DISPLAYS - MARKETING ITEMS

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ULTRAFLEX® - UFLEX® DISPLAYS - MARKETING ITEMS

STAND FOR ULTRAFLEX AND UFLEX PRODUCTS

73202 A - Customizable stand

 $\bf 41793\ Y$ - White glass reinforced plastic stand, customizable with Uflex products such as marine instruments, compasses, pumps, etc.

41794 A - White glass reinforced plastic stand, customizable with Ultraflex products such as steering wheels, control boxes, instruments, etc.







T HELEX



W ULTRAFLEX

//// ULTRAFLEX

UFLEX and ULTRAFLEX ADHESIVE LABELS.

Polished chromium polyester adesive labels.
They can be used on blank stand also.
Dimensions: 438 x 140 mm (17.24" x 5.51")

UFLEX - 72257 X ULTRAFLEX - 72308 M

UFLEX and ULTRAFLEX ADHESIVE LABELS: Printed on transparent vinyl

UFLEX - 65360 Z Dimensions: 450 x 130 mm (17.71" x 5.12")

ULTRAFLEX - 65359 R Dimensions: 300 x 130 (11.81" x 5.12")

FOREX:

65369 U - Dimensions: cm 70 x 100 (2.29' x 3.28')

65370 C - Dimensions: cm 119 x 168 (3.9' x 5.5')

Please contact our Marketing Department to ask for the CD with all FOREX available.





UFLEX FLAG - 65226 V:Dimensions: 150 x 225 cm (4.92' x 7.38')

UFLEX flags are made of high resistance nylon, with anti-tears double hem, strengthening side sheathing and fixing line. The logo is printed on both sides and they are resistant to sunwear and washing.



UFLEX SHIRT: Size S - 65355 G Size M - 65356 J Size L - 65357 L Size XL - 65358 N

UFLEX CAP - 65613 C Heavy cotton with adjustable back strip







FARIA* Calypso Series Instruments

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WEMA* - GPS Speedo

page 47 BEP* Wireless remote control for battery switches

page 109







VICTRON* Digital Multi Control page 137

ULTRAFLEX GROUP



1935 - 2009

Ultraflex Group has 74 years of experience in manufacturing and distributing the highest quality and most innovative products. The Ultraflex Group affiliate Companies that design and produce widely known equipments in the marine, industrial, architectural, Led technology and alternative energy fields.



Steering and control systems for pleasure boats.



UFLEX

Worldwide distribution of marine accessories



UFLEX - Energy Division

Systems and accessories for alternative energy applications

WESS ULTRAFLEX CONTROL SYSTEMS

Window and skylight remote controls. Innovative LED sign technology.



INDUSTRIA di LEIVI

Mechanical remote controls in the industrial field



Manufacturing the world's finest marine products.



Magnetic compasses



Factory in Casella



Factory in Borgo Fornari

Quality management system

The Ultraflex Quality System is certified CISQ-EQ Net by the Italian Shipping

Registry (RINA), in conformity with the UNI EN ISO 9001 rule, certification N420/96 $\,$

The quality system involves all the company resources and processes starting

from the design, in order to:

- \bullet assure product quality to the customer.
- set up the actions to maintain and improve the quality standards constantly.
- pursue a continuous process improvement to meet the market needs.
- maintain and verify conformity with ABYC requirements.

















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FLOWPUMP® AUTOMATIC MARINE PUMPS

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REVERSO®
OIL CHANGE
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UFLEX® ELECTRIC PUMPS AND BLOWERS

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VICTRON ENERGY®
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ULTRAFLEX® - UFLEX®

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The descriptions and guidelines shown in this catalog should be used as general reference only. For any further information please contact our Technical Service.

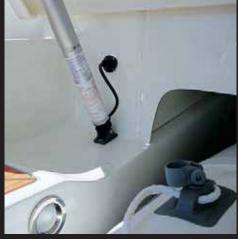
NDEX















AV SERIES ELECTRICAL HATCH LIFTERS

The AV hatch lifters are electromechanical products, especially designed for marine use on pleasure boats. They allow full or partial opening and closing of heavy engine hatches, peak tanks, hatch beams etc.

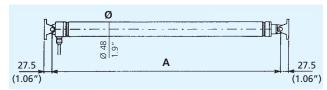
By activating a switch, it is possible to lift the hatch to any desired position from closed to full open; an internal selflocking mechanism will maintain the position preventing any accidental hatch closing. In case of a power failure an emergency device allows for manual opening.

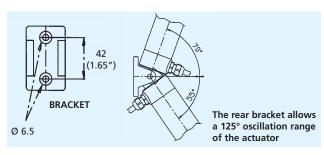
TECHNICAL FEATURES

- According to the load required, the AV hatch lifter can be mounted individually, or in twin cylinder installation for heavier loads. It is also possible to install more then two AV actuators in multiple applications.
- Maximum load for single installations:
- 1200N (120 kg 265 lbs)

 Maximum load for dual installations: 2400N (240 kg - 529 lbs)
- Maximum load is recommended not to be exceeded.
- Supplied with all mounting hardware.
- Stainless steel telescopic ram for manual operation in case of emergency.
- Available on request without manual emergency opening device for high performance boats.
- Circuit breaker to stop accidental overloading of the system and electronic stop at closed or full open position.
- IP 65 protection rated
- Speed: 25mm/sec no load applied, 17 mm/sec maximum load
- Current absorption in single installations: 10A at 12V, 5A at 24V
- Current absorption in dual installations: 20A at 12V, 10A at 24V
- AV 12VDC models are Ignition Protected. UL1500 - ISO8846 approved.







| MODEL | PART No. | VOLTS | STROKE | LENGTH A (FULL CLOSED ACTUATOR) | EXTERNAL DIA. |
|---------|----------|--------|--------------|---------------------------------|---------------|
| AV 3012 | 40671 C | 12V DC | 300 mm (12") | 677 mm (26.6") | 48 mm (1.9") |
| AV 3024 | 40672 E | 24V DC | 300 mm (12") | 677 mm (26.6") | 48 mm (1.9") |
| AV 4512 | 40582 D | 12V DC | 450 mm (18") | 827 mm (32.5") | 48 mm (1.9") |
| AV 4524 | 40583 F | 24V DC | 450 mm (18") | 827 mm (32.5") | 48 mm (1.9") |
| AV 6012 | 40584 H | 12V DC | 600 mm (24") | 977 mm (38.4") | 48 mm (1.9") |
| AV 6024 | 40585 K | 24V DC | 600 mm (24") | 977 mm (38.4") | 48 mm (1.9") |

OPTIONAL COMPONENTS:

RB12 - 40738 Y Relay box 12V **RB24** - 40742 C Relay box 24V It contains the relays needed for cycle revertion

SW20 - 61101 T

1 x 3 way single pole momentary switch (10-20 Amp)

BR/AV - 80382 I Spare fixing bracket

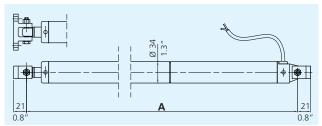


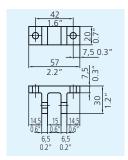


TECHNICAL FEATURES

- Single installation only
- Pull and push maximum load: 650N (65 kg 144 lbs)
- Pull and push maximum load is recommended not to be exceeded.
- Supplied with all mounting hardware.
- Aluminium ram.
- Circuit breaker to stop accidental overloading of the system and electronic stop at closed or full open position.
- IP 65 protection rated
- Speed:
 - 12V model:
 - 5 mm/sec no load applied
 - 4 mm/sec maximum load
 - 24V model:
 - 8 mm/sec no load applied
 - 6 mm/sec maximum load
- Current absorption: 2A at 12V, 1A at 24V







Highest installation flexibility: 180° oscillation range

| MODEL | PART No. | VOLTS | STROKE | LENGTH A (FULL CLOSED ACTUATOR) | EXTERNAL DIA. |
|--------------|----------|--------|--------------|---------------------------------|---------------|
| ULYSSES 1812 | 40924 Q | 12V DC | 180 mm (7") | 515 mm (20.3") | 34 mm (1.3") |
| ULYSSES 1824 | 40926 S | 24V DC | 180 mm (7") | 515 mm (20.3") | 34 mm (1.3") |
| ULYSSES 3012 | 40925 R | 12V DC | 300 mm (12") | 635 mm (25.0") | 34 mm (1.3") |
| ULYSSES 3024 | 40927 T | 24V DC | 300 mm (12") | 635 mm (25.0") | 34 mm (1.3") |

OPTIONAL COMPONENTS:

RB12 - 40738 Y Relay box 12V RB24 - 40742 C Relay box 24V It contains the relays needed for cycle revertion.

SW20 - 61101 T

1 x 3 way single pole momentary switch (10-20 Amp)

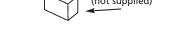
BR/UL - 35697 P Spare fixing bracket





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HATCH LIFTERS



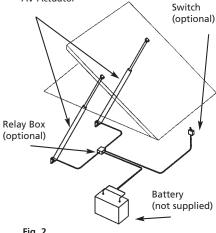


Fig. 2

COMPONENTS DESCRIPTION **AV Series Hatch Lifters**

Fig. 1

- n° 1 AV actuator for single installation (Fig.1)
- n° 2 AV actuators for dual installation (Fig.2)
- External diameter: 1.9" (48 mm)
- Length at closed position: 14.8" (377 mm)+ stroke
- Maximum oscillation range: 125°

ULYSSES Series actuators

- n° 1 Ulysses actuator (Fig.1) no dual installation
- External diameter: 1.3" (34 mm)
- Length at closed position: 12.1" (308 mm)+ stroke
- Maximum oscillation range: 180°

Power supply cable:

- AV and ULYSSES actuators are supplied with 5 ft (1,5 m) of electrical cable
- Warning: in case of longer cable length required, do not substitute the existing harness, but make a junction following the instructions supplied with the product.

Two way push-button with central off position (optional)

Fuse (not supplied)

Battery (not supplied)

INSTALLATION

AV Actuator

• The following equation will help you to calculate the maximum strength (Fmax) required from the hatch lifter to open your hatch, knowing the dimensions and weight of the hatch and the position of the mounting brackets.

$$Fmax = \frac{P}{2} \times \frac{d}{b} \times \frac{L}{a}$$

P = weight of the hatch in Newton c, a, b = dimensions in metres indicated in Fig. 3 and Fig. 4

L = hatch lifter length when in closed position

Maximum load (Fmax):

AV Series actuators:

1200 N (120 kg - 265 lbs) single installation, pushing only 2400 N (240 kg - 530 lbs) dual installation pushing only

Note: when the load exceeds 2400 N (240 kg - 530 lbs), it is possible to install more then two AV actuators

• ULYSSES actuators:

650 N (65 kg - 144 lbs) single installation only, both pull and push

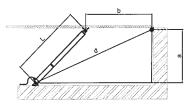


Fig. 3

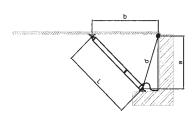


Fig. 4



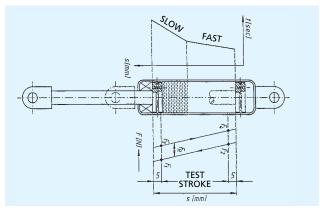


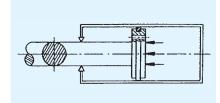
UFLEX GAS SPRINGS

Gas springs are pneumatic force accumulators mainly used to lift, hold open and smoothly lower hatches, covers, lids and doors. A gas spring, not equipped with a lock device, functions as follows: the pressure of the compressed nitrogen gas contained in a tube provides the extension force of the spring as the result of the difference between the internal tube pressure and the atmospheric pressure. The gas flows from the highest to the lowest pressure compartment of the tube through a self-cleaning orifice in the piston rod causing the spring rod to telescope out of the pressure tube.

Each tube incorporates a small quantity of oil that provides lubrication of the seals and of the piston rod and, at the same time, a damping medium to control the opening speed of the cover or hatch.

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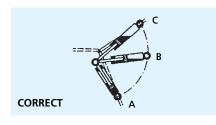


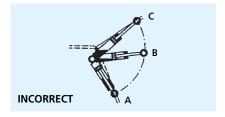
INSTALLATION

Ideal damping conditions are obtained when the spring gas is mounted with an angle of 30° from the vertical axis with the piston rod turned towards the hinge point: this proper installation provides optimal performance and appropriate oil damping operation.

If your application allows for quite large opening angles, a pointing up piston rod mounting may be more appropriate, especially if the opening operation includes the passage of the rod from the horizontal position. When the spring rotates from B to C, the oil leaks into the gas through the orifice in the piston rod; the residual quantity of oil that remains between rod and conductors provides appropriate spent travel damping.

With the piston rod pointing down and the spring in closed position, the oil is almost all leaked into the gas through the holes and the residual quantity of oil remained between internal surface and piston head is not sufficient to provide a good spent travel damping.





WARNING

- The rod surface should be protected against physical or chemical damages.
- Lateral loads should be carefully avoided.
- \blacksquare Attachment pivots should be well aligned.
- Springs should be mounted according to previous installation instructions ensuring correct orientation.
- Tensile forces exceeding the output force as indicated for each single spring should be avoided.
- Working temperature 30 ° C and + 80 °C.

В

STROKE





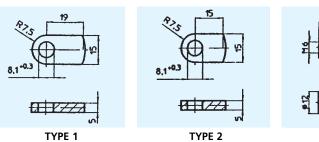
Nitro-protected steel rod and marine corrosion resistant black painted cylinder

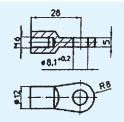
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|-----|---|---|
| - 1 | | ı |
| - 1 | | ı |

| MODEL | TOTAL LENGTH mm (") | STROKE mm (") | OUTPUT FORCE Kg (lbs) | ROD DIA. mm (") | END FI SIDE A TYPE | TTING SIDE B TYPE | OEM PACKAGING Part No. | AFTERMARKET PACKAGING Part No. |
|--|--|--|--|--|--------------------------|-------------------------|--|--|
| U95-5 U95-10 U95-20 | 257 (10.1) 257 (10.1) 257 (10.1) | 95 (3.7) 95 (3.7) 95 (3.7) | 5 (11.0) 10 (22.0) 20 (44.0) | 8 (0.3) 8 (0.3) 8 (0.3) | 1 1 1 | 2 2 2 2 | 64312 G 64313 J 64314 L | 64412 L 64413 N 64414 R |
| U140-10 | 365 (14.4) | 142 (5.6) | 10 (22.0) | 8 (0.3) | 1 | 1 | 64315 N | 64415 T |
| U140-20 | 365 (14.4) | 142 (5.6) | 20 (44.0) | 8 (0.3) | 1 | 1 | 64316 R | 64416 V |
| U140-30 | 365 (14.4) | 142 (5.6) | 30 (66.1) | 8 (0.3) | 1 | 1 | 64317 T | 64417 X |
| U235-10 U235-20 U235-30 U235-40 | 550 (21.6) 550 (21.6) 550 (21.6) 550 (21.6) | 234 (9.2) 234 (9.2) 234 (9.2) 234 (9.2) | 10 (22.0) 20 (44.0) 30 (66.1) 40 (88.1) | 8 (0.3) 8 (0.3) 8 (0.3) 8 (0.3) | 1 1 1 | 1 1 1 1 | 64318 V 64319 X 64320 F 64321 H | 64418 Z 64419 B 64420 K 64421 M |
| U260-20 | 600 (23.6) | 262 (10.3) | 20 (44.0) | 8 (0.3) | 2 | 3 | 64322 K | 64422 P |
| U260-30 | 600 (23.6) | 262 (10.3) | 30 (66.1) | 8 (0.3) | 2 | 3 | 64323 M | 64423 S |
| U260-40 | 600 (23.6) | 262 (10.3) | 40 (88.1) | 8 (0.3) | 2 | 3 | 64324 P | 64424 U |
| U300-30 | 683 (26.8) | 300 (11.8) | 30 (66.1) | 10 (0.4) | 2 | 2 | 65297 V | 65300 E |
| U300-40 | 683 (26.8) | 300 (11.8) | 40 (88.1) | 10 (0.4) | 2 | 2 | 65298 X | 65301 G |
| U300-50 | 683 (26.8) | 300 (11.8) | 50 (110.2) | 10 (0.4) | 2 | 2 | 65299 Z | 65302 J |

NOTE: The total length is measured from center pivot line to end fitting at fully extended spring. Further lengths, strokes and output forces available on request (20 pieces each size minimum order)

END FITTINGS





TYPE 3 Welded Eyelet

APPLICATIONS

Uflex provides gas springs in a variety of pressures to suit various installation needs, nevertheless it is the customer who decides which is the most convenient selection for a specific application. For more detailed information, please contact our Technical Service.

Welded Eyelet

PACKAGING

UFLEX gas springs are supplied in $\bf OEM$ or in $\bf Aftermarket$ packaging.

Please specify when ordering.

Welded Eyelet





BLACK PAINTED GAS SPRINGS UB SERIES



Nitro-protected steel rod and marine corrosion resistant black painted cylinder. Thermoplastic ball bearing end fittings to be threaded on.

NOTE: End fittings to be ordered separately Kit XB01 - 66510 K

| MODEL | TOTAL LENGTH | STROKE | OUTPUT FORCE | ROD DIA. | OEM PACKAGING | AFTERMARKET PACKAGING |
|----------|-----------------|------------|-----------------|-------------|------------------|-----------------------|
| | mm (") | mm (") | kg (lbs) | mm (") | Part No. | Part No. |
| UB100-5 | 275 (10.8) | 100 (3.9) | 5 (11.0) | 6 (0.2) | 66420 W | 66443 J |
| UB100-10 | 275 (10.8) | 100 (3.9) | 10 (22.0) | 6 (0.2) | 66421 Y | 66444 L |
| UB100-20 | 275 (10.8) | 100 (3.9) | 20 (44.0) | 6 (0.2) | 66422 A | 66445 N |
| UB120-10 | 315 (12.4) | 120 (4.7) | 10 (22.0) | 6 (0.2) | 66423 C | 66446 R |
| UB120-20 | 315 (12.4) | 120 (4.7) | 20 (44.0) | 6 (0.2) | 66424 E | 66447 T |
| UB120-30 | 315 (12.4) | 120 (4.7) | 30 (66.1) | 6 (0.2) | 66425 G | 66448V |
| UB150-10 | 375 (14.7) | 150 (5.9) | 10 (22.0) | 6 (0.2) | 66426 J | 66449 X |
| UB150-20 | 375 (14.7) | 150 (5.9) | 20 (44.0) | 6 (0.2) | 66427 L | 66450 F |
| UB150-30 | 375 (14.7) | 150 (5.9) | 30 (66.1) | 6 (0.2) | 66428 N | 66451 H |
| UB180-10 | 445 (17.5) | 180 (7.0) | 10 (22.0) | 8 (0.3) | 66429 R | 66452 K |
| UB180-20 | 445 (17.5) | 180 (7.0) | 20 (44.0) | 8 (0.3) | 66430 Z | 66453 M |
| UB180-30 | 445 (17.5) | 180 (7.0) | 30 (66.1) | 8 (0.3) | 66431 B | 66454 P |
| UB220-10 | 525 (20.6) | 220 (8.6) | 10 (22.0) | 8 (0.3) | 66432 D | 66455 S |
| UB220-20 | 525 (20.6) | 220 (8.6) | 20 (44.0) | 8 (0.3) | 66433 F | 66456 U |
| UB220-30 | 525 (20.6) | 220 (8.6) | 30 (66.1) | 8 (0.3) | 66434 H | 66457 W |
| UB220-40 | 525 (20.6) | 220 (8.6) | 40 (88.1) | 8 (0.3) | 66436 M | 66458 Y |
| UB250-20 | 585 (23.0) | 250 (9.8) | 20 (44.0) | 8 (0.3) | 66437 P | 66459 A |
| UB250-30 | 585 (23.0) | 250 (9.8) | 30 (66.1) | 8 (0.3) | 66438 S | 66460 J |
| UB250-40 | 585 (23.0) | 250 (9.8) | 40 (88.1) | 8 (0.3) | 66439 U | 66461 L |
| UB300-30 | 700 (27.5) | 300 (11.8) | 30 (66.1) | 10 (0.4) | 66440 C | 66462 N |
| UB300-40 | 700 (27.5) | 300 (11.8) | 40 (88.1) | 10 (0.4) | 66441 E | 66463 R |
| UB300-50 | 700 (27.5) | 300 (11.8) | 50 (110.2) | 10 (0.4) | 66442 G | 66464 T |

NOTE: The total length is measured from center pivot line to end fitting at fully extended spring. Further lengths, strokes and output forces available on request (20 pieces each size minimum order)

END FITTINGS

Kit **KB01** - 66510 X: 2 ball bearing end fittings to be threaded on the gas spring



APPLICATIONS

Uflex provides gas springs in a variety of pressures to suit various installation needs, nevertheless it is the customer who decides which is the most convenient selection for a specific application. For more detailed information, please contact our Technical Service.

PACKAGING

UFLEX gas springs are supplied in ${\bf OEM}$ or in ${\bf Aftermarket}$ ${\bf packaging}.$

Please specify when ordering.







L total ±2

STROKE

AISI 316 stailess steel rod, cylinder and threaded end fittings End fittings to be ordered separately

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NOTE: End fittings to be ordered separately: Kit KSS01 - 66514 F (ball-joint) or Kit KSS02 - 66512 B (clevis)

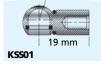
| MODEL | TOTAL LENGTH | STROKE | OUTPUT FORCE | ROD DIA. | OEM PACKAGING | AFTERMARKET PACKAGING |
|-----------|-----------------|------------|-----------------|-------------|------------------|-----------------------|
| | mm (") | mm (") | kg (lbs) | mm (") | Part No. | Part No. |
| USS100-5 | 275 (10.8) | 100 (3.9) | 5 (11.0) | 6 (0.2) | 66465 V | 66487 F |
| USS100-10 | 275 (10.8) | 100 (3.9) | 10 (22.0) | 6 (0.2) | 66466 X | 66488 H |
| USS100-20 | 275 (10.8) | 100 (3.9) | 20 (44.0) | 6 (0.2) | 66467 Z | 66489 K |
| USS120-10 | 315 (12.4) | 120 (4.7) | 10 (22.0) | 6 (0.2) | 66468 B | 66490 U |
| USS120-20 | 315 (12.4) | 120 (4.7) | 20 (44.0) | 6 (0.2) | 66469 D | 66491 W |
| USS120-30 | 315 (12.4) | 120 (4.7) | 30 (66.1) | 6 (0.2) | 66470 M | 66492 Y |
| USS150-10 | 375 (14.7) | 150 (5.9) | 10 (22.0) | 6 (0.2) | 66471 P | 66493 A |
| USS150-20 | 375 (14.7) | 150 (5.9) | 20 (44.0) | 6 (0.2) | 66472 S | 66494 C |
| USS150-30 | 375 (14.7) | 150 (5.9) | 30 (66.1) | 6 (0.2) | 66473 U | 66495 E |
| USS180-10 | 445 (17.5) | 180 (7.0) | 10 (22.0) | 8 (0.3) | 66474 W | 66496 G |
| USS180-20 | 445 (17.5) | 180 (7.0) | 20 (44.0) | 8 (0.3) | 66475 Y | 66497 J |
| USS180-30 | 445 (17.5) | 180 (7.0) | 30 (66.1) | 8 (0.3) | 66476 A | 66498 L |
| USS220-10 | 525 (20.6) | 220 (8.6) | 10 (22.0) | 8 (0.3) | 66477 C | 66499 N |
| USS220-20 | 525 (20.6) | 220 (8.6) | 20 (44.0) | 8 (0.3) | 66478 E | 66500 U |
| USS220-30 | 525 (20.6) | 220 (8.6) | 30 (66.1) | 8 (0.3) | 66479 G | 66501 W |
| USS220-40 | 525 (20.6) | 220 (8.6) | 40 (88.1) | 8 (0.3) | 66480 R | 66502 Y |
| USS250-20 | 585 (23.0) | 250 (9.8) | 20 (44.0) | 8 (0.3) | 66481 T | 66503 A |
| USS250-30 | 585 (23.0) | 250 (9.8) | 30 (66.1) | 8 (0.3) | 66482 V | 66504 C |
| USS250-40 | 585 (23.0) | 250 (9.8) | 40 (88.1) | 8 (0.3) | 66483 X | 66505 E |
| USS300-30 | 700 (27.5) | 300 (11.8) | 30 (66.1) | 10 (0.4) | 66484 Z | 66506 G |
| USS300-40 | 700 (27.5) | 300 (11.8) | 40 (88.1) | 10 (0.4) | 66485 B | 66507 J |
| USS300-50 | 700 (27.5) | 300 (11.8) | 50 (110.2) | 10 (0.4) | 66486 D | 66508 L |

NOTE: The total length is measured from center pivot line to end fitting at fully extended spring. Further lengths, strokes and output forces available on request (20 pieces each size minimum order)

END FITTINGS

Kit **KSS01** - 66514 F: 2 stainless steel ball bearing end fittings to be threaded on the gas spring

Kit **KSS02** - 66512 B: 2 stainless steel eyelet end fittings to be threaded on the gas spring





APPLICATIONS

Uflex provides gas springs in a variety of pressures to suit various installation needs, nevertheless it is the customer who decides which is the most convenient selection for a specific application. For more detailed information, please contact our Technical Service.

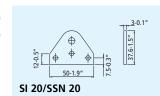
PACKAGING

UFLEX gas springs are supplied in **OEM** or in **Aftermarket packaging**. Please specify when ordering.





GAS SPRING MOUNTING BRACKETS







POLISHED STAINLESS STEEL BRACKETS AND STUDS

Flat bracket:

SI 20 - 64327 W

SSN 20 - 65289 W - With self-locking nuts

Square bent bracket with forward attachment point:

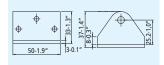
SI 21 - 64328 Y

SSN 21 - 65290 E - With self-locking nuts

Square bent bracket with reverse attachment point:

SI 22 - 64329 A

SSN 22 - 65291 G - With self-locking nuts









SI 21/SSN 21





POLISHED STAINLESS STEEL BRACKETS

AND STUDS TO CARRY BALL BEARING

END FITTINGS

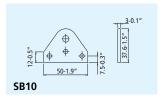
Flat bracket:

SB 10 - 66540 G

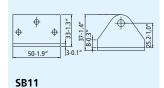
Square bent bracket with forward attachment **point: SB 11** - 66541 J

Square bent bracket with reverse attachment

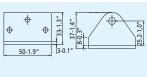
point: SB 12 - 66542 L















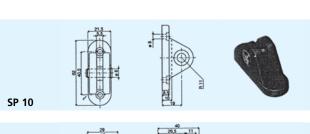
BLACK THERMOPLASTIC BRACKETS

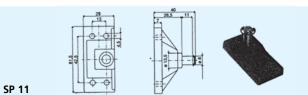
WITH ZINC PLATED

STEEL STUDS

SP 10 - 64325 S

SP 11 - 64326 U





BOATING AHEAD!

WITH INSTATRIM BOAT LEVELERS



TRIM TABS



BOAT ATTITUDE CORRECTION SYSTEM (TRIM TABS)

In boating performance is key. During acceleration or cruising, many factors can create unnecessary drag and an inefficient upward or listing attitude. You correct this with the simple touch of a switch: InstaTrim will deflect water downward to raise the stern and lower the bow.

Automatically you are up and running and cruising at peak performance with drammatically increased visibility, speed and control.



Note: two hydraulic cylinders per tab are supplied from 36" (92 cm) and larger tabs.

One cylinder per tab complete set

Components:

Motor 12V DC

- (24V DC on request) ■ 1 Pair of stainless steel tabs
- 1 Pair of hydraulic cylinders complete with
- 1 Litre of hydraulic oil
- 1 Water resistant rocker switch
- Hydraulic hose and harness
- 1 Funnel

Two cylinders per tab complete set

- Components:

 Motor 12V DC
 - (24V DC on request)
- 1 Pair of stainless steel tabs
- 2 Pair of hydraulic cylinders complete with fitting
- 1 Litre of hydraulic oil
- 1 Water resistant rocker switch
- Hydraulic hose and harness
- 1 Funnel

GENERAL SIZING RECOMMENDATIONS

| BOAT TYPE | LENGTH BOAT | TAB SIZE (cm) | TAB SIZE (in) | PART No. | WEIGHT kg (lbs) |
|--------------------------|-------------|---------------|---------------|----------|-----------------|
| | - | 25 x 20 | 10" x 8" | 61080 N | 10.1 (22.3) |
| Single outboard or I/O's | - | 30 x 20 | 12" x 8" | 60096 U | 11.4 (25.1) |
| | - | 46 x 20 | 18" x 8" | 60194 Y | 12.7 (27.9) |
| | - | 30 x 28 | 12" x 11" | 60197 B | 12.7 (27.9) |
| Twin engine | - | 35 x 28 | 14" x 11" | 60953 P | 14.2 (31.3) |
| outboard or I/O | - | 46 x 28 | 18" x 11" | 60198 E | 15.5 (34.2) |
| | - | 61 x 28 | 24" x 11" | 60199 F | 16.8 (37.0) |
| | 22' - 25' | 61 x 20 | 24" x 8" | 60195 Z | 14.5 (31.9) |
| Inboards | 22' - 25' | 76 x 20 | 30" x 8" | 60196 A | 16.3 (35.9) |
| inboards | 26′ - 29′ | 92 x 20 | 36" x 8" | 60262 M* | 18.2 (40.1) |
| | 30′ - 36′ | 102 x 20 | 40" x 8" | 60828 N* | 19.8 (43.6) |

^{*} Two hydraulic cylinders per tab

Note: other tabs measurements are available on request.

NOTE: on request InstaTrim® trim tabs are also available with aluminum tabs instead of the standard stainless steel ones. Please contact our Technical Service for further information.

ACCESSORIES



- 62595 M Tab locator Single station Black
- **62596 P** Tab locator Additional station Black



- **62597 S** Tab locator Single station White
- **62598 U -** Tab locator Additional station White



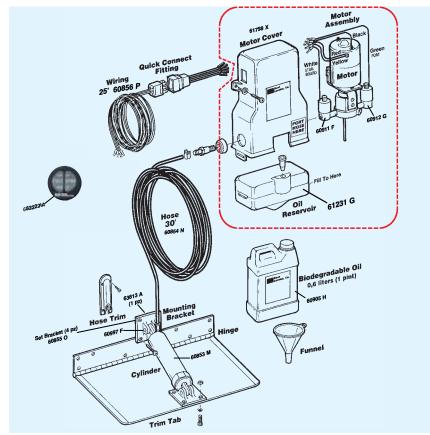
■ 63222 A - Water resistant rocker switch round - Additional station

Note: Do not simultaneously activate one tab up and the other tab down.



17

SPARE PARTS



Cylinder 60853 M length: 240 mm (9.5")

Warning

The page 90 general guideline makes the selection easier, however final selection should be made with the assistance of a qualified installation technician. When given a choice of more than one tab size, the largest trim tabs possible for your boat are the most efficient.

NOTE: These part numbers refer to 12 Volt systems. 24 Volt systems available on request.





UNIVERSAL MOTOR PUMP

Universal Motor Pump that fits all brands of hydraulic trim tab motor pumps (eg. Bennett and Trim Master).



FEATURES

- Pump has an adjustable pressure relief valve set at 28 Bar.
- Built-in bypass to permit fluid circulation in order to prevent pump stalling.
- Motor has thermal overload protection.
- Kit includes all necessary fittings for a 12V single cylinder system.
- Kit contains biodegradable oil and funnel.
- Heavy duty solenoid valves that lock cylinder in place.
- 45 cm (18") wire harness with colour coding instructions for other brands.
- Installation instruction included.

COLOURFUL PACKAGING



- Complete InstaTrim® system kit in a colourful promotional packaging.
- Especially designed for distributors.
- When ordering, please specify the optional packaging.

RIM TABS





UFLEX COMPASSES

Uflex offers a wide choice of models and styles of compasses both for power and sail boats. Mounting options vary from bulkhead, flush or bracket mounting to deck or pedestal assembly.

Every compass is a reliable instrument featuring a patented vibration dampening system that makes its card the most stable available on the market. Efficient compensation magnets and standard illumination guarantee good readability during all sea and weather conditions. Every Uflex compass is individually calibrated to ensure precision in highly variable temperatures from -40 °C to +60 °C (-40°F to +140 °F)

POWERBOAT COMPASSES

Easy to read, stylish compasses, they are extremely reliable and highly stable thanks to the unique "Quietcard" shock absorber system. The patented vibration dampening system combined with a low inertia card make these compasses ideal for all powerboat applications.

SAILBOAT COMPASSES

With their low inertia card design that provides high stability and readability in all conditions, these compasses represent the best value in sailing. The 45° lubber lines and the 45° built-in clinometer give the helmsman instant reference points for tacking and heel angle.

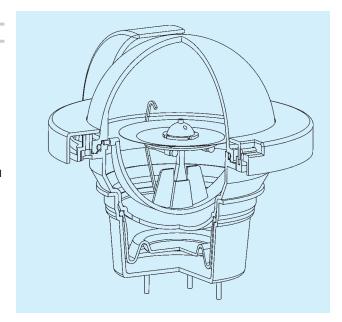
3 YEARS GUARANTEE

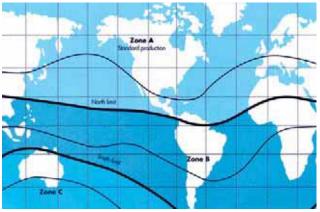
Our products are guaranteed, for a period of three years from the manufacture date, against defects in material and workmanship. Alleged defective products returned, freight prepaid, within the above said term, will be repaired or replaced at our option, free of charge, if found effectively below our quality standards.

This guarantee does not cover other claims for direct or indirect damage.

In particular, we decline liability and exclude guarantee (except for what stated above) if improper installation or misuse should result in the failure of our products.

Mounting and maintenance instructions are indicated in the instruction sheet supplied with the product.





CARD BALANCING

The cards in magnetic compasses are balanced to compensate for the dip caused by the earth's magnetic field. All Uflex compasses are standard balanced for use in the Northern Hemisphere (Zone A). When ordering compasses to be used in the Southern Hemisphere (Zone B-C), please specify the zone number of your boating area.

NOTE: Venezia Series compasses are factory balanced for world wide use.

All Uflex compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

| UFLE | IPASSES | APP. DIAL DIAM. | M | OUN | ITING | 3 | COLOUR OF HOUSING | | | | DIAL | | | AL DING | | ING GLE | | | | | |
|------|--------------|-----------------------|------------------|--------------|---------------|---------------|----------------------|-----------|----------|------------|-------------|-------|-------|------------|---------------|-----------------|--------------|---------|------------|--------------|--------------|
| | | INCHES | FLUSH MOUNT (FL) | BRACKET (BR) | BINNACLE (BI) | BULKHEAD (BU) | BLACK (B) | WHITE (W) | GRAY (G) | YELLOW (Y) | CHROME (CH) | BLACK | WHITE | SECTORS | FRONT READING | TOP READING (T) | FORE AND AFT | ROLL | CLINOMETER | COMPENSATORS | ILLUMINATION |
| Α | A-50 BI/B | 2" | | | • | | • | | | | | | • | | • | | | | | • | |
| м | A-50 BI/Y | 2" | | | • | | | | | • | | | • | | • | | | | | • | |
| Α | A-50 BR/B | 2" | | • | | | • | | | | | | • | | • | | + - 30° | + - 30° | | • | • |
| L | A-50 BR/W | 2" | | • | | | | • | | | | | • | | • | | + - 30° | + - 30° | | • | • |
| F | A-50 K/B | 2" | | | | | • | | | | | | • | | • | | | | | | |
| ı | A-50 K/Y | 2" | | | | | | | | • | | | • | | • | | | | | | |
| | A-65 L BI/B | 21/2" | | | • | | • | | | | | • | | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BI/W | 21/2" | | | • | | | • | | | | | • | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BI/G | 21/2" | | | • | | | | • | | | • | | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BI/CH | 21/2" | | | • | | | | | | • | • | | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BR/B | 21/2" | | • | | | • | | | | | • | | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BR/W | 21/2" | | • | | | | • | | | | | • | | • | | + - 30° | + - 30° | | | • |
| | A-65 L BR/G | 21/2" | | • | | | | | • | | | • | | | • | | + - 30° | + - 30° | | | • |
| | COLOMBO | 21/2" | | | | | • | | | | | | • | | • | | | | | | • |
| Р | P-80 BR/B | 3" | | • | | | • | | | | | • | | | • | | + - 30° | + - 30° | | | • |
| [| P-80 BR/W | 3" | | • | | | _ | • | | | | • | • | | • | | + - 30° | + - 30° | | • | • |
| S | P-80 BR/G | 3" | | • | | | | • | • | | | • | _ | | • | | + - 30° | + - 30° | | • | • |
| A | P-80 FL/B | 3" | | _ | | | | | • | | | | | | | | + - 30° | + - 30° | | _ | |
| _ ^ | P-80 FL/W | 3" | • | | | | • | | | | | • | | | • | | + - 30° | + - 30° | | • | • |
| | P-80 FL/G | 3" | • | | | | | • | • | | | • | • | | • | | + - 30° | + - 30° | | • | • |
| | P-80 BI/B | 3" | • | | | | • | | • | | | | | | • | | + - 30° | + - 30° | | • | • |
| | P-80 BI/W | 3" | | | | | • | • | | | | • | • | | _ | | + - 30° | + - 30° | | • | • |
| | P-80 BI/G | 3" | | | | | | • | • | | | • | _ | | • | | + - 30° | + - 30° | | | • |
| | P-80 LP/B | 3" | | | | | • | | • | | | | | | • | | + - 30° | + - 30° | | • | • |
| | P-80 LP/W | 3" | | | | | _ | • | | | | • | • | | • | | + - 30° | + - 30° | | | • |
| | P-80 LP/G | 3" | | | | | | • | • | | | • | _ | | • | | + - 30° | + - 30° | | | • |
| | P-90 BU/B | 31/2" | | | • | | • | | • | | | | | | • | | + - 30° | + - 30° | | • | |
| | P-90 BU/W | 3 ¹ /2" | | | | • | • | • | | | | • | • | | • | | + - 30° | + - 30° | | • | • |
| | P-90 BU/CH | 31/2" | | | | • | | • | | | • | | _ | | • | | + - 30° | + - 30° | | • | • |
| | P-90 BU/S | 31/2" | | | | • | • | | | | • | • | | | • | | + - 30° | + - 30° | | • | • |
| | | | | | | • | _ | | | | | | | _ | _ | | | | | • | |
| | P-95 BR/B | 33/4" | | • | | | • | | | | | • | | | • | | UNL. | + - 45° | | • | • |
| | P-95 BR/W | 33/4" | | • | | | | • | | | | | • | | • | | UNL. | + - 45° | | • | • |
| | P-95 BR/G | 33/4" | _ | • | | | | | • | | | • | | | • | | UNL. | + - 45° | | • | • |
| | P-95 BR T/B | 33/4" | | • | | | • | | | | | • | | | | • | UNL. | + - 45° | | • | • |
| | P-95 BR S/B | 33/4" | | • | | | • | | | | | • | | | • | | UNL. | + - 45° | • | • | • |
| | P-95 FL/B | 33/4" | _ | | | | • | | | | | • | | | • | | + - 45° | + - 45° | | • | • |
| | P-95 FL/W | 33/4" | _ | | | | | • | | | | | • | | • | | + - 45° | + - 45° | | • | • |
| | P-95 FL T/B | 33/4" | | | | | • | | | | | • | | | | • | UNL. | + - 45° | | • | • |
| | P-95 BU/B | 33/4" | | | | • | • | | | | | • | | | • | | UNL. | + - 45° | | • | • |
| | P-95 BU/W | 33/4" | | | | • | | • | | | | | • | | • | | UNL. | + - 45° | | • | • |
| | P-95 BU/G | 33/4" | | | | • | | | • | | | • | | | • | | UNL. | + - 45° | | • | • |
| | P-95 BU S/B | 33/4" | | | | • | • | | | | | • | | | • | | UNL. | + - 45° | • | • | • |
| | P-95 BU S/W | 33/4" | | | | • | | • | | | | | • | | • | | UNL. | + - 45° | • | • | • |
| | P-95 BU SS/B | 33/4" | | | | • | • | | | | | | | • | • | | UNL. | + - 45° | • | • | • |





| | JFLE COM | X IPASSES | APP. Dial Diam. | M | IOUN | ITING | 3 | | | LOUF | | | | DIAL | | DI Real | al Ding | | ING GLE | | | |
|---|-------------|---------------|-----------------------|------------------|--------------|---------------|---------------|-----------|-----------|----------|------------|-------------|-------|-------|---------|---------------|-----------------|--------------|------------|------------|--------------|--------------|
| | | | INCHES | FLUSH MOUNT (FL) | BRACKET (BR) | BINNACLE (BI) | BULKHEAD (BU) | BLACK (B) | WHITE (W) | GRAY (G) | YELLOW (Y) | CHROME (CH) | BLACK | WHITE | SECTORS | FRONT READING | TOP READING (T) | FORE AND AFT | ROLL | CLINOMETER | COMPENSATORS | ILLUMINATION |
| | G | G-116 FL/B | 41/2" | • | | | | • | | | | | • | | | • | | + - 45° | + - 45° | | • | • |
| ١ | E N | G-116 FL T/B | 41/2" | • | | | | • | | | | | • | | | | • | UNL. | + - 45° | | • | • |
| ١ | Ö | G-116 FL ST/B | 41/2" | • | | | | • | | | | | • | | | | • | UNL. | + - 45° | • | • | • |
| ١ | ٧ | G-116 BI ST/B | 41/2" | | | • | | • | | | | | • | | | | • | UNL. | + - 45° | • | • | • |
| ١ | Α | G-116 BU S/B | 41/2" | | | | • | • | | | | | • | | | • | | UNL. | + - 45° | • | • | • |
| | | | | | | | | | | | | | | | | | | | | | | |
| ١ | V E | V-135 FL T/B | 5 ⁵ /16" | • | | | | • | | | | | • | | | | • | + - 80° | + - 80° | | • | • |
| ١ | N | V-135 BI T/B | 5 ⁵ /16" | | | • | | • | | | | | • | | | | • | + - 80° | + - 80° | | • | • |
| 1 | E | V-135 BI T/P | 5 ⁵ /16" | | | • | | | | | | • | • | | | | • | + - 80° | + - 80° | | • | • |
| 1 | I A | | | | | | | | | | | | | | | | | | | | | |



HANDBEARING COMPASS

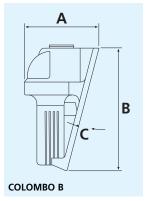
СОГОМВО

A 2 1/2" (65 mm) apparent diameter dial compass with a detachable bracket mounting. The bearing can be locked with a special system. Maximum tilting angle is 30° in all directions; the bracket is angled 15° forward from vertical. LED illumination.

COLOMBO B – 62333 E - Black







| Α | 111 mm - 4.37" |
|---|----------------|
| В | 180 mm - 7.1" |
| c | 15° |



A-50 AMALFI SERIES

- 2" (50 mm) apparent diameter dial
- front reading dial
- phosphorescent card
- built-in compensators A-50 BR models only
- Internal lighting A-50 BR models only

A-50 BINNACLE (BI)

A handy marine compass supplied with a special bracket from which can be easily removed. The durable vibration dampening makes this compass ideal not only for all power boat application, but also for dinghies and other small sailboats. Tilting angle effective up to 30°.

- A-50 BI/B 62332 C black A-50 BI/Y 62331 A yellow

A-50 BRACKET (BR)

A bracket mounted compass with multiple mounting capabilities, including surface mounting. Illumination and built-in compensators as standard.

- A-50 BR/B 62336 L black
- A-50 BR/W 62335 J white

A-50 KAYAK (K)

This compass, designed for Kayak and Canoe, is easy to mount and detach. The compass can be hooked to the kayak/canoa bungee cords or eyelets using clips provided.

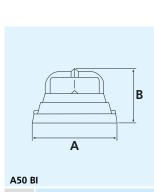
- A-50 K/B 62330 Y black
- A-50 K/Y 62329 P yellow



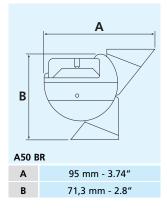
A-50 BI/Y A-50 BI/B







| A30 D | • |
|-------|---------------|
| Α | 87 mm - 3.42" |
| В | 54 mm - 2.13" |













A-65 AMALFI SERIES

- \blacksquare 2 1/2" (65 mm) apparent diameter dial
- front reading dial
- 5° dial graduation
- \blacksquare compact low profile
- snap-in mounting feature for easy removal
- binnacle or bracket installation
- shock resistant and antiscratching polycarbonate dome
- standard models with internal LED illumination
- black, grey, white and chrome (binnacle only) housing
- clamshell or box standard packaging

A-65 BINNACLE INSTALLATION (BI)

Low profile binnacle mounting compass that can be easily removed from its base acting on the snap-in mounting bracket.

Clamshell packaging

Without Illumination

A-65 Bl/B - 39320 N Black **A-65 Bl/W** - 39377 V White

A-65 BI/G - 39375 R Grey

A-65 BI/CH - 40901 T Chrome plated

With Illumination

A-65 L BI/B - 39350 Y Black A-65 L BI/W - 39351 A White A-65 L BI/G - 39379 Z Grey

A-65 L BI/CH - 40903 X Chrome plated

Box packaging

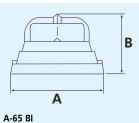
Without Illumination

A-65 BI/B box - 39382 M Black A-65 BI/W box - 39383 P White A-65 BI/G box - 39384 S Grey

A-65 BI/CH box - 40905 B Chrome plated

With Illumination A-65 L BI/B box - 39385 U Black A-65 L BI/W box - 39386 W White A-65 L BI/G box - 39387 Y Grey

A-65 L BI/CH box - 40907 F Chrome plated

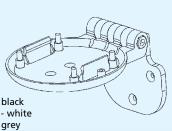


| A | Α | 86 mm - 3.39" |
|------|---|---------------|
| 5 BI | В | 78 mm - 3.1" |

MOUNTING VERSATILITY

Order BRACKET 65 if you wish to transform your A-65 BI binnacle compass in a A-65 BR bracket compass.











A-65 AMALFI SERIES

- 2 1/2" (65 mm) apparent diameter dial
- front reading dial
- 5° dial graduation
- compact low profile
- snap-in mounting feature for easy removal
- binnacle or bracket installation
- shock resistant and antiscratching polycarbonate dome
- standard models with internal LED illumination
- black, grey, white and chrome (binnacle only) housing
- clamshell or box standard packaging

A-65 BRACKET INSTALLATION (BR)

The bracket version of the A-65 Amalfi series compass is designed for multiple mounting capabilities both in a horizontal or inclined dashboard or a bulkhead. It can be easily removed from its bracket acting on the snap-in mounting system

Clamshell packaging

Without Illumination

A-65 BR/B - 39321 R Black **A-65 BR/W** - 39378 X White **A-65 BR/G** - 39376 T Grey

With Illumination

A-65 L BR/B - 39352 C Black **A-65 L BR/W** - 39353 E White **A-65 L BR/G** - 39380 H Grey

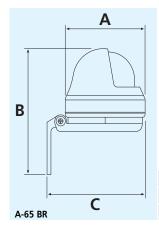
Box packaging

Without Illumination

A-65 BR/B box - 39388 A Black **A-65 BR/W** box - 39389 C White **A-65 BR/G** box - 39390 L Grey

With Illumination

A-65 L BR/B box - 39391 N Black **A-65 L BR/W** box - 39392 R White **A-65 L BR/G** box - 39393 T Grey



| Α | 86 mm - 3.39" |
|---|----------------|
| В | 132 mm - 5.2" |
| С | 106 mm - 4.17" |







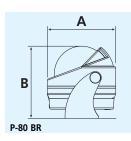
P-80 PISA SERIES

- 3" (80 mm) apparent diameter dial
- front reading dial
- low and compact profile
- bracket, flush, binnacle and bulkhead mount choice
- semi-gimbal system
- internal LED illumination
- built-in compensators (P-80 LP models excepted)
- available in black, white and gray housing
- 5° dial graduation
- single box packaging
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2.

P-80 BRACKET MOUNT (BR)

Bracket mount compasses easy to install in multiple ways both on a dashboard or a cabin overhead. The compass can be easily removed from its brackets by loosening the two sidemounted amagnetic screws.

P-80 BR/B 39591 X – front reading, black housing and card P-80 BR/W 39597 K – front reading, white housing and card P-80 BR/G 39593 B – front reading, gray housing, black card



| Α | 100 mm - 3.9" |
|---|-----------------|
| В | 103.5 mm - 4.1" |





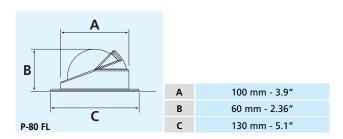
P-80 PISA SERIES

- 3" (80 mm) apparent diameter dial
- front reading dial
- low and compact profile
- bracket, flush, binnacle and bulkhead mount choice
- semi-gimbal system
- internal LED illumination
- built-in compensators (P-80 LP models excepted)
- available in black, white and gray housing
- 5° dial graduation
- single box packaging
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2.

P-80 FLUSH MOUNT (FL)

Flush mount compasses designed for mounting on top of an instrument panel or any flat surface from horizontal plane to 45° fore and aft tilt.

P-80 FL/B 40162 E – front reading, black housing and card
P-80 FL/W 40163 G – front reading, white housing and card
P-80 FL/G 41203 X – front reading, gray housing, black card









P-80 PISA SERIES

- 3" (80 mm) apparent diameter dial
- front reading dial
- low and compact profile
- bracket, flush, binnacle and bulkhead mount choice
- semi-gimbal system
- internal LED illumination
- built-in compensators (P-80 LP models excepted)
- available in black, white and gray housing
- 5° dial graduation
- single box packaging
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2.

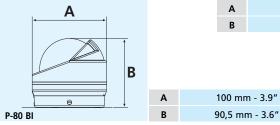
P-80 BINNACLE MOUNT (BI)

P-80 BI/B 40164 J – front reading, black housing and card
P-80 BI/W 40165 L – front reading, white housing and card
P-80 BI/G 41244 M – front reading, gray housing, black card

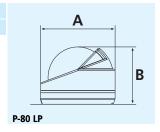
P-80 BINNACLE MOUNT "LOW PROFILE" (LP)

P-80 LP/B 41245 P – front reading, black housing and card P-80 LP/W 41246 S – front reading, white housing and card P-80 LP/G 41247 U – front reading, gray housing, black card

NOTE: Compensation is not included in P-80 LP models.



| Α | 100 mm - 3.9" |
|---|---------------|
| В | 75,5 mm - 3" |
| | |







P-90 PISA SERIES

- 3.5" (90 mm) apparent diameter dial
- front reading dial
- low and compact profile
- bracket, flush, binnacle and bulkhead mount choice
- semi-gimbal system
- internal LED illumination
- built-in compensators (P-80 LP models excepted)
- available in black, white, chrome and titanium (bulkhead only) housing
- 5° dial graduation
- single box packaging
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2.

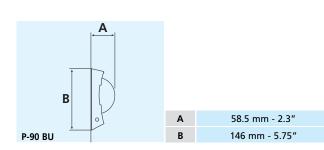
P-90 BULKHEAD MOUNT (BU)

Bulkhead or panel mount compasses ideal for both sailing and motor boats. The gimballing system allows them to be mounted on a vertical or up to 45° front sloping console.

P-90 BU/B 41248 W - front reading, black housing and card P-90 BU/W

41249 Y – front reading, white housing and card 41250 G – front reading, chrome plated housing, black card 41251 J – front reading, titanium housing, black card P-90 BU/CH P-90 BU/T P-90 BU/S 41252 L – front reading, black housing, sector card

SCB-90 41253 N – optional black cover 41254 R – optional white cover SCW-90





P-90 BU/S







P-95 PISA SERIES

- 3 3/4" (95 mm) apparent diameter dial
- choice of front or top reading dials in bracket and flush mount models
- bulkhead, bracket and flush mount choice
- LED illumination
- built-in compensators
- internal gimbal system
- 45° lubber lines and built-in clinometer scale up to 45° on sailboat models
- optional sun cover
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

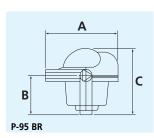
P-95 BRACKET MOUNT (BR)

Bracket mount compasses easy to install in multiple ways both on a dashboard or a cabin overhead. The compass can be easily removed from its bracket for security by loosening the two large bracket red knobs.

P-95 BR/B 62341 D - front reading, black housing and card 62340 B – front reading, white housing and card 62450 J – top reading, black housing and card 62500 X – for sail boat, front reading, black housing and card P-95 BR/W P-95 BR T/B

P-95 BR S/B

62648 L - Optional Sun Cover Sun Cover



| Α | 127,5 mm - 5" |
|---|-----------------|
| В | 82,5 mm - 3.25" |
| C | 140 mm - 5.5" |
| | |

P-95 BR SPARE PARTS

RED KNOB FOR BRACKET BLACK BRACKET 90442 U 90444 Y WHITE BRACKET 90445 A









P-95 PISA SERIES

- 3 3/4" (95 mm) apparent diameter dial
- choice of front or top reading dials in bracket and flush mount models
- bulkhead, bracket and flush mount choice
- LED illumination
- built-in compensators
- internal gimbal system
- 45° lubber lines and built-in clinometer scale up to 45° on sailboat models
- optional sun cover
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

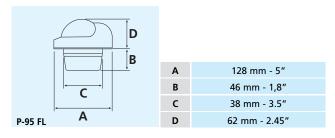
P-95 FLUSH MOUNT (FL)

Flush mount compasses designed for mounting on top of an instrument panel or any flat surface from horizontal plane to 45° fore and aft tilt. The optional spacer is used for altering the depth of flush mount and bulkhead model compasses.

P-95 FL/B 62344 K – front reading, black housing and card.
P-95 FL/W 62343 H – front reading, white housing and card
P-95 FL T/B 62466 A – top reading, black housing and card

SPACER 62511 C - Optional Spacer

Sun Cover 62648 L - Optional Sun Cover











P-95 PISA SERIES

- 3 3/4" (95 mm) apparent diameter dial
- choice of front or top reading dials in bracket and flush mount models
- bulkhead, bracket and flush mount choice
- LED illumination
- built-in compensators
- internal gimbal system
- 45° lubber lines and built-in clinometer scale up to 45° on sailboat models
- optional sun cover
- All Pisa series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

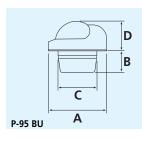
P-95 BULKHEAD MOUNT (BU)

Bulkhead or panel mount compasses with a gimballing system that allows them to be mounted on a vertical or up to 45° front sloping console.

P-95 BU/B 62338 R – front reading, black housing and card
P-95 BU/W 62337 N – front reading, white housing and card
P-95 BU/G 62339 T – front reading, grey housing, black card
P-95 BU S/B 62447 W – for sailboats, front reading, black housing and

P-95 BU S/B 62447 W – for sailboats, front reading, black housing and card
P-95 BU SS/B 62446 U – for sailboats, front reading, white housing and card
P-95 BU SS/B 62502 B – for sailboats, front reading, black housing, sector card

Sun Cover 62648 L - Optional Sun Cover



| Α | 128 mm - 5" |
|---|---------------|
| В | 46 mm - 1,8" |
| C | 38 mm - 3.5" |
| D | 62 mm - 2.45" |



P-95 BU SS/B







G-116 GENOVA SERIES

- 4 1/2" (116 mm) apparent diameter dial
- choice of front or top reading dials in flush mount models
- bulkhead, binnacle and flush mount choice
- LED illumination
- Built-in compensators
- internal gimbal system
- 45° lubber lines and built-in clinometer scale up to 45° on sailboat models
- optional sun covers
- All Genova series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

G-116 FLUSH MOUNT (FL)

G-116 FL/B 62453 R – front reading, black housing and card G-116 FL T/B 62469 G – top reading, black housing and card

G-116 FL ST/B 62503 D - for sailboats, top reading, black housing and card

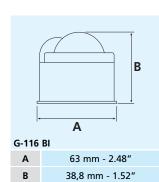
G-116 BINNACLE MOUNT (BI)

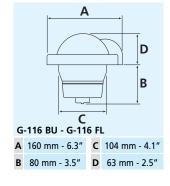
G-116 BI ST/B 62504 F – for sailboats, top reading, black housing and card

G-116 BULKHEAD MOUNT (BU)

G-116 BU S/B 62455 V - for sailboats, front reading, black housing and card

Sun Cover 62649 N - Optional Sun Cover















V-135 VENEZIA SERIES

- 5 5/16" (135 mm) apparent diameter dial
- traditional top reading dial
- binnacle or flush mount choice
- light bulb illumination 12/24 V
- built-in compensators
- internal gimbal system
- 45° lubber lines ■ factory balanced for world wide use
- standard sun covers
- All Venezia series compasses meet the D.M. 388 29/09/1999 art. 3, paragraph 2. Approved by the Finnish Maritime Administration.

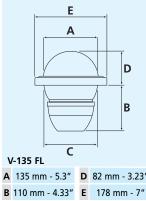


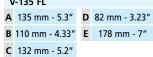
V-135 FLUSH MOUNT (FL)

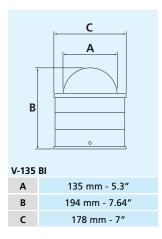
V-135 FL T/B 62460 M – top reading, black housing and card

V-135 BINNACLE MOUNT (BI)

V-135 BI T/B 62458 B – top reading, black housing and card
V-135 BI T/P 62459 D – top reading, polish steel housing, black card







MARINE INSTRU





FEATURES:

- Perimeter-lighted black (ULTRA) or white dial (ULTRA WHITE) with bold graphics.

 12V DC, negative ground
- Black aluminum bezel.
- Flat glass lens.
- Metric and american scales.

Uflex instruments are single tested and CE marked according to the European Standards.

| INSTRUMENT | DIAL RANGE | DESCRIPTION | SENDER | HOLE SIZE mm - in | ULTRA PART No. | ULTRA WHITE PART No. |
|-----------------------------|-------------------------------|---|--|-------------------------------------|-------------------------------|-------------------------------|
| | 6000 RPM | For all 4, 6 & 8 cylinder inboard & I/O gas engine. | Not required | 85 - 3.37 | 60738 G | 60691 K |
| Tachometer | 7000 RPM | • Universal for all outboard engines 4, 6, 8, 10, 12 & 20 pole. | Not required | 85 - 3.37 | 60509 S | 60533 T |
| | 4000 RPM | Diesel 5:1, 1:1, 1.5:1, 2:1 mechanical take off | Page 44 | 85 - 3.37 | 60510 J | 60534 U |
| | 4000 RPM | Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 60510 J | 60534 U |
| | 7000 RPM | • Universal for all outboard engines 4, 6, 8, 10, 12 & 20 pole. | Not required | 85 - 3.37 | 61766 H | 61767 K |
| Tach-Hourmeter | 4000 RPM | Diesel 5:1, 1:1, 1.5:1, 2:1 mechanical take off | Page 44 | 85 - 3.37 | 62049 H | 62050 S |
| | 4000 RPM | Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 62049 H | 62050 S |
| Speedometer | 30 Knot 50 Knot 70 Knot | - | Requires pitot tube (Page 44) | 85 - 3.37 85 - 3.37 85 - 3.37 | 60512 L 60513 M 60514 N | 60536 W 60537 X 60538 A |
| Fuel level gauge | E - 1/2 - F | - | Page 44 - 46 | 53 - 2.07 | 60518 T | 60542 U |
| Water level gauge | E - 1/2 - F | - | Page 46 | 53 -2.07 | 60520 L | 60544 W |
| Oil pressure gauge | 5 bar 10 bar | - | Page 44 | 53 - 2.07 53 - 2.07 | 60521 M 60522 N | 60545 X 60546 Y |
| Transmission pressure gauge | 25 bar | - | Not available | 53 - 2.07 | 60523 O | 60547 Z |
| Water temperature gauge | 40 - 120 °C | - | Page 44 | 53 - 2.07 | 60526 R | 60550 U |
| Voltmeter | 10-16 Volt 20-32 Volt | For all 12 Volt electrical system For all 24 Volt electrical system | Not required Not required | 53 - 2.07 53 - 2.07 | 60529 W 60741 Z | 60553 X 60742 A |
| Hourmeter | 10.000 ore | Elapsed in hour/tenths, (12-32 volt) | Not required | 53 - 2.07 | 60530 Q | 60554 Y |
| Ammeter | 60 - 0 - 60 | Indicates electrical charge/discharge rate | Not required | 53 - 2.07 | 60532 S | 60540 S |
| Battery charge indicator | E - 1/2 - F | 12 Volt, internally illuminated, remote mounted sensor with 20' harness included | Not required | 53 - 2.07 | 62080 B | 62081 D |
| Clock | - | Quartz analog | Not required | 53 - 2.07 | 60531 R | 60539 B |
| Synchonizer | - | All twin gas & diesel inboard | Not required | 85 - 3.37 | 60517 Q | 60541 T |
| Rudder angle indicator | Port- Starboard | Indicates relative position of rudder | Page 44 | 53 - 2.07 | 60699 U | 60700 Q |
| Trim gauge | Up-Down | Mercury & Mariner outboard, Mercruiser, Volvo DP, '96 & newer, Volvo & Yamaha EST sterndrive. OMC outboard Johnson & Evinrude. Yamaha & Evinrude Yamaha | Requires sender for outboard and sterndrive engines | 53 -2.07 53 -2.07 | 61655 Y 62045 Z | 62044 X 62046 B |
| | | outboard '97 & newer. | | 53 -2.07 | 62047 D | 62048 F |



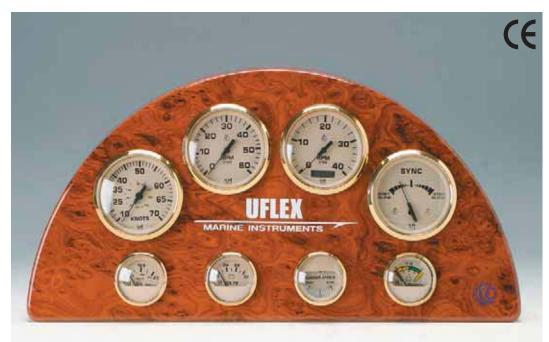
ELECTRONIC FLUX-GATE COMPASS

- Auto compensationEasy to install and to read in all weather conditions
- Unaffected by metal objects in the vicinity of the compass indicator
- Includes: remote mounted sensor with 20′ plug in harness, instruction manual and mounting hardware

61076 N – ULTRA Style Electronic Compass **61077 O** – ULTRA WHITE Style Electronic Compass



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BEIGE GOLD



ULTRAWHITE SS

FEATURES:

- Perimeter-lighted beige (BEIGE GOLD) or white dial (ULTRAWHITE SS) with bold graphics.
- 12V DC, negative ground
- Polished gold or polished stainless steel bezel.
- Domed glass lens.
- Metric and american scales.

Uflex instruments are single tested and CE marked according to the European Standards.

| INSTRUMENT | DIAL RANGE | DESCRIPTION | SENDER | HOLE SIZE mm - in | BEIGE-GOLD PART No. | U-WHITE SS PART No. |
|-----------------------------|-------------------------------|--|--|-------------------------------------|-------------------------------|-------------------------------|
| | 6000 RPM | • For all 4, 6 & 8 cylinder inboard & I/O gas engine. | Not required | 85 - 3.37 | 62053 Y | 62004 J |
| Tachometer | 7000 RPM | • Universal for all outboard engines 4, 6, 8, 10, 12 & 20 pole. | Not required | 85 - 3.37 | 62051 U | 62003 G |
| | 4000 RPM | Diesel 5:1, 1:1, 1.5:1, 2:1 mechanical take off | Page 44 | 85 - 3.37 | 62054 A | 62005 L |
| | 4000 RPM | Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 62054 A | 62005 L |
| | 7000 RPM | Universal for all outboard engines | Not required | 85 - 3.37 | 62055 C | 62006 N |
| Tach-Hourmeter | 4000 RPM | 4, 6, 8, 10, 12 & 20 pole. • Diesel 5:1, 1:1, 1.5:1, 2:1 | Page 44 | 85 - 3.37 | 62056 E | 62007 R |
| | 4000 RPM | mechanical take off • Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 62056 E | 62007 R |
| Speedometer | 30 Knot 50 Knot 70 Knot | - | Requires pitot tube (Page 44) | 85 - 3.37 85 - 3.37 85 - 3.37 | 62057 G 62058 J 62059 L | 62008 T 62009 V 62010 D |
| Fuel level gauge | E - 1/2 - F | - | Page 44 - 46 | 53 - 2.07 | 62063 B | 62014 M |
| Water level gauge | E - 1/2 - F | - | Page 46 | 53 - 2.07 | 62067 K | 62018 W |
| Oil pressure gauge | 5 bar 10 bar | - | Page 44 | 53 - 2.07 53 - 2.07 | 62065 F 62066 H | 62016 S 62017 U |
| Transmission pressure gauge | 25 bar | - | Not available | 53 - 2.07 | 62077 N | 62052 W |
| Water temperature gauge | 40 - 120 °C | - | Page 44 | 53 - 2.07 | 62073 E | 62024 R |
| Voltmeter | 10-16 Volt 20-32 Volt | For all 12 Volt electrical system For all 24 Volt electrical system | Not required Not required | 53 - 2.07 53 - 2.07 | 62071 A 62072 C | 62022 L 62023 N |
| Hourmeter | 10.000 ore | Elapsed in hour / tenths (12-32 volt) | Not required | 53 - 2.07 | 62064 D | 62015 P |
| Ammeter | 60 - 0 - 60 | Indicates electrical charge / discharge rate | Not required | 53 - 2.07 | 62060 V | 62011 F |
| Battery charge indicator | E - 1/2 - F | 12 Volt, internally illuminated, remote mounted sensor with 20' harness included | Not required | 53 - 2.07 | 62061 X | 61012 H |
| Clock | - | Quartz analog | Not required | 53 - 2.07 | 62062 Z | 62013 K |
| Syncronizer | - | All twin gas & diesel inboard | Not required | 85 - 3.37 | 62074 G | 62025 T |
| Rudder angle indicator | Port- Starboard | Indicates relative position of rudder | Page 44 | 53 - 2.07 | 62076 L | 62027 X |
| Trim indicator | Up-Down | For Mercury and Mariner outboards, Mercruiser, Volvo DP, '96 and newer, Volvo and Yamaha EST sterndrives For OMC outboards For Yamaha outboards (97 and newer) | Requires sender for outboard and sterndrive engines | 53 -2.07 53 -2.07 | 62068 M 62069 P | 62019 Y 62020 G |
| | | • For Yamaha outboards '97 and newer | | 53 -2.07 | 62070 Y | 62021 J |



ELECTRONIC FLUX-GATE COMPASS

- Auto compensation
- Easy to install and to read in all weather conditions
- Unaffected by metal objects in the vicinity of the compass indicator
- Includes: remote mounted sensor with 20′ plug in harness, instruction manual and mounting hardware

62078 R – BEIGE GOLD Style Electronic Compass **62079 T** – ULTRAWHITE SS Style Electronic Compass



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DRESS WHITE

FEATURES:

- Perimeter-lighted white dial with bold black graphics. 12V DC, negative ground
- White aluminum bezel.
- Flat glass lens.
- Metric and american scales.



FEATURES:

- Perimeter-lighted black dial with red graphics.

 12V DC, negative ground
- Black aluminum bezel.
- Flat glass lens.
- Metric and american scales.

Uflex instruments are single tested and CE marked according to the European Standards.

| INSTRUMENT | DIAL RANGE | DESCRIPTION | SENDER | HOLE SIZE mm - in | DRESS/WHITE PART No. | PROFESSIONAL PART No. |
|-----------------------------|-------------------------------|---|--|-------------------------------------|-------------------------------|-------------------------------|
| | 6000 RPM | • For all 4, 6 & 8 cylinder inboard & I/O gas engine. | Not required | 85 - 3.37 | 62656 F | 63196 C |
| Tachometer | 7000 RPM | • Universal for all outboard engines 4, 6, 8, 10, 12 & 20 pole. | Not required | 85 - 3.37 | 62657 H | 63197 E |
| racriometer | 4000 RPM | Diesel 5:1, 1:1, 1.5:1, 2:1 mechanical take off | Page 44 | 85 - 3.37 | 62658 K | 63198 G |
| | 4000 RPM | Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 62658 K | 63198 G |
| | 7000 RPM | Universal for all outboard engines | Not required | 85 - 3.37 | 62659 M | 63199 J |
| Tach-Hourmeter | 4000 RPM | 4, 6, 8, 10, 12 & 20 pole. • Diesel 5:1, 1:1, 1.5:1, 2:1 | Page 44 | 85 - 3.37 | 62660 W | 63200 P |
| | 4000 RPM | mechanical take off • Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 62660 W | 63200P |
| Speedometer | 30 Knot 50 Knot 70 Knot | - | Requires pitot tube (Page 44) | 85 - 3.37 85 - 3.37 85 - 3.37 | 62661 Y 62662 A 62663 C | 63201 S 63202 U 63203 W |
| Fuel level gauge | E - 1/2 - F | - | Page 44 - 46 | 53 - 2.07 | 62664 E | 63204 Y |
| Water level gauge | E - 1/2 - F | - | Page 46 | 53 - 2.07 | 62665 G | 63205 A |
| Oil pressure gauge | 5 bar 10 bar | - | Page 44 | 53 - 2.07 53 - 2.07 | 62666 J 62667 L | 63206 C 63207 E |
| Transmission pressure gauge | 25 bar | - | Not available | 53 - 2.07 | 62668 N | 63208 G |
| Water temperature gauge | 40 - 120 °C | - | Page 44 | 53 - 2.07 | 62669 R | 63209 J |
| Voltmeter | 10-16 Volt 20-32 Volt | For all 12 Volt electrical system For all 24 Volt electrical system | Not required Not required | 53 - 2.07 53 - 2.07 | 62670 Z 62671 B | 63210 T 63211 V |
| Hourmeter | 10.000 ore | Elapsed in hour / tenths (12-32 volt) | Not required | 53 - 2.07 | 62672 D | 63212 X |
| Ammeter | 60 - 0 - 60 | Indicates electrical charge / discharge rate | Not required | 53 - 2.07 | 62673 F | 63213 Z |
| Battery charge indicator | E - 1/2 - F | 12 Volt, internally illuminated, remote mounted sensor with 20' harness included | Not required | 53 - 2.07 | 62674 H | 63214 B |
| Clock | - | Quartz analog | Not required | 53 - 2.07 | 62676 M | 63216 F |
| Syncronizer | - | All twin gas & diesel inboard | Not required | 85 - 3.37 | 62677 P | 63217 H |
| Rudder angle indicator | Port- Starboard | Indicates relative position of rudder | Page 44 | 53 - 2.07 | 62678 S | 63218 K |
| Trim indicator | Up-Down | For Mercury and Mariner outboards, Mercruiser, Volvo DP, '96 and newer, Volvo and Yamaha EST sterndrives For OMC outboards For Yamaha outboards '97 and newer | Requires sender for outboard and sterndrive engines | 53 -2.07 53 -2.07 53 -2.07 | 62679 U 62680 C 62681 E | 63219 M 63220 W 63219 M |
| | | - 1 of Tallialia Outboalus 37 aliu newer | | 33 -2.07 | 02001 E | 032 19 IVI |



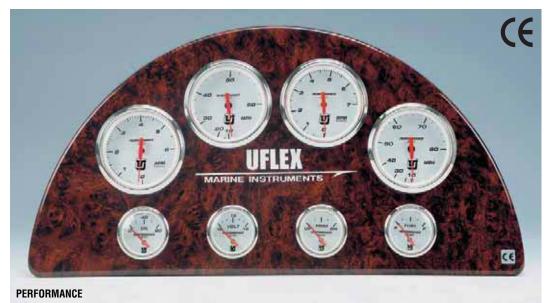
ELECTRONIC FLUX-GATE COMPASS

- Auto compensation
- Easy to install and to read in all weather conditions
- Unaffected by metal objects in the vicinity of the compass indicator
- Includes: remote mounted sensor with 20′ plug in harness, instruction manual and mounting hardware

62675 K – DRESS WHITE Style Electronic Compass



41



FEATURES:

- Perimeter-lighted white dial with black graphics
- 12V DC negative ground
- Stainless steel bezel
- Domed glass fog free lens
- Metric and American scales



FEATURES:

- Perimeter-lighted white dial with bold black graphics

 Stainless steel bezel
- Domed glass fog free lens
- 12V DC, negative ground
- Metric and American scales

Uflex instruments are single tested and CE marked according to the European Standards.

| INSTRUMENT | DIAL RANGE | DESCRIPTION | SENDER | HOLE SIZE mm - in | PERFORMANCE PART No. | CALYPSO PART No. |
|-----------------------------|-------------------------------|--|--|-------------------------------------|-------------------------------|-------------------------------|
| | 6000 RPM | For all 4, 6 & 8 cylinder inboard & I/O gas engine. | Not required | 85 - 3.37 | 65316 W | 66639 C |
| Tachometer | 7000 RPM | • Universal for all outboard engines 4, 6, 8, 10, 12 & 20 pole. | Not required | 85 - 3.37 | 65315 U | 66638 A |
| racionietei | 4000 RPM | Diesel 5:1, 1:1, 1.5:1, 2:1 mechanical take off | Page 44 | 85 - 3.37 | 65317 Y | 66640 L |
| | 4000 RPM | Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 65317 Y | 66640 L |
| | 7000 RPM | Universal for all outboard engines | Not required | 85 - 3.37 | 65318 A | |
| Tach-Hourmeter | 4000 RPM | 4, 6, 8, 10, 12 & 20 pole. • Diesel 5:1, 1:1, 1.5:1, 2:1 | Page 44 | 85 - 3.37 | 65319 C | |
| | 4000 RPM | mechanical take off • Diesel, variable ratio for alternator connection | Not required | 85 - 3.37 | 65319 C | |
| Speedometer | 30 Knot 50 Knot 70 Knot | - | Requires pitot tube (Page 44) | 85 - 3.37 85 - 3.37 85 - 3.37 | 65320 L 65321 N 65322 R | 66642 R 66643 T 66644 V |
| Fuel level gauge | E - 1/2 - F | - | Page 44 - 46 | 53 - 2.07 | 65323 T | 66645 X |
| Water level gauge | E - 1/2 - F | - | Page 46 | 53 - 2.07 | 65324 V | 66660 T |
| Oil pressure gauge | 5 bar 10 bar | - | Page 44 | 53 - 2.07 53 - 2.07 | 65325 X 65326 Z | 66646 Z 66647 B |
| Transmission pressure gauge | 25 bar | - | Not available | 53 - 2.07 | 65327 B | 66659 J |
| Water temperature gauge | 40 - 120 °C | - | Page 44 | 53 - 2.07 | 65328 D | 66648 D |
| Voltmeter | 10-16 Volt 20-32 Volt | For all 12 Volt electrical system For all 24 Volt electrical system | Not required Not required | 53 - 2.07 53 - 2.07 | 65329 F 65330 P | 66649 F 66656 C |
| Hourmeter | 10.000 ore | Elapsed in hour / tenths (12-32 volt) | Not required | 53 - 2.07 | 65331 S | 66650 P |
| Ammeter | 60 - 0 - 60 | Indicates electrical charge / discharge rate | Not required | 53 - 2.07 | 65332 U | 66655 A |
| Battery charge indicator | E - 1/2 - F | 12 Volt, internally illuminated, remote mounted sensor with 20' harness included | Not required | 53 - 2.07 | 65333 W | 66657 E |
| Syncronizer | - | All twin gas & diesel inboard | Not required | 85 - 3.37 | 65334 Y | 66641 N |
| Rudder angle indicator | Port- Starboard | Indicates relative position of rudder | Page 44 | 53 - 2.07 | 65335A | 66658 G |
| Trim indicator | Up-Down | For Mercury and Mariner outboards, Mercruiser, Volvo DP, '96 and newer, Volvo and Yamaha EST sterndrives For OMC outboards | Requires sender for outboard and sterndrive engines | 53 - 2.07 53 - 2.07 | 65336 C 65337 E | 66653 W |



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| SENDERS AND ACCESSORIES | SCALE | DESCRIPTION | PART No. |
|--------------------------|-------|---|----------|
| Diesel tachometer sender | - | Attaches to diesel sender mechanical take- off. Includes coupling and 4 drive keys | 60613 S |



60696 P

44

| Pitot kits | - | Pitot tube complete with transom mount mounting hardware As above complete with 20' of tubing Tubing - 20' | 60515 O 60516 P 61717 U | 0. |
|------------------------|------------------------------------|--|--|--|
| | | | | |
| Oil pressure sender | 5 bar 5 bar 10 bar 10 bar | Single station, 1/8" NPTF Dual station, 1/8" NPTF Single station, 1/8" NPTF Dual station, 1/8" NPTF | 60525 Q 60610 P 60611 Q 60612 R | |
| | | | | - |
| Water temperature | 40 - 120 °C | Single station, 1/8" NPTF | 60528 V | |
| sender | 40 - 120 °C | Dual station, 1/8" NPTF | 60614 T | |
| | | | | 40 |
| Fuel level sender | 20 - 60 cm (7.9" - 23.6") | Single station | 66180 C | 1 |
| | | | | B |
| | | l en et e e | | 10 |
| Rudder angle sender | - | Single station Dual station To use with Uflex rudder angle indicator only. | 60701 R 60702 S | Q · |
| | | | | 3 |
| | Temperature | 1/8" NPTF - M10x1 | 60618 Z | |
| Bushing kit | and pressure | 1/8" NPTF - M12x1 | 60619 A | A CONTRACTOR OF THE PARTY OF TH |
| | 3CHUCI 3 | 1/8" NPTF - M16x1.5 | 60620 R | |
| | | | C0C21 C | 1 |
| 24 Volt adaptor kit | 12 - 24V | Tachometer - Syncronizers Ammeter - Speedometer (24V bulb only) Water temperature Oil pressure - fuel level - water level - rudder angle | 60621 S 60623 U 60703 T 60704 U | A. |

Fuel level sender installation kit (for plastic fuel tanks)

NOTE: SINGLE SENDER: to connect to one gauge DUAL SENDER: to connect to two gauges

Installation kit

66234 Z

Fuel level Ultra Series gauge complete with sender 20 - 60 cm (7.9" - 23.6")

66235 B

Fuel level Ultra White Series gauge complete with sender 20 - 60 cm (7.9" - 23.6")







45

PROMOTIONAL

ITEMS

We present to our distributors particularly elegant displays to enhance the quality and design of our instruments.

Burl wood or carbon look colours available.

Burl wood - 62605 M Carbon look - 62606 P



Due to our customers care and attention for a stylish packaging for the instruments, we have decided to offer optional boxes that meet their requirements.

their requirements.

To present a quality product in a visually appealing packaging will increase the instruments sale possibility.

When ordering, please specify the optional packaging.





ATER/FUEL AND HOLDING TANK MONITORING SYSTEM



WATER AND FUEL LEVEL MONITORING SYSTEM

WATER AND FUEL LEVEL INDICATORS

- Available in black or white colours
- 12V/24V DC standard illumination
- Resistance rating:
 - 0 Ohm (empty)
 - 180 Ohm (full)
- 52 mm (2") gauge cut out

FUEL/B - 65836 Z - black **FUEL/W** - 65837 B - white **WATER/B** - 65838 D - black **WATER/W** - 65839 F - white



FUEL/B











WATER/B

WATER/W

S5 FUEL/WATER SENSORS

- Stainless steel
- Flange SAE 5-hole bolt circle 54 mm (2.1")
- Resistance rating:
- 0 Ohm (empty) 180 Ohm (full)
 S5 sensors interface all Uflex fuel and water level indicators

| LENGTH | MODEL | PART No. |
|----------------|---------|----------|
| 150 mm (5.9") | S5-E150 | 64689 H |
| 175 mm (6.9") | S5-E175 | 64690 S |
| 200 mm (7.9") | S5-E200 | 64691 U |
| 225 mm (8.9") | S5-E225 | 64692 W |
| 250 mm (9.8") | S5-E250 | 64693 Y |
| 275 mm (10.8") | S5-E275 | 64694 A |
| 300 mm (11.8") | S5-E300 | 64695 C |
| 350 mm (13.8") | S5-E350 | 64696 E |
| 400 mm (15.7") | S5-E400 | 64697 G |
| 450 mm (17.7") | S5-E450 | 64698 J |
| 500 mm (19.7") | S5-E500 | 64699 L |
| 550 mm (21.7") | S5-E550 | 64700 S |
| 600 mm (23.6") | S5-E600 | 64701 U |

NOTE: Longer lenghts available on request.

HOLDING TANK LEVEL MONITORING SYSTEM

HTG HOLDING TANK LEVEL INDICATORS

- Available in black or white colour
- 12V/24 Volt DC standard illumination
- Resistance rating: 240 Ohm (empty) - 33 Ohm (full)
- 52 mm (2") gauge cut out

HTG/B - 64683 V - black HTG/W - 64684 X - white



HTG/B



HTG/W



S3H

- Stainless steel
- HFL 64719 P Flange 1 1/4" NPT threads (to order separately)
- Resistance rating: 240 Ohm (empty) - 30 Ohm (full)

| LENGTH | MODEL | PART No. |
|----------------|-------|----------|
| 100 mm (3.9") | S3H-1 | 64685 Z |
| 205 mm (8.0") | S3H-2 | 64686 B |
| 305 mm (12.0) | S3H-3 | 64687 D |
| 410 mm (16.1") | S3H-4 | 64688 F |





World's Latest – Wema GPS Speedo tells you the truth, regardless of the conditions at

This is pure plug and play

Wema launches the world's latest GPS Speedo, the speedometer that precisely shows actual speed (speed over ground) and actual heading (compass heading over ground).

- Speed (0-60 knots) shown analogically and compass heading digitally, both guided by GPS signals.
- GPS Speedo has a "high-end" 32 channel GPS Receiver suitable for all types of boats (12V)
- Easy to install, it has a favourable price.
- GPS Speedo is in no way dependant of the boat main control and monitoring systems.
- Hole diameter: 85 mm (3.37")

IGPS-BB-60 - 66878 X - black dial and bezel, 12V DC, speed 0-60 knots

IGPS-WW-60 - 66879 Z - white dial and bezel, 12V DC, speed 0-60 knots





IGPS-WW-60



DIGITAL INSTRUMENTS

Digital instruments featuring the most advanced technology in the electronic field. They are supplied complete with senders. Available in Dress White style only: white dial and bezel.

DEPTH SOUNDER

- 61 meter Depth Sounder with Keel Offset, Automatic Gain and Shallow/Deep alarms. Depth Sounder measures in Meters, Feet or Fathoms.
- Out-of-range indication.
- Shallow and deep alarms are both audiable and visible to operator.
- Quick-Set mode for rapid adjustment or settings.
- Back illumination for maximum nigh vision.
- Keel-Offset adjustment and indication.
- 53 mm (2.07") gauge cut out

DEPTH SOUNDER - 62777 U

Depth Sounder includes 1 gauge. 1 depth sender and 1 installation cable.







FUEL MANAGER FOR GASOLINE ENGINES

The Fuel Manager System consists of a digital fuel gauge and fuel flow transducer that monitors and measures fuel as it is being used.
The gauge shows not only how much fuel has been used but, more importantly, how much is

Other features include a settable "low fuel alarm", trip log and total fuel consumed log. Fuel flow is measured in litres (2,5 to 160 litres per hour) or gallons (0.5 to 34 gallons per hour).

53 mm (2.07") gauge cut out

FUEL MANAGER - 62778 W

Fuel Manager includes 1 gauge and 1 fuel flow sender.

Fuel Manager is for use on gasoline engines only.



FUEL MANAGER

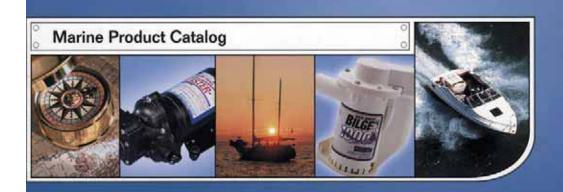


SPARE SENDERS FOR DIGITAL INSTRUMENTS

NOTE: Senders are supplied with the instrument.

| PART No. | MODEL | SUPPLIED WITH: |
|----------|------------------|----------------|
| 64311 E | Depth sender | Depth Sounder |
| 64310 C | Fuel flow sender | Fuel Manager |













Aqua King™ Junior 2.0

Aqua King™ Standard 3.0

Aqua King™Premium 4.0

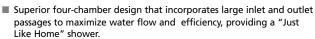
The Next Generation SHURflo® pumps guarantee quiet operation and smooth performance while providing the ultimate in durability and reliability. These automatic water pumps are self priming with a three-chamber design to lift water up to 8ft (2,4 m).

- Run dry capability
- Built-in check valve prevents backflow into the tank
- Sealed switch
- Corrosion resistant seamless e-coated motor
- Thermally Protected. Ignition Protected
- CE marked

| MODEL | PART No. | VOLT | DESCRIPTION | DIMENSIONS mm (") | FLOW RATE | AMP MAX | SHUT-OFF PRESSURE |
|-------------------------|----------|--------|------------------|------------------------------|-----------------------|------------|----------------------|
| Aqua King™ Junior | 65338 G | 12V DC | up to 2 fixtures | 184x127x118 (7.3x5.0x4.6) | 2.0 GPM - 7,6 l/min | 4,0 | 30 PSI - 2,0 Bar |
| Aqua King™ Standard 12V | 65339 J | 12V DC | multifixtures | 184x127x118 (7.3x5.0x4.6) | 3.0 GPM - 11,35 l/min | 5,0 | 45 PSI - 3,1 Bar |
| Aqua King™ Standard 24V | 65340 T | 24V DC | multifixtures | 184x127x118 (7.3x5.0x4.6) | 3.0 GPM - 11,35 l/min | 3,0 | 45 PSI - 3,1 Bar |
| Aqua King™ Premium | 65341 V | 12V DC | multifixtures | 210x134x127 (8.3x5.3x5) | 4.0 GPM - 15,1 l/min | 10,0 | 45 PSI - 3,1 Bar |

EXTREME™ SERIES SMART SENSOR™ 4.0

The Smart Sensor™ 4.0 is designed specifically for cruisers and midsize yachts. Delivering 4.0 GPM and pressure up to 50 PSI, this micro-control based variable speed pump precisely monitors your system's water pressure and adjust the motor speed, eliminating the need for a pressure switch.



- Run dry capability
- Self priming up to 9 ft (2,7 m)
- Sealed switch
- Corrosion resistant seamless e-coated motor
- Thermally Protected. Ignition Protected
- CE marked







Smart Sensor™ 4.0

| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | SHUT-OFF PRESSURE |
|-----------------------|----------|--------|----------------------------|----------------------|------------|----------------------|
| Smart Sensor™ 4.0 12V | 64679 E | 12V DC | 210x134x127 (8.3x5.3x5) | 4.0 GPM - 15,1 l/min | 9,0 | 45 PSI - 3.1 Bar |
| Smart Sensor™ 4.0 24V | 65342 X | 24V DC | 210x134x127 (8.3x5.3x5) | 4.0 GPM - 15,1 l/min | 5,0 | 45 PSI - 3.1 Bar |

The Smart Sensor™ 5.7 is a micro processor control based variable speed pump that delivers over 5 GPM (21,6 l/min) and pressure up to 60 PSI (4,1 Bar). SHURflo® Smart Sensor™ 5.7 precisely monitors your system's water pressure and adjust the motor speed, thus eliminating the need for a pressure switch.

- Superior five-chamber design that incorporates large inlet and outlet passages to maximize water flow and efficiency, providing a "Just Like Home" shower
- O-ring sealed end bells along with the protected electronic package make the Smart Sensor[™] capable of handling even the harshest marine enviroments
- Current limiting and over/under voltage protection
- Pressure sensor eliminates cycling and the need for an accumulator tank
- Run dry capability
- Self priming up to 9 ft (2,7 m)
- Sealed switch
- Corrosion resistant seamless e-coated motor
- Quick-Connect fittings included
- Thermally Protected. Ignition Protected
- CE marked

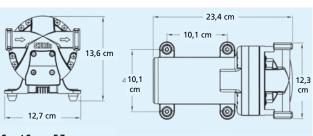




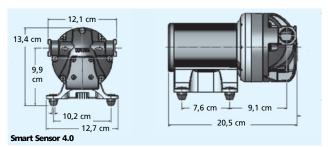


Smart Sensor™ 5.7

| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | SHUT-OFF PRESSURE |
|-----------------------|----------|--------|------------------------------|----------------------|------------|----------------------|
| Smart Sensor™ 5.7 12V | 63194 Y | 12V DC | 235x127x121 (9.3x5.0x5.5) | 5.0 GPM - 18,9 l/min | 12 | 60 PSI - 4,1 Bar |
| Smart Sensor™ 5.7 24V | 64335 V | 24V DC | 235x127x121 (9.3x5.0x5.5) | 5.0 GPM - 18,9 l/min | 5 | 60 PSI - 4,1 Bar |



Smart Sensor 5.7



EXTREME™ SERIES HIGH FLOW STRAINER

SHURflo® highly recommends the use of the Extreme™ Series High Flow Strainer, engineered to compliment the higher performance of the Smart Sensor™, to keep your Extreme™ Series Pumps flowing strong by protecting it from debris in the water. Easy installation and even easier to clean.

Extreme™ Series High Flow Strainer - 63735 G



5

WASHDOWN PUMPS

Perfect for tough washdown applications, such as fish box, scaling and anchor chain cleaning, these rugged self-priming pumps deliver high lift, can run dry without damage, and won't overheat with extended

- Run dry capability
- Sealed switch
- Corrosion resistant seamless e-coated motor
- Thermally Protected. Ignition Protected
- CE marked



| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | SHUT-OFF PRESSURE |
|------------------------|----------|--------|---------------------------|----------------------|------------|----------------------|
| Problaster Junior™ 12V | 66560 N | 12V DC | 203x127x118 (7.6x5.0x4.6) | 2.0 GPM - 7,6 l/min | 4 | 30 PSI - 2 Bar |
| Blaster™ 12V | 65862 A | 12V DC | 203x127x118 (7.6x5.0x4.6) | 3.5 GPM - 13,2 l/min | 6 | 45 PSI - 3,1 Bar |
| Blaster™ 24V | 65863 C | 24V DC | 203x127x118 (7.6x5.0x4.6) | 3.5 GPM - 13,2 l/min | 4,5 | 45 PSI - 3,1 Bar |
| Problaster™ 12V | 65864 E | 12V DC | 210x136x127 (8.3x5.3x5.0) | 4.0 GPM - 15,1 l/min | 10 | 45 PSI - 3,1 Bar |
| Problaster™ 24V | 65865 G | 24V DC | 210x136x127 (8.3x5.3x5.0) | 4.0 GPM - 15,1 l/min | 5,5 | 45 PSI - 3,1 Bar |

EXTREME™ PROBLASTER™ WASHDOWN PUMPS

The Extreme[™] ProBlaster[™] delivers over 5 GPM (20 l/min) and pressure up to 45 PSI (3,1 Bar), giving you the ultimate in washdown capabilities. This high volume pump will clean your deck quickly and easily. The corrosion resistant coated seamless motor shell with sealed switch provides excellent protection against the harsh marine anvironment. The Extreme[™] Pro Blaster[™] is designed for the toughest washdown applications.

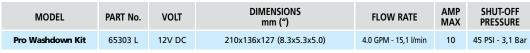
- Superior five-chamber design that incorporates large inlet and outlet passages to maximize water flow and efficiency
- Current limiting and over/under voltage protection
- Run dry capability
- Self Priming
- Sealed switch
- Corrosion resistant seamless e-coated motor with o-ring sealed end bells
- Quick-Connect fittings included
- Thermally Protected. Ignition Protected
- CE marked



Problaster™ Serie Extreme™

| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | SHUT-OFF PRESSURE |
|--------------------------|----------|--------|---------------------------|----------------------|------------|----------------------|
| Extreme™ Problaster™ 12V | 64337 Z | 12V DC | 235x127x140 (9.3x5.0x5.5) | 5.3 GPM - 20,1 l/min | 12 | 45 PSI - 3,1 Bar |
| Extreme™ Problaster™ 24V | 64338 B | 24V DC | 235x127x140 (9.3x5.0x5.5) | 5.3 GPM - 20,1 l/min | 6 | 45 PSI - 3,1 Bar |





MACERATOR PUMPS

Designed specifically for sanitation waste and fish box evacuations, SHURflo's Macerator pump features a premium impeller design.

- Run dry capability
- Self Priming
- SHURflo's unique dual blade and housing construction ensures problem free pumping
- Thermally Protected. Ignition Protected
- CE marked



| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | PORT SIZE |
|---------------|----------|--------|------------------------------|-------------------|------------|---|
| Macerator 12V | 62767 R | 12V DC | 274x97x114 (10.8x3.8x4.5) | 13 GPM - 50 l/min | 14 | inlet: 1.5" barb / 1,5 NPT outlet: 1" barb |
| Macerator 24V | 62768 T | 24V DC | 274x97x114 (10.8x3.8x4.5) | 13 GPM - 50 l/min | 8 | inlet: 1.5" barb / 1,5 NPT outlet: 1" barb |

OIL CHANGE, WINTERIZING AND LIQUID TRANSFER SYSTEM

Incorporating SHURflo's advanced motor technology that includes thermal overload protection, these pumps are self-priming, easy to install and are extremely versatile.

- 13 litres (3,5 gal) storage container 2,4 m (8') cable with battery clips and hose kit included
- Reversible switch
- Motor: 12V DC permanent magnet, continuous duty
- Self Priming up to 1,82 m (6')
- Thermal overload protection
- CE marked



64681 R

| MODEL | PART No. | DIMENSIONS mm (") | | | PORT SIZE |
|-------------------|----------|----------------------|---------------------|-----|------------|
| Oil Change System | 64681 R | 406x318 (16.0x12.5) | 1.5 GPM - 5,6 l/min | 4,5 | 3/8" F NPT |

PRE-PRESSURIZED ACCUMULATOR TANK

Reduces cycling pulsation and pressure spikes, increases the life of your pump and even saves battery power. SHURflo® accumulator tank is NSF

- Easy handles pressure requirements from 1,4 Bar (20 PSI) to 8,8 Bar (125 PSI)
- 1/2" male threaded Ports Uses standard SHURflo® fittings
- Can be mounted in-line
- Nylon housing/Butyl Bladder
- CE marked



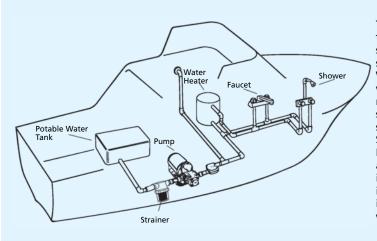
| MODEL | PART No. | DIMENSIONS mm (") | TOTAL VOLUME | MAXIMUM PSI - BAR | PRECHARGED | |
|------------|----------|-----------------------------|-------------------|----------------------|------------------|--|
| Nylon Tank | 65861 Y | 232x121x97 (9.1x4.8x3.8) | 24 oz - 0,7 litri | 125 PSI - 8,8 Bar | 20 PSI - 1,4 Bar | |

PRESSURE REGULATED CITY WATER ENTRIES

An exclusive diaphragm design prevents high-pressure damage often caused by city water systems. Leak-tight, stress and crack-resistant, these high-performance water entries limit water pressure safely to 50 or 65 PSI (3.5 or 4.5 Bar) while meeting or surpassing all check valve code requirements 63378 J - Wall mount Pressure regulator - Chrome 64717 K- Wall mount Pressure regulator - White 65306 T - Hose Adapter fitting 1/2" NPT (F) x 3/4" GSH (M) 63378 J



65306 T 64717 K



The pump may be mounted up to 6' (1.8 m) vertical above the source. Wiring should be switched above the source. Wiring should be switched as well as fused with the recommended size fuse. Inlet side of all fresh water pumps should include the use of a SHURflo® strainer. Mount the pump in an accessible area for a strainer inspection. Refer to installation instruction included for individual pump recommended wire and fuse size.

FRESH WATER MULTI-FIXTURE SYSTEMS

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|---|----|

| MODEL | PART No. | DESCRIPTION | FITTINGS |
|---------------------------------|----------|--|----------------------------|
| In-Line Strainer | 63185 X | Protects pumps from harmful debris. High capacity, rugged nylon housing, slide out easy to clean screen. | 1/2" (13 mm) female |
| Swivel nut strainer | 66526 N | Protects pumps from harmful debris. High capacity, rugged nylon housing, slide out easy to clean screen. | 1/2" (13 mm) barb inlet |
| In-line check valve | 61125 F | Allows flow in one direction only to safeguard agains back- surge up to 6,8 Bar (1000 PSI) | 1/2" (13 mm) barb inlet |
| High Pressure Blaster Nozzle | 61120 A | High impact plastic for long life. Use with SHURflo® pumps or garden hose. Adjust to fine mist or full stream. Lock clip for continuous spray. | 3/4" (19 mm) female |







FITTINGS

| MODEL | PART No. |
|--|----------|
| Straight fitting 1/2" NPT (f) x 3/8" | 61129 L |
| Elbow fitting 1/2" NPT (f) x 3/8" | 61130 C |
| Straight fitting 1/2" NPT (f) x 1/2" | 61127 H |
| Elbow fitting 1/2" NPT (f) x 1/2" barb swivel | 61128 K |
| Straight fitting 1/2" NPT (f) x 3/4" barb swivel | 64220 B |
| Elbow fitting 1/2" NPT (f) x 3/4" barb swivel | 64340 M |
| Straight adaptor 1/2" NPT (m) x 1/2" | 61132 E |

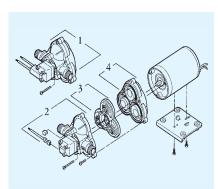




61128 K

61129 L

SPARE PARTS



- Complete headpump Headpump and switch kit Valve kit Diaphragm kit

| DESCRIPTION | PART No. |
|---|----------|
| Valve Kit for Blaster, Junior, Standard, Premium pumps | 61214 F |
| Diaphragm kit for Junior pump | 61217 I |
| Diaphragm kit for Standard, pumps | 61216 H |
| Diaphragm kit for Premium, Blaster pumps | 63180 L |
| Pump head Junior, Standard, Premium, Blaster | 63181 N |
| Pump head and switch kit for Junior 12V, 20 PSI | 61413 K |
| Pump head and switch kit for Standard 12V, 30PSI | 62526 S |
| Pump head and switch kit for Standard, Premium, Blaster 12V/24V, 45PSI | 63182 R |
| Complete head pump for Junior 12V, 20PSI | 61721 J |
| Complete head pump for Junior 12V, 20PSI | 61768 M |
| Complete head pump for Standard, 12V/24V, 45 PSI | 63183 T |
| Complete head pump for Premium, Blaster 12V/24V, 45 PSI | 63184 V |
| Impeller for Macerator pump | 63432 M |



SHURFLO® BILGE PUMPS 380/500/700/1000 GPH

Quality bilge pumps you can trust. SHURflo® bilge pumpsare built for the harsh marine enviroment to withstand the toughest conditions. Water cooled motors for extended life.

- Continuous duty
- Submersible with 6' (1,8 m) tinned wire assembly
- Tough nylon housing
- Quick-snap swivel baseplate
- Ignition pretected. ISO 8849



Shurflo® 380/500/700/1000 GPH

 ϵ

| MODEL | PART No. | VOLT | DIMENSIONS mm (") | Ø BASE mm (") | FLOW RATE | AMP MAX | OUTLET |
|------------|----------|--------|----------------------|------------------|---------------------|------------|--------------|
| Bilge 380 | 66527 R | 12V DC | 114x95 (4.5x3.75) | 60 (2 3/8) | 380 GPH - 24 l/min | 1,7 | 3/4" - 19 mm |
| Bilge 500 | 66528 T | 12V DC | 114x95 (4.5x3.75) | 60 (2 3/8) | 500 GPH - 32 l/min | 1,8 | 3/4" - 19 mm |
| Bilge 700 | 66529 V | 12V DC | 114x95 (4.5x3.75) | 60 (2 3/8) | 700 GPH - 42 l/min | 3,2 | 3/4" - 19 mm |
| Bilge 1000 | 66530 D | 12V DC | 114x95 (4.5x3.75) | 60 (2 3/8) | 1000 GPH - 63 l/min | 3,2 | 3/4" - 19 mm |

1500/2000 GPH

Heavy duty and built to last. SHURflo®'s 1500 and 2000 GPH nylon bilge pumps offer a unique motor cooling system (patent pending) to ensure efficient performance and long life. Installation is a snap with our patented swivel base.

- Continuous duty
- Submersible with 6' (1,8 m) tinned wire assembly
- Anti-air lock
- Run dry without damage
- Quick-snap swivel baseplate
- Commercial duty
- Ignition pretected. ISO 8849



Shurflo® 1500/2000 GPH

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| MODEL | PART No. | VOLT | DIMENSIONS mm (") | FLOW RATE | AMP MAX | BARB OUTLET |
|---------------|----------|--------|----------------------|-----------------------|------------|------------------|
| Bilge 1500/12 | 66531 F | 12V DC | 183x152 (7.2x6) | 1500 GPH - 94,6 l/min | 8 | 1 1/8" - 28,5 mm |
| Bilge 1500/24 | 66532 H | 24V DC | 183x152 (7.2x6) | 1500 GPH - 94,6 l/min | - | 1 1/8" - 28,5 mm |
| Bilge 2000/12 | 66533 K | 12V DC | 183x152 (7.2x6) | 2000 GPH - 126 l/min | 10 | 1 1/8" - 28,5 mm |
| Bilge 2000/24 | 66534 M | 24V DC | 183x152 (7.2x6) | 2000 GPH - 126 l/min | - | 1 1/8" - 28,5 mm |

The SHURflo® float switches provide the ultimate in reliability for your boat.

Complete line includes a solid state control, standard float switch and protected cage switch.

Manufactured in corrosion resistant and explosion proof material. They can be used for any kind of pump and also for water bilge and other alarm systems.







| SWS | SWSC |
|-----|------|
| SWS | |

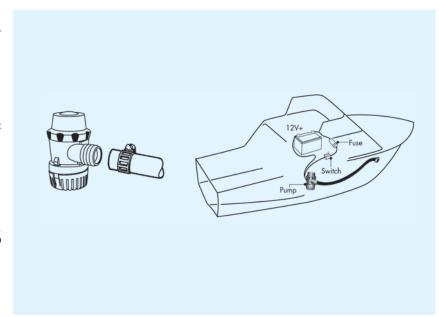
| MODEL | PART No. | PART No. | VOLT | DIMENSIONS mm (") |
|-------|----------|-----------------------|-----------|----------------------------|
| sws | 66535 P | Standard float switch | 12/24V DC | 116x53x40 (4.6x2.1x1.6) |
| swsc | 66536 S | Protected cage switch | 12/24V DC | 116x53x40 (4.6x2.1x1.6) |

RECOMMENDED MOUNTING:

Attach base to hull or stringer using stailess steel screws. Snap pump into base. The baseplate and/or cartridge may be easily removed for easy cleaning. CAUTION:

care must be taken not to drive the screws through the hull. Be sure pump is mounted on a flat surface, as low as possible in the bilge.

Attach 3/4" (19 mm) diameter hose for 380, 500, 700 and 1000 GPH, or 1 1/8" (29 mm) diameter hose for 1500 and 2000 GPH pumps. Use of a smooth bore hose will insure maximum pump performance, corrugated hose will significantly reduce pump performance.





RECESSED SHOWERS

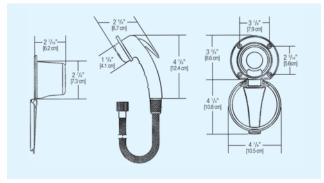
Practical, versatile and fashionable showers. Simply pull out the sprayer and extend it to any area of your boat for the ultimate in washdown versatility.

65311 K - Recessed shower white ABS plastic cup with trigger sprayer, stainless steel installation hardware and 1.8 m (6') heavy duty white hose. Deck or wall mount.

65312 M - Recessed cup white ABS plastic cup with stainless steel installation hardware







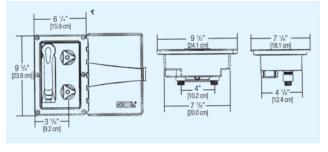
TRANSOM SHOWER

Functional, practical and durable showers. Combine the convenience and simplicity of the recessed shower, with the added benefit of a shut-off valve to create an all-in-one package for your exterior shower needs.

65313 P - Two handle hot/cold transom shower. White ABS plastic box with trigger sprayer, stainless steel installation hardware and 1.8 m (6') heavy duty white hose. Vertical or horizontal mount.







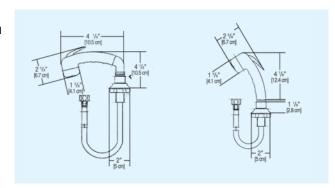
65307 V - Angled style sprayer - white White ABS sprayer with polished chrome deck holder, elbow fitting and 1,8 m (6') heavy duty white hose.

65308 X - Angled style sprayer - Chrome plated Chrome plated ABS sprayer with polished chrome deck holder, elbow fitting and 1,8 m (6') heavy duty white hose.

65309 Z - Straight style sprayer - white White ABS sprayer with polished chrome deck holder and 1,8 m (6') heavy duty white hose.

65310 H- Straight style sprayer - Chrome plated Chrome plated ABS sprayer with polished chrome deck holder and 1,8 m (6') heavy duty white hose.





SHURFLO® YELLOW TAIL™ 3" AND 4" IN-LINE BILGE BLOWERS

Shurflo® in-line blowers provide ventilation for engine compartments, galleys, bilge and heads. Mounting feet allow vertical or horizontal installation in confined spaces.

- Wider base-plate and oval screw hole for ease of installation
- Splash-proof motor with rubber boot
- Heavy duty shaft seal
- \blacksquare High volume air flow low current draw
- Longer barb for ease of duct connection
- CE, ISO 9097 and Ignition Protected



| PART No. | VOLT | INT. Ø HOSE | DIMENSIONS mm (") | DRAW AMP | AIR FLOW |
|----------|--------|-------------|---------------------------|----------|------------|
| 64703 Y | 12V DC | 76 mm - 3" | 130x140x96 (5.1x5.5x3.8) | 3,8 | 3,3 m³/min |
| 64704 A | 12V DC | 100 mm - 4" | 130x162x122 (5.1x6.4x4.8) | 5,5 | 6,0 m³/min |







SUBMERSIBLE BILGE PUMPS

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Rule® submersible Bilge Pumps have set the standard for the industry for decades.

They are the first choice of yachtsmen and commercial fishermen throughout the world. More innovations in Bilge Pump design have come from Rule industries than any other manufacturer.

360 G.P.H. Pump + Rule-A-Matic Float Switch

For your convenience, a Submersible 360 GPH pump, clamshell packaged with a high efficient Rule-A-Matic float switch.

Mod. 24-35A (12V) - 65387 W

360 G.P.H.

360 GPH pump, designed for the smaller boats, pumps 360 gallon per hour. This pump can be used for Livewell/ Baitwell recirculating application.

Mod. 24 (12V) - 60817 I



500 G.P.H. 500 G.P.H. pump offers many design features while keeping size and cost to a minimum. It also can be used as a Livewell/Baitwell pump.

Mod. 25D (12V) - 60818 L Mod. 26D (24V) - 60819 M



500 G.P.H. AUTO

Flow rate: 32l/min Automatic 500 GPH

Mod. 25S (12V) - 60969 Z



800 G.P.H.

The best known of the Rule pumps, 36 different mounting variations.

This pump is equipped with a gasoline resistant strainer base and has a 3/4" discharge.

Mod. 20F (12V) - 60891 W



1000 G.P.H.

The Rule 1000 is in a class by itself and is a popular choice among boat builders and boat owners. It allows for 36 mounting variations and has a 1-1/8" discharge outlet. Equipped with gasoline resistant strainer base.

Mod. 20A (12V) - 60889 E



1100 G.P.H.

The Rule 1100 pump offers many design features while keeping cost and size to a minimum. It also can be used as a Livewell/Baitwell recirculating pump.

Mod. 27D (12V) - 60820 D



1100 G.P.H. AUTO

Automatic version 1100 GPH. Flow rate 70 l/min.

Mod. 275 (12V) - 60888 D



1500 G.P.H.

High pumping capacity and reliability at a lower cost. The Rule 1500 pump continues to offer more pumping capacity and more exclusive design features than any comparable competitive pump.

Mod. 02 (12V) - 60821 E Mod. 03 (24V) - 60822 F



2000 G.P.H.

Engineered to commercial standards.

The Rule 2000 is the largest selling high capacity submersible bilge pump in the world. 1-1/8" discharge outlet.

Mod. 10 (12V) - 60890 V Mod. 12 (24V) - 60908 M



3700 G.P.H.

Heavy duty construction for both commercial and pleasure boat

1 1/2" discharge outlet.

Mod. 14A (12V) - 60823 G Mod. 16A (24V) - 60824 H





FULLY AUTOMATED BILGE PUMP

- Non-mercury float switch and pump in a single housing
- · No on/off cycling and therefore no power use until the pump comes on
- Removable strainer, impeller area accessible to clear debris
- All three pumps have the same size (500 GPH 750 GPH 1100 GPH)

Mod. RM500 (12V) - 61479 E Mod. RM750 (12V) - 61480 N

Mod. RM1100 (12V) - 61481 R



500-750-1100 GPH

SWITCHES

Rule - A- Matic®Switch™

Completely sealed metal capsule, the Rule-A-Matic is the switch of choice of most selective yachtsmen and boat builders the world over.

Mod. 35 A 12V DC - 66127 Y



Shower Drain

System

A compact, full capacity shower drain system. Automatically turns on after the water starts, and shuts off when the water is removed. Activated by a Rule-A-Matic float switch. Available with an 800

G.P.H. pump, with three inlet ports which offer varying combinations of inlet hose. Other features include a clear screw down cover, removable strainer for easy cleaning, and an internal check valve to prevent back siphoning.

Mod. 98A (12V) - 65388 Y

Mod. 98A/24 (24V) - 65389 A



Wema® Switch

The switch turns the pump on and off automatically and is typically placed in the bilge.

SW12V 12V DC - 65840 P **SW24V** 24V DC - 66034 R



Panel Switch

This unit features a black plastic panel. It has a built-in fuse holder and an internally lighted rocker switch with 3 positions (automatic, off, or manual) with the Rule "fail-safe" spring return to "off" from the "manual" position.

Mod. 43 - 61174 O



Mounting Bracket

Mounting bracket for round pumps 360, 500, 800 and 1100 Series. It allows side-mounting of pump to vertical surfaces.

Mod. 66 - 60827 K

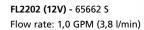




FLOWPOMP®

AUTOMATIC MARINE PUMPS

- Self priming automatic clear water pumps with fittings and quick-connect water strainer included
- Rugged and very quiet, they can run dry without damage
- Four built-in valves ensure a low vibration level and a continuous water flow with no cycling
- CE marked





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FL30 (12V) - 65663 U Flow rate: 2,6 GPM (10,0 l/min)



FL35 (12V) - 65664 W Flow rate: 3,3 GPM (12,5 l/min)



FL40 (12V) - 65665 Y Flow rate: 4,5 GPM (17,0 l/min)



FL44 (24V) - 65666 A Flow rate: 4,5 GPM (17,0 l/min)

| MODEL | PART NO. | VOLT | FIXTURES | AMP MAX | SHUT-OFF PRESSURE | DIMENSIONS MM (") |
|---------|----------|--------|------------------|------------|----------------------|---------------------------|
| FL 2202 | 65662 S | 12V DC | Up to 2 fixtures | 2,5 | 35 PSI - 2,4 Bar | 160x100x61 (6.3x3.9x2.4) |
| FL 30 | 65663 U | 12V DC | multifixtures | 2,2 | 17 PSI - 1,17 Bar | 210x100x100 (8.3x3.9x3.9) |
| FL 35 | 65664 W | 12V DC | multifixtures | 3,9 | 35 PSI - 2,4 Bar | 210x100x100 (8.3x3.9x3.9) |
| FL 40 | 65665 Y | 12V DC | multifixtures | 6,0 | 40 PSI - 2,75 Bar | 250x100x100 (9.8x3.9x3.9) |
| FL 44 | 65666 A | 24V DC | multifixtures | 2,5 | 40 PSI - 2,75 Bar | 250x100x100 (9.8x3.9x3.9) |

AUTOMATIC MARINE PUMPS





OIL CHANGE IMPELLER PUMPS OP-SERIES

OP-6 IMPELLER PUMP

The Reverso® OP-6 is a useful transfer pump suitable for oil, diesel or water. The OP-6 can transfer hot or cold oil quickly and cleanly to and from the engine oil pan. The three position switch has a safety lock that prevents accidental activation.

The switch is directionally oriented (flow is in direction of switch) for easy operation. Meets ISO 8846 standards.

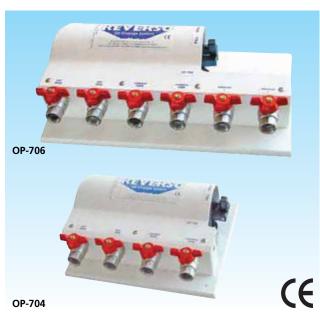


OP-700 MANIFOLD OIL CHANGE SYSTEMS

The OP-700 oil change systems feature a fully reversible OP-6 pump and are available on 2, 3, 4, 5, 6 valve options. They are mounted on a base to obtain a permanent installation: connecting these assemblies on equipments that need regular oil change they simplify the operation and reduce time and chances of oil spills.

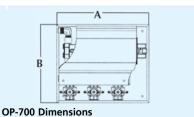
OP-SERIES FEATURES

- Reversible (they draw and fill engines)
- Powerful DC high torque motor
- Self priming
- Nickel plated brass pump body
- Impeller: Nitrile (oil) Fluoroelastomer (diesel fuel)
- Built in switch, switch guard and fuse
- Easily changed impeller
- CE certified



| TECHNICAL SPECIFICATIONS | OP-6 | OP-700 |
|--------------------------|------------------------------|----------------------------|
| Pump port: | est. M 3/4"- int. F 3/8" NPT | 1/2" flare |
| Manifold ports: | - | 1/2" F NPT |
| Flow rate: | 11,4 l/min (3.0 GPM) | 7,8 l/min (2.0 GPM) |
| Self priming: | 0,9 m (3 ft) | 0,9 m (3 ft) |
| Lift: | 3,0 m (10 ft) | 3,0 m (10 ft) |
| Working pressure: | from 0 to 1 bar (15 PSI) | from 0 to 1 bar (15 PSI) |
| Motor: | 12V DC or 24V DC | 12V DC or 24V DC |
| Amp: | 12 Amp (12V) – 6 Amp (24V) | 12 Amp (12V) – 6 Amp (24V) |
| Dimensions W x H: | 24,4 x 9,1 cm (9.6" x 3.6") | |
| Weight: | 2,7 kg (6 lbs) | |

| MODEL | No. VALVES | DIMEN | DIMENSIONS | | |
|--------|------------|-------------|---------------|----------|--|
| MODEL | NO. VALVES | A cm (") | B cm (") | kg (lbs) | |
| OP-702 | 2 valve | 24,4 (9.6) | 22,4 cm (8.8) | 4,5 (10) | |
| OP-703 | 3 valve | 26,9 (10.6) | 22,4 cm (8.8) | 5,0 (11) | |
| OP-704 | 4 valve | 29,5 (11.6) | 22,4 cm (8.8) | 5,5 (12) | |
| OP-705 | 5 valve | 36,2 (14.3) | 22,4 cm (8.8) | 5,9 (13) | |
| OP-706 | 6 valve | 41,2 (16.3) | 22,4 cm (8.8) | 6,8 (15) | |



OIL CHANGE OR TRANSFER DIESEL FUEL GEAR PUMPS GP-SERIES

GP-201, GP-301, GP-302, GP-301 AC PUMPS

Compact, powerful, self-priming DC gear pumps. The bronze gears and stainless steel shaft enable the pumps to move a variety of viscous and non-viscous fluids. They are durable and fit easily in the tightest spaces. They are available in both 12 and 24 Volt DC.



| TECHNICAL SPECIFICATIONS | GP-201 | GP-301 | GP-302 | GP-301 AC |
|---------------------------|----------------------------|------------------------------|------------------------------|-----------------------|
| Ports: | M 3/8" NPT | M 3/8" NPT | M 3/8" NPT | M 3/8" NPT |
| Max work press: | 1,7 bar (25 PSI) | 1,7 bar (25 PSI) | 2,8 bar (40 PSI) | |
| Flow rate: | 5,6-11,4 l/min (1.5-3 GPM) | 9.5-13,3 l/min (2.5-3.5 GPM) | 9.5-13,3 l/min (2.5-3.5 GPM) | 13.6 l/min (3.6 GPM) |
| Self priming (wet gears): | 0.5 m (1.5 ft) | 1.5 m (5 ft) | 1.5 m (5 ft) | 1.5 m (5 ft) |
| Lift: | 1,5 m (5 ft) | 3 m (10 ft) | 9,1 m (30 ft) | 30,4 m (100 ft water) |
| Pump body: | brass | brass | brass | brass |
| Gears: | bronze | bronze | bronze | bronze |
| Motor: | 12V or 24V DC | 12V or 24V DC | 12V or 24V DC | AC self ventilated |
| Fuse/Breaker: | 10 Amp (12V)-5 Amp (24V) | 10,5 Amp (12V)-6,8 Amp (24V) | 15 Amp (12V)-7,5 Amp (24V) | 5 Amp (220V) |
| Dimensions W x H cm ("): | 12,8x7,4 (5x2.9) | 13,7x7,6 (5.4x3) | 14,7x9,6 (5.8x3.8) | 26,4x16,3 (10.4x6.4) |
| Weight: | 0,9 kg (2 lbs) | 2,7 kg (6 lbs) | 3,2 kg (7 lbs) | 4,5 kg (10 lbs) |

GP-602, GP-602 AC PUMPS

Gear pumps able to move low viscosity fluids, NOT designed for heavy oil. The durable GP-602 pump combines a small size with a high flow capacity.



| TECHNICAL SPECIFICATIONS | GP-602 | GP-602 AC |
|---------------------------|-----------------------------|-----------------------|
| Ports: | M 1/2" NPT | M 1/2" NPT |
| Flow rate: | 22,7 l/min (6 GPM) | 32,2 l/min (8,5 GPM) |
| Self priming (wet gears): | 1,5 m (5 ft) | 6 m (20 ft) |
| Lift: | 18,2 m (60 ft water) | 36,5 m (120 ft water) |
| Pump body: | brass | brass |
| Gears: | bronze | bronze |
| Motor: | 12V or 24V DC | AC self ventilated |
| Fuse/Breaker: | 15 Amp (12V) - 10 Amp (24V) | 5 Amp (220V) |
| Dimensions W x H cm ("): | 17,8x10,1(7x4) | 32x19,3 (12.6x7.6) |
| Weight: | 3,6 kg (8 lbs) | 6,4 kg (14 lbs) |



OIL CHANGE OR TRANSFER DIESEL FUEL GEAR PUMPS GP-SERIES

GP-3010, GP-3020 , GP-700 MANIFOLD OIL CHANGE SYSTEMS

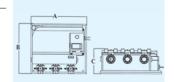
The gear pump manifold oil change systems service multiple engines, transmissions and generators. Compact, reversible (they draw and fill engines) and self-priming, they simplify oil changes and reduce chances of oil spills. Valve options from 3 to 7.



| TECHNICAL SPECIFICATIONS | GP-3010 | GP-3020 | GP-700 |
|---------------------------|---------------------------|-------------------------|-------------------------|
| Pump port: | 1/2" flare | 1/2" flare | 1/2" flare |
| Manifold ports: | 1/2" F NPT | 1/2" F NPT | 1/2" F NPT |
| Flow rate: | 9,5 l/min (2.5 GPM) | 11,4 l/min (3 GPM) | 11,4 l/min (3 GPM) |
| Self priming (wet gears): | 1,5 m (5 ft) | 1,5 m (5 ft) | 1,5 m (5 ft) |
| Lift: | 3 m (10 ft) | 7,6 m (25 ft) | 9,1 m (30 ft) |
| Motor: | 12V or 24V DC | 12V or 24V DC | 12V or 24V DC |
| Fuse/Breaker: | 8,8 A (12V) - 5,3 A (24V) | 9,8 A (12V) - 4 A (24V) | 15 A (12V) - 7,5A (24V) |

APPLICATIONS

- Single engines up to 450 hp : OP-6, GP-301
- Multiple engines up to 450 hp : GP-3010
- Single engines from 300 to 800 hp : GP-302
- Multiple engines from 300 to 800 hp : GP-3020, GP-700
- Multiple engines from 600 to 2000 hp : GP-700





GP-3010 Dimensions

GP-700 Dimensions

DIMENSIONS A x B cm (")

| No. VALVES | MODEL | A X B cm (") | MODEL | A X B cm (") | MODEL | A X B cm (") |
|------------|---------|------------------|---------|--------------------|--------|------------------|
| 2 valve | GP-3012 | 26x22 (10.2x8.6) | | - | | - |
| 3 valve | GP-3013 | 26x22 (10.2x8.6) | GP-3023 | 29x11,5 (11.5x4.5) | GP-703 | 37x12 (14.5x4.7) |
| 4 valve | GP-3014 | 30x22 (11.8x8.6) | GP-3024 | 36x11,5 (14.2x4.5) | GP-704 | 37x12 (14.5x4.7) |
| 5 valve | GP-3015 | 37x22 (14.5x8.6) | GP-3025 | 36x11,5 (14.2x4.5) | GP-705 | 37x12 (14.5x4.7) |
| 6 valve | GP-3016 | 42x22 (16.5x8.6) | | - | GP-706 | 42x12 (16.5x4.7) |
| 7 valve | | - | | - | GP-707 | 42x12 (16.5x4.7) |

MULTI-VALVE MANIFOLDS

These manifolds allow multiple hoses to be connected to one pump. The assemblies can be mounted in any direction. Mounting holes are pre-drilled for easy installation.

TECHNICAL SPECIFICATIONS

- Manifold ports: 1/2" F NPT
- Valves: Nickel chromed full flow ball valve
- Max working press: 9 bar (150 PSI)
- Mounting holes: 3/16"

| PART. No. | MULTI-VALVE MANIFOLD | | |
|-----------|-----------------------|--|--|
| 61477A | VA-2 2 valve assembly | | |
| 61572U | VA-3 3 valve assembly | | |
| 64741G | VA-4 4 valve assembly | | |
| 62976A | VA-5 5 valve assembly | | |

The OP-700 oil change system, featuring a full reversibile pump, connects directly to the dipstick tube. Portable or permanent, this system includes a poly-mounting board with handy carry handle, stainless steel cover plate, a safety switch lock and 6' of marine grade wire. Ideal for gas applications, the heavy duty motor pumps hot or cold oil.

GP-301P PORTABLE OIL CHANGER

This system is designed to remove the oil from 4 cycle outboard engines quickly and with no mess.

Simply hang the unit on the engine cawling, insert the nylon hose into the dipstick tube and attach the wire to a 12V power source. Oil is drained into a container and can be removed from the boat for proper disposal.

FEATURES

- Powerful reversible pumps specially designed to be used with oils.
- Self priming
- Compact size
- Exceptional high flow rate
- Built-in switch and circuit breaker
- OP-700 impeller: Nitrile (oil) Fluoroelastomer (diesel fuel)
- GP-301P: brass pump body, bronze gears and stainless steel shaft
- CE certified









| TECHNICAL SPECIFICATIONS | OP-700 | GP-301P |
|--------------------------|------------------------------|-------------------------------|
| Ports: | est. M 3/4"- int. F 3/8" NPT | 3/8" M JIC |
| Flow rate: | 11,4 l/min (3.0 GPM) | 11,4 l/min (3.0 GPM) |
| Self priming: | 0,9 m (3 ft) | 1,5 m (5 ft) |
| Lift: | 3,0 m (10 ft) | 4,5 m (15 ft) |
| Working press: | from 0 to 1 bar (15PSI) | |
| Motor: | 12V DC or 24V DC | 12V DC or 24V DC |
| Amp: | 7Amp (12V) – 3 Amp (24V) | 8,8 Amp (12V) – 5,3 Amp (24V) |
| Weight: | 3,6 kg (8 lbs) | 2,7 kg (6 lbs) |

SPARE PARTS

| PART No. | MODEL | DESCRIPTION |
|----------|---------|--|
| 61636 U | 360010 | Oil transfer impeller (Nitrile) |
| 61637 W | 360014 | Diesel fuel transfer impeller |
| 61638 Y | 360120 | OP-6 Seal |
| 61639 A | SRK-360 | Kit 1 impeller and seal - oil |
| 61640 J | 97360-2 | Kit 2 impellers and seals - oil |
| 61641 L | SRK-370 | Kit 1 impeller and seal – diesel fuel /oil |
| 61642 N | 97370-2 | Kit 2 impellers and seals - diesel fuel /oil |
| 61643 R | 36003 | 3 way switch (on-off-on) |



FUEL PRIMING AND POLISHING SYSTEMS

FP-301 FUEL PRIMING SYSTEM

The Reverso® Fuel Primer pumps fuel into the fuel lines, purging trapped air in the main feeding line and from primary filters, secondary filters and engines. To protect delicate fuel systems, all primers have integral pressure relief valves which are factory set to deliver the proper fuel pressure for each engine.

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TECHNICAL SPECIFICATIONS

■ Ports: 1" NPT

■ Valve : 1" NPT full flow ■ Amp: 10A (12V) – 5A (24V)

■ Size: 25x29x11 cm (10"x11.4"x4.4")

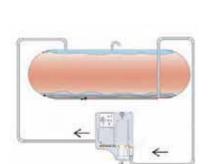
FPS FUEL POLISHING SYSTEMS

FPS Systems have been designed for fuel polishing directly in the tanks removing 99% of water and particulates.

They eliminate the build-up of algae and water in the tanks reducing

the costs of filter maintenance.

FPS Systems include control panel and service filter alarm.





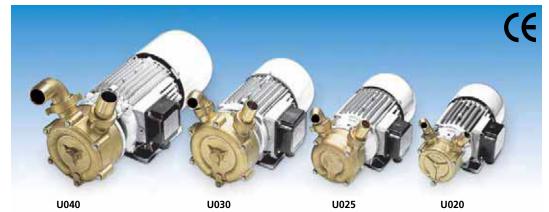
FPS-150

| TECHNICAL SPECIFICATIONS | FPS-80 | FPS-150 | FPS-210 AC |
|-------------------------------|-------------------------|------------------------|-------------------|
| Inlet and Outlet ports: | 1/2" # 8 JIC M | 1/2" # 8 JIC M | 1/2" # 8 JIC M |
| Flow rate: | 300 l/h (80 GPH) | 570 l/h (150 GPH) | 795 l/h (210 GPH) |
| Self priming (system primed): | - | 1.5 m (5 ft) | 1.5 m (5 ft) |
| Max lift: | 1,2 m vertical (4 ft) | 3.0 m (10 ft) | 9,1 m (30 ft) |
| Motor: | 12V or 24V DC | 12V or 24V DC | AC perm. magnets |
| Amp: | 3 A (12V) – 1,5 A (24V) | 10 A (12V) – 5 A (24V) | 1,4 (220V) |
| Dimensions W x H cm ("): | 47x39 (18.5x15.5) | 47x39 (18.5x15.5) | 59x50 (23.2x20) |
| Weight: | 9,5 kg (21 lbs) | 11,3 kg (25 lbs) | 27,2 kg (60 lbs) |

All **REVERSO** products have a 5 year warranty and are CE certified.



Self-priming side liquid ring electric pumps used to empty bilges and transfer uninflammable liquids such as: fresh water, sea water, fuel diesel and generally all low viscosity and free of solid impurities liquids.



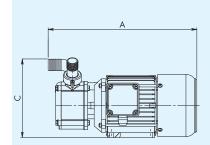
| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|---------|------------------|--------------|--------------|---------------|-----------------|
| U020 | 12V DC 24V DC | 26 A 14 A | 4 m (13.1′) | 10 m (32.8′) | 28 l/min |
| U025 | 12V DC 24V DC | 38 A 22 A | 6 m (19.7') | 12 m (39.4′) | 52 l/min |
| U030 | 12V DC 24V DC | 44 A 28 A | 6 m (19.7′) | 18 m (59.0′) | 75 l/min |
| U040 | 24 V DC | 45 A | 6 m (19.7') | 22 m (72.2') | 120 l/min |
| U050-MT | 230V AC/380V AC | - | 6 m (19.7') | 30 m (98.4') | 250 l/min |
| U070-T | 380V AC | - | 6 m (19.7') | 40 m (131.2') | 500 l/min |

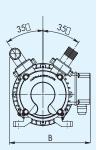
Standard features

Bronze pump body, bronze impeller, AISI 316 stainless steel shaft, corrosion-proof clamping rings, continuous duty electric motor with F insulation class, IP55 protection. On request BSP thread pumps also available. Delivery diagram: page 81.

Application limits

Uninflammable liquids free of solid impurities. Liquid temperature range: from 0° C to 70° C. Static pressure internal to the pump body: 6 bar max.





DIMENSIONS AND WEIGHTS

| MODEL | Ø IN mm (") | Ø OUT mm (") | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|-------|-------------|--------------|------------|------------|------------|-----------------|
| U020 | 20 (0.8) | 20 (0.8) | 310 (12.2) | 165 (6.5) | 145 (5.7) | 5.7 (12.5) |
| U025 | 25 (1) | 25 (1) | 345 (13.6) | 180 (7.1) | 178 (7) | 9.6 (21.2) |
| U030 | 30 (1.2) | 30 (1.2) | 405 (15.9) | 205 (8) | 215 (8.5) | 13.5 (29.7) |
| U040 | 40 (1.6) | 40 (1.6) | 520 (20.5) | 218 (8.6) | 230 (9) | 21.0 (46.3) |
| U050 | 50 (1.9) | 50 (1.9) | 435 (17.1) | 247 (9.7) | 245 (9.6) | 27.2 (59.5) |
| U070 | 70 (2.4) | 70 (2.4) | 680 (26.8) | 260 (10.2) | 360 (14.2) | 75 (165.3) |

LECTRIC PUMPS

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Rotary self-priming volumetric electric pumps used on boats to empty waste tanks, toilet sewage and particularly viscous oily fluids or liquids with small debries in suspension.

Standard features

AISI 316 stainless steel body pump, neoprene impeller, AISI 316 stainless steel shaft, corrosion-proof clamping rings, continuous duty electric motor with F insulation class, IP20 protection.

Delivery diagram: page 81.

Application limits

Never let the USBM-Midex pump run when empty.

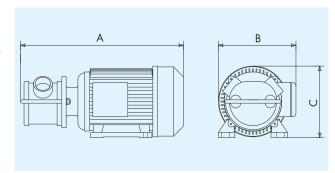
Liquid temperature range: from 0° C to 70° C. Static pressure internal to the pump body: 6 bar max.

For use as oil and/or fuel transfer pump it is necessary nitrile impeller (available on request).

Spare impellers:

- Neoprene impeller 66538 W
- Nitrile impeller (for only transfer) - 66539 Y





| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|--------------|--------|------------|--------------|--------------|-----------------|
| USBM - midex | 24V DC | 30 A | 6 m (19.7') | 27 m (88.6') | 64 l/min |

DIMENSIONS AND WEIGHTS

| MODEL | Ø IN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|------------|--------------|--------------|------------|-----------|-----------|-----------------|
| USBM-midex | 1" 1/4 BSP-F | 1" 1/4 BSP-F | 350 (13.8) | 215 (8.5) | 159 (6.3) | 15 (33) |

LECTRIC PUMPS

Single impeller centrifugal electric pumps used to transfer and/or supply large quantity of liquid. They are used to transfer uninflammable liquids such as diesel fuel or to deliver fresh water to those equipments that require a high water flow rate (eg. air conditioning units).

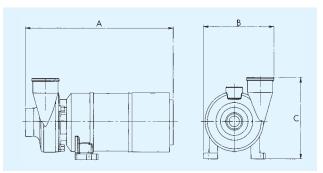
Standard features

Aluminum pump body, noryl impeller, AISI 420 stainless steel shaft, cast iron support , wound field electric motor. F insulation class. IP 20 protection.
Delivery diagram: page 81.

Application limits

Solid impurities free liquid, liquid temperature range from 0 to + 50 C°, max static internal pressure of the pump body: 6 bar.





| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|-----------|--------|------------|--------------|--------------|-----------------|
| UCE 03-12 | 12V DC | 38 A | 4 m (13.1') | 20 m (65.6') | 65 l/min |
| UCE 03-24 | 24V DC | 28 A | 4 m (13.1') | 28 m (91.8') | 70 l/min |

DIMENSIONS AND WEIGHTS

| MODEL | Ø IN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|--------------|------|-------|------------|-----------|-----------|-----------------|
| UCE 03-12/24 | 1" | 1" | 260 (10.2) | 125 (4.9) | 140 (5.5) | 6 (13.2) |

Multi-stage bronze self-priming electric pump fitted with radial impellers. These pumps are widely used to empty bilges, to attend fire equipments, to wash chains, to transfer fuel diesel etc.

Standard features

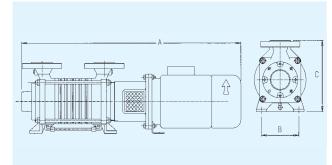
Bronze pump body, bronze impellers, AISI 316 stainless steel shaft, continuous duty electric motor with F insulation class, IP20 protection.



UABR

Application limits

Solid impurities free liquid, liquid temperature range from 0 to + 90 C°, max static internal pressure of the pump body: 20 bar.



| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|---------------|-----------------|------------|--------------|---------------|-----------------|
| UABR 32/1 | 24V DC | 52 A | 9 m (29.5') | 28 m (91.8') | 160 l/min |
| UABR 32/2 | 24V DC | 90 A | 9 m (29.5') | 52 m (170.6') | 160 l/min |
| UABR 40/1 | 24V DC | 90 A | 9 m (29.5') | 40 m (131.2') | 250 l/min |
| UABR 32/2-M/T | 230V AC/380V AC | - | 9 m (29.5') | 50 m (164') | 150 l/min |
| UABR 40/2-M/T | 230V AC/380V AC | - | 9 m (29.5') | 75 m (246') | 220 l/min |
| UABR 50/2-M/T | 230V AC/380V AC | - | 9 m (29.5') | 82 m (269') | 400 l/min |
| UABR 65/2-M/T | 230V AC/380V AC | - | 9 m (29.5') | 85 m (278.8') | 600 l/min |

DIMENSIONS AND WEIGHTS

| MODEL | Ø IN mm (") | Ø OUT mm (") | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|---------------|-------------|--------------|-------------|-----------|------------|-----------------|
| UABR 32/1 | 100 (3.9) | 140 (5.5) | 690 (27.2) | 135 (5.3) | 247 (9.7) | 56 (123.4) |
| UABR 32/2 | 100 (3.9) | 140 (5.5) | 730 (28.7) | 135 (5.3) | 247 (9.7) | 60 (132.3) |
| UABR 40/1 | 110 (4.3) | 150 (5.9) | 785 (30.9) | 155 (6.1) | 272 (10.7) | 70 (154.3) |
| UABR 32/2-M/T | 100 (3.9) | 140 (5.5) | 720 (28.3) | 135 (5.3) | 247 (9.7) | 44 (97.0) |
| UABR 40/2-M/T | 110 (4.3) | 150 (5.9) | 840 (33.1) | 155 (6.1) | 272 (10.7) | 75 (165.3) |
| UABR 50/2-M/T | 125 (4.9) | 165 (6.5) | 1100 (43.3) | 170 (6.7) | 325 (12.8) | 132 (291.0) |
| UABR 65/2-M/T | 145 (5.7) | 185 (7.3) | 1225 (48.2) | 195 (7.6) | 360 (14.2) | 202 (445.3) |

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SELF-PRIMING STAINLESS STEEL ELECTRIC PUMPS AND PRESSURE BOOSTER SETS – UJ SERIES

UJ SERIES ELECTRIC PUMPS

Self-priming centrifugal electric pumps, Jet type, with high suction capacity. These electric pumps are used to deliver pressurized water to on-board appliances (showers, toilets, washbasins etc.).

Standard features

AISI 304 stainless steel pump body, noryl diffuser and venture tube, AISI 316 stainless steel shaft, corrosion-proof clamping rings, continuous duty electric motor with F insulation class. Delivery diagram: page 81.

Application limits

Liquid free of solid impurities, liquid temperature range: from 0° C to 50° C, static pressure inside the pump body: 6 bar max.



| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|------------|---------|------------|--------------|---------------|-----------------|
| UJ-INOX 12 | 12V DC | 42 A | 9 m (29.5') | 30 m (118.8') | 50 l/min |
| UJ-INOX 24 | 24V DC | 28 A | 9 m (29.5') | 40 m (157.5') | 50 l/min |
| UJ-INOX M | 220V AC | 3 A | 9 m (29.5') | 48 m (188.9') | 50 l/min |

PRESSURE BOOSTER SETS - UJ SERIES

UJ-INOX pressure booster sets are equipped with **UJ** electric pumps and with a stainless steel cylindrical tank (X) with inside butyl rubber diaphragm suitable for food stuff, widely used for constant water pressure for all on-board appliances such as kitchens, showers, washbasins etc.

Standard features

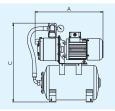
Manual safety pressure switch, pressure gauge, non return valve, 5 ways brass pipe fitting.



| MODEL | SWITCH PRE-SET | TANK PRESSURE | MAX DELIVERY | MAX PRESSURE | TANK CAPACITY |
|----------------|-------------------|------------------|-----------------|-----------------|------------------|
| UJ-INOX 12/8X | 1.4-2.0 bar | 1.2 bar | 40 l/min | 3.0 bar | 81 |
| UJ-INOX 12/20X | 1.4-2.0 bar | 1.2 bar | 40 l/min | 3.0 bar | 20 |
| UJ-INOX 24/8X | 1.4-2.8 bar | 1.2 bar | 40 l/min | 4.0 bar | 81 |
| UJ-INOX 24/20X | 1.4-2.8 bar | 1.2 bar | 40 l/min | 4.0 bar | 20 l |
| UJ-INOX M/20X | 1.4-3.5 bar | 1.2 bar | 50 l/min | 4.8 bar | 20 |

DIMENSIONS AND WEIGHTS

| MODEL | ØIN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|-------------------|----------|----------|-------------|-------------|-------------|--------------------|
| UJ-INOX 12/24-8X | 1" BSP-F | 1" BSP-F | 450 (17.3) | 225 (8.8) | 430 (16.9) | 13 (28.6) |
| UJ-INOX 12/24-20X | 1" BSP-F | 1" BSP-F | 440 (17.3) | 260 (10.2) | 575 (22.6) | 15 (33.0) |
| UJ-INOX M-20X | 1" BSP-F | 1" BSP-F | 440 (17.3) | 260 (10.2) | 575 (22.6) | 13.5 (29.7) |





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SELF-PRIMING BRONZE ELECTRIC PUMPS AND PRESSURE BOOSTER SETS - UMG SERIES

UMG SERIES ELECTRIC PUMPS

Self-priming electric pumps featuring 4 impellers that allow for a higher pressure and flow rate then the UJ-Inox pumps.

Standard features

AISI 304 stainless steel pump body, noryl diffuser and Venturi tube, AISI 316 stainless steel shaft, corrosion-proof clamping rings, continuous duty electric motor with F insulation class. Delivery diagram: page 81

Application limits

Liquid free of solid impurities. Liquid temperature range: from 0° C to 50° C

Static pressure inside the pump body: 6 bar max.



UMG-INOX

| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|-------------|---------|------------|--------------|---------------|-----------------|
| UMG-INOX 24 | 24V DC | 28 A | 9 m (29.5') | 50 m (164.0') | 90 l/min |
| UMG-INOX M | 220V AC | 3 A | 9 m (29.5') | 50 m (164.0') | 90 l/min |

UMG SERIES - PRESSURE BOOSTER SETS

UMG-INOX pressure booster sets are equipped with a **UMG** series electric pump and with a stainless steel cylindrical tank (X) with inside butyl rubber diaphragm suitable for food stuff, widely used for constant water pressure for all on-board appliances such as kitchens, showers, washbasins etc.

Standard features

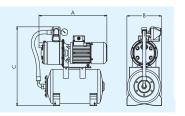
Manual safety pressure switch, pressure gauge, non return valve, 5 ways brass pipe fitting.



| MODEL | SWITCH PRE-SET | TANK PRESSURE | MAX DELIVERY | MAX PRESSURE | TANK CAPACITY |
|-----------------|-------------------|------------------|-----------------|-----------------|------------------|
| UMG-INOX 24/20X | 1.4 – 3.5 bar | 1.2 bar | 90 l/min | 5 bar | 20 |
| UMG-INOX M/20X | 1.4 – 3.5 bar | 1.2 bar | 90 l/min | 5 bar | 20 |

DIMENSIONS AND WEIGHTS

| MODEL | Ø IN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|-----------------|----------|----------|-------------|-------------|-------------|--------------------|
| UMG-INOX 24-20X | 1" BSP-F | 1" BSP-F | 570 (22.4) | 260 (10.2) | 575 (22.6) | 20 (44.0) |
| UMG-INOX M-20X | 1" BSP-F | 1" BSP-F | 570 (22.4) | 260 (10.2) | 575 (22.6) | 16.5 (36.4) |





SELF-PRIMING BRONZE ELECTRIC PUMPS AND PRESSURE BOOSTER SETS - UJBR SERIES

UJBR SERIES ELECTRIC PUMPS

Self-priming electric pumps, Jet type, with closed impeller, featuring a high suction capacity. These electric pumps are used **for rising both fresh and sea water and to deliver pressurized water to on-board appliances** (showers, toilets, washbasins etc), to air-conditioning units, anti-fire equipment. Used for washing of decks and chains.

Standard features

Bronze pump body, polycarbonate diffuser and Venturi tube, AISI 316 stainless steel shaft, special brass alloy impeller, corrosion-proof clamping rings, continuous duty electric motor with F insulation class. Delivery diagram: page 81.

Application limits

Liquid free of solid impurities. Liquid temperature range: from 0° C to 70° C. Static pressure inside the pump body: 6 bar max.



UJBR

| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|---------|---------|------------|--------------|---------------|-----------------|
| UJBR 12 | 12V DC | 42 A | 8 m (26.2') | 30 m (98.4') | 44 l/min |
| UJBR 24 | 24V DC | 28 A | 9 m (29.5') | 36 m (118.1') | 55 l/min |
| UJBR M | 220V AC | 3 A | 9 m (29.5') | 52 m (170.6') | 55 l/min |

UJBR SERIES - PRESSURE BOOSTER SETS

UJBR pressure booster sets are equipped with a **UJBR** electric pump and with a stainless steel cylindrical tank (X) with inside butyl rubber diaphragm suitable for food stuff, widely used for constant water pressure for all on-board appliances such as kitchens, showers, washbasins etc.

Standard features

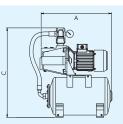
Manual safety pressure switch, pressure gauge, non return valve, 5 ways brass pipe fitting.

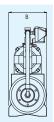


| MODEL | SWITCH PRE-SET | TANK PRESSURE | MAX DELIVERY | MAX PRESSURE | TANK CAPACITY |
|-------------|-------------------|------------------|-----------------|-----------------|------------------|
| UJBR 12/8X | 1.4-2.0 bar | 1.2 bar | 44 l/min | 3.0 bar | 81 |
| UJBR 12/20X | 1.4-2.0 bar | 1.2 bar | 44 l/min | 3.0 bar | 20 |
| UJBR 24/8X | 1.4-2.8 bar | 1.2 bar | 55 l/min | 3.6 bar | 81 |
| UJBR 24/20X | 1.4-2.8 bar | 1.2 bar | 55 l/min | 3.6 bar | 20 |
| UJBR M/20X | 1.4-3.5 bar | 1.2 bar | 55 l/min | 5.2 bar | 20 |

DIMENSIONS AND WEIGHTS

| MODEL | ØIN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|-------------|----------|----------|-------------|-------------|-------------|--------------------|
| UJBR 12/8X | 1" BSP-F | 1" BSP-F | 455 (17.9) | 220 (8.7) | 420 (16.5) | 26 (57.3) |
| UJBR 12/20X | 1" BSP-F | 1" BSP-F | 480 (18.9) | 260 (10.2) | 590 (23.2) | 28 (61.7) |
| UJBR 24/8X | 1" BSP-F | 1" BSP-F | 455 (17.9) | 220 (8.7) | 420 (16.5) | 26 (57.3) |
| UJBR 24/20X | 1" BSP-F | 1" BSP-F | 480 (18.9) | 260 (10.2) | 590 (23.2) | 28 (61.7) |
| UJBR M/20X | 1" BSP-F | 1" BSP-F | 480 (18.9) | 260 (10.2) | 590 (23.2) | 26 (57.3) |





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PERIPHERAL BRONZE ELECTRIC PUMPS AND PRESSURE BOOSTER SETS - UPB SERIES

UPB SERIES ELECTRIC PUMPS

Compact single-impeller peripheral electric pumps apt to develop high pressures compared to limited flow rate. These electric pumps are used for rising both fresh and fresh sea water and to deliver pressurized water to on-board appliances (showers, toilets, washbasins etc.), to airconditioning units, anti-fire equipment.

Used for washing of decks and chains.

Standard features

Bronze body pump, AISI 316 stainless steel shaft, special BRASS alloy impeller, corrosion-proof clamping rings, continuous duty electric motor with F insulation class. Delivery diagram: page 81

Application limits

Liquid free of solid impurities. Liquid temperature range: from 0° C to 70° C. Static pressure inside the pump body: 6 bar max.



| - 1 | п | DI | R |
|-----|---|----|---|

| MODEL | VOLT | MAX AMP | MAX INLET | MAX HEAD | MAX DELIVERY |
|--------|--------|------------|--------------|---------------|-----------------|
| UPB 12 | 12V DC | 36 A | 6 m (19.7') | 40 m (131.2') | 35 l/min |
| UPB 24 | 24V AC | 22 A | 6 m (19.7') | 42 m (137.8') | 36 l/min |

UPB SERIES - PRESSURE BOOSTER SETS

UPB pressure booster sets are equipped with a UPB electric pump and with a stainless steel or iron (L) cylindrical tank (X) with inside butyl rubber diaphragm suitable for food stuff, widely used for constant water pressure for all on-board appliances such as kitchens, showers, washbasins etc.

Standard features

Manual safety pressure switch, pressure gauge, non return valve, 5 ways brass pipe fitting.

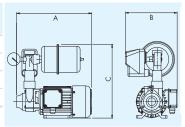


UPB 2X

| MODEL | SWITCH PRE-SET | TANK PRESSURE | MAX DELIVERY | MAX PRESSURE | TANK CAPACITY |
|-------------|-------------------|------------------|-----------------|-----------------|------------------|
| UPB-12/2X | 1.4-2.8 bar | 1.2 bar | 35 l/min | 4 bar | 2 |
| UPB-12/8X-L | 1.4-2.8 bar | 1.2 bar | 35 l/min | 4 bar | 8 |
| UPB-24/2X | 1.4-2.8 bar | 1.2 bar | 36 l/min | 4.2 bar | 2 |
| UPB-24/8X-L | 1.4-2.8 bar | 1.2 bar | 36 l/min | 4.2 bar | 8 |

DIMENSIONS AND WEIGHTS

| MODEL | ØIN | Ø OUT | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|-------------|----------|----------|-------------|-------------|-------------|--------------------|
| UPB-12/2X | 1" BSP-F | 1" BSP-F | 295 (11.6) | 205 (8.1) | 295 (11.6) | 9 (19.8) |
| UPB-12/8X-L | 1" BSP-F | 1" BSP-F | 420 (16.5) | 225 (8.8) | 330 (13.0) | 10 (22.0) |
| UPB-24/2X | 1" BSP-F | 1" BSP-F | 295 (11.6) | 205 (8.1) | 295 (11.6) | 9 (19.8) |
| UPB-24/8X-L | 1" BSP-F | 1" BSP-F | 420 (16.5) | 225 (8.8) | 330 (13.0) | 10 (22.0) |





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ELECTRIC PUMPS IN SERIES

UJ-INOX, UMG-INOX and UJBR pumps can be connected in series. With this peculiar application a double flow rate can be obtained and the system can face an emergency stop of one of the pumps during pavigation.

Connecting one 12V (or 24 VDC) pump to a 230 VAC pump, the power absorption is reduced for a longer battery life.



| MODEL | PUMP 1 | PUMP 2 | MOTOR | POWER Kw | CURRENT A | MAX DELIVERY | MAX PRESSURE |
|----------|-------------|-------------|-------|-------------|--------------|-----------------|-----------------|
| UGA1/J | UJ-INOX 24 | UJ-INOX 24 | DC+DC | 0,6+0,6 | 28+28 | 50+50 l/min. | 4 bar |
| UGA2/J | UJ-INOX M | UJ-INOX M | AC+AC | 0,6+0,6 | 1 | 50+50 l/min. | 4 bar |
| UGA3/J | UJ-INOX 24 | UJ-INOX M | DC+AC | 0,6+0,6 | 28+/ | 50+50 l/min. | 4 bar |
| UGA1/MG | UMG-INOX 24 | UMG-INOX 24 | DC+DC | 0,75+0,75 | 40+40 | 90+90 l/min. | 5 bar |
| UGA2/MG | UMG-INOX M | UMG-INOX M | AC+AC | 0,75+0,75 | 1 | 90+90 l/min. | 5 bar |
| UGA3/MG | UMG-INOX 24 | UMG-INOX M | DC+AC | 0,75+0,75 | 40+/ | 90+90 l/min. | 5 bar |
| UGA1/JBR | UJBR 24 | UJBR 24 | DC+DC | 0,6+0,6 | 28+28 | 55+55 l/min. | 3,6 bar |
| UGA2/JBR | UJBR M | UJBR M | AC+AC | 0,6+0,6 | 1 | 55+55 l/min. | 5 bar |
| UGA3/JBR | UJBR 24 | UJBR M | DC+AC | 0,6+0,6 | 28+/ | 55+55 l/min. | 5 bar |

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Pressure Booster Sets featuring an **Electronic Control System EPC (Electronic Pressure Control)** that automatically controls the pump start and stop stages when the pressure drops or when the water supply to the system is interrupted. The electronic control system EPC will guarantee the automatic stop of the pump when the water supply has run out (preventing damage to the pump if dry running) and will offer constant monitoring of the operation by means of warning lights.

If in lack of water the pump stops, in which case the EPC device will allow the pump to make brief starts at regular breaks to check the availability of water. If the pump is able to take in water during one of these attempts (maximum 4), the pressure booster set will restart its normal operation. After four attempts, the EPC device will stop the pump definitively. The pump can then be restarted only by pressing the "Reset" button.



| MODEL | VOLT | AMP MAX | MAX DELIVERY | MAX PRESSURE |
|-----------------|---------|------------|-----------------|-----------------|
| UJ-INOX/EPC-12 | 12V DC | 40 A | 40 l/min | 3 bar |
| UJ-INOX/EPC-24 | 24V DC | 28 A | 40 l/min | 4 bar |
| UJ-INOX/EPC-M | 230V AC | - | 50 l/min | 4,8 bar |
| UMG-INOX/EPC-24 | 24V DC | 40 A | 90 l/min | 5 bar |
| UMG-INOX/EPC-M | 230V AC | - | 90 l/min | 5 bar |
| UJBR/EPC-12 | 12V DC | 42 A | 44 l/min | 3 bar |
| UJBR/EPC-24 | 24V DC | 28 A | 55 l/min | 3,6 bar |
| UJBR/EPC-M | 230V AC | - | 55 l/min | 5,2 bar |
| UPB/EPC-12 | 12V DC | 36 A | 35 l/min | 4 bar |
| UPB/EPC-24 | 24V DC | 22 A | 36 l/min | 4,2 bar |

Inlet: 1" BSP - F (Gas)
Outlet: 1" BSP - M (Gas)



BIDIRECTIONAL SELF-PRIMING PUMPS NAUTIC AND SPECIAL SERIES



Bidirectional side liquid ring self-priming pumps. Thanks to their high delivery capability, these pumps are widely used in marine applications sector to empty bilges or for sea water suction. Upon request these pumps are also available with BSP thread.

Standard features

Bronze body pump, bronze impeller, bronze pipe fittings, AISI 316 stainless steel shaft, corrosion-proof clamping rings. Delivery diagram: page 81.

Application limits

Liquid free of solid impurities, liquid temperature range: from 0° C to 70° C, static pressure inside the pump body: 6 bar max.

NAUTIC SERIES

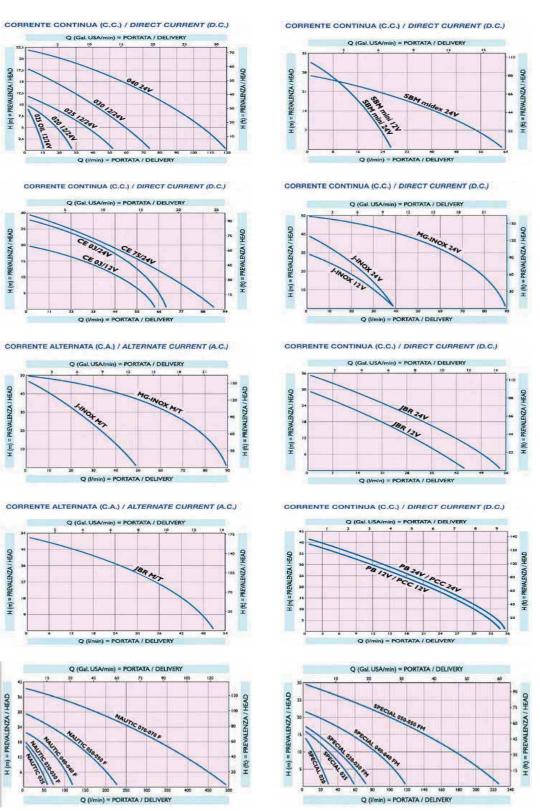
| MODEL | OPERATION | MAX INLET | MAX HEAD | MAX DELIVERY I/min@ rpm |
|--------------|---------------|--------------|---------------|----------------------------|
| UN 025 | bare shaft | 6 m (19.7') | 18 m (70.8') | 60 @ 2800 |
| UN 030-030 F | Manual clutch | 6 m (19.7') | 18 m (70.8') | 75 @ 1400 |
| UN 040-040 F | Manual clutch | 6 m (19.7') | 22 m (88.6') | 120 @ 1400 |
| UN 050-050 F | Manual clutch | 6 m (19.7') | 30 m (118.1') | 230 @ 1400 |
| UN 070-070 F | Manual clutch | 6 m (19.7') | 40 m (157.4') | 500 @ 1400 |

SPECIAL SERIES

| MODEL | OPERATION | MAX INLET | MAX HEAD | MAX DELIVERY I/min@ rpm |
|----------------|------------------|--------------|---------------|----------------------------|
| US 020 | Bare shaft | 6 m (19.7') | 15 m (59.0') | 30 @ 2800 |
| US 025 | Bare shaft | 6 m (19.7') | 18 m (70.8') | 60 @ 2800 |
| US 030-030 FM* | Magneticl clutch | 6 m (19.7') | 18 m (70.8') | 75 @ 1400 |
| US 040-040 FM* | Magneticl clutch | 6 m (19.7') | 22 m (88.6') | 120 @ 1400 |
| US 050-050 FM* | Magneticl clutch | 6 m (19.7') | 30 m (118.1') | 230 @ 1400 |

^{*}FM = Magnetic clutch 12 V DC or 24 V

UFLEX ELECTRIC PUMP PERFORMANCES ((DELIVERY DIAGRAMS)



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PUMP PERFORMANCES



CENTRIFUGAL ELECTRIC BLOWERS - UBLC SERIES

UBLC spiral centrifugal electric blowers are used for suction and ventilation of air in closed compartments such as toilets, kitchen, engine room etc.

Standard features

Painted steel casing, fan with forward and balanced steel blades, continuous duty electric motor with F insulation class, IP 44 protection (alternal current), IP 23 (direct current)

The orientation of the blower must be stated when ordering (see drawing).









| MODEL | VOLT | MAX AMP | RPM | MAX DELIVERY m³/min | MAX HEAD mm H ₂ O |
|--------------|-----------------|------------|------|------------------------|---------------------------------|
| UBLC 002-12 | 12V DC | 3,2 A | 2800 | 4,5 | 22 |
| UBLC 002-24 | 24V DC | 1,6 A | 2800 | 4,5 | 22 |
| UBLC 002-M/T | 230V AC/380V AC | - | 2800 | 4,5 | 22 |
| UBLC 004-12 | 12V DC | 12 A | 2000 | 15 | 30 |
| UBLC 004-24 | 24V DC | 6 A | 2000 | 15 | 30 |
| UBLC 004-M/T | 230V AC/380V AC | - | 2800 | 15 | 45 |
| UBLC 015-24 | 24V DC | 13 A | 1400 | 24 | 34 |
| UBLC 015-M/T | 230V AC/380V AC | - | 1400 | 24 | 34 |
| UBLC 028-24 | 24V DC | 16 A | 2800 | 24 | 64 |
| UBLC 028-M/T | 230V AC/380V AC | - | 2800 | 24 | 64 |
| UBLC 023-24 | 24V DC | 28 A | 2000 | 37 | 64 |
| UBLC 023-M/T | 230V AC/380V AC | - | 2800 | 58 | 130 |
| UBLC 025-24 | 24V DC | 24 A | 1400 | 50 | 55 |
| UBLC 025-M/T | 230V AC/380V AC | - | 1400 | 50 | 55 |
| UBLC 030-M/T | 230V AC/380V AC | - | 1400 | 95 | 75 |

HELICOIDAL ELECTRIC BLOWERS - UVE SERIES

UVE helicoidal electric blowers are used for suction and ventilation of air in closed compartments such as toilets, kitchen and engine rooms.

Standard features

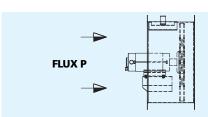
Painted sheet steel drum, polypropylene balanced fan (temperature range: from -5° C to 70° C), continuous duty electric motor with F insulation class, IP 44 protection.

The orientation of the blower must be specified when ordering (see drawing below).

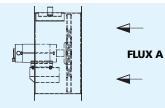




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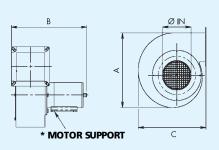


| Flux A | - Bl | lower |
|--------|------|-------|
|--------|------|-------|

| MODEL | VOLT | MAX AMP | RPM | MAX DELIVERY m³/min | MAX HEAD mm H ₂ O |
|--------------|-----------------|------------|------|------------------------|---------------------------------|
| UVE 25-12 | 12V DC | 22 A | 2500 | 30 | 13 |
| UVE 25-24 | 24V DC | 11A | 2500 | 30 | 13 |
| UVE 25-M/T | 230V AC/380V AC | - | 2800 | 35 | 14 |
| UVE 30-12 | 12V DC | 10 A | 1400 | 42 | 8 |
| UVE 30-24 | 24V DC | 5 A | 1400 | 42 | 8 |
| UVE 30-M/T | 230V AC/380V AC | | 1400 | 42 | 8 |
| UVE 30/2-24 | 24V DC | 14 A | 2000 | 75 | 22 |
| UVE 30/2-M/T | 230V AC/380V AC | | 2800 | 78 | 35 |
| UVE 35-12 | 12V DC | 12 A | 1400 | 56 | 13 |
| UVE 35-24 | 24V DC | 6 A | 1400 | 56 | 13 |
| UVE 35-M/T | 230V AC/380V AC | - | 1400 | 56 | 13 |
| UVE 35/2-24 | 24V DC | 16 A | 2000 | 96 | 18 |
| UVE 35/2-M/T | 230V AC/380V AC | - | 2800 | 100 | 46 |
| UVE 40-12 | 12V DC | 14 A | 1400 | 70 | 14 |
| UVE 40-24 | 24V DC | 7 A | 1400 | 70 | 14 |
| UVE 40-M/T | 230V AC/380V AC | - | 1400 | 70 | 14 |
| UVE 40/2-24 | 24V DC | 18 A | 2000 | 130 | 24 |
| UVE 40/2-M/T | 230V AC/380V AC | - | 2800 | 130 | 40 |
| UVE 45-24 | 24V DC | 9 A | 1400 | 107 | 17 |
| UVE 45-M/T | 230V AC/380V AC | - | 1400 | 107 | 17 |
| UVE 45/2-24 | 24V DC | 22 A | 2000 | 144 | 28 |
| UVE 45/2-M/T | 230V AC/380V AC | - | 2800 | 175 | 51 |
| UVE 50-24 | 24V DC | 38 A | 1400 | 160 | 20 |
| UVE 50-M/T | 230V AC/380V AC | - | 1400 | 160 | 20 |
| UVE 56-24 | 24V DC | 40 A | 1400 | 225 | 23 |
| UVE 56-M/T | 230V AC/380V AC | - | 1400 | 225 | 23 |
| UVE 63-M/T | 230V AC/380V AC | - | 1400 | 312 | 32 |
| UVE 71-T | 380V AC | - | 1400 | 330 | 30 |
| UVE 71/B-T | 380V AC | - | 1400 | 400 | 40 |

DIMENSIONS AND WEIGHTS: SEE PAGE 84

UBLC - DIMENSIONS AND WEIGHTS

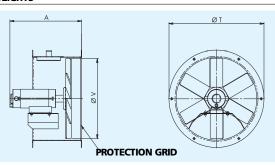




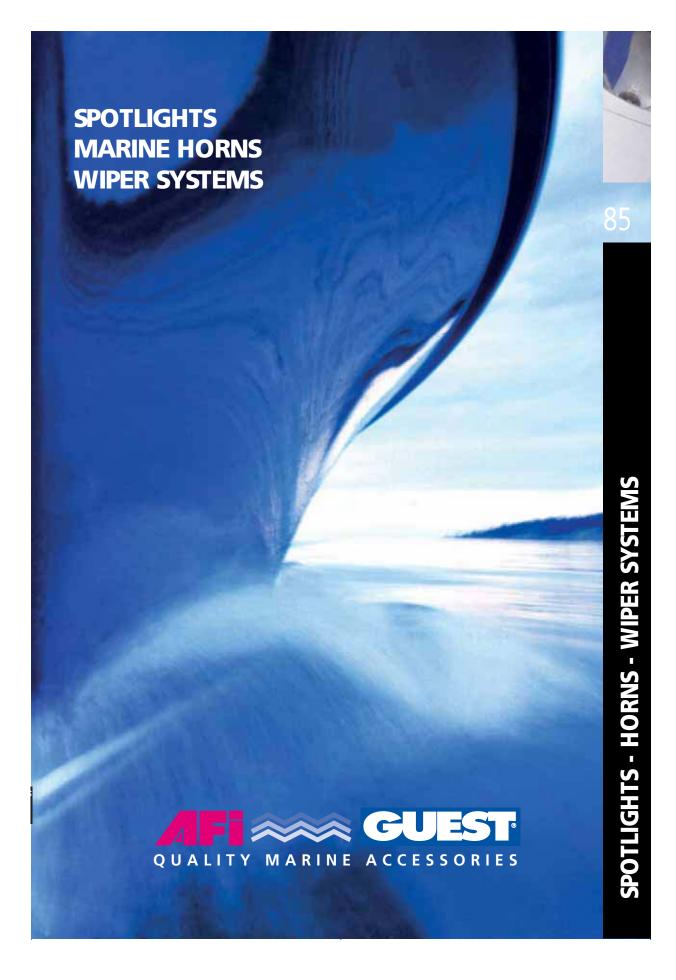
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| MODEL | Ø IN mm (") | Ø OUT mm (") | A mm (") | B mm (") | C mm (") | WEIGHT kg (lbs) |
|----------|-------------|--------------|------------|------------|------------|-----------------|
| UBLC 002 | 85 (3.3) | 59 (2.3) | 190 (7.5) | 243 (9.5) | 168 (6.6) | 2,5 (5.5) |
| UBLC 004 | 110 (4.3) | 98 (3.8) | 270 (10.6) | 340 (13.4) | 225 (8.8) | 6 (13.2) |
| UBLC 015 | 180 (7.1) | 148 (5.8) | 405 (16.0) | 370 (14.6) | 338 (13.3) | 14 (30.9) |
| UBLC 028 | 122 (4.8) | 118 (4.6) | 322 (12.7) | 320 (12.6) | 273 (12.6) | 8 (17.6) |
| UBLC 023 | 200 (7.8) | 160 (6.3) | 410 (16.1) | 390 (15.3) | 340 (13.4) | 19 (41.9) |
| UBLC 025 | 250 (9.8) | 250 (9.8) | 515 (20.3) | 438 (17.2) | 420 (16.5) | 26 (57.3) |
| UBLC 030 | 300 (11.8) | 300 (11.8) | 615 (24.2) | 510 (20.0) | 500 (19.7) | 36 (79.4) |

UVE - DIMENSIONS AND WEIGHTS



| MODEL | A mm (") | Ø V mm (") | Ø T mm (") | WEIGHT Kg (lbs) |
|----------|------------|------------|------------|-----------------|
| UVE 25 | 330 (13.0) | 250 (9.8) | 310 (12.2) | 8 (17.6) |
| UVE 30 | 330 (13.0) | 305 (12.0) | 378 (14.9) | 9 (19.8) |
| UVE 30/2 | 330 (13.0) | 305 (12.0) | 378 (14.9) | 9 (19.8) |
| UVE 35 | 330 (13.0) | 350 (13.8) | 425 (16.7) | 11 (14.3) |
| UVE 35/2 | 330 (13.0) | 350 (13.8) | 425 (16.7) | 11 (14.3) |
| UVE 40 | 330 (13.0) | 400 (15.7) | 473 (18.6) | 12 (26.4) |
| UVE 40/2 | 330 (13.0) | 400 (15.7) | 473 (18.6) | 12 (26.4) |
| UVE 45 | 330 (13.0) | 450 (17.7) | 523 (20.6) | 13 (28.6) |
| UVE 45/2 | 330 (13.0) | 450 (17.7) | 523 (20.6) | 13 (28.6) |
| UVE 50 | 330 (13.0) | 500 (19.7) | 573 (22.5) | 21 (46.3) |
| UVE 56 | 330 (13.0) | 560 (22.0) | 633 (24.9) | 23 (50.7) |
| UVE 63 | 310 (12.2) | 630 (24.8) | 704 (27.7) | 28 (61.7) |
| UVE 71 | 315 (12.4) | 710 (27.9) | 774 (30.5) | 35 (77.2) |
| UVE 71/B | 320 (12.6) | 710 (27.9) | 774 (30.5) | 44 (97.0) |





BEAMER™ - HALOGEN SPOTLIGHTS REMOTE CONTROL HALOGEN SPOTLIGHT



- Illuminates objects up to a mile away
- Marine grade construction
- Light can be directed manually without damaging motors
- Beamer lights are motorized for smooth trouble free remote operation
- Amp Draw: 8 Amp, up to 10 on start
- Operation: 12V Halogen
- Bulb: replaceable 100 Watt Halogen bulb
- Overall Dimensions: H 263mm (10.37") x W 187mm (7.37") x D 235mm (9.25")
- Base Dimensions: W 146mm (5.75") x D 159mm (6.25")
- Weight: 1,7 kg (3.75 lbs)



SPOTLIGHT WITH PUSH BUTTON CONTROL

502A - 66943F - 12V Spotlight controlled by a push button

SPOTLIGHT WITH JOYSTICK CONTROL

- 15 ft wiring harness included
- Smaller diameter wiring harness is easy to install
- Secondary station may be added (see parts and accessories)
- Joystick control cutout: H 41,3mm (1.63") x L 69,8mm (2.75")

502-1 66897 B – 12V Spotlight with Joystick Control **502-2** 66898 D – 24V Spotlight with Joystick Control

SPOTLIGHT WITH WIRELESS REMOTE CONTROL

- Wireless transmitter controls spotlight functions
- Remote control works up to 150 ft away
- Easy to install
- Security code on remote unit prevents unauthorized use
- Wireless secondary station may be added (see parts and accessories)

501A 66899 F – Spotlight with Wireless Remote Control

HALOGEN SPOT/FLOOD WITH REMOTE JOYSTICK CONTROL

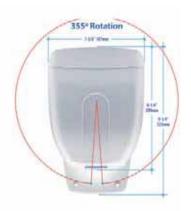
- Illuminates objects up to a mile away
- Marine grade construction
- Light can be directed manually without damaging motors
- 100 Watt spotlight with 55 Watt floodlight
- Includes 15 ft wiring harness
- Secondary station may be added (see parts and accessories)
- Amp Draw: 8 Amp, up to 10 on start

- Operation: 12V Halogen Bulb: replaceable Halogen bulb Overall Dimensions: H 263mm (10.37") x W 187mm (7.37") x D. 235mm (9.25")
- Base Dimensions: W 146mm (5.75") x D 159mm (6.25")
- Weight: 1,7 kg (3.75 lbs)
- Joystick control cutout: H 41,3mm (1.63") x L 69,8mm (2.75")

503-1 66900 L – 12V Spot/Flood with Joystick Control **503-2** 66861 D – 24V Spot/Flood with Joystick Control







12V XENON SPOTLIGHT WITH WIRELESS REMOTE CONTROL

- Twice as bright as Halogen spotlights
- Wireless remote control works from 100 feet
- Built-in RF receiver no extra pieces to mantain or install
- Waterproof bullet connectors for ease of installation
- Fortified "neck" bracing to resist damage due to side impact

505 - 66901 N - 12V Xenon Spotlight with Wireless Remote Control

STAINLESS STEEL HALOGEN SPOT/FLOOD WITH REMOTE JOYSTICK CONTROL

- 316 stainless steel base, 304 stainless steel head
- Includes joystick control and 15' wiring cable with easy to install plug ends
- Secondary station may be added (see parts and accessories)
- Light can be directed manually without damaging motors
- Spot Power: 72.000 CP Flood Power: 30.000 CP Amp Draw: 7 Amp
- Operation: 12V Incandescent **Bulb: Replaceable Incandescent**
- Lamp Dimensions: H 241mm (9.5") x W 114mm (4.5") x L 190mm (7.5")
- Base Dimensions: L 140mm (5.5") x W 89mm (3.5")
- Weight: 2,7 kg (6 lbs)
- Joystick requires 70mm (2.75") installation hole

22040A - 66860 B - Stainless Steel Halogen Spot/Flood with Joystick Control

HALOGEN SPOTLIGHT WITH REMOTE JOYSTICK CONTROL

- Corrosion-proof, impact resistant, UV stabilized ABS
- Includes joystick control and 15' wiring cable with easy to install plug ends
- Secondary station may be added (see parts and accessories)
- Light can be directed manually without damaging motors
- Spot Power: 100.000 CP Amp Draw: 4 Amp
- Operation: 12V Haloge
- Bulb: Replaceable Sealed Beam
- Lamp Dimensions: H 233mm (9.18") x W 219mm (8.63") x L 220mm (8.68")
- Base Dimensions: 127mm (5") Diameter
- Weigh: 1,9 kg (4.25 lbs)
- Joystick control cutout: H 41,3mm (1.63") x L 69,8mm (2.75")

22200 - 66859 T Halogen Spotlight with Joystick Control



505



BEAMER SPOTLIGTH PARTS & ACCESSORIES

| SPOTLIGHT MODEL | CONTROL PANEL | DUAL STATION CONTROL KIT | REPLACEMENT BULB KIT | EXTENSION CABLE KIT |
|--------------------|------------------|-----------------------------|-------------------------|---------------------|
| 501-A | 729825 | 729825 | 729493 | ND |
| 502A | 729827-P | 729828-P | 729493 | 729528 |
| 502-1 | U-3605 | 729488 | 729493 | 729528 |
| 502-2 | 22209-24 | 729489 | 729493 | 729528 |
| 503-1 | U-3606 | 729491 | 729494 | 729528 |
| 503-2 | 22208-24 | 729492 | 729494 | 729528 |
| 22040A | 22240 | 22218A | 22014-P | 22010A-P |
| 22200 | 22209 | 22219A | 22230-P | 22010A-P |



MARINE HORNS



AFI is the leading supplier of horns to the marine industry, with over a fifty years of experience in designing and manufacturing sound devices specifically for use in harsh marine environments. Stainless steel is used for all critical components such as trumpets, motor cover, diaphragms and mounting hardware.

AFI offers a complete line of marine horn products designed to meet almost any need, including electric and air trumpet horns, compact horns, below deck and deck horns.

DROP-IN BELOW DECK HORNS - ELECTRIC COMPACT HORNS

"H" HORN PHASE II - DROP-IN HIDDEN HORN WITH GRILLS

- Comes with both a white ASA and a black ABS screwin grills and includes a stainless steel cover
- Grills have water resistant fabric liners
- Easy installation: 69,8mm (2.75") diameter hole x 25,4mm (1") deep
- 12 Volt, maximum Amp draw: 4 Amp
- dB(A) rating: 111 at one meter
- Fundamental frequency: 370±20Hz
- Mounts from the outside, grill screws on for easy installation
- Easy retrofit

10087 - 66903 T - Drop-in Hidden Horn with Grills

"H" HORN PHASE II - DROP-IN HIDDEN HORN WITHOUT GRILL

- Same features as 10087 without grill
- When purchasing bulk version, grill must be ordered separately

11080 - 66904 V - Drop-in Hidden Horn without Grill

11187 - 66905 X - Screw-in White ASA Grill for 11080

11188 - 66906 Z - Screw-in Black ABS Grill for 11080

11096 - 66907 B - Screw-in Stainless Steel Grill Kit for 11080: includes stainless steel grill cover and plastic white (11187) screw-in grill

DROP-IN "H" HORN WITH GRILLS

- Comes with both black ABS and white ASA snap-in grills
- dB(A) rating: 107 at one meter Fundamental frequency: 370±20Hz
- Internal space requirements: H 50,8mm (2") x W 85,6mm (3.37") x D 82,5mm (3.25")
- Distinctive marine horn sound
- Enclosed sound unit
- Easy installation or retofit, mounts from the outside
- 12 Volt, maximum Amp draw: 4 Amp

10079 - 66908 D - Drop-in "H" Horn with Grills

DROP-IN HIDDEN HORN WITHOUT GRILL

- Internal space requirements: H 57,2mm (2.25") x W 92,2mm (3.63") x D 88,9mm (3.5")
- Maximum Amp draw: 3 Amp
- dB(A) rating: 105 at one meter
- Fundamental frequency: 440±20Hz
- Mounts from the outside, horn grill snap on for easy installation
- Easy retrofit
 Grill must be ordered separately

11095 - 66909 F - Drop-in Hidden Horn without Grill

11090 - 66910 P - Snap-in White ASA Grill for 11095

11091 - 66911 S - Snap-in Black ABS Grill for 11095

11225 - 66912 U - Snap-in Chome Plated ABS Grill for 11095 horn















AFI® FullBlast compressor driven air horns are the loudest and most complete line of 12V air horns available. They prduce sound levels ranging between 120 and 127 dB, which meens they meet the ABYC and NMMA regulations for boats up to 20 meters (66 ft). Both 12V and 24V compressors are CE listed.

SINGLE TRUMPET MINI AIR HORNS

- Solid brass construction
- Non-corrosive Lexan® diaphragm
- Include compressor, air tubing, fittings and hardware
- Dimensions: L 241,3mm (9.5") x W 88,9mm (3.5") x H 88,9mm (3.5")
- Maximum Amp draw: 12 Volt: 20 Amp, 24 Volt: 10
- dB rating: 126 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz
- **10107** 66913 W 12 Volt Chrome Single Trumpet Mini Air Horn - chrome plated solid brass
- 10104 66914 Y- 12 Volt White Single Trumpet Mini Air Horn - white epoxy powder-coated finish over solid brass

DUAL TRUMPET MINI AIR HORNS

- Solid brass construction
- Non-corrosive Lexan® diaphragm
- Include compressor, air tubing, fittings and hardware
- Dimensions: L. 241,3mm (9.5") x W 127,0mm (5.0") x H 95,3mm (3.75")
- Maximum Amp draw: 12 Volt: 20 Amp, 24 Volt: 10
- dB rating: 127 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz/525±15Hz
- 10108 66915 A 12 Volt Chrome Dual Trumpet Mini Air Horn - chrome plated solid brass
- **10121** 66916 C 12 Volt White Dual Trumpet Mini Air Horn - white epoxy powder-coated finish over solid brass

AIR COMPRESSORS

- Replacement compressors fit all AFI 12 Volt Air
- Dimensions: L 127,0mm (5.0") x D 66,8mm (2.63")
- Include mounting bracket
- Maximum Amp draw: 12 Volt: 20 Amp, 24 Volt: 10 Amp. Produce 9-11 PSI
- CE marked

10102 - 66917 E - 12 Volt Air Compressor

10224 - 66918 G - 24 Volt Air Compressor











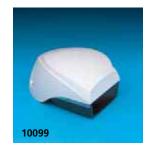


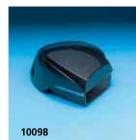
ELECTRIC DECK COMPACT HORNS

MINIBLAST™ - COMPACT ELECTRIC HORNS

- Long lasting, non-corrosive ASA plastic cover
- Sealed sound unit with stainless steel diaphragm
- Dimensions: L 109,2mm (4.37") x W 85,6mm (3.37") x H 50,8mm (2.0")
- Maximum Amp draw: 3 Amp, 12Volt
- dB(A) rating: 106 at one meter (3ft)
- Fundamental frequency: 440±20Hz

10099 - 66920 T - White MiniBlast Compact Electric Horn 10098 – 66921 V – Black MiniBlast Compact Electric Horn









WIPER SYSTEMS

AFI® wiper systems are designed for windshield sizes up to 45" and are available for 12Volt or 24Volt systems. AFI offers a full assortment of marine wiper arms and blades manufactured of durable stainless steel and marine grade silicone to last in the harsh marine

AFI 3.0 HEAVY DUTY PLUS WIPER MOTOR

The Heavy Duty Plus 3.0 Motor is AFI's only external linkage motor. This new design easily powers a 30" Premier Plus arm and 30" Premier Plus blade combination to provide coverage up to 45" of windshield area.

- Available in three shaft lengths: 1", 2" and 3" (arm fitting adds 2" to overall length)
- 18mm dia. tapered knurled drive shaft
- Factory pre-set sweep angle of 80° or 110°, can be easily adjusted to 45° or 60°
- For interior installations
 Measures approx.: L 212,8mm (8.37"), W 117,0mm (4.60"), D 109,9mm (4.32")
- Available in 12V and 24V models
- Coast to park with adjustable right or left self
- Two speed motor
- CE marked

| MODEL | Part No. | SWEEP | SHAFT | VOLT |
|-------|----------|-------|-------|------|
| 73111 | 66922 X | 110° | 1" | 12V |
| 73112 | 66923 Z | 110° | 2" | 12V |
| 73113 | 66924 B | 110° | 3″ | 12V |
| 73313 | 66925 D | 110° | 3" | 24V |

PREMIER PLUS - STAINLESS STEEL ADJUSTABLE SINGLE AND PANTOGRAPHIC WIPER ARMS

- Heavy duty component design for use with the AFI 3.0 wiper motor
- Stainless steel and chrome-plated die cast construction
- Available in standard and pantographic styles with both versions offered in normal and wet arm configurations

| MODEL | Part No. | DESCRIPTION |
|--------|----------|--|
| 33088 | 66926 F | Single Arm, Adjusts 25" to 30" |
| 33096 | 66927 H | Pantographic Arm, Adjusts 26" to 30" |
| 33088W | 66928 K | Single Wet Arm, Adjusts 25" to 30" |
| 33096W | 66929 M | Pantographic Wet Arm, Adjusts 26" to 30" |

Note: pantographic wiper arms will ONLY function properly with wiper motor sweep angles 80° or less

PREMIER PLUS - STAINLESS STEEL WIPER BLADES

- All stainless steel construction for use with Premier
- Available in stainless steel or black finish

| MODEL | Part No. | DESCRIPTION |
|---------|----------|-----------------|
| 33026 S | 66930 W | 26" Blade |
| 33026 B | 66931 Y | 26" Black Blade |
| 33028 S | 66932 A | 28" Blade |
| 33028 B | 66933 C | 28" Black Blade |
| 33030 S | 66934 E | 30" Blade |
| 33030 B | 66942 D | 30" Black Blade |



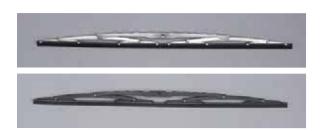














AFI's microcontroller based "intelligent" switch provides all necessary wiper motor functions in one small component

- Settings for two continuous speed functions and three intermittent speed functions (2 sec delay, 4 sec dely, 8 sec delay)
- Washer system operation function
- Blinking LED ligths in switch indicate operating
- Dual motor switch synchronizes both motors in each mode and deactivates each motor individually Works with 12V or 24V DC motors
- Fits standard switch size openings, requires 67,5mm (2.65") depth
- Includes one ten pole connector with female pins and two female quick- connects

| Taking Co. |
|------------|



| MODEL | Part No. | DESCRIPTION |
|-------|----------|---------------------------------|
| 76030 | 66935 G | Single Motor Intelligent Switch |
| 76035 | 66936 Y | Double Motor Intelligent Switch |

AFI 2.5 - HAEVY DUTY WATERPROOF WIPER MOTOR

- The most powerful waterproof wiper motor available
- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 26" Deluxe arm and blade combination or a 24" Premier arm and blade combination
- Available in two shaft lengths: 1" and 2" (knurled arm fitting adds ½" to overall lentgh)
 Factory pre-set sweep angle of 80° or 110°, can be easily adjusted to 45° or 60°
 Chrome plated solid brass knurled drive nut with 16
- mm (5/8") dia. brass and stainless steel drive shaft
- Measures approx.: L 201,0mm (7.91"), W 108,0mm (4.25"), D 76,8mm (3.02") Available in 12V and 24V models
- Coast to park with adjustable right or left self parking
- Two speed motor
- CE marked

| MODEL | Part No. | SWEEP | SHAFT | VOLT |
|-------|----------|-------|-------|------|
| 82081 | 66937 L | 80° | 1″ | 12V |
| 82082 | 66938 N | 80° | 2" | 12V |
| 82011 | 66939 R | 110° | 1" | 12V |
| 82012 | 66940 Z | 110° | 2" | 12V |
| 82312 | 66941 B | 110° | 2" | 24V |







AFI 1.5 - HAEVY DUTY WATERPROOF WIPER MOTOR

- Fully sealed powder coated aluminum waterproof
- Powers a 22" Deluxe arm and blade combination or a 20" Premier arm and blade combination Available in two shaft lengths: 1" and 2" (knurled
- arm fitting adds 1/2" to overall lentgh)
- Factory pre-set sweep angle of 80° or 110°, can be easily adjusted to 45° or 60°
- Chrome plated solid brass knurled drive nut with 16
- mm (5/8") dia. brass and stainless steel drive shaft Measures approx.: L 197,0mm (7.76"), W 101,0mm (3.98"), D 70,3mm (2.77")
- Available in 12V and 24V models
- Coast to park with adjustable right or left self parking Two speed motor
- CE marked





| MODEL | Part No. | SWEEP | SHAFT | VOLT |
|-------|----------|-------|-------|------|
| 71081 | 66952 G | 80° | 1" | 12V |
| 71082 | 66953 J | 80° | 2" | 12V |
| 71011 | 66954 L | 110° | 1″ | 12V |
| 71012 | 66955 W | 110° | 2" | 12V |
| 71212 | 66956 R | 110° | 2" | 24V |

PREMIER - STAINLESS STEEL ADJUSTABLE SINGLE AND PANTOGRAPHIC WIPER ARMS

Available in standard and pantographic styles with both versions offered in normal and wet arm configurations

| MODEL | Part No. | DESCRIPTION |
|--------|----------|---|
| 33086 | 66957 T | Single Arm, Adjusts 20" to 25" |
| 33092 | 66958 V | Pantographic Arm, Adjusts 17" to 22" |
| 33094 | 66959 X | Pantographic Arm, Adjusts 22" to 26" |
| 33086W | 66960 F | Single Wet Arm, Adjusts 20" to 25" |
| 33092W | 66961 H | Pantographic Wet Arm, Adjusts 17"to 22" |
| 33094W | 66962 K | Pantographic Wet Arm, Adjusts 22" to 26" |



Note: pantographic wiper arms will ONLY function properly with wiper motor sweep angles 80° or less

PREMIER - STAINLESS STEEL WIPER BLADES

Available in stainless steel or black finish

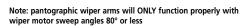
| MODEL | Part No. | DESCRIPTION |
|---------|----------|-----------------|
| 33021 S | 66963 M | 20" Blade |
| 33021 B | 66964 P | 20" Black Blade |
| 33024 S | 66965 S | 24" Blade |
| 33024 B | 66966 U | 24" Black Blade |



DELUXE - STAINLESS STEEL ADJUSTABLE SINGLE AND PANTOGRAPHIC WIPER ARMS

Available in stainless steel or black finish

| MODEL | Part No. | DESCRIPTION |
|---------|----------|---|
| 33060 A | 66967 W | Single Arm, Adjusts 20" to 26" |
| 33061 A | 66968 Y | Single Black Arm, Adjusts 20" to 26" |
| 33062 A | 66969 A | Pantographic Black Arm, Adjusts 22" to 26" |





DELUXE - STAINLESS STEEL CURVED WIPER BLADES

| MODEL | Part No. | DESCRIPTION |
|-------|----------|-------------|
| 33022 | 66970 J | 22" Blade |
| 33024 | 66971 L | 26" Blade |









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CIRCUIT BREAKER PANELS

BEP Marine manufactures a wide range of control panels for any type and dimension of boats utilizing high quality products and components as, for instance, the certified AIRPAX® circuit breakers fitted in modern and elegant designed panels.

Panels are supplied standard with preassembled cables for an easy installation and equipped with back lit label sets and indication LED's.

Configurations available: 12V DC, 24V DC (please specify voltage requested on ordering to receive the correct back lit labels), 220V AC or voltage combination.
All panels are available with Analog or Digital

meters.

BEP AC Panels back covers are designed to insulate the exposed terminals at the rear of the AC panels. The back covers are made from flame retardant PVC.









| MODEL | Part No. | SIZE mm (") | CIRCUIT BREAKE | | | CERS - SINGLE POLE | | | NEG | VOLT | METER | LABEL SHEET |
|--------|----------|-----------------------------|----------------|----|----|--------------------|----|----|--------|--------|---------|---------------|
| MODEL | rait NO. | HxWxD | 5 | 10 | 15 | 20 | 25 | 30 | BUS | VOLI | WILTER | page 89 |
| NC32YA | 66413 Z | 380x351x65 (15x13.9x2.5) | 7 | 11 | 11 | 1 | 1 | 1 | 24 way | 12V DC | ANALOG | Set 1,2,3,4,6 |
| NC32YD | 63145 J | 380x351x65 (15x13.9x2.5) | 7 | 11 | 11 | 1 | 1 | 1 | 24 way | 12V DC | DIGITAL | Set 1,2,3,4,6 |
| NC36LA | 66412 X | 380x351x65 (15x13.9x2.5) | 8 | 12 | 12 | 2 | 1 | 1 | 24 way | 12V DC | ANALOG | Set 1,2,3,4,6 |
| NC36LD | 63144 G | 380x351x65 (15x13.9x2.5) | 8 | 12 | 12 | 2 | 1 | 1 | 24 way | 12V DC | DIGITAL | Set 1,2,3,4,6 |

The Contour panel design allows for flexibility in layout. Although the panels shown in this catalogue are BEP Marine standard range, there are a number of changes that can be made to fit the needs of custom and production boatbuilders.

For example, a panel can be made up with eight circuit breakers, four systems in operation lights plus a meter; or a panel can consist of a mixture of analog and digital meters if required.

If the panel involves a total custom layout, as described above, a specific part number will be applied to that panel and quoted accordingly.

If the design is unable to be achieved we will notify the customer.







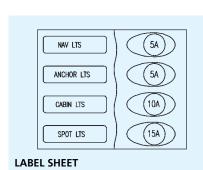
R158 - Front

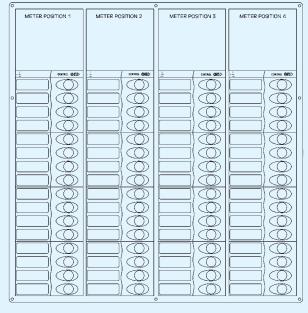
Alternatively a customer may request a standard panel with circuit breakers laid out to their requirements with labels factory fitted: this involves a personalised layout charge.

When ordering personalised panels, please specify the desired label sets.

When ordering BEP Marine standard range panels or smaller size models, it may be useful to refer to the following layout panel template where you can fill in model and number of meters requested, circuit breaker rating (double pole for 220V AC) and label set.

Layout template available directly from Uflex or from BEP Marine website.





LAYOUT CUSTOM PANELS

party land

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DC CIRCUIT BREAKER PANELS

New Zealand has a world wide recognized success both in pleasure and sport boats field as developer of innovative quality boats and electrical products for the marine market. The success of BEP Marine has been brought about through world class campaigns by New Zealand boats and crews in events such as the One Ton Cup, Admirals Cup Sydney to Hobart race, Volvo round the World Race and more recently the America's Cup.

BEP Marine Ltd is actively involved in the research and development of new products as circuit panels, circuit breakers panels and accessories that will be installed in the most important boats all around the world.

BEP Marine is today the most innovative manufacturer of electrical products for the sport and commercial boats. Its product are today available in Italy through UFLEX.

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FEATURES:

- Stylish Contour Design
- Red LED's for systems "ON"
- Green LED backlit labels
- All panels available in 12V or 24V configuration
- Cutout size: 10 mm (3/8") inside all external edges







904NM



902A



■ NOTE: All panels are supplied with label set 1 (see page 97)

| MODEL | PART No. | SIZE mm (") | CIRC | UIT BR | REAKE | RS - SI | NGLE | POLE | NEG | VOLT | METER | LABEL SHEET |
|-------|----------|------------------------------|------|--------|-------|---------|------|------|--------|--------|----------|-------------|
| WODEL | PART NO. | HxWxD | 5 | 10 | 15 | 20 | 25 | 30 | BUS | VOLI | IVILILIX | page 89 |
| 900 | 63125 C | 115x127x65 (4.5x5.0x2.5) | 1 | 2 | 1 | | | | 6 way | 12V DC | N/A | Set 1 |
| 900A | 64363 A | 200x127x65 (7.8x5.0x2.5) | 1 | 2 | 1 | | | | 6 way | 12V DC | ANALOGIC | Set 1 |
| 901V | 63126 E | 200x127x65 (7.9x5.0x2.5) | 2 | 2 | 3 | 1 | | | 6 way | 12V DC | N/A | Set 1 |
| 901DV | 64364 C | 295x127x65 (11.6x5.0x2.5) | 2 | 2 | 3 | 1 | | | 6 way | 12V DC | DIGITAL | Set 1 |
| 901H | 63127 G | 115x239x65 (4.5x9.4x2.5) | 2 | 2 | 3 | 1 | | | 6 way | 12V DC | N/A | Set 1 |
| 904NM | 63129 L | 200x239x65 (7.8x9.4x2.5) | 4 | 5 | 5 | 1 | 1 | | 12 way | 12V DC | N/A | Set 1 |
| 902A | 63128 J | 200x239x65 (7.8x9.4x2.5) | 3 | 4 | 4 | | 1 | | 6 way | 12V DC | ANALOGIC | Set 1 |
| 902D | 64365 E | 200x239x65 (7.8x9.4x2.5) | 3 | 4 | 4 | | 1 | | 6 way | 12V DC | DIGITAL | Set 1 |

DC CONTROL PANELS



900-AC1

FEATURES:

- All AC panels available in 110V or 230V options

 Double pole circuit breakers
- The panels are available with analog and digital meter. Models with digital meters show Volt, Amp and Frequency







900-AC2AH

■ **NOTE:** All panels are supplied with label set 5.

| MODEL | PART No. | SIZE mm (") | SIZE mm (") | | | SINGLE POLE | | | DOUBLE POLE | | NEG | VOLT | METER | LABEL | | |
|-----------|----------|-----------------------------|-------------|----|----|-------------|----|----|-------------|----|-----|------|-----------|-------|----------|-------|
| MODEL | PARI NO. | HxWxD | 5 | 10 | 15 | 20 | 25 | 30 | 20 | 25 | 30 | 50 | BUS | VOLI | IVIETER | SHEET |
| 900-AC1 | 63130 V | 115x239x65 (4.5x9.4x2.5) | | 2 | 2 | | | | 2 | | | | IS-6 mm-2 | 230 V | N/A | Set 5 |
| 900-ACM6W | 63131 X | 200x127x65 (7.8x5.0x2.5) | | 3 | 3 | 1 | | | 1 | | | | IS-6 mm-2 | 230 V | N/A | Set 5 |
| 900-AC2AH | 63132 Z | 200x239x65 (7.8x9.4x2.5) | 1 | 3 | 3 | 1 | | | 1 | | | | 2x6 way | 230 V | ANALOGIC | Set 5 |

CIRCUIT BREAKERS PANELS LABEL SETS

| ACCESSORIES | BAIT TANK PUMP | AFT DECK LIGHT | BILGE ALARM | AC MAINS | ACCESSORIES |
|-------------------|--------------------|---------------------------|-------------------|-------------------|-------------------|
| Set 1 | Set 2 | Set 3 | Set 4 | Set 5 | Set 6 |
| 63254 P | 63255 S | 63256 U | 63257 W | 63258 Y | 63259 A |
| | | | | | |
| Accessories | Bait Tank Pump | AFT Deck Light | 1,2,3,4,5 | AC Mains | Accessories |
| Auto Pilot | Bilge Pump Aft | Bilge Auto Man | 6,7,8,9,10, | AC Outlets | AC Mains |
| Bilge Pumps | Bilge Pump Forward | Bow Lights | Bilge Alarm | AC Outlets | Anchor Wash |
| Cabin Lights | Bilge Pump Mid | Docking Lights | Davit Winch | AC Outlets | Automatic |
| Cabin Lights | Bilge Pump Port | Emergency Parallel | Engine ALT | Air Conditioning | Autopilot |
| Cockpit Lights | Bilge Pump STBD | Engine Alarm | Fire System | Battery Changer | Auxiliary |
| Compass Lights | Blower | Engine Blowers | Fish Finder | Cook Top | Bilge Auto-Manual |
| DC Outlets | Boarding Light | Extraction Fan | Fishing Light | Dive Comp | Bilge Lights |
| Depth Sounder | Cabin Lights Aft | Floodlights | House ALT | Dryer | Book Furl |
| Freezer | Cabin Lights Mid | Fore Deck Light | Intercom | Frequency | Bridge Lights |
| Freshwater Pump | Cabin Lights Port | Holding Tank Pump | Load | Genset | Burglar Alarm |
| GPS | Cabin Lights STBD | House Batteries | Locker Light | Hotwater Cylinder | CB Radio |
| Instruments | Deck Wash Pump | Lazerette Light | Tank Room Lights | Ice Maker | Cell Phone |
| LPG Control | Electric Toilet | Port | Mid Wiper | Inverter | Computer |
| Mast Light | Engine room Lights | Radio Battery | MIzzen Spar Light | Refrigeration | DC Mains |
| Navigation Light | Fridge | Toilet LT | Plotter | Microwave | Fuel Transfer |
| Riding Light | Horn | Search Light | Port Wiper | Oven | Cabin Fan |
| Saltwater Pump | Nav Lts Port | Spare | Preheat | Reverse Polarity | Hatch Controls |
| Shower Drain Pump | Nav Lts STBD | Galley LT | Sole Light | Ships Power | Hydraulics |
| Spare | Panel Lights | Starboard | Heater Fan | Shore Power | Loud Hailer |
| Spreader Light | Radar | Start Batteries | Spare | Trash Compactor | Macerator |
| Spotlight | Saloon Lights | Step Light | Spare | TV | Manual |
| Stereo | SSB | Strobe Light | Starboard Wiper | Video | Night Lights |
| Trim Tabs | Start | Weather Fax | Start | Washing Machine | Pelmet Lights |
| VHF | Stern Lights | Window Washers | Stop | Wastemaster | Solar Panel |
| Winch | Stop | Windex Light | Sub Main | Water Maker | Galley Fan |
| Wiper | Sum Log | 12v Outlets | Sump Pump | 230v AC | Spare |
| | Tri Light | 24v Outlets | Towing Light | 110v AC | TV Antenna |
| | | | | | |

CIRCUIT BREAKERS

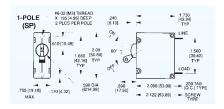
AIRPAX® IEG

B Series circuit breakers Carlingswitch magnetic circuit breakers are current sensing devices employing a time proven hydraulic magnetic design. These precision mechanisms are temperature stable and are not adversely affected by temperature changes in their operating environment. As such, derating consideration due to temperature variations are not normally required and heat induced nuisance tripping is avoided.

FEATURES:

- Trip free mechanism, a safety feature which makes it possible to manually hold the contacts closed during overcurrent or fault conditions
- Worldwide safety agency approval are available
- Common trip linkage between all poles.

 Another safety feature ensures that an overload in one pole will trip all adjacent poles.





| SINGLE POLE | PART No. | DOUBLE POLE | PART No. | TRIPLE POLE | PART No. |
|----------------|----------|----------------|----------|---------------|----------|
| CBS 2.5 A - SP | 63260 J | CBS 2.5 A - DP | 64385 L | CBS 30 A - TP | 63266 X |
| CBS 5 A - SP | 63261 L | CBS 5 A - DP | 63264 T | CBS 50 A - TP | 63267 Z |
| CBS 10 A - SP | 63262 N | CBS 10 A - DP | 63265 V | - | |
| CBS 15 A - SP | 63146 L | CBS 15 A - DP | 63151 D | - | |
| CBS 20 A - SP | 63147 N | CBS 20 A - DP | 63152 F | - | |
| CBS 25 A - SP | 63148 R | CBS 25 A - DP | 63153 H | - | |
| CBS 30 A - SP | 63149 T | CBS 30 A - DP | 63154 K | - | |
| CBS 40 A - SP | 63150 B | CBS 40 A - DP | 63155 M | - | |
| CBS 50 A - SP | 63263 R | CBS 50 A - DP | 63156 P | - | |

BUSSMANN HEAVY DUTY

Single pole thermal type breakers

FEATURES:

- Ratings: 50Amp to 150Amp; 30V DC; 3000Amp Interrupt Capacity
- Operating temperature: -32°C to 82°C
- Storage temperature: -32°C to 150°C
- Applications: Typically used in auxiliary and accessory circuits - trucks, buses, RV's and marine applications. Others might include battery charges and DC audio systems. Series 184 and 185 are sealed for engine compartment and bilge area applications.
- Mounting: Panel or surface
- Indicator: series 184 and 185 have a unique reset mechanism which provides visible indication of tripped condition.
- Approvals: complies with SAE J 1625





185 100F

MANUAL RESET:

| MODEL | PART No. | RATING | SURFACE | PANEL |
|---------------|----------|--------|---------|-------|
| 184 050P-01-1 | 65382 K | 50 | - | Х |
| 184 060P-01-1 | 65383 M | 60 | - | Х |
| 184 100F-01-1 | 63160 E | 100 | Х | - |
| 184 100P-01-1 | 63161 G | 100 | - | Х |
| 184 150F-01-1 | 63162 J | 150 | Х | - |
| 184 150P-01-1 | 63163 L | 150 | - | Х |

SWITCHABLE RESET:

| MODEL | PART No. | RATING | SURFACE | PANEL | | | | | |
|---------------|----------|--------|---------|-------|--|--|--|--|--|
| 185 050F-01-1 | 65384 P | 50 | Х | - | | | | | |
| 185 050P-01-1 | 63927 S | 50 | - | Χ | | | | | |
| 185 070P-01-1 | 65385 S | 70 | - | Χ | | | | | |
| 185 080F-01-1 | 65386 U | 80 | X | - | | | | | |
| 185 080P-01-1 | 63928 U | 80 | - | Х | | | | | |
| 185 100F-01-1 | 63164 N | 100 | X | - | | | | | |
| 185 100P-01-1 | 63166 T | 100 | - | X | | | | | |
| 185 135P-01-1 | 64386 N | 135 | - | Х | | | | | |
| 185 150F-01-1 | 63165 R | 150 | X | - | | | | | |
| 185 150P-01-1 | 63167 V | 150 | - | X | | | | | |

The MICRO range offers the unique ability to select the size and orientation of switch of panels by adding the compact modules together horizontally or vertically.

- Labels backlit with green LED changing to red when is on.
- Full range of text or graphical labels available
- Available in charcoal or white. When ordering white, add "W" on the end of the charcoal colour model.
- Dimensions HxWxD: 86x58x28 mm (3.38"x 2.28"x1.10") or: 58x86x28mm (2.28"x3.38"x1.10")



900-2WP - 63133 B 2x2 way switches

CECA WASH

DEPTH

NST.

907 (845)



900-2WPMOM - 63134 D 1x2 way switch 1x3 way momentary switch



900-2WPOFO - 63135 F 1x2 way switch 1x3 way double pole switch

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LABELS FOR MICRO MODULAR **SWITCH PANELS** Part No. 63136 H LBL-MIC1 DECK LOCCLTS AERATOR ANCHOR LIGHT AUTON: SUT TAM. FAP B.OWER CABIN COOKET LIGHTS OUTLETS.

Part No. 63137 K LBL-MIC2

NAV LTS

FLOOD LIGHTS

NAV LTS STBD

RADIO

版

EAZARETT LIGHT

JOSEY WATER PLANE

NUC LIGHTS

SEARCH WASHERS BTEANIA MD WPER PORT

BOARDING

COURTES LIGHTS

FINANC FLOOM LIGHTS

腦

ACCOUNT TO THE PROPERTY TO THE

SPRAY PROOF SWITCH PANELS - COMPACT SERIES

The next generation of BEP Marine's very popular Spray Proof panel range. Many new features have been incorporated into the series (eg. easy access to fuses from the front of the panel) as well as fresh new look. These new panels replace the part numbers 900-3WPS, 900-4WP, 900-5WPS, 900-6WP and having the same dimensions can easily be retrofitted.

Molded gasket incorporates fastening covers



Mini fuses accessible from front of panel with removable cartridge

Switches clip easily into rear of panel and can be removed to replace with different function switches eg. on/on, on/off/on, off/on and (on)off(on)





900-3WPS - Black 900-3WPSW - White

Custom designed toggle cover with unique sealing feature







CMP-6WP



CMP-5WPS

| | SPECIFICATIONS | | | | | | | |
|-----------------------|--------------------|------------------------------|-------------|---------------|--|--|--|--|
| MODEL | PART No. | SIZE mm (") H x W x D | LABEL SHEET | SWICTHES | | | | |
| CMP-4WP | 66517 M | 95x107x65 (3.75x4.25x2.5) | LBL-CMP | 4 | | | | |
| CMP-6WP | 66519 S | 95x107x65 (3.75x4.25x2.5) | LBL-CMP | 6 | | | | |
| 900-3WPS 900-3WPSW | 64401 F 64405 P | 95x107x65 (3.75x4.25x2.5) | LBL-CMP | 3 + DC Socket | | | | |
| CMP-5WPS | 66518 P | 95x107x65 (3.75x4.25x2.5) | LBL-CMP | 5 + DC Socket | | | | |

| ATM FUSES ARE SUPPLIED IN PACKS OF 2 | | | | | | |
|--------------------------------------|----------|--------|--|--|--|--|
| MODEL | PART No. | RATING | | | | |
| 603905 | 66520 A | 5 A | | | | |
| 603910 | 66521 C | 10 A | | | | |
| 603915 | 66522 E | 15 A | | | | |
| 603920 | 66523 G | 20 A | | | | |
| 603930 | 66524 J | 30 A | | | | |

| LABEL | SHEET |
|-------|-------|
| | |

LBL - CMP - 66537U

| Accessories | Horn |
|-----------------|-------------------|
| Aerator | Inst. Lights |
| Anchor Lights | |
| Autopilot | Instruments |
| Bait Tank Pump | Navigation Lights |
| Bilge Pump | Radar |
| Blower | Spare |
| Cabin Lights | Spotlights |
| Cockpit Lights | Stereo |
| DC Outlets | Stern Light |
| Deck Wash | Trim Tabs |
| Depth Sounder | VHF |
| Freshwater Pump | Log |
| Fridge | Wiper |
| GPS | |
| | |

SPRAY PROOF SWITCH PANELS

CSP6 Includes six switches unfused for installation where separate fused supply is available.

CSP6-F Includes six switches and 3 WAFH14 fuse holders with fuses behind panel. CSP6-PTC This panel utilises the latest technology in overload protection – Positive Temperature Coefficient (PTC). PTC fuses are solid state resettable fuses which will change to a high resistance device on over-current. To reset: Switch circuit off for 10 seconds. If fault remains the PTC will trip back to a resistive state. The panel is supplied with 6 x 9A PTC fuses mounted internally. No more changing fuses!

FEATURES:

- Switches protected by high quality neoprene rubber boots
- Green LED backlit labels
- Red LED's for system "ON"
- Waterproof to IP56 rating
- Removable cover plate over switches conceals screws and water drain
- Switch current ratings 20 Amp DC, 10 Amp AC
- Charcoal colour

Set - 1SP 63253 M

<Anc.Light Nav.Lts> Accessories Aerator **Anchor Lights** Autopilot Bait Tank Pump Bilge Pump Bilge Pump Auto/Man Blower Cabin Lights Cockpit Lights DC Outlets Deck Wash Depth Sounder Flood Lights Freshwater Pump Fridge Horn Inst. Lights Instruments **Navigation Lights** Trim Tabs Radio Saltwater Pump

Spot Lights Winch

Wiper

All CSP6 models are supplied with label back lit sheet set



CSP6

| MODEL | PART No. | SIZE mm (") H x W x D | SET LABEL SHEET | FUSES | PTC |
|----------|----------|-----------------------------|--------------------|-------|-----|
| CSP6 | 64375 H | 158x112x65 (6.2x4.4x2.5) | SET-1SP | NO | NO |
| CSP6-F | 64376 K | 158x112x75 (6.2x4.4x2.9) | SET-1SP | 3 | NO |
| CSP6-PTC | 63141 A | 158x112x75 (6.2x4.4x2.9) | SET-1SP | NO | 6 |

ACCESSORIES



12V RC

- 12 Volt receptacle with watertight sealing cap
- Locking system
- Easy to install with supplied locking ring
- Compatible with standard 12V plugs



12V PG - 66415 D

12V PG

- Standard plug 12V
- Moisture seal ring
- LED power indicator light
- Locking system
- Interchangeable fuse
- Internal strain relief and cord seal
- Compatible with standard 12V receptacles



SPARE PARTS FOR SPRAY PROOF PANELS

- WAFH-14 Waterproof fuse holder
- SW-M331 Splash proof cover

SPRAY PROOF PANELS

G2 SPRAY PROOF PANELS

The Generation 2 spray proof range offers unique styling utilising the latest techniques in injection moulding. The switch tray is moulded plastic with a rubber gasket and seal moulded into the plastic.

The cover is moulded in a clear plastic with a rubber over-mould allowing the flexibility to operate the switches through the front of the panel while providing a clear window for label backlighting. Panels available in black or white colour with charcoal or blue strips. When ordering white add "W" on the end of black colour model. G2 can be mounted vertically or horizontally and is available in 2, 4 and 6 way configurations. A joiner is available for multiple panel installations. Supplied complete with on/off switches.













| MODEL | PART No. | SWITCHES | FUSE | LABEL SHEET (page 103) |
|----------|----------|----------|------|---------------------------|
| CG2-2W | 64366 G | 2 | No | Set - G2 - 1 |
| CG2-2W-W | 64591 P | 2 | No | Set - G2 - 1 |
| CG2-2WF | 64367 J | 2 | 1 | Set - G2 - 1 |
| CG2-4W | 64368 L | 4 | No | Set - G2 - 1 |
| CG2-4W-W | 64542 A | 4 | No | Set - G2 - 1 |
| CG2-4WF | 64369 N | 4 | 2 | Set - G2 - 1 |
| CG2-6W | 64370 X | 6 | No | Set - G2 - 1 |
| CG2-6W-W | 64543 C | 6 | No | Set - G2 - 1 |
| CG2-6WF | 64371 Z | 6 | 3 | Set - G2 - 1 |

LABEL SET FOR G2 SPRAY PROOF PANELS

LABEL SET SET - G2 - 1 64373 D

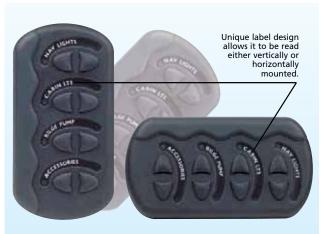
Accessories Aerator Anchor Lt Bait Tank Bilge Pump Auto B/P Man Blower Cabin Lights Cockpit Lts Dc Outlets Deck Wash Dn Winch Up Electronics **Engroom Lts** Flood Lights Fw Water Fridge Gps Horn Inst. Lights Instruments **Nav Lights** Radio Sw Water Spot Lights Up Port Dn Up Stbd Dn

Wiper

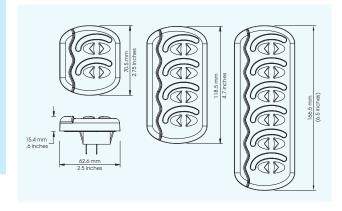
LABEL SET SET - G2 - 2 64374 F

B/Pump Port B/Pump Stbd B/Pump Fwd B/Pump Mid B/Pump Aft B/Pump Eng Rm Compass Lt Deck Lts Steaming Lt Nav Lts Pt Nav Lts Stbd Step Lts Stern Lt Wiper Pt Wiper Mid Wiper Stbd Washers Freezer H/Tank Pump Sump Pump Locker Lts Panel Lts Tri Lt Bow Lts Shower Lt **Shower Pump** Spare Spare

NOTE: Panels supplied standard with label set G2-1. Label set G2-2 can be ordered separately.



CG2-4W





| MODEL | PART No. | SPARE SWITCH FOR G2 PANELS |
|--------|----------|-------------------------------|
| SW-CG1 | 64372 B | ON/OFF |
| SW-CG2 | 64750 H | MOMENTARY ON/OFF |
| SW-CG3 | 64751 K | ON/OFF/ON |
| SW-CG4 | 64752 M | MOMENTARY ON/OFF/MOMENTARY ON |

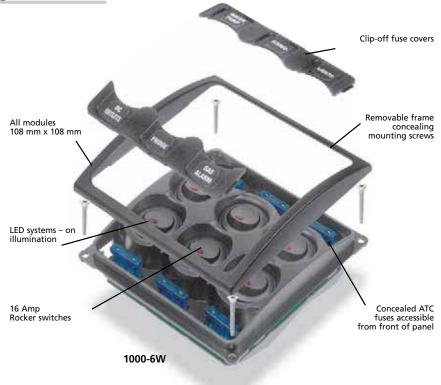
103



1000 SERIES
CONTROL PANELS

104

The Contour 1000
Series control panels
are offered as an
economical option
for interior use on
smaller sail boats or
cruises. The ATC fuses
are easily accessible
from the front of the
unit and the range is
fully modular
allowing it to be
mounted in a vertical
or horizontal
configuration.



FEATURES:

Panels are modular for vertical or horizontal stacking. Spacer supplied for accurate mounting spacing.



1000-6W - 64379 S Switch Panel

1000-VM-12 - 64380 A Analogic Meter Panel

1000-AM-50 - 64381 C Ammeter Panel

1000-DFR FRAME:

The 1000-DFR frame is designed to take any 600 – series digital meter (page 116-117-118). Frame and digital meter ordered separately.



1000-DFR - 64382 E

SPARE SWITCHES

SW-RVS1 - 65380 F ON/OFF spare switch



SW-RVS1

1000 SERIES CONTROL PANELS

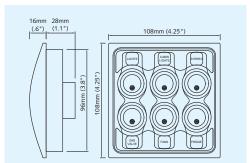
FEATURES:

- Supplied with ATC fuses accessible from front cover
- Square dimensions allow for modular mounting
- Supplied with label sheet part no. SET-1000
- Systems on LED on each switch
- Matching trim conceals mounting screws
- 4 way and 6 way options available
- An On/Off/Momentary switch is available for horn operation. Ordered separately Part No. SW-RVS3

| fin I | | |
|---------------|-------|--|
| | | |
| | | |
| SAS WIESTE | 11141 | |

1000-6W

| MODEL | PART No. | SWITCHES | FUSES | VOLT |
|-------------|----------|----------|-------|--------|
| 1000-6W-12V | 64379 S | 6 | 6 | 12V DC |

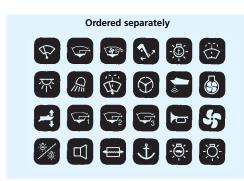


Mod. 1000-6W dimensions

LABEL SHEETS FOR 1000 SERIES CONTROL PANELS

Supplied with switch panel CABIN LIGHTS Bilge CABIN LIGHTS C/PIT Lights ACC HORN COMP LIGHTS DC OUTLET FRESH PUMP DEPTH FRIDGE GPS ANC LIGHT NAV Lights TRI LIGHT DECK LIGHT STMING LIGHT STEREO VHF

SET-1000 - 64383 G



SET-1002 - 64384 J





BATTERY DISTRIBUTION SWITCHES

BEP MARINE BATTERY SWITCH TEST PROCEDURES (UL 1107)

Continuous (1 hour) intermittent (5 minutes) and cranking (engine starting – 10 seconds). The test is to determine the maximum current the switch can handle for the stated time, without the rear terminals exceeding 100°C above the ambient temperature. The continuous and intermittent ratings are tested at 110% of specified ratings. All BEP switches are tested independently to this specification by a 3rd party laboratory.

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MOD. 701 BATTERY MASTER SWITCH - 63142 C

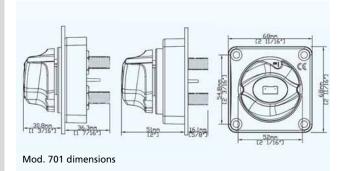
The 701 Contour Battery Master Switch offers a number of unique features. The highlights being the patented contour lock system, allowing it to be a stand alone unit, or locked together with other switches. The 701 also features a control knob which cannot be removed whilst in the On or OFF position, however can be removed by switching to an anti-clockwise 45° position. The control knob also features an interchangeable labelling system allowing a full range of applications Set-713 or Set-715 (page 110). The 701 also features removable side plates on 4 sides for access of up to 1/0 cables. Plus a rear cover insulating the rear terminals against any short circuits ensuring the switch meets ABYC requirements. The 701 can be either surface or recess mounted by cutting a 52 mm (2 1/16") hole.

FEATURES:

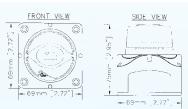
- Continuous rating: 275 Amp DC
- Intermittent rating: 455 Amp DC
- Cranking rating: 1250 Amp DC
- Voltage rating: 48V DC
- Operation: ON/OFF
- Mounting: recessed or surface
- Termination stud size: 2 x 10 mm (3/8")
- Dimensions: 69 x 69 x 75h mm (2.75 x 2.75 x 3h inches)
- Tin plated copper studs and nuts
- Ignition protected

701-PM PANEL MOUNT BATTERY SWITCHES - 65494 X

Same specifications as 701 switch







Mod. 701 dimensions



Removable key Standard 52,4 mm (2 1/16") hole cut out The 720 Heavy Duty Battery Switch fits into the same contour lock system as used on the battery distribution system. Rated at 600 Amp continuous and 2500 Amp cranking. It is well suited to larger vessels. As with the 701 and 720 can be recessed or surface mounted. The 720 uses the same style of self cleaning sliding contact as used in the 701. Also utilises the same label sheet as 701. Part Number 713 or 715 (page 110).

FEATURES:

- Continuous rating: 600 Amp DC
- Intermittent rating: 800 Amp DC■ Cranking rating: 2500 Amp DC
- Voltage rating: 48V DC
- Operation: ON/OFF
- Mounting: recessed or surface
- Termination stud size: 2 x 12 mm (1/2")
- Dimensions: 102 x 102 x 90h mm (4 x 4 x 3.5h inches)
- Tin plated copper studs and nuts
- Ignition protected

MOD. 720-DP DOUBLE POLE BATTERY SWITCH - 64388 T

This model has the same dimensions and features as the 720 battery switch. The 720-DP also meets the needs of vessels being built to survey requirements where positive and negative supplies must be isolated at the same time.

FEATURES:

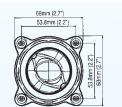
- Continuous rating: 400 Amp DC
- Intermittent rating: 525 Amp DC
- Cranking rating: 1500 Amp DC
- Voltage rating: 45V DC
- Operation: ON/OFF 2 poles
- Mounting: recessed or surface
- Termination stud size: 4 x 10 mm (3/8")
- Dimensions: 102 x 102 x 90h mm (4 x 4 x 3.5h inches)
- Tin plated copper studs and nuts
- Ignition protected

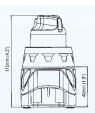
MOD. 700 EASYFIT BATTERY SWITCH - 63672 J

The 700 Easyfit is ideal on those installations where switches need to be recessed through varying thickness of panels. 700 Easyfit features an easily removable threaded ring allowing for panel thickness up to 19 mm (3/4"). It uses the same features as the 701 with the removable key 45° past the off position, labelled handle and a removable back cover covering exposed terminals to meet ABYC specifications. The switch can also be surface mounted offering a unique style compared to other switches available on the market. The 700 Easyfit can easily be retrofitted in place of most European post and lever type switches.

FEATURES:

- Continuous rating: 275 Amp DC
- Intermittent rating: 455 Amp DC
- Cranking rating: 1250 Amp DC
- Voltage rating: 48V DC
- Operation: ON/OFF
- Mounting: recessed or surface
- Termination stud size: 2 x 10 mm (3/8")
- Tin plated copper studs and nuts
- 700-KEY spare Part Removable knob
- Ignition protected





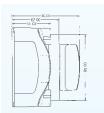


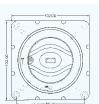






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Mod. 720, 720-DP dimensions







BATTERY DISTRIBUTION SWITCHES





BATTERY DISTRIBUTION SWITCHES

MOD. 701-S MINI BATTERY SELECTOR SWITCH - 64387 R

The 701-S is the most compact selector switch available on the market. Housed in the same dimensions as the 701 and includes the same removable side plates and back cover.

While BEP Marine foremost recommends isolated battery systems as outlined with our distribution clusters, the 721 offers a simple economical way of separating two batteries.

Please note this system will not separate electronics from harmful engine starting spikes.

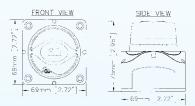
108 FEATURES:

- Continuous rating: 200 Amp DC
- Intermittent rating: 300 Amp DC
- Cranking rating: 1000 Amp DC
- Voltage rating: 48V DC
- Operation: Selector 1-2-both-off
- Mounting: recessed or surface
- Termination stud size: 3 x 8 mm (5/16")
- Dimensions: 69 x 69 x 75h mm (2.75 x 2.75 x 3h inches)
- Tin plated copper studs and nuts

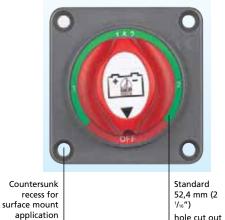
701S-PM PANEL MOUNT BATTERY SWITCHES - 66163 C

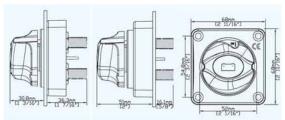
Same specifications as 701S switch





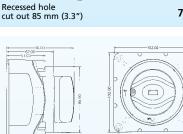
Mod. 701-S dimensions





Mod. 701S-PM dimensions





Mod. 721 dimensions

MOD. 721 BATTERY SELECTOR SWITCH - 63143 E

The 721 is our heavy duty selector switch, housed in the same module as the 720 and includes the same removable plates and back cover. While BEP Marine foremost recommends isolated battery systems as outlined with our distribution clusters, the 721 offers a simple economical way of separating two batteries. Please note this system will not separate electronics from harmful engine starting spikes.

hole cut out

FEATURES:

- Continuous rating: 350 Amp DC (between common and B1 or B2)
- Continuous rating: 500 Amp Dc (between common and B1 or B2)
- Intermittent rating: 500 Amp DC
- Cranking rating: 1500 Amp DC
- Voltage rating: 48V DC
- Operation: Selector Battery 1-2-both off
- Mounting: recessed or surface
- Termination stud size: 3 x 10 mm (3/8")
- Dimensions: 102 x 102 x 90h mm (4 x 4 x 3.5h inches)
- Tin plated copper studs and nuts
- Ignition protected

Due to the increased loading requirements on modern boats and large increases in the cost of copper battery cable, the MD range of battery switches allows you to mount the battery switch very close to the battery, reducing cable lengths to starter motor. They are also ideal for remote isolation of bow thrusters.

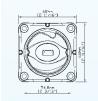
THE MD RANGE OFFERS THE FOLLOWING FEATURES

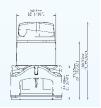
- Remote operation (easier access for battery control).
- Battery switch can be mounted alonside battery, reducing cable lengths and cable sizes to starter motor (large cost saving in copper cable).
- Reduced labour for fitting, due to shorter battery cabling.
- Manual override option to meet CE requirements.
- LED status identification for remote control switch.
- Same capacity/specification and mounting options as standard BEP battery switches.
- Utilize same interchangeable labelling system as BEP battery switches.





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Mod. 701-MD dimensions

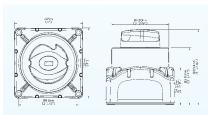
701-MD SPECIFICATIONS - 66026 S

- Continuous rating: 275 Amp DC
- Intermittent rating: 455 Amp DC
- Cranking rating: 1250 Amp DC
- Voltage rating: 9,5 32 Volt
- Operation: On / Off
- Mounting: recessed or surface
- Ignition protected
- Stud size: 2 x 10 mm (3/8")
- Tin plated copper studs and nuts

720-MD SPECIFICATIONS - 66027 U

- Continuous rating: 500 Amp DC
- Intermittent rating: 700 Amp DC
- Cranking rating: 2500 Amp DC
- Voltage rating: 9,5 32 Volt
- Operation: On / Off
- Mounting: recessed or surface
- Ignition protected
- Stud size: 2 x 12 mm (1/2")
- Tin plated copper studs and nuts





Mod. 720-MD dimensions

WIRELESS REMOTE CONTROL AND RECEIVER TO OPERATE BATTERY SWITCHES

You can now wire your Battery to the BEP receiver and operate the On/Off switch by remote control, from a distance of up to 50 metres away

- You can control up to 4 separate 5 Amp circuits, eg. 701/720-MD battery switches, anchor light, navigation lights and courtesy lights
- No more lifting hatches to turn on battery switches it is now all controlled from your remote keyfob
- Control battery switches easily (On/Off) from the dock or carpark
- The remote has a rolling code, for your security

80-911-0045-00 - 66951E - Wireless remote control





BATTERY DISTRIBUTION SWITCHES

MOD. 722 - 300 AMP ELECTRIC BATTERY SWITCH - $63175~\mathrm{U}$

The 722 fills a need on larger boats where cable runs are becoming very long and voltage drop is a prime concern. It has become necessary to offer a remotely operated battery switch. The 722 electric battery switch is placed as close as possible to the batteries, and a short run of cable from batteries to the starter motor. This can be remotely switched from either the dash or another convenient position, utilising a key switch part number 722-KS2 or any standard rocker or toggle switch. The 722 also has manual override capability.



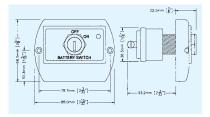
FEATURES:

- Continuous rating: 300 Amp DC
- Intermittent rating: 400 Amp DC
- Cranking rating: 1250 Amp DC
- Voltage rating: 12V DC 24V DC
- Operation: ON/OFF
- Mounting: surface
- Termination stud size: 2 x 10 mm (3/8")
- Dimensions: 102 x 102 x 107h mm (4"x 4"x 4.24"h)
- Tin plated copper studs and nuts
- Ignition protected



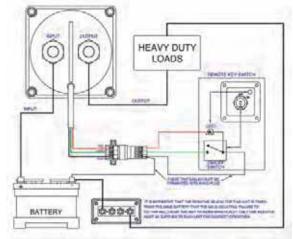






WIRING DIAGRAM

BATTERY DISTRIBUTION SWITCHES



Mod.720 - MD

LABEL SETS FOR BATTERY DISTRIBUTION SWITCHES

Set - 713 63681 K All 701 and 720

switches come standard with the battery symbol label. In installations where multiple switches are used, it will be necessary to label the switches for different application.

Following is our range of available labels.



Set - 715 64389 V

Set 715 contains the

three most commonly

requested labels out

of Set 713 without

the need to purchase

a full label set.











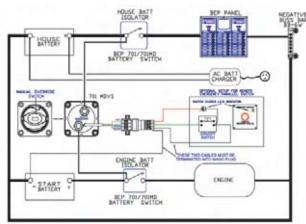






DISTRIBUTION SWITCHES

The VSS switch utilizes the same operation as the MD battery switches and is packed with features which complimet the MD range.





- Dual battery sensing
- Remote emergency parallel function 701-MDVS and 720-MDVS can be operated through a momentary button on the dash which will parallel the batteries for a present time of 10 minutes. Once this 10 minutes has passed, if the voltage is up high enough for the voltage sensitive switch to operate, it twill stay engaged. If not, it will discharge.
- Engine run sensing VSS will engage when the voltage on either start or house battery reaches 13,7 Volt. If the combined battery voltage drops below 13,0 Volt and the engine is not running, after 5 seconds the contacts will open and stay open until the start or house battery voltage exceeds 13,7 Volt. If the combined battery voltage drops below 12,2 Volt and the engine is running, after 5 minutes the contacts will open and stay open until the start or house battery voltage exceeds 13,7 Volt. If voltage drops below 13,0 Volt and stays above 12,2 Volt on either start or house battery while engine is running, the VSS will stay engaged.
- Manual override option
- The advantages of using a high current VSS is thet i twill cover your dual battery charging requirements and emergency parallel operation in one unit.









| MODEL | PART No. | VOLT | RATING | ENGAGES | DISENGAGES |
|--------------|----------|--------|--------|----------|----------------|
| 701-MDVS | 66416 F | 12V DC | 275A | 13.7V DC | 12.2-13.00V DC |
| 720-MDVS | 66417 H | 12V DC | 500A | 13.7V DC | 12.2-13.00V DC |
| 701-MDVS-24V | 66418 K | 24V DC | 275A | 27.4V DC | 24.4-26.00V DC |
| 720-MDVS-24V | 66419 M | 24V DC | 500A | 27.4V DC | 24.4-26.00V DC |



DUALBattery Charging

VOLTAGE SENSITIVE RELAYS

MOD. 710-125A VOLTAGE SENSITIVE RELAY

The VSR (Voltage Sensitive Relay) allows two or more batteries to be charged at the same time. The relay stays open when the engine is first started and remains open during charging until the battery has reached a preset voltage (13.7V). The relay then closes, allowing the two batteries to be charged together. When the engine is stopped, the voltage returns to normal levels, which allows the relay to open again, separating the 2 batteries, eliminating the possibility of discharging the wrong battery.

MOD. 710-125A-DS (DUAL SENSE) VOLTAGE SENSITIVE RELAY

Same as the 710-100A with the added feature of dual sensing. This allows the unit to sense the voltage of both batteries that it is connected between. If either battery is receiving a charge the VSR will activate paralleling the two battery banks.

The 710-100A-DS is designed for situations where a battery charger or second charging source is used into the house battery.

■ Ignition protected

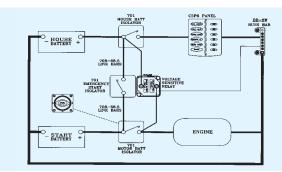
MOD. 710-300A VOLTAGE SENSITIVE RELAY (HEAVY DUTY)

The 710-300A offers the same features as the 100Amp model, with the additional feature that it can be used as a paralleling solenoid for emergency start. Paralleling function: The 710-300A can be operated through a button on the dash and will instigate a preset time of 10 minutes. Once this 10 minutes has passed, if the voltage is up high enough for the voltage sensitive relay to operate, it will stay engaged. If not it will disengage. There is also the ability to have the unit used only as a paralleling solenoid by disengaging the voltage sensitive function.

■ Ignition protected

ADVANTAGES OF FITTING VSR'S OVER CONVENTIONAL CHARGE (DIODE ISOLATORS):

- Easy 3 wire connection at the battery. No need to bypass existing alternator wiring.
- VSR's have no volt drop. Conventional diode isolators incur a minimum of 6 volt drop.
- Compact size no large heat sink.









| MODEL | PART No. | VOLT | APPLICATION | SIZE mm (") H x W x D |
|-----------------|----------|--------|---|--------------------------------|
| 710-125A | 64390 D | 12V DC | For use on charging systems up to 125 Amp | 69 x 69 x 50 (2.75 x 2.75 x 2) |
| 710-125A-DS-12V | 65351 Y | 12V DC | For use on charging systems up to 125 Amp | 69 x 69 x 50 (2.75 x 2.75 x 2) |
| 710-100A-24V | 65381H | 24V DC | For use on charging systems up to 100 Amp | 69 x 69 x 50 (2.75 x 2.75 x 2) |
| 710-300A-12V | 63176 W | 12V DC | For use on charging systems up to 300 Amp | 102 x 102 x 95 (4 x 4 x 3.75) |
| 710-300A-24V | 63177 Y | 24V DC | For use on charging systems up to 300 Amp | 102 x 102 x 95 (4 x 4 x 3.75) |





MOD. 716-SQ-100AVRS DUAL BATTERY CHARGING CLUSTERS

For use on charging systems under 100A. To be used on following systems:

- Single outboard dual battery bank
- Single alternator inboard engine dual battery bank

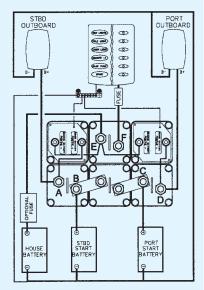
MOD. 715-S DUAL BATTERY CHARGING CLUSTERS

The 715-S is designed for systems with twin engines and 2 batteries. The house loads can be switched between port and starboard battery. The selector switch can also be used to parallel the batteries when in both position.

MOD.717-100A THREE BATTERY CHARGING CLUSTERS

This system is designed for twin outboard installations using outboards without AUX outputs. It will allow the port engine to charge the port start battery and the house battery when the VSR is engaged. It will also allow the starboard engine to charge the starboard start battery and the house battery when the starboard VSR is engaged, giving a combined charge from two outboards into the house battery until the voltage regulators on both engines control the charge. It will also allow the house battery to be charged if steaming on one engine.

| MODEL | PART No. | ORIENTATION | SIZE mm (") H x W x D |
|----------------|----------|-------------|--------------------------|
| 716-SQ-100AVRS | 64391 F | SQUARE | 138 x 138 (5.4 x 5.4) |
| 715-S | 65352 A | RECTANGULAR | 138 x 69 (5.4 x 2.75) |
| 717-100A | 65353 C | RECTANGULAR | 207 x 138 (8.1 x 5.4) |



717-100A

717-100A

BUS BARS

Marine grade negative or positive Bus Bars are supplied as standard with all BEP AC/DC control panels

FFATURES

- 4 mm (5/32") stainless steel screws with shakeproof washers
- 2x6 mm (1/4") input stud
- Tin plated brass
- Insulated mounting base

| MODEL | PART No. | OUTPUT SCREWS 4 mm (5/32") | INPUT STUDS 6 mm (1/4") | CURRENT RATING |
|-----------|----------|-------------------------------|----------------------------|-------------------|
| BB-6W-2S | 63690 L | 6 | 1 | 100A |
| BB-12W-2S | 63691 N | 12 | 1 | 100A |
| BB-24W-2S | 63692 R | 24 | 2 | 150A |

BB-6W-2S BB-12W-2S BB-24W-2S

INSULATED STUDS

FEATURES:

- Tinned copper 10 mm (3/8") or brass studs 6 mm (1/4") with spring washers
- High temperature plastic insulated mounting base

DIMENSIONS W x H x D mm ("):

■ IS-10MM-1: 44x35x18 mm (1.73x1.37x0.7)

■ IS-6MM-2: 42x32x36 mm

(1.65x1.25x1.42)



IS-10MM-1 64392H



63689C

BATTERY DISTRIBUTION COMPONENTS



BATTERY DISTRIBUTION COMPONENTS

MOD. 702 DISTRIBUTION STUD

The 702 Contour Distribution Stud allows terminating of heavy duty cables for 1 or more connections. Contour lock mouldings with removable side plates allow for connections from all sides, utilising link





702SB Secondary Bus Fitted to distribution stud 702 allows for small wire connections without cluttering main stud. Terminal screws 4 mm (1/8").



MOD. 702-HDBFH SINGLE FUSE HOLDER

BEP Marine's new heavy duty fuse holders are an economical way of fusing heavy loads 30-80 amp. Ideal for battery charger outputs or mains feeds. 6 mm (1/4") studs receive ring terminals and cables up to 25 mm² (4 gauge). Fuse is clamped between tinned brass clamp for positive connection. Covers enclose exposed terminals to meet ABYC standards.

| MODEL | PART No. | STUD SIZE | SIZE mm (") H x W x D |
|-----------|----------|--------------|--------------------------------|
| 702 | 63687 Y | 10 mm (3/8") | 69 x 69 x 50 (2,75 x 2.75 x 2) |
| 702-HDBFH | 65354 E | 6 mm (1/4") | 69 x 69 x 50 (2,75 x 2.75 x 2) |

SPECIFICATIONS:

- Fuses available 30-80 Amp
- Interrupt capacity: 1000 Amp DC
- Maximum voltage: 32 Volt DC

702-HDBFH **HEAVY DUTY FUSES** MODEL PART No. RATING PART No. RATING MODEL **BFHD-30A** 66132 R 30 Amp BFHD-60A 66135 X 60 Amp **BFHD-40A** 66133 T 40 Amp **BFHD-70A** 66136 Z 70 Amp

BFHD-80A 66137 B 80 Amp

BFHD-50A 66134 V 50 Amp

702

MOD. 704-ANL FUSE HOLDER HEAVY DUTY - 63235K

The 704-ANL allows fusing of heavy duty accessories between 80 Amp -500 Amp. Mounted in contour lock mouldings with removable sides. Meets ABYC standards for exposed terminals.





| MODEL | PART No. | ANL FUSE LINKS | SIZE mm (") H x W x D |
|--------|----------|----------------|--------------------------------|
| IP80A | 64394 M | 80 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP100A | 64395 P | 100 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP150A | 63806 D | 150 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP200A | 63807 F | 200 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP250A | 63808 H | 250 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP300A | 63809 K | 300 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP425A | 63810 U | 425 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |
| IP500A | 64407 U | 500 Amp | 138 x 69 x 50 (5.4 x 2.75 x 2) |

IGNITION PROTECTED

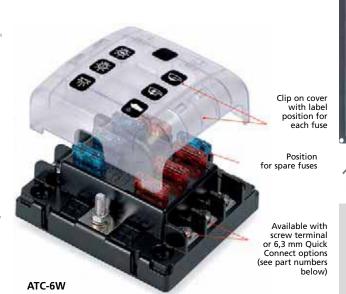


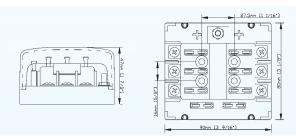
The BEP ATC fuse holder includes the patented contour lock system (as used in all BEP battery management products). This allows you to module as many fuse holders as you like together.

The advantage of this is that it allows you to link the inputs together, or split them apart to allow multiple power groups within one fuse holder: eg. switched supply or 24 hour supply. For the aftermarket the modular system allows you to carry one part number instead of 3 or 4. The 6W-ATC also includes a clip on cover and label positions. The lebel positions receive the same label as the 1000 series panels: refer page 105 (ordered separately).

SPECIFICATIONS

- Maximum amperage per circuit: 30 Amp
- Maximum amperage per block: 100 Amp
- Maximum voltage: 32V DC
- Base material: polycarbonate
- Cover material: clear polycarbonate





ATC-6W dimensions

Fuse holder link

| ATC FUSE HOLDERS | | | |
|------------------|----------|---|--|
| MODEL | PART No. | DESCRIPTION | |
| ATC-6W | 65569 C | 6 way fuseholder, screw terminals, with cover | |
| ATC-6WQC | 66017 R | 6 way fuseholder, quick connect, with cover | |



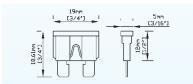
BB-LINK - 26 mm

ATC FUSES

| MODEL | PART No. | RATING |
|-------|-------------|---------|
| J03A | 66018 T | 3 Amp |
| J05A | 66019 V | 5 Amp |
| J7.5A | 66020 D | 7.5 Amp |
| J10A | 66021 F | 10 Amp |
| J15A | 66022 H | 15 Amp |
| J20A | 66023 K | 20 Amp |
| J25A | 66024 M | 25 Amp |
| J30A | 66025 P | 30 Amp |

SPECIFICATIONS

- Fuses available: 3-30 Amp
- Interrupt capacity: 1000 amp DC
- Maximum voltage: 32 Volt DC



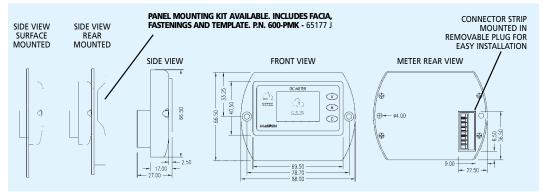
J05A dimensions



CONTOUR MATRIX DIGITAL MONITORING SYSTEMS

The 600 series Digital Monitoring System, designed and manufactured by BEP Marine, is made to meet the requirements of modern boating and recreational vehicles. Electrical installations on-board the modern boat now incorporate complex AC and DC systems along with extensive tankage for items such as fuel, fresh water, sewage and grey water. Accurate monitoring of such systems is essential, as a mal-function in any one of the above areas could cause major damage to expensive equipment and ultimately endanger the vessel or peoples lives. The dot matrix display incorporated in the 600 series allows for more detailed on-screen information and clarity of viewing. They have a backlighting display for easy night time viewing, audible alarm with mute function, power supply 10-35V DC. The Contour Matrix series is designed to be surface mounted or recessed into a panel utilising the 600-PMK Kit.

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600-DCM MONITOR - 63168X

The 600-DCM monitor offers a comprehensive range of functions to allow full monitoring of your batteries and charging system. For 2004 we have added a new function allowing for 24h monitoring of your bilge. This meter is an important addition to modern battery management systems.



Capacity remaining in Amp hours and percentage



VOLTAGE MONITOR:

- Voltage monitor for up to 3 battery banks
- 12 costum selectable legends eg: Start battery, House battery etc.
- Hi / Low voltage alarms on all 3 banks



AMP CHARGE & DISCHARGE:

- On house bank only
- Meter supplied with a 450-50 mV shunt



PERCENT REMAINING IN AMP HOURS:

- Software utilizes Peukerts exponent
- Suitable for use on battery banks from 60 to 3000 Amp hours
- Low Amp hour alarm



BILGE MONITOR

- The bilge monitor function monitors bilge pump functions 24 hours, 7 days a week. Stores bilge pump operations and accumulated time. Resettable when leaving boat.
- Function only available when third voltmeter position is not

LB-450-50 SHUNT - 64396 S

450A - 5 Shunt supplied with 600-DCM and 600-DCTLM

DIMENSIONS WxDxH mm ("):

■ 83 x 45 x 44 (3.26 x 1.77 x 1.73)



600-ACM - 63169 Z

The 600-ACM AC monitor includes one extra voltage input allowing monitoring of twin line inputs. Selectable legends allow labelling e.g. AC volt Line 1, AC volt Line 2. It has also an extra input for current enabling monitoring of Amp on twin line systems.





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AC VOLT FUNCTIONS:

- 3 inputs with selectable legends: AC volt Line 1, AC volt Line 2, AC volt L1 + L2,
- High / low volt alarm



AMP FUNCTIONS:

- 2 AC Amp inputs Selectable legends:
 AC Amp, AC Amp Line 1 & AC Amp Line 2
- High Amp alarm



FREQUENCY FUNCTIONS:

- 0 100 Hz
- Frequency alarm selectable for 50 or 60 Hz



AC-VSEN - 64397U

The AC-VSEN includes 2 voltage transformers for 2 voltage inputs. Supplied with 600-ACM.

CT-10-3 - 64398W

One Ct-10-3 current transformer is supplied with 600-ACM. If a twin line system is in use a second CT must be ordered.



CT-10-3

600-VM3 - 66567 D

- Voltage monitoring on up to 3 battery banks
- Custom selectable legends e.g. Start batt, House batt
- High / low voltage alarms
- Input 10 35V DC





MONITORING SYSTEMS

600-DCTLM - 65671 T

The 600- DCTLM is designed for installations where space is not available to fit two meters. Offering most of the same functions and settings as the 600-DCM and 600-TLM. Selectable legends offer full information to be shown on the screen to allow full monitoring of batteries and tank levels.



V/A button pressed repeatedly will allow 3 voltage inputs and amps charge and discharge



SPECIFICATIONS:

- Input voltage 10- 35V DC
- Supplied with LB-450-50 mv shunt (page 116)
- Compatible with TSI Ultrasonic tank sender (page 119)
- Dimensions: refer page 116



C button pressed repeatedly will allow amp hour capacity and percentage of charge



 ${f T}$ button pressed repeatedly will show tank 1, 2, 3, 4 and multitank screen (600-DCTLM will monitor up to 4 tanks)

600-TLM-SIF - 63172 M

The 600-TLM-SIF tank sender interface module must be used when using standard European (10 - 180 Ohm) or American (240 - 33 Ohm) senders to produce a 0 - 5 Volt signal to operate 600-TLM. 10 – 32V supply.

One unit per sender required.

600-TLM-SIF **Dimensions:** 60 x 34 x 22h mm (2.4" x 1.3" x 0.9"h)

ANALOG STAND-ALONE METERS

| ANALOG VOLTMETERS | | | | |
|-------------------|----------|--------|---------------|--|
| MODEL | PART No. | VOLT | SCALE | |
| N816DCV | 63682 M | 12V DC | 8-16 Volt DC | |
| N1632DCV | 63683 P | 24V DC | 16-32 Volt DC | |

| 29.10mm 13.80mm [1 1/8"] [9/16"] | 71.00mm [2 13/6"] |
|----------------------------------|--|
| | SO YOUNG STREET OF SO YOUNG STRE |

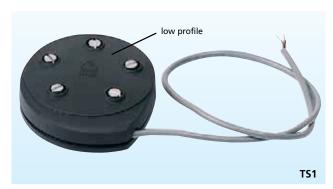
| ANALOG AMMETERS | | | | | |
|-----------------|----------|--------------|-----------------------|----------------|--|
| MODEL | PART No. | SCALE | CURRENT TRASFORMER | SHUNT MODEL | |
| N050A | 64399 A | 0-50 Amp DC | N/A | 50A-50MV | |
| N100A | 64400 D | 0-100 Amp DC | N/A | 100A-50MV | |
| N150A | 64183 Y | 0-150 Amp DC | N/A | 150A-50MV | |



| AMMETER SHUNT | | | | | |
|---------------|----------|---------|--|--|--|
| MODEL | PART No. | SCALE | | | |
| 50A - 50MV | 64515 X | 0-50 A | | | |
| 100A - 50MV | 64178 F | 0-100 A | | | |
| 150A - 50MV | 64516 Z | 0-150 | | | |

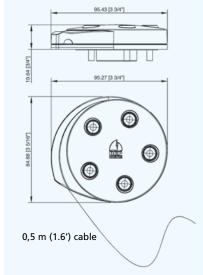


The new TS1 Ultrasonic Tank Sender can be used on fuel (petrol or diesel), fresh water, grey or black water tanks. One part number suits all tanks!



SPECIFICATIONS:

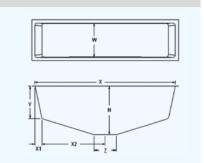
- The TS1 is programmable for the following outputs: 240-33 Ohm, 10-180 Ohm and 0-5 Volt
- The TS1 offers low profile and standard SAE 5 hole mounting pattern, allowing it to be retrofitted to practically all other sender brands
- The TS1 can be programmed for tank dimensions via a computer utilizing BEP Marine's proprietary TSI software avoiding experimental tank filling on site
- The TS1 configured to a 0-5V output will connect straight into the BEP 600-TLMN and 600-DCTLM digital tank monitors
- When configured to a 240-33 Ohm or 10-180 Ohm output the TS1 can be connected to Uflex®, Wema®, Faria®, VDO®, Teleflex® and many other popular instrument brands. When connecting to non-adjustable gauges the TS1 must be pre-calibrated
- Standard off the shelf TSI sender is set for 0-2000 mm (6.5')



| | SPECIFICATIONS | | | | |
|---------------------|---|--|--|--|--|
| Current draw | 10-32VDC | | | | |
| Current draw | 25mA with 5 volt gauge output | | | | |
| Measurement method | Acoustic sonic measurement | | | | |
| Tank depth | 0 to 2000mm (6.5 ft) | | | | |
| Accuracy | distance 0-2000mm (6.5') at 2 mm accuracy | | | | |
| Mounting | SAE 5 stud mounting pattern with gasket, seal and screws. Top mount only | | | | |
| Environmental | temperature 4 to 65 degrees C | | | | |
| Chemical resistance | Petrol, diesel, water, toilet chemicals | | | | |
| Tabk type style | Metal and plastic with non linear capacity, grey and black water, petrol and diesel | | | | |

BEP Marines proprietary software allows distributors or volume users to pre-programme tank dimensions giving accurate measurement avoiding experimental tank filling.

Non linear Tank Parameter Calculation







SOUND SYSTEMS AND SPEAKERS

SEA 2500S - AM/FM CD RECEIVER

- Pull-out removable chassis
- Manual tuning, high power 40 Watt per
- channel
 Station presets with Tuner Plus™
- LCD readout illuminated
 Separate bass & treble with audio mute
- APS (Automatic Preset Scan)
- Clock
- Preset 18-FM 6-AM
- Approved CE **SEA 2500S** 66155 D



SEA 2500S

RADIO COVERS

RTR/2000 B BLACK - RTR/2000 W WHITE

Super deluxe auto opening faceplate cover with dark tinted, curved retracting shield for shafted models. RTR/5200 B - 60345 O RTR/5200 W - 60324 J

RTR/600 B BLACK

■ Radio cover with manual opening system, available in black only.

RTR/600 B - 63105 W

ANTENNAS

URB/3S B BLACK - URB/3S W WHITE

AM/FM, 40.6 cm (16") fully flexible rubber antenna with 180 degree adjustable base, 137 cm (54") cable, 35 mm (1 3/8") base, available in black and white.

URB/3S B -60326 L

URB/3S W - 63106 Y

Soft wire antenna with plug, included as standard.
SEA/ANT - 60325 K

RTR/5200 W RTR/5200 B RTR/600 B



SEA/5582 W - WHITE SPEAKERS

- 12,7 cm (5") flush mount coaxial speakers 5 oz ferrite magnet coaxial with 1 1/2" tweeter

- High efficiency design

 How hat per channel
 Frequency response 70-16,000 hz

 Mounting Dimensions: Flush Mounting:
 114,3 mm (4 1/4") diameter hole.
- Outer dimensions: Depth 48 mm (1 7/8"), 153 mm (6") outside diameter. SEA/5582 W 65714 J

SEA/5632 W - WHITE SPEAKERS

- 6 1/4" flush mount waterproof dual cone speakers

- speakers
 6 oz ferrite magnet
 High efficiency design
 40 Watt per channel
 Frequency response 60-16,000 hz
 Mounting dimensions: Flash mounting:
 133 mm (5 1/4") diameter hole.
 Outer dimensions: Depth 61 mm (2 3/8"),
 outside diameter 168,4 mm (6 5/8")
 SEA/5632 W 60352 N





SHORE POWER FEATURES

EASY LOCK™ SYSTEM

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Marinco's exclusive Easy Lock System has been designed to make hook-up quick and easy. Just connect the cordset (with an Easy Lock locking ring installed) to the inlet and turn the locking ring less than a quarter turn.

The tabs on the locking ring lock into the inlet for a positive watertight hook-up while eliminating any chance of cross threading. The locking ring features lock locators positioned at 180° to improve finger grip during attachment.

Easy Lock inlets have a threaded boss that will accept threaded cordsets as well.

SOFT TOUCH™ CAP DESIGN

MARINCO inlets feature the Soft Touch cap design. The Soft Touch hinge is designed with a special cam feature that allows it to stay "locked" open in the upright position during hook-up. A "soft touvh" unloks it for closing.

PowerCord PLUS® CORDSET

The PowerCord PLUS® has features you will not find on other cordsets

Power Indicator light

LED Power indicator light – lets you know if you have power

Comfort Grip with Thumbprint Locator

Moulded to fit the contour of your hand. Thumbprint Locator lines up the locking blades for quick and easy connections.

- LED Power Indicator Light
- Contour Grip Ends
- Thumbprint Locator
- Super Flexible 10/3 Cable
- Easy Lock™ System
- High Quality Marine Grade Construction
- Watertight Molded Plug & Connectors
- Includes threaded ring and Easy Lock ring
- All PowerCord PLUS cords assembled complete with Watertight Connector Cap to ensure CE compliance
- CE marked













16 AMP/220V & 32 AMP/220V 50 HZ - POWER INLETS



- 316 Stainless Steel
- Easy Lock System
- Soft Touch cap design
- Rear safety enclosure with strain relief

303SSEL-BX - 66753A - 16A 6371EL-BX - 66766K - 32A



- Glass-filled polyester
- Easy Lock System
- Watertight
- Rear safety enclosure with strain relief

301EL-BX - 66754C -16A 6351EL-BX - 66767M - 32A



- Glass-filled polyester
- Easy Lock System
- Watertight
- Rear safety enclosure w/ strain relief

304EL-BX - 66755E - 16A 6343EL-BX - 66768P - 32A



- Glass-filled polyester
- Chrome plated cover
- Easy Lock System
- Watertight
- Rear safety enclosure

304EL-BXCR - 66756G - **16A 6343EL-BXCR** - 66769S - **32A**

16 AMP/220V & 32 AMP/220V - FEMALE CONNECTORS



- Female ConnectorCorrosion resistant contacts and terminals
- 305CRCXN 66757J 16A 6360CRNX - 66770A - 32A



- Weatherproof Cover with threaded ring
- Use with female connectors 103RNX 66758L for 16A 7715CRNX 66771C for 32A



- Watertight Connector Sealing Cap
- Use with cover and connector to ensure CE compliance

199109 - 66759N - for 16A 199110 - 66772E - for 32A

16 AMP/220V 50 HZ - SHORE POWER CORDSETS



- PowerCord[™] Cordset
- 3,3 mm² (12/3)
- With Female connector
- Blunt cut male end

50PCMX - 66760X - 15,24 m (50 ft) **25PCMX** - 66761Z - 7,62 m (25 ft)



- PowerCord ™ PLUS Cordset
- 3,3 mm² (12/3)
- With moulded connector with LED power indicator light
- Blunt cut male end **50SPPX** 66762B 15,24 m (50 ft)



- PowerCord TM PLUS Cordset
- 2,5 mm² (10/3)
- With moulded connector with LED power indicator light and IEC 60309 male plug (IP44)
- Watertight connector sealing cap for CE compliance

20MSPPXP - 66763D - 20 m (65.6 ft) 15MSPPXP - 66764F - 15 m (49.2 ft) 10MSPPXP - 66765h - 10 m (32.8 ft)

32 AMP/220V 50 HZ - SHORE POWER CORDSET



- PowerCord TM PLUS Cordset
- 2,5 mm² (10/3)
- With moulded connector with LED power indicator light and IEC 60309 male plug (IP44)
- Watertight connector sealing cap for CE compliance

15M32AXP – 66773G - 15 m (49.2 ft)

CABLE CLIP



- Includes 6 Cable Clips with stainless steel mounting screws
- Keeps shore power cable out of the water
- Holds 10 gauge 30A cable
- Easy to install
- Use on deck or edge of dock
- Organize shore power cable CLIP 66825 Z

SHORE POWER SYSTEMS

50 AMP 125V/250V; 3 POLE, 4-WIRE SHORE POWER PRODUCTS

50 AMP 125V/250V; 3 POLE, 4-WIRE - POWER INLETS



- Solid cast 316 stainless steel
- Easy Lock System
- Soft Touch cap stays open in the upright position
- Rear safety enclosure with strain relief
- Locking waterproof cap 6373EL-B - 66774J - 50A

■ Same as 6373EL-B power inlet, without rear safaty enclosure

6373EL - 66776N - 50A



- Glass-filled polyester
- Easy Lock System
- Watertight cap
- Rear safety enclosure w/strain relief
- Marine stainless steel trim

6353EL-B - 66775L - 50A



- Glass-filled polyester
- Easy Lock System
- Soft Touch cap stays open in the upright position
- Chrome finish cover
- Rear safety enclosure
- Stainless steel trim

6344EL-BCR - 66777R - 50A

50 AMP 125V/250V; 3 POLE, 4-WIRE - MALE PLUG AND FEMALE CONNECTOR



- Male Plug ribbed, thick wall nylon housing for secure gripping
- Use with weatherproof 7717N cover for superior

6365CRN - 66778T -50A



■ Weatherproof cover for male plug 6365CRN **7717N** – 66822T



- Female connector ribbed, nylon housing for secure gripping
- Use with weatherproof 7715CRN cover for superior

6364CRN - 66779V - 50A



Weatherproof cover for female connector 6364CRN **7715CRN** - 66780D

50 AMP 125/250V; 3 POLE, 4-WIRE

SHORE POWER CORDSET



- PowerCord ™ PLUS Cordset
- LED power indicator light lets you know if you have power
- Watertightmolded plug and connector for safety and durability
- Contoured grip ends with Thumbprint Locator for fast and esasy connection
- Includes Easy Lock Ring and astandard threaded ring for hook-up to ordinary threaded inlets

6152SPP - 66783K - 15,24 m (50 ft) 6152SPP-25 - 66784M- 7,62 m (25 ft)

"Y" ADAPTER



■ Locking with Sealing Collar System 510R

165AY - 66781F - 50A

SEALING COLLAR WITH THREADED

RING



■ Provides maximum moisture protection between cordset and adapter. 510R - 66782H



- 316 stainless steel
- Easy Lock System
- Soft Touch cap design
- Rear safety enclosure with strain relief

6401EL-BX - 66785M - 63A Single Phase, 3-wire 6402EL-BX - 66788W - 63A Three Phase, 4-wire



- Female Connector
- Corrosion resistant contacts and terminals
- Best when used with weatherproof cover 7715CRNX 6401CRCX - 66786S - 63A Single Phase, 3-wire

6402CRCX - 66789Y - 63A Three Phase, 4-wire



- Male Plug
- Corrosion resistant materials
- Best when used with weatherproof cover 7715CRNX

6401CRPX - 66787U - 63A Single Phase, 3-wire 6402CRPX - 66790G - 63A Three Phase, 4-wire



■ Weatherproof cover for 63 Amp male plugs and female connectors both single and three phase

7715CRNX – 66791J



100 AMP 125V/250V; 3 POLE, 4-WIRE CONNECTOR AND SHORE POWER INLET



- Yellow AMAPLAST watertight connector
- Body has gasketed locking ring to mate with the M4100B12R inlet

M4100C12R - 66792L - 100A



- Gray AMAPLAST shore power inlet
- Gasketed spring loaded cover provides an IP67 watertight rating when tightened M4100B12R - 66793N - 100A

100 AMP/380V; 4 POLE, 5-WIRE CONNECTOR AND SHORE POWER INLET



- Yellow AMAPLAST watertight connector
- Body has gasketed locking ring to mate with the M5100B9R inlet

M5100C9R - 66794R- 100A



- Gray AMAPLAST shore power inlet
- Gasketed spring loaded cover provides an IP67 watertight rating when tightened

M5100B9R - 667935T - 100A

30 AMP/125V SHORE POWER PRODUCTS



- Male Plug ribbed for secure gripping
- Compact design 305CRPN - 66817A - 30A



■ Weatherproof cover for male plug 305CRPN 102N - 66818C



- Female Connector ribbed for secure gripping
- Compact design

305CRCN - 66819E - 30A



■ Weatherproof cover with threaded ring for female connector 305CRCN 103RN - 66820N

50 AMP/125V; 2 POLE, 3-WIRE SHORE POWER PRODUCTS



- Male Plug ribbed, thick wall nylon housing for secure gripping
- Use with weatherproof 7717N cover for superior seal



6361CRN - 66821R - 50A ■ Weatherproof cover for male plug 6361CRN **7717N** – 66822T



- Female connector ribbed, nylon housing for secure gripping
- Use with weatherproof 7715CRN cover for superior



6360CRN - 68823V - 50A Weatherproof cover for female connector 6360CRN 7715CRN - 66780D



PHONE AND CABLE TV INLETS



- 316 stainless steel inlet
- Locking waterproof cap
- Soft Touch cap design
- Watertight rear boot (PH/TV inlet only)

PH6592TV-SS - 66796V Phone and Cable TV Inlet TV6592 - 66796V Cable TV Inlet



- Contoured glass-filled polyester inlet
- Watertight cap
- Soft Touch cap design
- Stainless steel trim on cap

PH6444TV – 66800G Phone and Cable TV Inlet TV6444 - 66801J Cable TV Inlet



- Standard glass-filled polyester inlet
- Watertight cap
- Stainless steel trim on cap **PH6574TV** 66798Z

Phone and Cable TV Inlet TV6574 - 66799B Cable TV Inlet



■ Female Phone Connector With cover PH6629 – 66848M

PHONE AND CABLE TV CORDSETS



Telephone Cordset

 3 conductor vinyl cord provides portable connection for RVs and pleasure boats

PH6599 – 66802L - 15,24 m (50 ft) PH6599-25 – 66803N - 7,62 m (25 ft) PH6599-12 – 66945 K - 3,65 m (12 ft)



TV Cable Cordset

 Standard 75 Ohm, with quick, slip-on connections and heavy duty boots included on both ends

TV99 - 66804R - 15,24 m (50 ft) TV99-25 - 66805T - 7,62 m (25 ft) TV99-12 -66806V - 3,65 m (12 ft)

SeaLink® 12 VOLT RECEPTACLE AND PLUG



12V DC Receptacle

- Watertight sealing cap
- Easy to install with supplied mounting plate for front panel installation, or locking ring for rear access installation
- Compatible with standard 12V plugs

12VRC – 66414B



12V DC Sealed Receptacle

- Ideal for vertical installations in wet environments
- Sealed seams at electrical connections
- 4mm hole directs water away from electrical connections
- Mounting plate not included

12VRCY.OEM - 66156F



Mounting Plate

For Sealed Receptacle 12VRCY.OEM 12MP.OEM – 66809B



12V DC Plug

- Moisture proof sealing ring
- LED power indicator light
- Interchangeable 10A fuse
- Internal strain relief and cord seal
- Compatible with standard 12V receptacles
- **12VPG** 66415D

SeaLink® ACCESSORIES



12V DC Extension Cord

- Heavy duty 18 gauge wire, extends to over 1,8 m (6 ft)
- Watertight cap
- Plug features a LED indicator light, moisture proof sealing ring, strain relief and built-in 10A fuse
- Works with any standard 12V plug and receptacle 12VXT 66810K



12V DC Dual Outlet Cord

- Heavy duty 18 gauge wire, extends to over 0,3 m (1 ft)
- Watertight cap
- Plug features a LED indicator light, moisture proof sealing ring, strain relief and built-in 10A fuse
- Works with any standard 12V plug and receptacle

12VAD - 66811M















BATTERY CHARGERS

BLUE POWER BATTERY CHARGER IP20

Universal input: 90-265 VAC or 90-350 VDC The charger will operate on whatever supply is available

Standard features

Adaptive 4-stage charge characteristic: bulk- absorption-float-storage. The Blue Power charger features a microprocessor controlled 'adaptive' battery management. The 'adaptive' feature will automatically optimise the charging process relative to the way the battery is been used.



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| MOD. | PART No. | INPUT VOLTAG RANGE | CHARGE VOLTAGE ABSORPTION | CHARGE CURRENT | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|------------|----------|---|---------------------------|-------------------|--------------------------------|--------------------|
| 12/7 IP20 | 65626 M | 90-265V AC / 45-65 Hz 90-350V DC / 45-65Hz | 14,4V DC | 7A | 50x85x200 (0.2x3.3x7.8) | 1.3 (2.8) |
| 12/10 IP20 | 65627 P | 90-265V AC / 45-65 Hz 90-350V DC / 45-65Hz | 14,4V DC | 10A | 50x85x200 (0.2x3.3x7.8) | 1.3 (2.8) |
| 12/15 IP20 | 65571 N | 90-265V AC / 45-65 Hz 90-350V DC / 45-65Hz | 14,4V DC | 15A | 50x85x200 (0.2x3.3x7.8) | 1.3 (2.8) |
| 24/5 IP20 | 65628 S | 90-265V AC / 45-65 Hz 90-350V DC / 45-65Hz | 28,8V DC | 5A | 50x85x200 (0.2x3.3x7.8) | 1.3 (2.8) |
| 24/8 IP20 | 65577 B | 90-265V AC / 45-65 Hz | 28,8V DC | 8A | 50x85x200 (0.2x3.3x7.8) | 1.3 |

BLUE POWER BATTERY CHARGERS - WATERPROOF

Blue Power battery chargers have automatic three stage IUoUo charging. The casing is made of cast aluminium and they are waterproof (protection IP 65), schockproof and ignition protected.

Standard features

Protection against battery reverse polarity, output short circuit and over temperature; operating temperature range -20 to +60°C; red and black battery connection cables of 1.5 m of length; connection cable of 1,5 m with Europe class 1 plug, two LED's for status indication.



BLUE POWER IP 67



| MOD. | PART No. | INPUT VOLTAGE RANGE | CHARGE VOLTAGE ABSORPTION | CHARGE CURRENT | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|------------|----------|------------------------|---------------------------|-------------------|--------------------------------|--------------------|
| 12/7 IP67 | 66009 S | 200-265V AC / 45-65Hz | 14,4V DC | 7A | 43x80x155 (1.7x3.1x6.1) | 1.1 (2.4) |
| 12/17 IP67 | 66405 A | 200-265V AC / 45-65Hz | 14,4V DC | 17A | 47x99x193 (1.9x3.9x7.6) | 1.4 (3.1) |
| 24/3 IP67 | 66406 C | 200-265V AC / 45-65Hz | 28,8V DC | 3A | 43x80x155 (1.7x3.1x6.1) | 1.4 (2.4) |
| 24/12 IP67 | 66035 T | 200-265V AC / 45-65Hz | 28,8V DC | 12A | 47x99x193 (1.9x3.9x7.6) | 1.4 (3.1) |

BATTERY CHARGERS

CENTAUR BATTERY CHARGERS - ANALOGIC CONTROL

Centaur battery chargers have automatic three stage IUoUo charging. All models are designed to operate all over the world without any adjustment needed on input voltage range or frequency.

They have three isolated outputs to simultaneously charge 3 battery banks. Each output is capable to supply the full rated current.

Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, built-in temperature sensors, forced cooling, protection against output short circuit and over temperature, analog ammeter, DIP switch for selection of charge/float voltage for flooded lead-acid, gel or AGM batteries, Europe CE certification and U.S.A. UL certification, feeder function.

Temperature range: -20 + 60° C



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| MOD. | PART No. | INPUT VOLTAGE RANGE | CHARGE VOLTAGE ABSORPTION | CHARGE CURRENT ⁽¹⁾ | Ah BATTERIES | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|--------|----------|------------------------|------------------------------|----------------------------------|-----------------|--------------------------------|--------------------|
| 12/20 | 64886 K | 90-265V AC / 45-65 Hz | 14.3V DC | 20 A | 80 /200 | 355x215x110 (14.0x8.5x4.3) | 3.8 (8.4) |
| 12/30 | 64887 M | 90-265V AC / 45-65 Hz | 14.3V DC | 30 A | 120/300 | 355x215x110 (14.0x8.5x4.3) | 3.8 (8.4) |
| 12/40 | 64888 P | 90-265V AC / 45-65 Hz | 14.3V DC | 40 A | 160/400 | 426x239x135 (16.8x9.4x5.3) | 5 (11) |
| 12/50 | 64889 S | 90-265V AC / 45-65 Hz | 14.3V DC | 50 A | 200/500 | 426x239x135 (16.8x9.4x5.3x) | 5 (11) |
| 12/60 | 64890 A | 90-265V AC / 45-65 Hz | 14.3V DC | 60 A | 240/600 | 426x239x135 (16.8x9.4x5.3) | 5 (11) |
| 12/80 | 64891 C | 90-265V AC / 45-65 Hz | 14.3V DC | 80 A | 320/800 | 505x255x130 (19.9x10.0x5.2) | 12 (26.4) |
| 12/100 | 64892 E | 90-265V AC / 45-65 Hz | 14.3V DC | 100 A | 400/1000 | 505x255x130 (19.9x10.0x5.2) | 12 (26.4) |
| 12/200 | 64893 G | 90-265V AC / 45-65 Hz | 14.3V DC | 200 A | 800/2000 | 505x255x230 (19.9x10.0x9.1) | 16 (35.3) |
| 24/16 | 64894 J | 90-265V AC / 45-65 Hz | 28.5V DC | 16 A | 45/150 | 355x215x110 (14.0x8.5x4.3) | 3.8 (8.4) |
| 24/30 | 64895 L | 90-265V AC / 45-65 Hz | 28.5V DC | 30 A | 120/300 | 426x239x135 (16.8x9.4x5.3) | 5 (11) |
| 24/40 | 64896 N | 90-265V AC / 45-65 Hz | 28.5V DC | 40 A | 160/400 | 505x255x130 (19.9x10.0x5.2) | 12 (26.4) |
| 24/60 | 64897 R | 90-265V AC / 5-65 Hz | 28.5V DC | 60 A | 240/600 | 505x255x130 (19.9x10.0x5.2) | 12 (26.4) |
| 24/80 | 64898 T | 90-265V AC / 45-65 Hz | 28.5V DC | 80 A | 320/800 | 505x255x230 (19.9x10.0x9.1) | 16 (35.3) |
| 24/100 | 64899 V | 90-265V AC / 45-65 Hz | 28.5V DC | 100 A | 400/1000 | 505x255x230 (19.9x10.0x9.1) | 16 (35.3) |

^{(1) 100 %} output up to 40°C, 80% nominal output at 50°C and 60% of nominal at 60°C.



BATTERY CHARGERS

PHOENIX BATTERY CHARGERS - MICROPROCESSOR CONTROL

Phoenix automatic battery chargers with microprocessor can suit perfectly and automatically the charge for the batteries. During the 4 charge stages (bulk-absorption-float-storage) the battery charger will maintain the optimal charge depending on battery status and use.

Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, built-in temperature sensors, forced cooling, protection against output short circuit and over temperature, battery temperature sensor, compensation on cable voltage fall, two full charge output and one oputput limited to 4 A, RS-485 data port for computer connection, feeder function.



| MOD. | PART No. | INPUT VOLTAGE RANGE | CHARGE VOLTAGE (Absorption) | CHARGE CURRENT ⁽¹⁾ | Ah BATTERIES | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|-------|----------|------------------------|-----------------------------------|----------------------------------|-----------------|--------------------------------|--------------------|
| 12/30 | 64900 A | 90-265V AC / 45-65 Hz | 14,4V DC | 30 A (x2) + 4 A | 100/400 | 350x200x108 (13.8x7.9x4.3) | 3.8 (8.4) |
| 12/50 | 64901 C | 90-265V AC / 45-65 Hz | 14,4V DC | 50 A (x2) + 4 A | 200/800 | 350x200x108 (13.8x7.9x4.3) | 3.8 (8.4) |
| 24/16 | 64902 E | 90-265V AC / 45-65 Hz | 28,8V DC | 16 A (x2) + 4 A | 100/200 | 350x200x108 (13.8x7.9x4.3) | 3.8 (8.4) |
| 24/25 | 64903 G | 90-265V AC / 45-65 Hz | 28.8V DC | 25 A (x2) + 4 A | 100/400 | 350x200x108 (13.8x7.9x4.3) | 3.8 (8.4) |

(1) 100 % output up to 40°C, 80% nominal output at 50°C and 60% of nominal at 60° C

SKYLLA BATTERY CHARGERS - MICROPROCESSOR CONTROL

Skylla battery chargers have automatic three stage IUoUo charging. They are designed for use on battery banks with 24Vcc / 48Vcc.

They have two outputs, two full charge output and one oputput limited to 4 $\mbox{\ensuremath{A}}$

Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, built-in temperature sensors, forced cooling, protection against output short circuit and over temperature, battery temperature sensor, compensation on cable voltage fall, feeder function.



| MOD. | PART No. | INPUT VOLTAGE RANGE | CHARGE VOLTAGE ABSORPTION | CHARGE CURRENT ⁽¹⁾ | Ah BATTERIES | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|---------------------|----------|------------------------|---------------------------|----------------------------------|-----------------|---------------------------------|--------------------|
| TG 24/30 | 64904 J | 185-265V AC / 45-65 Hz | 28.5V DC | 30 A | 150/300 | 365x250x147 (14.4x9.9x5.8) | 5.5 (12.1) |
| TG 24/30 GMDSS | 66036 V | 185-265V AC / 45-65 Hz | 28.5V DC | 30 A | 150/300 | 365x250x147 (14.4x9.9x5.8) | 6 (13.2) |
| TG 24/50 | 64905 L | 185-265V AC / 45-65 Hz | 28.5V DC | 50 A | 250/500 | 365x250x147 (14.4x9.9x5.8) | 5.5 (12.1) |
| TG 24/80 | 64906 N | 185-265V AC / 45-65 Hz | 28.5V DC | 80 A | 400/800 | 350x250x257 (14.4x9.9x10.1) | 10 (22) |
| TG 24/100 | 64907 R | 185-265V AC / 45-65 Hz | 28.5V DC | 100 A | 500/1000 | 365x250x257 (14.4x9.9x10.1) | 10 (22) |
| TG 24/100 3 fasi | 64908 T | 320-450V AC / 45-65 Hz | 28.5V DC | 100 A | 500/1000 | 515x260x265 (20.0x10.2x10.4) | 23 (48) |
| TG 48/25 | 64909 V | 185-265V AC / 45-65 Hz | 57V DC | 25 A | 125/250 | 365x250x147 (14.4x9.9x5.8) | 5.5 (12.1) |
| TG 48/50 | 64910 D | 185-265V AC / 45-65 Hz | 57V DC | 50 A | 250/500 | 365x250x257 (14.4x9.9x10.1) | 10 (22) |

(1) 100 % output up to 40°C, 80% nominal output at 50°C and 60% of nominal at 60°C

PHOENIX INVERTERS

Developed for professional duty, Phoenix pure sine inverters are suitable for the widest range of applications. The design criteria have been to produce a true sine wave inverter with optimised efficiency without compromise in performance. Employing hybrid HF technology, the result is a top quality product with compact dimensions, light in weight and capable of supplying power, problem-free, to any load. A unique feature of the **SinusMax** technology is very high start-up power. Phoenix inverters, in fact, are well suited to power up difficult loads such as: refrigeration compressors, electric motors and similar applications. Conventional high frequency technology does not offer such extreme performance.

PHOENIX INVERTER UP TO 750 VA

Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, forced cooling with temperature sensors, remote connector, battery cables (1.5 m), output short circuit protection, over temperature protection.



| MOD. | PART No. | INPUT VOLTAGE RANGE V DC | CONT. OUTPUT POWER - VA ⁽¹⁾ | PEAK POWER - W | | MAX EFFIC. % | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|---------------|----------|-----------------------------|---|-------------------|---------------|-----------------|--------------------------------|--------------------|
| 12/180 Schuko | 64911 F | 10,5 – 15,5 | 180 | 200 | % | 91 | 72x132x200 (2.8x5.2x7.9) | 2.7 (5.9) |
| 12/350 Schuko | 64912 H | 10,5 – 15,5 | 350 | 500 | + 5 | 90 | 72x155x237 (2.8x6.1x9.3) | 3.5 (7.7) |
| 12/750 Schuko | 65400 J | 10,5 – 15,5 | 750 | 1400 | 0V AC ± 2% | 91 | 72x180x295 (2.8x7.1x11.6) | 2.7 (5.9) |
| 24/180 Schuko | 64914 M | 21,0 - 31,0 | 180 | 200 | 23 14 | 92 | 72x132x200 (2.8x5.2x7.9) | 2.7 (5.9) |
| 24/350 Schuko | 64915 P | 21,0 - 31,0 | 350 | 500 | -55 - | 91 | 72x155x237 (2.8x6.1x9.3) | 3.5 (7.7) |
| 24/750 Schuko | 65649A | 21,0 - 31,0 | 750 | 1400 | 5 | 93 | 72x 180x295 (2.8x7.1x11.6) | 2.7 (5.9) |

(1) Continuous output power at 25°C

PHOENIX INVERTER 1200 VA

Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, forced cooling with temperature sensors, protection against: output short circuit, overload, low battery voltage, reverse polarity, reverse voltage on output, input voltage ripple, high temperature.



PHOENIX 1200 VA



| MOD. | PART No. | INPUT VOLTAGE RANGE V DC | CONT. OUTPUT POWER - VA ⁽¹⁾ | PEAK POWER - W | | MAX EFFIC % | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|------------|----------|-----------------------------|---|-------------------|--------|----------------|--------------------------------|--------------------|
| C12/1200 | 64918 W | 9,5 – 16,0 | 1200 | 2200 | νο. | 93 | 375x214x110 (14.7x8.4x4.3) | 10 (22) |
| C12/1600 | 64919 Y | 9,5 – 16,0 | 1600 | 2300 | . ± 2% | 93 | 375x214x110 (14.7x8.4x4.3) | 10(22) |
| C12/2000 | 66407 E | 9,5 – 16,0 | 2000 | 4000 | 50 Hz | 93 | 520x255x125 (20.5x10.0x4.9) | 13 (28.6) |
| 12/3000(2) | 66037 X | 9,5 – 16,0 | 3000 | 6000 | - %2 | 93 | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) |
| C24/1200 | 64921 J | 19,5 – 33,0 | 1200 | 2200 | AC ± | 94 | 375x214x110 (14.7x8.4x4.3) | 10 (22) |
| C24/1600 | 64922 L | 19,5 – 33,0 | 1600 | 3000 | 2307 | 94 | 375x214x110 (14.7x8.4x4.3) | 10 (22) |
| C24/2000 | 66408 G | 19,5 – 33,0 | 2000 | 4000 | Ę | 94 | 520x255x125 (20.5x10.0x4.9) | 13 (28.6) |
| 24/3000(2) | 64923 N | 19,5 – 33,0 | 3000 | 6000 | Į. | 94 | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) |
| 24/5000(2) | 66244 C | 19,5 – 33,0 | 5000 | 10.000 | | 94 | 444x328x240 (17.5x12.9x9.4) | 28 (61.7) |

(1) Continuous output power at 25°C

(2) Suitable for parallel (max 6 parallel units) and 3-phase operation



MULTI-FUNCTION INVERTER/BATTERY CHARGERS

QUATTRO 5kVA

Two AC inputs with integrated transfer switch

The Quattro can be connected to two independent AC sources, for example shore-side power and a generator, or two generators The Quattro will automatically connect to the active source.

Two AC outputs

The main output has no-break functionality. In the event of a grid failure, or shore or generator power being disconnected, the Quattro takes over the supply to the connected loads. This happens so fast (less then 20 milliseconds) that computers and other electronic equipment will continue to operate without disruption. The second output is live only when AC is available on one of the inputs of the Quattro. Loads that should discharge the battery, like a water heater for example can be connected to this output.

Virtually unlimited power thanks to parallel operation

Up to 6 Quattro's can operate in parallel. Six units 24/5000/120, for example, will provide 25kW / 30VA output power and 720 Amp charging capacity.

Thee phase capability

Three units can be configured for three-phase output and up to 6 sets of three units can be parallel connected to provide 75kW / 90kVA inverter power and more then 2000 Amp charging capacity.

Power Control - Dealing with limited generator, shore-side or grid power

The Quattro is a very powerful battery charger. It will therefore draw a lot of current from the generator or shore-side supply (16A per Quattro at 230 VAC). A current limit can be set for both AC inputs. The Quattro will then take account of the other AC loads and use whatever is spare for charging, thus preventing the generator or shore supply from being overloaded.



QUATTRO 5kVA

Power Assist - Boosting shore or generator power

Where peak power is so often required only for a limited period, the Quattro will make sure that insufficient shore or generator power is immediately compensated for by power from the battery. When the load reduces, the spare power is used to recharge the battery. With this feature problems related to insufficient shore or generator power are solved once and for all. Air conditioning, an electric hob, a washing machine, a dish washer: a 16A shore connection, or even less then 16A, will not limit you in any way.

| MODEL | PART No. | INPUT VOLTAGE RANGE | CONT. OUTPUT POWER (1) | | BATTERY CHA INPUT VOLTAGE RANGE | RGE CHARGE CURRENT | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|--------------------------|----------|---------------------------|------------------------------|-----------------|---|--------------------------|--------------------------------|--------------------|
| NEW 12/3000/120-50-30 | 66880 M | 9,5 - 17 | 3000 | ± 2% | 14.4V DC (absorption) 13.8V DC (float) | 120A | 362x258x218 (14.3x10.1x8.6) | 19,0 (41.8) |
| NEW 24/3000/70-50-30 | 66881 K | 19 - 33 | 3000 | OUTPUT: 230V AC | 28.8V DC (absorption) 27.6V DC (float) | 70A | 362x258x218 (14.3x10.1x8.6) | 19,0 (41.8) |
| 24/5000/120-2X30 | 66097 S | 19 - 33 | 5000 | OUTP | 28.8V DC (absorption) 27.6V DC (float) | 120A | 444x328x240 (17.4x12.9x9.4) | 30.0 (66.1) |

(1) Continuous output power at 25°C

PHOENIX EASYPLUS

The Poenix EasyPlus is a multifunctional energy system:
12 Volt 1600VA sine wave inverter (3000 Watt peak power) and
70A charger including 4A trickle charge for start battery.
Unique PowerAssiste technology protects the shore or generator
from being overloaded by adding extra inverter power when needed.
4 stage adaptive charge technology for quick and accurate battery
charging.

RCD (30mA/16A) on AC output.

Two Ac output sockets protected by 16A automatic circuit breakers for optimum safety. Second AC output active only when shore power is available.

No-break system: uninterrupted switching between shore/generator and inverter.

Battery cables and remote panel included.

| MODEL | PART No. | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|--------------------|----------|--------------------------------|--------------------|
| EP C 12/1600/70-16 | 64948 F | 510x214x110 (20x8.4x4.3) | 11,7 (25,8) |



PHOENIX MULTI-FUNCTION INVERTER/BATTERY CHARGERS - PLUS SERIES

PHOENIX MULTI

Phoenix Multi inverter/battery charger gets its name from the multiple functions it can perform. It is a powerful true sine wave inverter, a sophisticated battery charger that features adaptive charge technology, and a high-speed AC transfer switch in a single compact enclosure. It is designed by using the best technology and materials; the result is a powerful true sine wave inverter (Phoenix Inverter) and a powerful and reliable four stage adaptive charger.

PHOENIX MULTIPLUS

The **Plus** function is available for some Phoenix Multi models (see table) and allows fully automatic integration to the main energy source (battery bank or generator) if load absorption exceed its capacity.

In the event of a grid failure, or shore or generator power being disconnected, the inverter within the Multi is automatically activated and takes over the supply to the connected loads. This happens so fast (20 milliseconds) that computers and other electronic equipment will continue to operate without disruption. This is one of the most important advantage of the **Plus** function.



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Standard features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, forced cooling with temperature sensors, protection against: output short circuit, overload, low battery voltage, high battery voltage, reverse polarity, reverse voltage on output, input voltage ripple, high temperature, 16 A relay for fast switching (20 ms) of the line.

| MODEL | PART No. | PLUS FUNCTION | INPUT VOLTAGE RANGE | CONT. OUTPUT POWER(1) V A | OUTPUT | BATTERY INPUT VOLTAGE RANGE | CHARGE CHARGE CURRENT | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) | | | | | |
|----------------------------------|----------|------------------|---------------------------|---------------------------|-----------------|-----------------------------------|-----------------------------|--------------------------------|--------------------------------|--------------|--|------|-------------------------------|------------|
| MC 12/800/35-16 | 64927 X | n.a. | 9,5 – 16 | 800 | | | | | | | | 35 A | 375x214x110 (14.7x8.4x4.3) | 10 (22) |
| MP C12/1200/50-16 | 64932 P | std. | 9,5 – 16 | 1200 | | | 50 A | 375x214x110 (14.7x8.4x4.3) | 10 (22) | | | | | |
| MP C12/1600/70-16 | 64933 S | std. | 9,5 – 16 | 1600 | ± 2% 50 Hz ± 2% | | 70 A | 375x214x110 (14.7x8.4x4.3) | 10 (22) | | | | | |
| MP C12/2000/80-30 | 64936 Y | std. | 9,5 – 16 | 2000 | | N | 80 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | | |
| MP 12/3000/120-16 ⁽²⁾ | 64938 C | std. | 9,5 – 16 | 3000 | | +1 | 45-55 H | 120 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | |
| MP 12/3000/120-50 ⁽²⁾ | 66875 R | std. | 9,5 – 16 | 3000 | | 187-265 V AC / 45-55 Hz | 120 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | | |
| MC 24/800/16-16 | 64929 B | n.a. | 9,5 – 16 | 800 | 230V AC ± | 87-265 | 16 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | | |
| MP C24/1200/25-16 | 64940 N | std. | 19,5 – 33 | 1200 | .2 | _ | 25 A | 375x214x110 (14.7x8.4x4.3) | 10 (22) | | | | | |
| MP C24/1600/40-16 | 64941 R | std. | 19,5 – 33 | 1600 | | | 40 A | 375x214x110 (14.7x8.4x4.3) | 10 (22) | | | | | |
| MP C24/2000/50-30 | 65725 P | std. | 19,5 – 33 | 2000 | | | 50 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | | |
| MP 24/3000/70-16 ⁽²⁾ | 64944 X | std. | 19,5 – 33 | 3000 | | | 70 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7) | | | | | |
| MP 24/3000/70-50 ⁽²⁾ | 64945 Z | std. | 19,5 – 33 | 3000 | | | 70 A | 362x258x218 (14.2x10.1x8.6) | 18 (39.7)) | | | | | |

⁽¹⁾ Continuous output power at 25°C

For a better use of all **Phoenix MultiPlus** systems, it is necessary to install the **Multi Control 16/32** or the **Digital Multi Control** remote control. It offers power control and power assist (page 137).

⁽²⁾ Suitable for parallel (max 6 parallel units) and 3-phase operation



ORION DC-DC CONVERTERS

Orion DC/DC Converters are designed to deliver a stable 12 Volt supply from a 24 Volt system. An inferior supply can cause irreparable damage to 12 Volt system, but the use of an Orion voltage converter prevents such problems. Next to converters from 24V to 12V, a wide range of other models is available.



NON ISOLATED ORION CONVERTERS

| MODEL | PART No. | INPUT VOLTAGE RANGE - Vcc | OUTPUT VOLTAGE - VDC | MAX OUTPUT CURRENT | TEMPERATURE CONTROL | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|----------------|----------|------------------------------|-------------------------|-----------------------|---------------------|--------------------------------|--------------------|
| Orion 24/12-5 | 64949 H | 18-35 | 13,2 | 5.5 | no | 49x88x68 (1.9x3.5x2.7) | 0.17 (0.37) |
| Orion 24/12-8 | 64950 S | 18-35 | 13,2 | 8 | no | 49x88x98 (1.9x3.5x3.9) | 0.25 (0.55) |
| Orion 24/12-12 | 64951 U | 20-35 | 13,2 | 12 | no | 49x88x98 (1.9x3.5x3.9) | 0.26 (0.57) |
| Orion 24/12-20 | 64952 W | 20-35 | 13,8 | 20 | no | 49x88x126 (1.9x3.5x5.0) | 0.48 (1.1) |
| Orion 24/12-30 | 64953 Y | 20-35 | 13,8 | 30 | si | 49x88x151 (1.9x3.5x5.9) | 0.60 (1.3) |
| Orion 24/12-60 | 64954 A | 20-35 | 13,8 | 60 | si | 88x100x180 (3.5x4.0x7.0) | 1.20 (2.6) |
| Orion 12/24-7 | 64955 C | 9-18 | 24 | 7 | no | 49x88x98 (1.9x3.5x3.9) | 0.30 (0.7) |
| Orion 12/24-10 | 64956 E | 9-18 | 24 | 10 | no | 49x88x126 (1.9x3.5x5.0) | 0.40 (0.9) |

ISOLATED ORION CONVERTERS

| ISOLATED (xx = input: 2,24 V DC - yy = output: 12 or 24 V DC | | | | | | | | | |
|---|---|-------|---------|-------|----|--------------------------|------------|--|--|
| Orion xx/yy-100 - 12-24 12,5/24 100 W no 49x88x152 (1.9x3.5x6.0) 0.50 (1.1) | | | | | | | | | |
| Orion xx/yy-200 | - | 12-24 | 12,5/24 | 200 W | si | 49x88x182 (1.9x3.5x7.2) | 0.60 (1.3) | | |
| Orion xx/yy-360 | - | 12-24 | 12,5/24 | 360 W | si | 64x163x160 (2.5x6.4x6.3) | 1.40 (3.1) | | |

ISOLATION TRANSFORMERS

The isolation transformer eliminates any electrical continuity between AC shore power and the ship. It is essential for safety and eliminates the need for galvanic isolators and polarity alarms. The shore power is fed to the primary side of the transformer and the ship is connected to the secondary. The isolation transformer completely isolates the boat from the shore ground. By connecting all metal parts to the neutral output on the secondary side of the transformer, a GFCI (ground fault current interrupter) will trip or a fuse will blow in case of a short

Features

Aluminium epoxy powder coated case with drip shield, circuit board protection with an acrylic coating, toroidal transformer.



ISOLATION TRANSFORMER

| MODEL | PART No. | WATTAGE | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|------------------|----------|---------|--------------------------------|--------------------|
| 2000 W 115/230 V | 64969 P | 2000 W | 375x214x110 (14.8x8.4x4.3) | 10 (22.0) |
| 3600W 115/230 V | 64970 Y | 3600 W | 362x258x218 (14.2x10.1x8.5) | 23 (50.7) |
| 7000W 230 V | 64972 C | 7000 W | 362x258x218 (14.2x10.1x8.5) | 24 (52.9) |

BMV 600 AND BMV 602 BATTERY MONITORS

The BMV 600 and BMV 602 features an advanced microprocessor control system combined with high resolution measuring systems for battery voltage and charge/discharge current. It can display: voltage, charge/discharge current, state of charge of the battery (in Ah or %), remaining charge. Standard with connection cables and shunt.

Mounting hole: 52mm (2")

BMV 600 - 66164 E - monitoring1 battery BMV 602 - 66409 J - monitoring 2 batteries





BATTERY ISOLATORS

Battery isolators allow simultaneous charging of two or more batteries from one alternators, without connecting the batteries together. Discharging the accessory battery for example will not result in also discharging the starter battery.

ARGO - DIODE BATTERY ISOLATORS

The Argo battery isolators feature a low voltage drops thanks tom the use of Schottky diodes: at low current the voltage drop is approximately 0,3V and at the rated output approximately 0,45V.

All models are fitted with a compensation diode that can be used to slightly increase the output voltage of the alternator. This compensates for the voltage drop over the diodes in the isolator.



ARGO



(€

| MOD. | PART No. | MAX CHARGE CURRENT | ALTERNATOR MAX CURRENT | No. of BATTERIES | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|--------|----------|-----------------------|---------------------------|---------------------|--------------------------------|--------------------|
| 702SC | 64983 H | 50A | 70A | 2 | 60x120x80 (2.4x4.7x3.2) | 0.8 (1.8) |
| 903SC | 64984 K | 70A | 90A | 3 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 1202SC | 64985 M | 100A | 120A | 2 | 60x120x100 (2.4x4.7x3.9) | 0.8 (1.8) |
| 1203SC | 64986 P | 100A | 120A | 3 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 1602SC | 64987 S | 130A | 160A | 2 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 1603SC | 64988 U | 130A | 160A | 3 | 60x120x200 (2.4x4.7x7.9) | 5 (3.3) |

ARGO FET BATTERY ISOLATORS: NO VOLTAGE LOSS

Differently from diode battery isolators, FET isolators have virtually no voltage loss. Voltage drop is less then 0,02 Volt at low current and averages 0,1 Volt at higher currents.

When using ARGO FET battery isolators, there is no need to also increase the output voltage of the alternator. Care should be taken however to keep cable lengths short and of sufficient cross section.



ARGO FET

| MOD. | PART No. | MAX CHARGE CURRENT | ALTERNATOR MAX CURRENT | No. of BATTERIES | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|----------|----------|-----------------------|---------------------------|---------------------|--------------------------------|--------------------|
| 1002-FET | 64989 W | 100A | 100A | 2 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 1003-FET | 64990 E | 100A | 100A | 3 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 2002-FET | 64991 G | 200A | 200A | 2 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |
| 2003-FET | 64992 J | 200A | 200A | 3 | 60x120x150 (2.4x4.7x6.0) | 1.2 (2.6) |

CIRYX - MICROPROCESSOR CONTROLLED BATTERY COMBINER

The Cyrix battery combiner is a microprocessor controlled heavy duty relay that automatically connects batteries in parallel when one of them has reached a preset voltage (indicating that the battery has been charged) and disconnects when the voltage decreases below float level (indicating that one or more batteries have been discharged).

No voltage loss

Cyrix battery separators are an excellent replacement for diode isolators. The main feature is that there is virtually no voltage loss so that the output voltage of alternators or battery chargers does not need to be increased.

Prioritising the starter battery

In a typical setup the alternator is directly connected to the starter battery. The accessory battery and possibly also a bow thruster and other batteries are each connected to the starter battery by Ciryx battery combiners.

When a Ciryx senses that the starter battery has reached its connect voltage will engage, to allow for parallel charging of the other batteries.

Bidirectional voltage sensing

The Ciryx senses the voltage of both connected batteries. It will therefore also engage if for example the accessory battery has been charged by a battery

Parallel connection in case of emergency

The Cyrix can also be engaged with a switch to connect manually batteries in parallel. This is especially useful in case of emergency when the starter battery is discharged or damaged.

12/24V auto ranging with Cyrix-i

The Cyrix-i 12/24-100 automatically detects system voltage.



| - | |
|-------|----|
| CYRIX | (€ |

| MODEL | PART No. | CONTINUOUS CURRENT A | CONNECT VOLTAGE V | DISCONNECT VOLTAGE | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|--------------|----------|----------------------------|-------------------------|------------------------|--------------------------------|--------------------|
| X80/24 | 64994 N | 80 | 26.4 | 25.6 | 46x46x80 (1.8x1.8x3.2) | 0.11 (0.24) |
| Xi 12/24-100 | 66245 E | 100 | 13÷13.8V e 26÷27.6V | 11÷12.8V e 22÷25.7V | 46x46x80 (1.8x1.8x3.2) | 0.11 (0.24) |
| X 160/12 | 64995 R | 160 | 13.2 | 12.8 | 46x93x96 (1.8x3.7x3.8) | 0.3 (0.7) |
| X 160/24 | 64996 T | 160 | 26.4 | 25.6 | 46x93x96 (1.8x3.7x3.8) | 0.3 (0.7) |
| X 400/12 | 64997 V | 400 | 13.2 | 12.8 | 78x102x110 (3.1x4.0x4.4) | 0.9 (2.0) |
| X 400/24 | 64998 X | 400 | 26.4 | 25.6 | 78x102x110 (3.1x4.0x4.4) | 0.9 |

BATTERY PROTECTION

The Victron battery protection disconnects the battery from non essencial loads bifore it is completely discharged (which would damage the battery) or bifore it has insufficient power left to crank the engine.



| MOD. | PART No. | MAX CONTINUOUS CURRENT | PEAK CURRENT | OPERATING VOLTAGE RANGE | LOAD DISCONNECT DELAY | DIMENSIONS H x W x D mm (") | WEIGHT kg (lbs) |
|---------|----------|---------------------------|-----------------|----------------------------|-----------------------|--------------------------------|--------------------|
| BP-40i | 66038 Z | 40A | 120A | 6-35V | 1 minute | 80x60x40 (3.2x2.4x1.6) | 0.2 (0.5) |
| BP-60i | 65000 S | 60A | 120A | 6-35V | 1 minute | 80x60x40 (3.2x2.4x1.6) | 0.2 (0.5) |
| BP-200i | 66246 G | 200A | 480A | 6-35V | 1 minute | 60x120x110 (2.4x4.7x4.3) | 0.8 (1.8) |

REMOTE CONTROL PANELS AND CONNECTION CABLES





VE.Bus Multi Control





PHOENIX CC

(



CONTROL PANELS

| CONTROL PANELS | | | | | | |
|---------------------|----------|--|--|--|--|--|
| MODEL | PART No. | DESCRIPTION | | | | |
| DMC | 66717 W | Digital Multi Control | | | | |
| VE.Bus MC 16/200A | 66247 J | VE.Bus Multi Control 16/200A panel | | | | |
| VE.Bus MC 30/200A | 66248 L | VE.Bus Multi Control 30/200A panel | | | | |
| Phoenix DUO MC-16A | 65003 Y | Phoenix DUO Multi Control 16A panel | | | | |
| Phoenix DUO MC-30A | 65004 A | Phoenix DUO Multi Control 30A panel | | | | |
| Phoenix CC Inverter | 65005 C | Phoenix Inverter Control panel | | | | |
| Phoenix RC Inverter | 66202 K | Remote Control for 750VA Phoenix Inverter - 3m cable | | | | |
| Phoenix CC Charger | 65006 E | Phoenix Charger Control panel | | | | |
| Skylla CC | 65007 G | Skylla Control panell | | | | |
| CW | 65008 J | On-Off Skylla switch | | | | |
| BA | 65009 L | Battery alarm panel | | | | |

CABLES AND CONNECTION KITS

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| MODEL | PART No. | DESCRIPTION |
|-------------|----------|---|
| UTP-5 | 65010 V | UTP 5 m cable |
| UTP-10 | 65011 X | UTP 10 m cable |
| UTP-15 | 65012 Z | UTP 15 m cable |
| UTP-20 | 65013 B | UTP 20 m cable |
| UTP-25 | 65014 D | UTP 25 m cable |
| UTP-30 | 65015 F | UTP 30 m cable |
| 3-PH | 65017 K | Connection Kit in 3-phase operation |
| RS232/MK.2b | 65018 M | Connection Kit RS232/MK.2b Victron Interface |
| USB/RS232 | 65019 P | Converter USB/RS232 |

16AMP/250V & 32AMP/250V - SHORE POWER CABLES



- Waterproof IP67 shore power cable complete with plug and connector
 LED power indicator light
 Protection cap on female connector
 Stainless steel male plug
 CE certified



■ Stainless steel male plug, 3 poles with cover IP67 rating

MP16-10 - 66730M - 16A MP32-10 - 66731P - 32A

SHORE CABLES WITH MOULDED PLUG AND CONNECTOR

| MODEL | Part No. | DESCRIPTION |
|-------|----------|---|
| 2821 | 66732 S | Shore Power Cord 3x2,5 - 15m (49.2') 16A/250V |
| 2822 | 66738 E | Shore Power Cord 3x2,5 - 25m (82.0') 16A/250A |
| 2836 | 66733 U | Shore Power Cord 3x4 - 15m (49.2') 32A/250V |
| 2832 | 66739 G | Shore Power Cord 3x4 - 25m (82.0') 32A/250A |

SHORE POWER CABLES WITHOUT TERMINALS

| MODEL | Part No. | DESCRIPTION |
|----------|----------|---|
| 70031/50 | 66824 X | Shore Power Cord 3 x 2,5 mm² - 50m spool |
| 70032/50 | 66826 B | Shore Power Cord 3 x 4,0 mm² - 50m spool |
| 70033/50 | 66827 D | Shore Power Cord 3 x 6,0 mm² - 50m spool |
| 70034/50 | 66828 F | Shore Power Cord 3 x 10,0 mm² - 50m spool |

AUTOMATIC TRANSFER SWITCH

66138 D Filax transfer switch CE 50Hz (up to 3500W) shore/inverter



Deep cycle \mathbf{AGM} batteries are more suitable for short-time delivery of very high currents (engine starting) than gel batteries. Life: 7-10 years

| AGM Type | PART No. | CAPACITY* | DIMENSIONS W x D x H mm (") | WEIGHT kg (lbs) |
|----------|----------|-----------|--------------------------------|--------------------|
| 12/12 | 65020 Y | 12 Ah | 151x98x101 (5.9x3.8x4.0) | 4.1 (9.0) |
| 12/35 | 65021 A | 35 Ah | 197x130x180 (7.7x5.1x7.1) | 11 (24.2) |
| 12/55 | 65022 C | 55 Ah | 299x138x230 (11.7x5.4x9.0) | 20 (44.0) |
| 12/60 | 65023 E | 60 Ah | 260x168x233 (10.2x6.6x9.2) | 21 (46.3) |
| 12/80 | 65024 G | 80 Ah | 260x168x233 (10.2x6.6x9.2) | 27 (59.5) |
| 12/100 | 65645 S | 100 Ah | 224x171x330 (8.8x6.7x13.0) | 33 (72.7) |
| 12/120 | 65025 J | 120 Ah | 409x176x225 (16.1x6.9x8.8) | 38 (83.7) |
| 12/150 | 65026 L | 150 Ah | 485x172x240 (19.1x6.7x9.4) | 47 (103.6) |
| 12/200 | 65027 N | 200 Ah | 522x238x238 (20.5x9.3x9.3) | 65 (143.0) |

^{*}value for 10 hours of discharging

GEL deep cycle batteries. Life: 12 years

| GEL Type | PART No. | CAPACITY* | DIMENSIONS W x D x H mm (") | WEIGHT kg (lbs) |
|----------|----------|-----------|--------------------------------|--------------------|
| 12/55 | 65028 R | 55 Ah | 299x138x230 (11.7x5.4x9.0) | 20 (44.0) |
| 12/60 | 65029 T | 60 Ah | 260x168x233 (10.2x6.6x9.2) | 21 (46.3) |
| 12/80 | 65030 B | 80 Ah | 260x168x233 (10.2x6.6x9.2) | 26 (57.3) |
| 12/100 | 65646 U | 100 Ah | 224x171x330 (8.8x6.7x12.9) | 33 (72.7) |
| 12/120 | 65031 D | 120 Ah | 409x176x225 (16.1x6.9x8.8) | 38 (83.7) |
| 12/150 | 65032 F | 150 Ah | 485x172x240 (19.1x6.7x9.4) | 48 (103.6) |
| 12/200 | 65033 H | 200 Ah | 522x238x238 (20.5x9.3x9.3) | 66 (143.0) |

^{*}value for 10 hours of discharging

GEL long life 2Vcc batteries with lead calcium grids. Life: 20 years.

| GEL 2 V DC Type | PART No. | CAPACITY* | DIMENSIONS W x D x H mm (") | WEIGHT kg (lbs) |
|-----------------|----------|-----------|--------------------------------|--------------------|
| 2/800 | 65034 K | 800 Ah | 710x215x193 (27.9x8.5x7.6) | 56 (123.4) |
| 2/1000 | 65035 M | 1000 Ah | 710x215x235 (27.9x8.5x9.2) | 68 (150) |
| 2/1500 | 65036 P | 1500 Ah | 855x215x277 (33.6x8.5x10.9) | 109 (240) |
| 2/2000 | 65037 S | 2000 Ah | 815x215x400 (32.1x8.5x15.7) | 138 (304) |
| 2/3000 | 65038 U | 3000 Ah | 815x215x580 (32.1x8.5x22.8) | 202 (445) |

^{*}value for 10 hours of discharging





MERMAID® COMPACT AIR CONDITIONERS (SELF CONTAINED)

Mermaid has been one of the first air conditioning system manufacturers employing for their units the very quiet, compact and reliable rotation compressors.

The innovative choice to place condensation pan only near evaporator allows to avoid contact with water and/or moisture of electric and/or sensitive elements which could be damaged.

Thermostats and electric control elements are standard and very easy to find on the market.

All models are delivered with built in digital thermostat and a clear and complete installation and operation manual.

Furthermore Uflex gives a large series of accessories to customize the system to the boat where has to be installed.

Warranty: 2 years



FX-1 - 66562 T



| FEATURES | | M6 | М9 | M12 | M16 | M24 |
|----------------------------------|--------------|-------------|-------------|-------------|-------------|--------------|
| Part No. (right air ou | ıtlet) | 66219 D | 66220 M | 66221 P | 66222 S | 66561 R |
| Part No. (left air out | let) | 66545 T | 66546 V | 66543 N | 66544 R | N. D. |
| Capacity | Btu/hr | 6.500 | 9.000 | 12.000 | 16.500 | 24.000 |
| | Kcal/hr | 1.638 | 2.260 | 3.023 | 4.160 | 6.050 |
| Power absorption | kW | 0,825 | 0,880 | 1,254 | 1,485 | 2,5 |
| Return grille minim surface area | um cm² | 460 | 640 | 770 | 930 | 1.100 |
| Supply grille minim surface area | cm² | 200 | 300 | 450 | 500 | 900 |
| Air flow | cfm m3/hr | 265 450 | 320 540 | 382 650 | 485 825 | 820 1.393 |
| Collar diameter | mm (") | 100 (4) | 150 (6) | 150 (6) | 150 (6) | 200 (8) |
| Water flow | l/min | 15 | 15 | 20 | 22 | 32 |
| Height | cm (") | 29.2 (11.5) | 29.2 (11.5) | 34.9 (13.7) | 34.9 (13.7) | 34.9 (13.7) |
| Length | cm (") | 40.6 (16.0) | 40.6 (16.0) | 50.2 (19.8) | 50.2 (19.8) | 58.4 (23.0) |
| Depth | cm (") | 29.2 (11.5) | 29.2 (11.5) | 33 (13.0) | 34.3 (13.5) | 43.2 (17.0) |
| Weight | kg (lbs) | 20.2 (45) | 21.7 (48) | 29.7 (66) | 30.6 (68) | 41,5 (92) |

WHEN SELECTING THE SEA WATER PUMP, PLEASE CONSIDER THAT THE PIPE LENGTH AFFECTS FLOW RATE: A LENGTH OF ABOUT 3 m (9.8') ARE EQUIVALENT TO 30 cm (11.8'') OF HEAD.

This unit will run off the new Honda eu1000i 1,000 watt portable generator, while in cool mode. Another option is to use a Victron 1,000 watt inverter and 400 Amp hours of battery power and you can anchor out (one average) for one night.

This unit is ideal for the "tight fit" installations and is a welcomed addition to larger vessels for individual climate controlled cabins. The Mermaid Model "M5" has a rotable blower so, no Air Discharge option is necessary.

On average, this unit is designed to cool cruisers up to 26' and sailboats up to 28'.

All M5 models include a programmable digital thermostat.

Pump not included.

M5 - 66547 X



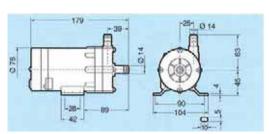


14'

TECHNICAL FEATURES

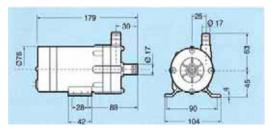
- Cool = 2.5 Amps
- Add approximately one Amp for the standard seawater pumps
- Start up amperage is calculated by running amperage multiplied by 1.8
- Air conditioning for yachts 24' up to 30'
- Cool only unit
- Fx-1 Digital Thermostat included
- Dimensions LxDxH: 29x38x29 cm (11.5"x15"x11.5")
- Weight: 16,4 kg (36.2 lbs)

SEAWATER PUMPS



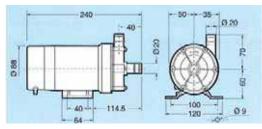
PMD-221 - 63426T

- Seawater centrifugal Pump
- Flow rate: 15 l/min (4.0 GPM)
- Max Head: 2,6 m (8.5')



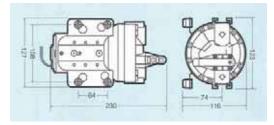
PMD-371 - 63570A

- Seawater centrifugal Pump
- Flow rate: 25 l/min (5.5 GPM)
- Max Head: 3,1 m (10.2')



PMD-421 - 63344R

- Seawater Centrifugal Pump
- Flow rate: 35 l/min (9.2 GPM)
- Max Head: 4,0 m (13.1')



5513-1E01 – 63799K

- Self priming seawater Pump
- Flow rate: 5 20 l/min (1.3 9.0 GPM)
- \blacksquare Self priming up to 3,0 m $\,$ (9.8')

ATTENTION Uflex recommends the use of a seawater in-line strainer to be installed between the seacock and the pump. Please contact our Technical Service to select the most suitable strainer to the application

62527U – In-line Strainer

61124E – In-line Strainer

63185X – In-line Strainer

- Section and Section

AIR CONDITIONING SYSTEM ACCESSORIES

Uflex offers a large range of accessories for air conditioning systems, useful to properly install both small and large systems. For the accessory selection it is very important to follow instructions given for each type of equipment.

"T" & "Y" adapters

To be directly connected on evaporators coupling flange; allow to divert air flow to feed several de-livery frame. Available in many inlet-outlet diameters.

"T" & "Y" diverters

To be connected pipe to pipe; allow to divert air flow to feed several delivery frames. Available in many inlet-outlet diameters.

Plenum joint

Available both with preassembled fittings or custom version to connect the system to the air ducts. It allows to best manage the air flow entering in the delivery frames.

Return frame

Available with anodized aluminium finishing or in teak, are employed to ensure a suitable air flow to Fan Coil Split and Chiller and to Compact Air conditioning systems.

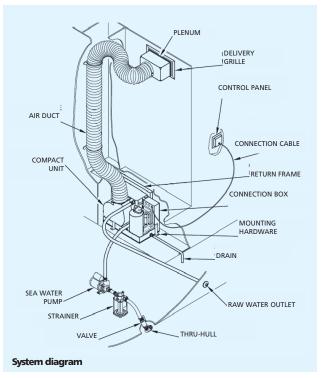
Delivery grilles and frames

Grilles available with anodized aluminium finishing or in teak of several sizes; round closing frames black or white to be employed to deliver conditioned air into rooms environment

Flexible insulated duct

Available in different diameters, its employment is essential not only to improve system efficency but also to avoid condensation sediment inside air ducts.





MERMAID - CONDENSATOR - 65138 Y

On some boats, you can't get a condensation drain line down to the bilge. Finally, you no longer have to put up with draining condensation water into the bilge or a shower sump. The Condensator operates on the venturi principal and "draws" the condensation water from the tray and discards it with the unit's cooling water. The kit includes the condensator, a filter, hoses and mounting hardware.



MERMAID - BLEED OFF VALVE - 66548 Z

This is very simple bleed off valve, for installation just beyond the pump. Simply open the valve. Air escapes, and once water starts dripping through the bottom, close the valve and the water pump air lock is cleared.





Southwest Windpower®

AIR BREEZE WIND GENERATORS

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EFFICIENCY = ENERGY The most powerful wind generator in its class.

The all-new Air Breeze: Quieter, more efficient and precision engineered to deliver more energy at lower wind speeds than any other wind generator in its class.

Today's sailboats are loaded WITH NEW ELECTRONICS GEAR THAT CONSUMES LOTS OF ELECTRICITY. Where do you find that energy? Look to the wind. When you're on the water, wind power offers the best and most economical solution to your energy needs.

To produce serious electrical output when underway, you can rely on Air Breeze, the new generation of the world's best-selling small wind turbine. From sailboats to remote seaside cottages, Air generates inexpensive energy, right where it' needed.

- 3 year warranty
- Injection-molded composite blades
- Microprocessor-based smart internal regulator with peak power tracking
- Aircraft-quality aluminum alloy castings
- Brushless neodymium alternator

■ Maintenance-free – only two moving parts

Microprocessor-based smart internal regulator with peak power tracking = Improved performance. Optimized energy output. Improved battery charging. Reduced sound.

3 durable composite blades = Increased reliability and durability. Reduced sound

Brushless neodymium alternator = More efficient energy delivery with no maintenance

Only two moving parts = Increased reliability. Reduced need for maintenance

| TECHNICAL SPECIFICATIONS | | | | | |
|--------------------------|--|-------------------|--|--|--|
| Model: | Air Breeze M1 12V | Air Breeze M2 24V | | | |
| Part No.: | 66131 N | 66166 J | | | |
| Rotor diameter: | 46 in (| 1.17 m) | | | |
| Weight: | 13 lb (5.9 kg) | | | | |
| Shipping dimensions: | 27 x 12.5 x 9 in (686 x 318 x 229 mm) – 17 lb (7.7 kg) | | | | |
| Mount: | 1.5 in schedule 40 1.9 in (48 mm) OD pipe | | | | |
| Start-Up Wind Speed: | 6 mph (2.68 m/s) | | | | |
| Voltage: | 12 and 24 VDC | | | | |
| Rated power: | 200 watts at 28 mph (12.5 m/s) | | | | |
| Turbine controller: | Microprocessor-based smart internal regulator with peak power tracking | | | | |
| Body: | Cast aluminum | | | | |
| Blades: | Injection-molded composite | | | | |
| Overspeed protection: | Electronic torque control | | | | |
| kW/Hours per month: | 35 kWh/mo at 12 mph (5.4 m/s) | | | | |
| Survival wind speed: | 110 mph (49.2 m/s) | | | | |
| Warranty: | 3 year limit | ed warranty | | | |
| | | | | | |





Southwest Windpower®

AIR-X WIND GENERATORS

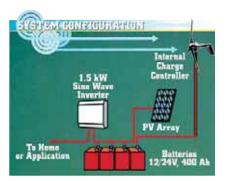
The NEW AIR-X combines what has made AIR the world's number one selling small wind turbine with new technology previously found only in today's state-of-art mega-watt-class wind turbines.

All of these features are primarily found within the body of the turbine. The new microprocessor based speed control results in increased performance, improved battery charging capability and the elimination of "flutter" noise from the machine. The controller allows for peak-power tracking of the wind by optimizing the alternators output on all points of the cubic curve and then efficiently delivers the energy to the battery. Furthermore, a new series of carbon-reinforced blades with a modified pitch angle further increases power production.

The AIR-X's circuit monitors the wind speed and slows the blades as it reaches its rated output preventing it from going into flutter. The result is a much quieter, neighbour friendly wind turbine. In high winds, the AIR-X will continue to produce power at a reduced level until the wind decreases, at which point maximum output will resume. Additionally, when the battery has reached its charged state, the AIR-X will slow to an almost complete stop. Only when the battery has dropped below its user adjustable voltage set point will it startup and resume charging.

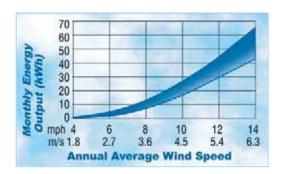
The AIR-X's charge controller periodically stops charging, reads the battery voltage, compares it to the voltage setting and if the battery is charged, it completely shuts off all current going to the battery.

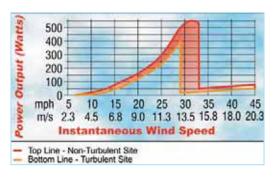




TECHNICAL SPECIFICATIONS AIR MX1 (12V DC) Model: AIR MX2 (24V DC) 63034 Z 63035 B Part No.: **Rotor Diameter:** 1.15 m - 3.77' 6 kg - 13.23 lbs Weight: Ø 48 mm - 1.9" Mount: Blades: Carbon Fiber Composite Body: Cast aluminium* 7 mph (3.13 m/s) Start-up wind speed: **Energy Production:** 38 kWh/mp @12mph (5.4 m/s) Voltage: Rated Power: 400 watts at 28mph (12.5 m/s) Warranty: 3 Year Limited Warranty







SUPERWIND - 350

The Superwind 350 is a small wind generator for professional use, which even under extreme conditions works autonomously and automatically. It is often used on sites where there is no grid available. The electric power generated by Superwind charges batteries and can be used directly for 12V- or 24 Vappliances. There are many industrial appliances on these voltage levels like measurement systems, transmitters or navigational aids. But there are also quite a number of high-quality energy-saving appliances available, such as energy saving lamps, refrigerators, deep-freezers, water pumps, ventilators, consumer electronics, TV, radio and navigation equipment, etc. Superwind generators are used in wind/solar hybrid systems to ensure the availability of power.

TECHNICAL SPECIFICATIONS

Nominal Power: 350W at 12,5 m/s

■ Nominal wind speed: 3,5 m/s

■ Cut off wind speed: none

Rotor diameter: 1,20 m

■ Number of blades: 3

■ Blade material: CFK

■ Rotor speed: 500 - 1300 rpm

■ Generator: permanent magnet

Nominal voltage: 12V DC - 24 V DC

■ Speed regulation: rotor blade pitch

 \blacksquare Power regulation: rotor blade pitch

■ Brake: generator short-circuit

■ Weight: 11,5 Kg

■ Rotor thrust (operation): 70 N

■ Rotor thrust (extreme wind speed): 200 N

SUPERWIND 350 12V - 65726 S **SUPERWIND 350 24V** - 65727 U

CHARGE REGULATOR CRM 12V - 65728 W CHARGE REGULATOR CRM 24V - 65729 Y

STOP SWITCH - 65730 G

INSTALLATION KIT - 65731 J







These modules are suitable to charge 12V batteries of cars, caravans, boats and small electronic devices such as mobile phones, digital cameras, MP3 players, GPS and handhelds.

FLEXCELL SUNSLICK MODULES

Flexible and waterproof modules. These solar battery chargers have been specifically designed for marine & yachting applications. The Sunslick can be installed on curved surfaces such as hatch covers, boat decks and vehicle roofs, or it can be tied to sail covers, dinghies and canvas awnings. They are supplied with 3 m cable.

Power available: 7, 14 and 27 Wp.



SUNSLICK 27W

FLEXCELL SUNBOARD MODULES

Semi-rigid and waterproof modules. Really lightweight and unbreakable, these battery chargers are perfect for marine, chalet and caravan rooftop application. They are supplied with 3 m cable.

Power available: 7, 14 and 27 Wp.



SUNBOARD 14W

FLEXCELL SUNPACK MODULES

Foldable, lightweight modules. They are ideal for all outdoor activities such as camping and trekking. Their rolled diameter dimensions are 6,5 and 8 cm. They have a waterproof bag and cigarette lighter socket (male and female).

Power available: 7 and 14 Wp.



SUNPACK 14W

| SUNPACK FOLDABLE MODELS: | | | | | |
|--------------------------|--------|--------|--|--|--|
| | SP-7W | SP-14W | | | |
| Part no. | 65582U | 65583W | | | |
| P. max (Wp) | 6,75 | 13,5 | | | |
| Imp (A) | 0,45 | 0,9 | | | |
| Voc (V) | 15 | 15 | | | |
| Isc (A) | 0,6 | 1,2 | | | |
| Length (mm) | 900 | 1500 | | | |
| Width (mm) | 350 | 350 | | | |
| Weight | 0.7 kg | 1.1 kg | | | |





| SUNSLICK FLEXIBLE MODELS: | | | | | | |
|---------------------------|---------|--------|--------|--|--|--|
| | SL-7W | SL-14W | SL-27W | | | |
| Part no. | 65594B | 65578D | 65595D | | | |
| P. max (Wp) | 6,75 | 13,5 | 27 | | | |
| Imp (A) | 0,45 | 0,9 | 1,8 | | | |
| Voc (V) | 15 | 15 | 15 | | | |
| Isc (A) | 0,6 | 1,2 | 2,4 | | | |
| Length (mm) | 700 | 1310 | 1310 | | | |
| Width (mm) | 350 | 350 | 642 | | | |
| Weight | 0.48 kg | 0.9 kg | 1.5 kg | | | |

| SUNBOARD SEMI-RIGID MODELS: | | | | | |
|-----------------------------|---------|--------|--------|--|--|
| | SB-7W | SB-14W | SB-27W | | |
| Part no. | 65579F | 65580P | 65581S | | |
| P. max (Wp) | 6,75 | 13,5 | 27 | | |
| Imp (A) | 0,45 | 0,9 | 1,8 | | |
| Voc (V) | 15 | 15 | 15 | | |
| Isc (A) | 0,6 | 1,2 | 2,4 | | |
| Length (mm) | 700 | 1310 | 1310 | | |
| Width (mm) | 350 | 350 | 642 | | |
| Weight | 0.72 kg | 1.2 kg | 2.2 kg | | |





MARINE PV SOLAR MODULES

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Sunware solar modules, without glass, are functionally reliable, robust, light-weight, weather-proof and sea-water resistant: therefore they have been specially designed for marine applications on board.
The innovative manufacturing process and the use, in some cases, of 40 polycrystalline solar cells instead of 36, make them particularly suitable to be installed on the deck of the boat, avoiding vibrations and the negative effects of high temperature. Self-cleaning and safe to step-on, SUNWARE modules are easy to bend and can therefore adhere to the deck (maximum bending 3%, i.e. bending of 3 cm per 1 m long module). Each module is supplied complete with stainless steel back-plate, a sea-water proof and UV resistant cable (3 m long – red/blue 2x1.5 mmq), a surrounding edge protection profile and mounting stainless steel eyelets for easy installation using screws, hooks or

Manufacturing process, result of long experience achieved, includes an individual final test for each SUNWARE solar module. All modules are covered by a 3 year warranty on the power output.





| MODEL | SW-3061 | SW-3062 | SW-3063 | SW-3064 | SW-3065 | SW-3066 | SW-3265 | SW-3266 |
|--------------------|--------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|
| P. No. | 65103C | 65104E | 65105G | 65106S | 65107L | 65108N | 65109R | 65110Z |
| Rated power Wp | 12 | 18 | 24 | 36 | 48 | 70 | 48 | 70 |
| N° of Cells | 40 | 40 | 40 | 40 | 40 | 40 | 80 | 80 |
| Battery System | 12 | 12 | 12 | 12 | 12 | 12 | 24 | 24 |
| Imp. (A) | 0.55 | 0.83 | 1.1 | 1.65 | 2.2 | 3.3 | 1.1 | 1.6 |
| Voc (V) | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 49.2 | 49.2 |
| Isc (A) | 0.6 | 0.89 | 1.2 | 1.8 | 2.4 | 3.6 | 1.2 | 1.7 |
| Dimensions mm (")* | 249 x 467 | 249 x 642 | 459 x 467 | 459 x 638 | 499 x 838 | 891 x 638 | 499 x 838 | 891 x 638 |
| | (9.8 x 18.4) | (9.8 x25.3) | (18.0 x 18.4) | (18.0 x 25.1) | (19.6 x 33.0) | (35.0 x 25.1) | (19.6 x 33.0) | (35.0 x 25.1) |
| Weight Kg (lbs) | 1.2 (2.6) | 1.7 (3.7) | 2.3 (5.0) | 3.1 (6.8) | 3.2 (7.0) | 6.1 (13.4) | 4.5 (9.9) | 6.1 (13.4) |

^{*} Thickness: 5 mm - 0.2"

ACCESSORIES:



MID CLIPS AND SIDE CLIPS

- Part No. 64098 H (2 clips)
- Part No. 64099 K (4 clips)



PLUGS, SOCKETS AND CONNECTORS

- Male Socket Part No. 64100 R
- Female Socket Part No. 64101 T
- **Plug** Part No. 64102 V
- Bulkhead kit Part No. 64104 Z



COMPACT MARINE PV SOLAR MODULES

Sunware Compact PV modules, without glass and designed for marine applications, are the best solution to save space on the deck of a boat thanks to their small size and high power density.

Junction boxes are thin, waterproof and can be chosen on the left or on the right side. Compact modules (available with a power of 48 or 69 Wp) have no eyelets and no thick seals on their sides.

Self-cleaning and safe to step on, Sunware Compact modules are easy to bend with a maximum bending of 3% (i.e. bending of 3 cm per 1 meter long module).

The installation is very easy by using Mid Clips and Side Clips (optional) (page 164). Compact modules are covered by a 3 year warranty on the power output.





SUNWARE® COMPACT PV Modules

| MODEL | SW-5065 | SW-5066 |
|-------------------|-------------------------|-------------------------|
| | 65111 B | 65112 D |
| Rated power (Wp) | 48 | 69 |
| Vmp (V) | 2.2 | 3.3 |
| Imp (A) | 2.2 | 3.3 |
| Voc (V) | 24.6 | 24.6 |
| Isc (A) | 2.4 | 3.6 |
| N° of Cells | 39 | 39 |
| Dimensions mm (") | 780 x 460 (30.7 x 18.1) | 600 x 890 (23.6 x 35.0) |
| Weight Kg (lbs) | 3.5 (7.7) | 5.4 (11.9) |



REGULATED MODIFIED SINE WAVE INVERTERS

The Sinergex PureWatts series are rated among the highest quality regulated modified sine wave inverters available.

By regulating the AC output, the PW inverters decrease the level of interference produced by modified sine wave making the PW series perfect for operating equipment like mobile office products, televisions, VCR's, small power tools, laptop computers and many other AC products. The PW series offers many other features like protection against overload, low battery voltage, short circuit, and overheating, all with auto-recovery for simple operation. The PW Series includes models of 150, 300 and 500 Watts; all models have high surge capabilities to start the toughest equipment.



| SERIES | PWE 150 | | PWE : | 300 | PWE | 500 | PWE 1000 | | PWE 2000 | |
|-------------------------------|---------------|---|----------|------------|------------|-------------|-----------|-----------|-----------|------------|
| MODEL | 12 | 24 | 12 | 24 | 12 | 24 | 12 | 24 | 12 | 24 |
| Part No. | 64470 B | 64473 H | 64471 D | 64474 K | 64472 F | 64475 M | 64018 G | 64020 T | 66321 U | 66565 Z |
| DC input Voltage (V) | 10-15 | 20-30 | 10-15 | 20-30 | 10-15 | 20-30 | 10-15 | 20-30 | 11-15 | 22-30 |
| Continuous AC power (W) | 150 |) | 300 |) | 50 | 0 | 100 | 0 | 200 | 00 |
| Surge AC power (W) | 300 |) | 600 |) | 1000 | | 2000 | | 4000 | |
| Optimum efficiency | >909 | >90% | | % | >90% | | 85% | | 85% | |
| Low battery alarm (V) | | 10.7 for 12 V models & 21.4 for 24 V models | | | | | | | | |
| Low battery shutdown @ V | | | 1 | 0 for 12 V | models & 2 | 20 for 24 V | models | | | |
| Low battery auto recovery @ V | | 12 for 12 V models & 24 for 24 V models | | | | | | | | |
| No load current draw (A) | <0.2 | !5 | <0.2 | !5 | <0. | 25 | 0.9 | 0.5 | 1.1 | 0.7 |
| Dimensions mm (") | 148 x 95 x 63 | | 165 x | 95 x 62 | 212 x 1 | 105 x 63 | 325 x 1 | 80 x 90 | 418 x 18 | 30 x 90 |
| | (5.8 x 3.7 | 7 x 2.5) | (6.5 x 3 | .7 x 2.4) | (8.3 x 4 | .1 x 2.5) | (12.8 x 7 | .1 x 3.5) | (16.4 x 7 | '.1 x 3.5) |
| Weight kg (lbs) | 0.6 (| 1.3) | 0.75 | (1.6) | 0.9 | (1.9) | 3.0 (| 6.6) | 4.5 (| 9.9) |

BATTERY CHARGERS PURE CHARGE SERIES

The Sinergex PureCharge series are fully automatic and intelligent battery chargers. Using microprocessor and switch-mode technology, the PureCharge battery charges carefully assess the battery and then deliver the optimum charge required.

Being a true 3-stage battery charger, the PureCharge delivers charges in bulk absorption and float stages, each stage delivering the optimum charge for the best performance and power for your battery.

By incorporating the float charge stage, the PureCharge battery charger allows you to set and forget, while your batteries are automatically maintained.



| MODEL | PC 1012 - 64023 Z | PC 0524 - 64123 D | | |
|------------------------|--------------------------|--------------------------|--|--|
| Input Voltage (V c.a.) | 100 - 240 | 100 - 240 | | |
| Input frequency (Hz) | 50-60 | 50-60 | | |
| Output power (W) | 160 | 80 | | |
| Output current (A) | 10 | 5 | | |
| Output Voltage (V) | 12 | 24 | | |
| Power factor | 0.98 | | | |
| Dimensions mm (") | 210x85x50 (8.3x3.3x1.9) | | | |
| Weight kg (lbs) | 0.9 (1.9) | | | |
| | | | | |

The PureSine inverters are microprocessor controlled and have fully isolated voltage input and output. They also include advanced performance features like automatic protection against overload, overheating, low battery, and short circuit.

The Sinergex PureSine series includes models ranging from 150 watts to 3000 watts of continuous power for both professional and recreational uses.

PS700







| PS2-R6 - 6 | 4017 E |
|------------|--------|
|------------|--------|

| SERIES | PS | 150 | PS 3 | 00 | PS2 | 700 | PS2 | 1000 | PS2 1 | 500 | |
|-------------------------------|----------------|---------------|---------|---------|---------------|---------------|----------|----------------|----------------------|-----------------|--|
| MODEL | 212 | 224 | 212 | 224 | 212 | 224 | 212 | 224 | 212 | 224 | |
| Part No. | 64007 B | 64522 U | 64008 D | 64012 U | 64492 M | 64493 P | 64010 P | 64014 Y | 64494 S | 64497 Y | |
| DC input Voltage (V) | 10.5-15 | 21-31 | 10.5-15 | 21-31 | 10.5-15 | 21-30 | 10.5-15 | 21-31 | 10.5-15 | 21-31 | |
| Continuous AC power (W) | 150 |) | 30 | 0 | 70 | 00 | 10 | 00 | 15 | 00 | |
| Surge AC power (W) | 25 |) | 45 |) | 14 | 00 | 150 | 00 | | 2000 | |
| Optimum efficiency | 90% | 93% | 91% | 94% | 90% | 93% | 90% | 93% | 89% | 92% | |
| Efficiency @ full load | 72% | 80% | 72% | 80% | 91% | 93% | 87% | 91% | 86% | 89% | |
| Low battery alarm (V) | 10.7 | 21.4 | 10.7 | 21.4 | 11 | 22 | 10.7 | 21.5 | 10.7 | 21.5 | |
| Low battery shutdown @ V | <10.5 | <21.0 | <10.5 | <21.0 | <10.5 | <21.0 | <10.5 | <21.0 | <10.5 | <21.0 | |
| Low battery auto recovery @ V | 12.5 | 25 | 12.5 | 25 | 12.5 | 25 | 12.5 | 25 | 12.5 | 25 | |
| No load current draw (A) | 0.22 | 0.16 | 0.23 | 0.15 | 1.2 | 0.6 | 1.2 | 0.6 | 1.3 | 0.7 | |
| Dimensions mm (") | 200 x 132 x 72 | | '2 | 2 29 | | 95 x 180 x 72 | | 383 x 182 x 89 | | 390 x 275 x 105 | |
| | (7 | .9 x 5.2 x 2. | 8) | (11 | 1.6 x 7.1 x 2 | .8) | (15.1 x7 | 7.2 x 3.5) | (15.3 x ⁻ | 10.8 x 4.1) | |
| Weight kg (lbs) | 2.0 (4 | .4) | 3.5 | 7.7) | 2.7 (| (5.9) | 4.0 (| (8.8) | 7 (| 15.4) | |
| Thermal cont. cooling fan | ye | S | ye | S | ye | 2S | ye | S | У | es | |

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CHARGE REGULATORS PROSTAR - SUNSAVER MODELS

ProStar - 15 and 30 serie features

- 3 digits LCD display reading in sequence:
- battery current, PV current, loads current.
- Automatic voltage select for either 12 or 24 Volt systems.
- Electronic selection of either a sealed or flooded battery.
- Full electronic protection against any sequence of reversed wire connection.
- PV current (Amps): 15 (ProStar-15) and 30 (ProStar-30).
- Load current (Amps): 15 (ProStar-15) and 30 (ProStar-30).
- A button will instantly disconnect/connect all PV and loads.
- Load disconnect 11.5V, LVD reconnect 12.6V.
- Dimensions mm: 153 X 105 X 55, weight kg 0.34

SunSaver - 6, 10, 20 serie features

- Green Led = battery receiving energy from the PV modules, Red Led = load disconnect condition.
- Full electronic protection against reversed PV, battery or load wire connections.
- Either a flooded or sealed battery can be selected with a simple jumper.
- Encapsulated in epoxy compound for service in harsh environment.
- PV current (Amps): 6.5 (SunSaver-6), 10 (SunSaver-10), 20 (SunSaver-20).
- Load current (Amps): 6 (SunSaver-6), 10 (SunSaver-10), 20 (SunSaver-20)
- Available in 12 / 24 Volt versions.
- Load disconnect 11.5V, LVD reconnect 12.6V
- Dimensions mm: 152 X 56 X 33, weight kg 0.23





| TECHICAL SPECIFICATION: | | | |
|-------------------------|---------------------|---------------------|-----------|
| MODEL | PS15M | PS30M | PS15M-48V |
| Part No. | 62643W | 61737A | 63072H |
| Rated solar current | 15 A | 30 A | 15 A |
| Rated load current | 15 A | 30 A | 15 A |
| System voltage | 12 V c.c./24 V c.c. | 12 V c.c./24 V c.c. | 48 V c.c. |
| Nominal voltage | 12 V | 24 V | 48 V |
| Self-consumption | 22 mA | 25 mA | 28 mA |

| TECHICAL SPECIFICATION: | | | | | |
|-------------------------|-----------|-----------|-----------|-----------|------------|
| MODEL | SS 6 L | SS 10 | SS 10 L | SS 20 L | SS 10 L-24 |
| Part No. | 61213E | 61415B | 61192X | 61734U | 61938L |
| Rated solar current | 6.5 A | 10 A | 10 A | 20 A | 10 A |
| Rated load current | 6 A | 10 A | 10 A | 20 A | 10 A |
| Voltage | 12 V c.c. | 12 V c.c. | 12 V c.c. | 12 V c.c. | 24 V c.c. |
| LVD | YES | NO | YES | YES | YES |

BATTERY CHARGE REGULATORS