

CHAPTER 05

Pumps, plumbing & sanitary

FORESPAR MARELON · PENTAIR SHURFLO · SATI



IN THIS CHAPTER

- Marelon Pro Series valves
- Seacocks & thru-hulls
- Tailpipes, elbows & adapters
- Aqua King II fresh water
- Washdown, livewell & bilge pumps
- Macerators & repair kits
- Sati marine hoses — fuel, exhaust, water
- SATIBLOCK clamps & collars

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Marelon composite marine plumbing

FORESPAR MARELON® — 40 YEARS OF POLYMER PLUMBING · MADE IN USA · SPECIFIED BY OVER 450 BOAT BUILDERS

THE MARELON® ADVANTAGE
Better than bronze



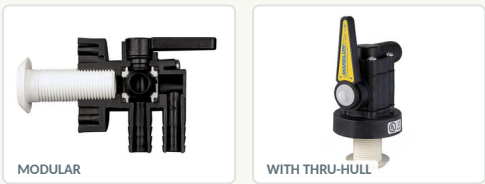
Marelon is an extremely strong, marine-grade polymer composite built for long-term use in all applications. Every part is hand-made in Forespar's California factory.

Exclusive polymer formulation that will never corrode · any hull material · no bonding wires · immune to lightning strike damage · saves weight for better speed and efficiency · outstanding U.V. resistance · complete freedom from electrolysis or reaction to any metals.

Standard or test	Marelon status	Property	Marelon Pro Series
A.B.Y.C.	Compliant	Hull materials	Aluminium, steel, wood or FRP
U.L.	Listed	Bonding / grounding	Not required
ISO 9093-2	Certified by IMCI	Operating temperature	-22°F to +176°F
CE	Certified	Lightning strike	Immune to damage
ABYC 500 lb strength test	Passes	Waterline	Above or below
USCG fire test	Passes	Weight, 1-1/2" ball valve seacock	1.48 lbs vs 6 lbs in bronze

Relative weight of a 1-1/2" ball valve seacock: Marelon 1.48 lbs · PVC 1.65 lbs · bronze 6 lbs.

THREAD COMPATIBILITY
Buttress, NPSM, NPT & BSP



All seacock-style Pro Series valves come equipped with their own Marelon thru-hull. These thru-hulls feature a **buttress** style thread with flat thread faces that provide superior strength for below-the-waterline use. This thread type is used **only** in the thru-hull and the seacock base; all other Marelon valves and fittings use straight NPSM threads.

Thread form	Where it is used	Angle	Specification notes
Buttress	Pro Series thru-hull and seacock base only	45°	Standard on every seacock; supplied with the valve
American NPSM	All other Marelon threaded connections	60°	Optional seacock base — add modifier N
NPT	Other manufacturers' fittings	60°	Same form and pitch as NPSM but cut narrower near the end; usable with liberal marine sealant, not warranted
BSP	European installations	—	Special order, modifier B; not for 1/2" or 3/4" valves

Make all threaded attachments with Teflon tape or marine sealant. A backing block attached to the inside of the hull is recommended for the most stable mounting strength.

TYPICAL INSTALLATION
The Marelon integrated system



A single Marelon system serves the engine cooling water intake with flush-out T-strainer, the multiple water discharge hoses, fresh water pumps, the marine head and black water tank, the sea chest and the AC or generator discharge — all above and below the waterline, with no bonding.

No.	Integrated component	No.	Integrated component
1	Pro Series valve / seacock	6	Threaded Pro Series valves
2	Titan strainer	7	Tank vent
3	Deck fill for pump out	8	T-150 strainer
4	Vented loop, with optional deck vent (4a)	9	1-1/2" barb adapter
5	Y-valve	10	Barbed in-line ball valve

Pro Series™ — building your part number

OVER 2,500 CONFIGURATIONS FROM ONE MODULAR PLATFORM — BASE, BODY, TOP, SIZE, MODIFIERS

STEPS 1 – 3

Base, body & top styles

MARELON



Every Pro Series valve is specified as a six-character number: **93** (constant, indicates Pro Series) + base + body + top + size, with any modifier letters appended.

Valves can be configured with dual inputs or outputs and used as seacocks or in-line valves, reducing the total amount of plumbing needed in most boat designs.

Style no.	Step 1 — base	Step 2 — body	Step 3 — top
1	Flanged seacock base, mushroom head buttress threaded thru-hull	Straight flow, single port, with thru-hull plug	—
2	Flanged seacock base, flush head buttress threaded thru-hull	Double port Y-valve, body barb opposite the handle, thru-hull plug	—
3	Female NPSM threads	Straight flow, single port, no thru-hull plug; flush cap on handle	Female threads
4	Straight barbed tailpipe	Double port Y-valve, body barb opposite the handle, flush cap	Straight hose barb tailpipe
5	90° elbow barbed tailpipe	Double port dual drain, body barb opposite the handle, thru-hull plug	Low profile 90° elbow hose barb
6	Flanged seacock base, screened flush head buttress thru-hull	Double port dual drain, body barb opposite the handle, flush cap	Blank top (bodies 5 & 6 only)
7	Flanged seacock base, screened mushroom head buttress thru-hull	—	Female garden hose (engine flush-out; bodies 2 & 4)

STEPS 4 – 5

Size codes & modifier codes

MARELON



Step 4 — size codes. $1/2" = 2 \cdot 3/4" = 3 \cdot 1" = 4 \cdot 1-1/8" = 0-4 \cdot 1-1/4" = 5 \cdot 1-1/2" = 6 \cdot 2" = 8$. **Step 5 — modifiers** are appended to the end of the part number and multiple modifiers are acceptable. Top elbows are oriented 180° from the handle unless a modifier specifies otherwise.

Code	Modifier	Code	Modifier
N	NPSM straight threaded base — allows the valve to be installed on a standard thru-hull; no thru-hull or handle plug included	V	Anti-venturi thru-hull; does not include a thru-hull plug
B	BSP threaded base; not available for 1/2" or 3/4" valves; no thru-hull or handle plug provided	K	Locking handle — padlock lock-off plate to USCG requirements (1" & 2" sizes only)
C	Chromed mushroom head buttress thread thru-hull	Z	Large Speed Scoop (1-1/2" & 2" valve sizes only)
L	Left facing top elbow, viewed from the top of the valve with the handle at 6 o'clock	D	Black thru-hull (standard is white)
R	Right facing top elbow, viewed from the top of the valve with the handle at 6 o'clock	X	Extra-long thru-hull, 5-3/4" long threads; custom cut lengths available
E	For ROV electric motor (OEM only — motor sold separately)	—	Minimum order quantities may apply on custom builds

WORKED EXAMPLE

Reading part number 931155

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Enter the style numbers chosen in steps 1 to 5 into the sequence below. The **93** prefix remains constant and indicates a Pro Series valve; the modifier field is blank by default. **931155** is a 1-1/4" mushroom-head seacock with a low profile 90° barb top — one of the most-specified configurations in the range.

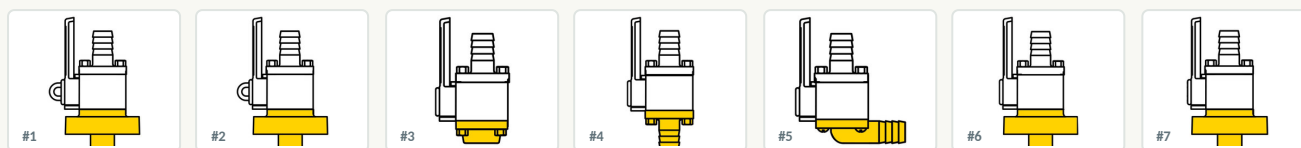
Position	Digit	Meaning
Base — step 1	1	Flanged seacock base with mushroom head buttress threaded thru-hull
Body — step 2	1	Straight flow, single port, with a thru-hull plug
Top — step 3	5	Low profile 90° elbow hose barb
Size — step 4	5	1-1/4" (31.75 mm)

Pro Series™ base, body & top styles

FORESPAR MARELON® — STEP-BY-STEP GUIDE TO CREATING A CUSTOM VALVE PART NUMBER

STEP 1 — SELECT A BASE OPTION

Base styles 1 – 7

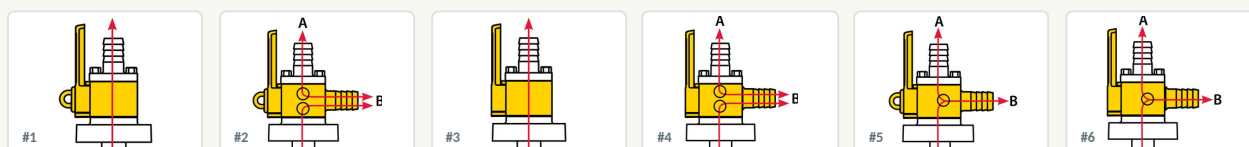
MARELON

Styles 1, 2, 6 and 7 are flanged seacock bases supplied complete with their own buttress threaded thru-hull; styles 3, 4 and 5 are in-line bases with no thru-hull.

Style	Base option
1	Flanged, seacock base with mushroom head buttress threaded thru-hull.
2	Flanged, seacock base with a flush head buttress threaded thru-hull.
3	Female NPSM threads.
4	Straight barbed tailpipe.
5	90 degree elbow barbed tailpipe.
6	Flanged, seacock base with screened flush head buttress threaded thru-hull.
7	Flanged, seacock base with screened mushroom head buttress threaded thru-hull.

STEP 2 — SELECT A BODY OPTION

Body styles 1 – 6

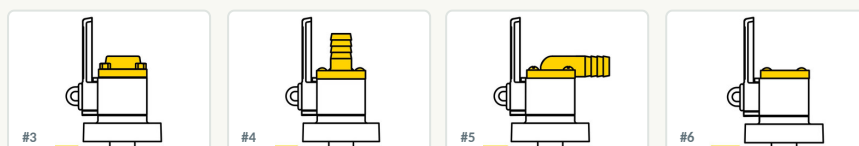
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Y-valves have three modes — off, A-B connected and B-C connected. **Dual drain** valves have two modes — A-B-C connected, and off.

Style	Body option
1	Straight flow, single port with a thru-hull plug for use with our buttress thru-hulls.
2	Double port Y-valve with body barb opposite the handle with a thru-hull plug.
3	Straight flow, single port with no thru-hull plug; only a flush cap on the handle.
4	Double port Y-valve with body barb opposite the handle with a flush cap on the handle.
5	Double port "Dual Drain" valve with the body barb opposite the handle and a thru-hull plug.
6	Double port "Dual Drain" valve with the body barb opposite the handle and flush cap handle.

STEPS 3 & 4 — TOP OPTION AND VALVE SIZE

Top styles and size codes

MARELON

A complete number reads **93** + base + body + top + size, with modifier letters appended — for example **931155**.

Top	Top option	Valve size	Size code
3	Female threads.	1/2" (12.7 mm)	2
4	Straight hose barb tailpipe.	3/4" (19.05 mm)	3
5	Low profile 90 degree elbow hose barb.	1" (25.4 mm)	4
6	Blank top only (used on very few configurations — with body 5 & 6 only).	1-1/8" (28.57 mm)	0-4
7	Female garden hose fitting (engine flush-out valves, body #2 and #4). Not shown.	1-1/4" (31.75 mm)	5
—	Top elbows are oriented 180° from the handle unless otherwise specified.	1-1/2" (38.1 mm)	6
—	Multiple modifiers are acceptable; the field is blank by default.	2" (50.8 mm)	8

Scan the interactive PDF guide at forespars.com/marelon to build a custom valve part number online.

Pro Series™ technical data

VALVE SIZES, HOSE BARB DIMENSIONS AND CRITICAL DIMENSIONS FOR EVERY BODY SIZE

PRO SERIES™ SIZES

Valve sizes & hose barb dimensions

MARELON



Pro Series hose barb valves allow quick and secure hose installation across a wide array of sizes. Valves can be configured with a combination of horizontal or vertical ports to adapt to tight hull spaces. The size digit below is the fourth character of every Pro Series part number.

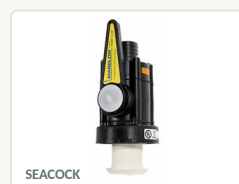
Size code	Nominal valve size	Hose barb inner I.D.	Height with handle	Body width	King nut dia.	Approx. weight
2	1/2" (12.7 mm)	0.462" (11.73 mm)	4.5" (114 mm)	1.75" (45 mm)	3.1" (80 mm)	10 oz (0.28 kg)
3	3/4" (19.05 mm)	0.52" (13.20 mm)	4.5" (114 mm)	1.75" (45 mm)	3.1" (80 mm)	10 oz (0.28 kg)
4	1" (25.4 mm)	0.790" (20.06 mm)	6.2" (157 mm)	2.3" (59 mm)	3.75" (95 mm)	18 oz (0.51 kg)
0-4	1-1/8" (28.57 mm)	—	—	—	—	—
5	1-1/4" (31.75 mm)	1.05" (26.67 mm)	6.2" (157 mm)	2.3" (59 mm)	3.75" (95 mm)	18 oz (0.51 kg)
6	1-1/2" (38.1 mm)	1.25" (31.75 mm)	7.6" (194 mm)	3.1" (79 mm)	4.2" (107 mm)	28 oz (0.79 kg)
8	2" (50.8 mm)	1.54" (39.11 mm)	7.6" (194 mm)	3.1" (79 mm)	4.2" (107 mm)	28 oz (0.79 kg)

1-1/8" (size code 0-4) is a custom configuration size and is not held as a standard stock configuration.

CRITICAL DIMENSIONS

Seacock & thru-hull dimension table

MARELON



Reference letters correspond to the Pro Series dimension drawing. Three body sizes cover the whole range: 1/2"-3/4", 1"-1-1/4" and 1-1/2"-2". Each valve disassembles for cleaning and O-ring replacement.

Ref	Dimension	1/2" & 3/4"	1" & 1-1/4"	1-1/2" & 2"
A	Thru-hull head major dia.	1.7" (44 mm)	2.2" (56 mm)	2.8" (71 mm)
B	Thru-hull head minor dia.	1.3" (32.5 mm)	1.7" (43 mm)	2.2" (55 mm)
C	Thru-hull thread outside dia.	1.1" (28 mm)	1.6" (41 mm)	2.1" (53 mm)
D	Thru-hull inside dia.	0.6" (16 mm)	1.05" (27 mm)	1.7" (42 mm)
E	Thru-hull head thickness	0.25" (6 mm)	0.25" (6 mm)	0.24" (6 mm)
F	Max. thru-hull thread length	2.4" (61 mm)	2.4" (61 mm)	2.4" (61 mm)
G	King nut dia.	3.1" (80 mm)	3.75" (95 mm)	4.2" (107 mm)
H	Height with handle	4.5" (114 mm)	6.2" (157 mm)	7.6" (194 mm)
I	Overall body height	3.2" (81 mm)	4" (102 mm)	5.25" (133 mm)
J	Body width	1.75" (45 mm)	2.3" (59 mm)	3.1" (79 mm)
K	Barb length	1.3" (33 mm)	1" barb 1.25" (32 mm); 1-1/4" barb 1.50" (38 mm)	
L	Side barb length	1.5" (37 mm)	1.5" (38 mm)	1.75" (45 mm)
M	Handle length from axis	2.5" (64 mm)	4" (102 mm)	5" (127 mm)
N	Handle stick out	0.6" (15 mm)	0.8" (20 mm)	1" (25.4 mm)
O	King nut thickness	0.9" (23 mm)	1" (25 mm)	1.1" (28 mm)
—	Approximate weight	10 oz (0.28 kg)	18 oz (0.51 kg)	28 oz (0.79 kg)

Dimension F is measured from the base of the seacock to the bottom of the head with a minimum safe thread engagement of five threads.

Custom Marine configures Pro Series part numbers to your drawing and holds the most-specified sizes in Dubai — 800BOATS.

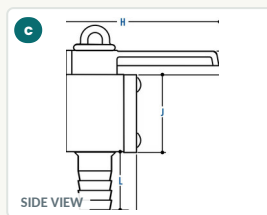
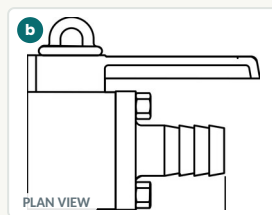
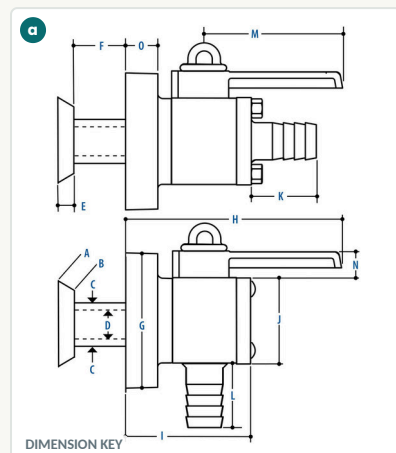
Pro Series™ critical dimension data

FORESPAR MARELON® — EVERY DIMENSION LETTER REFERENCED TO THE SECTIONAL DRAWING

PRO SERIES CRITICAL DIMENSION TABLE

Dimensions A – O

MARELON®



Marelon Pro Series hose barb valves allow quick and secure hose installation through a wide array of sizes. Valves can also be configured with a combination of horizontal or vertical ports to adapt to tight hull spaces.

Letters in the table below refer to the sectional drawing **a**. Sizes are grouped: 1/2" and 3/4" share a body; 1" and 1-1/4" share a body; 1-1/2" and 2" share a body.

Corresponding diagram dimension	1/2" (12.7 mm) 3/4" (19.05 mm)	1" (25.4 mm) 1-1/4" (31.75 mm)	1-1/2" (38.1 mm) 2" (50.8 mm)
A - TH HEAD MAJOR DIA.	1.7" (44 mm)	2.2" (56 mm)	2.8" (71 mm)
B - TH HEAD MINOR DIA.	1.3" (32.5 mm)	1.7" (43 mm)	2.2" (55 mm)
C - TH THREAD OUTSIDE DIA.	1.1" (28 mm)	1.6" (41 mm)	2.1" (53 mm)
D - TH INSIDE DIA.	0.6" (16 mm)	1.05" (27 mm)	1.7" (42 mm)
E - TH HEAD THICKNESS	0.25" (6 mm)	0.25" (6 mm)	0.24" (6 mm)
F - MAX TH THREAD LENGTH *	2.4" (61 mm)	2.4" (61 mm)	2.4" (61 mm)
G - KING NUT DIA.	3.1" (80 mm)	3.75" (95 mm)	4.2" (107 mm)
H - HEIGHT WITH HANDLE	4.5" (114 mm)	6.2" (157 mm)	7.6" (194 mm)
I - OVERALL BODY HEIGHT	3.2" (81 mm)	4" (102 mm)	5.25" (133 mm)
J - BODY WIDTH	1.75" (45 mm)	2.3" (59 mm)	3.1" (79 mm)
K - BARB LENGTH	1.3" (33 mm)	1" barb = 1.25" long (32 mm); 1-1/4" barb = 1.50" long (38 mm)	
L - SIDE BARB LENGTH	1.5" (37 mm)	1.5" (38 mm)	1.75" (45 mm)
M - HANDLE LENGTH (from axis)	2.5" (64 mm)	4" (102 mm)	5" (127 mm)
N - HANDLE STICK OUT	0.6" (15 mm)	0.8" (20 mm)	1" (25.4 mm)
APPX. WEIGHT	10 oz (0.28 kg)	18 oz (0.51 kg)	28 oz (0.79 kg)
O - KING NUT THICKNESS	0.9" (23 mm)	1" (25 mm)	1.1" (28 mm)

* Distance from base of seacock to bottom of the head with minimum safe thread engagement of 5 threads.

HOSE BARB INNER DIAMETER

Pro Series hose barb I.D.

MARELON®



Marelon Pro Series valves are supplied with their own thru-hull in screened, flush and anti-venturi styles. A thru-hull plug slots into the handle where applicable so owners can service the valve by plugging the thru-hull from the outside, without hauling the boat.

In addition to the standard part number configuration, further modifications are available to OEMs including **longer and shorter thru-hulls** and pre-packaged kits.

Valve size	Hose barb inner I.D.	Valve size	Hose barb inner I.D.
1/2" (12.7 mm)	0.462" (11.73 mm)	1-1/4" (31.75 mm)	1.05" (26.67 mm)
3/4" (19.05 mm)	0.52" (13.20 mm)	1-1/2" (38.1 mm)	1.25" (31.75 mm)
1" (25.4 mm)	0.790" (20.06 mm)	2" (50.8 mm)	1.54" (39.11 mm)

Custom Marine stocks the Marelon Pro Series in Dubai and can build any of the 2,500+ configurations to order — tell us base, body, top, size and modifiers and we will confirm availability.

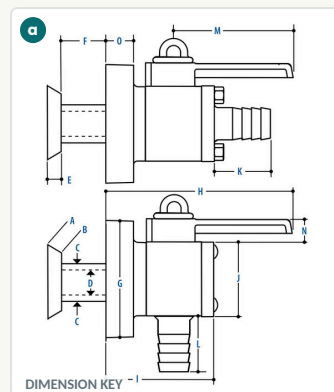
Marelon® 93 Series hose barb valve dimensions

FORESPAR® — ALL DIMENSIONS IN INCHES • USED BY OVER 350 BOAT BUILDERS

93 SERIES HOSE BARB VALVES

Complete dimension table

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MARINE PRODUCTS THAT PERFORM



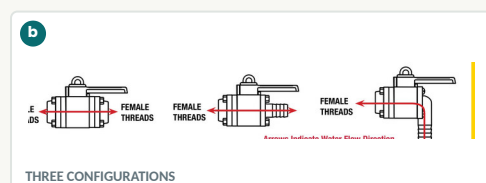
Standard Marelon 93 Series hose barb valves allow quick and secure hose installation through a wide array of sizes, and can be configured with horizontal or vertical ports to adapt to tight hull spaces. Available with **mushroom, flush or anti-venturi** thru-hull connectors and with **chrome plated mushroom heads**; custom orders with NPT or BSP threads.

Dimension	1/2" & 3/4" (12.7 mm) & (19.05 mm)	1" & 1-1/4" (25.4 mm) & (31.75 mm)	1-1/2" & 2" (38.1 mm) & (50.8 mm)
MAJOR DIA.	1.73 (43.94 mm)	2.20 (55.88 mm)	2.79 (70.86 mm)
MINOR DIA.	1.28 (32.51 mm)	1.70 (43.18 mm)	2.18 (55.37 mm)
OUTSIDE DIA.	1.1 (27.94 mm)	1.6 (40.64 mm)	2.1 (53.34 mm)
INSIDE DIA.	.62 (15.74 mm)	1.05 (26.67 mm)	1.64 (41.65 mm)
KING NUT DIA.	3.13 (79.50 mm)	3.75 (95.25 mm)	4.21 (106.93 mm)
WEIGHT	10 oz	18 oz	28 oz
A	4.48 (113.79 mm)	6.19 (157.22 mm)	7.63 (193.80 mm)
B	.91 (23.11 mm)	.98 (24.89 mm)	1.10 (27.94 mm)
C	.48 (12.19 mm)	.31 (7.84 mm)	.23 (5.84 mm)
D	1.20 (30.48 mm)	1.87 (47.49 mm)	1.57 (39.87 mm)
E	.52 (13.20 mm)	.75 (19.05 mm)	1.35 (34.29 mm)
F	.53 (13.46 mm)	.75 (19.05 mm)	.78 (34.29 mm)
G	1.31 (33.27 mm)	1"=1.25 (25.4 mm)=(31.75 mm); 1-1/4"=1.50 (31.75 mm)=(38.1 mm)	1.50 (38.1 mm)
H	1.44 (36.57 mm)	1.50 (38.1 mm)	1.75 (44.45 mm)
I	.24 (6.09 mm)	.23 (5.84 mm)	.24 (6.09 mm)

93 SERIES THREADED VALVES

Female threaded configurations

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MARINE PRODUCTS THAT PERFORM



These valves meet the needs of builders and owners who require the Marelon integrated plumbing system with **female threads**. They work well with A.N.P. thru-hulls and are offered in the three most widely used configurations with **N.P.S.M. or B.S.P.** threads. All Marelon Integrated Plumbing System valves come with a matched thru-hull, both using a buttress thread form. Ordered with flush or mushroom non-screened thru-hulls, the valve comes with a capped handle loop — an emergency thru-hull plug so the valve can be serviced **without hauling the boat**.

Valve size	Female thread base × female thread top	Female thread base × straight barb top	Female thread base × 90° barb top
1/2" (12.7 mm)	933332	933342	933352
3/4" (19.05 mm)	933333	933343	933353
1" (25.4 mm)	933334	933344	933354
1-1/4" (31.75 mm)	933335	933345	933355
1-1/2" (38.1 mm)	933336	933346	933356
2" (50.8 mm)	933338	933348	933358

If a Marelon valve is to be used with an existing bronze or stainless steel thru-hull, Forespar can (with prior notice) supply the valve with NPSM or BSP threads. Forespar valve components are not compatible with any other manufacturer's product.

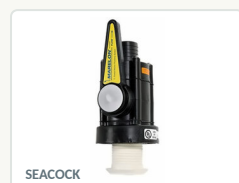
Standard Pro Series™ seacocks

PRE-ASSEMBLED STOCK CONFIGURATIONS — U.L. APPROVED · ISO 9093-2 CERTIFIED · A.B.Y.C. COMPLIANT

93 SERIES — IN STOCK

Seacock, open thru-hull

MARELON



Common port styles, directions and flow pattern configurations, pre-assembled and ready to go. They meet all design criteria and exceed the mechanical property requirements specified by ISO, UL, CE, IMCI and ABYC.

Standard with buttress thread thru-hulls. NPSM or BSP threaded bases available 3/4" to 2" for use with existing thru-hulls — add modifier N or B.

Valve size	Female thread top mushroom head	Female thread top flush head	Straight barb top mushroom head	Straight barb top flush head	90° barb top mushroom head	90° barb top flush head
1/2" (12.7 mm)	931132	932132	931142	932142	931152	932152
3/4" (19.05 mm)	931133	932133	931143	932143	931153	932153
1" (25.4 mm)	931134	932134	931144	932144	931154	932154
1-1/4" (31.75 mm)	931135	932135	931145	932145	931155	932155
1-1/2" (38.1 mm)	931136	932136	931146	932146	931156	932156
2" (50.8 mm)	931138	932138	931148	932148	931158	932158

93 SERIES — IN STOCK

Seacock, screened thru-hull

MARELON



The same three top styles on screened mushroom and screened flush head buttress thru-hulls — base styles 7 and 6. Screens keep weed and debris out of engine and generator intakes without a separate strainer at the hull.

Extra-long buttress thread thru-hulls are now available for all Pro Series valves — add modifier X.

Valve size	Female thread top screened mushroom	Female thread top screened flush	Straight barb top screened mushroom	Straight barb top screened flush	90° barb top screened mushroom	90° barb top screened flush
1/2" (12.7 mm)	937332	936332	937342	936342	937352	936352
3/4" (19.05 mm)	937333	936333	937343	936343	937353	936353
1" (25.4 mm)	937334	936334	937344	936344	937354	936354
1-1/4" (31.75 mm)	937335	936335	937345	936345	937355	936355
1-1/2" (38.1 mm)	937336	936336	937346	936346	937356	936356
2" (50.8 mm)	937338	936338	937348	936348	937358	936358

93 SERIES — IN-LINE

In-line ball valves

MARELON



Base style 3 (female NPSM threads) or base style 4 (straight barbed tailpipe) with body style 1 or 3 gives a full in-line ball valve on the same three-part Pro Series platform — no thru-hull, flush cap on the handle.

Valves are a maintenance item: actuate the handle and lubricate the seals regularly with MareLube REACH kit 770049.

Valve size	Thread base × thread top	Thread base × straight barb	Thread base × 90° barb	Barb base × barb top	Y-valve barb base × barb top
1/2" (12.7 mm)	933332	933342	933352	934342	934442
3/4" (19.05 mm)	933333	933343	933353	934343	934443
1" (25.4 mm)	933334	933344	933354	934344	934444
1-1/4" (31.75 mm)	933335	933345	933355	934345	934445
1-1/2" (38.1 mm)	933336	933346	933356	934346	934446
2" (50.8 mm)	933338	933348	933358	934348	934448

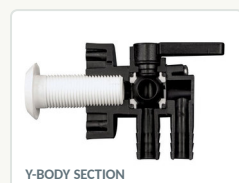
Pro Series™ Y-valve seacocks

THREE-WAY DIVERSION BELOW THE WATERLINE — OFF, A-B CONNECTED, B-C CONNECTED

93 SERIES — IN STOCK

Y-valve seacock, open thru-hull

MARELON



Y-valves have three modes: **off**, **A-B connected** and **B-C connected**. They divert water between a head system, a holding tank and fresh water, or send raw water from a single input to two separate outputs.

Body styles 2 and 4 — double port with the body barb opposite the handle, with a thru-hull plug or a flush cap on the handle.

Valve size	Female thread top mushroom head	Female thread top flush head	Straight barb top mushroom head	Straight barb top flush head	90° barb top mushroom head	90° barb top flush head
1/2" (12.7 mm)	931232	932232	931242	932242	931252	932252
3/4" (19.05 mm)	931233	932233	931243	932243	931253	932253
1" (25.4 mm)	931234	932234	931244	932244	931254	932254
1-1/4" (31.75 mm)	931235	932235	931245	932245	931255	932255
1-1/2" (38.1 mm)	931236	932236	931246	932246	931256	932256
2" (50.8 mm)	931238	932238	931248	932248	931258	932258

93 SERIES — IN STOCK

Y-valve seacock, screened thru-hull

MARELON



Base styles 7 (screened mushroom head) and 6 (screened flush head) on the Y-valve body. Every seacock is supplied with its own matched buttress thread thru-hull and, where applicable, a thru-hull plug that slots into the handle — so the thru-hull can be plugged from outside for maintenance without hauling the boat.

Valve size	Female thread top screened mushroom	Female thread top screened flush	Straight barb top screened mushroom	Straight barb top screened flush	90° barb top screened mushroom	90° barb top screened flush
1/2" (12.7 mm)	937432	936432	937442	936442	937452	936452
3/4" (19.05 mm)	937433	936433	937443	936443	937453	936453
1" (25.4 mm)	937434	936434	937444	936444	937454	936454
1-1/4" (31.75 mm)	937435	936435	937445	936445	937455	936455
1-1/2" (38.1 mm)	937436	936436	937446	936446	937456	936456
2" (50.8 mm)	937438	936438	937448	936448	937458	936458

TOP STYLE 6 — SPACE SAVER

Y-valve seacock, 90° space saver

MARELON



The 90° space saver Y-valve turns the flow through a right angle immediately above the king nut, cutting installed height where headroom over the seacock is limited. Available across all four thru-hull head styles and all six sizes.

Valve size	Mushroom head	Flush head	Screened mushroom head	Screened flush head
1/2" (12.7 mm)	931262	932262	937462	936462
3/4" (19.05 mm)	931263	932263	937463	936463
1" (25.4 mm)	931264	932264	937464	936464
1-1/4" (31.75 mm)	931265	932265	937465	936465
1-1/2" (38.1 mm)	931266	932266	937466	936466
2" (50.8 mm)	931268	932268	937468	936468

Straight barb base Y-valves with a straight barb top: 934442 1/2" · 934443 3/4" · 934444 1" · 934445 1-1/4" · 934446 1-1/2" · 934448 2".

Pro Series™ dual drain seacocks

TWO MODES — A-B-C CONNECTED, AND OFF. ONE THRU-HULL SERVING SEVERAL SYSTEMS

93 SERIES — IN STOCK

Dual drain seacock, open thru-hull

MARELON



Dual drain valves have two modes: **A-B-C connected** and **off**. They provide raw water to multiple systems, or discharge multiple systems through a single drain — one hull penetration instead of two or three.

Body styles 5 and 6 — double port with the body barb opposite the handle, with a thru-hull plug or a flush cap on the handle.

Valve size	Female thread top mushroom head	Female thread top flush head	Straight barb top mushroom head	Straight barb top flush head	90° barb top mushroom head	90° barb top flush head
1/2" (12.7 mm)	931532	932532	931542	932542	931552	932552
3/4" (19.05 mm)	931533	932533	931543	932543	931553	932553
1" (25.4 mm)	931534	932534	931544	932544	931554	932554
1-1/4" (31.75 mm)	931535	932535	931545	932545	931555	932555
1-1/2" (38.1 mm)	931536	932536	931546	932546	931556	932556
2" (50.8 mm)	931538	932538	931548	932548	931558	932558

93 SERIES — IN STOCK

Dual drain seacock, screened thru-hull

MARELON



All Pro Series valves use a three-part construction that enables their versatility and long-term maintainability. Each valve can be easily disassembled for cleaning and to replace the O-rings — a necessary maintenance procedure on every valve on the market.

Valve size	Female thread top screened mushroom	Female thread top screened flush	Straight barb top screened mushroom	Straight barb top screened flush	90° barb top screened mushroom	90° barb top screened flush
1/2" (12.7 mm)	937632	936632	937642	936642	937652	936652
3/4" (19.05 mm)	937633	936633	937643	936643	937653	936653
1" (25.4 mm)	937634	936634	937644	936644	937654	936654
1-1/4" (31.75 mm)	937635	936635	937645	936645	937655	936655
1-1/2" (38.1 mm)	937636	936636	937646	936646	937656	936656
2" (50.8 mm)	937638	936638	937648	936648	937658	936658

IN-LINE & SERVICE

Dual drain in-line valves & O-ring kits

MARELON



Dual drain body on a female NPSM threaded base with a straight barb top — base style 3, body style 6, top style 4. No thru-hull; flush cap on the handle. Each size is matched below to its O-ring service kit.

Valve size	Dual drain in-line, thread base x straight barb top	O-ring repair kit	Kit covers
1/2" (12.7 mm)	933642	930401	1/2" to 3/4"
3/4" (19.05 mm)	933643	930401	1/2" to 3/4"
1" (25.4 mm)	933644	930402	1" to 1-1/4"
1-1/4" (31.75 mm)	933645	930402	1" to 1-1/4"
1-1/2" (38.1 mm)	933646	930403	1-1/2" to 2"
2" (50.8 mm)	933648	930403	1-1/2" to 2"

Further modifications are available to OEMs, including longer and shorter thru-hulls and pre-packaged kits to reduce clutter on the factory floor.

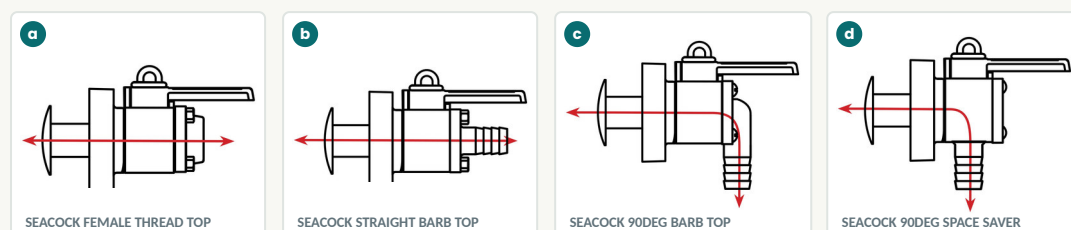
Pro Series™ flow patterns — sectional drawings

FORESPAR MARELON® — ARROWS INDICATE WATER FLOW DIRECTION · ALL DRAWINGS NOT TO SCALE

SEACOCK BODIES — SINGLE PORT AND SPACE SAVER

Seacock flow patterns

MARELON



Every stock Pro Series configuration is shown here in section, with the thru-hull, the valve ball and the flow path drawn together. Use the drawing to confirm the port directions before ordering — a seacock body has a single through port, so the water path is set by the top style you choose.

The **90° space saver** body turns the flow down immediately below the valve for installations where there is no room for a conventional elbow tailpipe.

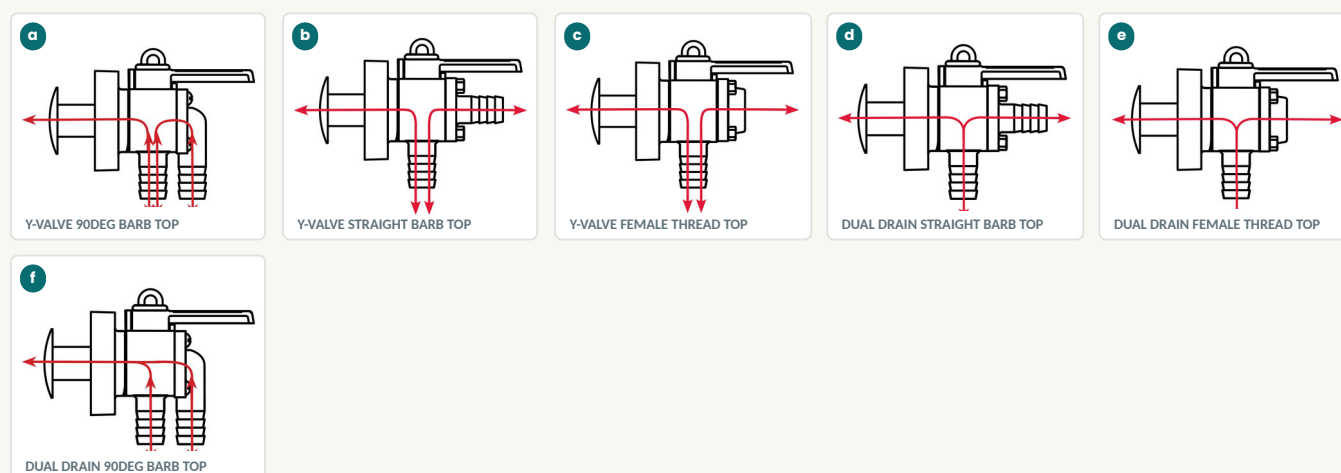
	Configuration	Mushroom thru-hull	Flush thru-hull	Mushroom screened thru-hull	Flush screened thru-hull
a	Seacock – female thread top	931132-931138	932132-932138	937332-937338	936332-936338
b	Seacock – straight barb top	931142-931148	932142-932148	937342-937348	936342-936348
c	Seacock – 90° barb top	931152-931158	932152-932158	937352-937358	936352-936358
d	Seacock – 90° space saver	931262-931268	932262-932268	937462-937468	936462-936468

Ranges run 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" — the last digit is the size code (2, 3, 4, 5, 6, 8). Full part numbers are tabulated on the preceding pages.

Y-VALVE AND DUAL DRAIN BODIES

Diverter flow patterns

MARELON



Y-valves have three modes — off, A-B connected and B-C connected — and are used to divert water between a head system, a holding tank and fresh water, or to send raw water from a single input to two separate outputs.

Dual drain valves have two modes — A-B-C connected, and off. They provide raw water to multiple systems, or discharge multiple systems through a single drain.

	Configuration	Mushroom thru-hull	Flush thru-hull	Mushroom screened thru-hull	Flush screened thru-hull
a	Y-valve – 90° barb top	931252-931258	932252-932258	937452-937458	936452-936458
b	Y-valve – straight barb top	931242-931248	932242-932248	937442-937448	936442-936448
c	Y-valve – female thread top	931232-931238	932232-932238	937432-937438	936432-936438
d	Dual drain – straight barb top	931542-931548	932542-932548	937642-937648	936642-936648
e	Dual drain – female thread top	931532-931538	932532-932538	937632-937638	936632-936638
f	Dual drain – 90° barb top	931552-931558	932552-932558	937652-937658	936652-936658

Ranges run 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" — the last digit is the size code (2, 3, 4, 5, 6, 8). Full part numbers are tabulated on the preceding pages.

Pro Series™ valve options

ENGINE FLUSH-OUT • ANTI-VENTURI THRU-HULLS • LOCKING HANDLES • RETAIL PACKS

TOP STYLE 7 — GARDEN HOSE

Engine flush-out valve

MARELON


Engines running in salt or brackish water need to be flushed with fresh water after use to prevent costly corrosion during winter or off-season storage. This seacock / Y-valve configuration includes a **brass garden hose connection** to make regular fresh water engine flushing a one-valve operation.

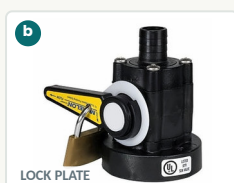
The valve includes a thru-hull that must be used to ensure a proper seal. Replacement parts are available.

Hose barb diameter	Mushroom head thru-hull	Screened mushroom head thru-hull	Valve body	Top style
1" (25.4 mm)	931274	937474	Y-valve	Female garden hose
1-1/4" (31.75 mm)	931275	937475	Y-valve	Female garden hose
1-1/2" (38.1 mm)	931276	937476	Y-valve	Female garden hose
2" (50.8 mm)	931278	937478	Y-valve	Female garden hose

Also catalogued: 1/2" 931272 and 3/4" 931273 mushroom head · flush head 932272, 932273, 932274, 932275, 932276, 932278 · screened flush 937472, 937473 · straight barb base 934472, 934473, 934474, 934475, 934476, 934478. Garden hose tops are available on body styles 2 and 4 only.

MODIFIERS V & K

Anti-venturi thru-hulls & locking handle

MARELON


Anti-venturi thru-hulls give steady, controlled water flow on high-speed boats. Tested at varying speeds and turn rates up to 45 mph: on a 3/4" generator intake line only 0" to about 5" of vacuum was recorded. The notch and lowered ramp in the leading edge force-feed the intake, while the exit slot lets flow leave at a controlled rate so impellers are not overwhelmed.

Locking plates are installed at the factory on any Pro Series seacock and allow the handle to be padlocked closed — satisfying the USCG requirement for locking overboard-discharge head seacocks in the no-discharge position.

Part number	Description	Fits valve sizes	Order via
930171	Mushroom head buttress thru-hull, anti-venturi	1/2" & 3/4"	Modifier V
930272	Mushroom head buttress thru-hull, anti-venturi	1" & 1-1/4"	Modifier V
930273	Mushroom head buttress thru-hull, anti-venturi	1-1/2" & 2"	Modifier V
930136	 Optional handle lock plate, USCG pattern	1" & 1-1/4"	Modifier K
930137	Optional handle lock plate, USCG pattern	1-1/2" & 2"	Modifier K

Forespar does not supply the padlock. Valve locks are not sold separately and are not a retrofit item — they must be specified with the valve. Modifier K is **only** available on 1" and 2" sizes.

RETAIL PACK

Seacock, thru-hull & connector kit

MARELON


Six common Pro Series valve sizes in a peg-hook retail bag. The integrated four-part system comes complete with valve, 90° hose barb connector, straight hose barb connector and a properly matched mushroom head thru-hull with buttress threading — designed to eliminate the valve and thru-hull thread mismatches common in aftermarket installations.

Part number	Description	Hose barb O.D.	Thru-hull O.D.
904042ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	1/2" (13 mm)	1-1/4" (32 mm)
904043ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	3/4" (19 mm)	1-1/4" (32 mm)
904044ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	1" (25 mm)	1-3/4" (44 mm)
904045ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	1-1/4" (32 mm)	1-3/4" (44 mm)
904046ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	1-1/2" (38 mm)	2-1/4" (57 mm)
904048ABYC	Valve replacement kit, mushroom thru-hull, straight & 90°	2" (51 mm)	2-1/4" (57 mm)

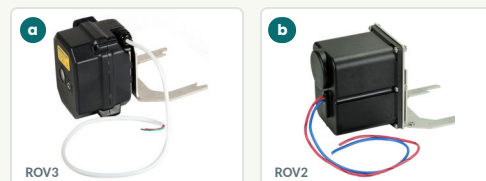
Forespar valve components are not compatible with any other manufacturer's product. For compatible 1-1/2" fittings see the female NPSM threaded barb fittings later in this chapter.

Remote-operated valves & valve service

ROV MOTORS • FLOWTECH™ RACING VALVES • REPAIR KITS, WRENCHES & LUBRICATION

MODIFIER E — OEM ONLY

ROV remote-operated valve motors

MARELON


Marelon ROV motors give electronic control of hundreds of Pro Series valves — opening and closing seacocks without reaching into the bilge.

ROV3 is fully re-engineered: 250 inch-pounds of torque, IP67 waterproof and ignition-safe, a 12 V motor drawing less than 1 amp under load, open/closed activation with a 12 V signal wire, and manual override using the included snap-in-place wrench. **ROV2** is the original two-wire motor: push-button control, switch indicator lights confirming valve status, 12 V and 24 V compatible, CE certified and RoHS compliant.

Series	Part number	Motor assembly	Fits Pro Series valve sizes	Approvals
a ROV3	930630	Small ROV motor assembly	1/2" to 3/4"	UL approved, ISO certified, ABYC compliant
ROV3	930631	Medium ROV motor assembly	1" to 1-1/4"	UL approved, ISO certified, ABYC compliant
ROV3	930632	Large ROV motor assembly	1-1/2" to 2"	UL approved, ISO certified, ABYC compliant
b ROV2	930245	Small ROV motor and switch assembly	1/2" to 3/4"	UL, ISO, ABYC, CE, RoHS
ROV2	930246	Medium ROV motor and switch assembly	1" to 1-1/4"	UL, ISO, ABYC, CE, RoHS
ROV2	930247	Large ROV motor and switch assembly	1-1/2" to 2"	UL, ISO, ABYC, CE, RoHS

Motor only — specify modifier E on the valve part number. Available to qualified OEMs only; motor sold separately.

FLUSH SURFACE SEA VALVES

Flowtech™ racing valves

MARELON


Flowtech™ free-flow sea valves incorporate the valve body, thru-hull and the choice of all three sizes of hose pipe connection in one set, for 3/4" (19.05 mm), 1" (25.14 mm) and 1-1/2" (38.1 mm) hose. The valve pipe can be faired smooth to the boat's outer skin so that when the valve is closed the internal plunger and valve pipe create a flush, fair and fast outer surface. Made of Marelon.

The **Mark II** valve features a longer and wider threaded base than the Mark I — see the bury dimensions below before cutting.

Part number	Model	Weight	Bury depth	Bury diameter
905106	Flowtech™ Valve Mark I	1.502 oz	1-3/8" (35 mm)	1-7/8" (47.6 mm)
905109	Flowtech™ Valve Mark II — custom	1.702 oz	2-1/16" (52 mm)	2-1/4" (57 mm)
905107	Flowtech™ Mark I repair kit	—	—	—
905112	Flowtech™ Mark II repair kit	—	—	—

SERVICE PARTS

Repair kits, wrenches & lubrication

FORESPAR
MARINE PRODUCTS THAT PERFORM


MareLube Valve Lubricant keeps valve seals and balls working smoothly in marine plumbing systems. Clear, non-staining and non-toxic, it suits traditional bronze fittings as well as composite fixtures. The REACH kit injects lubricant directly onto the moving parts with a pre-loaded syringe and extension tube — no disassembly.

Part number	Description	Application
930401	Pro Series valve O-ring repair kit	1/2" to 3/4" valves
930402	Pro Series valve O-ring repair kit	1" to 1-1/4" valves
930403	Pro Series valve O-ring repair kit	1-1/2" to 2" valves
902006	MF series Y-valve parts kit	Fits 1" & 1-1/2" Y-valves
930134	Thru-hull wrench, flush & screened head	Installation tool
930135	Thru-hull wrench, mushroom head	Installation tool
770049	MareLube REACH 30 cc syringe lube kit	In-situ valve lubrication
770050	MareLube Valve lubricant, 4 oz jar	General valve service
770055	MareLube Valve lubricant, 16 oz liquid	Yard and OEM quantities

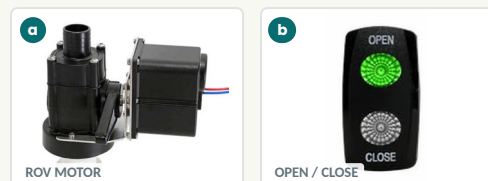
ROV™, Interlock™ & retail packs

FORESPAR MARELON® — REMOTELY OPERATED VALVES, SMART VALVE CONTROL AND PEG-HOOK RETAIL PACKS

REMOTE OPERATED ROV™ 93 VALVES

Switch operated valves

FORESPAR®
MARINE PRODUCTS THAT PERFORM



Forespar offers remote operated ROV valves to boat builders wishing to give their customers the convenience of operating seacocks without reaching into the bilge. Motor activated, push button control · switch indicator lights confirm valve status · UL approved, ISO certified, ABYC compliant · CE certified, RoHS compliant · 12 V or 24 V.

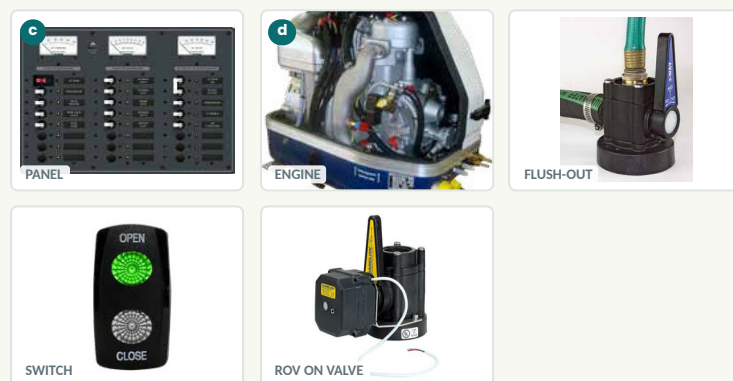
Part number	Model	Part number	Model
930145	1/2" – 3/4" valves	930245	ROV2 motor and switch assembly 1/2" to 3/4"
930146	1" – 1-1/4" valves	930246	ROV2 motor and switch assembly 1" to 1-1/4"
930147	1-1/2" – 2" valves	930247	ROV2 motor and switch assembly 1-1/2" to 2"

Please specify 12 V or 24 V systems. OEM and ABYC qualified installers only. The ROV motor is sold separately and is used only with Pro Series valves; specify modifier E on the valve part number.

INTERLOCK™ SMART VALVE SYSTEMS

Programmed valve control

FORESPAR®
MARINE PRODUCTS THAT PERFORM

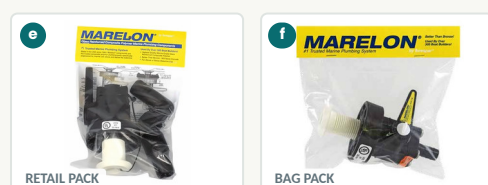


Forespar's Interlock valve control system automatically opens and closes system valves to protect critical systems from improper valve operation due to human error. Factory set to match the boat's requirements; the valve can control equipment, or the equipment can control the valve. Pre-programmed activation · panel lights confirm status · 12 V or 24 V.

MARELON 93 SERIES RETAIL PACK

Valve & mushroom thru-hull, 4-part integrated system

FORESPAR®
MARINE PRODUCTS THAT PERFORM



Six common valve sizes are offered in a bag package for hanging rack display. The integrated 4-part system comes complete with valve, 90° hose barb connector, straight hose barb connector and a matched mushroom head thru-hull with buttress threading — eliminating the thread style mismatches common in aftermarket installations.

Part number	Description	Hose barb O.D.	Thru-hull O.D.
904042ABYC	Straight barb valve	1/2" 13 mm	1 1/4" 32 mm
904043ABYC	Straight barb valve	3/4" 19 mm	1 1/4" 32 mm
904044ABYC	Straight barb valve	1" 25 mm	1 3/4" 44 mm
904045ABYC	Straight barb valve	1 1/4" 32 mm	1 3/4" 44 mm
904046ABYC	Straight barb valve	1 1/2" 38 mm	2 1/4" 57 mm
904048ABYC	Straight barb valve	2" 51 mm	2 1/4" 57 mm
904052ABYC	90° elbow barb valve 1/2"	1/2" 13 mm	1 1/4" 32 mm
904053ABYC	90° elbow barb valve 3/4"	3/4" 19 mm	1 1/4" 32 mm
904054ABYC	90° elbow barb valve 1"	1" 25 mm	1 3/4" 44 mm
904055ABYC	90° elbow barb valve 1-1/4"	1 1/4" 32 mm	1 3/4" 44 mm
904056ABYC	90° elbow barb valve 1-1/2"	1 1/2" 38 mm	2 1/4" 57 mm
904058ABYC	90° elbow barb valve 2"	2" 51 mm	2 1/4" 57 mm

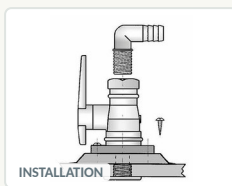
849 seacocks, 850 ball valves & MF Y-valves

MARELON® 850 / 849 SERIES — THE DIRECT REPLACEMENT FOR IN-LINE BRONZE VALVES

MF 849 SERIES

Flange-mounted seacocks

MARELON®



Flange-mounted seacocks made with Marelon offer superior strength and corrosion resistance compared with conventional bronze valves. Strong, lightweight and free of corrosion and electrolysis, they make an ideal thru-hull valve and can replace most existing marine thru-hull fittings.

The traditional three-bolt flanged seacock style bonds to a backing block glassed to the inside of the hull. A tailpiece — straight or elbow as required — screws into the top port.

Part number	Model	Size	Height	Height with handle	Base	Thread
904009	MF 849 1/2"	1/2" (12.7 mm)	3" (76.2 mm)	4" (101.6 mm)	3" (76.2 mm)	NPSM
904010	MF 849 3/4"	3/4" (19.05 mm)	3" (76.2 mm)	4" (101.6 mm)	3" (76.2 mm)	NPSM
904011	MF 849 1-1/2"	1-1/2" (38.1 mm)	5" (127 mm)	8" (203.2 mm)	6" (152.4 mm)	NPSM
904021	MF 849 1-1/2" BSP	1-1/2" (38.1 mm)	5" (127 mm)	8" (203.2 mm)	6" (152.4 mm)	BSP

Bed the thru-hull thoroughly and fibreglass-bond the backing block. The 849/850 line offers less flexibility and repairability than Pro Series, but is an economical alternative where a simple, rugged valve suits the installation.

MF 850 SERIES

In-line ball valves

MARELON®



Precision moulded in high-strength Marelon. Their strength, light weight and complete freedom from corrosion and electrolysis make them ideal for controlling inlet and outlet water requirements above and below the waterline. Forespar's engineers opened and closed a 3/4" valve **11,000 times**, then submerged it with an air line pressurised to 40 p.s.i. — absolutely leak free, with no evidence of internal seal wear.

Part number	Model	Size	Body dia.	Body length	Length with handle	Thread
905100	MF 850 1/2"	1/2" (12.7 mm)	1-7/8" (47.62 mm)	3" (76.2 mm)	4" (101.6 mm)	NPSM
905101	MF 850 3/4"	3/4" (19.05 mm)	1-7/8" (47.62 mm)	3" (76.2 mm)	4" (101.6 mm)	NPSM
905102	MF 850 1"	1" (25.4 mm)	2-3/4" (69.85 mm)	4-3/4" (120.65 mm)	5-1/2" (139.7 mm)	NPSM
905103	MF 850 1-1/4"	1-1/4" (31.75 mm)	2-3/4" (69.85 mm)	4-7/8" (123.82 mm)	5-3/4" (146.05 mm)	NPSM
905104	MF 850 1-1/2"	1-1/2" (38.1 mm)	3-1/2" (88.9 mm)	5" (127 mm)	7-1/2" (190.5 mm)	NPSM
905105	MF 850 2"	2" (50.8 mm)	4-1/4" (107.95 mm)	5-7/8" (149.22 mm)	8" (203.2 mm)	NPSM

Valves sold throughout the U.S.A. have parallel marine type threads. B.S.P. versions are available outside America: 901036 1" · 901037 1-1/4" · 901038 1-1/2" · 901039 2".

MF 852 – MF 855

Bulkhead-mounted Y-valves

MARELON®



Moulded from Marelon with an improved, stronger handle design. Y-valves are essential where the flow of water or other fluids must be conveniently diverted — as in a marine head application with a holding tank. They mount easily to a bulkhead, are operated by a simple **120° movement**, and have positive stops between positions.

Part number	Model	Barb size	Description
902000	MF 852	1-1/2" (38.1 mm)	Bulkhead-mounted Y-valve
902001	MF 853	1" (25.4 mm)	Bulkhead-mounted Y-valve
902017	MF 854	3/4" (19.05 mm)	Directional Y-valve, barbed ends
902018	MF 855	1-1/8" (28.57 mm)	Slim style Y-valve, male threads
902007	—	3/4" (19.05 mm)	Y-valve male adapters, NPSM
902010	—	1-1/2" (38.1 mm)	Y-valve male thread, NPSM
902006	—	—	Y-valve parts kit, fits 1" & 1-1/2"

Not below the waterline — fit a Pro Series Y-valve seacock. MF 854 = **902017**, MF 855 = **902018**; older 902007/902008 are superseded (902007 is now the male adapter set).

Thru-hull connectors — 250 & 251 series

FULL NPSM THREADED, FLUSH AND MUSHROOM HEAD, OPEN OR SCREENED INTAKE

CF 250 SERIES

Flush head thru-hull connectors

MARELON



A full line of thru-hull connectors in flush and mushroom headed varieties, with or without a screened intake. These lightweight, corrosion-free parts are crafted from high-strength Marelton with NPSM threads and are suitable for above and below waterline use. Combine with an elbow connector where a 90° intake is needed.

Reference letters A, B, D and H correspond to the thru-hull dimension drawing.

Thread size	Open intake CF 250	Screened intake CF 250S	Thread length	A	B	D	H
1/2" (12.7 mm)	906000	906001	2" (50.8 mm)	2.375"	0.430"	2.000"	0.810"
3/4" (19.05 mm)	906002	906003	2.25" (57.15 mm)	2.430"	0.665"	2.250"	1.015"
1" (25.4 mm)	906004	906005	2.375" (60.32 mm)	2.835"	0.875"	2.375"	1.285"
1-1/4" (31.75 mm)	906006	906007	3" (76.2 mm)	2.820"	1.115"	3.000"	1.635"
1-1/2" (38.1 mm)	906008	906009	3" (76.2 mm)	2.562"	1.380"	3.000"	1.850"

CF 251 SERIES

Mushroom head thru-hull connectors

MARELON



The mushroom head profile stands slightly proud of the hull and is the preferred head for intakes where a force feed is wanted. Full NPSM threaded, with a matching thru-hull nut, and available with a moulded screen over the intake. Long pattern 906084 has 1" threads and 4" overall length — 906084B in black.

Thread size	Open intake CF 251	Screened intake CF 251S	Thread length	A	B	D	H
1/2" (12.7 mm)	906010	906011	2" (50.8 mm)	1.500"	0.448"	2.125"	0.810"
3/4" (19.05 mm)	906012	906013	2.25" (57.15 mm)	2.084"	0.690"	3.093"	1.028"
1" (25.4 mm)	906014	906015	2.375" (60.32 mm)	2.345"	0.880"	2.400"	1.282"
1-1/4" (31.75 mm)	906016	906017	3" (76.2 mm)	2.650"	1.110"	2.950"	1.615"
1-1/2" (38.1 mm)	906018	906019	3" (76.2 mm)	2.940"	1.360"	2.950"	1.850"
2" (50.8 mm)	906020	906021	3" (76.2 mm)	3.511"	1.842"	2.890"	2.320"

BUTTRESS THREAD

Thru-hulls for Pro Series seacocks

MARELON



Buttress thread thru-hulls are the mating half of every Pro Series seacock and are supplied with the valve. They are also stocked separately as service items, in mushroom and flush heads, screened or open, and in chrome, black and anti-venturi variants. Each part number covers two valve sizes.

Part number	Description	Part number	Description
930001	Mushroom head buttress, 1/2" & 3/4"	930010	Flush head buttress screened, 1/2" & 3/4"
930002	Mushroom head buttress, 1" & 1-1/4"	930011	Flush head buttress screened, 1" & 1-1/4"
930003	Mushroom head buttress, 1-1/2" & 2"	930012	Flush head buttress screened, 1-1/2" & 2"
930004	Flush head buttress, 1/2" & 3/4"	930161	Mushroom head buttress chrome, 1/2" & 3/4"
930005	Flush head buttress, 1" & 1-1/4"	930162	Mushroom head buttress chrome, 1" & 1-1/4"
930007	Mushroom head buttress screened, 1/2" & 3/4"	930163	Mushroom head buttress chrome, 1-1/2" & 2"
930008	Mushroom head buttress screened, 1" & 1-1/4"	930014	Mushroom head buttress black, 1/2" & 3/4"
930009	Mushroom head buttress screened, 1-1/2" & 2"	930171	Mushroom head buttress anti-venturi, 1/2" & 3/4"

Thru-hull connectors — 253 & 254 series

INTEGRAL HOSE TAILPIPE THRU-HULLS, NUTS, WRENCHES AND BSP PATTERNS

CF 253 SERIES

Mushroom head hose tailpipe thru-hulls

MARELON



The 253 series combines the thru-hull and the hose tailpipe in one moulding — the hose pushes straight onto the barb inside the hull, with no separate tailpiece to seal. Mushroom head, open or screened intake, in seven hose sizes.

Hose size	Open intake CF 253	Screened intake CF 253S	A	B	D	H
1/2" – 5/8" (12.7 – 15.87 mm)	906022	906023	1.506"	0.505"	1.490"	0.812"
3/4" (19.05 mm)	906024	906025	2.100"	0.670"	1.677"	1.015"
1" (25.4 mm)	906026	906027	2.350"	0.958"	1.695"	1.280"
1-1/8" (28.57 mm)	906070	906071	—	—	—	—
1-1/4" (31.75 mm)	906028	906029	2.675"	1.194"	1.818"	1.615"
1-1/2" (38.1 mm)	906030	906031	2.933"	1.350"	1.875"	1.850"
2" (50.8 mm)	906032	906033	3.511"	1.842"	1.875"	2.320"

Bed all thru-hull connectors properly. Maximum recommended torque 20 lb/ft for the 250, 251 and 253 series connectors.

CF 254 SERIES

Flush head hose tailpipe thru-hulls

MARELON



The flush head version of the integral tailpipe thru-hull, for discharges and drains where nothing may stand proud of the hull. Supplied in the four largest sizes, open or screened — screened models carry the S suffix.

Thread size & hose I.D.	Model	Open intake	Screened intake	Thread length	A	B	H
1-1/4" (31.75 mm)	CF254 1-1/4	906038	—	1-3/4" (44.45 mm)	2.805"	1.164"	1.615"
1-1/2" (38.1 mm)	CF 254 1-1/2	906036	906037	1-3/4" (44.45 mm)	2.805"	1.406"	1.850"
1-5/8" (41.27 mm)	CF 254 1-5/8	906039	—	1-3/8" (34.92 mm)	—	—	—
2" (50.8 mm)	CF 254 2	906034	906035	1-3/8" (34.92 mm)	3.525"	1.672"	2.320"

FITTING PARTS

Thru-hull nuts, wrenches & BSP thru-hulls

MARELON

Replacement Marelton thru-hull nuts in NPSM and BSP patterns, the two installation wrenches, and the BSP thru-hull range for export and European specification work.

Part number	Description	Part number	Description
907007	Thru-hull nut 1/2" NPSM	920380	Thru-hull nut 1" BSP
907008	Thru-hull nut 3/4" NPSM	920381	Thru-hull nut 1-1/4" BSP
907009	Thru-hull nut 1" NPSM	920382	Thru-hull nut 1-1/2" BSP
907010	Thru-hull nut 1-1/4" NPSM	920383	Thru-hull nut 2" BSP
907011	Thru-hull nut 1-1/2" NPSM	901025	Thru-hull 1" flush head BSP
907012	Thru-hull nut 2" NPSM	901026	Thru-hull 1-1/2" flush head BSP
930134	Thru-hull wrench, flush & screened head	901027	Thru-hull 1" mushroom head BSP
930135	Thru-hull wrench, mushroom head	901028	Thru-hull 1-1/4" mushroom head BSP
901029	Thru-hull 1-1/2" mushroom head BSP	901030	Thru-hull 2" mushroom head BSP

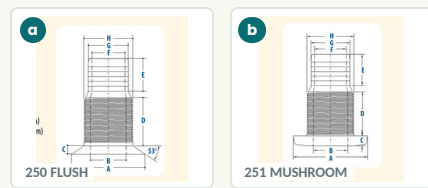
Thru-hull connectors — dimensioned sections

FORESPAR MARELON® — CORRESPONDING DIMENSION FROM THE DRAWING, SERIES 250 / 251 / 253 / 254

SERIES 250 AND 251

Fully threaded flush and mushroom heads

MARELON®



Forespar thru-hull connectors are precision moulded in high strength Marelton. Their strength, light weight and complete freedom from corrosion and electrolysis make them the ideal thru-hull connector for use above or below the waterline.

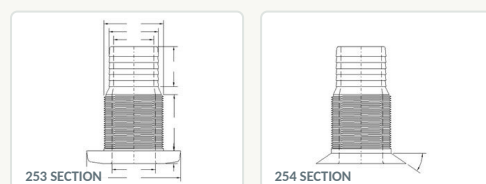
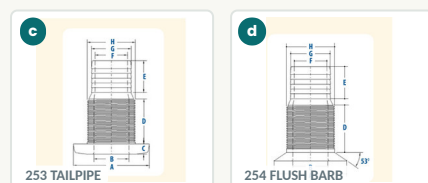
All thru-hull connectors must be installed with proper bedding compound. We recommend a **maximum torque setting of 20 lb/ft** for series 250, 251 and 253. The 'S' notation in a model number (e.g. CF 250S 1/2) indicates a thru-hull fitted with a screen. Dimensions E, F and G do not apply to the fully threaded series and are shown N/A in the source.

Series / size	A	B	C	D	E	F	G	H
250 1/2" (12.7mm)	2.375(60.32mm)	.430(10.92mm)	.335(8.5mm)	2.000(50.8mm)	N/A	N/A	N/A	.810(20.57mm)
250 3/4" (19.05mm)	2.430(61.72mm)	.665(16.89mm)	.320(8.1mm)	2.250(57.15mm)	N/A	N/A	N/A	1.015(25.78mm)
250 1" (25.4mm)	2.835(72mm)	.875(22.22mm)	.320(8.1mm)	2.375(60.32mm)	N/A	N/A	N/A	1.285(32.63mm)
250 1-1/4" (31.75mm)	2.820(71.63mm)	1.115(28.32mm)	.325(8.25mm)	3.000(76.2mm)	N/A	N/A	N/A	1.635(41.52mm)
250 1-1/2" (38.1mm)	2.562(65.07mm)	1.380(35.05mm)	.320(8.1mm)	3.000(76.2mm)	N/A	N/A	N/A	1.850(46.99mm)
251 1/2" (12.7mm)	1.500(38.1mm)	.448(11.37mm)	.256(6.5mm)	2.125(53.97mm)	N/A	N/A	N/A	.810(20.57mm)
251 3/4" (19.05mm)	2.084(52.93mm)	.690(17.52mm)	.335(8.5mm)	3.093(78.56mm)	N/A	N/A	N/A	1.028(26.11mm)
251 1" (25.4mm)	2.345(59.56mm)	.880(22.35mm)	.288(7.31mm)	2.400(60.96mm)	N/A	N/A	N/A	1.282(32.56mm)
251 1-1/4" (31.75mm)	2.650(67.31mm)	1.110(28.19mm)	.345(8.76mm)	2.950(74.93mm)	N/A	N/A	N/A	1.615(41.02mm)
251 1-1/2" (38.1mm)	2.940(74.67mm)	1.360(34.54mm)	.345(8.76mm)	2.950(74.93mm)	N/A	N/A	N/A	1.850(46.99mm)
251 2" (50.8mm)	3.511(89.17mm)	1.842(46.78mm)	.375(9.5mm)	2.890(73.41mm)	N/A	N/A	N/A	2.320(58.92mm)

SERIES 253 AND 254

Hose tailpipe mushroom and flush heads

MARELON®



The 253 series is a mushroom head thru-hull with an integral NPSM to hose barb tailpipe; the 254 series is the same tailpipe on a flush head, used as a scupper or drain outlet. Dimension **A** is the head major diameter, **B** the thread outside diameter, **C** the head thickness, **D** the thread length, and **E** to **H** the barb and bore dimensions.

Series / size	A	B	C	D	E	F	G	H
253 1/2" (12.7mm)	1.506(38.25mm)	.505(12.82mm)	.265(6.73mm)	1.490(37.84mm)	.975(24.76mm)	.439(11.15mm)	.657(16.68mm)	.812(20.62mm)
253 3/4" (19.05mm)	2.100(53.34mm)	.670(17.01mm)	.325(8.25mm)	1.677(42.59mm)	1.028(26.11mm)	.535(13.58mm)	.770(19.55mm)	1.015(25.78mm)
253 1" (25.4mm)	2.350(59.69mm)	.958(24.33mm)	.295(7.49mm)	1.695(43.05mm)	1.085(27.55mm)	.797(20.24mm)	1.015(25.78mm)	1.280(32.51mm)
253 1-1/4" (31.75mm)	2.675(67.94mm)	1.194(30.32mm)	.327(8.3mm)	1.818(46.17mm)	1.280(32.51mm)	1.021(25.93mm)	1.273(32.33mm)	1.615(41.02mm)
253 1-1/2" (38.1mm)	2.933(74.49mm)	1.350(34.29mm)	.345(8.76mm)	1.875(47.62mm)	1.280(32.51mm)	1.258(31.95mm)	1.530(38.86mm)	1.850(46.99mm)
253 2" (50.8mm)	3.511(89.17mm)	1.842(46.78mm)	.375(9.5mm)	1.875(47.62mm)	1.350(34.29mm)	1.610(40.89mm)	2.018(51.25mm)	2.320(58.92mm)
254 1-1/4" (31.75mm)	2.805(71.24mm)	1.164(29.56mm)	.316(8.02mm)	1.500(38.1mm)	1.280(32.51mm)	.945(24mm)	1.260(32mm)	1.615(41.02mm)
254 1-1/2" (38.1mm)	2.805(71.24mm)	1.406(35.71mm)	.316(8.02mm)	1.500(38.1mm)	1.280(32.51mm)	1.115(28.32mm)	1.475(37.46mm)	1.850(46.99mm)
254 2" (50.8mm)	3.525(89.53mm)	1.672(42.46mm)	.325(8.25mm)	1.500(38.1mm)	1.300(33.02mm)	1.480(37.59mm)	2.018(51.25mm)	2.320(58.92mm)

Thru-hull & valve identification plate

FORESPAR MARELON® — PHOTOGRAPH, PART NUMBER AND MODEL FOR EVERY HEAD STYLE

IDENTIFICATION PLATE

Thru-hulls, seacocks and scoops

MARELON



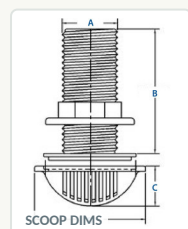
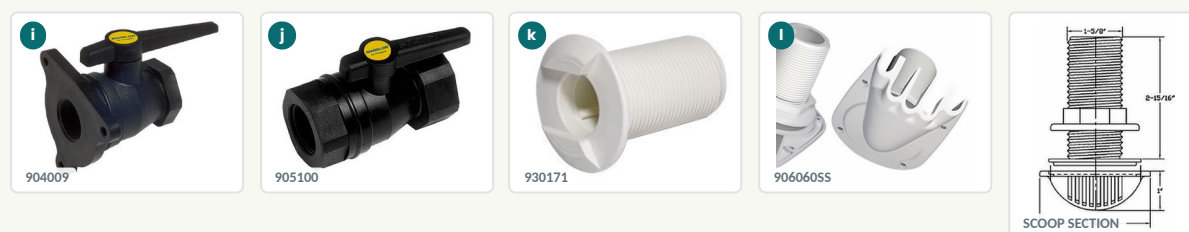
Head styles are not interchangeable once the hull is drilled. Use this plate to confirm the head form — **mushroom**, **flush**, **screened** or **anti-venturi** — against the part number before ordering. The 'S' notation indicates a thru-hull fitted with a screen; series 250 and 251 are fully threaded, series 253 and 254 carry an integral hose barb tailpipe.

	Part number	Model	Description
a	906010	CF 251 1/2	Mushroom head thru-hull, full NPSM threaded, open intake
b	906011	CF 251S 1/2	Mushroom head thru-hull, full NPSM threaded, screened intake
c	906000	CF 250 1/2	Flush head thru-hull, full NPSM threaded, open intake
d	906001	CF 250S 1/2	Flush head thru-hull, full NPSM threaded, screened intake
e	906022	CF 253 1/2	Mushroom head, NPSM to hose barb tailpipe, open intake
f	906023	CF 253S 1/2	Mushroom head, NPSM to hose barb tailpipe, screened intake
g	906034	CF 254 2	Flush head, NPSM to barb tailpipe, open intake
h	906035	CF 254S 2	Flush head, NPSM to barb tailpipe, screened intake

IDENTIFICATION PLATE

Valves, anti-venturi heads and scoops

MARELON



The **anti-venturi** thru-hull is a custom-tooled head tested on boats at speeds and turn rates up to 45 mph. On a 3/4" generator intake line, 0" to about 5" of vacuum was measured — no pressure situation that could push water past the vanes of an older impeller and flood the cylinders or starve the engine of cooling water. The notch and lowered ramp in the leading edge provide a force-feed effect; the exit slot lets the flow leave at a controlled rate. Add a **V** to the end of the Pro Series part number to specify it.

	Part number	Model	Description
i	904009	MF 849 1/2	Flange mounted seacock, 1/2" (12.7 mm) NPSM
j	905100	MF 850 1/2	In-line ball valve, 1/2" (12.7 mm) NPSM
k	930171	—	Anti-venturi thru-hull, 1/2" & 3/4" buttress (modifier V)
l	906060SS	—	Speed Scoop kit with 1-1/4" thru-hull

Tailpipes & hose connectors

GLASS-REINFORCED MARELON® WITH NPSM STANDARD THREADS — FOR FORESPAR BALL VALVES AND SEACOCKS

CF 252 SERIES

NPSM to hose barb tailpipes

MARELON®



The perfect choice for joining hose lines to Forespar ball valves and seacocks. Made from high-strength glass-reinforced Marelton using NPSM standard threads. Dimensions A, B and C correspond to the tailpipe drawing.

Part number	Model	Thread size	Tailpipe dia.	A	B	C
905006	CF 252 1/2	1/2" (12.7 mm)	5/8" (15.87 mm)	1" (24.4 mm)	1" (24.4 mm)	2-1/4" (57.15 mm)
905007	CF 252 3/4	3/4" (19.05 mm)	3/4" (19.05 mm)	1" (24.4 mm)	1" (24.4 mm)	2-3/8" (60.32 mm)
905008	CF 252 1	1" (24.4 mm)	1" (24.4 mm)	1-1/2" (38.1 mm)	1-1/16" (26.98 mm)	2-7/8" (73.02 mm)
905016	CF 252 1-1/8	1" (24.4 mm)	1-1/8" (28.57 mm)	1" (24.4 mm)	1-1/16" (26.98 mm)	2-7/8" (73.02 mm)
905009	CF 252 1-1/4	1-1/4" (31.75 mm)	1-1/4" (31.75 mm)	1-5/8" (41.27 mm)	1-1/4" (31.75 mm)	3-1/4" (82.55 mm)
905010	CF 252 1-1/2	1-1/2" (38.1 mm)	1-7/16" (36.51 mm)	1-7/16" (36.51 mm)	1-1/8" (28.57 mm)	2-5/8" (66.67 mm)
905017	CF 252 1-1/2	1-1/2" (38.1 mm)	1-1/4" (31.75 mm)	1-7/16" (36.51 mm)	1-1/4" (31.75 mm)	2-5/8" (66.67 mm)
905011	CF 252 2	2" (50.8 mm)	2" (50.8 mm)	1-11/16" (42.88 mm)	1-1/4" (31.75 mm)	3-1/4" (82.55 mm)

Add a "C" after the part number for Clear View fittings — not for use with petroleum products.

FEMALE NPSM

Threaded barb fittings

MARELON®



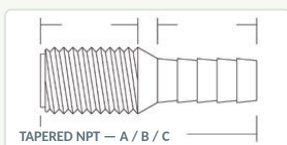
Female pipe thread to hose barb adapters in high-strength glass-reinforced Marelton — the standard way to take a hose off a male-threaded valve port, strainer or vented loop. The 1-1/2" FPT range steps down to every common hose size.

Part number	Female pipe thread	Hose barb	White version
901014	1/2" (12.7 mm) FPT	1/2" (12.7 mm)	—
901015	3/4" (19.05 mm) FPT	3/4" (19.05 mm)	—
905012	1-1/2" (38.1 mm) FPT	3/4" (19.05 mm)	905012W
905013	1-1/2" (38.1 mm) FPT	1" (24.4 mm)	905013W
905015	1-1/2" (38.1 mm) FPT	1-1/8" (28.57 mm)	905015W
905018	1-1/2" (38.1 mm) FPT	1-1/4" (31.75 mm)	905018W
905014	1-1/2" (38.1 mm) FPT	1-1/2" (38.1 mm)	905014W

HC SERIES

NPT hose connectors

MARELON®



Small-bore tapered NPT thread connectors for instrument, sink, shower and pump lines. Available in black or Clear View — add a "C" after the part number for Clear View fittings, which are not for use with petroleum products.

Part no.	Model	Thread	Tube I.D.	Part no.	Model	Thread	Tube I.D.
910146	HC 4x4	1/4" (6.35 mm)	1/4" (6.35 mm)	910156	HC 8x8	1/2" (12.7 mm)	1/2" (12.7 mm)
910147	HC 4x5	1/4" (6.35 mm)	5/16" (7.93 mm)	910157	HC 8x12	1/2" (12.7 mm)	3/4" (19.05 mm)
910148	HC 4x6	1/4" (6.35 mm)	3/8" (9.52 mm)	910158	HC 12x8	3/4" (19.05 mm)	1/2" (12.7 mm)
910149	HC 4x8	1/4" (6.35 mm)	1/2" (12.7 mm)	910159	HC 12x12	3/4" (19.05 mm)	3/4" (19.05 mm)
910150	HC 6x6	3/8" (9.52 mm)	3/8" (9.52 mm)	910160	HC 12x16	3/4" (19.05 mm)	1" (24.4 mm)
910154	HC 6x8	3/8" (9.52 mm)	1/2" (12.7 mm)	910168	HC 20x24	1-1/4" (31.75 mm)	1-1/2" (38.1 mm)

Elbow connectors & valve service

MOULDED FROM HIGH-STRENGTH MARELON® · DIMENSION A INDICATES THE PIPE THREAD SIZE

HECM SERIES

Male NPSM thread to barb elbows

MARELON



HECM ELBOW

90° elbow connectors with a male NPSM thread on one leg and a hose barb on the other — the standard way to turn a hose immediately off a valve top or thru-hull without stressing the run. Two step-down patterns are included.

Part number	Model	A thread	B barb	C	D	E
901000	HECM 8	1/2" (12.7 mm)	5/8" (15.87 mm)	7/16" (11.11 mm)	2" (50.8 mm)	1-1/2" (38.1 mm)
901001	HECM 12	3/4" (19.05 mm)	3/4" (19.05 mm)	1/2" (12.7 mm)	2-1/8" (53.97 mm)	1-5/8" (41.27 mm)
901002	HECM 16	1" (24.4 mm)	1" (24.4 mm)	5/8" (15.87 mm)	2-1/2" (63.5 mm)	1-7/8" (47.62 mm)
901053	HECM 16/16.125	1" (24.4 mm)	1-1/8" (28.57 mm)	29/32" (22.86 mm)	2-1/2" (63.5 mm)	1-7/8" (47.62 mm)
901003	HECM 20	1-1/4" (31.75 mm)	1-1/4" (31.75 mm)	7/8" (22.22 mm)	2-3/4" (69.85 mm)	2-5/16" (58.72 mm)
901004	HECM 24	1-1/2" (38.1 mm)	1-1/2" (38.1 mm)	1-1/16" (26.98 mm)	3-1/4" (82.55 mm)	2-3/4" (69.85 mm)
901052	HECM 24/20	1-1/2" (38.1 mm)	1-1/4" (31.75 mm)	7/8" (22.22 mm)	2-3/4" (69.85 mm)	2-3/4" (69.85 mm)
901005	HECM 32	2" (50.8 mm)	2" (50.8 mm)	1-1/2" (38.1 mm)	3-5/8" (92.07 mm)	3-1/4" (95.25 mm)

Black or Clear View — add "C" after the part number. Clear View connectors are not for use with petroleum products.

HECF & MEC SERIES

Female thread & female/male elbows

MARELON



HECF



MEC

HECF elbows take a female NPSM thread onto a hose barb; MEC elbows are the female-to-male NPSM thread pattern used to turn a corner between two threaded components. All moulded in glass-reinforced Marelton.

Part number	Model	A	B	C	D	E
901006	a HECF 8	1/2" (12.7 mm)	5/8" (15.87 mm)	7/16" (11.11 mm)	2" (50.18 mm)	1-5/8" (41.27 mm)
901007	HECF 12	3/4" (19.05 mm)	3/4" (19.05 mm)	9/16" (14.28 mm)	2-3/16" (55.56 mm)	1-3/4" (44.45 mm)
901008	HECF 16	1" (24.4 mm)	1" (24.4 mm)	5/8" (15.87 mm)	2-1/2" (63.5 mm)	1-7/8" (47.62 mm)
901009	HECF 20	1-1/4" (31.75 mm)	1-1/4" (31.75 mm)	7/8" (22.22 mm)	2-3/4" (69.85 mm)	2-1/2" (63.5 mm)
901010	HECF 24	1-1/2" (38.1 mm)	1-1/2" (38.1 mm)	1-1/8" (28.57 mm)	3-1/8" (79.37 mm)	2-3/4" (69.85 mm)
901011	HECF 32	2" (50.8 mm)	2" (50.8 mm)	1-9/16" (39.68 mm)	3-5/8" (92.07 mm)	3-1/4" (82.55 mm)
920207	b MEC 8	1/2" (12.7 mm)	N/A	1/2" (12.7 mm)	1-5/16" (33.33 mm)	1-7/16" (36.57 mm)
920336	MEC 12	3/4" (19.05 mm)	N/A	3/4" (19.05 mm)	1-5/8" (41.27 mm)	1-5/8" (41.27 mm)

BSP elbows to special order: female to barb 901017, 901018, 901019, 901020; male to barb 901021, 901022, 901023, 901024. BSP tailpipes 901032 to 901035.

MAINTENANCE

Valves are a maintenance item

MARELON



MARELUBE REACH



REACH KIT

Marelton valves will never corrode, but like any moving part in a marine environment they require regular inspection and lubrication. Actuate the handle regularly and lubricate the seals. For easy lubrication use the **MareLube REACH** valve lubrication kit — a pre-loaded syringe and extension tube that injects lubricant directly onto the valve's moving parts. Water pump grease or mineral oil can also be used if necessary.

Part number	Description	Part number	Description
770049	MareLube REACH 30cc syringe lube kit	770050	MareLube valve lubricant, 4 oz
770055	MareLube valve lubricant liquid, 16 oz	770056	MareLube EXTRA, 4 oz jar

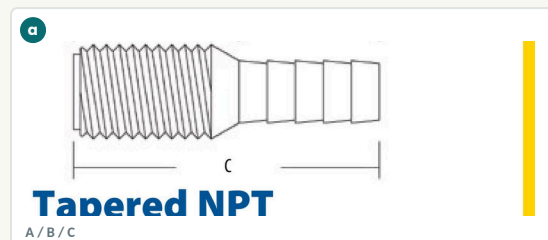
Connector dimensions & thread adapters

FORESPAR MARELON® — DIMENSION LETTERS KEYED TO THE TABLES · NPSM COUPLERS, REDUCERS AND BUSHINGS

TAILPIPES & HOSE CONNECTORS

Straight tailpipes and NPT connectors

MARELON



BLACK



CLEAR VIEW



FEMALE BARB

Tailpipes are moulded from high-strength glass-reinforced Marelton and are the correct choice for joining hose lines to Forespar ball valves and seacocks. Dimension **A** is the male thread length, **B** the barb length and **C** the overall length.

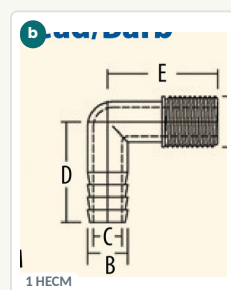
Available in **black** or **clear view**: add a **C** after the part number for clear view fittings. Clear view connectors are not for use with petroleum products. The tapered NPT **HC series** connectors use true tapered threads for joining to other manufacturers' fittings.

Female NPSM threaded barbed hose fittings 901014, 901015, 905012 – 905018 are listed with the tailpipe tables on the preceding pages; white versions carry a W suffix.

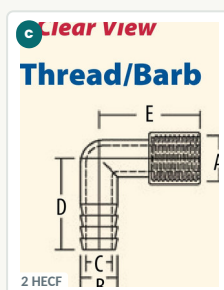
ELBOWS

HECM, HECF and MEC dimension drawings

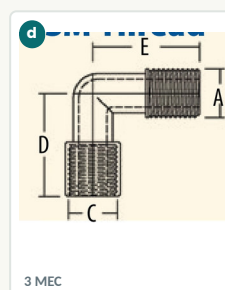
MARELON



1 HECM



2 HECF



3 MEC



HECM



CLEAR VIEW HECM

Elbows are moulded from high-strength Marelton. Dimension **A** indicates the pipe thread size; **B** the barb size; **C**, **D** and **E** the barb, drop and reach dimensions shown on the drawings.

1 HECM male NPSM thread to barb · **2 HECF** female NPSM thread to barb · **3 MEC** female to male NPSM thread. HECM elbows are available in black or clear view — add a **C** after the part number. Clear view is **not** available on HECF or MEC elbows.

Full A – E dimension tables for every elbow size are on the Marelton elbows and adapters page.

FTC / MTC / RB

NPSM couplers, reducers & bushings

MARELON



MTC, RB & FTC

Thread-to-thread couplers and reducers. FTC couplers are female both ends, MTC reducers are female to male, and RB reducing bushings step a 1-1/2" male thread down to a smaller female thread — the usual way to bring a strainer or vented loop down to a smaller hose size.

Part no.	Model	Side A	Side B	Part no.	Model	Side A	Side B
901045	FTC 8	1/2" female	1/2" female	901050	MTC 12-12	3/4"	3/4" male
901046	FTC 12	3/4" female	3/4" female	901051	MTC 16-12	1"	3/4" male
901042	FTC 16	1" female	1" female	901047	MTC 24-16	1-1/2"	1" male
901044	FTC 20	1-1/4" female	1-1/4" female	901048	MTC 24-20	1-1/2"	1-1/4" male
901043	FTC 24	1-1/2" female	1-1/2" female	901049	MTC 24-24	1-1/2"	1-1/2" male
901041	Coupler	2" female	2" female	910062	RB 24-16	1-1/2" male	1" female
901040	MTC 12-8	3/4"	1/2" male	910063	RB 24-12	1-1/2" male	3/4" female
910180	RB BSP	1-1/2" male BSP	3/4" female BSP	—	—	—	—

Vented loops & Y-connectors

SIPHON BREAK VALVES FOR HEADS, TANKS AND ENGINE SYSTEMS • O-RING SEALED LINE CONNECTORS TO 40 PSI

MF SERIES — BLACK

Vented loops

MARELON



Vented loops, or siphon break valves, prevent water from dangerously siphoning into the boat in aggressive waves, during manoeuvring, or when the vessel is heavily loaded. The loop is placed between a water pump and any tank, head, engine or other system.

Water passes unimpeded when forced by the pump; if the boat leans and water begins to be sucked in by siphoning pressure, the **duckbill valve** opens and briefly admits air, breaking the siphon.

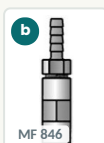
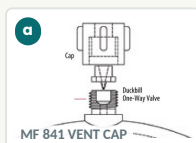
Model	Barb size	Part no. black	Part no. white	Height	Width
MF 845	1/2" (12.7 mm)	903008	903008W	5-1/4" (133.35 mm)	4-1/4" (107.95 mm)
MF 843	5/8" (15.87 mm)	903003	—	4-1/2" (114.3 mm)	4" (101.6 mm)
MF 842	3/4" (19.05 mm)	903001	903001W	4-1/2" (114.3 mm)	3-3/4" (95.25 mm)
MF 844	1" (25.4 mm)	903007	903007W	7" (177.8 mm)	9" (228.6 mm)
MF 847	1-1/8" (28.57 mm)	903018	903018W	7" (177.8 mm)	9" (228.6 mm)
MF 839	1-1/4"	903011	903011W	7" (177.8 mm)	9" (228.6 mm)
MF 840	1-1/2" (38.1 mm)	903000	903000W	5-1/4" (133.35 mm)	7-3/4" (196.85 mm)

Loops are moulded from chemical resistant resin and are supplied in black as standard, with the sizes above also available in white for exposed locations.

MF 841 / MF 846

Vented loop service parts

MARELON



The rubber duckbill vent should be inspected and cleaned regularly; replacement parts are always available. The vent barb option lets an external tube be run so that unwanted odours are not released into the cabin.

Part number	Description	White version
903002	a MF 841 vent cap assembly	903002W
903004	b MF 846 vent barb assembly	—
903013	Vent barb assembly, 3/8" barb	—
903017	Vented loop 1" with 3/8" vent barb	—
903019	Vented loop 1-1/2", threaded	—
920132	Duckbill one-way valve only	—

HYC / HYCF SERIES

Y-connectors

MARELON



Y-connectors join fluid lines. The end plate can be removed for blockage relief, and an O-ring seal ensures leak-free performance up to **40 psi**. With or without a mounting flange.

Part number	Model	Mounting flange	Barb size
902002	c HYCF 16	Yes	1" (25.4 mm)
902003	d HYC 16	No	1" (25.4 mm)
902004	HYCF 24	Yes	1-1/2" (38.1 mm)
902005	HYC 24	No	1-1/2" (38.1 mm)

Siphoning can occur without proper vented loop placement. Mount the loop at least 10" (254 mm) above the waterline and consult the marine toilet's instructions.

Vented loops are the single most-missed item on a head or engine refit. Custom Marine will size the loop and its hose run against your layout — 800BOATS.

Marelon® water strainers

TITAN T-STRAINER · T-150 · MF 810 — RAW WATER FILTRATION THAT NEVER CORRODES

NEW — HIGH FLOW DESIGN

Titan T-Strainer

MARELON



Based on the popular T-150, the Titan uses the same space-saving T design but incorporates a new internal flow pattern and strainer basket that significantly increases cooling water flow while reducing the number of clean-outs needed — **up to 25% better engine cooling**.

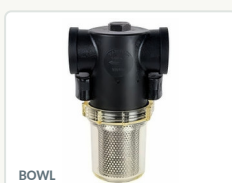
New straight-flow internal design · integrated top mount flush-out plug for flushing and winterisation · large stainless steel cut-out filter screen · compact and lightweight · tough polymer bowl formulated to prevent cracking and glazing from antifreeze.

Part number	Model / description	Size	Fits
906165	Titan T-Strainer with mounting bracket	1-1/2" (38.1 mm)	—
920264FO	Titan strainer mesh screen #8	—	Titan
920261	T-Strainer clear bowl	—	Titan & T-150
920262	T-Strainer gasket	—	Titan & T-150
906187	T-Strainer mounting bracket only	—	Titan & T-150

COMPACT T-HEAD BODY

T-150 water strainer

MARELON



Compact raw water filtration without compromising filtration rates. The T-head body design allows the T-150 to be installed in tight or hard-to-reach locations. The clear, chemical resistant polycarbonate filter bucket screws onto the Marelon housing and gives easy viewing of the stainless steel filter basket without removal. A flexible C-clamp mounting bracket lets it snap into place and rotate to face any direction.

Part number	Model / description	Mesh	Fits
906166	T-150 water strainer	—	1-1/2" (38.1 mm)
920264	T-150 mesh screen, standard	#8	T-150
920265	T-150 mesh screen, extra fine	#20	T-150
920261	T-150 clear bowl	—	T-150 & Titan
920262	T-150 gasket	—	T-150 & Titan
906187	T-150 mounting bracket	—	T-150 & Titan

MF 810 — 40 GPM

Water strainer with rotating bracket

MARELON



A universal mounting bracket and clear polycarbonate lid for ready inspection; the stainless steel basket lifts out for cleaning. Intake and exit ports are **1-1/2" (38.1 mm) NPSM** parallel threads as standard, and reducers for 3/4" I.D. hose are available separately. Diameter 6.3" (160.02 mm), height 6.1" (154.94 mm), flow rate **40 GPM (151.41 L/m)** with 1-1/2" ports. Loosening the bracket clamp lets the whole housing rotate so the exit port can face the right way.

Part number	Model / description	Part number	Model / description
906066	MF 810 water strainer	920178	MF 810 clear cover only
906066S	MF 810 water strainer with 3/4" adapters	920179	MF 810 knob only
906067	MF 811 gasket set for MF 810	920180	MF 810 housing only
906065	Stainless steel basket only	920187	MF 810 mounting bracket only
906068	Knob only	906078	MF 810 repair kit

All water strainers must be installed above the waterline. Use 1-1/2" threaded adapters for all strainers, or RB reducing bushings for smaller hose sizes.

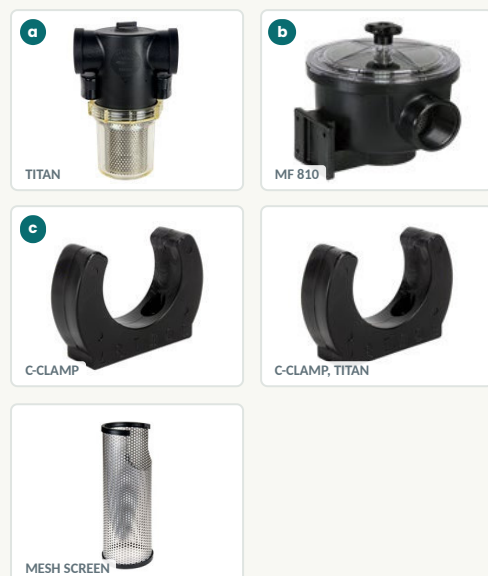
Custom Marine stocks Titan and T-150 strainers with spare screens and bowls in Dubai, and can supply matched thru-hull, valve and strainer sets per engine — 800BOATS.

Strainer & scoop service plate

FORESPAR MARELON® — BOWLS, SCREENS, BRACKETS AND SCOOP HEADS IDENTIFIED

WATER STRAINER SERVICE PARTS

Titan, T-150 and MF 810

MARELON


All Marelon water strainers are moulded from chemical resistant resin specifically formulated to prevent cracking and glazing from antifreeze. All water strainers must be installed **above the waterline**.

The flexible **C-clamp mounting bracket** allows the T-150 and Titan strainers to be snapped into place and rotated as needed to face any direction to fit tight spaces. Use 1-1/2" threaded adapters for all strainers, or RB reducers for smaller hose sizes.

	Part number	Model / description	Part number	Model / description
a	906165	Titan T-strainer 1-1/2" with mounting bracket	920264FO	Titan strainer mesh screen #8
b	906066	MF 810 water strainer	906078	MF 810 water strainer repair kit
c	906187	T-strainer / T-150 mounting bracket only	920180	MF 810 water strainer housing only
—	920187	MF 810 water strainer mounting bracket only	920179	MF 810 water strainer knob only
—	906065	MF 810 stainless steel basket only	906066S	MF 810 water strainer with 3/4" adapters
—	920178	MF 810 water strainer clear cover only	906067	Gasket set for MF 810 water strainer
—	920261	T-strainer / T-150 clear bowl only	920262	T-strainer / T-150 gasket only
—	920265	T-150 mesh screen #20 (extra fine)	920264	T-150 mesh screen #8 (standard)
—	906068	MF 810 water strainer BSP	906166	T-150 water strainer 1-1/2"

SCOOP STRAINERS & SPEED SCOOP

Identification

MARELON


Scoop strainers are high-strength, high-speed strainers in non-corrosive Marelon. Two-piece construction allows easy installation. Screens can be epoxied to the hull to eliminate additional holes in the gel-coat, and scoop screens can also be used over other thru-hulls — flush head styles are best — wherever a force feed is required.

The **Speed Scoop** is designed for higher velocity and volume applications in powerboats and speedboats, maximising water intake flow while minimising drag and turbulence. The standard kit includes an NPSM thru-hull; the Large Speed Scoop kit includes a buttress thread thru-hull for use with Pro Series valves — use modifier code **Z**.

	Part number	Model	Description
f	906060SS	—	Speed Scoop kit with 1-1/4" thru-hull
g	906062SS	—	Speed Scoop only 1-1/4"
—	906062SSL	—	Large Speed Scoop only
i	906059	MF 867 3/4	Thru-hull 3/4" (19.05 mm) threaded with scoop

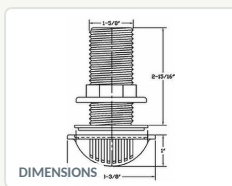
Scoop strainers, Speed Scoops & deck fills

FORCE-FEED INTAKES FOR HIGH-SPEED CRAFT • COLOUR-CODED MARELON® DECK FILLS

MF 865 – MF 868

Scoop strainers

MARELON®



High-strength, high-speed strainers in non-corrosive Marelton. Two-piece construction allows easy installation, in 3/4" (19.05 mm) and 1-1/4" (31.75 mm) thread sizes.

Screens can be epoxied to the hull to eliminate additional holes in the gel-coat. Scoop screens can also be used over other thru-hulls — flush head styles are best — wherever a force feed is required.

Part number	Model	Thread size	A	B	C	D
906059	MF 867 3/4	3/4" (19.05 mm)	1-1/32" (26.18 mm)	2-1/4" (57.15 mm)	1" (25.4 mm)	3-1/8" (79.37 mm)
906060	MF 868 1-1/4	1-1/4" (31.75 mm)	1-5/8" (41.27 mm)	2-15/16" (74.42 mm)	1" (25.4 mm)	3-3/8" (85.72 mm)
906061	MF 865 3/4	Scoop only	—	—	1" (25.4 mm)	3-1/8" (79.37 mm)
906062	MF 866 1-1/4	Scoop only	—	—	1" (25.4 mm)	3-3/8" (85.72 mm)

MODIFIER Z

Speed Scoop & Large Speed Scoop

MARELON®



The Speed Scoop is designed for higher velocity and volume applications. Intended for powerboats and speedboats of all types, it maximises water intake flow while minimising drag and turbulence. The standard kit includes an NPSM thru-hull; the **Large Speed Scoop Kit** includes a buttress thread thru-hull for use with Pro Series valves — order with modifier Z on the valve part number.

Part number	Description	Thread size	A	B	C	D
906060SS	Speed Scoop Kit with 1-1/4" thru-hull	1-1/4" (31.75 mm)	1-5/8" (41 mm)	2-15/16" (74.42 mm)	1" (25.4 mm)	3-3/8" (85.72 mm)
906062SS	Speed Scoop only	No thru-hull included	—	—	1" (25.4 mm)	3-3/8" (85.72 mm)
—	Large Speed Scoop Kit — order with modifier Z	2.1" (53 mm)	2-1/8" (53.98 mm)	2-15/16" (74.42 mm)	1-3/8" (34.9 mm)	2-1/2" (63.5 mm)
906062SSL	Large Speed Scoop only	No thru-hull included	—	—	1-3/8" (34.9 mm)	2-1/2" (63.5 mm)

The Large Speed Scoop is available on 1-1/2" and 2" Pro Series valve sizes only. Dimension references follow the scoop strainer drawing above.

MF 830 SERIES

Deck fills

MARELON®



Moulded in Marelton for lifetime durability and available in two colour-coded models, each clearly marked for use with either water or waste. The easy-open cap is fitted with a nylon retainer cord and a rubber O-ring to ensure a safe and efficient seal. Suitable for 1-1/2" (38.1 mm) I.D. hose.

Part number	Model	For use with	Deck flange	Cut-out	Hose barb length
907003	MF 830 W	Water	4" (101.6 mm) dia.	2-1/8" (53.97 mm)	3" (76.2 mm)
907004	MF 830 WST	Waste	4" (101.6 mm) dia.	2-1/8" (53.97 mm)	3" (76.2 mm)
907025	Deck fill cap, blue	Water	—	—	—
907026	Deck fill cap, black	Waste	—	—	—
907024	Deck fill cap, red	Fuel	—	—	—

Scoops, deck fills and drains are held alongside the valve range in Dubai, so a complete hull-fitting package ships as one order — 800BOATS.

Drains, sink wastes & tank vents

GARBOARD AND UTILITY DRAINS • SW SINK WASTES • MF 610 TANK VENT • WIDE MOUTH TRANSOM DRAIN

GARBOARD, DECK & UTILITY

Drains & drain plugs

MARELON



For newer, thicker transoms Forespar designed a drain and plug assembly to fit transoms up to 1-3/4" (44.45 mm) thick. Marelton 3/4" female elbows or a female threaded barbed hose fitting can be screwed onto the end for hose attachment. All-Marelton construction ensures years of corrosion-free use, and the screw-style plug with gasket is supplied as standard.

Part number	Description	Part number	Description
906081	Garboard drain with nut, thru-hull style	906087	Garboard drain thru-hull, 1" long, 4" overall
906075	Socket style garboard drain, short (GD-S)	906088	1" plug & gasket set for 906075 / 906076
906076	Socket style garboard drain, long (GD-L)	906091	Garboard drain 2", black
906085	Garboard drain thru-hull only, 1" short	906092	Garboard drain 2", white
906086	Garboard drain female fitting, 1"	907006	Outboard well drain, 1-1/4" flange
906085B	Garboard drain thru-hull only, 1" short, black	907028	Utility drain D-1, fully threaded acetal, 1"
906086B	Garboard drain female fitting, 1", black	907001	MF 790 drain plug, Marelton with neoprene seal
906087B	Garboard drain thru-hull only, 1" long, black	906088B	1" plug & gasket set, black

GD-S 906075 usable length, five threads engaged: 2-1/2" max, 1-7/16" min; GD-L 906076: 3-1/4" max, 2-1/2" min. Flange dia. 2", body dia. 1-3/16" (30.16 mm). Utility drain D-1 thread 1" (25.14 mm), length 1-3/8" (34.92 mm).

SW SERIES

Sink wastes

MARELON



Available in straight and 90° configurations for 1" and 3/4" tubing. Models SW-3, SW-4 and SW-6 are bright chrome plated, non-corrosive plastic.

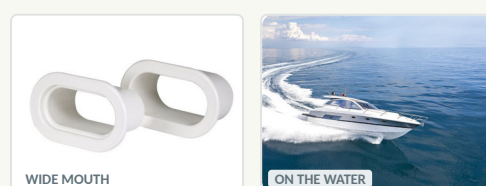
Part number	Model	Tail	Flange	Cut-out	Overall size
907000	b SW-1	Straight — for 1" (25.14 mm) I.D.	1-3/4" (44.45 mm)	1-5/16" (33.33 mm)	2-7/16" × 2-7/16" × 1-5/8"
907014	c SW-2	90° — for 1" (25.14 mm) I.D.	1-3/4" (44.45 mm)	1-5/16" (33.33 mm)	3-3/16" × 2" × 2-1/2"
907015	SW-3	Straight — 1-1/2" (38.11 mm) screw	2-7/8" (73.02 mm)	2" (50.8 mm)	3" × 3" × 1-3/4"
907017	SW-4	90° — for 1" (25.14 mm) I.D.	2-7/8" (73.02 mm)	2" (50.8 mm)	3-3/4" × 3" × 4-1/8"
907013	SW-5	As SW-1, for 3/4" (19.05 mm) I.D.	1-3/4" (44.45 mm)	1-5/16" (33.33 mm)	2-7/16" × 2-7/16" × 1-51/64"
907022	SW-6	Straight — for 1" (25.14 mm) I.D.	2-7/8" (73.02 mm)	2" (50.8 mm)	3" × 3" × 3-1/8"
907027	SW-7	As SW-6, for 3/4" (19.05 mm) I.D.	2-7/8" (73.02 mm)	2" (50.8 mm)	3" × 3" × 3-5/16"
907016	—	Replacement sink stopper	—	—	—

Also: 907015W, 907022W, 907017W, 907027W in white • 907018 with 1-1/2" barb • 907019 with 1-1/8" barb • 907020 with 1-1/2" elbow • 907030 threaded straight • 907032 90° for 1-1/8".

MF 610 & TELESCOPING DRAIN

Tank vent & wide mouth drain

MARELON



The **MF 610 tank vent** is a new idea in fuel tank vents, for hulls with solid cores only. The unit press-fits into a 3/4" (19.5 mm) hole without the need of a nut, and its stainless steel screen will not corrode and has no plating to chip.

The **wide mouth telescoping drain** is a push-fit scupper drain for decks and transoms. At 3" wide by 1-1/4" high it allows a significant flow of water through, and its snap-together construction suits hulls from 2-1/4" to 3-3/4" thick.

Part number	Model	Description	Size
907029	MF 610	Tank vent, press-fit, stainless steel screen	3/4" (19.5 mm) hole
907035	—	Wide mouth telescoping drain, transom	1-1/4" H × 3" W

Vented loops, garboard & utility drains

FORESPAR MARELON® — VENT PARTS, DRAIN BODIES AND PLUGS IDENTIFIED

VENTED LOOP SERVICE PARTS

Vent caps, duckbills and barbs

MARELON®



Vented loops, or siphon break valves, prevent water siphoning into the boat under aggressive waves, manoeuvring, or when the vessel is heavily loaded. The loop is placed between a water pump and any tank, head, engine or other system. The **duckbill** vent should be inspected and cleaned regularly; replacement parts are always available. The vent barb option runs an external tube so unwanted odours are not released in the cabin.

	Part number	Model	Description
j	903000W	MF 840 White	Vented loop 1-1/2" (38.1 mm), white
k	903000	MF 840	Vented loop 1-1/2" (38.1 mm), black
l	903004	MF 846	Vent barb assembly — vents to 1/4" (6.35 mm) hose
m	903002	MF 841	Vent cap / duckbill assembly

Recommended installation: at least 10" (254 mm) above the waterline.

GARBOARD, DECK & UTILITY DRAINS

Identification

MARELON®



For newer, thicker transoms, Forespar designed a drain and plug assembly to fit up to **1-3/4" (44.45 mm)** thick transoms. A Marelton female 3/4" (19.05 mm) elbow or female threaded barbed hose fitting can be screwed onto the end for hose attachment if needed.

GD-S 906075 (short) usable length with 5 threads engaged is 2-1/2" (63.5 mm) maximum, 1-7/16" (36.51 mm) minimum. GD-L 906076 (long) usable length with 5 threads engaged is 3-1/4" (82.55 mm) maximum, 2-1/2" (63.5 mm) minimum. Flange diameter (both ends) is 2" (50.8 mm); body diameter (female threaded unit) is 1-3/16" (30.16 mm) — that is the hole size needed to install the unit through the transom.

	Part number	Model	Description
a	906092	—	Garboard drain 2" diameter, white
b	906091	—	Garboard drain 2" diameter, black
c	906081	—	Garboard drain with nut, thru-hull style
—	906075	GD-S	Socket style garboard drain, short
d	906076	GD-L	Socket style garboard drain, long
—	906087	—	Long 1" thru-hull (1" threads, 4" long)
f	907028	D-1	Utility drain, fully threaded acetal, 1" (25.14 mm), thread length 1-3/8" (34.92 mm)
g	907001	MF 790	Drain plug, Marelton with neoprene seal

Deck fills, sink wastes & tank vent

FORESPAR MARELON® — EVERY DECK FILL, SINK WASTE BODY, STOPPER AND VENT IDENTIFIED

DECK FILLS & OUTBOARD WELL DRAIN

Colour-coded caps

MARELON®



Deck fills are moulded in Marelton for lifetime durability and are available in two colour-coded models, each clearly marked for use with either water or waste. The easy-open cap is fitted with a nylon retainer cord and rubber O-ring to ensure a safe and efficient seal. Suitable for 1-1/2" (38.1 mm) I.D. hose. Deck flange is 4" (101.6 mm) diameter, cut-out 2-1/8" (53.97 mm), hose barb length 3" (76.2 mm).

The **outboard well drain** is a corrosion proof replacement for the old fashioned brass fitting. It can also be used as a chafe guard to lead hose, wiring or steering cables through bulkheads, floor timbers and fibreglass panels. Barbs on the O.D. ensure positive locking action. Designed to fit a 1" (25.14 mm) diameter hole; flange is 1-1/4" (31.75 mm) diameter.

	Part number	Model	For use with / description
h	907003	MF 830 W	Deck fill — water
—	907004	MF 830 WST	Deck fill — waste
—	907006	MF 795	Outboard well drain, 1-1/4" (31.75 mm) flange
k	907035	—	Wide mouth telescoping drain transom, 1-1/4" H x 3" W

SINK WASTES & TANK VENT

Identification

MARELON®



Sink wastes are available in straight and 90° configurations for 1" and 3/4" tubing. Models SW-3, SW-4 and SW-6 are bright chrome plated, non-corrosive plastic.

The **tank vent** is a new idea in fuel tank vents for hulls with solid cores only. The unit press-fits into a 3/4" (19.5 mm) hole without the need for a nut. The stainless steel screen will not corrode and has no plating to chip. For 5/8" (15.87 mm) hose.

	Part number	Model	Description
l	907000	SW-1	Straight, for 1" (25.14 mm) I.D.
m	907014	SW-2	90°, for 1" (25.14 mm) I.D.
n	907015	SW-3	Straight, 1-1/2" (38.11 mm) screw
o	907017	SW-4	90°, for 1" (25.14 mm) I.D.
p	907022	SW-6	Straight, for 1" (25.14 mm) I.D.
q	907029	MF 610	Tank vent, press-fit into 3/4" (19.5 mm) hole
r	907016	—	Replacement sink stopper

Marelon® 93 Series — system data

FORESPAR® — TYPICAL INSTALLATIONS, THREAD FORMS AND CERTIFIED PHYSICAL PROPERTIES

TYPICAL INSTALLATIONS

Head, sink drain & cockpit drain

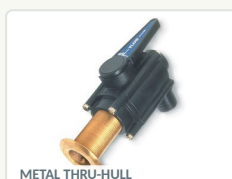
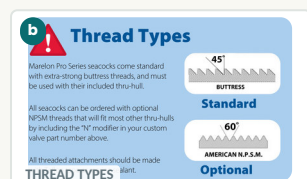


A **typical head installation** runs a 3/4" (19.05 mm) raw water intake to the bowl and a 1-1/2" (38.1 mm) Y-valve on the discharge, with the vented loop mounted at **least 10" (254 mm) above the waterline** and a pump-out deck fill and vent on the holding tank.

A **sink drain** uses a tailpipe and ball valve down to the thru-hull; a **cockpit drain** uses a flush head thru-hull. Note: if a thru-hull is to be installed less than 6" (152.4 mm) above the waterline, a ball valve or seacock must also be used.

A WORD ON THREAD FORMS

Industrial vs marine · British vs United States



Industrial or household fittings typically use the **NPT** (National Pipe Tapered) tapered thread. The marine valves, thru-hulls, tailpipes and seacocks used in boats employ the **NPSM** (National Pipe Straight Mechanical) parallel thread form. Tapered industrial fittings are not intended to be joined with parallel marine fittings.

Almost all Marelon valves, thru-hulls and fittings use NPSM parallel thread forms that require thread compound or Teflon tape to seal. There are two exceptions: the Marelon **93 Series** plumbing system comes standard with buttress threaded thru-hulls that mate to buttress threaded valves, and the Marelon **HC Series** reducing tailpipes all employ true NPT tapered threads.

The American NPSM parallel thread standard has a thread flank angle of **60°**. The British Standard Pipe (BSP) standard for parallel threads has a flank angle of **55°**. The truncation of the root and crest of American standard threads is flat; British standard threads are round. The Marelon buttress thread form is **45°**.

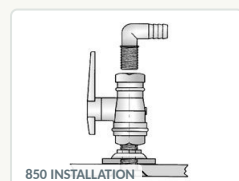
CERTIFIED PHYSICAL PROPERTIES

ABYC H-27 / UL 1121 and ISO/DIS 9093-2



All Forespar Marelon ball valves and thru-hull fittings meet or exceed current revisions of **A.B.Y.C. H-27 / UL 1121** (seacocks, through-hull connections and drain plugs) and **ISO/DIS 9093-2** (small craft — seacocks and through-hull fittings, non-metallic).

Physical property measurements of Forespar Marelon through-hull and through-hull adjacent fittings are tabulated below against both standards.



Property	ABYC standard	ISO standard	Marelon
Tensile strength	75 MPa / 10,900 psi	60 MPa / 8,700 psi (ISO 527)	85 MPa / 12,330 psi
Flexural modulus	3480 MPa / 505,000 psi	2700 MPa / 391,600 psi (ISO 178)	3600 MPa / 522,135 psi
Impact strength	N/A	9 kJ/m ² (ISO 180/A)	13 kJ/m ²
As to strength test	2225N / 500 lb-f static	1500N / 337 lb-f dynamic	Over 2225N / 500 lb-f static

Limited warranty: Forespar accepts no responsibility for valve or thru-hull components which are improperly installed, tampered with, or have inadequate access for service and maintenance.

Marelon Partners Program: participating boat builders can offer a 25 year limited warranty on installed Marelon plumbing parts. Ask Custom Marine for details.

Marelon® parts index — further listings

FORESPAR MARELON® — CLEAR VIEW AND BSP FITTINGS, ADDITIONAL VALVE CONFIGURATIONS AND INDEX-ONLY ITEMS

CLEAR VIEW & BSP FITTINGS

Tailpipes, elbows and thru-hulls

MARELON®



Every black tailpipe and male-thread elbow is also moulded in **clear view** Marelon so that flow and any blockage can be seen without breaking the joint — add a **C** after the black part number. Clear view is **not for use with petroleum products** and is not available on HECF or MEC elbows. **BSP** parallel threads have a 55° flank angle and are not compatible with NPSM; the BSP tailpipes, elbows and buttress thru-hulls stocked as standard are listed below.

Part no.	Description	Part no.	Description
905006C	Tailpipe 1/2" Male Threads to 5/8" Barb Clear	901032	Tailpipe 1" Male Threads to 1" Barb BSP
905007C	Tailpipe 3/4" Male Threads to 3/4" Barb Clear	901033	Tailpipe 1-1/4" Male Threads to 1-1/4" Barb BSP
905008C	Tailpipe 1" Male Threads Clear	901034	Tailpipe 1-1/2" Male Threads to 1-1/2" Barb BSP
905009C	Tailpipe 1-1/4" Male Threads Clear	901035	Tailpipe 2" Male Threads to 2" Barb BSP
905010C	Tailpipe 1-1/2" Male Threads Clear	901017	Elbow 1" Female Threads to 1" Barb BSP
905011C	Tailpipe 2" Male Threads Clear	901018	Elbow 1-1/4" Female Threads to 1-1/4" Barb BSP
905016C	Tailpipe 1" Male Thread Hose Fitting to 1-1/8" Barb Clear	901019	Elbow 1-1/2" Female Threads to 1-1/2" Barb BSP
905017C	Tailpipe 1-1/2" Male Thread Hose Fitting to 1-1/4" Barb Clear	901020	Elbow 2" Female Threads to 2" Barb BSP
901052C	Elbow Elbow 1-1/2" Male Threads to 1-1/4" Barb Clear	901021	Elbow 1" Male Threads to 1" Barb BSP
901053C	Elbow 1-1/8" Male Threads to 1" Barb Clear	901022	Elbow 1-1/4" Male Threads to 1-1/4" Barb BSP
901000C	Elbow 1/2" Male Threads to 1/2" Barb Clear	901023	Elbow 1-1/2" Male Threads to 1-1/2" Barb BSP
901001C	Elbow 3/4" Male Threads to 3/4" Barb Clear	901024	Elbow 2" Male Threads to 2" Barb BSP
901002C	Elbow 1" Male Threads to 1" Barb Clear	930006	Thru-Hull Flush Head Buttress 1" & 1-1/4"
901003C	Elbow 1-1/4" Male Threads to 1-1/4" Barb Clear	930013	Thru-Hull 1-1/2" & 2" Flush Head Buttress Screened
901004C	Elbow 1-1/2" Male Threads to 1-1/2" Barb Clear	903003W	Vented Loop 5/8" White
901005C	Elbow 2" Male Threads to 2" Barb Clear		

FURTHER PRO SERIES CONFIGURATIONS

Additional factory-listed valve numbers

MARELON®



Listed in the Forespar factory parts index in addition to the stock configurations on the preceding pages. Descriptions omit the repeated "Pro Series" prefix.

Part no.	Description	Part no.	Description
931342	1/2" Valve Seacock / Straight Barb Top	931653	3/4" Dual Drain Seacock / 90° Barb Top
931343	3/4" Valve Seacock / Straight Barb Top	931654	1" Dual Drain Seacock / 90° Barb Top
931344	1" Valve Seacock / Straight Barb Top	931655	1-1/4" Dual Drain Seacock / 90° Barb Top
931345	1-1/4" Valve Seacock / Straight Barb Top	931656	1-1/2" Dual Drain Seacock / 90° Barb Top
931346	1-1/2" Valve Seacock / Straight Barb Top	931658	2" Dual Drain Seacock / 90° Barb Top
931348	2" Valve Seacock / Straight Barb Top	934478	2" Y-Valve Straight Barb Base / Fem. Garden Hose Top
931652	1/2" Dual Drain Seacock / 90° Barb Top		

INDEX-ONLY ITEMS

Dealer signage & literature

MARELON®

Listed in the Marelon parts index for the trade counter and not pictured in the Forespar catalogue. Order alongside stock to support point-of-sale display of the Pro Series™ build-your-own valve system.

Part number	Description	Notes
920509	MARELON store sign / chart	Signage, not pictured in catalog
930410	MARELON Pro Series build-your-own valve brochure	Literature, not pictured in catalog

Forespar boat care — MareLube™ valve lubricant, TEF45™, LanoCote®, ReFresh™, Tea Tree Power® and PureWater+® — is catalogued in full with every pack size in **chapter 08, Adhesives, coatings & boat care.**

Aqua King II fresh water pumps

PENTAIR SHURFLO — AUTOMATIC DEMAND PUMPS · SEALED SWITCH · IGNITION PROTECTED · RUN DRY WITHOUT DAMAGE

JUNIOR 2.0 & STANDARD 3.0 — INTERMITTENT DUTY

Aqua King II 2.0 & 3.0 GPM



Designed with a unique **over-molded single-piece diaphragm** and an internal bypass (3.0 versions only) to enable long life and top performance in all plumbing systems. These fresh water automatic demand pumps are quiet and **can run dry without damage**.

Sealed switch · ignition protected · thermally protected. Two 1/2" hose barb fittings are included on aftermarket models. The Junior 2.0 serves up to two fixtures; the Standard 3.0 is a multi-fixture pump. **3 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
a	Aqua King II Junior 2.0	4128-110-A04	4128-110-E04	12 VDC	8.2" × 4.9" × 4.1" [208 × 124 × 104mm]	2.0 GPM [7.6 LPM]	3.5	30 PSI [2.0 BAR]
	Aqua King II Standard 3.0	4138-111-A65	4138-111-E65	12 VDC	8.2" × 4.9" × 4.1" [208 × 124 × 104mm]	3.0 GPM [11.35 LPM]	6.5	55 PSI [3.8 BAR]
	Aqua King II Standard 3.0	4138-131-A65	4138-131-E65	24 VDC	8.2" × 4.9" × 4.1" [208 × 124 × 104mm]	3.0 GPM [11.35 LPM]	3.8	55 PSI [3.8 BAR]

OEM model numbers are listed first; the aftermarket equivalent is the retail-packed version and is the one supplied with fittings. Internal bypass is fitted to 3.0 models only.

PREMIUM 4.0 & SUPREME 5.0 — MULTI-FIXTURE

Aqua King II 4.0 & 5.0 GPM



For boats with multiple fixtures, providing "just like home" shower pressure. A built-in **mechanical bypass** lets these pumps operate at lower flow conditions with minimal cycling.

Heavy duty **seamless shell electro-coated motors** built to withstand the tough marine environment, with o-ring sealed end bells and completely sealed wire entries. Sealed switch · ignition protected · thermally protected. Inlet strainer and two 1/2" hose barb fittings are included on aftermarket models. **3 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
b	Aqua King II Premium 4.0	4148-153-A75	4148-153-E75	12 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	4.0 GPM [15.1 LPM]	10	55 PSI [3.8 BAR]
	Aqua King II Premium 4.0	4148-163-A75	4148-163-E75	24 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	4.0 GPM [15.1 LPM]	5	55 PSI [3.8 BAR]
c	Aqua King II Supreme 5.0	4158-153-A75	4158-153-E75	12 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	5.0 GPM [18.9 LPM]	13	55 PSI [3.8 BAR]
	Aqua King II Supreme 5.0	4158-163-A75	4158-163-E75	24 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	5.0 GPM [18.9 LPM]	7	55 PSI [3.8 BAR]

All 4XX8 threaded pump ports are internally tapered and must be **hand-tightened only**, using Pentair SHURflo swivel fittings — they eliminate expensive brass or stainless fittings that require more complex plumbing. Fit a strainer on the inlet of every fresh water pump and mount the pump where the strainer can be inspected.

4558 SERIES — FRESH WATER AND WASHDOWN ON ONE BOARD

High Flow system, 10.0 GPM



The most advanced system available: an **Aqua King II Supreme 5.0** and a **Pro Blaster II Ultimate 5.0** supplied together on a manifold assembly and mounting board, delivering a combined **10.0 GPM**. These fully-automatic, quiet units deliver water smoothly and consistently. **3 year warranty.**

Model	OEM / aftermarket	Description	Voltage	Flow rate	Amps max.	Shut-off
SHURflo High Flow System	4558-153-E75	12 VDC system: Aqua King II Supreme 5.0 GPM and Pro Blaster II Ultimate 5.0 GPM, manifold assembly and mounting board	12 VDC	10.0 GPM [37.8 LPM]	13/11	55 PSI [3.8 BAR]
SHURflo High Flow System	4558-163-E75	24 VDC system: Aqua King II Supreme 5.0 GPM and Pro Blaster II Ultimate 5.0 GPM, manifold assembly and mounting board	24 VDC	10.0 GPM [37.8 LPM]	7 / 6	55 PSI [3.8 BAR]

SLV, Revolution & 4048 High Flow pumps

PENTAIR SHURFLO — SINGLE-FIXTURE, FOUR-CHAMBER AND HIGH FLOW DEMAND PUMPS FOR ON-BOARD FRESH WATER

SINGLE FIXTURE — LOW VOLUME, INTERMITTENT DUTY

SLV automatic demand pump



SLV PUMP

A compact automatic demand pump offering durability and dependability, ideal for **low volume, intermittent duty** applications — a single galley tap, a heads basin or a filtered drinking water line. SLV pumps **self-prime up to 2.5 vertical feet** while delivering 1.0 GPM at open flow.

The 12 volt low power consumption motor is **thermally protected** and carries a long life pressure switch rated to 30 PSI, providing high pump performance and reliability. **1 year warranty.**

Model	OEM model no.	Aftermarket	Description	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
SHURflo SLV	105-003	105-013	Automatic demand pump	12 VDC	6.8" × 3.9" × 2.5" [170 × 100 × 60mm]	1.0 GPM [3.8 LPM]	2.5	30 PSI [2.0 BAR]

REVOLUTION 4008 SERIES — FOUR INDEPENDENT CHAMBERS

Revolution fresh water pumps



REVOLUTION

The Revolution fresh water pump design was created with a unique **one-piece diaphragm and internal by-pass**, assuring long life and top performance in all plumbing systems. The Revolution automatic demand pump is quiet, **thermally protected** and can run dry without damage. Mounts in any position.

Four independent pump chambers for smooth, even flow · 3" diameter motor · threaded ports · o-ring check valve · adjustable pressure shut-off micro switch · adjustable bypass · umbrella valves · pressed-in bearings · TPE baseplate for dampening and vibration resistance · 16 gauge wires with strain relief.

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
a	SHURflo Revolution pump	4008-101-A65	4008-101-E65	12 VDC	8.1" × 4.9" × 4.3" [206 × 125 × 110mm]	3 GPM [11.4 LPM]	7.5	55 PSI [3.7 BAR]
	SHURflo Revolution pump	4008-131-A65	4008-131-E65	24 VDC	8.1" × 4.9" × 4.3" [206 × 125 × 110mm]	3 GPM [11.4 LPM]	4	55 PSI [3.7 BAR]
	SHURflo Revolution pump	4028-100-A54	4028-100-E54	12 VDC	8.1" × 4.9" × 4.3" [206 × 125 × 110mm]	2.3 GPM [8.7 LPM]	5	50 PSI [3.4 BAR]
	SHURflo Revolution pump	4008-171-A65	4008-171-E65	115 VAC	8.9" × 4.9" × 4.2" [225 × 125 × 106mm]	3 GPM [11.4 LPM]	1	55 PSI [3.7 BAR]

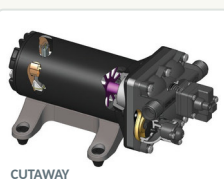
Revolution and 4048 pumps are drawn from the Pentair SHURflo RV catalogue and are listed here for on-board fresh water systems only. The 115 VAC model suits vessels running a permanent shore or genset supply.

4048 SERIES — FLOW REACTION TECHNOLOGY

4048 High Flow fresh water pump



4048



CUTAWAY

With **flow reaction technology**, the 4048 High Flow fresh water pump uses a one-piece diaphragm and internal by-pass to assure smooth flow, long life and top performance in any plumbing system. Designed and built for high flow, low noise and no rapid cycling; quiet, run-dry capable and mounts in any position. It is designed to replace both the 4900 and 5900 smart sensor series.

Commercial grade heavy duty motor · die cast components · four independent chambers · o-ring check valve · adjustable bypass and pressure shut-off switch · dual motor shaft ball bearings · oversized brushes and commutator · nylon base with neoprene feet.

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
SHURflo 4048 High Flow	4048-153-A75	4048-153-E75	12 VDC	10.3" × 4.9" × 4.8" [260 × 125 × 122mm]	4 GPM [15 LPM]	10	55 PSI [3.8 BAR]

The Revolution High Flow series does not require an accumulator tank. On all other demand pumps, charge the accumulator to the pump restart (on) pressure for the best system flow, lowest cycling and smoothest delivery.

Faucets, city water entries & accumulators

PENTAIR SHURFLO — PRESSURE CONTROL, ACCUMULATION AND OUTLET HARDWARE FOR THE FRESH WATER CIRCUIT

GALLEY & HEADS — WASHERLESS CERAMIC DISC

Faucets



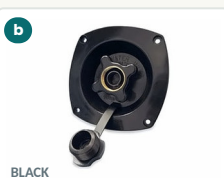
Smooth, easy flow with a **washerless ceramic disc** design and versatile **360° spout rotation**. Easy to use with a city water system. The 15-045-02 single touch faucet has a 1/4" port and works perfectly with filtration systems.

Electric models switch the pump directly at the faucet, so no separate pump switch is needed at the panel. The 94-009-21 combination supplies faucet and pump as a matched set for a single fixture.

	Model	OEM model no.	Aftermarket	Voltage	Ports	Amps max.	Spout rotation	Colour
	Electric faucet with switch	94-009-00	94-009-10	12 VDC	3/8" barb	3	360°	White
	Electric faucet with switch	94-009-01	N/A	12 VDC	3/8" barb	3	360°	Gray
a	Electric faucet and pump combo	94-009-21	94-009-20	12 VDC	3/8" barb	3	360°	White
	Single touch faucet	15-045-02	15-045-02	N/A	1/4"	N/A	Twist	Chrome
	Faucet without switch	94-009-32	94-009-12	N/A	3/8" barb	N/A	360°	White

SHORE SUPPLY — INTEGRAL CHECK VALVE

Pressure reducing city water entries



The exclusive Pentair SHURflo **diaphragm design** prevents **high-pressure damage** often caused by dock water. These high performance water entries limit water pressure and include a check valve, so the marina supply cannot back-feed the on-board tank.

3/4" GHT female swivel inlet · 1/2" NPSM male outlet · 1/2" swivel elbow fitting included. Wall mount versions fit a flush deck or topsides cut-out; the in-line version is fitted in the hose run behind an existing entry. **1 year warranty.**

	Model	Mounting	65 PSI model — OEM	65 PSI model — aftermarket	50 PSI model	Colour
a	SHURflo city water entry, wall mount	Wall mount	183-020-14	183-029-14	—	Chrome
b	SHURflo city water entry, wall mount	Wall mount	183-020-16	183-029-16	—	Black
	SHURflo city water entry, wall mount	Wall mount	183-020-18	183-029-18	—	Gel white
d	SHURflo city water entry, in-line	In-line	—	N/A	183-039-08	Gel white

SMOOTH DELIVERY — 20 TO 125 PSI SYSTEMS

Pre-pressurized accumulator tanks



Minimizes **cycling, pulsation and pressure spikes** while increasing the life of the pump — and saving battery power. Easily handles pressure requirements from 20 PSI to 125 PSI. **1 year warranty.**

Charge the tank to the restart (on) pressure of the pump for the best system flow, lowest pump cycling and smoothest delivery at the outlets.

	Model	OEM model no.	Aftermarket	Ports	Dimensions	Total volume	Maximum pressure
a	SHURflo 24 oz. nylon tank	182-100	182-200	1/2" NPSM male	9.1" × 4.8" × 3.8" [232 × 121 × 97mm]	24 oz. [710 ml]	125 PSI [8.8 BAR]
b	SHURflo 2 gallon stainless steel tank	3400-002	3400-002	1/2" NPT female	12" H × 9" D [23 cm H × 10 cm D]	2 gallons [8 L]	100 PSI [7 BAR]

Custom Marine holds the Aqua King II range in Dubai and specifies the matching strainer, accumulator tank and silencing kit for every installation — 800BOATS.

Water system accessories

PENTAIR SHURFLO — INLET PROTECTION, NOISE REDUCTION AND DECK WASH HARDWARE · BIG PROTECTION FROM SMALL PRODUCTS

INLET PROTECTION — 50 MESH STAINLESS SCREEN

Twist-on & swivel nut water strainers



Eliminate unnecessary repairs by keeping debris and other particles out of the pump. The strainer screws directly onto the pump head, and the **transparent bowl** shows at a glance when it is time to clean. Easy disassembly, cleaning and reassembly. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Screen	Designation
a	SHURflo twist-on water strainer	255-213	255-313	50 mesh stainless steel	1/2" [13mm] pipe inlet
	SHURflo twist-on water strainer	255-223	255-323	50 mesh stainless steel	1/2" [13mm] barb inlet
	SHURflo swivel nut water strainer	255-215	255-315	50 mesh stainless steel	1/2" [13mm] pipe inlet
b	SHURflo swivel nut water strainer	255-225	255-325	50 mesh stainless steel	1/2" [13mm] barb inlet

NOISE REDUCTION — FLEXIBLE HIGH PRESSURE RISERS

Pump silencing kit & risers



Easy to install high-pressure flexible hoses, fitted between the pump and the plumbing system to reduce unwanted rattling and plumbing vibration noise. The kit comes with two 1/2" NPT male pipe nipples for added convenience across a variety of systems.

Flexible inlet and outlet plumbing is critical to lowering pump noise level and increasing pump life. Anchor the flex line where it meets hard tubing so the run cannot rattle behind joinery.

	Model	Model no.	Description	Designation
c	SHURflo pump silencing kit	94-591-01	Includes 2 each of 411-030-00 and 2 each 1/2" [13mm] male pipe couplers	1/2" [13mm] female swivel fitting
	SHURflo 18" [457mm] riser	411-010-00	18" [457mm] flexible 1/2" hose riser	1/2" [13mm] female swivel fitting
	SHURflo 30" [762mm] riser	411-020-00	30" [762mm] flexible 1/2" [13mm] hose riser	1/2" female swivel fitting
	SHURflo 36" [914mm] riser	411-030-00	36" [914mm] flexible 1/2" [13mm] hose riser	1/2" [13mm] female swivel fitting

DECK WASH ACCESSORIES — NOZZLE, HOSE & CHECK VALVE

Blaster nozzle, self-coiling hoses & check valve



Designed for safety and convenience — big protection from small but essential products. The high pressure blaster nozzle is moulded in **high impact plastic**, adjusts from fine mist to full stream and has a lock clip for continuous spray. It fits SHURflo pumps or a garden hose.

Self-coiling hoses are UV protected and recoil clear of the deck. The in-line check valve allows flow in one direction only, safeguarding against backsurge. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Description	Designation
e	SHURflo high pressure blaster nozzle	15-010	94-010-00	High impact plastic for long life, use with SHURflo pumps or garden hose, adjusts to fine mist or full stream, lock clip for continuous spray	3/4" [19mm] garden hose thread
	SHURflo self-coiling hose	7-071-25	7-071-25	25' [7.6 m], 3/8" [9.5mm] diameter, white coiled hose	3/4" [19mm] garden hose thread
g	SHURflo self-coiling hose	7-137-25	7-137-25	25' [7.6 m], 1/2" [13mm] diameter, blue coiled hose	3/4" [19mm] garden hose thread
	SHURflo in-line check valve	340-000	340-001	Allows flow in one direction only to safeguard against backsurge up to 100 PSI [6.8 BAR]	1/2" [13mm] barb

Blaster II & Pro Blaster II washdown pumps

PENTAIR SHURFLO — DECK WASH, FISH BOX SCALING AND ANCHOR CHAIN CLEANING · SEALED SWITCH · IGNITION PROTECTED

BLASTER II — 3.5 GPM, 45 PSI

Blaster II washdown pumps



BLASTER II

Created with a unique **over-molded single-piece diaphragm**, assuring long life and top performance in all marine washdown applications. Blaster II washdown automatic demand pumps are **thermally protected** and can run dry without damage. Sealed switch · ignition protected.

Two 3/4" hose barb fittings, one 3/4" GHT (M) fitting and a nozzle are included on aftermarket models. **2 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
SHURflo Blaster II	4238-121-A07	4238-121-E07	12 VDC	9" × 4.9" × 4.1" [229 × 124 × 104mm]	3.5 GPM [13.2 LPM]	7.5	45 PSI [3.1 BAR]
SHURflo Blaster II	4238-141-A07	4238-141-E07	24 VDC	9" × 4.9" × 4.1" [229 × 124 × 104mm]	3.5 GPM [13.2 LPM]	3.5	45 PSI [3.1 BAR]

PRO BLASTER II — DELUXE 4.0 & ULTIMATE 5.0, 60 PSI

Pro Blaster II washdown pumps



DELUXE 4.0



ULTIMATE 5.0

Superior performance whether you are blasting away the grime on deck, scaling a fish box or cleaning the anchor chain. Pro Blaster II washdown pumps deliver a **powerful, consistent spray pattern** and are built to withstand the tough marine environment with an **electro-coated motor**, o-ring seals and fully sealed wire entries.

Sealed switch · ignition protected · thermally protected. Inlet strainer, two 3/4" hose barb fittings, one 3/4" GHT (M) fitting and a nozzle are included on aftermarket models. **2 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
a	Pro Blaster II Deluxe 4.0	4248-153-A09	4248-153-E09	12 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	4.0 GPM [15.1 LPM]	10	60 PSI [4.1 BAR]
	Pro Blaster II Deluxe 4.0	4248-163-A09	4248-163-E09	24 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	4.0 GPM [15.1 LPM]	5	60 PSI [4.1 BAR]
b	Pro Blaster II Ultimate 5.0	4258-153-A09	4258-153-E09	12 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	5.0 GPM [18.9 LPM]	14	60 PSI [4.1 BAR]
	Pro Blaster II Ultimate 5.0	4258-163-A09	4258-163-E09	24 VDC	10" × 5" × 4.75" [254 × 127 × 120mm]	5.0 GPM [18.9 LPM]	7	60 PSI [4.1 BAR]

INLET PROTECTION — BAIT TANK, LIVEWELL & WASHDOWN

Raw water strainers



1/2" STRAINER



1" STRAINER

Built to keep bait tank, livewell and washdown pumps protected from harmful debris. A high capacity, **rugged nylon housing** with clear twist-off polyamide bowl and removable stainless steel screen allows easy inspection and cleaning. An integral o-ring creates a tight seal, eliminating possible leaks. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Screen
a	1/2" strainer with fittings	253-120-00	253-120-01	50 mesh screen
	1/2" strainer with bracket & fittings	253-121-01	253-121-01	50 mesh screen
	3/4" strainer	253-220-00	253-220-01	50 mesh screen
	3/4" strainer with bracket & fittings	253-221-01	253-221-01	50 mesh screen
b	1" strainer	253-320-00	253-320-01	50 mesh screen
	1" strainer with bracket & fittings	253-321-01	253-321-01	50 mesh screen
	1-1/4" strainer	253-400-00	253-400-01	20 mesh screen
	1-1/4" strainer with bracket & fittings	253-401-01	253-401-01	20 mesh screen

For optimum washdown performance an inlet raw water strainer is required. Use marine approved reinforced hose and double stainless steel clamps on any plumbing below the water line.

Washdown kits & Pro Baitmaster II

PENTAIR SHURFLO — COMPLETE WASHDOWN PACKAGES AND HEAVY DUTY LIVEWELL / WASHDOWN PUMPS

BLASTER II WASHDOWN KIT — 3.5 GPM

Blaster II washdown kit



Everything needed for washdown applications — fish box, scaling, anchor chain cleaning and blasting down the grimeiest decks — in one convenient package. The kit includes the **Blaster II 3.5 GPM pump**, nozzle, strainer, fittings and a **UV protected 25' coiled hose**. **2 year warranty.**

Model	OEM model no.	Aftermarket	Kit contents	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
Blaster II Washdown Kit 3.5 GPM	4338-121-A07	4338-121-E07	Blaster II 3.5 pump, fittings, nozzle, strainer, 25' 3/8" coiled hose	12 VDC	9" x 4.9" x 4.1" [229 x 124 x 104mm]	3.5 GPM [13.2 LPM]	7.5	45 PSI [3.1 BAR]

PRO WASHDOWN KIT II — DELUXE 4.0 & ULTIMATE 5.0

Pro washdown kit II



Available in both Deluxe 4.0 and Ultimate 5.0 series. These kits include everything needed for the toughest washdown applications — fish box, scaling, anchor chain cleaning and blasting down the grimeiest decks — in one kit. Each contains a washdown pump, fittings, nozzle, **raw water strainer** and a 25' coiled hose. **2 year warranty.**

Model	OEM model no.	Aftermarket	Kit contents	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
Pro Washdown Kit II Deluxe 4.0	4348-153-A09	4348-153-E09	Pro Blaster II Deluxe 4.0 pump, fittings, nozzle, raw water strainer, 25' 3/8" coiled hose	12 VDC	10" x 5" x 4.75" [254 x 127 x 120mm]	4.0 GPM [15.1 LPM]	10	60 PSI [4.1 BAR]
Pro Washdown Kit II Ultimate 5.0	4358-153-A09	4358-153-E09	Pro Blaster II Ultimate 5.0 pump, fittings, nozzle, raw water strainer, 25' 1/2" coiled hose	12 VDC	10" x 5" x 4.75" [254 x 127 x 120mm]	5.0 GPM [18.9 LPM]	14	60 PSI [4.1 BAR]

PRO BAITMASTER II — CONTINUOUS DUTY, SPLASH PROOF

Pro Baitmaster II livewell pumps



Heavy duty livewell / washdown pumps, excellent for livewell or washdown applications in harsh marine environments. The **seamless motor shell and sealed switch** protect the pump from splashed liquids. The pump is **self-priming and can run dry without damage**. For tank sizes 35 gallons and under.

Thermally protected · ignition protected. Use 1/2" [13mm] I.D. hose on the tank inlet and outlet for minimum back pressure and turbulence to the live bait, and fit a raw water strainer between the thru-hull fitting and the pump inlet. **2 year warranty.**

Model	OEM model no.	Aftermarket	Description	Voltage	Dimensions	Flow rate	Amps max.	Shut-off
SHURflo Pro Baitmaster II	4648-153-A07	4648-153-E07	Continuous duty, splash proof, sealed motor, ignition protected	12 VDC	10" x 5" x 4.75" [254 x 127 x 120mm]	4.0 GPM [15.1 LPM]	8	45 PSI [3.1 BAR]
SHURflo Pro Baitmaster II	4648-163-A07	4648-163-E07	Continuous duty, splash proof, sealed motor, ignition protected	24 VDC	10" x 5" x 4.75" [254 x 127 x 120mm]	4.0 GPM [15.1 LPM]	4	45 PSI [3.1 BAR]

Livewell pumps

PENTAIR SHURFLO — MAGNETIC DRIVE, HIGH FLOW AND PIRANHA CARTRIDGE PUMPS · ANTI-AIRLOCK · ISO 8846

BAIT SENTRY — MAGNETIC DRIVE, ISO 8846

Bait Sentry livewell pumps



Designed for easy installation and trouble-free operation. **Magnetic drive technology** eliminates unnecessary failures, and the patented **anti-airlock feature** allows the pump to clear trapped air in rough water or when the boat is anchored. Includes a dual port for easy washdown pump connection.

All models 12 VDC, continuous duty, ignition protected to ISO 8846. **3 year warranty.**

	Model	OEM model no.	Aftermarket	Tank size	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
	Bait Sentry 500 Magnetic Drive	1700-000-030	1700-001-030	30 gallons	4.93" × 7.85" [125 × 200mm]	3/4" inlet NPT / 3/4" outlet barb	500 GPH [1893 LPH]	1.7
	Bait Sentry 800 Magnetic Drive	1700-010-030	1700-011-030	40 gallons	4.93" × 7.85" [125 × 200mm]	3/4" inlet NPT / 3/4" outlet barb	800 GPH [3028 LPH]	4
a	Bait Sentry 1100 Magnetic Drive	1700-020-030	1700-021-030	60 gallons	4.93" × 7.85" [125 × 200mm]	3/4" inlet NPT / 1-1/8" outlet barb	1100 GPH [4164 LPH]	4.2

HIGH FLOW 1500 & 2000 — LARGE LIVEWELLS

High flow livewell pumps



Heavy duty and built to last. The 1500 and 2000 GPH nylon livewell pumps offer a unique **motor cooling system** (patent pending) to ensure efficient performance and long life. Designed for large livewell applications and supplied as standard with a **6' tinned wire assembly**.

Anti-airlock · tough nylon housing · washdown port connection · submersible · ignition protected to ISO 8846. **2 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
SHURflo Livewell 1500	358-001-00	358-001-10	12 VDC	8.3" × 6.2" [210 × 157mm]	1" inlet NPT / 1-1/8" outlet barb	1500 GPH [5678 LPH]	8
SHURflo Livewell 2000	358-011-00	358-011-10	12 VDC	8.3" × 6.2" [210 × 157mm]	1" inlet NPT / 1-1/8" outlet barb	2000 GPH [7570 LPH]	10
SHURflo Livewell 1500	358-101-00	358-101-10	24 VDC	8.3" × 6.2" [210 × 157mm]	1" inlet NPT / 1-1/8" outlet barb	1500 GPH [5678 LPH]	4
SHURflo Livewell 2000	358-111-00	358-111-10	24 VDC	8.3" × 6.2" [210 × 157mm]	1" inlet NPT / 1-1/8" outlet barb	2000 GPH [7570 LPH]	5

PIRANHA — REMOVABLE CARTRIDGE, ANTI-AIRLOCK

Piranha livewell pumps



Smart, reliable, attractive, efficient. A tough **high density nylon housing** and heavy duty water cooled motor give the Piranha livewell pumps unparalleled reliability. The patented **anti-airlock feature** allows the pump to clear trapped air in rough water or when the boat is anchored, and the dual port fitting allows easy washdown pump connection.

Removable cartridge · submersible · 6' tinned wire assembly · ignition protected to ISO 8846. **2 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
SHURflo Livewell 600	357-013-00	357-013-10	12 VDC	6.5" × 3.75" [165 × 95mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	600 GPH [2270 LPH]	2
SHURflo Livewell 800	357-113-00	357-113-10	12 VDC	6.5" × 3.75" [165 × 95mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	800 GPH [3027 LPH]	4.5
SHURflo Livewell 1100	357-103-00	357-103-10	12 VDC	6.5" × 3.75" [165 × 95mm]	3/4" [19mm] inlet / 1-1/8" [29mm] outlet	1100 GPH [4163 LPH]	4.5

Aerator pumps & livewell fill valve

PENTAIR SHURFLO — PIRANHA STRAIGHT AND ANGLED PORT AERATORS · ADJUSTABLE FULL PORT FILL VALVE

PIRANHA AERATORS — STRAIGHT PORT

Straight port aerator pumps



STRAIGHT PORT

The straight port aerator carries the same tough high density nylon housing and heavy duty water cooled motor as the Piranha livewell range, in a slim in-line body for tight transom and stringer runs. The patented anti-airlock feature clears trapped air in rough water or at anchor.

Removable cartridge · submersible · 6' tinned wire assembly · ignition protected to ISO 8846. **2 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
SHURflo Straight Port Aerator 600	357-012-00	357-012-10	12 VDC	9.5" × 3.75" [241 × 95mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	600 GPH [2270 LPH]	2
SHURflo Straight Port Aerator 800	357-112-00	357-112-10	12 VDC	9.5" × 3.75" [241 × 95mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	800 GPH [3027 LPH]	4.5
SHURflo Straight Port Aerator 1100	357-102-00	357-102-10	12 VDC	9.5" × 3.75" [241 × 95mm]	3/4" [19mm] inlet / 1-1/8" [29mm] outlet	1100 GPH [4163 LPH]	4.5

PIRANHA AERATORS — ANGLED PORT

Angled port aerator pumps



ANGLED PORT

The angled port body turns the discharge through 90° at the pump, so the outlet can be pointed up toward the tank without a sagging hose run — the single most common cause of an airlock in a livewell circuit.

Removable cartridge · anti-airlock · tough nylon housing · submersible · 6' tinned wire assembly · ignition protected to ISO 8846. **2 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
SHURflo Angled Port Aerator 600	357-014-00	357-014-10	12 VDC	7" × 7.5" [178 × 191mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	600 GPH [2270 LPH]	2
SHURflo Angled Port Aerator 800	357-114-00	357-114-10	12 VDC	7" × 7.5" [178 × 191mm]	3/4" [19mm] inlet / 3/4" [19mm] outlet	800 GPH [3027 LPH]	4.5
SHURflo Angled Port Aerator 1100	357-104-00	357-104-10	12 VDC	7" × 7.5" [178 × 191mm]	3/4" [19mm] inlet / 1-1/8" [29mm] outlet	1100 GPH [4163 LPH]	4.5

Livewell installation: a seacock valve must be fitted between the pump and the thru-hull fitting, the pump impeller must sit below the water line, and the discharge port must point up toward the tank — never down toward the keel. Do not allow the outlet tubing to sag between pump and tank.

FLOW CONTROL — FULL PORT, LOW PROFILE

Livewell fill valve



FILL VALVE

Keep your bait alive. The livewell fill valve creates an energized environment that keeps bait alive on the longest run offshore. The **full port fittings** (3/4" or 1-1/8") assure the amount of flow required is achieved and maintained, and the **adjustable flow valve** lets you set the water flow to the level the tank needs. **3 year warranty.**

Model	OEM model no.	Aftermarket	Description
SHURflo livewell fill valve	330-010	330-021	Nylon construction, 3/4" full port, low profile design
SHURflo livewell fill valve	330-000	330-021	Nylon construction, 1-1/8" full port, low profile design

Aftermarket part 330-021 includes both 3/4" and 1-1/8" full port fittings.

Ballast pumps & bilge pumps 380 – 1000

PENTAIR SHURFLO — SKI AND WAKE BALLAST SYSTEMS · FLEXIBLE IMPELLER AND CARTRIDGE PUMPS

SKI & WAKE — SUBMERSIBLE CARTRIDGE

Piranha ballast pumps



PIRANHA BALLAST

Everything you are looking for in a ballast pump. A tough **high density nylon housing** and heavy duty water cooled motor give the Piranha ballast pumps unparalleled reliability, and the patented anti-airlock feature allows the pump to clear trapped air. All ballast series pumps have a **removable cartridge** for easy cleaning and simple replacement.

Submersible · 6' tinned wire assembly · ignition protected to ISO 8846. **2 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
	SHURflo Ballast 800	357-116-00	357-116-10	12 VDC	5.6" × 3.7" [142 × 94mm]	3/4" MNPT inlet / 3/4" barb outlet	800 GPH [3027 LPH]	4.5
a	SHURflo Ballast 1100	357-106-00	357-106-10	12 VDC	5.6" × 3.7" [142 × 94mm]	3/4" MNPT inlet / 1-1/8" barb outlet	1100 GPH [4163 LPH]	4.5

HIGH CAPACITY — BRONZE BODY, FLEXIBLE IMPELLER

High flow & standard flow ballast pumps



HIGH FLOW



STANDARD FLOW

Specially designed and developed for **high capacity ballast tank applications in ski and wake boats**, providing rapid fill and drain rates in a readily adaptable configuration, able to operate on a 25 amp circuit. The high efficiency, high torque motor combined with a high modulus neoprene compound impeller provides fast priming, long life and consistent performance.

Close tolerances reduce leak back when the pump is mounted below the ballast tank. Built on the latest SHURflo motor series with fully sealed heavy die cast end bells, electro-coat finish throughout and a steel mounting plate. **Reversible** flexible impeller · self priming · bronze pump body · ignition protected. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Port size inlet / outlet	Flow rate	Amps max.
a	SHURflo High Flow Ballast	3300-000	3300-001	12 VDC	7.67" × 4.75" × 3.61" [195 × 121 × 92mm]	1/2" [12.7mm] internal pipe thread / 1" [25.4mm] hose barb	15 GPM [56.8 LPM]	19
b	SHURflo Standard Flow Ballast	3300-100	3300-101	12 VDC	6.62" × 4.75" × 6.61" [168 × 121 × 168mm]	1/2" [12.7mm] internal pipe thread / 1" [25.4mm] hose barb	12 GPM [45.7 LPM]	15

380 – 1000 GPH — CONTINUOUS DUTY, ISO 8849

Bilge pumps 380 to 1000 GPH



BILGE 380-1000

Quality bilge pumps you can trust, built for the harsh marine environment to withstand the toughest conditions. Supplied as standard with a 3' **tinned wire assembly** for below waterline installations.

Continuous duty · submersible · anti-airlock · ABS housing with nylon impeller · ignition protected to ISO 8849 · 2-3/8" [86mm] round footprint. **3 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Round footprint	Outlet port	Flow rate	Amps max.
SHURflo Bilge 380	355-020-00	355-020-10	12 VDC	4.2" × 3.75" [114 × 95mm]	2-3/8" [86mm]	3/4" [19mm]	380 GPH [1438 LPH]	1.7
SHURflo Bilge 500	355-010-00	355-010-10	12 VDC	4.2" × 3.75" [114 × 95mm]	2-3/8" [86mm]	3/4" [19mm]	500 GPH [1893 LPH]	1.8
SHURflo Bilge 700	355-110-00	355-110-10	12 VDC	4.2" × 3.75" [114 × 95mm]	2-3/8" [86mm]	3/4" [19mm]	700 GPH [2650 LPH]	3.2
SHURflo Bilge 1000	355-100-00	355-100-10	12 VDC	4.2" × 3.75" [114 × 95mm]	2-3/8" [86mm]	1-1/8" [29mm]	1000 GPH [3785 LPH]	3.2

Attach 3/4" [19mm] (380, 500 and 700 GPH) or 1-1/8" [29mm] (1000 GPH) I.D. smooth bore hose. Corrugated hose will significantly reduce pump performance.

Bilge pumps, float switches & blowers

PENTAIR SHURFLO — CONTINUOUS DUTY BILGE PUMPS TO ISO 8849 · YELLOWTAIL VENTILATION TO ISO 9097

1500 & 2000 GPH — SWIVEL BASEPLATE

Bilge pumps 1500 & 2000 GPH



BILGE 1500/2000

Heavy duty and built to last. The 1500 and 2000 GPH nylon bilge pumps offer a unique **motor cooling system** (patent pending) to ensure efficient performance and long life. Installation is quick with the patented **swivel base** and 6' [1.8 m] tinned wire assembly.

Continuous duty · submersible · anti-airlock · ignition protected to ISO 8849. **3 year warranty.**

Model	OEM model no.	Aftermarket	Voltage	Dimensions	Outlet port	Flow rate	Amps max.
SHURflo Bilge 1500	358-000-00	358-000-10	12 VDC	7.2" × 6.3" [184 × 160mm]	1-1/8" outlet barb	1500 GPH [5677 LPH]	8
SHURflo Bilge 2000	358-010-00	358-010-10	12 VDC	7.2" × 6.3" [184 × 160mm]	1-1/8" outlet barb	2000 GPH [7569 LPH]	10
SHURflo Bilge 1500	358-100-00	358-100-10	24 VDC	7.2" × 6.3" [184 × 160mm]	1-1/8" outlet barb	1500 GPH [5677 LPH]	4
SHURflo Bilge 2000	358-110-00	358-110-10	24 VDC	7.2" × 6.3" [184 × 160mm]	1-1/8" outlet barb	2000 GPH [7569 LPH]	5

AUTOMATIC SWITCHING — NON-MERCURY, ISO 8849

Bilge float switches



359-101-30 (A)



359-101-40 (B)

SHURflo series float switches provide the ultimate in reliability. The complete line includes a **standard automatic float switch** and a **caged automatic float switch** for bilges where debris or loose gear could foul a bare float. Both are non-mercury, may be remote or direct mounted, and are supplied with a 3' tinned wire assembly. Ignition protected to ISO 8849. **3 year warranty.**

Model	OEM model no.	Aftermarket	Description	Voltage	Dimensions	Amps max.
SHURflo standard automatic float switch	359-101-30	359-111-30	Non-mercury, remote or direct mounting, 3' tinned wire assembly	12 / 24 VDC	4.4" × 3.6" × 1.3" [112 × 92 × 32mm]	12
SHURflo caged automatic float switch	359-101-40	359-111-40	Non-mercury, remote or direct mounting, 3' tinned wire assembly	12 / 24 VDC	5.1" × 4.0" × 2.8" [130 × 102 × 71mm]	12

Mount the pump on a flat surface, as low as possible in the bilge, and take care not to drive the fixing screws through the hull. Route the discharge hose to a thru-hull fitting well above the water line, avoiding sags and loops. Do not use an open flame in the bilge area.

YELLOWTAIL — SIX-BLADE NYLON FAN

In-line blowers



3" BLOWER



4" BLOWER

Pentair SHURflo has developed a unique nylon fan with **six blades** to ensure high performance and efficient ventilation of engine compartments, bilges, galleys and head closets. Installation is made easy by extended barbs and a slotted mounting bracket.

12 VDC · CE · continuous duty · ISO 9097 marine · ignition protected · USCG 183.410 compliant · NMMA type accepted · ABYC. **3 year warranty.**

	Model	OEM model no.	Aftermarket	Description	Dimensions	CFM	Amps max.
a	SHURflo 3" YellowTail blower	277-3100	277-3110	12 VDC, CE, continuous duty, ISO 9097 marine, ignition protected, USCG 183.410 compliant, NMMA type accepted, ABYC	5.1" × 5.5" × 3.8" [130 × 140 × 96mm]	120	3.7
b	SHURflo 4" YellowTail blower	277-4100	277-4110	12 VDC, CE, continuous duty, ISO 9097 marine, ignition protected, USCG 183.410 compliant, NMMA type accepted, ABYC	5.1" × 6.4" × 4.8" [130 × 162 × 122mm]	220	5.2

Position the blower with the flow arrow toward the exhaust vent and angled slightly toward the engine compartment to avoid moisture build-up. Suits vertical transom, horizontal transom and deck mounting.

Macerator & refrigeration pumps

PENTAIR SHURFLO — SANITATION AND FISH BOX EVACUATION · COLD PLATE CIRCULATION

SANITATION & FISH BOX EVACUATION

Macerator pumps



MACERATOR

Designed specifically for sanitation waste and fish box evacuation. A premium impeller design with **run-dry capability**, a seamless shell motor with o-ring sealed end bells and a sealed manual turn key. The unique dual blade and housing construction ensures reliable pumping and superior performance in harsh marine environments. Thermally protected and ignition protected.

A flow rate of up to 13 gallons per minute conveniently empties any tank in minutes. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Voltage	Dimensions	Flow rate	Amps max.	Port size
a	SHURflo Macerator 12 VDC	3200-000	3200-001	12 VDC	10.6" × 4.9" × 3.8" [269 × 125 × 97mm]	13 GPM [49 LPM]	17	Inlet 1-1/2" Barb/1-1/2" NPT, outlet 1" barb
	SHURflo Macerator 12 VDC, 180° port	3200-100	3200-101	12 VDC	10.6" × 4.9" × 3.8" [269 × 125 × 97mm]	13 GPM [49 LPM]	17	Inlet 1-1/2" Barb/1-1/2" NPT, outlet 1" barb
	SHURflo Macerator 24 VDC	3200-010	3200-011	24 VDC	10.6" × 4.9" × 3.8" [269 × 125 × 97mm]	13 GPM [49 LPM]	9	Inlet 1-1/2" Barb/1-1/2" NPT, outlet 1" barb
	SHURflo Macerator 24 VDC, 180° port	3200-110	—	24 VDC	10.6" × 4.9" × 3.8" [269 × 125 × 97mm]	13 GPM [49 LPM]	9	Inlet 1-1/2" Barb/1-1/2" NPT, outlet 1" barb
	SHURflo Macerator 12 VDC, 10 GPM	3200-200	3200-201	12 VDC	10.6" × 4.9" × 3.8" [269 × 125 × 97mm]	10 GPM [37 LPM]	15	Inlet 1-1/2" Barb/1-1/2" NPT, outlet 1" barb

The 3200-200 / 3200-201 10 GPM macerator is listed in the Pentair SHURflo RV catalogue and is specified where a lower-draw waste evacuation pump is wanted on a smaller circuit.

Macerator pumps are designed to empty marine holding tanks of normal waste, and are equally effective for emptying fish boxes of scales and residual waste. A flow rate of up to 13 gallons per minute conveniently empties any tank in minutes. Refer to the Pentair SHURflo installation manual for complete guidelines before plumbing a discharge to a thru-hull.

REFRIGERATION — COLD PLATE CIRCULATION

Refrigeration circulation pumps



CIRCULATION

Specifically designed for refrigeration cold plate circulation. Each pump features a **positive displacement diaphragm** and EPDM valves for proven priming ability and longer life. Continuous duty motor, no switch fitted. **1 year warranty.**

SHURflo diaphragm pumps will operate in any position; the recommended position is **motor up, pumphead down**, to prevent water damage to the motor in the event of a leak during setup or operation. Mount on a solid surface to reduce noise and vibration, and use flexible inlet and outlet plumbing throughout.

	Model	OEM model no.	Aftermarket	Description	Dimensions	Flow rate	Amps max.	Maximum pressure
a	Refrigeration circulation pump	8050-261-105	8050-261-105	12 VDC CE version, no switch, continuous duty motor, cold plate refrigeration pump	7.3" × 4.3" × 4.4" [185 × 109 × 112mm]	0.5 GPM [1.9 LPM]	1.5	30 PSI [2.1 BAR]
	Refrigeration circulation pump	4728-110-E10	4728-110-E10	12 VDC CE version, no switch, continuous duty motor, cold plate refrigeration pump	7.2" × 4.9" × 4.5" [183 × 125 × 114mm]	2 GPM [7.5 LPM]	3.5	45 PSI [3.1 BAR]

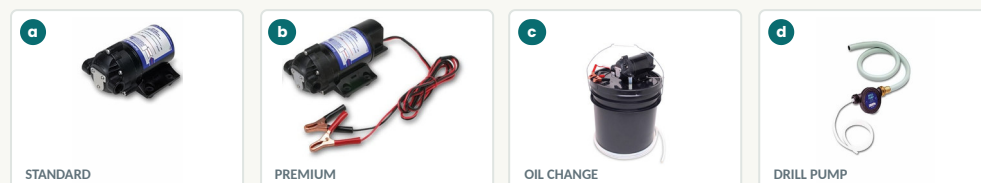
To minimize heat rise, continuously operating pumps other than bilge pumps should be mounted in well ventilated spaces.

General purpose pumps & installation data

PENTAIR SHURFLO — WINTERIZING, OIL CHANGE AND LIQUID TRANSFER · WIRE SIZE AND PLUMBING GUIDELINES

UTILITY — WINTERIZING, OIL CHANGE & LIQUID TRANSFER

General purpose & oil change pumps



Easy to install and extremely versatile — perfect for a variety of uses including **winterizing, oil changing and liquid transfer**. Self-priming and thermally protected, with BUNA valves and a 7' [2.1 m] prime.

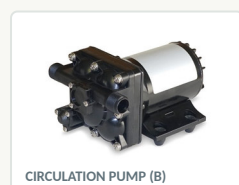
The premium pump adds an 8' cable with battery clips; the oil change / winterizing system adds a hose kit and 3.5 gallon [13 L] storage container. **1 year warranty.**

	Model	OEM model no.	Aftermarket	Description	Dimensions	Flow rate	Amps max.	Port size
a	General purpose pump, standard	8050-305-526	8050-305-526	12 VDC, ignition protected, BUNA valves, CE, 7' [2.1 m] prime, hose kit included	6.5" x 4.5" x 4.3" [165 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" F NPT
b	General purpose pump, premium	8050-305-626	8050-305-626	12 VDC, BUNA valves, CE, 7' [2.1 m] prime, 8' cable with battery clips, hose kit included	7.8" x 4.5" x 4.3" [198 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" F NPT
c	Oil change / winterizing system	8050-305-426	8050-305-426	12 VDC, 8' [2.4 m] cable with battery clips, CE, hose kit and 3.5 gal [13 L] storage container	16" H x 12.5" D [406 x 318mm]	1.5 GPM [5.6 LPM]	4	3/8" F NPT
d	Drill pump	3010-000	3010-000	1/4" [6mm] drill shaft, flexible BUNA impeller, 8' [2.4 m] prime, oil change and liquid transfer	—	200 GPH [757 LPH]	—	3/4" GSH M

All Pentair SHURflo marine water pumps are ignition protected **with the exception of 8050-305-626 and 8050-305-426**. Neither may be installed in a machinery or fuel space that requires ignition-protected equipment — use them as portable service pumps only.

INSTALLATION — WIRE SIZE & PLUMBING GUIDELINES

Specifying the circuit and the pipework



Fusing and switching. Pentair SHURflo recommends that every pump is fused individually, in addition to any other circuit protection such as circuit breakers, and switched so it can be isolated for service. The pump may be mounted up to **six vertical feet** above the water source and, thanks to self-priming, up to **30 feet [9.2 m] horizontally** from the supply.

Plumbing. SHURflo fittings — hand tighten only. Feet — snug down but do not flatten, on a solid surface. Pump and hose — flexible hose on the inlet and outlet side; 1/2" minimum on mains, 3/8" minimum on branch. Water purifier — run a separate line from the mains, 1/4" minimum. Noise reduction — use flexible hose and check for air in the system, including all drain lines and hot water heater lines.

Battery-to-pump distance	Minimum wire size AWG [mm²]	Battery-to-pump distance	Minimum wire size AWG [mm²]
0 – 25 feet [0 – 7.6 m]	16 [1.3]	50 – 70 feet [15.2 – 21.3 m]	12 [3.3]
25 – 50 feet [7.6 – 15.2 m]	14 [2.1]	70 – 110 feet [21.3 – 33.5 m]	10 [5.3]

12 VDC, 15 amp circuit — minimum wire size by total wire length (length from power source to motor and back to ground).

Total wire length	Minimum wire size — 3% drop	Minimum wire size — 10% drop
1 – 10 feet [.3 – 3 m]	#12	#16
11 – 20 feet [3.3 – 6 m]	#10	#14
21 – 30 feet [6.4 – 9.1 m]	#8	#14
31 – 40 feet [9.1 – 12.2 m]	#6	#12
41 – 60 feet [12.2 – 18.3 m]	#6	#10

First table: minimum wire size for a 10% voltage drop on a 12 VDC, 10 amp circuit. Red wire positive, black wire negative. All Pentair SHURflo marine water pumps are ignition protected, except 8050-305-626 and 8050-305-426.

Pentair® filtration — 5" and 10" cartridges

PENTAIR SHURFLO — CARBON, GAC AND SEDIMENT CARTRIDGES FOR ONBOARD FRESH WATER

PENTAIR GAC 5" AND C-2 5" CARTRIDGES

Short-body cartridges



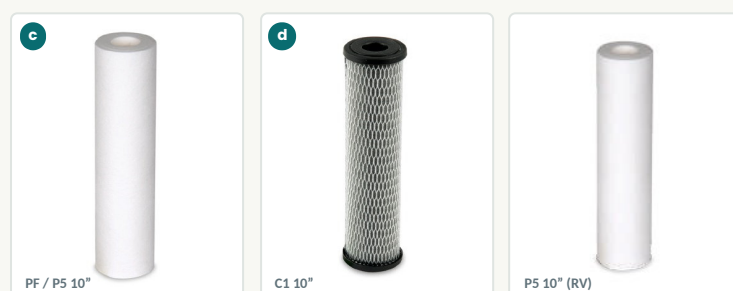
Pentair cartridges fit the standard slim-line filter housing and are the simplest way to take taste, odour and chlorine out of tank water. **Granular activated carbon (GAC)** gives the highest flow for a given pressure drop; **carbon wrapped paper** adds fine particulate reduction.

All filters are for cold water use only. Do not freeze any filter or cartridge. Maximum pressure 125 PSI on all filters and cartridges. Replace filters every 3-6 months, or after periods of inactivity or non-use.

Name	Model no.	Cartridge media	Taste & chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron rating
Pentair 5" cartridge	155110-43	Granular activated carbon	•		•	•		20
Pentair 5" cartridge	155022-43	Carbon wrapped paper	•		•	•		5

PENTAIR PF / P5 10" AND C1 10" CARTRIDGES

Sediment and carbon paper



The **PF** cartridge (listed as **P5** in the RV catalogue) is a sediment filter only: low pressure drop and high flow in a cellulose-free gradient density spun fibre solid matrix.

The **C1** cartridge is the economic solution for basic chlorine, taste and odour reduction, again with low pressure drop and high flow.

Name	Model no.	Cartridge media	Taste & chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron rating
Pentair 10" cartridge	155014-43	Spun polypropylene	Sediment filter only					5
Pentair 10" cartridge	155002-43	Carbon wrapped paper	•		•	•		5

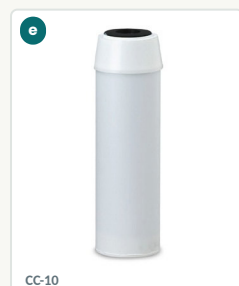
PENTAIR CC-10 10" CARTRIDGE

Coconut shell carbon



Low pressure drop in a high flow, long life coconut shell carbon design. Filter life at the recommended flow rate is 7,500 gallons at 1 GPM / 60 PSI.

Housing and cartridge filters combine the convenience of a permanent installation with a choice of filter media. A high flow of water through a filter reduces its ability to clean the water and can create significant back pressure on the pump, giving low system pressure and flow — most filters are designed to filter at a low flow rate.



Name	Model no.	Cartridge media	Taste & chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron rating
Pentair 10" cartridge	155155-43	Granular activated carbon (GAC)	•		•	•		20

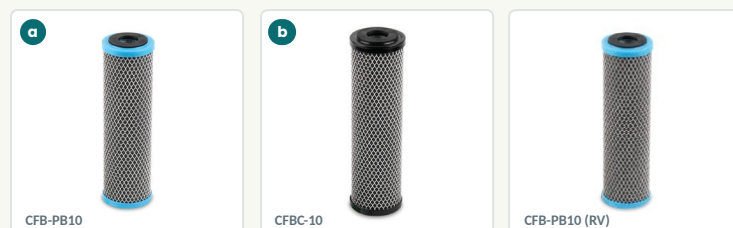
Do not use filters with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the unit.

Pentair® filtration — carbon block & KDF cartridges

PENTAIR SHURFLO — 0.5 MICRON CARBON BLOCK AND QUAD-STAGE BACTERIOSTATIC MEDIA

PENTAIR CFBC-10 AND CFB-PB10 10" CARTRIDGES

Modified carbon block, 0.5 micron



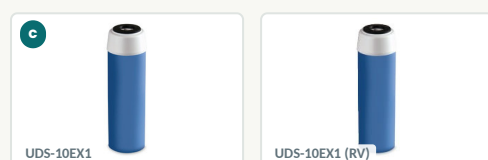
Low pressure drop in a long life cellulose-free synthetic fibre matrix. The **CFB-PB10** adds lead reduction to the same high flow, long life matrix.

† Reduces cysts such as Cryptosporidium and Giardia by mechanical means. ‡ Reduces particles as small as 0.5 micron in size by mechanical means. Performance based on the manufacturer's internal testing.

Name	Model no.	Cartridge media	Taste & chlorine	Lead	Cyst †	THM's VOC's	Pesticides	Micron rating ‡
Pentair 10" cartridge	255679-43	Modified carbon block	•		•	•	•	0.5
Pentair 10" cartridge	255681-43	Modified carbon block	•	•	•	•	•	0.5

PENTAIR UDS-10EX1 10" CARTRIDGE

Quad-stage bacteriostatic KDF / carbon



Superior long life, quad-stage bacteriostatic KDF/carbon filter with excellent heavy metal removal. Filter life 11,000 gallons at 1 GPM / 60 PSI.

Name	Model no.	Cartridge media	Taste & chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron rating
Pentair 10" cartridge	255800-43	KDF/Carbon	•	•		•	•	5

PENTAIR IN-LINE WATER FILTERS — WATERGUARD®

City water entry and interior filters



In-line filters install under a sink, on a separate single-tap faucet, on an ice maker, or on the city water entry itself. Make clean tubing cuts and handle tubing carefully.

Model no.	Name	Cartridge media	Description	Micron rating	Fittings / port size and accessories
255521-43	10" in-line filter (A)	Granular activated carbon (GAC)	Long life triple stage carbon in-line city water entry filter with 1/4" NPT-female ends	5	1/4" NPT-female ports
255525-43	10" in-line filter	Granular activated carbon (GAC)	Long life triple stage carbon in-line city water entry filter with 1/4" quick connect ends	5	1/4" quick connect ports
RV-210GH-A	City water entry in-line filter (C)	Activated carbon	Long life, triple-stage carbon in-line city water entry filter with garden hose ends	5	3/4" garden hose ports
RV-210GH-KDF-A	City water entry in-line filter	KDF / carbon	Long life, high quality quad-stage bacteriostatic KDF/carbon in-line city water entry filter with garden hose ends	5	3/4" garden hose ports
94-009-50	10" in-line interior filter (B)	KDF / carbon	Long-life, high quality quad-stage bacteriostatic KDF/carbon in-line filter with fittings for every interior need	5	1/4" NPT-F both ends; fittings included: 2 ea. 1/2" MPT, 2 ea. quick connect and 2 ea. Colder fittings

Everpure® filters & complete systems

PENTAIR SHURFLO — AFTERMARKET FILTRATION SYSTEMS AND WATER SYSTEM SANITATION

PENTAIR EVERPURE® FILTERS

Micro-Pure pleated and carbon block



Everpure exclusive technology reduces 99.9% of all particles 0.5 micron in size; the **Part-Timer** is supplied as a twin-pack. † Reduces cysts such as Cryptosporidium and Giardia by mechanical means. ‡ Reduces particles as small as 0.5 micron in size.

Model no.	Name	Cartridge media	Description	Taste & chlorine	Heavy metals	Cyst †	THM's VOC's	Micron rating ‡
EV959206	Everpure Full-Timer (A)	Micro-Pure pleated	Exclusive technology reduces 99.9% of all particles 0.5 micron in size	•	•	•	•	0.5
EV959207	Everpure Part-Timer (B)	Carbon block	Exclusive technology reduces 99.9% of all particles 0.5 micron in size, twin-pack	•	•	•	•	0.5

COMPLETE AFTERMARKET FILTER SYSTEM COMPONENTS

Housings, systems and kits



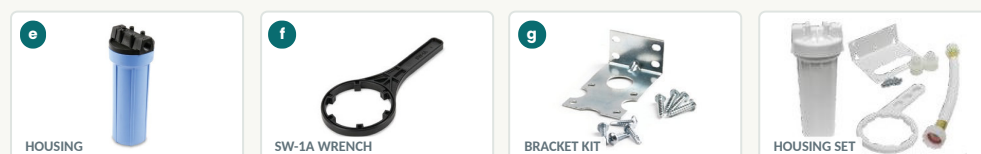
The Everpure filtration system includes an installation kit and a super chlorination disinfection kit, and protects against bacteria, viruses and cysts down to 0.5 micron.

Name	Model no.	Includes
Everpure filter housing (A)	RV-10UC-A	C1 filter, housing, wrench, bracket kit, fittings, garden hose. Complete 10" filter housing with filter and garden hose fittings for use under the counter, as a whole house filter, or outside as a city water or tank fill filter
Everpure filtration system w/ POP	EV925200	2 complete EV925205 systems with POP display carton (not shown)
Everpure complete kit (B)	EV925205	EV959206 filter, housing, by-pass, installation kit

EV925200 and EV925205: exclusive Everpure filtration system; includes installation kit and super chlorination disinfection kit. Protects against bacteria, viruses and cysts down to 0.5 micron in size. † Reduces cysts such as Cryptosporidium and Giardia by mechanical means. ‡ Reduces particles as small as 0.5 micron in size by mechanical means.

HOUSING, BRACKET, WRENCH AND O-RING KITS

Slim-line filtration system components



Filter housings should be removed and cleaned with a bleach solution when changing cartridges.

Name	Model no.	Description	Name	Model no.	Description
Everpure housing (A)	158196	10" housing with 1/2" female ports	Everpure bracket kit (C)	244047	Slim-line filter housing mounting bracket with screws
Everpure housing	158195	10" housing with 1/2" female ports, with pressure relief	Everpure single pack O-ring kit	151121	Single-pack O-ring kit for 10" slim-line filter housing
Everpure SW-1A wrench (B)	150539	Slim-line filter housing wrench	Everpure O-ring kit	94-178-09	10-pack O-ring kit for 10" Waterguard filter housing (RV-10UC-A)
Pentair in-line filter clip	244454	Fin-Line accessory; for use with all 10" [254mm] in-line filter housings	—	—	—

Filtration overview & housing components

SHURFLO® FILTRATION OVERVIEW — MEDIA, CONTAMINANTS REDUCED, MICRON RATING AND FILTER LIFE

SHURFLO® FILTRATION OVERVIEW

Every cartridge and in-line filter compared



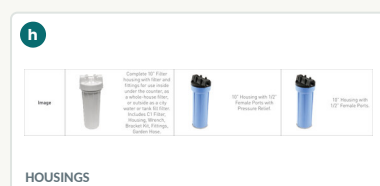
Every filter has varying degrees of contaminant removal dependent on flow, micron rating and influent water quality. ² Superchlorination in combination with ultrafiltration, nanofiltration and reverse osmosis are considered better options for the removal of these contaminants. ³ SHURflo recommends superchlorination to effectively kill bacteria and other micro-organisms — a minimum of 6.7 ppm residual chlorine. ⁴ For a complete list of heavy metals, THMs (trihalomethanes) and VOCs (volatile organic compounds) in your water, consult your local water distributor. ⁵ Hydrogen sulfide and iron can be greatly reduced with the use of superchlorination and proper carbon filtration. ‡ Reduces particles as small as 0.5 micron in size by mechanical means; EPA Est. No. 086074-NH-001 applies.

Cartridges / filters	155014-43 P5 10"	155002-43 C1 10"	155155-43 CC10 10"	255681-43 CFB- PB10 10"	255800-43 UDS- 10EX1 10"	255679-43 CFBC-10 10"	94-009-50 — In-Line	RV-210GH-A — In-Line	RV-210GH-KDF-A — In-Line	EV959206 — 10"	255525-43 GS- 10RO-G In-Line	255521-43 GS- 10RO-B In-Line
Sediment	•	•	•	•	•	•	•	•	•	•	•	•
Aluminium					•		•		•			
Bacteriostat ^{2 3}					•		•		•	•		
Bad taste, chlorine, odour		•	•	•	•	•	•	•	•	•	•	•
Cryptosporidium, cysts, Giardia ^{2 3}				•						•		
Heavy metals ⁴					•		•		•			
Hydrogen sulfide ⁵												
Iron ⁵			•	•	•	•	•	•	•	•	•	•
Lead				•	•		•		•			
Pesticides, radon, toxaphene		•	•	•	•	•	•	•	•	•	•	•
THMs ⁴ , VOCs ⁴		•	•	•	•	•	•	•	•	•	•	•
Viruses ^{2 3}										•		
Micron rating ‡	5	5	20	0.5 ‡	5	0.5 ‡	5	5	5	0.5 ‡	5	5
Filter life (gal)	Replace as needed for good flow	2500	7500	5000	11000	20,000	3900	6000	11000	750	3300	3300
Recommended flow	—	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	as needed for flow	.5GPM @ 60PSI	.5GPM @ 60PSI

Replace filters every 3–6 months, or after periods of inactivity or non-use. All filters are for cold water use only; do not freeze any filter or cartridge. 125 PSI maximum pressure on all filters and cartridges. Everpure's Filtration System Installation and Operation Manual covers QL2-WPS and QL3-WPS systems.

PROPER WATER SYSTEM SANITATION & MAINTENANCE

Clean, flush, disinfect



Clean & flush. Add 4 teaspoons of household detergent for every 10 gallons of tank capacity. Fill the tank and slosh it around to coat all sides and the top. Run each fixture full force to drive the soapy water through the system and dislodge slime and debris. Fill with clean water and repeat to rinse the system clean.

System disinfection. Introduce up to 200 ppm of chlorine into the system: add 2/3 cup (6 ounces) of standard household bleach for every 10 gallons of tank capacity and fill the tank. Open each faucet separately and run water until the smell of bleach is evident — do not forget the water heater. Let the system stand for an hour and repeat, then drain, refill with clean water and flush.

Periodic sanitation. Sanitise after periods of non-use, any time the system is opened for maintenance, and yearly regardless of use. Remove in-line filters and cartridges from their housings first. Chlorine protection in city water can dissipate in as little as 72 hours.

Do not use filters with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the unit. Do not attach filters to hot water lines, do not over-pressurise filters and do not use filters beyond their stated capacity.

Pump fittings

PENTAIR SHURFLO — NYLON WINGNUT SWIVELS FOR INTERNALLY TAPERED 4XX8 PUMP PORTS • HAND TIGHTEN ONLY

HAND-TIGHTEN ONLY — NYLON WINGNUT SWIVELS

Straight pump fittings



Pentair SHURflo offers a variety of barbed and threaded fittings in straights and elbows from 3/8" to 3/4". All 4XX8 threaded pump ports are **internally tapered** and are to be thoroughly hand-tightened only with SHURflo swivel fittings — they eliminate expensive brass or stainless fittings which require more complex plumbing.

	Model no.	Style	Material	Description
	244-2916	Wingnut swivel	Nylon	1/2"-15 NPT (F) × 3/8" barb
a	244-2926	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 1/2" barb
	244-2936	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 5/8" barb
	244-2946	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 3/4" barb
	244-5146	Adapter	Nylon	1/2" NPT (M) × 3/4" barb

Barb sizes step from 3/8" to 3/4" on a common 1/2" NPT swivel body, so one pump port can be matched to whatever hose the boat is already plumbed in. 244-5146 is the male adapter used where the run must be taken onto a fixed female fitting.

ELBOW FITTINGS — NYLON WINGNUT SWIVELS

Elbow pump fittings



Elbow swivels turn the run at the pump port itself, keeping side-to-side stress off the plumbing and allowing a flexible riser to be led away cleanly. Minimize side-to-side stresses on all plumbing system fittings.

	Model no.	Style	Material	Description
	244-3366	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 1/2"-14 NPT (M)
	244-3916	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 3/8" barb
a	244-3926	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 1/2" barb
	244-3936	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 5/8" barb
	244-3946	Wingnut swivel	Nylon	1/2"-14 NPT (F) × 3/4" barb

All 4XX8 threaded pump ports are internally tapered and are to be thoroughly hand-tightened only with SHURflo swivel fittings. 244-3366 is the female-to-male elbow used to turn a rigid run at the port itself.

GARDEN HOSE, ADAPTER & TEE

Wingnut, adapter & tee fittings



The garden hose wingnut fitting takes a washdown pump straight onto a 3/4" GHT hose; the swivel straight adapter is the pump-to-accumulator fitting; and the barb tee splits a 1/2" branch without a threaded joint.

Model no.	Style	Material	Description
244-2356	Wingnut swivel	Nylon	3/4" GHT (M) × 1/2" NPT (F)
244-2866	Wingnut swivel — pump / accumulator fitting	Nylon	1/2" NPT (F) × 1/2" NPT (F)
244-4522	Barb tee	Polypropylene	1/2" barb × 1/2" barb × 1/2" barb

Pump fittings on both inlet and outlet must seal on the **internal taper** of the threaded pump ports. On quick-connect fittings make sure the o-rings are lubricated and the fitting is pushed in straight. Minimize side-to-side stress on all plumbing system fittings, and anchor flexible line where it meets hard tubing.

Pump repair & rebuild kits I

PENTAIR SHURFLO — 2088 / 2093, 2901 / 3901 AND 8050 SERIES BENCH AND FIELD REPAIR KITS

2088/2093 SERIES — BENCH & FIELD REPAIR

Pumphead, lower housing & switch kits



Pentair SHURflo pumps have set the standard for marine performance and reliability. To keep that performance at its peak, SHURflo offers a wide range of kits for **bench and field repair** covering the pumphead, lower housing, valve assembly, check valve and the switch and upper housing.

On the 2088 / 2093 series the **diaphragm and drive assembly are included in the lower housing kit**. For detailed listings of individual part numbers, refer to Pentair SHURflo pricing guides and repair manuals. This overview indicates the type of kits available.

Model	OEM model no.	Aftermarket	Pumphead repair kit	Lower housing	Valve assembly	Check valve (not shown)	Switch & upper housing
SHURflo Standard	2088-423-344	2088-423-344	94-236-03	94-238-04	94-232-06	94-237-00	94-231-10
SHURflo Standard	2088-743-244	2088-573-354	94-236-03	94-238-04	94-232-06	94-237-00	94-231-10
SHURflo Silencer	2093-224-313	2093-224-313	94-236-03	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Deluxe	2088-733-244	2088-433-344	94-236-03	94-238-04	94-232-06	94-237-00	94-231-10
SHURflo Premium	2088-712-244	2088-414-934	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Standard Blaster	2088-732-244	2088-534-344	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Standard Blaster, 24 VDC	2088-752-244	2088-574-344	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Pro Blaster	2088-732-234	2088-534-944	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Pro Baitmaster	2088-721-234	2088-414-734	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10
SHURflo Pro Baitmaster, 24 VDC	2088-762-234	2088-574-734	94-236-14	94-238-03	94-232-06	94-237-00	94-231-10

Lower housing kit includes the diaphragm and drive assembly. The 2088-752-244 and 2088-762-234 models are 24 VDC; all other pump models in this table are 12 VDC.

2901 / 3901 SERIES — AQUA KING, BLASTER & PRO BLASTER JUNIOR

Switch, housing, valve, drive & motor kits



Service kits for the 2901 and 3901 series Aqua King, Blaster and Pro Blaster Junior pumps. Each pump breaks down into five serviceable groups — switch, upper housing, valve assembly, drive assembly and motor — so a worn switch or a torn valve set can be replaced without changing the complete pump.

Model	OEM model no.	Aftermarket	Switch	Upper housing	Valve assembly	Drive assembly	Motor
SHURflo Aqua King Standard	3901-0206	3901-0216	94-706-00	94-706-01	94-706-02	94-706-06	94-77-023-17
SHURflo Aqua King Standard, 24 VDC	3901-1206	3901-1216	94-706-01	94-238-04	94-706-02	94-706-06	94-77-029-17
SHURflo Blaster	3901-2204	3901-2214	94-706-03	94-706-03	94-706-02	94-706-06	94-77-043-17
SHURflo Blaster, 24 VDC	3901-3204	3901-3214	94-706-03	94-706-01	94-706-02	94-706-06	94-77-003-17
SHURflo Pro Blaster Junior	2901-6203	2901-6213	94-706-04	94-706-01	94-706-02	94-706-06	94-77-035-17
SHURflo Aqua King Junior	2901-0203	2901-0213	94-706-04	94-706-01	94-706-02	94-706-06	94-77-035-17

8050 SERIES — AQUA KING JUNIOR & UTILITY PUMPS

Pumphead, switch & drive kits



UTILITY PUMP

Kits for the 8050 series Aqua King Junior and the 8050-305 utility pump family used for winterizing, oil change and liquid transfer. Utility pumps are serviced with the valve and drive assemblies only.

Model	OEM model no.	Aftermarket	Pumphead repair kit	Switch	Check valve	Upper housing	Valve assembly	Drive assembly
SHURflo Aqua King Junior	8050-204-133	8050-204-033	94-380-33	94-375-13	94-374-16	94-378-00	94-390-06	94-385-25
SHURflo utility pumps	8050-305-XXX	8050-305-XXX	—	—	—	—	94-391-12	94-385-42

Pump repair & rebuild kits II

PENTAIR SHURFLO — 4128 / 4138, 4148 / 4149 / 4158 AND 4238 SERIES KITS

4128 / 4138 SERIES — AQUA KING II JUNIOR & STANDARD

Upper assembly, valve, drive & motor kits



Service kits for the Aqua King II Junior 2.0 and Standard 3.0 fresh water pumps. The check valve is not shown on the exploded view but is available separately for all models in the series.

Model	OEM model no.	Aftermarket	Upper assembly	Valve assembly	Drive assembly	Motor & gasket	Pump head	Check valve
Aqua King Junior II	4128-110-A04	4128-110-E04	94-800-22	94-800-01	94-800-25	94-71-003-07	94-800-28	94-800-03
Aqua King Standard	4138-111-A65	4138-111-E65	94-800-23	94-800-01	94-800-26	94-71-005-07	94-800-29	94-800-03
Aqua King Standard, 24 VDC	4138-131-A65	4138-131-E65	94-800-23	94-800-01	94-800-26	94-71-006-07	94-800-29	94-800-03

Junior 2.0 and Standard 3.0 pumps share the valve assembly and the check valve, but use different upper assemblies, drive assemblies and pump heads. Order against the pump's own OEM model number.

4148/4149/4158 SERIES — PREMIUM 4.0 & SUPREME 5.0

Upper assembly, valve, drive & motor kits



Service kits for the Aqua King II Premium 4.0 and Supreme 5.0 fresh water pumps, in both 12 and 24 VDC. Motor and gasket part numbers differ by voltage — check the voltage before ordering.

Model	OEM model no.	Aftermarket	Upper assembly	Valve assembly	Drive assembly	Motor & gasket	Pump head	Check valve
Aqua King II Premium 4.0	4148-153-A75	4148-153-E75	94-801-10	94-800-01	94-801-02	94-71-001-07	94-801-11	94-800-03
Aqua King II Premium 4.0, 24 VDC	4148-163-A75	4148-163-E75	94-801-10	94-800-01	94-801-02	94-71-001-03	94-801-11	94-800-03
Aqua King II Supreme 5.0	4158-153-A75	4158-153-E75	94-801-10	94-800-01	94-801-12	94-71-000-17	94-801-13	94-800-03
Aqua King II Supreme 5.0, 24 VDC	4158-163-A75	4158-163-E75	94-801-10	94-800-01	94-801-12	94-71-001-04	94-801-13	94-800-03

Motor and gasket kits are **voltage specific**. Premium 4.0 takes 94-71-001-07 at 12 VDC and 94-71-001-03 at 24 VDC; Supreme 5.0 takes 94-71-000-17 at 12 VDC and 94-71-001-04 at 24 VDC. Confirm the pump voltage before ordering a motor kit.

4238 SERIES — BLASTER II

Blaster II washdown pump kits



Service kits for the Blaster II 3.5 GPM washdown pump in 12 and 24 VDC. Upper assembly, valve assembly, drive assembly and pump head are common to both voltages; only the motor and gasket differ.

Model	OEM model no.	Aftermarket	Upper assembly	Valve assembly	Drive assembly	Motor & gasket	Pump head	Check valve
SHURflo Blaster II	4238-121-A07	4238-121-E07	94-800-13	94-800-01	94-800-15	94-71-002-07	94-800-17	94-800-03
SHURflo Blaster II, 24 VDC	4238-141-A07	4238-141-E07	94-800-13	94-800-01	94-800-15	94-71-001-17	94-800-17	94-800-03

Upper assembly, valve assembly, drive assembly and pump head are common to the 12 and 24 VDC Blaster II; only the motor and gasket differ between the two.

Every Aqua King II, Blaster II and Pro Blaster II sold by Custom Marine is backed by the full kit range held in Dubai — a valve set or a pump head is usually next-day · 800BOATS.

Pump repair & rebuild kits III

PENTAIR SHURFLO — 4558 HIGH FLOW, 4248 / 4258 / 4648 AND 357 BILGE CARTRIDGE KITS

4148/4149/4158/4558 SERIES — 4558 HIGH FLOW SYSTEM

Kits for both pumps on the manifold board



HIGH FLOW

The High Flow system carries two pumps on one board, so the kit table lists both: the Aqua King II Supreme 5.0 fresh water pump and the Pro Blaster II Ultimate 5.0 washdown pump, in 12 and 24 VDC.

System	Pump OEM model	Aftermarket	Upper assembly	Valve assembly	Drive assembly	Motor & gasket	Pump head	Check valve
High Flow System 12 V, 4558-153-E75	4158-153-A75	4158-153-E75	94-801-10	94-800-01	94-801-12	94-71-000-17	94-801-13	94-800-03
High Flow System 12 V, 4558-153-E75	4258-153-A09	4258-153-E09	94-805-01	94-800-01	94-801-02	94-71-004-17	94-804-03	94-800-03
High Flow System 24 V, 4558-163-E75	4158-163-A75	4158-163-E75	94-801-10	94-800-01	94-801-12	94-71-001-04	94-801-13	94-800-03
High Flow System 24 V, 4558-163-E75	4258-163-A09	4258-163-E09	94-805-01	94-800-01	94-801-02	94-71-001-04	94-805-02	94-800-03

4158-153-E75 and 4258-153-E09 are the 12 V replacement pumps; 4158-163-E75 and 4258-163-E09 are the 24 V replacement pumps.

4248 / 4258 / 4648 SERIES — PRO BLASTER II & PRO BAITMASTER II

Washdown & livewell pump kits



DELUXE 4.0



ULTIMATE 5.0



BAITMASTER II

Service kits covering the Pro Blaster II Deluxe 4.0 and Ultimate 5.0 washdown pumps and the Pro Baitmaster II 4.0 livewell / washdown pump, in 12 and 24 VDC.

The baseplate shown on the exploded view is for all models except the Pro Blaster II 4.0. Check valve part 94-800-03 is common to the whole series and is not shown on the drawing.

Model	OEM model no.	Aftermarket	Upper assembly	Valve assembly	Drive assembly	Motor & gasket	Pump head	Check valve
Pro Blaster II Deluxe 4.0	4248-153-A09	4248-153-E09	94-804-02	94-800-01	94-801-02	94-71-001-07	94-804-03	94-800-03
Pro Blaster II Deluxe 4.0, 24 VDC	4248-163-A09	4248-163-E09	94-804-02	94-800-01	94-801-02	94-71-001-03	94-804-03	94-800-03
Pro Blaster II Ultimate 5.0	4258-153-A09	4258-153-E09	94-804-02	94-800-01	94-801-02	94-71-004-17	94-804-03	94-800-03
Pro Blaster II Ultimate 5.0, 24 VDC	4258-163-A09	4258-163-E09	94-804-02	94-800-01	94-801-02	94-71-001-04	94-804-03	94-800-03
Pro BaitMaster II 4.0	4648-153-A07	4648-153-E07	94-805-01	94-800-01	94-801-02	94-71-001-07	94-805-02	94-800-03
Pro BaitMaster II 4.0, 24 VDC	4648-163-A07	4648-163-E07	94-805-01	94-800-01	94-801-02	94-71-001-03	94-805-02	94-800-03

357 SERIES — BILGE PUMPS

Replacement cartridges, bilge



PIRANHA BILGE

Piranha bilge pumps are serviced by replacing the complete cartridge — the motor and impeller assembly lifts out of the mounted base without disturbing the hose or the wiring, so a failed pump can be changed in minutes with the boat afloat.

Model	OEM model no.	Aftermarket	Replacement cartridge	GPH
SHURflo Piranha bilge pumps	357-1XX-XX	357-1XX-XX	94-005-00	380 / 500
SHURflo Piranha bilge pumps	357-1XX-XX	357-1XX-XX	94-006-00	700 / 1000

Pump repair & rebuild kits IV

PENTAIR SHURFLO — 4901, 5901 AND 357 LIVEWELL, AERATOR AND BALLAST CARTRIDGE KITS

4901 SERIES — AQUA KING PREMIUM, PRO BLASTER & SMART SENSOR

Switch, housing, valve, drive & motor kits



Service kits for the 4901 series Aqua King Premium, Pro Blaster, Pro Baitmaster and Smart Sensor 4.0 pumps. Smart Sensor models have no mechanical switch or serviceable motor kit, so those columns are shown as a dash.

Model	OEM model no.	Aftermarket	Switch	Upper housing	Valve assembly	Drive assembly	Motor
SHURflo Aqua King Premium	4901-4202	4901-4212	94-668-00	94-670-01	94-669-00	94-670-00	94-77-013-17
SHURflo Pro Blaster	4901-5292	4901-5282	94-668-00	94-670-01	94-669-00	94-670-00	94-77-013-17
SHURflo Pro Blaster, 24 VDC	4901-5292	4901-5282	94-668-00	94-670-01	94-669-00	94-670-00	94-77-028-17
SHURflo Pro Baitmaster	4901-6202	4901-6212	94-668-00	94-670-01	94-669-00	94-670-00	94-77-025-17
SHURflo Pro Baitmaster, 24 VDC	4901-7202	4901-7212	94-668-00	94-670-01	94-669-00	94-670-00	94-77-026-17
SHURflo Smart Sensor 4.0	4901-0201	4901-0211	—	94-670-01	94-669-00	94-670-00	—
SHURflo Smart Sensor 4.0, 24 VDC	4901-1201	4901-1211	—	94-670-01	94-669-00	94-670-00	—

Smart Sensor 4.0 pumps carry no mechanical pressure switch and no separately listed motor kit, so those two columns are shown as a dash. **Drive assembly kits are for use on pumps manufactured June 2006 or later** — quote the pump serial when ordering if the build date is not known.

5901 SERIES — SMART SENSOR 5.7 & EXTREME PRO BLASTER

Switch, housing, valve, drive & motor kits



Service kits for the 5901 series Smart Sensor 5.7 and Extreme Pro Blaster pumps, including the 32 VDC Extreme Pro Blaster used on larger sportfish platforms.

Model	OEM model no.	Aftermarket	Switch	Upper housing	Valve assembly	Drive assembly	Motor
SHURflo Smart Sensor 5.7	5901-0201	5901-0211	—	94-670-02	94-030-01	94-030-02	—
SHURflo Smart Sensor 5.7, 24 VDC	5901-1201	5901-1211	—	94-670-02	94-030-01	94-030-02	—
SHURflo Extreme ProBlaster, 12 VDC	5901-2202	5901-2212	94-069-00	94-670-02	94-030-01	94-030-02	94-77-007-17
SHURflo Extreme ProBlaster, 24 VDC	5901-3202	5901-3212	94-069-00	94-670-02	94-030-01	94-030-02	94-77-009-17
SHURflo Extreme ProBlaster, 32 VDC	5901-4202	5901-4212	94-069-00	94-670-02	94-030-01	94-030-02	94-77-010-17

Drive assembly kits are for use on pumps manufactured June 2006 or later.

357 SERIES — LIVEWELL, AERATOR & BALLAST

Replacement cartridges, livewell & ballast



The same removable cartridge principle covers the Piranha livewell, aerator and ballast pumps. Two cartridges serve the whole range: 94-619-00 for 600 GPH pumps and 94-620-00 for 800 and 1100 GPH pumps, livewell and ballast alike.

Model	Model no.	Replacement cartridge	GPH
SHURflo Piranha livewell / aerator pump	357-0XX-XX	94-619-00	600
SHURflo Piranha livewell / aerator pump	357-1XX-XX	94-620-00	800 / 1100
SHURflo Piranha ballast pump	357-1X6-XX	94-620-00	800 / 1100

Cartridge 94-620-00 covers the 800 and 1100 GPH livewell, aerator and ballast pumps alike, so a single spare serves the whole high-output range on board.

Cartridge pumps are the fastest repair on the boat: lift the cartridge, drop in the replacement, and the hose and wiring stay untouched. Custom Marine stocks both cartridges — 800BOATS.

Pump repair & rebuild kits V

PENTAIR SHURFLO — REVOLUTION 4008 / 4028, 4048 HIGH FLOW AND 3200 MACERATOR KITS

4008/4028 SERIES — REVOLUTION

Revolution fresh water pump kits



Service kits for the Revolution 4008 and 4028 series fresh water pumps in 12 VDC, 24 VDC and 115 VAC. Upper housing, valve assembly, drive assembly, motor and pump head are all available separately.

Model	OEM model no.	Aftermarket	Upper housing	Valve assembly	Drive assembly	Motor	Pump head	Switch
Revolution, 12 VDC	4008-101-A65	4008-101-E65	94-800-00	94-800-01	94-800-02	94-11-302-00	94-800-04	94-800-05
Revolution, 24 VDC	4008-131-A65	4008-131-E65	94-800-00	94-800-01	94-800-02	94-11-303-00	94-800-04	94-800-05
Revolution, 12 VDC	4028-100-A54	4028-100-E54	94-802-00	94-800-01	94-802-02	94-11-302-00	94-800-14	94-802-06
Revolution, 115 VAC	4008-171-A65	4008-171-E65	94-800-00	94-800-01	94-800-02	94-11-306-00	94-800-04	94-800-05

Pump head kit 94-800-03 (not shown) covers items 1, 2 and 3 for every model in this table.

4048 SERIES — HIGH FLOW

4048 High Flow pump kits



Service kits for the 4048 High Flow fresh water pump. The pump head kit 94-801-04 covers items 1 to 4 as a single assembly; check valve 94-800-03 is not shown on the exploded view.

Model	OEM model no.	Aftermarket	Switch	Upper housing	Valve assembly	Drive assembly	Motor	Pump head kit
SHURflo 4048, 12 VDC	4048-153-A75	4048-153-E75	94-801-05	94-801-01	94-800-01	94-801-02	94-71-001-07	94-801-04

3200 SERIES — MACERATOR PUMPS

Impeller, housing, blade & lip seal kits



All four macerator variants — 12 and 24 VDC, standard and 180° port — share the same wear parts: impeller kit, impeller housing kit, blade kit and lip seal kit. Keep an impeller and lip seal aboard; they are the two parts a waste evacuation pump consumes.

Model	OEM model no.	Aftermarket	Impeller kit	Impeller housing kit	Blade kit	Lip seal kit
SHURflo Macerator 12 VDC	3200-000	3200-001	94-571-00	94-570-00	94-570-02	94-570-04
SHURflo Macerator 12 VDC, 180° port	3200-100	3200-101	94-571-00	94-570-00	94-570-02	94-570-04
SHURflo Macerator 24 VDC	3200-010	3200-011	94-571-00	94-570-00	94-570-02	94-570-04
SHURflo Macerator 24 VDC, 180° port	3200-110	3200-111	94-571-00	94-570-00	94-570-02	94-570-04

A safety seacock (thru-hull valve) is required for any installation using a thru-hull water source. Macerator pumps are designed to empty marine holding tanks of normal waste, and are also an excellent approach for emptying fish boxes of scales and residual waste; refer to the Pentair SHURflo installation manual for complete guidelines. The ABYC **above the waterline** recommendation is a **diaphragm pump** guideline — see the installation guidelines page — and is not a macerator mounting instruction.

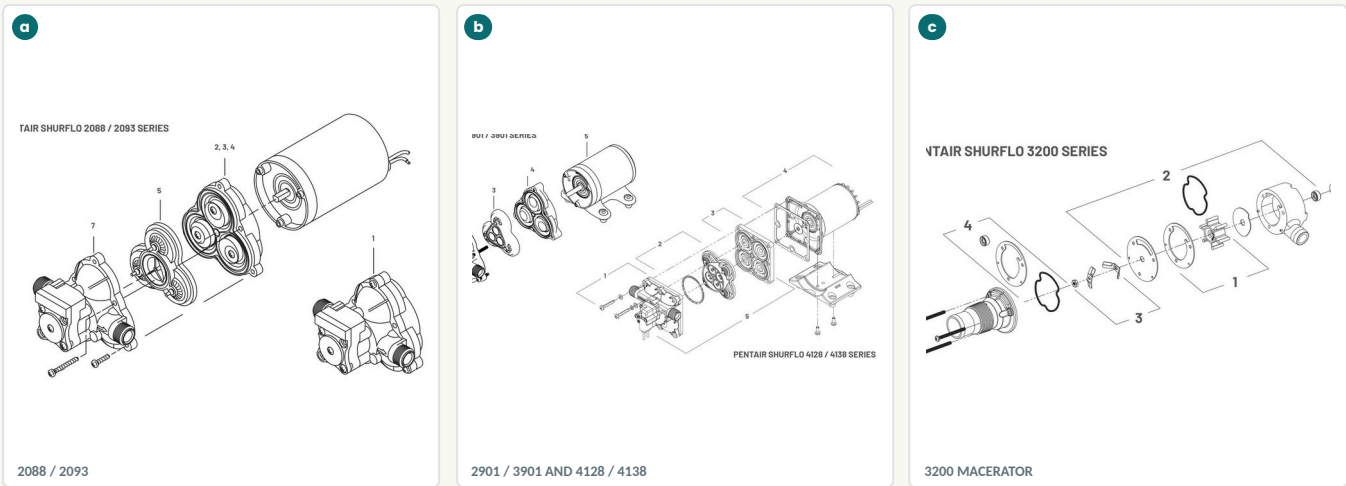
Custom Marine carries fast-moving Pentair SHURflo service kits in Dubai and rebuilds pumps in-house, so a failed washdown or fresh water pump can be back on the boat the same week — 800BOATS • 800YACHTS.

Marine pump exploded views

PENTAIR SHURFLO — HOW THE REPAIR AND REBUILD KITS MAP ONTO THE PUMP

EXPLODED VIEWS I

2088 / 2093, 2901 / 3901, 4128 / 4138 and 3200

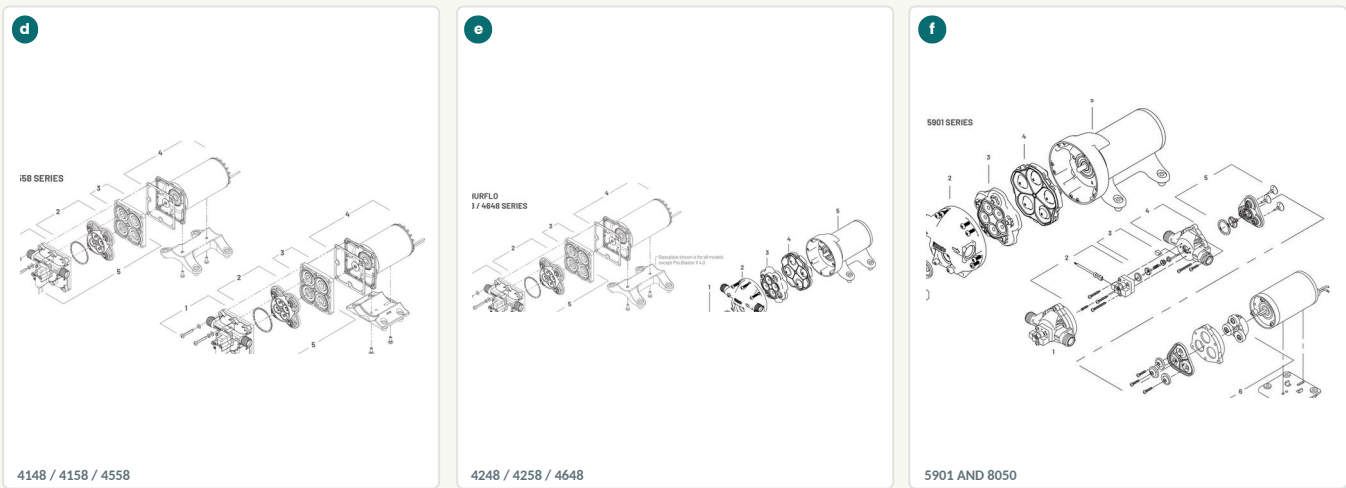


The callout numbers on each drawing are the same numbers used in the kit tables on the repair and rebuild pages. Use the drawing to confirm which assembly a kit covers before ordering: a diaphragm pump is rebuilt from the wet end outwards, and most field failures are in the valve assembly or the drive assembly rather than the motor.

Series	Callouts
2088 / 2093 series	1 Switch & upper housing · 2 Valve assembly · 3 Drive assembly · 4 Diaphragm · 5 Valve assembly · 6 Check valve (not shown) · 7 Pumphead repair kit
2901 / 3901 series	1 Switch · 2 Upper housing · 3 Valve assembly · 4 Drive assembly · 5 Motor
4128 / 4138 series	1 Upper assembly · 2 Valve assembly · 3 Drive assembly · 4 Motor & gasket · 5 Pump head · 6 Check valve (not shown)
3200 series macerator	1 Impeller kit · 2 Impeller housing kit · 3 Blade kit · 4 Lip seal kit

EXPLODED VIEWS II

4148 / 4158 / 4558, 4248 / 4648 and 5901 / 8050



Kits are supplied as complete sub-assemblies: the pumphead kit covers the wet end, the drive assembly covers the diaphragm and swash plate, and the motor kit is supplied with its gasket. On the 2088 / 2093 series the diaphragm and drive assembly are included in the lower housing kit.

Series	Callouts
4148 / 4149 / 4158 / 4558 series	1 Upper assembly · 2 Valve assembly · 3 Drive assembly · 4 Motor & gasket · 5 Pump head · 6 Check valve (not shown)
4248 / 4258 / 4648 series	1 Upper assembly · 2 Valve assembly · 3 Drive assembly · 4 Motor & gasket · 5 Pump head · 6 Check valve (not shown)
5901 and 8050 series	1 Switch · 2 Upper housing · 3 Valve assembly · 4 Drive assembly · 5 Motor · 6 Baseplate

Revolution™ & High Flow fresh water pumps

PENTAIR SHURFLO — FOUR-CHAMBER POSITIVE DISPLACEMENT DEMAND PUMPS, SELF-PRIMING, RUN DRY SAFE

REVOLUTION™ 4008 SERIES PUMPS

One-piece diaphragm, internal by-pass



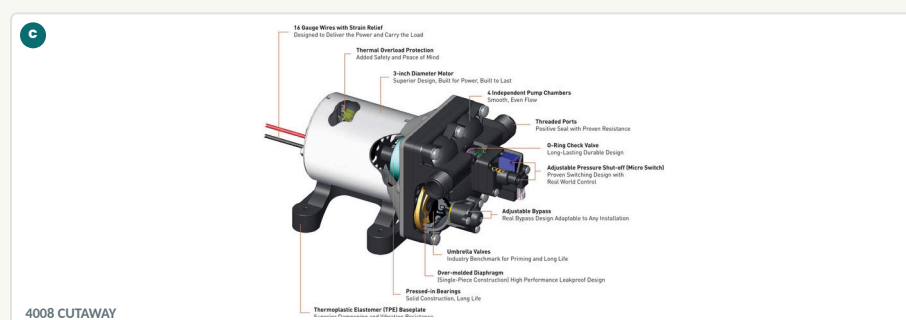
The Revolution fresh water pump design was created with a unique one-piece diaphragm and internal by-pass, assuring long life and top performance in all plumbing systems. The Revolution automatic demand pump is quiet, thermally protected and can run dry without damage. **Mounts in any position.**

Listed in the Pentair Shurflo **RV product catalogue** and carried here for onboard fresh water systems; specification and part numbers are the manufacturer's.

Name	Model no. OEM / (aftermarket)	Voltage	Dimensions	Flow rate	Amps (max.)	Shut-off pressure
Shurflo Revolution pump (A)	4008-101-A65 (4008-101-E65)	12 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	3 GPM [11.4 LPM]	7.5	55 PSI [3.7 BAR]
Shurflo Revolution pump (A)	4008-131-A65 (4008-131-E65)	24 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	3 GPM [11.4 LPM]	4	55 PSI [3.7 BAR]
Shurflo Revolution pump (A)	4028-100-A54 (4028-100-E54)	12 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	2.3 GPM [8.7 LPM]	5	50 PSI [3.4 BAR]
Shurflo Revolution pump (B)	4008-171-A65 (4008-171-E65)	115 VAC	8.9" x 4.9" x 4.2" [225 x 125 x 106mm]	3 GPM [11.4 LPM]	1	55 PSI [3.7 BAR]

CUTAWAY — WHAT IS INSIDE A REVOLUTION PUMP

Four independent chambers



16 gauge wires with strain relief · thermal overload protection · 3-inch diameter motor · four independent pump chambers · threaded ports · O-ring check valve · adjustable pressure shut-off (micro switch) · adjustable by-pass · umbrella valves · over-moulded single-piece diaphragm · pressed-in bearings · thermoplastic elastomer (TPE) baseplate.

4048 HIGH FLOW PUMP AND SLV SINGLE FIXTURE PUMP

Flow reaction technology



With flow reaction technology, the High Flow fresh water pump has a unique one-piece diaphragm and internal by-pass to assure smooth flow, long life and top performance. Designed for high flow, low noise and smooth flow with no rapid cycling. **This pump is designed to replace both the 4900 and 5900 smart sensor series products.**

The compact **SLV** automatic demand pump is ideal for low volume, intermittent duty applications. It self-primers up to 2.5 vertical feet while delivering 1.0 GPM at open flow. The 12 volt low power consumption motor is thermally protected and the long life pressure switch is rated to 30 PSI.

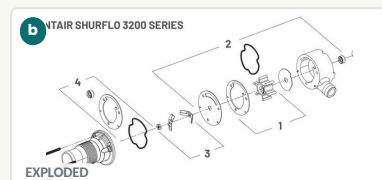
Name	Model no. OEM / (aftermarket)	Voltage	Dimensions	Flow rate	Amps (max.)	Shut-off pressure
Shurflo 4048 High Flow	4048-153-A75 (4048-153-E75)	12 VDC	10.3" x 4.9" x 4.8" [260 x 125 x 122mm]	4 GPM [15 LPM]	10	55 PSI [3.8 BAR]
Shurflo SLV	105-003 (105-013)	12 VDC	6.8" x 3.9" x 2.5" [170 x 100 x 60mm]	1 GPM [3.8 LPM]	2.5	30 PSI [2.0 BAR]

Macerator, general purpose & winterizing pumps

PENTAIR SHURFLO — WASTE EVACUATION, LIQUID TRANSFER AND OIL CHANGE SYSTEMS

MACERATOR PUMPS

3200 series waste evacuation



Macerator pumps are designed to accommodate the need for a reliable, high performance waste evacuation pump. These pumps incorporate a high quality motor with a seamless shell design that is thermally protected. The unique features include a premium impeller design with **run dry capability**, a dual blade and housing construction for trouble-free operation.

Name	Model no. OEM / (aftermarket)	Voltage	Dimensions	Flow rate	Amps (max.)	Port size
Macerator	3200-200 [3200-201]	12 VDC	10.6" x 4.9" x 3.8" [269 x 125 x 97mm]	10 GPM [37 LPM]	15	Inlet 1-1/2" Barb/1-1/2" NPT; outlet 1" barb
Macerator	3200-001	12 VDC	10.6" x 4.9" x 3.8" [269 x 125 x 97mm]	13 GPM [49 LPM]	17	Inlet 1-1/2" Barb/1-1/2" NPT; outlet 1" barb

STANDARD & PREMIUM GENERAL PURPOSE PUMPS

8050 series liquid transfer



Incorporating Shurflo's advanced motor technology including thermal overload protection, these general purpose pumps are self-priming, easy to install and extremely versatile — perfect for winterizing, oil changing and liquid transfer. The premium model includes an 8' (2.44 m) cable with battery clips.

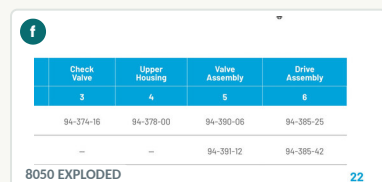
Name	Model no. OEM / (aftermarket)	Voltage	Dimensions	Flow rate	Amps (max.)	Port size
Standard general purpose pump (A)	8050-305-526 [8050-305-526]	12 VDC	6.5" x 4.5" x 4.3" [165 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F
Premium general purpose pump (B)	8050-305-626 [8050-305-626]	12 VDC	7.8" x 4.5" x 4.3" [198 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F

OIL CHANGE / WINTERIZING SYSTEM

Complete pump, hose and bucket kit



Self-priming, easy to install and extremely versatile. The system includes a premium pump with 8' (2.44 m) cables, battery clips, hose kit and a 3.5 gallon (13.25 l) storage bucket.



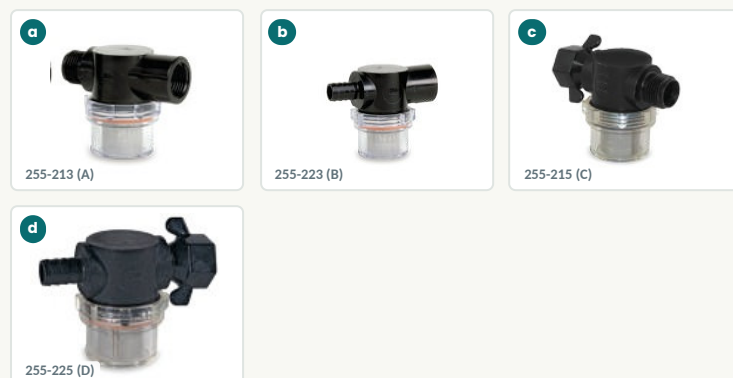
Name	Model no. OEM / (aftermarket)	Voltage	Dimensions	Flow rate	Amps (max.)	Port size
Oil change system	8050-305-426 [8050-305-426]	12 VDC	16" H x 12.5" D [406 x 318mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F

Water system accessories – strainers & hoses

PENTAIR SHURFLO — STRAINERS, SILENCING KITS, RISERS, CHECK VALVES AND SPRAY NOZZLES

WATER STRAINERS

Twist-on and swivel nut, 50 mesh stainless steel screen



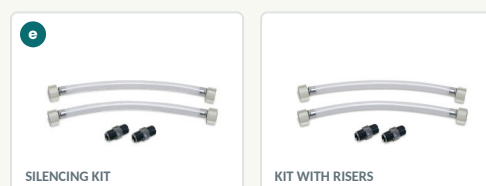
Shurflo strainers keep debris and other particles out of the pump. The strainer screws directly onto the pump head; the transparent bowl shows when it is time to clean it. Listed in the Pentair Shurflo **RV product catalogue** and carried here for onboard fresh water systems; specification and part numbers are the manufacturer's.

	Name	Model no. OEM / (aftermarket)	Designation		Name	Model no. OEM / (aftermarket)	Designation
a	Twist-on water strainer (A)	255-213 (255-313)	1/2" [13mm] pipe inlet	c	Swivel nut water strainer (C)	255-215 (255-315)	1/2" [13mm] pipe inlet
b	Twist-on water strainer (B)	255-223 (255-323)	1/2" [13mm] barb inlet	d	Swivel nut water strainer (D)	255-225 (255-325)	1/2" [13mm] barb inlet

All four strainers: easy assembly; keeps debris out of the pump; easy to see when the strainer needs cleaning; 50 mesh stainless steel screen.

PUMP SILENCING KIT & FLEXIBLE RISERS

High-pressure flexible hose



Easy to install high-pressure flexible hoses fit between the pump and the plumbing system to reduce rattling and vibration noise. The kit comes with two 1/2" NPT-M pipe nipples.

Name	Model no. OEM / (aftermarket)	Description	Designation
Pump silencing kit (A)	(94-591-01)	Includes 2 of 411-030-00 and 2-1/2" [13mm] male pipe couplers	1/2" [13mm] female swivel fitting
18" [457mm] riser	411-010-00	Single 18" riser with 1/2" [13mm] female swivel fittings	1/2" [13mm] female swivel fitting
30" [762mm] riser	411-020-00	Single 30" riser with 1/2" [13mm] female swivel fittings	1/2" [13mm] female swivel fitting
36" [914mm] riser	411-030-00	Single 36" riser with 1/2" [13mm] female swivel fittings	1/2" [13mm] female swivel fitting

IN-LINE CHECK VALVE & HOSE SPRAY NOZZLE

Backsurge protection and washdown



The check valve allows water to flow in one direction only, safeguarding against back surge pressure up to 100 PSI [6.89 BAR]. The hose spray nozzle adjusts from a fine mist to full stream, with a lock clip for continuous spray.

Name	Model no. OEM / (aftermarket)	Description	Designation
In-line check valve	340-000 (340-001)	Allows flow in one direction only to safeguard against backsurge up to 100 PSI [6.8 BAR]	3/4" [19.1mm] barb
Hose spray nozzle	(94-010-00)	High impact plastic for long life. Use with Shurflo pumps or garden hose. Adjusts from fine mist to full stream; lock clip for continuous spray	3/4" (F) garden hose thread

Accumulator tanks, city water entries & faucets

PENTAIR SHURFLO — PRE-PRESSURIZED TANKS, PRESSURE REDUCING ENTRIES AND CERAMIC DISC FAUCETS

PRE-PRESSURIZED ACCUMULATOR TANKS

Nylon and stainless steel



Accumulator tanks reduce cycling pulsation and pressure spikes, increase the life of the pump and even save battery power. They easily handle pressure requirements from 20 PSI to 125 PSI.

Accumulators should be charged to the restart [on] pressure of the pump to provide the best system flow, low pump cycling and smooth performance. **The Revolution High Flow series pumps do not require an accumulator.**

Name	Model no. OEM / (aftermarket)	Ports	Dimensions	Total volume	Max. PSI
24 oz. nylon tank (A)	182-100 (182-200)	1/2" NPSM-male	9.1" x 4.8" x 3.8" [232 x 121 x 97mm]	24 oz. [710 ml]	125 PSI [8.8 BAR]
2 gallon stainless steel tank (B)	3400-002 (3400-002)	1/2" NPT-female	12" H x 9" D [23 cm H x 10 cm D]	2 Gal. [8 L]	100 PSI [7 BAR]

PRESSURE REDUCING WATER CITY ENTRIES

Wall mount and in-line



The exclusive Shurflo diaphragm design prevents high-pressure damage often caused by city water. These high performance water entries limit water pressure and include a check valve. **3/4" (19.1 mm) GHT female swivel inlet, 1/2" (13 mm) NPSM male outlet. A 1/2" swivel elbow fitting is included.**

Name	50 PSI model OEM / (aftermarket)	65 PSI model OEM / (aftermarket)	Colour
Shurflo wall mount (A)	—	183-020-14 (183-029-14)	Chrome
Shurflo wall mount (B)	—	183-020-16 (183-029-16)	Black
Shurflo wall mount (C)	—	183-020-18 (183-029-18)	Gel white
Shurflo in-line (D)	[183-039-08]	N/A	Gel white

FAUCETS

Washerless ceramic disc, 360° spout rotation



Shurflo faucets offer smooth, easy flow with a washerless ceramic disc design. Versatile 360 degree spout rotation, and easy to use with a city water system. The 15-045-02 single touch faucet has a 1/4" (6.35 mm) port and works perfectly with filtration systems.

Name	Model no. OEM / (aftermarket)	Voltage	Ports	Amps (max.)	Operation	Spout rotation	Colour
Electric faucet with switch (A)	94-009-00 (94-009-10)	12 VDC	3/8" barb	3	Single	360°	White
Electric faucet with switch	94-009-01 (N/A)	12 VDC	3/8" barb	3	Single	360°	Gray
Electric faucet and pump combo (A)	94-009-21 (94-009-20)	12 VDC	3/8" barb	3	Single	360°	White
Single touch faucet (B)	15-045-02 (15-045-02)	N/A	1/4"	N/A	Single	Twist	Chrome
Faucet without switch	94-009-32 (94-009-12)	N/A	3/8" barb	N/A	Single	360°	White

Pump fittings – straight, elbow & tee

PENTAIR SHURFLO — NYLON WINGNUT SWIVEL FITTINGS FOR INTERNALLY TAPERED PUMP PORTS

STRAIGHT FITTINGS

Wingnut swivel and adapter



All Pentair Shurflo 4XX8 threaded pump ports are internally tapered and are to be thoroughly **hand-tightened only** with Pentair Shurflo swivel fittings. They eliminate expensive brass or stainless fittings which require more complex plumbing.

Listed in the Pentair Shurflo **RV product catalogue** and carried here for onboard fresh water systems; specification and part numbers are the manufacturer's.

Model no.	Style	Material	Description
244-2916	Wingnut swivel	Nylon	1/2"-15 NPT (F) x 3/8" barb
244-2926 (A)	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 1/2" barb
244-2936	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 5/8" barb
244-2946	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 3/4" barb
244-5146	Adapter	Nylon	1/2" NPT (M) x 3/4" barb

ELBOW FITTINGS

Wingnut swivel 90°



Elbow fittings turn the plumbing at the pump port without stressing it. For quick-connect fittings make sure the O-rings are lubricated and the fittings are pushed in straight.

Model no.	Style	Material	Description
244-3366	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 1/2"-14 NPT (M)
244-3916	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 3/8" barb
244-3926 (A)	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 1/2" barb
244-3936	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 5/8" barb
244-3946	Wingnut swivel	Nylon	1/2"-14 NPT (F) x 3/4" barb

GARDEN HOSE, SWIVEL ADAPTER & TEE FITTINGS

Completing the pump connection



Pentair Shurflo offers barbed and threaded fittings in straights and elbows from 3/8" to 3/4". The swivel straight adapter is the pump / accumulator fitting.

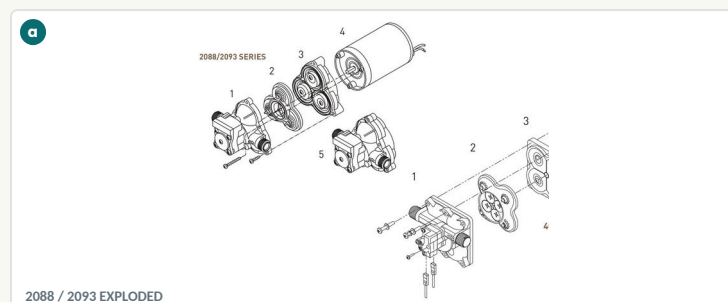
Model no.	Style	Material	Description
244-2356	Wingnut swivel	Nylon	3/4" GHT (M) x 1/2" NPT (F)
244-2866	Wingnut swivel (pump / accumulator fitting)	Nylon	1/2" NPT (F) x 1/2" NPT (F)
244-4522	Barb tee	Polypropylene	1/2" barb x 1/2" barb x 1/2" barb

RV pump repair & rebuild kits I

PENTAIR SHURFLO — 2088 / 2093 AND 4008 / 4028 REVOLUTION™ SERIES BENCH AND FIELD KITS

2088 / 2093 SERIES

Upper housing, valve, drive, motor, pump head & check valve



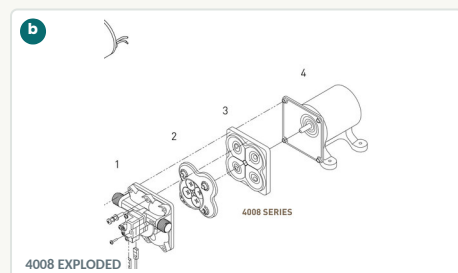
Shurflo pumps have set the standard for performance and reliability. To keep that performance at its peak, Shurflo offers a wide range of kits for **bench and field repair**. For detailed listings of individual part numbers, refer to Shurflo pricing guides and repair manuals; this overview indicates the type of kits available.

Listed in the Pentair Shurflo **RV product catalogue** and carried here for onboard fresh water systems; specification and part numbers are the manufacturer's.

Name	Model no. OEM / (aftermarket)	Upper housing 1	Valve assembly 2	Drive assembly 3	Motor 4	Pump head kit 5	Check valve (not shown)
Premium Plus pump	2088-453-144 (2088-453-444)	94-231-20	94-232-06	94-238-04	94-11-173-01	94-236-08	94-237-00
Classic™ pump	2088-422-144 (2088-422-444)	94-231-20	94-232-06	94-238-03	94-11-261-00	94-236-21	94-237-00
Whisper King™ Classic pump	2093-204-113 (2093-204-413)	94-231-24	94-232-06	94-238-05	94-11-192-00	94-236-05	94-237-00
Standard pump	2088-473-143 (2088-473-443)	94-231-24	94-232-03	94-238-04	94-11-142-10	94-236-08	94-237-00
Park model	2088-492-144 (2088-492-444)	94-231-20	94-232-04	94-238-03	94-11-150-10	94-236-21	94-237-00

4008 / 4028 SERIES — REVOLUTION™

Upper housing, valve, drive, motor, head & switch



The Revolution series shares one pump head across the 12 VDC, 24 VDC and 115 VAC models — only the motor kit changes. The pump head kit covers callouts 1, 2 and 3 together; the check valve and switch are not shown on the drawing.



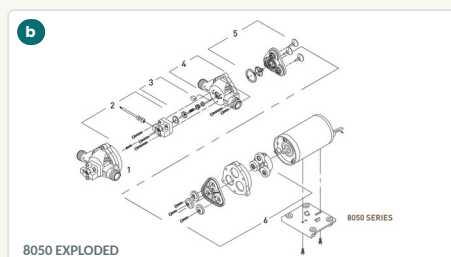
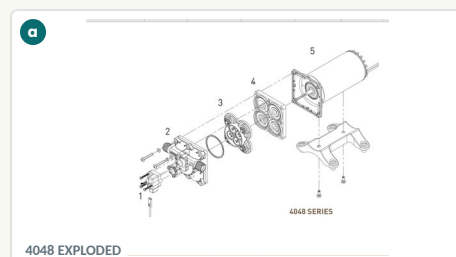
Name	Model no. OEM / (aftermarket)	Upper housing 1	Valve assembly 2	Drive assembly 3	Motor 4	Pump head 1, 2, 3	Pump head kit (not shown)	Switch (not shown)
Revolution 12 VDC	4008-101-A65 (4008-101-E65)	94-800-00	94-800-01	94-800-02	94-11-302-00	94-800-04	94-800-03	94-800-05
Revolution 24 VDC	4008-131-A65 (4008-131-E65)	94-800-00	94-800-01	94-800-02	94-11-303-00	94-800-04	94-800-03	94-800-05
Revolution 12 VDC	4028-100-A54 (4028-100-E54)	94-802-00	94-800-01	94-802-02	94-11-302-00	94-800-14	94-800-03	94-802-06
Revolution 115 VAC	4008-171-A65 (4008-171-E65)	94-800-00	94-800-01	94-800-02	94-11-306-00	94-800-04	94-800-03	94-800-05

RV pump repair & rebuild kits II

PENTAIR SHURFLO — 4048, 8050, 4900, 5900 AND 3200 SERIES KITS WITH EXPLODED VIEWS

4048 SERIES AND 8050 SERIES

High Flow and utility pumps



On the 4048 High Flow pump the **pump head kit covers callouts 1, 2, 3 and 4** together.

Name	Model no. OEM / (aftermarket)	Switch 1	Upper housing 2	Valve assembly 3	Drive assembly 4	Motor 5	Pump head kit 1, 2, 3, 4	Check valve (not shown)
4048 – 12 VDC	4048-153-A75 [4048-153-E75]	94-801-05	94-801-01	94-800-01	94-801-02	94-71-001-07	94-801-04	94-800-03

8050 SERIES

Utility pump service kits

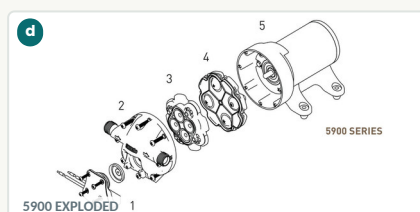


Pump head, switch, check valve and upper housing kits are not offered for the 8050 series; the valve assembly and drive assembly kits cover field service.

Name	Model no. OEM / (aftermarket)	Pump head 1	Switch 2	Check valve 3	Upper housing 4	Valve assembly 5	Drive assembly 6
Utility pumps	8050-305-XXX	N/A	N/A	N/A	N/A	94-391-12	94-385-42

4900 AND 5900 SERIES — EXTREME™ SMART SENSOR™

Housing, valve and drive kits

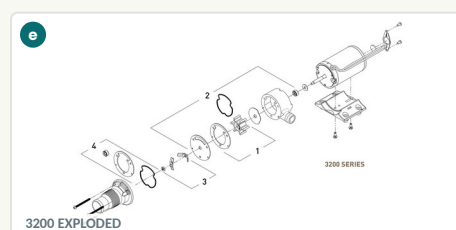


Serviced with upper housing, valve assembly and drive assembly kits; the switch and motor are not offered separately.

Name	Model no. OEM / (aftermarket)	Switch 1	Upper housing 2	Valve assembly 3	Drive assembly 4	Motor 5
Extreme Series Smart Sensor 4.0, 12 VDC	4900-0201 (4900-0211)	N/A	94-670-01	94-669-00	94-670-00	N/A
Extreme Series Smart Sensor 5.7, 12 VDC	5900-0201 (5900-0211)	N/A	94-670-02	94-030-01	94-030-02	N/A

3200 SERIES MACERATOR

Impeller, housing, blade and lip seal kits



The macerator is serviced with four kits: impeller, impeller housing, blade and lip seal.

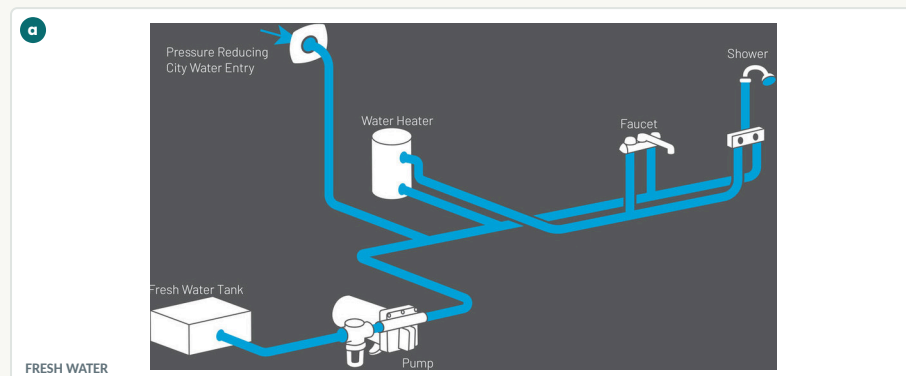
Name	Model no. OEM / (aftermarket)	Impeller kit 1	Impeller housing kit 2	Blade kit 3	Lip seal kit 4
Macerator 12 VDC	3200-200 [3200-201]	94-571-00	94-570-00	94-570-02	94-570-04
Macerator 12 VDC	3200-001	94-571-00	94-570-00	94-570-02	94-570-04

Installation guidelines I

PENTAIR SHURFLO — FRESH WATER, WASHDOWN AND LIVEWELL SYSTEM SCHEMATICS

FRESH WATER MULTI-FIXTURE SYSTEMS

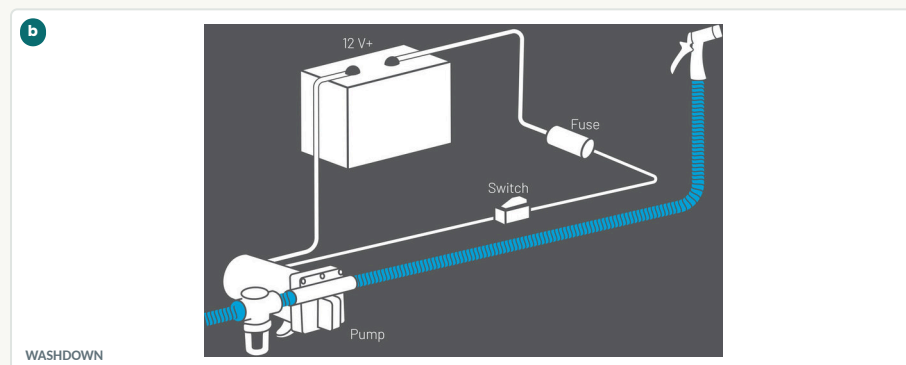
Tank, strainer, pump, water heater, city water entry



The pump may be mounted up to **six vertical feet above the water source**. Wiring should be switched as well as fused with the recommended size fuse. The inlet side of all fresh water pumps should include a Pentair Shurflo strainer. Mount the pump in an accessible area for strainer inspection. Refer to the application and specification chart for individual pump recommended wire and fuse sizes.

WASHDOWN SYSTEMS

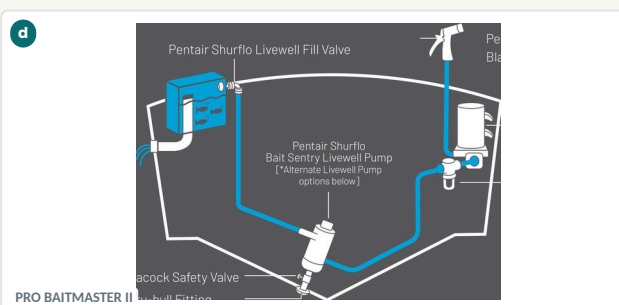
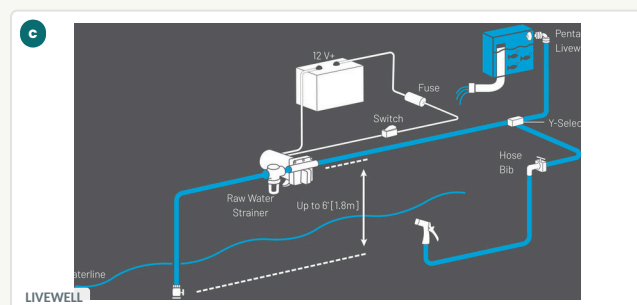
Raw water strainer, pump, hose and nozzle



For washdown systems using the Pentair Shurflo Blaster / Blaster II / Pro Blaster / Pro Blaster II, a **marine approved reinforced hose** is recommended. For optimum performance an inlet Pentair Shurflo raw water strainer is required. Use of the supplied hose nozzle will ensure high pressure delivery.

LIVEWELL PUMP SYSTEMS

Thru-hull valve, raw water strainer, fill valve



For livewell systems Pentair Shurflo recommends marine approved reinforced hose. Always use double stainless steel clamps for plumbing below the water line. A **seacock valve must be installed between the pump and the thru-hull fitting**. The pump impeller must be below the water line. To prevent an airlock, do not allow outlet tubing to sag between pump and tank — the discharge port on the pump must point up toward the tank, not down toward the keel.

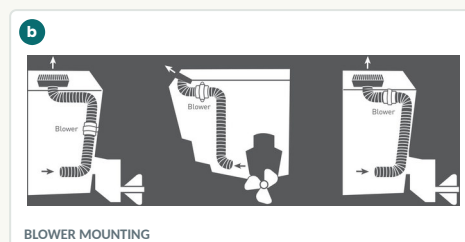
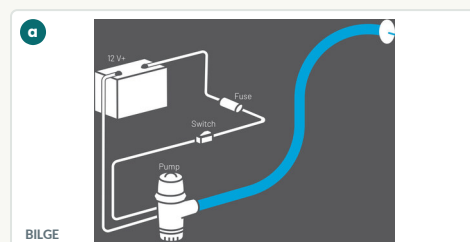
Use 1/2" [13mm] I.D. hose on the tank inlet and outlet for minimum back pressure and turbulence to the live bait. A raw water strainer between the thru-hull fitting and the pump inlet must be used. When plumbing the livewell pump to a washdown pump, use a raw water strainer between the livewell pump and the washdown pump; tubing should be no smaller than 1/2" [13mm].

Installation guidelines II

PENTAIR SHURFLO — BILGE, BLOWER, SHOWER SUMP AND MACERATOR SYSTEMS • WIRE SIZING

BILGE PUMP AND BLOWER SYSTEMS

Mounting, hose and ventilation



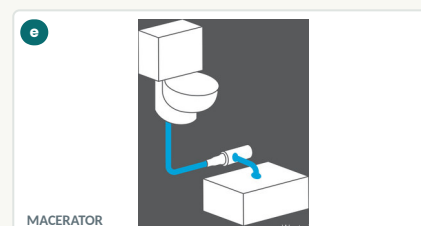
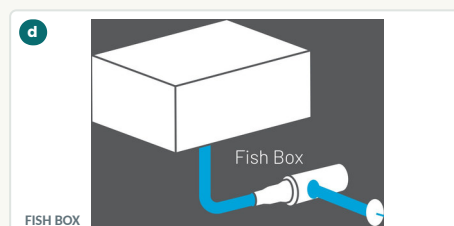
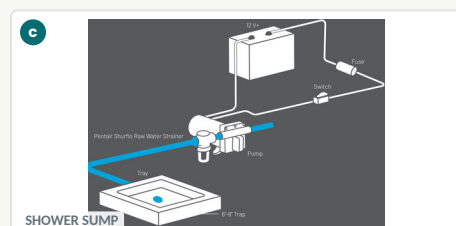
Attach the base to the hull or stringer using stainless steel screws and snap the pump into the base. Take care not to drive the screws through the hull, and mount the pump on a flat surface as low as possible in the bilge. Attach 3/4" [19mm] (380, 500 and 700 GPH) or 1-1/8" [29mm] (1000 GPH) I.D. **smooth bore** hose — corrugated hose significantly reduces pump performance. Route the discharge hose to a thru-hull fitting well above the water line and avoid sagging or loops. Vertical lift over 3' significantly reduces output.

In-line blowers ventilate engine compartments, bilges, galleys and head closets. Locate a flat mounting surface on the transom or under the deck and position the blower with the flow arrow towards the exhaust vent, slightly angled toward the engine compartment to avoid moisture build-up.

Do not use an open flame in the bilge area.

SHOWER SUMP AND MACERATOR SYSTEMS

Trap, strainer and waste evacuation



The standard 4138 models can be used for shower sump applications. The sump tray should employ a **6"-8" trap** with adequate strainer capability; use a raw water strainer on the inlet side of the pump, mounted in an easily accessible location for inspection.

Macerator pumps empty marine holding tanks of normal waste and are also an excellent approach for emptying fish boxes of scales and residual waste. A flow rate of up to 13 gallons per minute empties any tank in minutes.

WIRE SIZE, PLUMBING AND GENERAL NOTES

Based on 10 amps, 10% voltage drop



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Battery-to-pump distance	AWG [mm²]
0-25 feet [0-7.6m]	16 [1.3]
25-50 feet [7.6-15.2m]	14 [2.1]
50-70 feet [15.2-21.3m]	12 [3.3]
70-110 feet [21.3-33.5m]	10 [5.3]

WIRE TABLE

g

Total Wire Length*	Minimum Wire Size	
FEET (METERS)	3% Drop	10 % Drop
1-10 [3-3]	#12	#16
11-20 [3.3-6]	#10	#14
21-30 [6.4-9.1]	#8	#14
31-40 [9.1-12.2]	#6	#12
RV (1-20 FEET [0.3-6.1m])	#6	#10

RV WIRE TABLE

All Pentair Shurflo marine water pumps are ignition protected (except 8050-305-626 and 8050-305-426). Diaphragm pumps will operate in any position, but the recommended position is **motor up / pumphead down**. A safety seacock is required for any installation using a thru-hull water source, and ABYC guidelines place all diaphragm pumps plumbed to a thru-hull above the waterline.

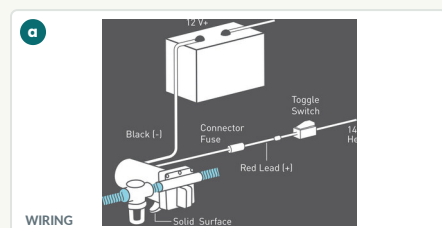
Battery-to-pump distance	AWG [mm²]	Area	Plumbing suggestion
0-25 feet [0-7.6m]	16 [1.3]	Pentair Shurflo fittings	Hand tighten only.
25-50 feet [7.6-15.2m]	14 [2.1]	Feet	Snug, don't flatten; solid surface.
50-70 feet [15.2-21.3m]	12 [3.3]	Pump / hose	Flexible hose on inlet and outlet side of pump. 1/2" minimum on mains, 3/8" minimum on branch.
70-110 feet [21.3-33.5m]	10 [5.3]	Water purifier	Run separate line from mains. 1/4" minimum recommended.
RV: 1-10 ft [0.3-3 m] • 3% / 10% drop	#12 / #16	Noise reduction	Use flexible hose. Check for air in the system, including all drain lines and hot water heater lines.

RV installation guidelines & system care

PENTAIR SHURFLO — MOUNTING, PLUMBING, WIRE SIZING, FILTRATION CHOICE AND MAINTENANCE

TYPICAL PUMP INSTALLATION

Mounting, plumbing and electrical



WIRING

Solid surfaces are required to lessen vibration and noise — a thin surface amplifies noise. **Easy access** for strainer and pump maintenance is needed, as well as space around the pump to keep it cool. **Positioning** the pump horizontal is best, but most pumps can be mounted in any position; pumps push water better than they pull, so mount the pump within 6 feet of the water tank. **Anchor** the pump snug, but do not flatten the feet.

Flex lines reduce vibration transmitted through the system and should be rated not to collapse under pump vacuum — collapsing inlet lines cause pump starvation, cavitation and noise. **Strainers** with adequate screen size keep debris out of the pump. **Valves** for tank shut-off or winterizing should be full-port style. **Pump fittings** on both inlet and outlet must seal on the internal taper of the threaded pump ports.

Total Wire Length*	Minimum Wire Size	
FEET [METERS]	3% Drop	10 % Drop
1-10 [3.3-3]	#12	#16
11-20 [3.3-6]	#10	#14
21-30 [6.4-9.1]	#8	#14
31-40 [9.1-12.2]	#6	#12
41-60 [12.2-18.3]	#6	#10

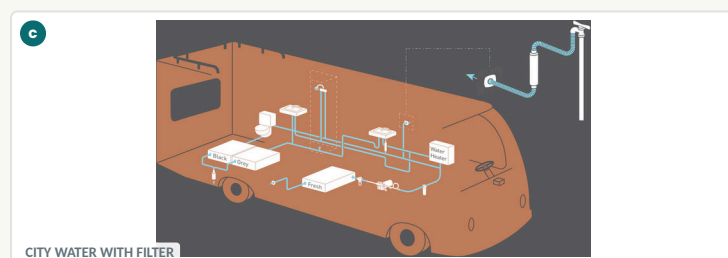
12VDC 15 AMP CIRCUIT

Total wire length	Minimum wire size — 3% drop	Minimum wire size — 10% drop
1-10 feet [0.3-3 m]	#12	#16
11-20 feet [3.3-6 m]	#10	#14
21-30 feet [6.4-9.1 m]	#8	#14
31-40 feet [9.1-12.2 m]	#6	#12
41-60 feet [12.2-18.3 m]	#6	#10

Length is measured from the power source to the pump and back to ground. Fusing and switching are important: they allow the pump to be shut off separately as a layer of safety.

CHOOSING FILTRATION

In-line filters and housing & cartridge filters



In-line filters are ideal for under-the-sink installation, separate single-tap faucets and ice makers. They are sized to meet many flow and life requirements and can even filter the water coming in through the city water entry. Make clean tubing cuts and handle tubing carefully to avoid scratches, kinks and damage.

Housing and cartridge filters combine the ease of a permanent installation with a variety of filter media. If a housing is installed for whole-house filtration, make sure the filter meets the need: a high flow of water through a filter reduces its ability to clean the water and creates significant back pressure on the pump, giving low system pressure and flow.

Standard pumps are **not** designed for the high pressures and continuous-duty cycles needed for reverse osmosis. Some state and local laws may pertain to the installation of plumbed-in components — check compliance in your area.

GENERAL SYSTEM CARE

Road and sea vibration loosens components



Vibration can loosen system components. Check all plumbing components, fittings and connections regularly, and tighten anything that is loose. Do not store things on top of plumbing system components. **Sanitizing** keeps the system clean — follow the manufacturer and component manuals for recommendations. It is easy to do and helps to extend component life.

Pump troubleshooting guide

PENTAIR SHURFLO — SYMPTOM AGAINST POSSIBLE CAUSE · MOST FAULTS ARE PLUMBING FAULTS

PUMP TROUBLESHOOTING GUIDE

Symptom against possible cause



Find the symptom across the top and read down the column: every possible cause marked with a dot should be checked. Most faults are plumbing faults, not pump faults — kinked or undersized hose, a clogged strainer, a restrictive valve or an inlet air leak account for the majority of complaints about noise, cycling and low flow.

Possible cause	Noise	Cycles on-off-on	Won't start	Won't shut off	Tank fills on city water	Starts, fixtures closed	Loses prime	Will not prime	Low flow	Leaks
Kinked Inlet Hose	•							•	•	
Hard Plumbed Pump	•	•								
Elbows At Pump	•								•	
Pipes Hitting	•							•	•	
Clogged Tank Outlet	•							•		
Clogged Tank Strainer	•							•	•	
Clogged/Small I.D. Winterizing Valve	•							•	•	
Clogged/Small I.D. Shut-Off Valve	•							•	•	
Small I.D. Hose At Pump Inlet	•							•	•	
Pump Too Far From Tank								•	•	
Collapsing/Non-Vacuum-Rated Hose	•								•	
Small I.D. Hose At Pump Outlet		•						•		
Inlet Air Leak	•			•	•	•				•
Air In System	•			•		•				•
Cracked Strainer				•		•				
Loose Pump Fittings				•						
Pipes Banging In System	•									
Kinked Outlet Hose	•	•							•	
Small I.D. Hose At Heater/Toilet	•	•							•	
Bad City Water/Tank Fill 3-WAY Valve	•	•		•	•		•	•	•	
Clogged Faucet Aerators	•	•							•	
Flow Restrictors	•	•							•	
Dirty/Worn Pump Valves				•	•	•	•	•	•	
Dirt/Worn Check Valve			•		•	•	•			
Bad Drive Assembly	•			•				•	•	•
Pinched Main Diaphragm										•
Ruptured Main Diaphragm									•	•
Ruptured Switch Diaphragm			•							•
Bad Microswitch	•	•	•	•						
Loose Wire At Switch			•							
Loose Pump Screws	•						•			•
Leaking Fixtures/Fittings						•	•			
Frozen Pump			•							•
Motor Thermal Overload (Hot Motor)			•							
Low Voltage				•				•	•	
Bad Motor	•		•					•	•	
Bad Pump Mount (Thin, Loose, etc.)	•									

WHAT TO CHECK FIRST

Inlet side, outlet side and electrical



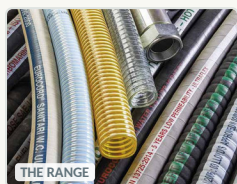
Inlet side: clogged tank outlet or tank strainer, small I.D. hose at the pump inlet, a collapsing or non-vacuum-rated hose, a cracked strainer, or an inlet air leak. **Outlet side:** kinked outlet hose, small I.D. hose at the heater or toilet, clogged faucet aerators, flow restrictors or a bad city water / tank fill 3-way valve. **Electrical:** low voltage, a loose wire at the switch, a bad microswitch or motor thermal overload.

Sati marine industrial hoses

SATI GROUP — SATIHOSE MARINE & SATIBLOCK · MADE IN ITALY

SATI GROUP · BOLOGNA, ITALY · SINCE 1965

Marine industrial hoses



SATIHOSE MARINE

For sixty years Sati Group has produced and distributed industrial rubber and PVC hoses, conveyor belts, rubber sheeting and foam rubber from its 30,000 m² headquarters at Castel Maggiore, Bologna. Over 5,000 articles are held in stock and more than 2,500 orders a month are handled, with tailor-made service for the marine trade.

SATIHOSE Marine is the hose range engineered for boats and yachts: fuel, wet exhaust, sanitation, sea-water, hot-water, potable-water, ducting, air-conditioning and cable-protection lines, with RINA, Lloyd's Register and NMMA approvals where the application demands them. **SATIBLOCK** is the matching clamp and collar range.

SELECTION GUIDE

Every Sati hose at a glance



Hose	Application	Temp. °C	ID mm
CARBOMARINE / LN 10	Fuel lines	-35° / +80°	5-19
CARBO ECO	Fuel lines	-35° / +70°	4-10
CRISTALBENZ	Fuel lines	-5° / +60°	4-10
PRESSCORD GREEN FUEL	Fuel lines	-4° / +60°	5-10
CARBOMARINE / SP	Fuel lines	-20° / +100°	19-63
CARBOMARINE / SP-C	Fuel lines	-20° / +100°	19-63
CARBOMARINE / IT	Fuel lines	-20° / +100°	19-63
GRECATO / SP MULTIPURPOSE	Fuel lines	-35° / +70°	15-120
MARINGAS / SP	Wet exhaust	-30° / +100°, with peaks up to +115°	19-203
SILMARINE / SP	Wet exhaust	-60° / +200°	19-404
SANITARI / WC ULTRAFLEX	Sanitation & waste	-40° / +120°	16-51
CORDSTEEL / WC	Sanitation & waste	-5° / +60°	12-102
SANISTEEL / WC	Sanitation & waste	-5° / +60°	20-50
CORDSTEEL P.L.	Multipurpose & bilge	-5° / +60°	10-102
CORDFLEX N.T.	Multipurpose & bilge	-5° / +60°	20-200
EPDM / LN 10	Sea water & hot water	-40° / +125°	5-25

Standards, approvals and markings are given on each hose's own page.

Hose	Application	Temp. °C	ID mm
ACQUA CALDA / 120°C	Sea water & hot water	-40° / +125°	10-60
WATER INTAKE / SP	Sea water & hot water	-40° / +125°	16-102
RADIATOR	Sea water & hot water	-40° / +125°	18-102
CRISTALCORD	Potable water & food grade	-5° / +60°	5-50
BOILER LDPE LR/LB	Potable water & food grade	-20° / +60°	9-11
EPDM FQ	Potable water & food grade	-40° / +120°	13-13
CORDFLEX AIR	Air & fume ducting	-5° / +60°	20-300
THERMOCORD HL	Air & fume ducting	-20° / +90°, with peaks up to +110°	51-457
THERMOCORD 130°C	Air & fume ducting	-20° / +90°, with peaks up to +130°	40-400
NEMOCORD	Deck cleaning	-5° / +60°	10-30
ARTIC / ESP	Air conditioning	-20° / +90°, with peaks up to +115° (max 2 min)	51-254
ARTIC THERM	Air conditioning	-20° / +90°, with peaks up to +110°	80-508
PROTECH/SIL	Cable protection	+260°	10-125
HELIOMOPLN	Cable protection	-5° / +100°	10,4* - 140
SAE 100 R7	Hydraulic systems	-40° / +100°	5-13

Sati fuel lines

SATHOSE MARINE — FUEL • FULL SIZE TABLES

FUEL LINES • SOURCE PAGE 6

CARBOMARINE / LN 10



Extra flexible • Homologated • RINA • Lloyd's Register approved

Ideal for the delivery of fuel such as diesel and unleaded gasoline for marine craft; extra flexible and light-weight hose with very low bending radius. **R.I.N.A approved**, according to Directive 2013/53/EU – ISO 7840:2021 – A1, and **LLOYD'S**.

Lining: Black (NBR) rubber, smooth, oil resistant to fuel with maximum 50% aromatic content.

Reinforcement: Synthetic textile high tenacity yarns. **Cover:** Synthetic rubber compound, flame resistant, also to lubricants, oil, sea water and weathering conditions. Outer layer: smooth. **Marking:** EUROCORD® EN ISO 7840:2021 – R.I.N.A APPROVED – CE – YEAR – SAE J 1527:2011 USCG R1 – LLOYD'S APPROVED **Working temperature:** -35 °C / +80 °C **Packaging:** Blue polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
5	15	-	>14	-	0,210	50	40
6	16	-	>14	-	0,240	60	40
8	17	-	>14	-	0,240	80	40
10	19	-	>14	-	0,280	100	40
12	22	-	>10	-	0,300	120	40
16	26	-	>10	-	0,460	160	40
19	30	-	>10	-	0,590	190	40

Also supplied in coils:

Inside diameter mm	Outside diameter mm	Coil length m
6	16	20
8	17	20
10	19	20

Weight column reproduced as printed in the manufacturer's table. Also available in coils — see the coil table.

FUEL LINES • SOURCE PAGE 8

CRISTALBENZ



Low cost

Suitable for the delivery of fuel including unleaded gasoline.

Material: Transparent green PVC. **Working temperature:** -5 °C / +60 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Coil length m
4	7	5	15	31	25
5	9	5	15	53	25
7	12	5	15	91	25
8	13	5	15	100	25
9	14	5	15	111	25
10	15	4	12	120	25

Sati fuel lines

SATHOSE MARINE — FUEL • FULL SIZE TABLES

FUEL LINES • SOURCE PAGE 7

CARBO ECO



Extra flexible

For the delivery of fuel such as gasoline, unleaded gasoline, eco diesel and lubricants in general. Used for internal combustion engines of cars, industrial vehicles, tractors and marine engines.

Lining: Black rubber (NBR), smooth, resistant to fuel with maximum 50% aromatic content and to unleaded gasoline with MTBE content up to 5%. **Reinforcement:** High tensile synthetic textile. **Cover:** Black special synthetic rubber (CN/NBR), anti-abrasive, fuel, oil and weathering condition resistant. Outer layer: smooth. **Marking:** EUROCORD® SPECIAL GREEN FUEL – ISO 1307 **Working temperature:** -35 °C / +70 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
4	9	10	30	-	60	40	100
5	10	10	30	-	80	50	100
6	13	10	30	-	140	60	100
7	13	10	30	-	130	70	100
7,5	14,5	10	30	-	168	75	100
8	14,5	10	30	-	160	80	100
10	16	10	30	-	170	100	100

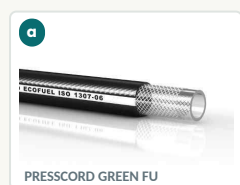
Also supplied in coils:

Inside diameter mm	Outside diameter mm	Coil length m
4	9	20
5	10	20
6	13	15
7	13	10
7,5	14,5	10
8	14,5	10
10	16	10

Also available in coils — see the coil table.

FUEL LINES • SOURCE PAGE 9

PRESSCORD GREEN FUEL



Very light • Low cost

Suitable for the delivery of fuel, including eco diesel and unleaded gasoline.

Lining: PVC smooth, transparent, oil resistant, including eco diesel and unleaded gasoline. **Reinforcement:** High tenacity synthetic textile yarns. **Cover:** Black PVC opaque, smooth, oil, green fuel and weathering resistant. Outer layer: smooth extruded. **Marking:** PRESSCORD GREEN FUEL ISO 1307 **Working temperature:** -4 °C / +60 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Coil length m
5	10.5	10	30	80	25
6	11	10	30	80	25
8	14	10	30	110	25
10	16	10	30	140	25

Sati fuel lines

SATHOSE MARINE — FUEL · FULL SIZE TABLES

FUEL LINES · SOURCE PAGE 10

CARBOMARINE / SP



Flexible · Low bending radius · Homologated · RINA · Lloyd's Register · NMMA approved

Ideal for fuel suction & delivery for boats and yachts. Heavy duty, very flexible and light-weight hose. **R.I.N.A approved**, according to Directive 2013/53/EU – ISO 7840:2021 – A1, and **LLOYD'S**.

Lining: NBR black oil/fuel rubber, smooth, resistant to maximum 50% aromatic contents.

Reinforcement: Synthetic textile high tenacity yarns and embedded steel spiral. **Cover:** Synthetic rubber compound, flame, oil, lubricant, abrasion, sea water and weathering resistant. Outer layer: smooth. **Marking:** EUROCORD® CARBOMARINE I.D. ... EN ISO 7840:2021 A1 – E10/B10 compatible – R.I.N.A APPROVED – CE – YEAR – FUEL HOSE – SAE J 1527:2011 USCG A1 – LLOYD'S APPROVED **Working temperature:** -20 °C / +100 °C **Packaging:** Blue polyethylene film

^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
19	31	2,5	10	-0,35	758	90	20	38	50	2,5	10	-0,8	1.433	190	20
20	32	2,5	10	-0,35	787	100	20	40	52	2,5	10	-0,8	1.498	200	20
22	34	2,5	10	-0,35	837	110	20	45	59	2,5	10	-0,8	1.954	223	20
25	37	2,5	10	-0,35	918	125	20	51	63	2,5	10	-0,8	1.942	254	20
30	42	2,5	10	-0,8	1.087	150	20	60	72	2,5	10	-0,8	2.226	300	20
32	44	2,5	10	-0,8	1.148	160	20	63	76	2,5	10	-0,8	2.406	318	20
35	47	2,5	10	-0,8	1.335	175	20								

FUEL LINES · SOURCE PAGE 11

CARBOMARINE / SP-C



Extra flexible type · Even lower bending radius · Homologated · Corrugated outer surface · RINA · Lloyd's Register · NMMA approved

Suitable for fuel suction & delivery on boats and in the light marine industry. Suitable for heavy duties. Flexibility and lightness are a characteristic of this hose. **R.I.N.A approved**, according to Directive 2013/53/EU – ISO 7840:2021 – A1, and **LLOYD'S**.

Lining: NBR black oil/fuel rubber, smooth, resistant to maximum 50% aromatic contents.

Reinforcement: Synthetic textile high tenacity yarns and embedded steel spiral. **Cover:** Synthetic rubber compound, flame, oil, lubricant, abrasion, sea water and weathering resistant. Outer layer: smooth. **Marking:** EUROCORD® CARBOMARINE I.D. ... EN ISO 7840:2021 A1 – E10/B10 compatible – R.I.N.A APPROVED – CE – YEAR – FUEL HOSE – SAE J 1527:2011 USCG A1 – LLOYD'S APPROVED **Working temperature:** -20 °C / +100 °C **Packaging:** Blue polyethylene film

^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
19	31	5	15	-0,8	585	49	20	38	50	5	15	-0,8	1190	115	20
20	32	5	15	-0,8	616	52	20	40	52	5	15	-0,8	1252	129	20
22	31	5	15	-0,8	677	57	20	45	59	5	15	-0,8	1409	145	20
25	37	5	15	-0,8	770	65	20	51	61	5	15	-0,8	1540	165	20
30	40	5	15	-0,8	910	89	20	60	72	5	15	-0,8	1811	194	20
32	44	5	15	-0,8	970	95	20	63	76	5	15	-0,8	1902	203	20
35	46	5	15	-0,8	1096	105	20								

Sati fuel lines

SATHOSE MARINE — FUEL · FULL SIZE TABLES

FUEL LINES · SOURCE PAGE 12

CARBOMARINE / IT



Long life performance structure · Homologated · RINA · Lloyd's Register · NMMA approved

Suitable for diesel and fuel transfer for marine craft. Long life structure. **R.I.N.A approved**, according to Directive 2013/53/EU – ISO 7840:2021 – A1, and **LLOYD'S**.

Lining: Black (NBR) rubber, smooth, oil resistant to fuel with maximum 50% aromatic content.

Reinforcement: Synthetic textile high tenacity yarns. **Cover:** Synthetic rubber compound resistant to flame, lubricant, oil, sea water and weathering conditions. Outer layer: smooth. **Marking:** EUROCORD® CARBOMARINE I.D. ... EN ISO 7840:2021 A1 – E10/B10 compatible – R.I.N.A APPROVED – CE – YEAR – FUEL HOSE – SAE J 1527:2011 USCG A1 – LLOYD'S APPROVED **Working temperature:** -20 °C / +100 °C

Packaging: Blue polyethylene film

^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
19	31	2,5	10	-	705	190	20	38	50	2,5	10	-	1.235	380	20
20	32	2,5	10	-	733	200	20	40	52	2,5	10	-	1.340	400	20
22	34	2,5	10	-	789	220	20	45	58	2,5	10	-	1.723	445	20
25	37	2,5	10	-	853	254	20	50	63	2,5	10	-	1.577	508	20
30	42	2,5	10	-	1.012	300	20	60	72	2,5	10	-	1.831	600	20
32	44	2,5	10	-	1.068	320	20	63	76	2,5	10	-	1.989	630	20
35	47	2,5	10	-	1.152	350	20								

FUEL LINES · SOURCE PAGE 13

GRECATO / SP MULTIPURPOSE



Extra flexible · Very low bending radius

Ideal for fuel and oil derivatives. Appropriate for low bending radius use.

Lining: NBR black oil/fuel rubber, smooth, resistant to maximum 50% aromatic contents.

Reinforcement: Synthetic textile high tenacity yarns and embedded steel spiral. **Cover:** Special synthetic EPDM rubber, anti-abrasive, oil and sea water resistant. Outer layer: corrugated cloth impression. **Working temperature:** -35 °C / +70 °C **Packaging:** Black polyethylene film

^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	^a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
15	25	10	30	0,8	380	45	40	42	53	10	30	0,8	960	126	40
16	26	10	30	0,8	410	48	40	45	56	10	30	0,8	1000	135	40
18	28	10	30	0,8	450	54	40	48	59	10	30	0,8	1080	144	40
19	29	10	30	0,8	570	75	40	51	63	10	30	0,8	1410	153	40
20	30	10	30	0,8	483	60	40	55	67	10	30	0,8	1510	165	40
22	32	10	30	0,8	520	66	40	60	72	10	30	0,8	1500	180	40
25	35	10	30	0,8	570	75	40	70	82	10	30	0,8	2080	210	40
28	38	10	30	0,8	630	84	40	76	88	10	30	0,8	2170	228	40
30	40	10	30	0,8	670	90	40	80	92	10	30	0,8	2300	475	20-40
32	43	10	30	0,8	790	100	40	90	104	10	30	0,8	2980	522	20
35	45	10	30	0,8	820	105	40	102	116	10	30	0,8	4133	610	20-40
38	48	10	30	0,8	840	114	40	120	138	10	30	0,8	7400	720	20
40	51	10	30	0,8	870	120	40								

Sati wet exhaust

SATHOSE MARINE — EXHAUST • FULL SIZE TABLES

WET EXHAUST • SOURCE PAGE 14

MARINGAS / SP



Super flexible • Very low bending radius • Homologated • RINA • Lloyd's Register approved

Ideal for exhaust gas discharge and for the cooling of heating systems in boats and yachts. Very flexible thanks to a particular structure with extremely low bending radius. **R.I.N.A approved**, according to ISO 13363:2006 Type 1 class A&B, Type 2 class A&B, and **LLOYD'S** SAE J 2006:03 R1 and R2.

Lining: Smooth black rubber, exhaust gas and sea water resistant. **Reinforcement:** 2 high tenacity textile synthetic yarns, embedded double steel spiral. **Cover:** Black rubber, anti-abrasive, heat, weathering and sea water resistant. Outer layer: corrugated cloth impression. **Marking:** EUROCORD® MARINGAS/SP I.D. ... R.I.N.A APPROVED N. DIP042318XT/001 – ISO 13363:2006 – TYPE 1 CLASS A & B – TYPE 2 CLASS A & B – SAE J 2006:03 LLOYD'S APPROVED N. 02/0029 **Working temperature:** -30 °C / +100 °C, with peaks up to +115 °C **Packaging:** Blue polyethylene film

a Inside diameter mm	Collar size suggested mm*	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Collar size suggested mm*	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
19	29-31	3	9	0,3	370	19	20	76	86-91	3	9	0,3	1719	72	10-20
20	29-31	3	9	0,3	386	19	20	80	86-91	3	9	0,3	1828	76	10-20
25	32-35	3	9	0,3	473	24	20	90	98-103	3	9	0,3	2046	86	10-20
30	40-43	3	9	0,3	573	28	20	100	104-112	3	9	0,3	2502	95	10-20
32	40-43	3	9	0,3	633	30	10-20	102	113-121	3	9	0,3	2540	97	10-20
35	44-47	3	9	0,3	657	33	20	110	122-130	3	9	0,3	2706	200	10-20
38	48-51	3	9	0,3	707	36	10-20	115	122-130	3	9	0,3	2800	209	10-20
40	48-51	3	9	0,3	741	38	10-20	120	131-139	3	9	0,3	2942	218	10-20
45	52-55	3	9	0,3	884	43	10-20	127	131-139	3	9	0,3	3107	231	10-20
51	60-63	3	9	0,3	999	49	10-20	130	140-148	3	9	0,3	3178	236	10-20
55	64-67	3	9	0,3	1096	53	20	140	149-161	3	9	0,3	3860	254	10-20
60	68-73	3	9	0,3	1189	57	10-20	152	162-174	3	9	0,3	4856	276	10-20
63	74-79	3	9	0,3	1253	60	20	180	188-200	3	9	0,3	5703	650	20
65	74-79	3	9	0,3	1281	62	20	203	214-226	3	9	0,3	6859	751	10
70	80-85	3	9	0,3	1374	68	10-20								

* Suggested clamp (collar) size for each inside diameter, as printed by the manufacturer.

WET EXHAUST • STANDARDS & FITTING

Which exhaust hose, and how to clamp it



Hose	Standard	Approval	Duty
MARINGAS / SP	ISO 13363:2006 Type 1 class A & B, Type 2 class A & B	RINA • Lloyd's Register	Exhaust gas discharge and heat-exchanger cooling water; very flexible, low bending radius
SILMARINE / SP	SAE J2006 R2 class B marine exhaust hose	—	Exhaust gas discharge under high temperature; silicone construction

Wet exhaust hose is a safety item: fit two SATIBLOCK collars at every joint, sized from the collar size suggested column in the MARINGAS table, and use STC W4 or W5 hinged bolt collars (pages following) rather than worm-drive clamps on bores above 50 mm. Route with the bending radius given in the table and support the hose so that no joint carries its weight.

Sati wet exhaust & sanitation & waste

SATHOSE MARINE — EXHAUST • FULL SIZE TABLES

WET EXHAUST • SOURCE PAGE 15

SILMARINE / SP



Resistant to very high temperature • Very low bending radius

Ideal for exhaust gas discharge and for the cooling of heating systems under high temperatures in boats and yachts. Conforms to SAE J2006 R2 CLASS B MARINE EXHAUST HOSE.

Lining: Smooth, blue silicone rubber, heat and sea water resistant. **Reinforcement:** High temperature resistant textile synthetic yarns, embedded double steel spiral. **Cover:** Smooth, blue silicone rubber, heat, weathering and sea water resistant. **Marking:** SILMARINE/SP MARINE EXHAUST SAE J2006 R2 **Working temperature:** -60 °C / +200 °C

a Inside diameter mm	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
19	25	0,43	90	20	67	8	1,67	175	20
20	25	0,45	95	20	70	8	1,74	180	20
25	20	0,54	100	20	73	8	1,88	200	20
28	20	0,59	105	20	76	8	1,94	220	20
30	18	0,63	110	20	80	8	2,04	225	20
32	18	0,66	115	20	90	7	3,26	250	20
35	15	0,72	125	20	102	6	3,65	280	20
38	15	0,88	130	20	114	6	4,04	290	20
40	15	0,97	135	20	127	6	4,46	300	20
42	15	1,02	135	20	133	6	4,93	350	20
45	12	1,08	140	20	140	6	5,74	360	20
48	12	1,14	150	20	152	6	6,19	400	20
51	12	1,20	160	20	203	5	10,29	450	10
54	10	1,27	160	20	254	5	14,92	1200	10
60	8	1,39	165	20	305	5	18,69	1450	10
63,5	8	1,59	170	20	350	5	21,58	1750	6
65	8	1,62	170	20	404	4	26,72	2000	6

Outside diameter, working pressure and vacuum are not stated by the manufacturer for this hose. Weight column reproduced as printed.

SANITATION & WASTE • SOURCE PAGE 18

SANISTEEL / WC



High anti-odour resistance • Steel wire reinforcement • Lighter in weight, superior flexibility, value for money versus rubber hoses

Specially designed, by use of a special compound, for toilet waste discharge in boats, yachts and caravans. Concrete advantages versus equivalent rubber hoses: lighter in weight, superior flexibility and anti-odour resistance, value for money.

Lining: Internal composition: special anti-odour PVC compound. **Cover:** Grey colour, smooth, weathering resistant. **Spiral:** Embedded steel spiral, ultra flexible. **Marking:** SANISTEEL WC LOW PERMEABILITY **Working temperature:** -5 °C / +60 °C **Packaging:** White polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
20	27	8,5	24	0,9	340	30	25
25	33	8,5	24	0,9	520	38	25
30	38,4	8	24	0,9	630	60	25
38	47	8	24	0,9	800	76	25
40	50	8	24	0,9	950	80	25
50	60	8	24	0,9	1020	100	25

Sati sanitation & waste

SATHOSE MARINE — SANITARY • FULL SIZE TABLES

SANITATION & WASTE • SOURCE PAGE 16

SANITARI / WC ULTRAFLEX



Zero odour permeability • Extremely flexible • Long life use

Ideal for toilet waste discharge in boats and yachts. The special inner layer prevents odour propagation from the toilet drain. Extremely flexible thanks to a very low bending radius. Suitable for narrow and difficult-access spaces.

Lining: Black butyl rubber. **Reinforcement:** High tenacity textile synthetic yarns, embedded steel spiral.

Cover: Grey or white EPDM rubber, anti-abrasive, weathering resistant. **Marking:** EUROCORD®

SANITARI WC TESTED ISO 8099:2000 & UNI EN 13725:2014 – 5 YEARS LOW PERMEABILITY –

ULTRAFLEX **Working temperature:** -40 °C / +120 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Vacuum bar	Weight g/m	Bending radius mm	Coil length m GREY cover	Coil length m WHITE cover
16	24	0,8	345	50	40	30
19	27	0,8	410	60	40	30
25	33	0,8	525	80	40	30
30	38	0,8	605	95	40	30
38	46,5	0,8	930	120	40	30
40	48,5	0,8	975	130	40	30
51	59	0,8	1215	175	40	30

Working and burst pressure are not stated by the manufacturer for this hose. Supplied with a grey or a white cover — state the colour when ordering.

SANITATION & WASTE • SOURCE PAGE 17

CORDSTEEL / WC



Extremely flexible • Low cost

Ideal for toilet waste discharge in boats and yachts. Extremely flexible thanks to a very low bending radius. Suitable for narrow and difficult-access spaces.

Cover: White PVC, opaque / grey. **Spiral:** Embedded steel spiral. **Marking:** CORDSTEEL WC I.D. MM –

SPECIAL FOR BOAT **Working temperature:** -5 °C / +60 °C **Packaging:** White polyethylene film

a Inside diameter mm	Wall thickness mm *	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
12	3,0	7	0,85	180	25	30/60
14	3,0	6	0,85	200	30	30/60
16	3,1	6	0,85	225	35	30/60
18	3,1	6	0,85	280	40	30/60
20	3,1	5	0,85	340	50	30/60
22	3,2	5	0,85	370	55	30/60
25	3,2	5	0,85	510	60	30/60
30	3,5	4	0,85	600	70	30/60
32	3,9	4	0,85	650	75	30
35	4,2	4	0,85	730	80	30
38	4,4	4	0,85	800	90	30

a Inside diameter mm	Wall thickness mm *	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
40	4,5	3	0,85	870	95	30
45	5,1	3	0,80	1100	105	30
50	5,1	3	0,80	1200	125	30
60	6,5	2,5	0,70	1800	135	30
63	6,5	2,5	0,70	1950	150	30
70	7	2	0,70	2200	180	30
76	7	2	0,70	2500	195	30
80	7,5	2	0,70	2700	220	30
90	7,5	2	0,60	3000	260	30
102	8	2	0,60	3400	300	30

* Printed under the outside-diameter symbol in the manufacturer's table; the values (3,0–8 mm) are the wall thickness. Burst pressure not stated. Coil length 30/60 m = supplied in 30 m or 60 m coils.

Sati multipurpose & bilge & sea water & hot water

SATHOSE MARINE — MULTIPURPOSE & BILGE PUMP · FULL SIZE TABLES

MULTIPURPOSE & BILGE · SOURCE PAGE 19

CORDSTEEL P.L.



Extra flexible · Multipurpose · Food grade

PVC flexible transparent hose with embedded steel spiral. Suitable for suction & delivery of sea water, inactive fluids and liquid foodstuffs in accordance with Directive EU 10/2011 for simulants A, B, C. Used in agriculture, construction, food, naval and chemical industry, in drainage and discharge applications. Ideal for installation on the sea inlet of boats: the steel wire spiral makes it extremely flexible and easy to insert into very tight spaces, and the transparency lets you see the liquid passing.

Cover: PVC transparent wall, embedded steel spiral reinforcement. **Spiral:** Embedded steel spiral. **Marking:** CORDSTEEL PL (food grade) I.D. MM EU 10/2011 SIM A, B, C **Standards:** 2007/19/EC simulants type A, B, C – ISO 1307 – Directive EU 10/2011 simulants type A, B, C **Working temperature:** -5 °C / +60 °C **Packaging:** White polyethylene film

a Inside diameter mm	Wall thickness mm*	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
10	3,0	7	0,85	160	20	30/60
12	3,0	7	0,85	180	25	30/60
14	3,0	6	0,85	200	30	30/60
16	3,1	6	0,85	225	35	30/60
18	3,1	6	0,85	280	40	30/60
20	3,1	5	0,85	340	50	30/60
22	3,2	5	0,85	370	55	30/60
25	3,2	5	0,85	510	60	30/60
30	3,5	4	0,85	600	70	30/60
32	3,9	4	0,85	650	75	30
35	4,2	4	0,85	730	80	30

a Inside diameter mm	Wall thickness mm*	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
38	4,4	4	0,85	800	90	30
40	4,5	3	0,85	870	95	30
45	5,1	3	0,80	1100	105	30
50	5,1	3	0,80	1200	125	30
60	6,5	2,5	0,70	1800	135	30
63	6,5	2,5	0,70	1950	150	30
70	7	2	0,70	2200	180	30
76	7	2	0,70	2500	195	30
80	7,5	2	0,70	2700	220	30
90	7,5	2	0,60	3000	260	30
102	8	2	0,60	3400	300	30

* Printed under the outside-diameter symbol in the manufacturer's table; the values (3,0–8 mm) are the wall thickness. Burst pressure not stated. Coil length 30/60 m = supplied in 30 m or 60 m coils.

SEA WATER & HOT WATER · SOURCE PAGE 21

EPDM / LN 10



Sea water resistant · Light and flexible · Hot water resistant

Flexible hose for the delivery of sea water, hot water and slightly corrosive liquids under pressure in equipment and plants of various kinds.

Lining: Smooth, black EPDM rubber. **Reinforcement:** Textile synthetic yarns. **Cover:** Black, smooth EPDM rubber; sea water, high temperature and weathering resistant. **Marking:** EUROCORD® HOT WATER 100°C ISO 1307 **Working temperature:** -40 °C / +125 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
5	10,5	10	30	82	50	100
5	11	10	30	93	50	100
6	12	10	30	102	60	100
7	13	10	30	120	70	100
8	15	10	30	160	80	100
10	17	10	30	185	100	100
12	17	10	30	155	120	100
13	19	10	30	180	130	100

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
14	21	10	30	230	140	50
15	21	10	30	205	150	50
15	23	10	30	360	150	50
19	26	10	30	310	190	50
20	30	10	30	480	200	50
22	30	10	30	390	220	50
25	33	10	30	550	250	50
25	35	10	30	610	250	50

Vacuum rating not stated. Two outside diameters are listed for 5, 15 and 25 mm bore — quote both bore and outside diameter when ordering.

Sati multipurpose & bilge & sea water & hot water

SATIHOSE MARINE — MULTIPURPOSE & BILGE PUMP · FULL SIZE TABLES

MULTIPURPOSE & BILGE · SOURCE PAGE 20

CORDFLEX N.T.



Very flexible · Food grade · Multipurpose

Suitable for suction & delivery of water, inert fluids and liquid foodstuffs in accordance with Directive EU 10/2011 for simulants A, B, C. Recommended as the flexible link to the bilge pump.

Cover: PVC yellow transparent flexible wall, rigid PVC spiral reinforcement. **Spiral:** Yellow shock-resistant PVC spiral. **Marking:** CORDFLEX N.T. (food grade) EU 10/2011 SIM A, B, C **Standards:** 2007/19/EC simulants type A, B, C - ISO 1307 - Directive EU 10/2011 simulants type A, B, C **Working temperature:** -5 °C / +60 °C **Packaging:** White polyethylene film

a Inside diameter mm	Wall thickness mm*	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Wall thickness mm*	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
20	2,7	28	0,80	240	85	50	70	4,5	12	0,70	1080	315	50
25	2,9	22	0,80	300	112	50	75	4,6	12	0,70	1260	337	50
30	3,1	21	0,80	345	135	50	80	4,8	12	0,60	1400	360	50
32	3,2	20	0,80	370	144	50	90	5,1	11	0,60	1620	405	25
35	3,2	19	0,80	415	157	50	100	5,9	11	0,60	1850	459	25
38	3,3	18	0,80	470	171	50	110	6,1	11	0,50	2250	495	25
40	3,5	18	0,80	505	180	50	120	6,3	10	0,40	2700	540	25
45	3,5	17	0,80	570	202	50	125	6,6	10	0,40	2880	562	25
50	3,8	15	0,80	690	225	50	150	7,0	9	0,30	3870	675	25
60	4,0	13	0,70	825	270	50	200	8,5	7	0,20	5950	900	10

* Printed under the outside-diameter symbol in the manufacturer's table; the values (2,7–8,5 mm) are the wall thickness. Working pressure not stated; pressure column reproduced as printed under the burst-pressure symbol.

SEA WATER & HOT WATER · SOURCE PAGE 22

ACQUA CALDA / 120°C



Sea water resistant · Hot water resistant

Suitable for the delivery of hot sea water mixed with steam and non-corrosive hot liquids.

Lining: Smooth black EPDM rubber. **Reinforcement:** Textile synthetic yarns. **Cover:** Black EPDM rubber; high temperature, weathering and ageing resistant. Outer layer: smooth with fabric impression.

Marking: EUROCORD® HOT WATER 120°C W.P. 10 BAR **Working temperature:** -40 °C / +125 °C

Packaging: Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
10	20	10	30	346	100	40	30	41	10	30	897	300	40
12	22	10	30	392	120	40	35	48	10	30	1260	350	40
15	25	10	30	461	150	40	40	54	10	30	1423	400	40
18	28	10	30	529	180	40	45	61	10	30	1864	450	40
19	30	10	30	619	190	40	50	68	10	30	2231	510	40
20	30	10	30	575	200	40	60	82	10	30	3443	600	40
25	35	10	30	667	250	40							

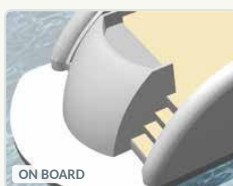
Vacuum rating not stated by the manufacturer.

Sati sea water & hot water

SATHOSE MARINE — SEA WATER & HOT WATER · FULL SIZE TABLES

SEA WATER & HOT WATER · SOURCE PAGE 23

WATER INTAKE / SP



Sea water resistant · Hot water resistant · Very low bending radius

Ideal for the suction & delivery of sea water and hot water, even with a low-concentration chemical content. Can be used as a flexible connection for heating pumps and autoclaves.

Lining: Smooth black EPDM rubber, resistant to heat. **Reinforcement:** Textile synthetic yarns with embedded steel spiral. **Cover:** Black EPDM rubber; high temperature, weathering and ageing resistant. Outer layer: smooth with cloth impression. **Working temperature:** -40 °C / +125 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
16	26	10	30	0,92	487	64	40	40	51	10	30	0,92	1310	160	40
19	29	10	30	0,92	557	76	40	45	57	10	30	0,92	1610	180	40
20	30	10	30	0,92	580	80	40	50,8	63	10	30	0,92	1790	203	40
25	35	10	30	0,92	700	100	40	60	72	10	30	0,92	1986	270	40
30	40	10	30	0,92	800	120	40	70	82	10	30	0,92	2426	300	40
32	43	10	30	0,92	1000	128	40	76	90	10	30	0,92	3075	300	40
35	46	10	30	0,92	1090	140	40	80	94	10	30	0,92	3230	320	40
38	49	10	30	0,92	1200	152	40	102	116	10	30	0,92	4050	400	40

SEA WATER & HOT WATER · SOURCE PAGE 24

RADIATOR



Hot water

For conveying hot water mixed with anti-freeze liquids for the cooling of thermal engines; used as the flexible connection in engine cooling circuits.

Lining: Heat and anti-freeze liquid resistant EPDM rubber. **Reinforcement:** High tenacity textile synthetic yarns. **Cover:** Black EPDM rubber; high temperature, weathering and ageing resistant. Outer layer: corrugated. **Marking:** EUROCORD® RADIATOR HOT WATER 100°C (DIAM. MM) **Standards:** ISO 1307 **Working temperature:** -40 °C / +125 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
18	24	4	12	281	180	40	42	50	4	12	825	420	40
20	26	4	12	307	200	40	45	54	4	12	990	450	40
22	28	4	12	334	220	40	50	60	4	12	1200	510	40
25	32	4	12	423	250	40	55	65	4	12	1280	550	40
28	36	4	12	573	280	40	60	70	4	12	1493	600	40
30	38	4	12	609	300	40	70	81	4	12	1906	700	20
32	40	4	12	645	320	40	80	92	4	12	2368	800	20
35	43	4	12	699	350	40	90	102	4	12	2457	900	20
38	46	4	12	753	380	40	102	112	4	12	2549	1020	20
40	48	4	12	789	400	40							

Vacuum rating not stated by the manufacturer.

Sati potable water & food grade

SATIOSE MARINE — FOOD GRADE · FULL SIZE TABLES

POTABLE WATER & FOOD GRADE · SOURCE PAGE 25

CRISTALCORD



For shower · Food grade

Hose suitable for the delivery of liquid foodstuffs in accordance with EU Directive 10/2011 for simulants type A, B, C. Suitable for shower use.

Lining: Clear transparent PVC, food grade. **Reinforcement:** Textile synthetic yarns. **Cover:** Transparent PVC. **Marking:** CRISTALCORD GLASS CLEAR (food grade) EU 10/2011 SIM A, B, C **Working temperature:** -5 °C / +60 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Wall thickness mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
5	3,0	20	60	81	14	100
6	3,0	20	60	83	15	100
7	3,0	20	60	119	20	100
8	3,0	20	60	117	26	100
10	3,0	15	45	138	35	100
12	3,0	10	30	159	36	100
13	3,0	10	30	169	50	100
15	3,0	10	30	190	60	50
16	3,0	10	30	201	62	50
19	3,5	10	30	280	70	50

Vacuum rating not stated by the manufacturer.

POTABLE WATER & FOOD GRADE · SOURCE PAGE 26

BOILER LDPE LR/LB



Totally recyclable · Very good flexibility · FDA-compliant materials

LDPE hose for food use, suitable for the passage of both hot and cold water. Produced according to FDA title 21 parts 170 to 199 item 177.2600 and DM 174, CE 1935/2004 and EU 10/2011.

Material: Low-density polyethylene (LDPE) for liquid foodstuffs. In red (LR) and blue (LB) colour. **Marking:** EUROCORD® BOILER LDPE (inside diameter) MADE IN ITALY **Working temperature:** -20 °C / +60 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Bending radius mm	Coil length m
9	12	7	28	120	50
11	15	7,5	30	250	50

Vacuum and weight not stated by the manufacturer. LR = red, LB = blue.

POTABLE WATER & FOOD GRADE · SOURCE PAGE 27

EPDM FQ



Food grade FDA 177.2600 · Light and flexible

Suitable for the delivery of liquid foodstuffs according to FDA Title 21 part 170 to 199 item 177.2600.

Lining: Smooth black EPDM rubber. **Reinforcement:** High tenacity textile synthetic yarns. **Cover:** Smooth EPDM rubber, anti-abrasive, high temperature and weathering resistant, in red or blue colour. **Marking:** EUROCORD® EPDM FOOD QUALITY ACCORDING FDA W.P. 15 BAR 100°C **Working temperature:** -40 °C / +120 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
13	20	15	45	0,225	130	100

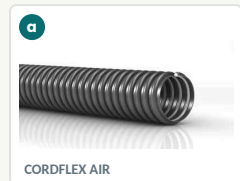
Weight column reproduced as printed. Vacuum rating not stated.

Sati air & fume ducting

SATIHOSE MARINE — AIR & FUME DUCTING · FULL SIZE TABLES

AIR & FUME DUCTING · SOURCE PAGE 28

CORDFLEX AIR



Very light · Extra flexible

Suitable for industrial ventilation and ducting of air, fumes, dust, powders and wood-chips.

Cover: Corrugated outer cover, resistant to crushing, chemical agents, abrasion and weathering. **Spiral:** Rigid shock-resistant PVC spiral, flexible PVC corrugated wall, grey colour. **Standards:** ISO 1307 **Working temperature:** -5 °C / +60 °C **Packaging:** White polyethylene film

a Inside diameter mm	Outside diameter mm	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
20	24,8	1	0,5	115	28	30
25	30	0,5	0,5	165	35	30
30	35,2	0,5	0,5	215	42	30
32	38	0,5	0,5	225	45	30
35	41	0,5	0,5	235	47	30
38	44,2	0,5	0,5	255	50	30
40	46,5	0,5	0,5	270	55	30
45	52,2	0,5	0,5	350	60	30
50	57	0	0,45	435	65	30
60	68	0	0,45	525	80	30
70	78,4	0	0,45	620	95	30
75	84	0	0,4	670	100	30
80	89	0	0,4	755	110	30

Burst pressure not stated by the manufacturer.

a Inside diameter mm	Outside diameter mm	Working pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
90	99	0	0,4	805	125	30
100	110	0	0,4	950	140	30
110	120,4	0	0,4	1065	150	30
120	131	0	0,35	1165	170	30
130	141	0	0,35	1210	175	30
140	151	0	0,35	1455	190	30
150	162	0	0,35	1650	200	30
160	172	0	0,3	1800	220	20
180	193	0	0,3	2130	250	20
200	214	0	0,3	2330	280	20
250	264	0	0,3	3240	300	10
300	316	0	0,3	3980	330	10

AIR & FUME DUCTING · SOURCE PAGE 29

THERMOCORD HL



Extremely flexible and light

Extremely light and flexible hose for ventilation and air conditioning. Axial compressibility 8:1. Behaviour to fire: class 1.

Cover: Corrugated outer cover. **Spiral:** Polyester fabric coated with added polyolefin resins, helicoidal spiral in harmonic steel wire, corrugated surface in grey metallic colour. **Standards:** UNI 84 56/87 + UNI 9174/87 + UNI 9174/A1/96 **Working temperature:** -20 °C / +90 °C, with peaks up to +110 °C

a Inside diameter mm	Bending radius mm	Coil length m
51	0,6 x Di	10
63	0,6 x Di	10
70	0,6 x Di	10
76	0,6 x Di	10
80	0,6 x Di	10
89	0,6 x Di	10
102	0,6 x Di	10
110	0,6 x Di	10
121	0,6 x Di	10
127	0,6 x Di	10
133	0,6 x Di	10

a Inside diameter mm	Bending radius mm	Coil length m
140	0,6 x Di	10
152	0,6 x Di	10
160	0,6 x Di	10
180	0,6 x Di	10
203	0,6 x Di	10
254	0,6 x Di	10
305	0,6 x Di	10
356	0,6 x Di	10
406	0,6 x Di	10
457	0,6 x Di	10

Bending radius = 0,6 × inside diameter. Outside diameter, pressure, vacuum and weight are not stated by the manufacturer.

Sati air & fume ducting & deck cleaning

SATIHOSE MARINE — AIR & FUME DUCTING · FULL SIZE TABLES

AIR & FUME DUCTING · SOURCE PAGE 30

THERMOCORD 130°C



Compressibility 8:1 · Very flexible and light

Suitable for air, fume & dust ducting, for heating and ventilation systems; excellent resistance to high and low temperatures, excellent flexibility; particularly recommended for civil and naval air conditioning systems. Axial compressibility 8:1. Behaviour to fire: class 1.

Cover: Corrugated outer cover. **Spiral:** Polyamide fabric, PVC coated on both sides, harmonic wire embedded helicoidal steel spiral. Corrugated surface in dark grey metallic colour. **Standards:** UNI 84 56/87 + UNI 9174/87 + UNI 9174/A1/96 **Working temperature:** -20 °C / +90 °C, with peaks up to +130 °C

a Inside diameter mm	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m	a Inside diameter mm	Burst pressure bar	Vacuum bar	Weight g/m	Bending radius mm	Coil length m
40	0,90	0,24	120	0,7xDi	10	125	0,40	0,08	356	0,7xDi	10
45	0,80	0,20	130	0,7xDi	10	130	0,40	0,08	370	0,7xDi	10
50	0,80	0,20	145	0,7xDi	10	140	0,25	0,06	398	0,7xDi	10
60	0,80	0,16	170	0,7xDi	10	150	0,25	0,06	427	0,7xDi	10
65	0,70	0,14	182	0,7xDi	10	160	0,20	0,06	527	0,7xDi	10
70	0,70	0,14	198	0,7xDi	10	180	0,20	0,06	590	0,7xDi	10
76	0,60	0,10	210	0,7xDi	10	200	0,20	0,05	660	0,7xDi	10
80	0,60	0,10	227	0,7xDi	10	250	0,10	0,04	825	0,7xDi	10
90	0,50	0,09	254	0,7xDi	10	300	0,06	0,03	990	0,7xDi	10
100	0,50	0,09	285	0,7xDi	10	350	0,05	0,02	1155	0,7xDi	10
110	0,50	0,08	310	0,7xDi	10	400	0,04	0,01	1320	0,7xDi	10
120	0,50	0,08	342	0,7xDi	10						

Bending radius = $0,7 \times$ inside diameter. Outside diameter and working pressure not stated; pressure column reproduced as printed under the burst-pressure symbol.

DECK CLEANING · SOURCE PAGE 31

NEMOCORD



No twist version · Robust structure

Suitable for water delivery in general and for leisure-boat deck washing. Light, flexible and no-twist hose.

Lining: White PVC. **Reinforcement:** Textile synthetic yarns. **Cover:** White PVC with blue ribbon.

Marking: NEMOCORD CLEANING HOSE ISO 1307 **Working temperature:** -5 °C / +60 °C **Packaging:** Transparent polyethylene film

a Inside diameter mm	Wall thickness mm *	Working pressure bar	Burst pressure bar	Weight g/m	Coil length m
10	2,5	10	30	110	25/50
13	2,8	10	32	170	25/50
16	2,8	10	32	200	25/50
19	3	10	32	260	25/50
22	3	10	21	300	25/50
25	3,5	10	32	420	25/50
30	4	5	15	529	25/50

* Printed under the outside-diameter symbol in the manufacturer's table; the values (2,5-4 mm) are the wall thickness. Vacuum and bending radius not stated. Coil length 25/50 m = supplied in 25 m or 50 m coils.

Sati air conditioning

SATIOSE MARINE — AIR CONDITIONING · FULL SIZE TABLES

AIR CONDITIONING · SOURCE PAGE 32

ARTIC / ESP



Very flexible · Low noise · Antibacterial

Air conditioning, mechanical ventilation (simple or double flow), reduction of condensation and heat dispersion; air conditioning systems for transport vehicles in the agricultural, industrial and marine sectors. Behaviour to fire: class 1.

Lining: Polyolefin resin film with additives. **Reinforcement:** Harmonic steel wire helix. **Cover:** Thermo-insulating cover in netted, closed-cell foam polyethylene. Outer protection: insulation in polyolefin resins. **Working temperature:** -20 °C / +90 °C, with peaks up to +115 °C (max 2 min)

a Inside diameter mm	Working pressure bar *	Vacuum bar *	Weight g/m	Bending radius mm	Coil length m
51	0,70	0,18	96	35	10
63	0,70	0,15	115	42	10
70	0,60	0,13	128	49	10
80	0,50	0,09	154	56	10
102	0,40	0,08	200	70	10
127	0,40	0,07	254	92	10
152	0,20	0,05	308	105	10
160	0,15	0,05	331	110	10
180	0,15	0,05	438	130	10
203	0,15	0,04	492	140	10
254	0,08	0,03	600	175	10

* Pressure and vacuum data based on +20 °C room temperature. Outside diameter and burst pressure not stated.

AIR CONDITIONING · SOURCE PAGE 33

ARTIC THERM



Very flexible

Suitable for single and double flow mechanical ventilation, for the reduction of water condensates and heat dispersion, also for air conditioning. Recommended for use in the industrial and naval construction sectors. Behaviour to fire: class 1.

Lining: Polyolefin resin film with additives. **Reinforcement:** Harmonic steel wire helix. **Cover:** Thermo-insulating cover in polyester fibre (thickness 25 mm / 16 kg/m³). Outer anti-steam protection in polyolefin resins with additives. **Working temperature:** -20 °C / +90 °C, with peaks up to +110 °C

a Inside diameter mm	Air flow m ³ /h at 8 m/s	Load loss Pa at 8 m/s	Air flow m ³ /h at 10 m/s	Load loss Pa at 10 m/s	Coil length m
80	152	1	190	31	10
102	250	15	333	24	10
127	383	12	368	18	10
160	575	8	773	14	10
203	900	6,5	1151	10,5	10
254	1445	4,7	1843	7,5	10
318	2278	3,7	3105	6	10
356	3058	3	3850	5,2	10
406	3845	2,7	4590	4,4	10
508	5111	2	8223	3	10

Example of calculation of flow rates and pressure drop at air speeds of 8 m/s and 10 m/s. To calculate the flow and pressure drop of other diameters, request the manufacturer's pressure drop diagram.

Sati cable protection

SATIHOSE MARINE — CABLE PROTECTION · FULL SIZE TABLES

CABLE PROTECTION · SOURCE PAGE 34

PROTECH/SIL



Heat resistant

Used to insulate steam tracer lines in oil refineries, as thermal and electrical insulation for the wire and cable industry, in glass manufacturing, for covering tines in metal refining, foundries and steel mills, and wherever else a high temperature barrier might be required.

Lining: Protech/SIL is a braided sleeving manufactured from E-fibreglass yarn. **Cover:** Silicone. Outer layer: smooth, red colour.

Standards: R.I.N.A approved according to ISO 15540:199(E) and ISO 15541-199 (E) – UL 1441 VW-1 **Working temperature:** +260 °C

a Inside diameter mm	Fibreglass mm	Silicone mm	Coil length m
10	2,5	1,0	20
12	2,5	1,0	20
15	2,5	1,0	20
20	2,5	1,0	20
25	2,5	1,0	20
30	2,5	1,0	20
35	2,5	1,0	20
38	2,5	1,0	20
40	2,5	1,0	20
42,5	2,5	1,0	20
45	2,5	1,0	15

Weight not stated by the manufacturer.

a Inside diameter mm	Fibreglass mm	Silicone mm	Coil length m
50	2,5	1,0	15
60	2,5	1,0	15
65	2,5	1,0	15
70	2,5	1,0	15
75	2,5	1,0	15
80	2,5	1,0	15
85	2,5	1,0	15
90	2,5	1,0	15
100	2,5	1,0	15
115	2,5	1,0	15
125	2,5	1,0	15

CABLE PROTECTION · SOURCE PAGE 35

HELIPOLEN



Extra light · Extra flexible

Used as a protective conduit for other hoses and for air conveyance. Polypropylene hose, corrugated surface.

Standards: ISO 1307 **Working temperature:** -5 °C / +100 °C

a Inside diameter mm	Outside diameter mm	Weight g/m	Bending radius mm	Coil length m
10,4*	13,4	22	13	50
11,4*	15,1	25	15	50
14,4*	18,1	35	18	50
17*	21,2	40	21	50
20	24,5	50	24	50
26,5	30,5	69	30	50
28	32,2	74	32	50
30,5	35	85	35	50
35*	40,5	100	40	50

* Diameters available on request.

a Inside diameter mm	Outside diameter mm	Weight g/m	Bending radius mm	Coil length m
40,5	47,5	110	47	50
50,5	57,8	175	57	50
61	68	225	68	50
70	78	265	78	50
80	89,5	310	89	25
90,5	99,5	350	99	25
100	110,5	410	110	25
120	129	515	129	25
140	155	650	155	25

Sati hydraulic systems & clamps & collars

SATHOSE MARINE — HYDRAULIC SYSTEMS · FULL SIZE TABLES

HYDRAULIC SYSTEMS · SOURCE PAGE 36

SAE 100 R7



Extra flexible · Ageing resistant

High pressure thermoplastic hose for hydraulic (oleodynamic) applications, especially for the nautical sector. According to EN 855:1996 – R7; ISO 3949:2004 / R7-1; SAE J517 FEB 98 100 R7.

Lining: Polyamide, resistant to solvents, paints and hydraulic oils. **Reinforcement:** High tenacity double-braided polyester yarns. **Cover:** Anti-abrasive, oil and weathering resistant polyurethane.

Marking: EUROCORDER® SAE 100 R7 1/4" **Standards:** EN 855:1996 R7, ISO 3949:2004/R7-1, SAE J517 FEB98 100R7 **Working temperature:** -40 °C / +100 °C

a Inside diameter mm	Nominal size inch	Outside diameter mm	Working pressure bar	Burst pressure bar	Weight g/m	Bending radius mm	Coil length m
5	3/16"	9,3	220	880	60	26	10/80
6,6	1/4"	12,5	215	860	100	30	10/80
8	5/16"	14,3	195	780	140	40	10/80
9,7	3/8"	16,5	187	750	170	70	10/80
13	1/2"	20,5	157	630	230	90	10/80

Column headings follow the printed values (nominal inch size and outside diameter); the manufacturer's unit labels are printed shifted. Coil length 10/80 m = supplied in 10 m or 80 m coils.

MANUFACTURER'S SYSTEM INDEX · SOURCE PAGE 4

Which hose for which system

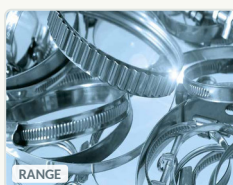


Boat system	Sati hoses for the job
Air conditioning	ARTIC THERM · ARTIC / ESP
Fuel fill line	CARBOMARINE / LN 10 · CARBO ECO · CRISTALBENZ · PRESSCORD GREEN FUEL · CARBOMARINE / SP · CARBOMARINE / SP-C · CARBOMARINE / IT · GRECATO / SP MULTIPURPOSE
Bilge pump	CORDFLEX N.T.
Sanitation discharge	SANITARI / WC ULTRAFLEX · CORDSTEEL / WC · SANIFLEX / WC† · SANISTEEL / WC
Drain line	CRISTALCORD · EPDM FQ
Water fill tank	CRISTALCORD · EPDM FQ
Food grade water line	CRISTALCORD · EPDM FQ
Multipurpose	CORDSTEEL P.L.
Deck cleaning	NEMOCORD no-twist
Wet exhaust vent	MARINGAS / SP · SILMARINE / SP
Cable protection	HELIOMPLEN · PROTECH/SIL
Hydraulic	SAE 100 R7
Sea water & hot water	EPDM / LN 10 · ACQUA CALDA 120°C · WATER INTAKE / SP · RADIATOR
Air & fume ducting	CORDFLEX AIR · THERMOCORD HL · THERMOCORD 130°C

† SANIFLEX / WC is listed in the manufacturer's index but has no specification page in this edition — ask the order desk.

SATIBLOCK®

Clamps and collars for every hose in this section



Worm-drive clamps to DIN 3017 in five material grades (STF W1 with an AISI 201 stainless band and zinc-plated housing and screw, through STF W5 in all-AISI 316), heavy-duty hinged bolt collars for large-bore exhaust and sea-water hose, MAGNUM collars to 260 mm and beyond, constant-tension and dual-bead SAE clamps for cooling circuits, stepless ear clamps, spring and wire clamps, spiral-pipe clamps for ducting, rubber-lined P-clips and the BANDI-BLOCK cut-to-length band system.

Marine specification: W4 (AISI 304) below deck; W5 (AISI 316) where the clamp is wetted by sea water or sits in the bilge. Fit two clamps on every below-waterline hose connection.

SATIBLOCK clamps & collars

SATIBLOCK — READING THE TABLES

READING THE TABLES · SOURCE PAGE 5

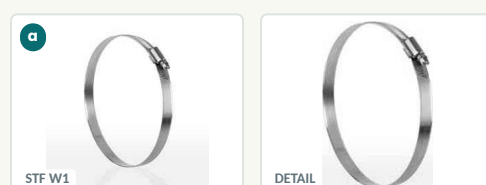
Column definitions used throughout this section



Column	Meaning
Inside diameter	Nominal bore of the hose, mm — choose to match the tail or fitting
Outside diameter	Overall diameter, mm — determines the clamp size
Working pressure	Maximum continuous pressure, bar, at 20 °C
Burst pressure	Pressure at which the hose fails on test, bar — typically 3× working pressure
Vacuum	Suction the hose withstands without collapsing, bar
Bending radius	Tightest radius the hose may be routed through without kinking, mm
Weight	Mass per metre, g/m
Coil length	Standard supplied length, m
(*) Homologated	Type-approved by RINA and Lloyd's Register for the stated application

SATIBLOCK® · DIN 3017 · AISI 201 BAND

STF W1 worm-drive hose clamps



High-resistance clamp, compact and durable. Rolled-up band edges and a smooth band underside guarantee total protection of the hose. According to DIN 3017.

Material: Band stainless steel AISI 201 · housing zinc-plated steel · screw zinc-plated steel.

Applications: General industry, agriculture, construction, irrigation.

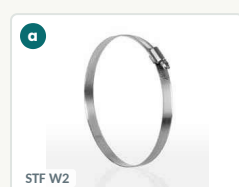
a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
W1A09008012000	9	8-12	0,8	2,6	100	W1A09090110000	9	90-110	0,8	4,0	25	W1B12070090000	12	70-90	1,0	6,5	25
W1A09010016000	9	10-16	0,8	2,6	100	W1A09100120000	9	100-120	0,8	4,0	25	W1B12080100000	12	80-100	1,0	6,5	25
W1A09012020000	9	12-20	0,8	2,6	100	W1A09110130000	9	110-130	0,8	4,0	25	W1B12090110000	12	90-110	1,0	6,5	25
W1A09016025000	9	16-25	0,8	4,0	100	W1A09120140000	9	120-140	0,8	4,0	25	W1B12100120000	12	100-120	1,0	6,5	25
W1A09016027000	9	16-27	0,8	4,0	100	W1A09130150000	9	130-150	0,8	4,0	25	W1B12110130000	12	110-130	1,0	6,5	25
W1A09020032000	9	20-32	0,8	4,0	100	W1B12016025000	12	16-25	1,0	6,5	100	W1B12120140000	12	120-140	1,0	6,5	25
W1A09025040000	9	25-40	0,8	4,0	100	W1B12016027000	12	16-27	1,0	6,5	100	W1B12130150000	12	130-150	1,0	6,5	25
W1A09035050000	9	32-50	0,8	4,0	50	W1B12020032000	12	20-32	1,0	6,5	100	W1B12140160000	12	140-160	1,0	6,5	25
W1A09040060000	9	40-60	0,8	4,0	50	W1B12025040000	12	25-40	1,0	6,5	100	W1B12150170000	12	150-170	1,0	6,5	25
W1A09050070000	9	50-70	0,8	4,0	50	W1B12035050000	12	32-50	1,0	6,5	50	W1B12160180000	12	160-180	1,0	6,5	25
W1A09060080000	9	60-80	0,8	4,0	50	W1B12040060000	12	40-60	1,0	6,5	50	W1B12170190000	12	170-190	1,0	6,5	25
W1A09070090000	9	70-90	0,8	4,0	25	W1B12050070000	12	50-70	1,0	6,5	50	W1B12180200000	12	180-200	1,0	6,5	25
W1A09080100000	9	80-100	0,8	4,0	25	W1B12060080000	12	60-80	1,0	6,5	50						

SATIBLOCK clamps & collars

SATIBLOCK — STF W2 · FULL SIZE TABLE

SATIBLOCK® · DIN 3017 · AISI 430

STF W2 worm-drive hose clamps



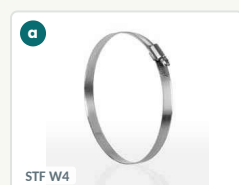
High-resistance clamp, compact and durable. Rolled-up band edges and a smooth band underside guarantee total protection of the hose. According to DIN 3017.

Material: Band stainless steel AISI 430 · housing stainless steel AISI 430 · screw zinc-plated steel. **Applications:** Agriculture, construction, irrigation, general engine bay use.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
W2A09008012000	9	8-12	0,8	2,6	100	W2A09090110000	9	90-110	0,8	4,0	25	W2B12060080000	12	60-80	1,0	6,5	50
W2A09010016000	9	10-16	0,8	2,6	100	W2A09100120000	9	100-120	0,8	4,0	25	W2B12070090000	12	70-90	1,0	6,5	25
W2A09012020000	9	12-20	0,8	2,6	100	W2A09110130000	9	110-130	0,8	4,0	25	W2B12080100000	12	80-100	1,0	6,5	25
W2A09016025000	9	16-25	0,8	4,0	100	W2A09120140000	9	120-140	0,8	4,0	25	W2B12090110000	12	90-110	1,0	6,5	25
W2A09016027000	9	16-27	0,8	4,0	100	W2A09130150000	9	130-150	0,8	4,0	25	W2B12100120000	12	100-120	1,0	6,5	25
W2A09020032000	9	20-32	0,8	4,0	100	W2B12012020000	12	12-20	1,0	6,5	100	W2B12110130000	12	110-130	1,0	6,5	25
W2A09025040000	9	25-40	0,8	4,0	100	W2B12016025000	12	16-25	1,0	6,5	100	W2B12120140000	12	120-140	1,0	6,5	25
W2A09035050000	9	32-50	0,8	4,0	50	W2B12016027000	12	16-27	1,0	6,5	100	W2B12130150000	12	130-150	1,0	6,5	25
W2A09040060000	9	40-60	0,8	4,0	50	W2B12020032000	12	20-32	1,0	6,5	100	W2B12140160000	12	140-160	1,0	6,5	25
W2A09050070000	9	50-70	0,8	4,0	50	W2B12025040000	12	25-40	1,0	6,5	100	W2B12150170000	12	150-170	1,0	6,5	25
W2A09060080000	9	60-80	0,8	4,0	50	W2B12035050000	12	32-50	1,0	6,5	50	W2B12160180000	12	160-180	1,0	6,5	25
W2A09070090000	9	70-90	0,8	4,0	25	W2B12040060000	12	40-60	1,0	6,5	50	W2B12170190000	12	170-190	1,0	6,5	25
W2A09080100000	9	80-100	0,8	4,0	25	W2B12050070000	12	50-70	1,0	6,5	50	W2B12180200000	12	180-200	1,0	6,5	25

SATIBLOCK® · DIN 3017 · AISI 304 · MARINE

STF W4 worm-drive hose clamps



High-resistance clamp, compact and durable. Rolled-up band edges and a smooth band underside guarantee total protection of the hose. According to DIN 3017. The standard marine specification below deck.

Material: Band stainless steel AISI 304 · housing stainless steel AISI 304 · screw zinc-plated steel. **Applications:** Marine, food.

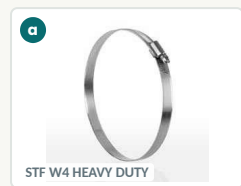
a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
W4A09008012000	9	8-12	0,8	2,6	100	W4A09090110000	9	90-110	0,8	4,0	25	W4B12060080000	12	60-80	1,0	6,5	50
W4A09010016000	9	10-16	0,8	2,6	100	W4A09100120000	9	100-120	0,8	4,0	25	W4B12070090000	12	70-90	1,0	6,5	25
W4A09012020000	9	12-20	0,8	2,6	100	W4A09110130000	9	110-130	0,8	4,0	25	W4B12080100000	12	80-100	1,0	6,5	25
W4A09016025000	9	16-25	0,8	4,0	100	W4A09120140000	9	120-140	0,8	4,0	25	W4B12090110000	12	90-110	1,0	6,5	25
W4A09016027000	9	16-27	0,8	4,0	100	W4A09130150000	9	130-150	0,8	4,0	25	W4B12100120000	12	100-120	1,0	6,5	25
W4A09020032000	9	20-32	0,8	4,0	100	W4B12012020000	12	12-20	1,0	6,5	100	W4B12110130000	12	110-130	1,0	6,5	25
W4A09025040000	9	25-40	0,8	4,0	100	W4B12016025000	12	16-25	1,0	6,5	100	W4B12120140000	12	120-140	1,0	6,5	25
W4A09035050000	9	32-50	0,8	4,0	50	W4B12016027000	12	16-27	1,0	6,5	100	W4B12130150000	12	130-150	1,0	6,5	25
W4A09040060000	9	40-60	0,8	4,0	50	W4B12020032000	12	20-32	1,0	6,5	100	W4B12140160000	12	140-160	1,0	6,5	25
W4A09050070000	9	50-70	0,8	4,0	50	W4B12025040000	12	25-40	1,0	6,5	100	W4B12150170000	12	150-170	1,0	6,5	25
W4A09060080000	9	60-80	0,8	4,0	50	W4B12035050000	12	32-50	1,0	6,5	50	W4B12160180000	12	160-180	1,0	6,5	25
W4A09070090000	9	70-90	0,8	4,0	25	W4B12040060000	12	40-60	1,0	6,5	50	W4B12170190000	12	170-190	1,0	6,5	25
W4A09080100000	9	80-100	0,8	4,0	25	W4B12050070000	12	50-70	1,0	6,5	50	W4B12180200000	12	180-200	1,0	6,5	25

SATIBLOCK clamps & collars

SATIBLOCK — STF W4 HEAVY DUTY · FULL SIZE TABLE

SATIBLOCK® · DIN 3017 · ALL AISI 304

STF W4 Heavy Duty hose clamps



High-resistance clamp, compact and durable. Rolled-up band edges and a smooth band underside guarantee total protection of the hose. According to DIN 3017. All-stainless construction including the screw. **Note:** the manufacturer's catalogue prints the same article codes for STF W4 and STF W4 Heavy Duty — state "Heavy Duty" on the order.

Material: Band, housing and screw all stainless steel AISI 304. **Applications:** Marine, food.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
W4A09008012000	9	8-12	0,8	2,6	100	W4A09090110000	9	90-110	0,8	4,0	25	W4B12060080000	12	60-80	1,0	6,5	50
W4A09010016000	9	10-16	0,8	2,6	100	W4A09100120000	9	100-120	0,8	4,0	25	W4B12070090000	12	70-90	1,0	6,5	25
W4A09012020000	9	12-20	0,8	2,6	100	W4A09110130000	9	110-130	0,8	4,0	25	W4B12080100000	12	80-100	1,0	6,5	25
W4A09016025000	9	16-25	0,8	4,0	100	W4A09120140000	9	120-140	0,8	4,0	25	W4B12090110000	12	90-110	1,0	6,5	25
W4A09016027000	9	16-27	0,8	4,0	100	W4A09130150000	9	130-150	0,8	4,0	25	W4B12100120000	12	100-120	1,0	6,5	25
W4A09020032000	9	20-32	0,8	4,0	100	W4B12012020000	12	12-20	1,0	6,5	100	W4B12110130000	12	110-130	1,0	6,5	25
W4A09025040000	9	25-40	0,8	4,0	100	W4B12016025000	12	16-25	1,0	6,5	100	W4B12120140000	12	120-140	1,0	6,5	25
W4A09035050000	9	32-50	0,8	4,0	50	W4B12016027000	12	16-27	1,0	6,5	100	W4B12130150000	12	130-150	1,0	6,5	25
W4A09040060000	9	40-60	0,8	4,0	50	W4B12020032000	12	20-32	1,0	6,5	100	W4B12140160000	12	140-160	1,0	6,5	25
W4A09050070000	9	50-70	0,8	4,0	50	W4B12025040000	12	25-40	1,0	6,5	100	W4B12150170000	12	150-170	1,0	6,5	25
W4A09060080000	9	60-80	0,8	4,0	50	W4B12035050000	12	32-50	1,0	6,5	50	W4B12160180000	12	160-180	1,0	6,5	25
W4A09070090000	9	70-90	0,8	4,0	25	W4B12040060000	12	40-60	1,0	6,5	50	W4B12170190000	12	170-190	1,0	6,5	25
W4A09080100000	9	80-100	0,8	4,0	25	W4B12050070000	12	50-70	1,0	6,5	50	W4B12180200000	12	180-200	1,0	6,5	25

SATIBLOCK® · DIN 3017 · ALL AISI 316

STF W5 worm-drive hose clamps



High-resistance clamp, compact and durable. Rolled-up band edges and a smooth band underside guarantee total protection of the hose. According to DIN 3017. AISI 316 throughout for sea-water exposure and petrochemical service.

Material: Band, housing and screw all stainless steel AISI 316. **Applications:** Marine, petrochemical, food.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
W5A09008012000	9	8-12	0,8	2,6	100	W5A09090110000	9	90-110	0,8	4,0	25	W5B12060080000	12	60-80	1,0	6,5	50
W5A09010016000	9	10-16	0,8	2,6	100	W5A09100120000	9	100-120	0,8	4,0	25	W5B12070090000	12	70-90	1,0	6,5	25
W5A09012020000	9	12-20	0,8	2,6	100	W5A09011013000	9	110-130	0,8	4,0	25	W5B12080100000	12	80-100	1,0	6,5	25
W5A09016025000	9	16-25	0,8	4,0	100	W5A09012014000	9	120-140	0,8	4,0	25	W5B12090110000	12	90-110	1,0	6,5	25
W5A09016027000	9	16-27	0,8	4,0	100	W5A09013015000	9	130-150	0,8	4,0	25	W5B12100120000	12	100-120	1,0	6,5	25
W5A09020032000	9	20-32	0,8	4,0	100	W5B12012020000	12	12-20	1,0	6,5	100	W5B12110130000	12	110-130	1,0	6,5	25
W5A09025040000	9	25-40	0,8	4,0	100	W5B12016025000	12	16-25	1,0	6,5	100	W5B12120140000	12	120-140	1,0	6,5	25
W5A09035050000	9	32-50	0,8	4,0	50	W5B12016027000	12	16-27	1,0	6,5	100	W5B12130150000	12	130-150	1,0	6,5	25
W5A09040060000	9	40-60	0,8	4,0	50	W5B12020032000	12	20-32	1,0	6,5	100	W5B12140160000	12	140-160	1,0	6,5	25
W5A09050070000	9	50-70	0,8	4,0	50	W5B12025040000	12	25-40	1,0	6,5	100	W5B12150170000	12	150-170	1,0	6,5	25
W5A09060080000	9	60-80	0,8	4,0	50	W5B12035050000	12	32-50	1,0	6,5	50	W5B12160180000	12	160-180	1,0	6,5	25
W5A09070090000	9	70-90	0,8	4,0	25	W5B12040060000	12	40-60	1,0	6,5	50	W5B12170190000	12	170-190	1,0	6,5	25
W5A09080100000	9	80-100	0,8	4,0	25	W5B12050070000	12	50-70	1,0	6,5	50	W5B12180200000	12	180-200	1,0	6,5	25

SATIBLOCK clamps & collars

SATIBLOCK — STC W2 · FULL SIZE TABLE

SATIBLOCK® · HINGED BOLT COLLAR · AISI 430

STC W2 heavy-duty bolt collars



High-performance collars, compact and durable, particularly suited to large-diameter, very robust and rigid hose. Rolled-up band edges guarantee total protection of the hose.

Material: Band stainless steel AISI 430 · guide stainless steel AISI 430 · screw zinc-plated steel.

Applications: General industry, agriculture, construction, irrigation.

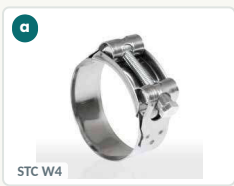
a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC221026028000	21	26-28	M6x50	10,4	50
WC221029031000	21	29-31	M6x50	10,4	50
WC221032035000	21	32-35	M6x50	10,4	50
WC221036039000	21	36-39	M6x50	10,4	50
WC221040043000	21	40-43	M6x50	10,4	50
WC221044047000	21	44-47	M6x50	10,4	50
WC221048051000	21	48-51	M6x60	10,4	50
WC221052055000	21	52-55	M6x60	10,4	50
WC221056059000	21	56-59	M6x60	10,4	50
WC221060063000	21	60-63	M6x60	10,4	50

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC221064067000	21	64-67	M6x55	10,4	50
WC224068073000	24	68-73	M8x70	24,6	25
WC224074079000	24	74-79	M8x70	24,6	25
WC224080085000	24	80-85	M8x70	24,6	25
WC224086091000	24	86-91	M8x80	24,6	25
WC224092097000	24	92-97	M8x80	24,6	25
WC224098103000	24	98-103	M8x80	24,6	25
WC224104112000	24	104-112	M8x90	24,6	25
WC224113121000	24	113-121	M8x90	24,6	25
WC224122130000	24	122-130	M8x90	24,6	25

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC226131139000	26	131-139	M10x100	50,1	20
WC226140148000	26	140-148	M10x100	50,1	20
WC226149161000	26	149-161	M10x100	50,1	20
WC226162174000	26	162-174	M10x100	50,1	20
WC226175187000	26	175-187	M10x100	50,1	10
WC226188200000	26	188-200	M10x100	50,1	10
WC226201213000	26	201-213	M10x100	50,1	10
WC226214226000	26	214-226	M10x100	50,1	10
WC226227239000	26	227-239	M10x100	50,1	10
WC226240252000	26	240-252	M10x100	50,1	10

SATIBLOCK® · HINGED BOLT COLLAR · AISI 304 · MARINE

STC W4 heavy-duty bolt collars



High-performance collars, compact and durable, particularly suited to large-diameter, very robust and rigid hose such as wet-exhaust and sea-water intake lines. Rolled-up band edges guarantee total protection of the hose.

Material: Band, guide and screw all stainless steel AISI 304. **Applications:** Marine, petrochemical, food.

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC421026028000	21	26-28	M6x50	5,9/10,4	50
WC421029031000	21	29-31	M6x50	5,9/10,4	50
WC421032035000	21	32-35	M6x50	5,9/10,4	50
WC421036039000	21	36-39	M6x50	5,9/10,4	50
WC421040043000	21	40-43	M6x50	5,9/10,4	50
WC421044047000	21	44-47	M6x50	5,9/10,4	50
WC421048051000	21	48-51	M6x60	5,9/10,4	50
WC421052055000	21	52-55	M6x60	5,9/10,4	50
WC421056059000	21	56-59	M6x60	5,9/10,4	50
WC421060063000	21	60-63	M6x60	5,9/10,4	50

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC421064067000	21	64-67	M6x60	5,9/10,4	50
WC424068073000	24	68-73	M8x70	14,5/25,5	25
WC424074079000	24	74-79	M8x70	14,5/25,5	25
WC424080085000	24	80-85	M8x70	14,5/25,5	25
WC424086091000	24	86-91	M8x80	14,5/25,5	25
WC424092097000	24	93-97	M8x80	14,5/25,5	25
WC424098103000	24	98-103	M8x80	14,5/25,5	25
WC424104112000	24	104-112	M8x90	14,5/25,5	25
WC424113121000	24	113-121	M8x90	14,5/25,5	25
WC424122130000	24	122-130	M8x90	14,5/25,5	25

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC426131139000	26	131-139	M8x100	14,5/25,5	20
WC426140148000	26	140-148	M8x100	14,5/25,5	20
WC426149161000	26	149-161	M8x100	14,5/25,5	20
WC426162174000	26	162-174	M8x100	14,5/25,5	20
WC426175187000	26	175-187	M8x100	14,5/25,5	10
WC426188200000	26	188-200	M8x100	14,5/25,5	10
WC426201213000	26	201-213	M8x100	14,5/25,5	10
WC426214226000	26	214-226	M8x100	14,5/25,5	10
WC426227239000	26	227-239	M8x100	14,5/25,5	10
WC426240252000	26	240-252	M8x100	14,5/25,5	10

SATIBLOCK clamps & collars

SATIBLOCK — STC W5 · FULL SIZE TABLE

SATIBLOCK® · HINGED BOLT COLLAR · AISI 316

STC W5 heavy-duty bolt collars



High-performance collars, compact and durable, particularly suited to large-diameter, very robust and rigid hose. Rolled-up band edges guarantee total protection of the hose. AISI 316 throughout.

Material: Band, guide and screw all stainless steel AISI 316. **Applications:** Marine, petrochemical, food.

a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	Box pcs
WC521023025000	21	23-25	M6	10	50	WC521064067000	21	64-67	M6	10	50	WC526140148000	26	140-148	M8	24	20
WC521026028000	21	26-28	M6	10	50	WC524068073000	24	68-73	M8	24	25	WC526149161000	26	149-161	M8	24	20
WC521029031000	21	29-31	M6	10	50	WC524074079000	24	74-79	M8	24	25	WC526162174000	26	162-174	M8	24	20
WC521032035000	21	32-35	M6	10	50	WC524080085000	24	80-85	M8	24	25	WC526175187000	26	175-187	M8	24	10
WC521036039000	21	36-39	M6	10	50	WC524086091000	24	86-91	M8	24	25	WC526188200000	26	188-200	M8	24	10
WC521040043000	21	40-43	M6	10	50	WC524092097000	24	92-97	M8	24	25	WC526201213000	26	201-213	M8	24	10
WC521044047000	21	44-47	M6	10	50	WC524098103000	24	98-103	M8	24	25	WC526214226000	26	214-226	M8	24	10
WC521048051000	21	48-51	M6	10	50	WC524104112000	24	104-112	M8	24	25	WC526227239000	26	227-239	M8	24	10
WC521052055000	21	52-55	M6	10	50	WC524113121000	24	113-121	M8	24	25	WC526240252000	26	240-252	M8	24	10
WC521056059000	21	56-59	M6	10	50	WC524122130000	24	122-130	M8	24	25						
WC521060063000	21	60-63	M6	10	50	WC526131139000	26	131-139	M8	24	20						

SATIBLOCK® · 26 MM BAND · AISI 430

MAGNUM W2 large-bore collars



High-performance collars, compact and durable, particularly suited to large-diameter, very robust and rigid hose. Rolled-up band edges guarantee total protection of the hose. Diameters from 245 mm upwards. Minimum order quantity applies.

Material: Band, guide and screw all stainless steel AISI 430. **Applications:** Marine, petrochemical, food.

a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs
WC2C26245260000	26	245-260	M10	24	1-10	WC2C26325340000	26	325-340	M10	24	1-10	WC2C26440455000	26	440-455	M10	24	1-10
WC2C26250265000	26	250-265	M10	24	1-10	WC2C26335350000	26	335-350	M10	24	1-10	WC2C26450465000	26	450-465	M10	24	1-10
WC2C26255270000	26	255-270	M10	24	1-10	WC2C26340355000	26	340-355	M10	24	1-10	WC2C26465480000	26	465-480	M10	24	1-10
WC2C26260275000	26	260-275	M10	24	1-10	WC2C26345360000	26	345-360	M10	24	1-10	WC2C26490505000	26	490-505	M10	24	1-10
WC2C26265280000	26	265-280	M10	24	1-10	WC2C26350365000	26	350-365	M10	24	1-10	WC2C26500515000	26	500-515	M10	24	1-10
WC2C26270285000	26	270-285	M10	24	1-10	WC2C26360375000	26	360-375	M10	24	1-10	WC2C26510525000	26	510-525	M10	24	1-10
WC2C26275290000	26	275-290	M10	24	1-10	WC2C26375390000	26	375-390	M10	24	1-10	WC2C26515530000	26	515-530	M10	24	1-10
WC2C26280295000	26	280-295	M10	24	1-10	WC2C26390405000	26	390-405	M10	24	1-10	WC2C26520535000	26	520-535	M10	24	1-10
WC2C26285300000	26	285-300	M10	24	1-10	WC2C26395410000	26	395-410	M10	24	1-10	WC2C26535550000	26	535-550	M10	24	1-10
WC2C26290305000	26	290-305	M10	24	1-10	WC2C26400415000	26	400-415	M10	24	1-10	WC2C26550565000	26	550-565	M10	24	1-10
WC2C26295310000	26	295-310	M10	24	1-10	WC2C26410425000	26	405-420	M10	24	1-10	WC2C26590605000	26	590-605	M10	24	1-10
WC2C26295310000	26	300-315	M10	24	1-10	WC2C26410425000	26	410-425	M10	24	1-10	WC2C26600615000	26	600-615	M10	24	1-10
WC2C26305320000	26	305-320	M10	24	1-10	WC2C26415430000	26	415-430	M10	24	1-10	WC2C26610625000	26	610-625	M10	24	1-10
WC2C26310325000	26	310-325	M10	24	1-10	WC2C26425440000	26	425-440	M10	24	1-10	WC2C26695710000	26	695-710	M10	24	1-10
WC2C26315330000	26	315-330	M10	24	1-10	WC2C26430445000	26	430-445	M10	24	1-10	WC2C26700715000	26	700-715	M10	24	1-10
WC2C26320335000	26	320-335	M10	24	1-10	WC2C26435450000	26	435-450	M10	24	1-10	WC2C26790805000	26	790-805	M10	24	1-10

SATIBLOCK clamps & collars

SATIBLOCK — MAGNUM W4 · FULL SIZE TABLE

SATIBLOCK® · 26 MM BAND · AISI 304 · MARINE

MAGNUM W4 large-bore collars



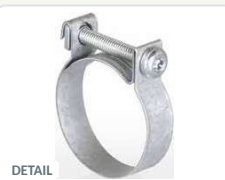
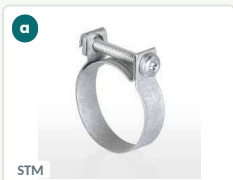
High-performance collars, compact and durable, particularly suited to large-diameter, very robust and rigid hose. Rolled-up band edges guarantee total protection of the hose. Diameters from 245 mm upwards. Minimum order quantity applies.

Material: Band, guide and screw all stainless steel AISI 304. **Applications:** Marine, food.

a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs	a Code	Band width mm	Diameter mm	Screw	Torque Nm	MOQ pcs
WC4C26245260000	26	245-260	M8	24	1-10	WC4C26325340000	26	325-340	M8	24	1-10	WC4C26440455000	26	440-455	M8	24	1-10
WC4C26250265000	26	250-265	M8	24	1-10	WC4C26335350000	26	335-350	M8	24	1-10	WC4C26450465000	26	450-465	M8	24	1-10
WC4C26255270000	26	255-270	M8	24	1-10	WC4C26340355000	26	340-355	M8	24	1-10	WC4C26465480000	26	465-480	M8	24	1-10
WC4C26260275000	26	260-275	M8	24	1-10	WC4C26345360000	26	345-360	M8	24	1-10	WC4C26490505000	26	490-505	M8	24	1-10
WC4C26265280000	26	265-280	M8	24	1-10	WC4C26350365000	26	350-365	M8	24	1-10	WC4C26500515000	26	500-515	M8	24	1-10
WC4C26270285000	26	270-285	M8	24	1-10	WC4C26360375000	26	360-375	M8	24	1-10	WC4C26510525000	26	510-525	M8	24	1-10
WC4C26275290000	26	275-290	M8	24	1-10	WC4C26375390000	26	375-390	M8	24	1-10	WC4C26515530000	26	515-530	M8	24	1-10
WC4C26280295000	26	280-295	M8	24	1-10	WC4C26390405000	26	390-405	M8	24	1-10	WC4C26520535000	26	520-535	M8	24	1-10
WC4C26285300000	26	285-300	M8	24	1-10	WC4C26395410000	26	395-410	M8	24	1-10	WC4C26535550000	26	535-550	M8	24	1-10
WC4C26290305000	26	290-305	M8	24	1-10	WC4C26400415000	26	400-415	M8	24	1-10	WC4C26550565000	26	550-565	M8	24	1-10
WC4C26295310000	26	295-310	M8	24	1-10	WC4C26410425000	26	405-420	M8	24	1-10	WC4C26590605000	26	590-605	M8	24	1-10
WC4C26295310000	26	300-315	M8	24	1-10	WC4C26410425000	26	410-425	M8	24	1-10	WC4C26600615000	26	600-615	M8	24	1-10
WC4C26305320000	26	305-320	M8	24	1-10	WC4C26415430000	26	415-430	M8	24	1-10	WC4C26610625000	26	610-625	M8	24	1-10
WC4C26310325000	26	310-325	M8	24	1-10	WC4C26425440000	26	425-440	M8	24	1-10	WC4C26695710000	26	695-710	M8	24	1-10
WC4C26315330000	26	315-330	M8	24	1-10	WC4C26430445000	26	430-445	M8	24	1-10	WC4C26700715000	26	700-715	M8	24	1-10
WC4C26320335000	26	320-335	M8	24	1-10	WC4C26435450000	26	435-450	M8	24	1-10	WC4C26790805000	26	790-805	M8	24	1-10

SATIBLOCK® · SMALL BORE · 7 MM HEX

STM mini fuel-line clamps



This clamp features rolled-up band edges that are gentle on hoses. The band tongue that fits under the hose is profiled for added strength. The hexagonal slotted screw head suits a flexible driver. Particularly suited to small-diameter, thin-wall fuel and breather lines.

Material: Band zinc-plated steel · screw zinc-plated steel / AISI 430 · 7 mm hex. **Applications:** General industry, agriculture.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
WCM007009	9	7-9	0,6	1,2	2000	WCM150000	9	14-16	0,6	1,2	3000
WCM009010	9	9-10	0,6	1,2	2000	WCM160000	9	15-17	0,6	1,2	3000
WCM100000	9	8,5-11	0,6	1,2	2000	WCM170000	9	16-18	0,6	1,2	2500
WCM110000	9	9,5-12	0,6	1,2	2000	WCM180000	9	17-19	0,6	1,2	2500
WCM120000	9	11-13	0,6	1,2	3000	WCM190000	9	18-21	0,6	1,2	2500
WCM130000	9	11,5-14	0,6	1,2	3000	WCM200000	9	19-21	0,6	1,2	2500
WCM140000	9	13-15	0,6	1,2	3000	WCM290000	9	24-29	0,6	1,2	1200

SATIBLOCK clamps & collars

SATIBLOCK — STS · FULL SIZE TABLE

SATIBLOCK® · CONVOLUTED INNER RING

STS constant-tension clamps, SAE type T



A convoluted heat-treated band provides spring-like tensioning for thermal-cycling hose applications. The clamp concentrates band-sealing pressure, increasing performance by up to 30% compared with standard smooth liners. Flanged edges protect soft hose compounds from abrasion; electropolished finish for corrosion resistance.

Material: Band stainless steel AISI 304 · housing and screw stainless steel series 300 · electropolished finish. **Applications:** General industry, agriculture, construction, marine, military.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
WTS028038	16,51	28-38	8	5,6	400
WTS030041	16,51	30-41	8	5,6	400
WTS035048	16,51	35-48	8	5,6	400
WTS040054	16,51	40-54	8	5,6	300
WTS041060	16,51	41-60	8	5,6	300
WTS046067	16,51	46-67	8	5,6	200
WTS050073	16,51	50-73	8	5,6	200
WTS057079	16,51	57-79	8	5,6	200
WTS064086	16,51	64-86	8	5,6	200
WTS070092	16,51	70-92	8	5,6	200

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
WTS076098	16,51	76-98	8	5,6	200
WTS083105	16,51	83-105	8	5,6	200
WTS089111	16,51	89-111	8	5,6	200
WTS095118	16,51	95-118	8	5,6	200
WTS108130	16,51	108-130	8	5,6	200
WTS121143	16,51	121-143	8	5,6	100
WTS146148	16,51	146-168	8	5,6	100
WTS159181	16,51	159-181	8	5,6	100
WTS184206	16,51	184-206	8	5,6	100

SATIBLOCK® · INNER SHIELD · COOLANT LINES

SDB dual-bead clamps, SAE type F



For air-to-air and coolant applications. The inner shield provides superb sealing characteristics and is safe for all soft hoses, creating an O-ring effect between clamp, hose and tail. Also used in the marine, agriculture, construction and off-highway markets.

Material: Band stainless steel AISI 304 · housing and screw stainless steel series 300. **Applications:** General industry, agriculture, construction.

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
WDB015034	16,51	15,9-34,9	8	3,4-4,5	400
WDB017041	16,51	17,5-41,4	8	3,4-4,5	400
WDB023047	16,51	23,8-47,6	8	3,4-4,5	400
WDB030054	16,51	30,2-54,0	8	3,4-4,5	400
WDB036060	16,51	36,5-60,3	8	3,4-4,5	300
WDB042066	16,51	42,9-66,7	8	3,4-4,5	300
WDB049073	16,51	49,2-73,0	8	3,4-4,5	300

a Code	Band width mm	Diameter mm	Thickness mm	Torque Nm	Box pcs
WDB055079	16,51	55,6-79,4	8	3,4-4,5	300
WDB061085	16,51	61,9-85,7	8	3,4-4,5	300
WDB068092	16,51	68,3-92,1	8	3,4-4,5	300
WDB074098	16,51	74,6-98,4	8	3,4-4,5	200
WDB087111	16,51	87,3-111,1	8	3,4-4,5	200
WDB100123	16,51	100,0-123,8	8	3,4-4,5	200
WDB112136	16,51	112,7-136,5	8	3,4-4,5	200

SATIBLOCK clamps & collars

SATIBLOCK — SGT · FULL SIZE TABLE

SATIBLOCK® · 360° SEAMLESS · AISI 304

SGT stepless ear clamps



These clamps offer 360° seamless fastening. The seamless design and uniform compression sealing eliminate leak paths, and they are quick to fit with pincers. Manufactured in 304 stainless steel and ideal for poly and braided tubing, fuel lines, beverage and medical lines.

Material: Stainless steel AISI 304. **Applications:** Marine, petrochemical, food, beverage.

a Code	Band width mm	Diameter mm	Thickness mm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Box pcs	a Code	Band width mm	Diameter mm	Thickness mm	Box pcs
WGT05070	5	5,8-7,0	0,48	2500	WGT07145	7	12,0-14,5	0,56	2500	WGT07256	7	22,4-25,6	0,56	On demand
WGT05080	5	6,8-8,0	0,48	2500	WGT07148	7	12,3-14,8	0,56	2500	WGT07271	7	23,9-27,1	0,56	On demand
WGT05087	5	7,0-8,7	0,48	2500	WGT07153	7	12,8-15,3	0,56	2500	WGT07286	7	25,4-28,6	0,56	On demand
WGT05090	5	7,3-9,0	0,48	2500	WGT07157	7	13,2-15,7	0,56	2500	WGT07301	7	26,9-30,1	0,56	On demand
WGT05095	5	7,8-9,5	0,48	2500	WGT07162	7	13,7-16,2	0,56	2500	WGT07308	7	27,6-30,8	0,56	On demand
WGT05100	5	8,3-10,0	0,48	2500	WGT07164	7	13,9-16,4	0,56	2500	WGT07316	7	28,4-31,6	0,56	On demand
WGT05105	5	8,8-10,5	0,48	2500	WGT07170	7	14,5-17,0	0,56	2500	WGT07331	7	29,9-33,1	0,56	On demand
WGT05109	5	9,2-10,9	0,48	2500	WGT07180	7	15,5-18,0	0,56	2500	WGT07346	7	31,4-34,6	0,56	On demand
WGT05113	5	9,6-11,3	0,48	2500	WGT07185	7	16,0-18,5	0,56	2500	WGT07361	7	32,9-36,1	0,56	On demand
WGT05118	5	10,1-11,8	0,48	2500	WGT07192	7	16,0-19,2	0,56	On demand	WGT07376	7	34,4-37,6	0,56	On demand
WGT07123	7	9,8-12,3	0,56	2500	WGT07198	7	16,6-19,8	0,56	On demand	WGT07381	7	34,9-38,1	0,56	On demand
WGT07128	7	10,3-12,8	0,56	2500	WGT07210	7	17,8-21,0	0,56	On demand	WGT07396	7	36,4-39,6	0,56	On demand
WGT07133	7	10,8-13,3	0,56	2500	WGT07226	7	19,4-22,6	0,56	On demand	WGT07410	7	37,8-41,0	0,56	On demand
WGT07138	7	11,3-13,8	0,56	2500	WGT07235	7	20,3-23,5	0,56	On demand	WGT07455	7	42,3-45,5	0,56	On demand
WGT07140	7	11,5-14,0	0,56	2500	WGT07241	7	20,9-24,1	0,56	On demand					

MATERIAL DATA · SOURCE PAGE 54

Stainless band — physical & mechanical properties



Property (W2 grade stainless band)	Value
Structure	Ferritic
Breaking load Rp 0,2 (N/mm ²) min	280
Breaking load Rm (N/mm ²) min	450–600
Elasticity in tension at 20 °C (kN/mm ²)	220
Elongation, min	20%
Coefficient of thermal expansion, 20–200 °C	10
Thermal conductivity at 20 °C (W/m-K)	25
Corrosion resistance PREN*	16.00–18.00
Working temperature	–80 °C to 538 °C
Flammability	Fireproof
Electromagnetic properties	Magnetic
Other	UV resistant
Salt-spray corrosion (min. h)	72 h

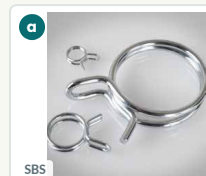
Physical and mechanical properties as published by the manufacturer for the W2 band material used in SSS spiral-pipe clamps; * PREN = pitting resistance equivalent number.

SATIBLOCK clamps & collars

SATIBLOCK — SBS · FULL SIZE TABLE

SATIBLOCK® · ZINC-PLATED WIRE

SBS double-wire spring clamps



SBS



DETAIL

Clamps made from double zinc-plated steel wire; the elasticity of the wire compensates small diameter variations. Recommended on very thin-wall hose and for light-duty sealing. Use hose tails with sufficient barb to resist the clamp load and prevent hose pull-off.

Material: Double zinc-plated steel wire. **Applications:** General industry.

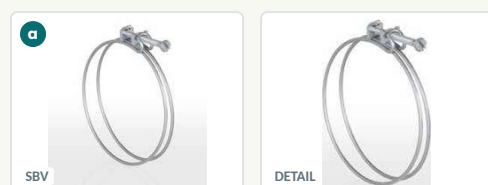
a Code	Diameter mm	Wire ø mm	Large box pcs	Medium box pcs	Small box pcs	a Code	Diameter mm	Wire ø mm	Large box pcs	Medium box pcs	Small box pcs	a Code	Diameter mm	Wire ø mm	Large box pcs	Medium box pcs	Small box pcs
WBS056007	6,6-7	1,0	25000	8300	2500	WBS154162	15,4-16,2	1,8	3000	1000	300	WBS332348	33,2-34,8	2,8	450	200	100
WBS070075	7-7,5	1,0	20000	8300	2000	WBS159168	15,9-16,8	1,8	3000	1000	300	WBS339357	33,9-35,7	2,8	500	200	100
WBS073078	7,3-7,8	1,0	20000	8300	2000	WBS168177	16,8-17,7	1,8	3000	1000	300	WBS346364	34,6-36,4	3,0	450	200	100
WBS078083	7,8-8,3	1,0	20000	8300	2000	WBS177187	17,7-18,7	1,9	2200	700	200	WBS362380	36,2-38	3,0	450	200	100
WBS083088	8,3-8,8	1,0	12000	6600	1200	WBS187195	18,7-19,5	2,0	2000	700	200	WBS377397	37,7-39,7	3,2	400	200	100
WBS088093	8,8-9,3	1,0	15000	5000	1500	WBS196205	19,6-20,5	2,0	1500	700	200	WBS385405	38,5-40,5	3,2	400	200	100
WBS093098	9,3-9,8	1,0	15000	5000	1500	WBS206216	20,6-21,6	2,0	1500	700	200	WBS389408	38,9-40,8	3,2	350	-	-
WBS098104	9,8-10,4	1,2	10000	3300	1000	WBS215226	21,5-22,6	2,2	1300	500	100	WBS394414	39,4-41,4	3,2	350	-	-
WBS104110	10,4-11	1,2	10000	3300	1000	WBS220231	22,0-23,1	2,2	1300	500	100	WBS407423	40,7-42,3	3,2	350	-	-
WBS110116	11-11,6	1,2	9000	3300	900	WBS224236	22,4-23,6	2,2	1200	400	100	WBS410432	41-43,2	3,2	300	-	-
WBS116122	11,6-12,2	1,5	6000	2000	600	WBS235247	23,5-24,7	2,2	1200	400	100	WBS428450	42,8-45	3,2	300	-	-
WBS122129	12,2-12,9	1,5	5000	2000	500	WBS245258	24,5-25,8	2,5	1000	300	100	WBS446468	44,6-46,8	3,2	300	-	-
WBS124131	12,4-13,10	1,2	7000	2000	700	WBS251264	25,1-26,4	2,5	900	300	100	WBS465489	46,5-48,9	3,2	300	-	-
WBS129136	12,9-13,6	1,5	4500	2000	400	WBS256269	25,6-26,9	2,5	800	300	100	WBS488509	48,8-50,9	3,5	200	-	-
WBS133141	13,3-14,1	1,5	4000	1300	400	WBS267281	26,7-28,1	2,5	750	250	100	WBS506532	50,6-53,2	3,5	200	-	-
WBS136144	13,6-14,4	1,5	4000	1300	400	WBS279294	27,9-29,4	2,5	750	250	100	WBS527554	52,7-55,4	3,5	200	-	-
WBS144151	14,4-15,10	1,8	3000	1300	300	WBS293309	29,3-30,9	2,8	750	200	100	WBS560588	56-58,8	3,5	150	-	-
WBS148159	14,8-15,9	1,6	3500	1300	300	WBS304320	30,4-32	2,8	500	200	100	WBS582610	58,2-61	3,5	150	-	-
WBS151159	15,10-15,9	1,8	3000	1000	300	WBS318334	31,8-33,4	2,8	500	200	100						

SATIBLOCK clamps & collars

SATIBLOCK — SBV · FULL SIZE TABLE

SATIBLOCK® · FOR SPIRAL-REINFORCED HOSE

SBV double-wire screw clamps



Recommended for hoses with spirals in relief. Made from double zinc-plated steel wire, they give optimal clamping even on soft, thin-wall hose. Larger sizes on demand.

Material: Zinc-plated steel. **Applications:** General industry.

a Code	Diameter mm	Thickness mm	Screw	Box pcs	a Code	Diameter mm	Thickness mm	Screw	Box pcs	a Code	Diameter mm	Thickness mm	Screw	Box pcs
WBV012000	9,5-12	1,5	M3	2500	WBV035000	30,5-35	2,2	M4	1000	WBV100000	92-100	3,0	M6	On demand
WBV013000	10,5-13	1,5	M3	2500	WBV037000	33-37	2,2	M4	1000	WBV104000	95-104	3,0	M6	On demand
WBV014000	11,5-14	1,5	M3	2500	WBV040000	35,5-40	2,2	M4	800	WBV108000	98-108	3,0	M6	On demand
WBV015000	12,5-15	1,5	M3	2500	WBV043000	38,5-43	2,2	M4	800	WBV112000	103-112	3,0	M6	On demand
WBV016000	13-16	1,8	M3	3000	WBV046000	41-46	2,5	M5	500	WBV116000	109-116	3,0	M6	On demand
WBV017000	13,5-17	1,8	M3	3000	WBV049000	43,5-49	2,5	M5	500	WBV120000	111-120	3,0	M6	On demand
WBV018000	15-18	1,8	M3	3000	WBV053000	46,5-53	2,5	M5	400	WBV124000	115-124	3,0	M6	On demand
WBV019000	15,5-19	1,8	M3	2500	WBV056000	50,5-56	2,5	M5	400	WBV128000	120-128	3,0	M6	On demand
WBV020000	17-20	1,8	M3	2500	WBV060000	53,5-60	2,5	M6	400	WBV132000	124-132	3,0	M6	On demand
WBV021000	17,5-21	1,8	M3	2000	WBV064000	56,5-64	2,8	M6	On demand	WBV140000	125-140	3,0	M6	On demand
WBV022000	18,5-22	2,0	M4	1500	WBV068000	60-68	2,8	M6	On demand	WBV150000	134-150	3,0	M6	On demand
WBV023000	19-23	2,0	M4	1500	WBV072000	64-72	2,8	M6	On demand	WBV160000	145-160	3,0	M6	On demand
WBV025000	21,5-25	2,0	M4	1500	WBV076000	68,5-76	2,8	M6	On demand	WBV165000	150-165	3,0	M6	On demand
WBV027000	23,5-27	2,2	M4	1500	WBV080000	72,5-80	3,0	M6	On demand	WBV170000	155-170	3,0	M6	On demand
WBV029000	25-29	2,2	M4	1000	WBV084000	76,5-84	3,0	M6	On demand	WBV180000	165-180	3,0	M6	On demand
WBV031000	27-31	2,2	M4	1000	WBV088000	80-88	3,0	M6	On demand	WBV190000	175-190	3,0	M6	On demand
WBV033000	29-33	2,2	M4	1000	WBV096000	88-96	3,0	M6	On demand					

SATIBLOCK® · ANTI-VIBRATION · EPDM LINED

SCG rubber-lined P-clips, DIN 3016 W1



Reinforcement band and strip in shaped galvanized steel, coated with anti-vibration EPDM rubber to protect the cables or pipes carried and absorb vibration. Band reinforced at the fixing hole.

Manufactured according to DIN 3016.

Material: Band zinc-plated steel · coating EPDM rubber. **Applications:** General industry, agriculture, marine.

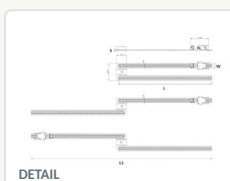
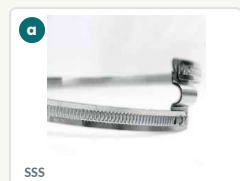
a Code	Diameter mm	Fixing hole mm	Thickness mm	Box pcs	a Code	Diameter mm	Fixing hole mm	Thickness mm	Box pcs	a Code	Diameter mm	Fixing hole mm	Thickness mm	Box pcs
WCGC115006	6	6,4	0,6	100	WCGC115040	40	6,4	0,8	100	WCGC120032	32	8,4	1,0	50
WCGC115008	8	6,4	0,6	100	WCGC120010	10	8,4	0,8	50	WCGC120034	34	8,4	1,0	50
WCGC115010	10	6,4	0,6	100	WCGC120011	11	8,4	0,8	50	WCGC120035	35	8,4	1,0	50
WCGC115012	12	6,4	0,6	100	WCGC120012	12	8,4	0,8	50	WCGC120036	36	8,4	1,0	50
WCGC115014	14	6,4	0,6	100	WCGC120013	13	8,4	0,8	50	WCGC120038	38	8,4	1,0	50
WCGC115015	15	6,4	0,8	100	WCGC120014	14	8,4	0,8	50	WCGC120040	40	8,4	1,0	50
WCGC115016	16	6,4	0,8	100	WCGC120015	15	8,4	0,8	50	WCGC120042	42	8,4	1,0	50
WCGC115018	18	6,4	0,8	100	WCGC120016	16	8,4	0,8	50	WCGC120044	44	8,4	1,0	50
WCGC115020	20	6,4	0,8	100	WCGC120017	17	8,4	0,8	50	WCGC120046	46	8,4	1,0	50
WCGC115022	22	6,4	0,8	100	WCGC120018	18	8,4	0,8	50	WCGC120048	48	8,4	1,0	50
WCGC115024	24	6,4	0,8	100	WCGC120020	20	8,4	0,8	50	WCGC120050	50	8,4	1,0	50
WCGC115025	25	6,4	0,8	100	WCGC120022	22	8,4	0,8	50	WCGC120052	52	8,4	1,0	50
WCGC115028	28	6,4	0,8	100	WCGC120024	24	8,4	0,8	50	WCGC120054	54	8,4	1,0	50
WCGC115030	30	6,4	0,8	100	WCGC120025	25	8,4	0,8	50	WCGC120056	56	8,4	1,0	50
WCGC115032	32	6,4	0,8	100	WCGC120026	26	8,4	1,0	50	WCGC120058	58	8,4	1,0	50
WCGC115035	35	6,4	0,8	100	WCGC120028	28	8,4	1,0	50	WCGC120060	60	8,4	1,0	50
WCGC115038	38	6,4	0,8	100	WCGC120030	30	8,4	1,0	50	WCGC120062	62	8,4	1,0	50

SATIBLOCK clamps & collars

SATIBLOCK — SSS • FULL SIZE TABLE

SATIBLOCK® • FOR SPIRAL DUCTING • LEFT / RIGHT HAND

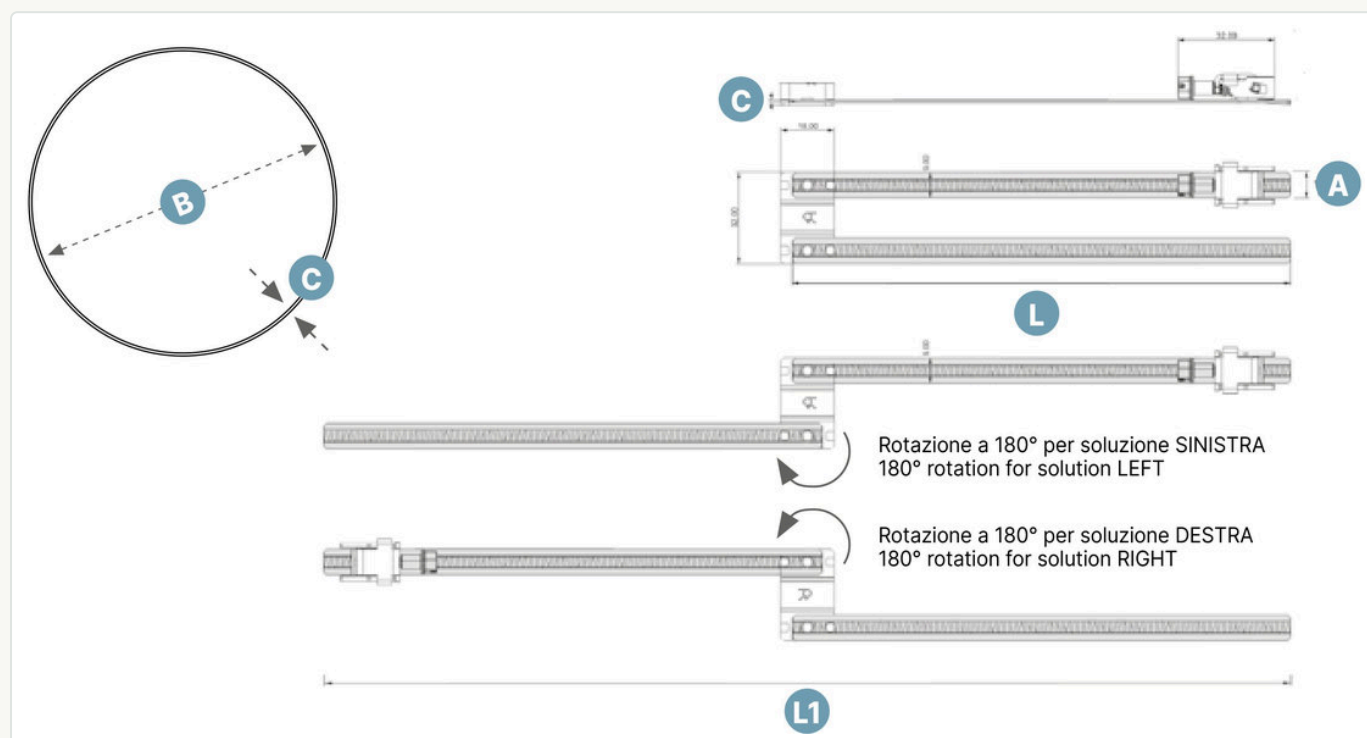
SSS spiral-pipe clamps



Revolutionary clamp for tightening spiral-reinforced hose: thanks to the patented system it can be used for both right-hand and left-hand spirals — rotating the central pin of the bridge through 180° sets the band for either hand. The knurled band along its whole length covers a wide range of diameters, drastically reducing the number of codes held in stock, and the absence of welding guarantees excellent tightening-torque performance.

Material: Band stainless steel AISI 430 • housing stainless steel AISI 430 • screw zinc-plated steel.

Applications: General industry, agriculture, construction, food; ducting and fume extraction on board.



Dimensions A (band width), B (diameter), C (thickness), L (closed length) and L1 (open length) as tabulated below; the bridge rotates 180° for left- or right-hand spiral.

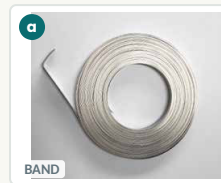
a Code	Band width mm	Diameter mm	Thickness mm	Length mm	Torque Nm	Box pcs
WSS06013500000	9,0	60 - 135	0,6	211 - 425	3,5	25
WSS10017500000	9,0	100-175	0,6	274 - 550	3,5	25
WSS12522500000	9,0	125-225	0,6	355 - 710	3,5	25
WSS15828500000	9,0	158 - 285	0,6	450 - 900	3,5	25
WSS17531500000	9,0	175 - 315	0,6	500 - 1000	3,5	25
WSS19535000000	9,0	195 - 350	0,6	550 - 1100	3,5	25
WSS21338500000	9,0	213 - 385	0,6	610 - 1220	3,5	25
WSS24043500000	9,0	240 - 435	0,6	700 - 1400	3,5	25
WSS27048500000	9,0	270 - 485	0,6	775 - 1550	3,5	25
WSS29553500000	9,0	295 - 535	0,6	850 - 1700	3,5	25

SATIBLOCK bands & buckles

SATIBLOCK — BANDI-BLOCK CUT-TO-LENGTH SYSTEM

SATIBLOCK® · BANDI-BLOCK SYSTEM

SNA bands, SNG buckles & SNU tool



SNA bands — austenitic stainless steel band in 30 m rolls, packed in a stout cardboard box. Cut to length on the job and closed with an SNG buckle for a clamp of any diameter.

SNG buckles — austenitic stainless steel, packed 100 per box; match the buckle grade to the band grade.

a Code	Material	Width mm	Thick. mm	Break. kg	Roll m	kg
WNA095201	AISI 201	9,50	0,65	410	30	1,5
WNA127201	AISI 201	12,70	0,75	680	30	2,3
WNA158201	AISI 201	15,80	0,75	850	30	2,9
WNA195201	AISI 201	19,05	0,75	1020	30	3,5
WNA095304	AISI 304	9,50	0,65	390	30	1,5
WNA127304	AISI 304	12,70	0,75	500	30	2,3

b Code	Material	Width mm	For band	Break. kg	Box	kg
WNG095304	AISI 304	9,50	AISI 201	390	100	0,5
WNG127304	AISI 304	12,70	AISI 201	500	100	1,0
WNG158304	AISI 304	15,80	AISI 201	650	100	1,3
WNG195304	AISI 304	19,05	AISI 201	950	100	1,6

a Code	Material	Width mm	Thick. mm	Break. kg	Roll m	kg
WNA158304	AISI 304	15,80	0,75	650	30	2,9
WNA195304	AISI 304	19,05	0,75	950	30	3,5
WNA095316	AISI 316	9,50	0,65	340	30	1,5
WNA127316	AISI 316	12,70	0,75	540	30	2,3
WNA158316	AISI 316	15,80	0,75	680	30	2,9
WNA195316	AISI 316	19,05	0,75	820	30	3,5

b Code	Material	Width mm	For band	Break. kg	Box	kg
WNG095316	AISI 316	9,50	AISI 316	340	100	0,5
WNG127316	AISI 316	12,70	AISI 316	540	100	1,0
WNG158316	AISI 316	15,80	AISI 316	680	100	1,3
WNG195316	AISI 316	19,05	AISI 316	820	100	1,6

SNU tool — the BANDI-BLOCK hand tool carries out the complete installation: tensioning the band, locking the buckle and cutting off the excess. One tool serves all three band grades.

Code	For band	Box pcs	Weight kg
WNU001	AISI 201 · AISI 304 · AISI 316	1	2,0

SATIBLOCK® · MARINE SPECIFICATION GUIDE

Which clamp for which hose



System	Recommended SATIBLOCK clamp
Fuel lines below deck	STF W4 worm-drive (AISI 304) · two per joint · SGT stepless on small-bore breather lines
Sea-water intake & strainer lines	STF W5 (AISI 316) or STC W5 collars · two per joint below the waterline
Wet exhaust	STC W4 / W5 hinged bolt collars sized from the exhaust table · MAGNUM W4 above 245 mm
Sanitation & waste	STF W4 · W5 where the bilge is wet
Hot water & heating	STS constant-tension for thermal cycling · SDB dual-bead on soft coolant hose
Ducting & fume extraction	SSS spiral-pipe clamps on spiral-reinforced duct
Spiral-reinforced suction hose	SBV double-wire screw clamps
Cable runs & pipe support	SCG rubber-lined P-clips, DIN 3016
Any diameter, on site	SNA band cut to length + SNG buckle