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JABSCO.

# AMAZON
## MANUAL BILGE PUMPS

**Universal**
(Through Deck or on Deck mounting)

Thrudeck

Bulkhead

Warrior

Bilge Strainers

In-line Non-Return Valves

## Jabsco Marine Products

# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

## MODELS

### PUMPS

- **29240-0000** Bulkhead pump, c/w detachable handle
- **29250-0000** Thrudeck pump, c/w detachable handle and through deck kit
- **29270-0000** Universal pump, c/w detachable handle and one push-fit elbow
- **29280-0000** Warrior pump, c/w detachable handle

### OPTIONS

- **29279-0000** Through deck kit (for Universal and Warrior only)
- **29289-0000** Under deck bracket (required for Warrior when used with through deck kit)
- **29266-1000** Additional push-fit elbow (for Universal only)

### ACCESSORIES

- **29290-0020** Bilge strainer for 19mm (3/4") id hose
- **29290-0000** Bilge strainer for 25mm (1") id hose
- **29290-0010** Bilge strainer for 38mm (1 1/2") id hose
- **29295-0011** In-line non-return valve for 19mm (3/4") id hose
- **29295-0000** In-line non-return valve for 25mm (1") id hose
- **29295-0010** In-line non-return valve for 38mm (1 1/2") id hose

## APPLICATIONS

The Amazon range of pumps is primarily designed to evacuate standing bilge water.

**CAUTION: Amazon pumps are not designed to keep pace with water flowing in through a hole in the vessel's structure.**

Actual performance varies according to the individual installation and the pumping rate of the user.

The Amazon Universal and Warrior models are also suitable for discharging toilet waste from holding tanks.

**CAUTION: Amazon pumps are designed specifically for use as bilge pumps and toilet waste disposal pumps. Consult ITT Industries-Jabsco for advice about all other possible applications. Do not use Amazon pumps to transfer petrol, petroleum products, acids, chemicals or caustic liquids.**

# INSTALLATION INSTRUCTIONS

## INTRODUCTION

An Amazon pump will become an integral part of your bilge pumping system. Correct installation of the whole system is essential if you want the pump to perform properly, operate reliably and safely, and to give satisfactory length of life.

## 1 LOCATION

Your pump is delivered ready for installation, but all Amazon pumps can be adapted by the installer to suit different types of location.

- Select a location that allows you to pump comfortably for long periods of time, preferably with the handle rocking vertically towards and away from you at waist height.
- Ensure that there is sufficient clearance for you to use the full stroke of the handle without injury to your hands and arms.
- You must be able to get easy access to the pump chamber and both inlet and outlet valves in the event of a blockage occurring.
- For safety, locate the pump - whether above or below decks - where you can operate it with all hatches and lockers fully closed.

## 2 MOUNTING

For all models, except the Thrudeck, you will need the appropriate number, type, diameter and length of bolts, complete with nuts and washers, to mount the unit on the deck. All should be in marine grade stainless steel or bronze, and a small tube of silicone sealant will be required to seal the bolts where they pass through the deck.

- The mounting surface must be flat and sufficiently strong so that it does not flex when you are pumping hard.

## 3 THROUGH HULL FITTING

If you are installing the pump as a bilge pump you will need either a 25mm (1") id or 38mm (1½") id through hull fitting, according to the particular model of pump.

- Follow the through hull fitting manufacturer's own instructions concerning materials and methods of installation.
- Ensure that the through hull fitting will be above the waterline at all times, whether the craft is at rest or underway, or heeling, rolling or pitching.

## 4 SUCTION INLET

The suction inlet must be located in the deepest part of the bilges.

- To minimise the risk of a blockage you should fit an Amazon Strainer.
- You must be able to get easy access to the suction inlet point in the event of a blockage occurring.
- To maximise the efficiency of the pump you should have a non-return valve close to the suction inlet. This prevents the water that you have just lifted up the hose from falling back into the bilge. (Amazon Bilge Strainers incorporate a non-return valve). If, for any reason, you do not want to fit a strainer you should fit an Amazon in-line, non-return valve as close to the suction inlet as possible.

## 5 PIPEWORK

You will need spiral reinforced smooth bore flexible hose for both the inlet and outlet pipework, and a stainless steel wormdrive hose clip for every hosetail connection (4 or more).

- To maximise the efficiency of the pump ensure that the outlet hose rises at least 30cm (12") after it leaves the pump. This prevents the pump from sucking in air through the outlet hose.
- Avoid sharp bends in the pipework that may cause the hose to become kinked.
- Keep all pipework lengths as short as possible. Unnecessary inlet or outlet hose length makes the pump harder to operate.
- Secure the pipework so that the hoses cannot move and chafe, and so that they do not exert any leverage on the hose tail fittings to which they are connected.
- If it is difficult to fit the hose onto any hosetails, soften the hose by dipping the end of it in hot water.

**CAUTION: Do NOT apply flame to the hoses. Do NOT apply flame or heat to any plastic hosetails.**
**Do NOT apply sealing compounds to any hose connections.**

- Secure the ends of all hoses to the hosetails with stainless steel wormdrive hoseclips, ensuring that all inlet connections are airtight and that all outlet connections are watertight.

## 6 HANDLE

Store the handle close to the pump in spring clips.

- Using the hole provided in the stainless steel handle, secure it with a lanyard to the mounting surface of the pump.

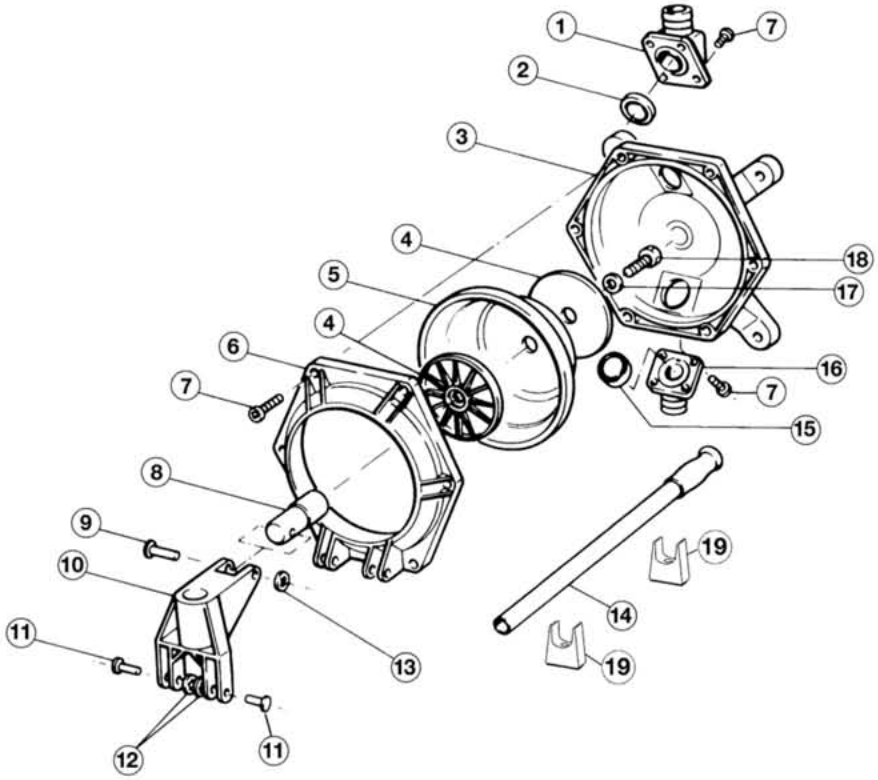
# OPERATING INSTRUCTIONS

Amazon pumps are simple to operate.

- If your pump is installed through the deck, first swing the white lid of the deck cover through 180° and snap it into its open position.
- Then just insert the end of the pump handle into the socket on the rocker arm, and move the handle backwards and forwards.
- For maximum efficiency, use even strokes through the full arc of travel of the handle.
- Expect the pump to prime and begin to discharge after a few strokes.
- After use, remove the handle and return it to its storage position.
- Close the white lid of the deck cover.

# EXPLODED VIEW & PARTS LIST

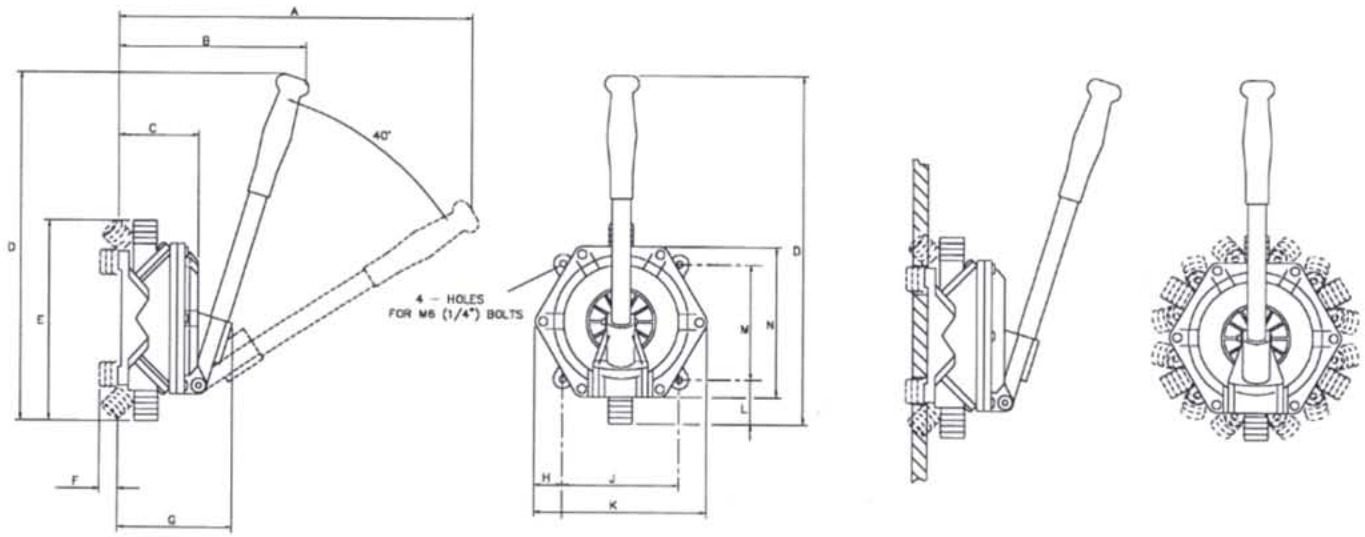
## 29240-0000 Bulkhead




| REPAIR KITS AVAILABLE | | |
|---|---|---|
| KIT | PART NO | DESCRIPTION |
| A | 29246-1000 | MAJOR SERVICE KIT |
| B | 29241-1000 | PORTS KIT |
| C | 29243-1000 | CLAMP RING & ROCKER KIT |

| KEY | DESCRIPTION | QTY PER PUMP | PART NO | QTY PER REPAIR KIT | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 1 | OUTLET PORT | 1 | | | 1 | |
| 2 | OUTLET VALVE | 1 | | 1 | 1 | |
| 3 | BODY | 1 | 29242-1000 | | | |
| 4 | DIAPHRAGM PLATE | 2 | | | | 2 |
| 5 | DIAPHRAGM | 1 | | 1 | | |
| 6 | CLAMP RING | 1 | | | | 1 |
| 7 | SCREW | 14 | | 3 | 2 | 3 |
| 8 | CON ROD | 1 | | | | 1 |
| 9 | PIVOT PIN (LONG) | 1 | | | | 1 |
| 10 | ROCKER | 1 | | | | 1 |
| 11 | PIVOT PIN (SHORT) | 2 | | | | 2 |
| 12 | STARLOCK WASHER | 2 | | | | 2 |
| 13 | STARLOCK WASHER | 1 | | | | 1 |
| 14 | HANDLE | 1 | 29267-1000 | | | |
| 15 | INLET VALVE | 1 | | 1 | 1 | |
| 16 | INLET PORT | 1 | | 1 | | |
| 17 | WASHER | 1 | | 1 | | 1 |
| 18 | BOLT | 1 | | | | 1 |
| 19 | HANDLE CLIPS | 2 | | | | |

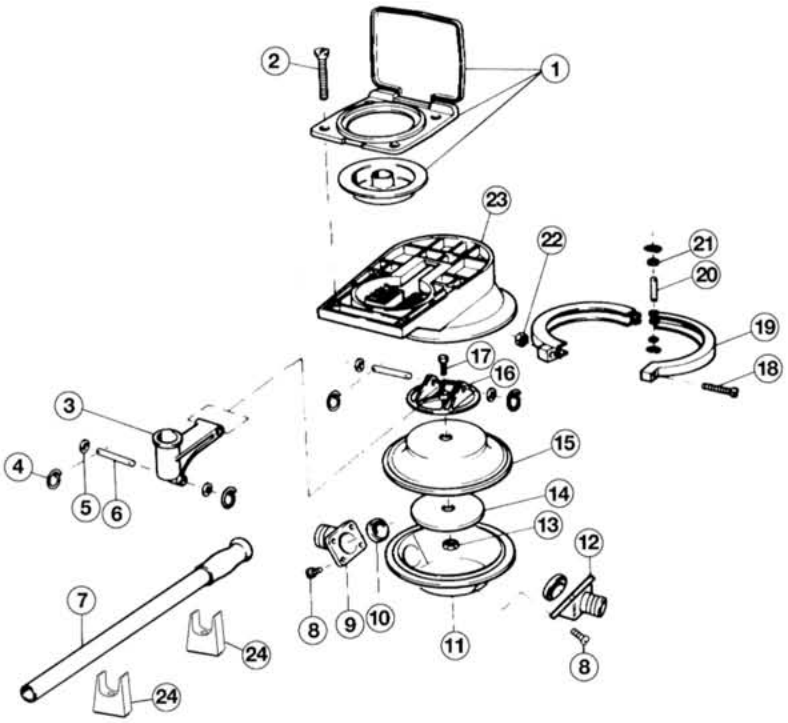
# DIMENSIONS




| A | B | C | D | E | F | G | H | J | K | L | M | N | UNITS | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 362 | 192 | 82 | 357 | 204 | 19 | 120 | 28.5 | 119 | 176 | 46 | 119 | 155 | mm | 0.6 kg |
| (14.3) | (76) | (3.3) | (14) | (8) | (0.8) | (4.8) | (1.1) | (4.7) | (7) | (1.8) | (4.7) | (6.1) | (ins) | (1.4) (lbs) |

# EXPLODED VIEW & PARTS LIST

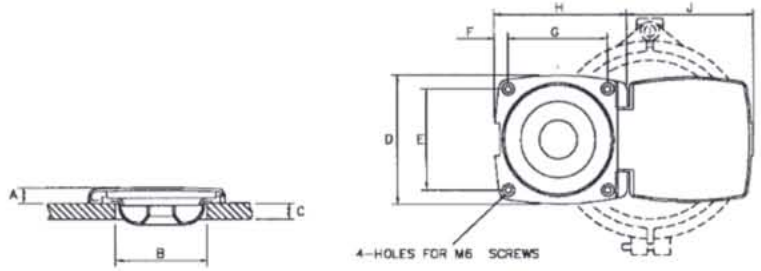
## 29250-0000 Thrudeck

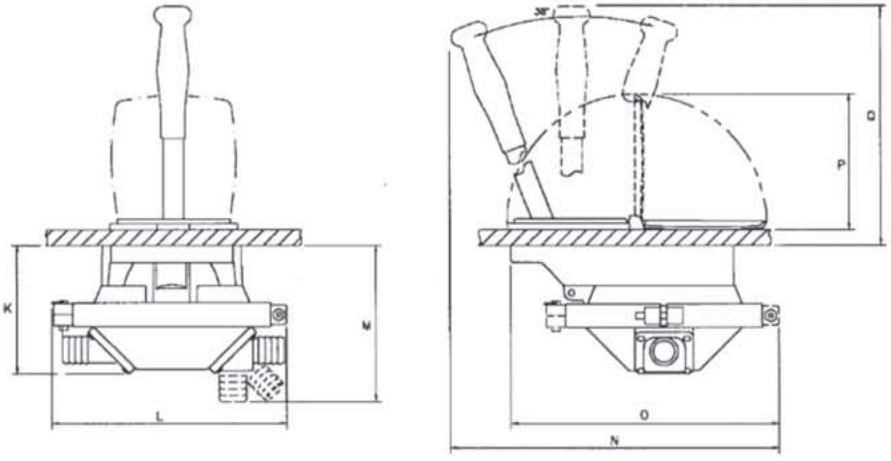



| REPAIR KITS AVAILABLE | | |
|---|---|---|
| KIT | PART NO | DESCRIPTION |
| A | 29256-1000 | MAJOR SERVICE KIT |
| B | 29241-1000 | PORTS KIT |
| C | 29252-1000 | CLAMP RING ASSEMBLY |
| D | 29254-1000 | ROCKER ASSEMBLY |

| KEY | DESCRIPTION | QTY PER PUMP | PART NO | QTY PER REPAIR KIT | | | |
|---|---|---|---|---|---|---|---|
| | | | | A | B | C | D |
| 1 | THROUGH DECK KIT | 1 | 29279-0000 | | | | |
| 2 | SCREW | 4 | | | | | |
| 3 | ROCKER | 1 | | | | | 1 |
| 4 | RING CLIP | 6 | | | | 2 | 4 |
| 5 | WASHER | 4 | | | | | 4 |
| 6 | PIVOT PIN | 2 | | | | | 2 |
| 7 | HANDLE | 1 | 29267-1000 | | | | |
| 8 | SCREW | 8 | | 2 | 2 | | |
| 9 | OUTLET PORT | 1 | | | 1 | | |
| 10 | FLAP VALVE | 2 | | 2 | 2 | | |
| 11 | LOWER BODY | 1 | 29258-1000 | | | | |
| 12 | INLET PORT | 1 | | | 1 | | |
| 13 | NYLOC NUT | 1 | | 1 | | | 1 |
| 14 | DIAPHRAGM PLATE (LOWER) | 1 | | | | 1 | |
| 15 | DIAPHRAGM | 1 | | 1 | | | |
| 16 | DIAPHRAGM PLATE (UPPER) | 1 | | | | 1 | |
| 17 | BOLT | 1 | | | | | 1 |
| 18 | SCREW | 1 | | 1 | | 1 | |
| 19 | DIAPHRAGM CLAMP RING | 2 | | | 2 | | |
| 20 | PIVOT PIN (CLAMP) | 1 | | | | 1 | |
| 21 | WASHER | 2 | | | | 2 | |
| 22 | NUT | 1 | | | | 1 | |
| 23 | UPPER BODY | 1 | 29251-1000 | | | | |
| 24 | HANDLE CLIPS | 2 | | | | | |

# DIMENSIONS

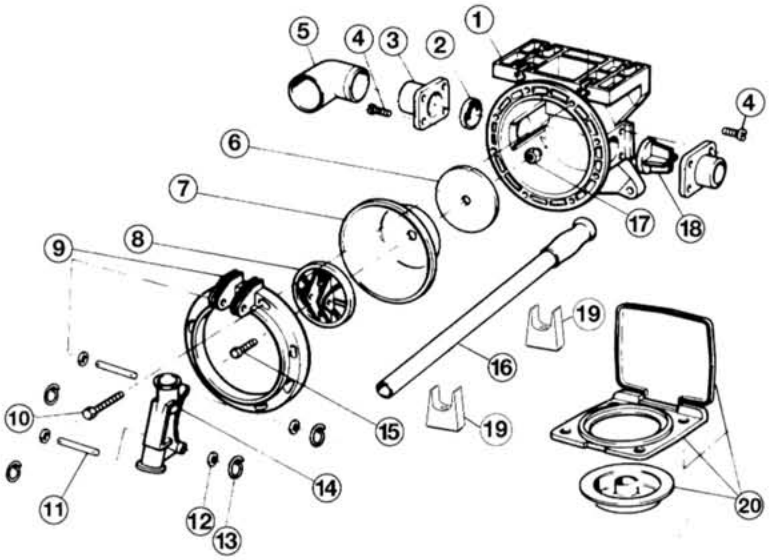



| A | B | C | D | E | F | G | H | J | K | L | M | N | O | P | Q | UNITS | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.5 (0.6) | Ø86 (3.4) | 5-22 (0.2-0.9) | 120 (4.7 | 94 (3.7) | 12.8 (0.5) | 94 (3.7) | 129 (5.1) | 115 (4.5) | 121 (4.8) | 218 (8.58) | 147 (5.8) | 310 (12.2) | 252 (9.9) | 129 (5.1) | 277 (10.9) | mm (ins) | 1.2 kg (2.5) (lbs) |

# EXPLODED VIEW & PARTS LIST

## 29270-0000 Universal



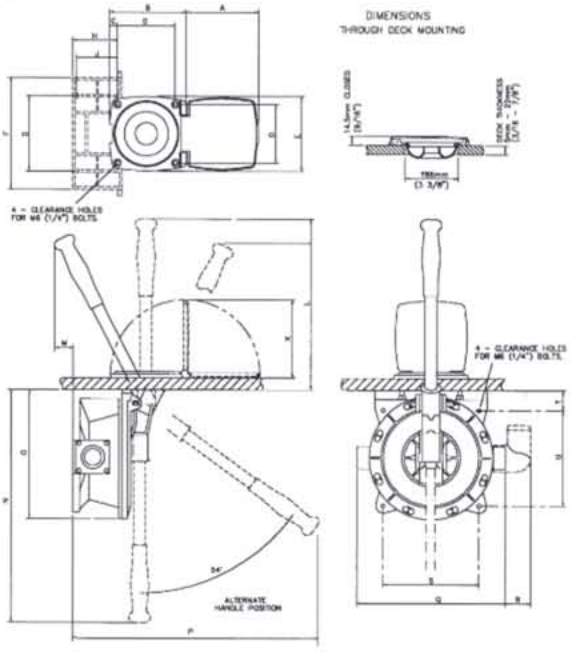

| REPAIR KITS AVAILABLE | | |
|---|---|---|
| KIT | PART NO | DESCRIPTION |
| A | 29276-1000 | MAJOR SERVICE KIT |
| B | 29275-1000 | PORTS KIT |
| C | 29272-1000 | CLAMP RING & ROCKER KIT |

| KEY | DESCRIPTION | QTY PER PUMP | PART NO | QTY PER REPAIR KIT | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 1 | BODY | 1 | 29271-1000 | | | |
| 2 | INLET VALVE | 1 | | 1 | 1 | |
| 3 | PORT | 2 | | | 2 | |
| 4 | SCREW | 8 | | 3 | 2 | |
| 5 | PUSH FIT ELBOW | 1 | 29266-1000 | | | |
| 6 | DIAPHRAGM PLATE (INNER) | 1 | | | | 1 |
| 7 | DIAPHRAGM | 1 | | 1 | | |
| 8 | DIAPHRAGM PLATE (OUTER) | 1 | | | | 1 |
| 9 | CLAMP RING | 1 | | | | 1 |
| 10 | SCREW | 8 | | 3 | | 3 |
| 11 | PIVOT PIN | 2 | | | | 1 |
| 12 | WASHER | 4 | | 1 | | 2 |
| 13 | RING CLIP | 4 | | 1 | | 2 |
| 14 | ROCKER | 1 | | | | 1 |
| 15 | BOLT | 1 | | | | 1 |
| 16 | HANDLE | 1 | 29267-1000 | | | |
| 17 | NYLOC NUT | 1 | | 1 | | 1 |
| 18 | OUTLET VALVE | 1 | | 1 | 1 | |
| 19 | HANDLE CLIPS | 2 | | | | |

| OPTIONAL EXTRAS AVAILABLE | | |
|---|---|---|
| KIT | PART NO | DESCRIPTION |
| 20 | 29279-0000 | THROUGH DECK KIT |

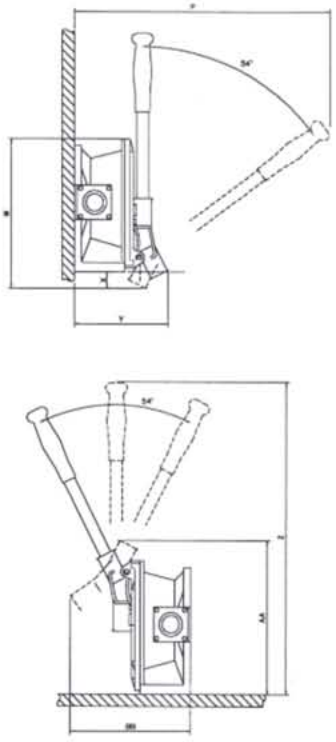
# DIMENSIONS

## Through Deck Mounting




| A | B | C | D | E | F | G | H | J | K | L | M | N | O | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 115 (4.5) | 129 (5.1) | 12.8 (0.5) | 94 (3.7) | 120 (4.8) | 180 (7) | 121 (4.8) | 73 (2.9) | 66 (2.6) | 129 (5.1) | 277 (11) | 29 (1.1) | 380 (15) | 212 (8.4) | mm (ins) |

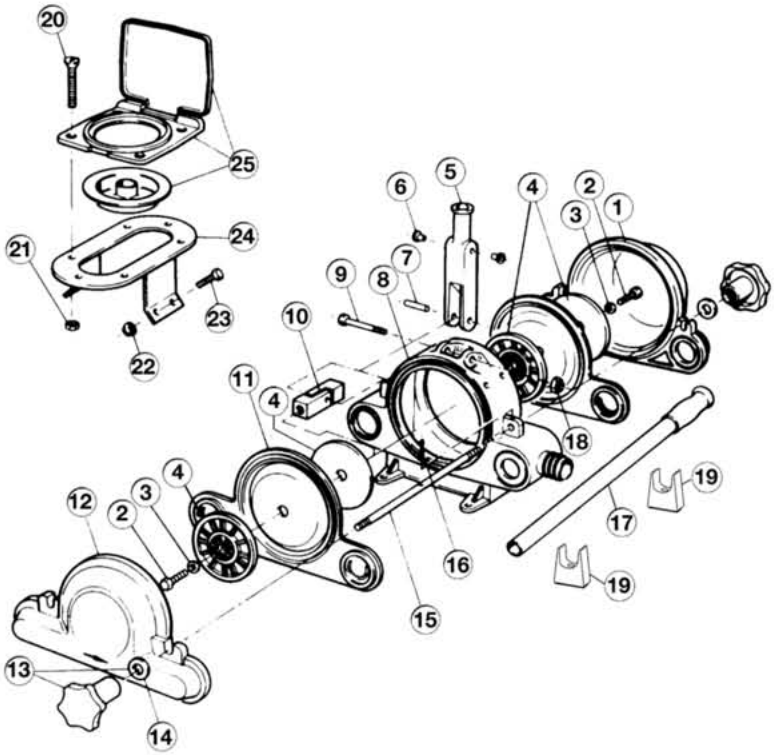
## On Deck Mounting



| P | Q | R | S | T | V | W | X | Y | Z | AA | BB | UNITS | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390 (15.4) | 242 (9.5) | 41 (1.6) | 156 (6.1) | 33 (1.3) | 405 (16) | 238 (9.4) | 26 (0.5) | 149 (6) | 498 (19.6) | 244 (9.6) | 192 (7.5) | mm (ins) | 1.2 kg (2.9) (lbs) |

# EXPLODED VIEW & PARTS LIST

## 29280-0000 Warrior



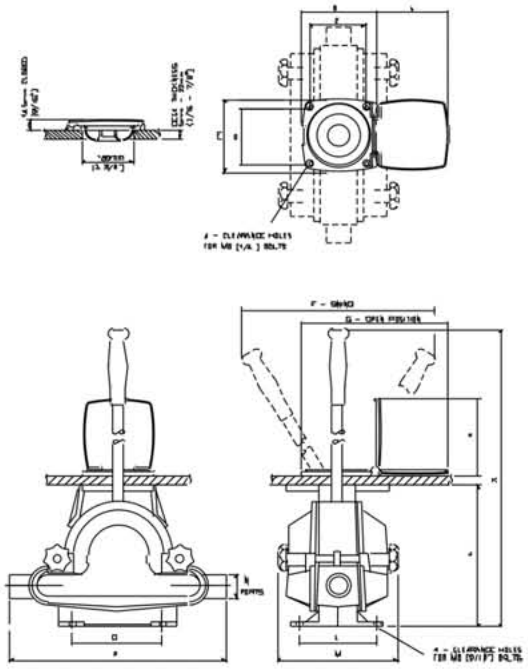
| REPAIR KITS AVAILABLE | | |
|---|---|---|
| KIT | PART NO | DESCRIPTION |
| A | 29286-1000 | MAJOR SERVICE KIT |
| B | 29283-1000 | BODY KIT |
| C | 29284-1000 | ROCKER KIT |

| KEY | DESCRIPTION | QTY PER PUMP | PART NO | QTY PER REPAIR KIT | | |
|---|---|---|---|---|---|---|
| | | | | A | B | C |
| 1 | LEFT HAND COVER PLATE | 1 | 29281-1000 | | | |
| 2 | BOLT (DIAPHRAGM PLATE) | 2 | | | | 2 |
| 3 | WASHER | 2 | | 1 | | 2 |
| 4 | DIAPHRAGM PLATE | 4 | | | | 4 |
| 5 | ROCKER ARM | 1 | | | | 1 |
| 6 | BUSH | | | | 2 | |
| 7 | PIVOT PIN | 1 | | | | 1 |
| 8 | BODY | 1 | | | 1 | |
| 9 | BOLT (ROCKER ASSEMBLY) | 1 | | | | 1 |
| 10 | CONROD | 1 | | | | 1 |
| 11 | DIAPHRAGM | 2 | | 2 | | |
| 12 | RIGHT HAND COVER PLATE | 1 | 29282-1000 | | | |
| 13 | KNOB & WASHER ASSY | 4 | 29288-1000 | | | |
| 14 | WASHER (STUD) | 4 | | 2 | | |
| 15 | LONG STUD | 2 | | | 2 | |
| 16 | ROLL PIN | 2 | | | 2 | |
| 17 | HANDLE | 1 | 29287-1000 | | | |
| 18 | NUT (ROCKER ASSEMBLY) | 1 | | | | 1 |
| 19 | HANDLE CLIPS | 2 | | | | |

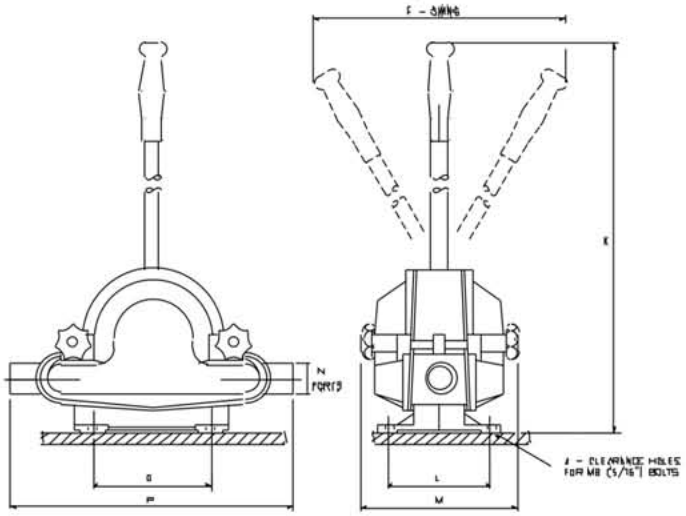
| OPTIONAL EXTRAS AVAILABLE | | | |
|---|---|---|---|
| KEY | DESCRIPTION | QTY PER PUMP | PART NO |
| 20 | SCREW | 6 | 29289-0000 |
| 21 | NUT | 6 | |
| 22 | NUT | 4 | |
| 23 | BOLT | 4 | |
| 24 | UNDERDECK BRACKET | 1 | |
| 25 | THROUGH DECK KIT | 1 | 29279-0000 |

# DIMENSIONS

## Through Deck Mounting



## On Deck Mounting



| F | K | L | M | N | O | P | UNITS | WEIGHT |
|---|---|---|---|---|---|---|---|---|
| 310 (12.2) | 680 (27) | 130 (5.1) | 200 (8) | 38.1 (1.5) | 150 (6) | 355 (14) | mm (ins) | 4.40 kg (9.7) (lbs) |

| A | B | C | D | E | F | G | H | J | K | L | M | N | O | P | UNITS | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.5 (0.6) | Ø86 (3.4) | 5-22 (02-09) | 120 (4.7) | 94 (3.7) | 12.8 (0.5) | 94 (3.7) | 129 (5.1) | 115 (4.5) | 121 (4.8) | 218 (8.58) | 147 (5.8) | 310 (12.2) | 252 (9.9) | 129 (5.1) | mm (ins) | 1.2 kg (2.5) (lbs) |

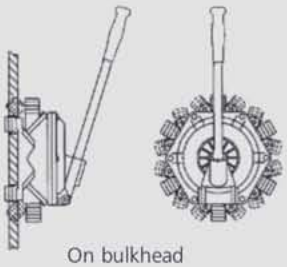
# AMAZON BULKHEAD

**For surface mounting on bulkhead or deck**

- Repositionable ports and body offer an amazing 96 assembly variations
- Complete with stainless steel handle, mounting clips and provision for safety lanyard
- Sustainable outputs up to 45 lpm (10 gpm)

Connections for 25mm (1") id hose

**29240-000 Bulkhead pump c/w detachable handle**



On bulkhead

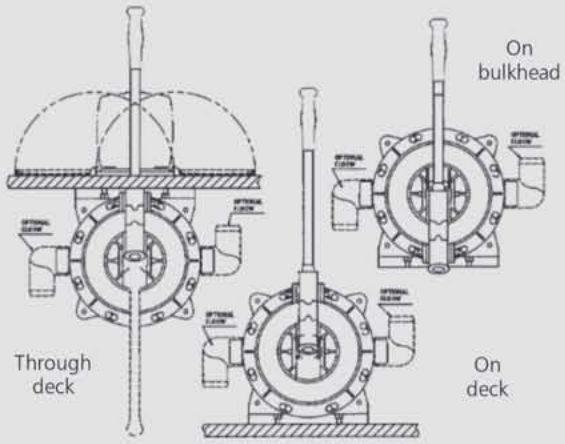
# AMAZON UNIVERSAL

**For mounting on bulkhead, through bulkhead, on deck, or through deck (with optional through deck kit).**

- Flow direction can be changed 180° by interchanging inlet and outlet ports
- Optional push-fit inlet and outlet elbows swivel through 360° to increase flexibility of installation still further
- Unique safety feature allows operation from both inside and outside the cabin (with optional through deck kit)
- Quick release clamp ring gives fast access for blockage clearance
- Complete with stainless steel handle, mounting clips and provision for safety lanyard
- Impressive features are matched by impressive flow rate of up to 100 lpm (22 gpm)
- Excellent solids handling ability for use with holding tanks

Connections for 38mm (1½") id hose

**29270-0000 Universal pump, c/w detachable handle and one push-fit elbow**
**29279-0000 Optional through deck kit**
**29266-1000 Additional push-fit elbow**



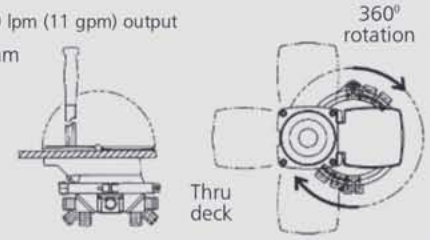

# AMAZON THRUDECK

**For mounting through deck or through bulkhead**

- The ultimate compact through deck pump with no less than 16 port variations relative to the body
- Loosening just one screw lets you clear blockages or re-position the body anywhere through 360° relative to the handle position
- Complete with stainless steel handle, mounting clips and provision for safety lanyard
- Sleekly styled through deck kit and cover, with 4 mounting positions relative to the pump
- Readily achievable 50 lpm (11 gpm) output

Connections for 25mm (1") id hose

**29250-0000 Thrudeck pump, c/w detachable handle and through deck kit**




# AMAZON WARRIOR

**For mounting on deck or through deck (with optional through deck kit and bracket)**

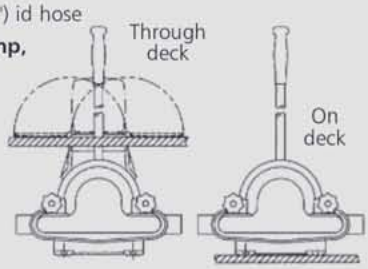
- Robust, alloy body particularly suited to workboat and safety applications
- Double diaphragm design gives maximum efficiency and added safety, because each side of the pump operates independently
- Solid 18" handle assists sustained high outputs of up to 135 lpm (30 gpm)

Connections for 38mm (1½") id hose

**29280-0000 Warrior pump, c/w detachable handle**

**29279-0000 Optional through deck kit**

**29289-0000 Under deck bracket (required for use with through deck kit)**




# AMAZON ACCESSORIES

**29290-0020 Bilge strainer for 19mm (¾") id hose**

**29290-0000 Bilge strainer for 25mm (1") id hose**

**29290-0010 Bilge strainer for 38mm (1½") id hose**

**29295-0011 In-line non-return valve for 19mm (¾") id hose**

**29295-0000 In-line non-return valve for 25mm (1") id hose**

**29295-0010 In-line non-return valve for 38mm (1½") id hose**

In-line Non-Return Valve


Jabsco

ITT Industries

**Jabsco,** 20 Icon, Foothill Ranch, CA 92610 USA
Tel: +1 949 609 5106 Fax: +1 949 859 1254 — **USA**

**Jabsco,** Bingley Road, Hoddesdon, Hertfordshire EN11 0BU
Tel: +44 (0) 1992 450 145 Fax: +44 (0) 1992 467 132 — **UK**

**Fluid Products Canada,** 55 Royal Road, Guelph, Ontario N1H 1T1
Tel: +1 519 821 1900 Fax: +1 519 821 2569 — **CANADA**

**NHK Jabsco Co Ltd,** 3-21-10, Shin-Yokohama, Kohoku-ku, Yokohama 222
Tel: +81 (0) 45 475 8906 Fax: +81 (0) 45 475 8908 — **JAPAN**

**Jabsco GmbH,** Oststraße 28, 22844 Norderstedt
Tel: +49 (0) 40 53 53 73 0 Fax: +49 (0) 40 53 53 73 11 — **GERMANY**



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