replacement Cap 351330 - 351331	

**PERKO****PLASTIC GAS FILL**

Black plastic, Fiber reinforced, easy grip cap. No deck plate key or ground wire required. Hose size 1-1/2".

1613-DPBLK**SEADOGLINE****KEY FREE DECK FILL FOR HOSE**

Investment cast 316 stainless.

351380	Gas	1-1/2"
351381	Diesel	1-1/2"
351382	Water	1-1/2"
351383	Waste	1-1/2"
351385	Replacement cap, gas	
351386	Replacement cap, diesel	
351387	Replacement cap, water	
351388	Replacement cap, waste	
351480	Gas	2"
351481	Diesel	2"
351485	Replacement cap, gas 2"	
351486	Replacement cap, diesel 2"	

**SEADOGLINE****NYLON DECK FILL WITH KEYLESS CAP AND SPLASH GUARD**

Injection molded fiberglass nylon. Hose size 1-1/2"

357040	Gas, black body, red cap
357090	Replacement Cap



SEADOGLINE**NYLON HOSE DECK FILL**

Injection molded fiberglass nylon.
Hose size 1-1/2". Black body.

Complete	Cap only	
357010	357015	Gas
357011	357016	Diesel
357013	357017	Water
357014	357018	Waste

**SEADOGLINE****NYLON DECK FILL WITH KEYLESS CAP**

Injection molded fiberglass nylon.
Hose size 1-1/2". Black body.

Complete	Cap only	
357030	357090	Gas
357031	357091	Diesel
357033	357093	Water
357034	357094	Waste
357032	357092	Oil

**PERKO****GAS FILL WITH TANK VENT**

A black or white integral tank vent with flip top and flame arrestor. No deck plate key or ground wire needed. Hose size 1-1/2", 5/8" vent connection.

1318-DPGBLK	Gas, black (angled neck)
1319-DPGBLK	Gas, black (straight neck)
1319-DPGWHT	Gas, white (straight neck)
1319-DPWBLK	Water, black (straight neck)

PERKO
DECK FILLS WITH COLOR CODED CAPS

- Includes 4 resin decals; 1 each for water, gas, diesel and waste
- Chromed bronze cap
- 1-1/2" fill

552-DP0CHR	Straight neck
552-DPC99A	Spare cap Non Vented with 4 decals

**PERKO**
VENTED DECK FILLS WITH COLOR CODED CAPS

- Includes 3 resin decals, 1 each for water, gas or diesel
- Chromed bronze cap
- 1-1/2" fill and 5/8" vent connections

582-DP0CHR	Angled neck
583-DP0CHR	Straight neck
582-DPC99A	Spare cap Vented with 3 decals

PERKO**KEYLESS DECK FILL CAP**

Chrome plated bronze cap with stainless steel bead chain. Deck plate key not required.

For use with Perko 540, 541, 557, 564, 577, 590 & 591 series deck fills.

590-DPG99A**PERKO****COMBINATION GAS FILL AND TANK VENTS**

Fuel hose size 1-1/2", vent hose size 5/8". Black plastic base.

Chrome plated bronze cap, straight neck

541-DPGCHR	Gas
541-DPDCHR	Diesel
541-DPWCHR	Water

Angled neck

542-DPGBLK	Gas, black cap
542-DPWBLK	Water, black cap
540-DPGCHR	Gas, chrome cap



SEADOGLINE**UNIVERSAL DECK KEY**

Stainless Steel, fits most deck fills.

335690 Each**335690-7** Strip display (10 pc)**PERKO****ADJUSTABLE DECK KEY**

Made with hardened steel pins, this adjustable deck key fits most popular "pin-type" deck caps.

826-DPCHR Chrome, opens to 8"**DAVIS****UNIVERSAL DECK KEY**

Made of Stainless Steel, this key will fit just about any combination of deck fills imaginable.

DAV0381**SEADOGLINE****UNIVERSAL DECK FILL KEY - SMALL**

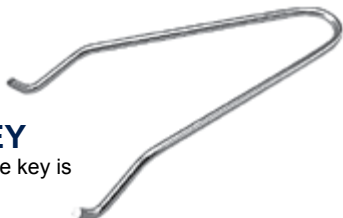
Stamped 304 stainless

335695**SEADOGLINE****DECK FILL KEY****351399** Investment cast 316 stainless**357399** Injection molded nylon**PERKO****DECK PLATE KEY**

Available for all sizes of Perko deck plates.

1248-7-8DP For 1 1/4" & 1 1/2"**1248-009DP** For 2" Deck Plates**SEADOGLINE****ADJUSTABLE DECK KEY**

Made of Stainless Steel, this adjustable key is perfect for most applications.

335699**SEADOGLINE****NYLON TANK VENT**

Injection moulded nylon. For 3/4" hull thickness and 5/8" hose size.

357100 Black**357105** White**attwood****PLASTIC STRAIGHT TANK VENT**

Corrosion-resistant and splash resistant vent. 5/8" hose with a hull thickness of 7/16".

1607-1 Black**attwood****90° P-TRAP FUEL TANK VENTS**

These vents help prevent water from entering the fuel tank, yet allow air to vent freely during normal sea conditions and washdowns. This eliminates the need for an anti-siphon loop in the vent hose. For 5/8" ID hose. Meets ABYC standard. Black with stainless steel trim cover.

66419-1 Black w/SS trim cover**1670-3** All Black**PERKO****TANK VENT**

Chrome plated cowl with black plastic cap. 5/8" Hose with a hull thickness of 3/4"

570-DP4BLK**SEADOGLINE****CHROME ZINC TANK VENT**

Chrome plated zinc. For 3/4" hull thickness and 5/8" hose size.

352100

PERKO' CHROME TANK VENT

Chrome plated zinc with black plastic splash guard. For 5/8" hose with a hull thickness of 3/4"

506-DP4CHR Chrome/black

506-DP4WHT Chrome/white



PERKO' TANK VENT WITH SWIVEL ELBOW

Black plastic cap with Zinc elbow. 5/8" hose with a hull thickness of 3/4".

571-DP4BLK



SEADOGLINE

CHROME TANK VENT

Die cast chrome plated. For 1/2" hull thickness and 5/8" hose size.

352110



SEADOGLINE

CHROME TANK VENT

Chrome plated brass. For 1/2" hull thickness and 9/16" hose size.

352010



PERKO'

CHROME TANK VENT

Chrome plated bronze.

509-DP4CHR 5/8" Hose / 3/4" hull

509-DP5CHR 3/4" Hose / 5/8" hull



SEADOGLINE

STAINLESS STEEL TANK VENT

All stainless steel. For 1/2" hull thickness and 5/8" hose size.

352210

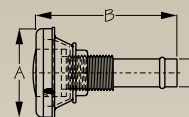


SEADOGLINE

90° STAINLESS STEEL TANK VENT

All stainless steel. For 1/2" hull thickness and 5/8" hose size.

352230



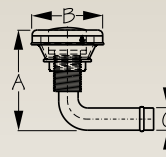
SEADOGLINE

FLUSH MOUNT GAS TANK VENT

Investment cast 316 stainless steel.

A= 1-13/16" B= 3" C= 5/8"

353210



SEADOGLINE

FLUSH MOUNT 90 DEGREE GAS TANK VENT

Investment cast 316 stainless steel.

A= 2-9/16" B= 3" C= 5/8"

353230



PERKO'

TANK VENT WITH SWIVEL ELBOW

Chrome plated zinc alloy cap with zinc alloy elbow and black plastic splash guard. Fits hose size 5/8" with a max hull thickness of 1"

561-DP4CHR Chrome/black

561-DP4WHT Chrome/white



PERKO'**CHROME TANK VENT**

Chrome plated bronze. For 5/8" hull thickness and 1/2" pipe.

515-DP4CHR 1/2" Pipe

**SEADOG LINE****CHROME TANK VENT**

Chrome plated brass. For 1-1/8" hull thickness and 3/8" pipe size.

352020

**RACOR****FUEL/AIR SEPARATORS**

Can handle most commercial fuel dispensing nozzles. The vent line connections are for standard 5/8" ID rubber hose.

LG50 Gasoline: Fill flow rate capacity 12 cubic feet (air) per minute (90gpm).

LG100 Diesel or gasoline fuel: Fill flow rate capacity 17 cubic feet (air) per minute (127gpm).

LG50 Gasoline

LG100 Diesel or gasoline fuel

**PERKO'****CHROME TANK VENT**

Chrome plated bronze. For 7/8" hull thickness available in 2 pipe sizes. With 90° elbow.

503-DP3CHR 3/8" pipe

503-DP4CHR 1/2" pipe

**attwood****FUEL VENT LINE SURGE PROTECTOR**

Helps avoid refueling spills because the surge helps the automatic fuel nozzles to shut off as the tank fills. Meets ABYC standard.

Glass-filled polypropylene construction and surge-ball design.

Installs in-line with traditional 5/8" ID vent hose tank systems.

Withstands oil, gas and alcohol-blended fuels. Compact size allows installation inside gunwale in any orientation within 45° of vertical. Includes two hose clamps.

1-7/16"W x 4-11/16"L.

1675-6

**PERKO'****CHROME FLUSH TANK VENT**

Chrome plated bronze. 1/2" pipe size.

505-DPCHR 1/2" Pipe

**FUEL SPILL GUARD™**

The Fuel Spill Guard™ fuel spill prevention system, is the ONLY effective way to stop fuel vent spills! This system has been tested in all conditions from extreme hot weather to rough seas.

5/8" hose barbs.

FSG2-058



FIRE-RESISTANT HOSE FOR GASOLINE OR DIESEL SYSTEMS



Construction:

Inner tube of oil resistant Nitrile synthetic rubber, an insulation layer, a high tensile steel wire braid reinforcement and an oil and weather and fire resistant, blue, "PKR" synthetic rubber cover. Layline is embossed for permanent identification.

Application and Temperature Range:

Gasoline, ethanol blends, diesel fuels, petroleum-base hydraulic fluids and lubricating oils within a temperature range of -4°F to +212°F (-20°C to +100°C); Water, water/oil emulsion, and water/glycol hydraulic fluids up to +185°F (+85°C). Meets Class 1 permeation requirements with gasoline and gasoline/ethanol blend and 2-1/2 minute fire test. USCG accepted for commercial and recreational vessel applications.

	ID.	OD.	Working (psi)	Burst (psi)	Min. Bend Radius
221FR-5	1/4	0.58	500	2000	1
221FR-6	5/16	0.68	500	2000	1-1/4
221FR-8	13/32	0.77	500	2000	1-3/4
221FR-10	1/2	0.92	500	2000	2-1/4
221FR-12	5/8	1.08	500	2000	2-3/4



20 SERIES ALL STAINLESS-STEEL 2 PIECE FIELD ATTACHABLE (REUSEABLE) FITTINGS

		Thread (inch)	Hose Size	Tube Size
20620-6-6C	Female 37° swivel straight	9/16-18	5/16	3/8
20620-8-8C	Female 37° swivel straight	3/4-16	13/32	1/2
20620-10-10C	Female 37° swivel straight	7/8-14	1/2	5/8
20620-12-12C	Female 37° swivel straight	1-1/16-12	5/8	3/4



20620 Series Female 37° Swivel-Straight

22 SERIES ALL-BRASS 2 PIECE FIELD ATTACHABLE (REUSEABLE) FITTINGS

		Thread (inch)	Hose Size
20122-4-5B	Male NPTF pipe rigid straight	1/4-18	1/4"
20122-4-6B	Male NPTF pipe rigid straight	1/4-18	5/16"
20122-6-8B	Male NPTF pipe rigid straight	3/8-18	13/32"
20122-12-12B	Male NPTF pipe rigid straight	3/4-14	5/8"



20122 Series Male NPTF Rigid-Straight

22 SERIES ALL-BRASS 3 PIECE (MANDREL STYLE) FIELD ATTACHABLE (REUSEABLE) FITTINGS

		Thread (inch)	Hose Size	Tube Size
20622-5-5B	Female dual 37° / 45° Swivel Straight	1/2-20	1/4	5/16
20622-6-6B	Female 37° JIC Swivel Straight	9/16-18	5/16	3/8
20622-8-8B	Female dual 37° / 45° Swivel Straight	3/4-16	13/32	1/2
20622-10-10B	Female 37° JIC Swivel Straight	7/8-14	1/2	5/8



20622 Series Female 37°/45° Swivel-Straight

26 SERIES ALL-BRASS HOSE FITTINGS

		Thread (inch)	Hose Size
10126-4-6B	Male NPT pipe rigid straight	1/4-18	5/16
10126-6-6B	Male NPT pipe rigid straight	3/8-18	5/16
10126-6-8B	Male NPT pipe rigid straight	3/8-18	13/32
10126-8-8B	Male NPT pipe rigid straight	1/2-14	13/32
10126-8-10B	Male NPT pipe rigid straight	1/2-14	1/2
10126-12-12B	Male NPT pipe rigid straight	3/4-14	5/8
10326-6-6B	Male JIC 37° - Rigid - Straight	9/16-18	5/16
10326-8-8B	Male JIC 37° - Rigid - Straight	3/4-16	13/32
10326-10-10B	Male JIC 37° - Rigid - Straight	7/8-14	1/2
10626-6-6B	Female JIC 37° - Swivel - Straight	9/16-18	5/16
10626-12-12B	Female JIC 37° - Swivel - Straight	1-1/16-12	5/8
16826-8-8B	Female JIC 37° / 45° - Dual Flare Swivel - Straight	3/4-16	13/32
16826-8-10B	Female JIC 37° / 45° - Dual Flare Swivel - Straight	3/4-16	1/2
16826-10-10B	Female JIC 37° / 45° - Dual Flare Swivel - Straight	7/8-14	1/2



10126 Series Male NPTF pipe Rigid-Straight



10326 Series Male JIC 37° Rigid-Straight






10626 Series Male JIC 37° Swivel-Straight

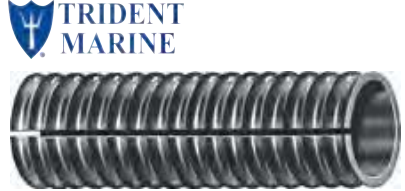


16826 Series Male JIC 37°/45° Dual Flare Swivel-Straight



FUEL HOSE

A2 CORRUGATED FUEL FILL HOSE #329		Hose ID	#329
 <p>Sold by the foot (50' per roll)</p>	<p>Premium corrugated marine fuel fill hose for very tight bends. Thick wall with corrugated cover, smooth tube and wire helix between 2 ply reinforcement for extraordinary flexibility and bend radius. Resists permeation, fire, heat, cold, ozone and premature aging by all marine fuels including alcohol blends. Exceeds Newest Type A2 (USCG, SAE, ISO, ABYC) Std. NMMA Type Accepted, CE certified, Lloyds Register Type Approved. 5 YEAR WARRANTY</p>	1-1/2"	TRI329-112
		2"	TRI329-200
A2 FUEL FILL HOSE #327		Hose ID	#327
 <p>Sold by the foot (50' per roll)</p>	<p>Premium marine fuel fill hose. Thick wall with smooth tube and cover, and wire helix between 2 ply reinforcement for excellent flexibility and bend radius. Resists permeation, fire, heat, cold, ozone and premature aging by all marine fuels including alcohol blends. Exceeds Newest Type A2 (USCG, SAE, ISO, ABYC) Std. NMMA Type Accepted, CE certified. Lloyds Register Type Approved. #328 is without wire. 5 YEAR WARRANTY</p>	3/4"	TRI327-034
		1-1/2"	TRI327-112
		1-5/8"	TRI327-158
		1-7/8"	TRI327-178
		2"	TRI327-200
		2-3/8"	TRI327-238
BARRIER LINED A1-15 FUEL HOSE #365		Hose ID	#365
 <p>Sold by the foot (50' per box)</p>	<p>Trident Barrier Lined A1-15 Fuel Hose (Distribution, Return, Vent, and Transfer) for both gasoline (petrol) and diesel (including alcohol blends). Exceeds ABYC H-24 & H-33, SAE J1527, ISO 7840, & USCG Type A1; and is NMMA Type Accepted & CE certified. It is also compliant with CARB Regulations. Built with best fuel, fire and age resistant formulation, 2 spiral reinforcement and unique "Barrier Liner" on inside surface of tube so fuel is not in direct contact with rubber. Provides extraordinary resistance to fuel permeation and aging, as well as fire, heat, cold, and ozone. Also good Bend-ability. 5 YEAR WARRANTY</p>	1/4"	TRI365-014
		5/16"	TRI365-056
		3/8"	TRI365-038
		1/2"	TRI365-012
		5/8"	TRI365-058
BARRIER LINED B1-15 LOW PERM FUEL HOSE #305		Hose ID	#305
 <p>Sold by the foot (50' per box)</p>	<p>Trident Barrier Lined B1-15 Fuel Hose for both gasoline (petrol) and diesel (including ethanol blends up to E85). Exceeds ABYC H-24, SAE J1527, ISO 8469 B1, & USCG Type B1-15; CARB and EPA low permeation; and is NMMA Type Accepted & CE certified. Built with best fuel and age resistant formulation, 2 spiral reinforcement and unique "Barrier Liner" on inside surface of tube so fuel is not in direct contact with rubber. Provides extraordinary resistance to fuel permeation and aging, as well as heat, cold, and ozone. Also good Bend-ability. 3 YEAR WARRANTY</p>	1/4"	TRI305-014
		5/16"	TRI305-056
		3/8"	TRI305-038
A2 FUEL HOSE #317		Hose ID	#317
 <p>Sold by the foot (50' per box)</p>	<p>Trident 5/8" A2 Fuel Hose for gasoline vent hose (including ethanol blends) and diesel (including bio diesel blends). The #317 series exceeds ABYC H-24 & H-33, SAE J1527, ISO 7840, & USCG Type A2; and is NMMA Type Accepted & CE certified. This hose is built with the best fuel, fire and age resistant formulation. Provides extraordinary resistance to aging, fire, heat, cold, and the ozone. Also provides excellent bend-ability. 5 YEAR WARRANTY</p>	5/8"	TRI317-058









SPLIT CONDUIT

WIRE HARNESS CONDUIT #128		Hose ID	#128
 <p>Sold by the foot</p>	<p>Corrugated Polypropylene Conduit Hose. Safe and easy to install for multi-wire harness, cable & hose routing (like transom to O/B engine), and other applications. New ABYC Electrical Standard E-11 applies to all boats with AC or DC systems. Slit. Fire Retardant/Self Extinguishing Polypropylene. Meets UL 94 V-2 as per ABYC E-11.16.4.1.9. Black. 1 YEAR WARRANTY</p>	1/2"	TRI128-012
		3/4"	TRI128-034
		1"	TRI128-100
		1-1/4"	TRI128-114
		1-1/2"	TRI128-112
		2"	TRI128-200







VENT DUCT

PVC VENT DUCT #400/402		Hose ID	#400 (white)	#402 (black)
 Sold by the foot (50' per box)	Wire supported vinyl ducting resists weather, sunlight and ozone. Won't support flame. #400-402: Standard vent ducting 3 mil. Operating temperatures 0° to +160° F (-18° to +71° C) 1 YEAR WARRANTY	3"	TRI400-300	TRI402-300
		4"	TRI400-400	TRI402-400
POLYDUCT #481 (blue)		Hose ID	#481 (blue)	
 Sold by the foot	Trident Polyduct - The most flexible, crush proof, and rugged blower duct hose for Heat, Ventilation, and Air Conditioning (HVAC). Heavy Duty polypropylene hose, reinforced with a flexible polypropylene rod helix. It has excellent flexibility & compressibility; and excellent resistance to crushing, flex fatigue, tearing, and moisture. Stomp on it and it returns to shape with out damage. Shove it through tight openings and overheads and it delivers full air flow. Meets FMVSS 302 flame resistance, Temp. range: -40° F to 225° F (-40° C to 107° C). 3 YEAR WARRANTY	3"	TRI481-300	
		4"	TRI481-400	




POTABLE WATER HOSE

CLEAR PVC HOSE - FDA #150		Hose ID	#150 (clear)	
  Sold by the foot (50' per box)	Non-toxic FDA compounded PVC for many unpressurized, cool water uses like fresh water drain and vent lines. Operating tempratures (+20° - +150° F). NOT RECOMMENDED FOR BELOW-THE WATERLINE THRU-HULL CONNECTIONS. 2 YEAR WARRANTY	1/4"	TRI150-014	
		5/16"	TRI150-056	
		3/8"	TRI150-038	
		1/2"	TRI150-012	
		5/8"	TRI150-058	
		3/4"	TRI150-034	
		1"	TRI150-100	
		1-1/8"	TRI150-118	
		1-1/4"	TRI150-114	
		1-1/2"	TRI150-112	
REINFORCED CLEAR PVC HOSE - FDA #162 (blue & red tracer) & #164 (blue tracer)		Hose ID	#162 (blue & red)	#164 (blue)
  Sold by the foot (50' per box)	Nylon reinforced. FDA compound PVC for pressurized drinking water systems, ect. No taste or odor. #164 "Cold Water". Max W.P. depending on I.D size @ 70°F (21° C): #162 = 175 PSI (1.21Mpa) #164 = 150 PSI (1.03Mpa). Operating temperatures +20° to +150° F (-7° to 66° C). NOT RECOMMENDED FOR BELOW WATERLINE THRU-HULL CONNECTIONS. 2 YEAR WARRANTY	3/8"	TRI162-038	
		1/2"	TRI162-012	TRI164-012
		5/8"	TRI162-058	TRI164-058
		3/4"	TRI162-034	TRI164-034
		1"	TRI162-100	
HD REINFORCED CLEAR PVC HOSE - FDA #161		Hose ID	#161 (white tracer)	
  Sold by the foot (50' per box)	Heavy duty non-toxic FDA compoundPVC with nylon reinforcement. For pressurized drinking systems and many other uses. Resists odor, taste and up to 250 PSI/ WP (depending onI.D. size) @ 70° F (21° C). For cold and hot tap water. Operating temperatures: +20° to +150° F (-7° to +66°C). Good flexibility and bend radius. Below water line connections - recommend double clamping and sealing compound. 3 YEAR WARRANTY	1-1/4"	TRI161-114	
		1-1/2"	TRI161-112	
WIRE REINFORCED CLEAR PVC HOSE - FDA #163		Hose ID	#163 (clear)	
  Sold by the foot (50' per box)	Clear FDA grade PVC hose with galvanized steel helix provides excellent flexibility and bend radius. It has a smooth outer surface to allow for easy clamping. Applications - Liquid suction lines, Air & Water Supply, Food and Beverage Supply, Vacuum Pumps, Bilge, Live Well, Drain, and Potable Water. Construction: Plasticized PVC (FDA) Color: Clear Reinforcement: Steel Helix Temperature Range: -5°F to 150°F (-20°C to 65°C) 3 YEAR WARRANTY	1/2"	TRI163-012	
		5/8"	TRI163-058	
		3/4"	TRI163-034	
		1"	TRI163-100	
		1-1/4"	TRI163-114	
		1-1/2"	TRI163-112	





BILGE, LIVE WELL & DRAIN HOSE

VAC - HD BILGE & LIVEWELL HOSE #144		Hose ID			#144 (black)	
  Sold by the foot (50' per box)	<p>Heavy duty bilge, drain and live well hose. Clear see thru vinyl (FDA) corrugated with black hard PVC helix and smooth tube. Provides excepeptional flexibility and bend radius. NOT RECOMMENDED FOR BELOW WATER LINE THRU-HULL CONNECTIONS. No cuffs required. Operating temps: +10° to +140° F (-12° to +60°C). 2 YEAR WARRANTY</p>	3/4"	TRI144-034			
		1-1/8"	TRI144-118			
		1-1/4"	TRI144-114			
		1-1/2"	TRI144-112			
VAC - XHD BILGE & LIVEWELL HOSE #147 / 149		Hose ID			#147 (clear/black)	#149 (black/black)
  Sold by the foot (50' per box)	<p>Smooth extra heavy wall vinyl (FDA) well hose. All clear (see thru) with black helix. Excellent durability, flexibility & bend radius for XHD bilge, live well, drain, scupper lines, etc. No cuffs required. Operating temperatures +10° to +140°F (-12° to +60°C). 3 YEAR WARRANTY</p>	5/8"	TRI147-058	TRI149-058		
		3/4"	TRI147-034	TRI149-034		
		1"	TRI147-100	TRI149-100		
		1-1/8"	TRI147-118	TRI149-118		
		1-1/4"	TRI147-114	TRI149-114		
		1-1/2"	TRI147-112	TRI149-112		
BILGE HOSE #120(white) & #121(black)		Hose ID			#120 (white)	#121 (black)
  Sold by the foot (50' per box)	<p>Extremely flexible and tough corrugated polyethylene hose for bilge intake and discharge. Cuffed every foot for clamping. Resists oily bilge and sea water. NOT RECOMMENDED FOR BELOW WATERLINE THRU-HULL CONNECTIONS. Operating tempratures -40° to +200°F (-40° to +93°C). 1 YEAR WARRANTY</p>	5/8"	TRI120-058	TRI121-058		
		3/4"	TRI120-034	TRI121-034		
		1-1/8"	TRI120-118	TRI121-118		
		1-1/4"	TRI120-114	TRI121-114		
		1-1/2"	TRI120-112	TRI121-112		



SANITATION HOSE

SANI SHIELD SANITATION HOSE, #101 (black) & 102 (white)		Hose ID	#101 (black)	#102 (white)
 <p>Sold by the foot (50' per box)</p>	Premium sanitation hose for all head and holding tank connections. Extra thick tube and cover specially compounded for Max. Resistance to odor permeation and winterizing anti-freeze. Helical wire between 2 ply reinforcement provides excellent flexibility bend radius. Longest odor-free performance on the market, but self draining installations still recommended. Not for potable water. 5 YEAR WARRANTY	1"	TRI101-100	TRI102-100
		1-1/2"	TRI101-112	TRI102-112
		1-7/8"	TRI101-178	
ODOR SHIELD SANITATION HOSE #140 (light grey)		Hose ID	#140 (light grey)	
 <p>Sold by the foot (50' per box)</p>	Extra odor-resistant hose for all head and holding tank connections. This smooth light grey hose a special anti-bacterial thermoplastic formulation that greatly exceeds the odor resistance of our popular 148 series. The hard PVC helix gives the same good flexibility and bend radius. No cuffs required. Not for potable water applications, or for exposure to alcohol, petrochemicals or solvents. Self draining installations are recommended for longest odor free service. Max. operating temps: +10° to +140° F (-12° to +60° C). Max. working pressure 70 PSI (0.48Mpa). 3 YEAR WARRANTY	1-1/2"	TRI140-112	
XHD SANITATION HOSE #148 (white)		Hose ID	#148 (white)	
 <p>Sold by the foot (50' per box)</p>	Extra heavy-duty sanitation hose of smooth white vinyl. Specially compounded to provide excellent resistance to odor permeation and (FDA) potable water fill. Also for critical bilge, drain scuppers, live wells, etc.. Hard PVC helix gives good flexibility and bend radius. No cuffs required. Don't use with alcohols, anti-freeze, petro-chemicals or solvents. Self draining installations are recommended for longest odor free service. Max. operating temps: +10° to +140° F (-12° to +60°C). 3 YEAR WARRANTY	5/8"	TRI148-058	
		3/4"	TRI148-034	
		1"	TRI148-100	
		1-1/8"	TRI148-118	
		1-1/4"	TRI148-114	
	1-1/2"	TRI148-112		

MARINE WATER (HEATER) HOSE

HEATER HOSE, #130 (black rubber) & #131V (blue silicone)		Hose ID	#130	#131V
<div></div> <div>Sold by the foot (50' per box)</div>	<p>#131V Ultimate Silicone Heater Hose- Very Hi Temp Blue with Red Tube provides much greater temperature range and service life (up to 6 times longer) than standard EDPM rubber #130 Heater Hose. Both are 2 spiral polyester reinforced with similar working pressure for engine coolant water, A/C and other mid-pressure water applications. #131V (VHT-Blue): 45 to 75PSI (0.31 to 0.52Mpa) WP 350°F (177°C) SAE J20R3, Class 1 & J20P3. 7 Year Warranty. #130 (Standard Black): 50PSI (0.34Mpa) WP 212°F (100°C) SAE J20R3. 2 Year Warranty.</p>	1/2"	TRI130-012	Available by request
		5/8"	TRI130-058	
		3/4"	TRI130-034	
		1"	TRI130-100	
HD & XHD WATER/AIR HOSE #132/134		Hose ID	#132 (HD)	#134 (XHD)
<div></div> <div>Sold by the foot (50' per box)</div>	<p>Cost effective, Hi Temp, EPDM rubber, polyester reinforced and exceeds SAE J20R3. Both are resistant to coolants, ozone, cold & heat; and serve a variety of boat and plant pressurized applications (water & air delivery). #132: 2 spiral, 200PSI (1.38Mpa) WP. #134: 4 spiral, heavy wall and better bend radius and working pressure - 300PSI (2.1Mpa) WP. Operating temperature -40° to 212°F (-40° to 100°C). #134 serves below water line intake and discharge applications (A/C, Eng, Sani) etc. 2-3 YEAR WARRANTY</p>	1/2"	Available by request	TRI134-012
		5/8"		TRI134-058
		3/4"		TRI134-034
		1"		TRI134-100

MARINE SILICONE WET EXHAUST & WATER HOSE

SILICONE WET EXHAUST & WATER HOSE #202V		ID x L	#202V	ID x L	#202V
 <p>Sold by the length</p>	Ultimate quality Silicone Marine Exhaust & Water hose. #202V Blue Very Hi Temp. [4 to 6 ply polyester reinforcement 350°F (177°C)] & #202X Red Xtra Hi Temp [4 ply Nomex® reinforcement 500°F (260°C)] dramatically exceeds all standards and lasts up to 6 times longer than black rubber. See Marine Wet Exhaust Systems Catalog. ISO 13363 Std. Pending. 10 YEAR WARRANTY	1" x 36'	202V1000-36	2-5/8" x 36"	202V2580-36
		1-1/8" x 36"	202V1180-36	2-3/4" x 36"	202V2340-36
		1-1/4" x 36"	202V1140-36	2-7/8" x 36"	202V2780-36
		1-3/8" x 36"	202V1380-36	3" x 36"	202V3000-36
		1-1/2" x 36"	202V1120-36	3-1/2" x 36"	202V3120-36
		1-3/4" x 36"	202V1340-36	4" x 36"	202V4000-36
		1-7/8" x 36"	202V1780-36	5" x 36"	202V5000-36
		2" x 36"	202V2000-36	6" x 36"	202V6000-36
		2-1/8" x 36"	202V2180-36	8" x 36"	202V8000-36
		2-1/4" x 36"	202V2140-36	10" x 36"	202V10000-36
		2-3/8" x 36"	202V2380-36	12" x 36"	202V12000-36
		2-1/2" x 36"	202V2120-36	14" x 36"	202V14000-36
		#202X Xtra Hi Temp(red) & longer lengths available by request			
CORRUGATED SILICONE WET EXHAUST & WATER HOSE #252V		ID x L	#252V	ID x L	#252V
 <p>Sold by the length</p>	Ultimate quality Silicone Marine Exhaust & Water hose. #252V Blue Very Hi Temp. [4 to 6 ply polyester reinforcement 350°F (177°C)] dramatically exceeds all standards and lasts up to 6 times longer than black rubber. See Marine Wet Exhaust Systems Catalog. ISO 13363 Std. Pending. 10 YEAR WARRANTY	3/4" x 36"	252V0340-36	2-1/4" x 36"	252V2140-36
		3/4" x 12'	252V0344	2-1/2" x 36"	252V2120-36
		1" x 36"	252V1000-36	3" x 36"	252V3000-36
		1" x 12'	252V1004	3-1/2" x 36"	252V3120-36
		1-1/4" x 36"	252V1140-36	4" x 36"	252V4000-36
		1-1/4" x 12'	252V1144	4-1/2" x 36"	252V4120-36
		1-1/2" x 36"	252V1120-36	5" x 36"	252V5000-36
		1-1/2" x 12'	252V1124	6" x 36"	252V6000-36
		1-3/4" x 36"	252V1340-36	8" x 36"	252V8000-36
		1-3/4" x 12'	252V1344	10" x 36"	252V10000-36
		2" x 36"	252V2000-36	12" x 36"	252V12000-36
		2" x 12'	252V2004		
		Longer lengths available by request			

MARINE WET EXHAUST & WATER HOSE

CORRUGATED HARD WALL MARINE WET EXHAUST HOSE #252



Premium corrugated marine wet exhaust hose for longer connections with substantial bends. Thick tube and cover with helix between 2 ply reinforcement. Exceptional flexibility and bend radius. Resists heat, ozone, exhaust fumes, panting and collapse. Exceeds New (SAE J2006, ABYC and NMMA) Stds. Black High Temp EDPM Rubber 250°F (121°C).
5 YEAR WARRANTY

Hose ID	#252
1-1/2"	TRI252-112
1-5/8"	TRI252-158
1-3/4"	TRI252-134
1-7/8"	TRI252-178
2"	TRI252-200
2-3/8"	TRI252-238
2-1/2"	TRI252-212
2-7/8"	TRI252-278
3"	TRI252-300
3-1/2"	TRI252-312
4"	TRI252-400
5"	TRI252-500
6"	TRI252-600

Sold by the foot

HARD WALL WET EXHAUST & WATER HOSE #250/100



Premium wet exhaust hose for longer bent connections. In smaller I.D.'s for engine intake, critical water, drain, scupper bilge & sanitation uses. Extra heavy tube and cover with helix between 2 ply reinforcement provides excellent flexibility and bend radius. Resists heat, ozone, exhaust, sani chemicals, panting and collapse. Exceeds New (SAE J2006, ABYC and NMMA) Stds. Black High Temp EDPM Rubber 250°F (121°C).
5 YEAR WARRANTY

Hose ID	#250/100	Hose ID	#250
1/2"	TRI100-012	2-3/8"	TRI250-238
5/8"	TRI100-058	2-1/2"	TRI250-212
3/4"	TRI100-034	2-5/8"	TRI250-258
7/8"	TRI100-078	2-3/4"	TRI250-234
1"	TRI100-100	2-7/8"	TRI250-278
1-1/8"	TRI100-118	3"	TRI250-300
1-1/4"	TRI100-114	3-1/8"	TRI250-318
1-1/2"	TRI250-112	3-1/2"	TRI250-312
1-5/8"	TRI250-158	4"	TRI250-400
1-3/4"	TRI250-134	4-1/2"	TRI250-412
1-7/8"	TRI250-178	5"	TRI250-500
2"	TRI250-200	6"	TRI250-600
2-1/4"	TRI250-214	8"	TRI250-800

Sold by the foot

SOFT WALL WET EXHAUST & WATER HOSE #200/110



Premium marine wet exhaust hose for short, straight connections. In smaller I.D.'s for critical engine coolant & circulation, heat exchanger and discharge uses. Extra heavy tube and cover with 2 to 6 ply reinforcement resists heat, aging, ozone, exhaust and sani chemicals. Exceeds New (SAE J2006, ABYC and NMMA) Stds. Black High Temp EDPM Rubber 250°F (121°C).
5 YEAR WARRANTY

Hose ID	#200/110	Hose ID	#200/110
1/2"	TRI110-012	2-3/8"	TRI200-238
5/8"	TRI110-058	2-1/2"	TRI200-212
3/4"	TRI110-034	2-5/8"	TRI200-258
1"	TRI110-100	2-3/4"	TRI200-234
1-1/4"	TRI110-114	2-7/8"	TRI200-278
1-1/2"	TRI200-112	3"	TRI200-300
1-5/8"	TRI200-158	3-1/8"	TRI200-318
1-3/4"	TRI200-134	3-1/2"	TRI200-312
1-7/8"	TRI200-178	4"	TRI200-400
2"	TRI200-200	4-1/2"	TRI200-412
2-1/8"	TRI200-218	5"	TRI200-500
2-1/4"	TRI200-214	6"	TRI200-600

Sold by the foot

RUBBER & SILICONE WET EXHAUST ELBOWS & BELLOWS


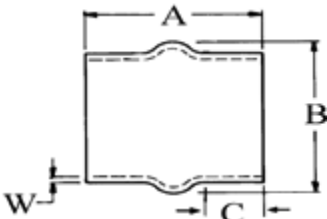
Silicone & Rubber Elbows & Hump Hose Bellows provide the ultimate flexible connectors for Marine Wet Exhaust Systems. They offer much greater tolerance to heat, misalignment, engine movement, & vibration, with significant savings in cost, parts, labor and space. Highest max. continuous operating temps.

Molded Black Hi Temp: EPDM Rubber 250°F (121°C). **5 YEAR WARRANTY**


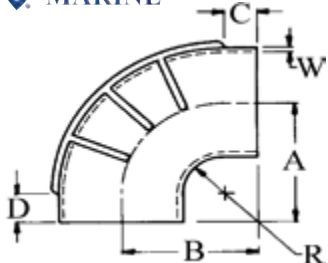
Blue Very Hi Temp: Silicone 350°F (177°C). **7 YEAR WARRANTY**

Red Xtra Hi Temp: Silicone 500°F (260°C). **10 YEAR WARRANTY** (Available by special order)


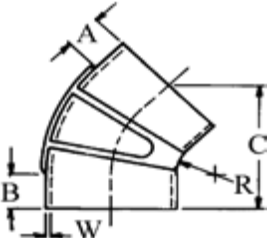


Hump Hose (Bellows)	Black HT	Blue VHT	ID	A	B	C	W
 	THH3	270V3000	3"	5.25	4.50	2.00	0.25
	THH35	270V3500	3.5"	5.25	5.00	2.00	0.25
	THHR353		3.5 x 3"	5.25	5.00	2.12	0.25
	THH4	270V4000	4"	5.25	5.37	2.00	0.25
	THHR43	270V4030	4" x 3"	5.25	5.50	1.50	0.25
	THH5	270V5000	5"	6.00	6.12	2.25	0.25
	THHR54	270V5040	5" x 4"	5.50	6.50	1.50	0.25
	THHR65	270V6050	6" x 5"	6.00	7.50	1.87	0.25
	THH6	270V6000	6"	7.00	7.50	2.75	0.25
Larger sizes & Red Xtra Hi Temp available by special order							



90° Elbow	Black HT	Blue VHT	ID	A	B	C	R	W
 	TRL290	290V2000	2"	4.50	5.50	2.00	2.00	0.20
	TRL2590	290V2500	2.5"	4.25	4.25	1.75	2.00	0.20
	TRL390	290V3000	3"	5.25	5.25	1.75	2.00	0.25
	TRL3590	290V3500	3.5"	5.50	5.50	1.75	2.00	0.25
	TRL490	290V4000	4"	5.75	5.75	1.75	2.00	0.25
	TRL4590	290V4500	4.5"	6.00	6.00	1.75	1.75	0.25
	TRL590	290V5000	5"	6.00	6.00	1.75	1.75	0.25
	TRL690	290V6000	6"	7.00	7.00	2.25	1.75	0.25
		290V8000	8"	8.50	8.50	2.25	2.12	0.37
Larger sizes & Red Xtra Hi Temp available by special order								



45° Elbow	Black HT	Blue VHT	ID	A	B	C	R	W
 	TRL345	240V3000	3"	1.50	1.50	5.50	2.00	0.25
	TRL3545	240V3500	3.5"	1.50	1.50	5.50	2.00	0.25
	TRL445	240V4000	4"	1.50	1.50	5.50	2.00	0.25
	TRL545	240V5000	5"	1.62	1.62	5.25	1.75	0.25
	TRL645	240V6000	6"	2.00	2.00	6.50	1.75	0.25
Larger sizes & Red Xtra Hi Temp available by special order								



Trident recommends that only T-bolt constant torque clamps be used on exhaust connections with double clamping at each connection.

EXHAUST TUBE CONNECTOR

Fiberglass. 250° F max continuous use.

260-2001	2"
260-2121	2-1/2"
260-3001	3"
260-3121	3-1/2"
260-4001	4"
260-5001	5"
260-6001	6"

Larger sizes are available by special order.

**CEN TEK INDUSTRIES****VERNATUBE™ WET EXHAUST TUBING**

Vernatube fire ratings exceed the values required for self extinguishing rating per ASTM-D-365. Vernatube should be located far enough downstream from the water-injection point to ensure that it is not exposed to temperatures in excess of 250°F. Tubing is supplied in 10' lengths.

	Nominal OD
1100512-FT	2"
1100502-FT	3"
1100503-FT	3-1/2"
1100504-FT	4"
1100505-FT	4-1/2"
1100506-FT	5"
1100507-FT	6"
1100508-FT	8"
1100509-FT	10"

Other sizes are available by special order.

**CEN TEK INDUSTRIES****FIBERGLASS 90° ELBOWS**

Nominal OD	
1200202	1-1/2"
1200200	2"
1200195	2-1/2"
1200171	3"
1200189	3-1/2"
1200157	4"
1200190	4-1/2"
1200175	5"
1200162	6"

Other sizes are available by special order.

**CEN TEK INDUSTRIES****FIBERGLASS 45° ELBOWS**

Nominal OD	
1200217	1-1/2"
1200192	2"
1200215	2-1/2"
1200109	3"
1200111	3-1/2"
1200112	4"
1200168	4-1/2"
1200113	5"
1200114	6"

Other sizes are available by special order.

**OTHER COMPONENTS AVAILABLE:**

- 45° Reducers
- 90° Reducers
- 180° Returns
- T Fittings
- Surge Chambers
- Reducer Couplings
- Y Fittings

Available by special order call for price & availability.

**EXHAUST PROTECTOR VALVES**

Specially compounded rubber flapper valves designed to prevent water from entering the exhaust system in following seas or when backing down. Made with weather resistant EPDM with U/V stabilizer. Includes stainless steel hose clamp.



	Pipe size
SIE18-4456	3"
SIE18-4457	4"
SIE18-4458	5" and 6"

**MARINE HARDWARE****EXHAUST PORTS**

This Marine Hardware design is the finest exhaust port available. Made of 316 stainless steel, with a 60 durometer nitrile rubber flap to prevent backwash. Fasteners are high grade stainless steel. The unique design allows easy installation in boat hulls of varying thicknesses, from 3/8" to 2-1/4", inboard/outboard transoms or sides of hull.

GETH1500S	1-1/2" hose
GETH1625S	1-5/8" hose
GETH2000S	2" hose
GETH2500S	2-1/2" hose
GETH3000S	3" hose
GETH3500S	3-1/2" hose

**CEN TEK INDUSTRIES****THRU-HULL EXHAUST FITTING WITH FLAPPER**

Made from fiberglass

1200300	I/O 2" - White
1200301	I/O 2" - Black
1200298	I/O 3" - White
1200299	I/O 3" - Black
1200326	I/O 4" - White
1200325	I/O 4" - Black
1200342	I/O 5" - White
1200343	I/O 5" - Black

**THERMOFAB WOVEN TAPES**

Developed as an efficient, high-quality alternative to asbestos in hot-wrapping and energy conservation applications. Woven with selvaged edges to prevent unravelling. Typical applications include pipe and hose wrapping and hangers, thermal insulation, electrical applications, fabrication of special gaskets and furnace door seals. Can be overcoated with waterglass. Sold in full 100' x 1/16" rolls only.

GW150-112	1-1/2" wide
GW150-2	2" wide
GW150-212	2-1/2" wide
GW150-3	3" wide

**THERMOFAB ROPE LAGGING**

Developed as an alternative to the asbestos lagging. Continuous operation to 1000°F. Non health hazardous. Overcoat with waterglass. Sold in full 100' rolls only.

78G-34	3/4" Diameter
78G-1	1" Diameter





CEN TEK MUFFLERS

Centek Industries manufactures the most complete line of "wet marine exhaust products" in the industry to accommodate a wide range of installations safely and efficiently. Choosing the best unit for a particular installation depends upon engine location, noise reduction efficiency, exhaust system size and safety considerations. Many different muffler models may be available for a specific installation, with designs that provide varying degrees of noise reduction.

PLEASE CALL OUR SALES DEPARTMENT FOR MORE INFORMATION



VERNATONE™

The Vernatone™ exhaust muffler is the original FRP water-cooled marine muffler. This style has been used by boat builders and boaters world wide for over 40 years. The Vernatone™ family of inline mufflers includes eight basic products with hundreds of variations in length, width, height, inlets and outlets. Builders and boaters requested these variations for specific engine or location requirements in a particular vessel. These mufflers also vary in size which influences the acoustical performance.

VERNALIFT™

The Vernalift™ muffler was originally designed for small auxiliary propulsion engines installed near or below the water line in sailboats. In the early 70's the quieting capabilities of lift mufflers were recognized. The Vernalift™ family expanded to include new and larger engines.

UNDERWATER EXHAUST

This exhaust silencer was designed specifically for use with underwater exhaust systems. It combines Centek's experience in muffler design with all the benefits of an underwater discharge. One of the benefits includes the elimination of the exhaust gases flowing back into the boat, commonly referred to as the "station wagon effect".

Another benefit is the elimination of engine exhaust deposits (soot) staining the exterior surfaces of the boat. The underwater exhaust is available in a vertical design for installation in the engine room as well as a horizontal design for mounting under the deck in the cockpit area.



GAS/WATER SEPARATION MUFFLERS

The routing of exhaust gas and cooling water in some complex vessels brought about the development of new types of muffler products. Centek has met these needs with its gas/water separation mufflers. Separation systems are very effective where engines are located amidships or well forward in the hull and extremely effective in reducing exhaust noise.

GEN-SEP™

The Gen-Sep™ is used in conjunction with a Vernalift™ muffler on generator sets. The water drain from the Gen-Sep™ can be located below the water line to eliminate irritating water splash during overnight moorings.

COMBO-SEP™

The patented Combo-Sep™ combines a Vernalift™ muffler and a highly efficient gas/water separator into a single space saving unit. The Combo-Sep™ is excellent for mid-range generators and propulsion engines installed amidship or forward. Centek recommends the Combo-Sep™ for above water line installations for maximum silencing and excellent water separation.



CONSTANT TORQUE CLAMPS

- Visual "Torque Check" feature "A"
- All stainless steel construction
- Reusable for long service life
- Can install without removing hose
- 5/8" wide band and internal liner helps protect and seal hose
- Extended adjustment - 7/8" OD range
- Compensates for "cold flow" and system expansion/contraction due to heat and cold
- Use when clamp can't be readjusted

	ID. Range	OD. Range
730-1000	3/4" to 1-1/4"	1" to 1.75"
730-1140	1" to 1-1/2"	1.25" to 2.125"
730-1120	1-1/4" to 2"	1.75" to 2.625"
730-2000	1-7/8" to 2-1/2"	2.25" to 3.125"
730-2120	2-3/8" to 3"	2.75" to 3.625"
730-3000	2-3/4" to 3-1/4"	3.25" to 4.125"
730-3120	3-1/4" to 3-1/2"	3.75" to 4.625"
730-4000	4"	4.25" to 5.125"
730-4120	4-1/8" to 4-1/2"	4.75" to 5.625"
730-5000	5" to 5-1/8"	5.25" to 6.125"
730-5120	5-1/2"	5.75" to 6.625"
730-6000	6"	6.25" to 7.125"
730-8000	8"	8.25" to 9.125"
730-10000	10"	10.35" to 11.25"



STAINLESS STEEL T-BOLT CLAMPS

3/4" wide 301 stainless steel band, and 18-8 stainless steel bolt & lock nut

	ID. Range	OD. Range
720-1000	1"	1.28" to 1.59"
720-1140	1-1/8" to 1-1/4"	1.53" to 1.84"
720-1120	1-3/8" to 1-1/2"	1.78" to 2.09"
720-1340	1-5/8" to 1-3/4"	2.03" to 2.34"
720-2000	1-7/8" to 2"	2.28" to 2.59"
720-2140	2-1/8" to 2-1/4"	2.53" to 2.84"
720-2120	2-3/8" to 2-1/2"	2.78" to 3.09"
720-2340	2-5/8" to 2-3/4"	3.03" to 3.34"
720-3000L	2-7/8" to 3-1/4"	3.37" to 3.94"
720-3120L	3-1/2"	3.87" to 4.44"
720-4000L	4"	4.37" to 4.94"
720-4120L	4-1/2"	4.87" to 5.44"
720-5000L	5"	5.37" to 5.94"
720-5120L	5-1/2"	5.87" to 6.44"
720-6000L	6"	6.53" to 7.10"
720-8000L	8"	8.62" to 9.19"



KODIAK STAINLESS T-BOLT CLAMPS

These are an all stainless steel clamp, ideal for many marine clamping applications, especially where gear clamps do not provide adequate holding or tightening strength.

	OD. Min.	OD. Max.
G89-022	1.38"	1.56"
G89-024	1.50"	1.69"
G89-026	1.62"	1.81"
G89-028	1.75"	2.00"
G89-030	1.88"	2.13"
G89-032	2.00"	2.25"
G89-034	2.13"	2.38"
G89-036	2.25"	2.56"
G89-038	2.38"	2.69"
G89-040	2.50"	2.81"
G89-042	2.63"	2.94"
G89-044	2.75"	3"
G89-046	2.88"	3.15"
G89-049	3.06"	3.38"
G89-052	3.25"	3.56"
G89-054	3.38"	3.69"
G89-057	3.56"	3.88"
G89-061	3.81"	4.13"
G89-065	4.06"	4.38"
G89-069	4.31"	4.63"
G89-073	4.56"	4.88"
G89-077	4.81"	5.13"
G89-081	5.06"	5.38"
G89-085	5.31"	5.63"
G89-089	5.56"	5.88"
G89-096	6.00"	6.32"
G89-100	6.25"	6.56"
G89-104	6.50"	6.81"
G89-108	6.75"	7.06"
G89-116	7.25"	7.56"
G89-132	8.25"	8.56"
G89-148	9.25"	9.56"
G89-164	10.25"	10.56"



304 STAINLESS STEEL MINI CLAMPS

The AWAB 304 stainless steel mini clamps are especially suitable for the smaller dimensions of plastic and rubber hose. Mini clamps have an unbroken band with rounded edges. The band is folded over to retain the nut, and together with the small screw thread pitch, gives the clamp self-locking characteristics. 3/8" band width.

	OD. Min.	OD. Max.
AWA306008	15/64"	21/64"
AWA306009	9/32"	3/8"
AWA306010	5/16"	13/32"
AWA306011	23/64"	29/64"
AWA306012	25/64"	31/64"
AWA306013	7/16"	17/32"
AWA306015	33/64"	39/64"
AWA306016	35/64"	41/64"
AWA306017	19/32"	11/16"



316 STAINLESS STEEL HOSE CLAMPS

The AWAB 316 stainless steel hose clamps feature rolled band edges to eliminate hose damage. The joining of the band to the housing is arranged in such a manner that the least possible deviation from a circular shape arises while the clamp is being tightened. The extra wide threads of the band are stamped, leaving the unperforated band smooth on the inside. In addition, the band and screw threads are properly pitched rendering the clamp virtually immune to vibration back-off. 1/2" band width.

	Hose OD Range	Std. Clamp Equivalent
AWA316017	7/16" - 11/16"	#4
AWA316020	1/2" - 13/16"	#6
AWA316024	5/8" - 15/16"	#8
AWA316028	3/4" - 1-1/8"	#10
AWA316032	7/8" - 1-1/8"	#12
AWA316038	1-1/16" - 1-1/2"	#16
AWA316044	1-1/4" - 1-3/4"	#20
AWA316050	1-1/2" - 2"	#24
AWA316057	1-1/4" - 2-1/4"	#28
AWA316064	1-1/2" - 2-1/2"	#32
AWA316070	1-3/4" - 2-3/4"	#36
AWA316076	2" - 3"	#40
AWA316083	2-1/4" - 3-1/4"	#44
AWA316089	2-1/2" - 3-1/2"	#48
AWA316095	2-3/4" - 3-3/4"	#52
AWA316102	3" - 4"	#56
AWA316108	3-1/4" - 4-1/4"	#60
AWA316114	3-1/2" - 4-1/2"	#64
AWA316127	3-1/2" - 5"	#72
AWA316140	4" - 5-1/2"	#80
AWA316152	4-1/2" - 6"	#88
AWA316165	5" - 6-1/2"	#96
AWA316178	5-1/2" - 7"	#104
AWA316191	6" - 7-1/2"	#112
AWA316203	6-1/2" - 8"	#120
AWA316216	7" - 8-1/2"	#128
AWA316232	7-5/8" - 9-1/8"	#138
AWA316257	8-5/8" - 10-1/8"	#154
AWA316283	9-5/8" - 11-1/8"	#170
AWA316308	10-5/8" - 12-1/8"	#186
AWA125015	Tail tips for 1/2" band width	



705-SERIES 3/8" BAND COMPACT "HD NON-PERF" HOSE CLAMPS

Premium Marine Grade, all AISI 316 (high tensile strength) Stainless Steel Compact "HD NON-PERF" Worm Gear Hose Clamp. The 9.7 mm (0.382") wide band is Non-Perforated and Smooth on the inside with Rolled Edges. This eliminates hose damage with increased clamping force. The High Strength, Compact, One Piece 14mm (0.55") wide Housing provides one of the highest clamping force ratings of any worm gear style clamp. Screw Head is 7mm.

	Size	For Hose I.D.
TRI705-0140	3	3/16-1/4
TRI705-0560	4	1/4-5/16
TRI705-0380	6	5/16-3/8
TRI705-0120	8	3/8-1/2
TRI705-0580	10	1/2-5/8
TRI705-0340	12	5/8-3/4
TRI705-1000	16	7/8-1
TRI705-1140	20	1-1-1/4
TRI705-1380	24	1-5/16-1-3/8
TRI705-1120	28	1-1/2-1-5/8



710-SERIES 1/2" BAND "HD NON-PERF" HOSE CLAMPS

Premium Marine Grade, all AISI 316 (high tensile strength) Stainless Steel "HD NON-PERF" Worm Gear Hose Clamp. The 11.7 mm (0.46") wide band is Non-Perforated and Smooth on the inside with Rolled Edges. This eliminates hose damage with increased clamping force. The High Strength, Compact, One Piece 16mm (0.63") wide Housing provides one of the highest clamping force ratings of any worm gear style clamp. Screw Head is 7mm.

	Size	For Hose I.D.
TRI710-0120	8	3/8-1/2
TRI710-0580	10	1/2-5/8
TRI710-0340	12	5/8-1-1/8
TRI710-1000	16	7/8-1
TRI710-1140	20	1-1-1/4
TRI710-1380	24	1-5/16-1-3/8
TRI710-1120	28	1-1/2-1-5/8
TRI710-1780	-	1-3/4-1-7/8
TRI710-2000	32	1-3/4-2
TRI710-2140	40	2-1/8-2-3/8
TRI710-2120	44	2-1/2-2-3/4
TRI710-3000	52	2-5/8-3
TRI710-3120	64	3-1/8-3-1/2
TRI710-4000	80	3-1/2-4-1/2



STAINLESS STEEL GEAR CLAMPS

The band and one piece housing is of 301 stainless steel and the screw is of 305 stainless steel. 1/2" Band width.

	Nominal	Min.	Max.
HF6	3/8"	3/8"	25/32"
HF8	1/2"	1/2"	1"
HF10	5/8"	9/16"	1-1/4"
HF12	3/4"	11/16"	1-1/4"
HF16	1"	5/8"	1-1/2"
HF20	1-1/4"	1-3/16"	1-3/4"
HF24	1-1/2"	1-1/16"	2"
HF30	1-3/4"	1-7/16"	2-3/8"
HF32	2"	1-9/16"	2-1/2"
HF36	2-1/4"	1-13/16"	2-3/4"
HF40	2-1/2"	2-1/16"	3"
HF44	2-3/4"	2-5/16"	3-1/4"
HF48	3"	2-13/16"	3-1/2"
HF52	3-1/4"	2-13/16"	3-3/4"
HF56	3-5/8"	3-1/16"	4"
HF60	3-3/4"	3-5/16"	4-1/4"
HF64	4"	3-9/16"	4-1/2"
HF72	4-1/2"	4-1/8"	5"
HF80	5"	4-5/8"	5-1/2"
HF88	5-1/2"	5-1/8"	6"
HF96	6"	5-5/8"	6-1/2"
HF104	6-1/2"	6-1/8"	7"
HF116	7-1/4"	6-7/8"	7-3/4"
HF128	8"	7-5/8"	8-1/2"
HF152	9-1/2"	9-1/8"	10"
HF188	12"	11-3/4"	12-1/4"
Mini Band. 5/16" band width			
MAH4	1/4"	7/32"	5/8"
MAH5	5/16"	7/16"	11/16"
MAH6	1/2"	5/16"	7/8"
MAH8	3/4"	1/2"	1"
MAH10	5/8"	1/2"	1-1/16"
MAH12	3/4"	1/2"	1-1/4"



FLEXI-CLAMPS

Strong, polymer-based worm drive clamp that is suited to a wide range of uses and applications. This non-conductive composite clamp will never rust, is strong and very easy to install. Will clamp around both square and round posts and is re-useable. Great to have for emergency situations.

Construction: Polymer Based, non-flammable, UV protected

Temperature Range: -5°F to 175°F (-20.5°C to 80°C)

TRI740-1200-25 3/4" to 3-1/2" (12" long) 25-pack

TRI740-1800-25 5/8" to 5" (18" long) 25-pack

TRI740-1200-4 3/4" to 3-1/2" (12"), 4-pack with tool

TRI740-1800-4 5/8" to 5" (18"), 4-pack with tool

TRIHEXTOOL Tightening tool for Flexi-Clamps (each)



HOSE CLAMP TAIL TIPS

These soft red vinyl tail tips dress up your job while, more importantly, making those unsightly scars just a bad memory. As a bonus, they will fit on 1/2" band clamps from those other guys as well.

AWA125015



DURAMAX CUTLASS SHAFT BEARINGS

Naval Brass	Fiberglass	Shaft	OD.	Length
34X114	34X114FG	3/4"	1-1/4"	3"
78X114		7/8"	1-1/4"	3-1/2"
78X138		7/8"	1-3/8"	3-1/2"
78X112	78X112FG	7/8"	1-1/2"	3-1/2"
1X114	1X114FG	1"	1-1/4"	4"
1X138		1"	1-3/8"	4"
1X112	1X112FG	1"	1-1/2"	4"
1X158		1"	1-5/8"	4"
1X2		1"	2"	4"
118X112		1-1/8"	1-1/2"	4-1/2"
118X158		1-1/8"	1-5/8"	4-1/2"
118X134		1-1/8"	1-3/4"	4-1/2"
118X2		1-1/8"	2"	4-1/2"
114X112		1-1/4"	1-1/2"	5"
114X134	114X134FG	1-1/4"	1-3/4"	5"
114X2	114X2FG	1-1/4"	2"	5"
114X218		1-1/4"	2-1/8"	5"
138X178	138X178FG	1-3/8"	1-7/8"	5-1/2"
138X2	138X2FG	1-3/8"	2"	5-1/2"
138X218		1-3/8"	2-1/8"	5-1/2"
138X238		1-3/8"	2-3/8"	5-1/2"
112X2	112X2FG	1-1/2"	2"	6"
112X238	112X238FG	1-1/2"	2-3/8"	6"
158X218		1-5/8"	2-1/8"	6-1/2"
158X258		1-5/8"	2-5/8"	6-1/2"
134X238	134X238FG	1-3/4"	2-3/8"	7"
134X258		1-3/4"	2-5/8"	7"
178X258		1-7/8"	2-5/8"	7-1/2"
178X21516		1-7/8"	2-15/16"	7-1/2"
2X258	2X258FG	2"	2-5/8"	8"
2X3	2X3FG	2"	3"	8"
218X21516		2-1/8"	2-15/16"	8"
218X318		2-1/8"	3-1/8"	8"
214X21516		2-1/4"	2-15/16"	9"
214X318	214X318FG	2-1/4"	3-1/8"	9"
214X338		2-1/4"	3-3/8"	9"
238X338		2-3/8"	3-3/8"	9-1/2"
212X318		2-1/2"	3-1/8"	10"
212X338		2-1/2"	3-3/8"	10"
258X338		2-5/8"	3-3/8"	10-1/2"
234X338		2-3/4"	3-3/8"	11"
234X334		2-3/4"	3-3/4"	11"
278X334		2-7/8"	3-3/4"	11-1/2"
3X334		3"	3-3/4"	12"
3X4		3"	4"	12"
314X414		3-1/4"	4-1/4"	13"
312X412	312X412FG	3-1/2"	4-1/2"	14"
4X514		4"	5-1/4"	16"
412X512		4-1/2"	5-1/2"	18"

Non-corrosive and inherently resistant to many chemicals, oil and grease, as well as being non-electrolytic.

LARGER SIZES UP TO 6-1/2" SHAFT DIAMETER ARE AVAILABLE BY SPECIAL ORDER

PACKLESS SEALING SYSTEM PSS SHAFT SEAL



PACKLESS SHAFT SEALING SYSTEM

PSS Shaft Seal Packless Sealing System is a maintenance-free dripless stuffing box and packing gland replacement for sailboat and power boat drivetrains.

The PSS Shaft Seal is a mechanical seal that uses a self-aligning carbon-graphite stator to ensure a 100% watertight seal with proven reliability. This seal will eliminate shaft wear and minimize corrosion. Available for shafts from 3/4" to 3-3/4". Larger sizes are available.

- Three year guarantee
- A.B.S. approved

	Shaft OD.	Stern Tube OD.
PSS02100112	7/8"	1.5" - 1.75"
PSS0225M112	25mm	1.5" - 1.75"
PSS02100112	1"	1.5" - 1.75"
PSS02100200	1"	2" - 2.25"
PSS02118112	1-1/8"	1.50" - 1.75"
PSS02118200	1-1/8"	2" - 2.25"
PSS02114134	1-1/4"	1.75" - 2.00"
PSS02114214	1-1/4"	2.25" - 2.50"
PSS02114234	1-1/4"	2.75" - 3.00"
PSS02138214	1-3/8"	2.25" - 2.50"
PSS02112200	1-1/2"	2.00"
PSS02112214	1-1/2"	2.25" - 2.50"
PSS02112234	1-1/2"	2.75" - 3.00"
PSS02112312	1-1/2"	3.50"
PSS02134214	1-3/4"	2.25" - 2.50"
PSS02134234	1-3/4"	2.75" - 3.00"
PSS02134314	1-3/4"	3.25" - 3.50"
PSS02200234	2"	2.75" - 3.00"
PSS02200314	2"	3.25" - 3.50"
PSS02214314	2-1/4"	3.25" - 3.50"
PSS02212312	2-1/2"	3.50"
PSS02300414	3"	4.25" - 4.50"

Other sizes & metric sizes available by special order.
Tee kits to supply water from cooling system for speeds over 12 knots.

PSS07-KIT034	Water feed Tee kit 3/4"
PSS07-KIT100	Water feed Tee kit 1"
PSS07-KIT112	Water feed Tee kit 1-1/2"
PSS07-KIT114	Water feed Tee kit 1-1/4"



BRONZE RUDDER BOXES

Manufactured of cast red bronze and machine finished to precise tolerances. Designed for internal mount, with long neck below the flange for application in all hulls. Furnished with brass studs for metal compatibility and strength. Complete with braided flax packing in place. A backing plate is also available separately, please specify if required.

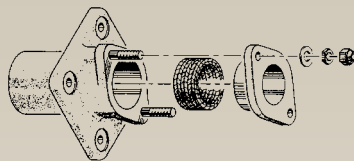
Nom. Bore

RBGF-1.250-B 1-1/4"

RBGF-1.500-B 1-1/2"

RBGF-2.500-B 2-1/2"

Other sizes available by special order.



BRONZE BOLT TYPE SHAFT STUFFING BOXES

Manufactured of cast red bronze and machine finished to precise tolerances. Brass studs are provided for metal compatibility and strength. Fittings for water cooling and electrical grounding available, please specify if required.

Shaft dia. Fits

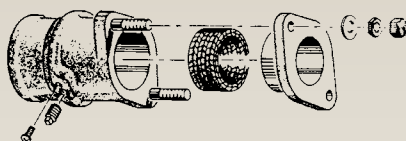
SPGF-1.25B3.00 1-1/4" 3"

SPGF-1.50B3.00 1-1/2" 3"

SPGF-1.75B3.00 1-3/4" 3"

SPGF-2.00B3.50 2" 3-1/2"

Larger sizes available by special order.



BRONZE NUT STYLE SHAFT STUFFING BOXES

This stuffing box is cast red brass with precision-machined threads available in right or left hand thread. Coolant fittings and electrical ground screw are available if so specified. Unit comes complete with packing nut, jam nut, and braided flax packing.

Shaft Fits

SPNS-1.00B1.62 1" 1-5/8"

SPNS-1.125B1.75 1-1/8" 1-3/4"

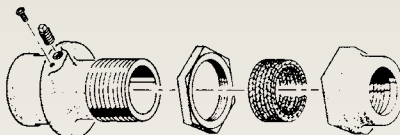
SPNS-1.25B2.50 1-1/4" 2-1/2"

SPNS-1.50B2.50 1-1/2" 2-1/2"

SPNS-1.75B2.50 1-3/4" 2-1/2"

SPNS-2.00B3.00 2" 3"

Other sizes available by special order.



FLAX PACKING

Recommended for rotary equipment and stern glands. Thermopak 114 is a long fibre flax packing lubricated with tallow and wax. For a working temperature of 90°C (200°F). For shaft speed up to 1200rpm.

Sold by the foot

114-18 1/8" Square

114-316 3/16" Square

114-14 1/4" Square

114-516 5/16" Square

114-38 3/8" Square

114-716 7/16" Square

114-12 1/2" Square

114-58 5/8" Square

114-34 3/4" Square

114-78 7/8" Square

114-1 1" Square



TEFLON PACKING

Thermopak 160 is a crosslink braided packing made from synthetic fibres impregnated with PTFE treated with a break-in lubricant.

Sold by the foot

160-18 1/8" Square

160-316 3/16" Square

160-14 1/4" Square

160-516 5/16" Square

160-38 3/8" Square

160-12 1/2" Square



FLEXIBLE PACKING HOOKS

PH1 6-1/4" Long

PH2 10-5/8" Long

PH3 15" Long

PH4 18" Long

PH5 22" Long

PH6 26" Long