



THE ULTIMATE IN MARINE HARDWARE

PRODUCT GUIDE 2017

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## INTRODUCTION

Over the last 30 years Monitor Marine International has developed a range of precision engineered, high quality interior fittings, deckware, tender attachments and helipad tie-downs for SuperYacht and quality volume boat builders. Monitor operates under the Hepworth Marine International division based in the West Midlands, UK. Hepworth International is the Worldwide leader in Marine Wiper Systems.



All the products are designed, engineered and manufactured in the UK from marine grades of stainless steel and aluminium, produced under ISO 9001/2008 quality standards and with a number of products carrying Load Test results.



The product range includes SnapShuts, a Mini Pad Eye, Compression and Crew Cabin Hatch Handles, Releases and Hatch Hinges, and for on deck there is a range of Deck Filler options, Deck Drains and Cleats. There are also 1 tonne and 3 tonne SWL Plug-in Connectors available.

The unique range of Helicopter tie-downs includes 6 versions suitable for use with all types and sizes of aircraft. They can be installed on most composite, wood, GRP, steel or aluminium decks and helipads. The latest addition to the range is the Surface Mount model for adding to most types of existing decks or for ground installations.

All our products are backed up by an engineering team and we can offer a wide range of specialist services, including marine fabrications and a design facility for either new build or re-fits.



#### Most products are available in a range of finishes including:

#### MP MIRROR POLISH

A superb high quality mirror polish finish is accomplished by hand finishing external surfaces.

### SUPERYACHT POLISH

A superb high quality mirror polish finish is accomplished by hand finishing to ALL VISIBLE surfaces.

The two finishes above are indicated by the symbols shown located next to each Part Number.

#### 'SATIN' and POWDER

COATED finishes can be supplied on request. Please contact us for more information.

Satin Powder Coated

B Hepworth & Co Ltd reserves the right to change specifications and prices at any time without notice.

Please note: all sizes and weights detailed throughout this Product Guide are approximate.

All products are manufactured to ISO 9001/2008 Quality Standards.

Perfect for many applications including use as lift points for tenders and toys, as well as stanchions, awning and guard rail anchor points.

#### 1 TONNE CONNECTOR WITH STRAIGHT AWNING/STANCHION PROBE (SWL = 1 TONNE)

MP Part no. 2165-1T-ST Weight: 585g approx. Probe only: MP Part no. 27245-1T-ST

#### 1 TONNE CONNECTOR WITH JOINTED AWNING PROBE (SWL = 1 TONNE)

MP Part no. 2165-1T-JT Weight: 670g approx. Probe only: MP Part no. 27245-1T-JT



#### Suitable for:

- Support couplings for Awnings / Biminis / Canopies
- Anchor points for ladders and stanchions
- Lift points for Toys and Tenders

Other probe designs available - please contact us for more information.

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## Multi-purpose Plug-in Connector

#### 1 Tonne SWL, Factor of Safety 5:1 3 Tonne SWL, Factor of Safety 5:1

- Probe supplied with shackle fitting (standard)
- Unobtrusive, flush fitting, watertight and easy to use
- Suitable for use with toys and tenders, or for stanchions, guard rails, awnings, biminis etc.
- Quick attachment and release mechanism
- 316 and 17-4ph stainless steel
- · Flush fitting, watertight
- Alternative probe ends available
- Option to be fitted with auxiliary attachment to enable distribution of part load to the hull (3 tonne version only)
- Test reports can be supplied if required

#### **MULTI-PURPOSE PLUG-IN CONNECTOR**

Shown with probe and shackle fitting

Dimensions	Part No:	2165-1T	2165-3T	2181-3T
Flange diameter		35mm	60mm	60mm
Deck opening		30mm	52mm	52mm
Height of probe centre above deck		40mm	68mm	68mm
Depth below deck		80mm	111mm	141mm

#### 1 tonne model

_	Part no. 2165-11 ne model	Weight: 395g approx. (ex-shackle) 460g approx. (inc. shackle)
MP	Part no. 2165-3T	Weight: 1.7kg approx. (ex-shackle) 1.9kg approx. (inc. shackle)

Versions for areas with no under-deck installation access:

1 tonne model	3 tonne model		
MP Part no. 2175-11	MP	Part no. 2175-3T	
Further information is available upon	reauest.		

#### MULTI-PURPOSE PLUG-IN CONNECTOR WITH AUXILIARY ATTACHMENT FOR ADDITIONAL SUPPORT

3 tonne model:

MP Part no. 2181-3T Weight: 1.7kg approx. (ex-shackle)





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20.5mm catch depth

### MONITOR MARINE INTERNATIONAL

## **50MM FINGER PULL HANDLE**

MP Part no. 8350

- SY Part no. 8350-SY Weight: 260g approx.
- 60mm flange diameter, 50mm body diameter
- Handle accommodates lift with two fingers
- Flush fitting, 316 stainless steel
- Complete with backplate



Ø 50mm

20.5mm (excluding backplate)

## 50mm SnapShut Latch

20.5MM CATCH DEPTH Weight: 280g approx.

32MM DEEP CATCH DEPTH Weight: 290g approx.

- 60mm flange diameter, 50mm body diameter, complete with backplate
- Secure non-locking spring-loaded catch
- Flush fitting, 316 stainless steel
- Logo can be included

Ø 60mm

**Ø** 50mm

20.5mm (excluding backplate)

50MM COMPRESSION HATCH HANDLE (SHORT AND LONG BEAM VERSIONS)

> MP Part no. 8450-CMP-SB Weight: 300g approx. MP Part no. 8450-CMP-LB

- Flush fitting, 316 stainless steel
- Logo can be included
- Simple adjustment, pre-set compression
- Grip range 8mm to 100mm
- Reach 26mm to 89mm

#### Ø 60mm

14mm (excluding backplate)

Picture shows Long Beam version. Part no. 8450-CMP-LB

32mm deep

catch depth





### **70mm SnapShut Latch** (20.5MM CATCH DEPTH)

MP Part no. 8925

SY Part no. 8925-SY Weight: 450g approx.

- 70mm slam shut latch complete with backplate
- Secure non-locking spring-loaded catch
- Flush fitting, 316 stainless steel
- Logo can be included

#### Ø 70mm



20.5mm (excluding backplate)

**Ø** 60mm

### 70mm SnapShut Latch (DEEP CATCH. 32MM CATCH DEPTH)

MP Part no. 8925-DC SY Part no. 8925-DC-SY

Weight: 465g approx.

- 70mm slam shut latch with deeper catch depth, complete with backplate
- Secure non-locking spring-loaded catch
- Flush fitting, 316 stainless steel
- Logo can be included

#### Ø 70mm

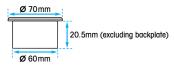
20.5mm (excluding backplate)

**Ø** 60mm

### **70mm SnapShut Latch** (INTEGRAL HEX LOCK, DEEP CATCH OPTION)

		Standard	Deep Catch
MP	Part no.	EL8925	EL8925-DC
SY	Part no.	EL8925-SY	EL8925-DC-SY
Weig	ht: 450g	approx.	475g approx.

- 70mm slam shut latch with integral hex key lock, backplate and hex key
- Available with Deep Catch option
- Positive click-click action
- Flush fitting, 316 stainless steel
- Logo can be included









Strap version

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For installation drawings please contact us or visit our website.

### MONITOR MARINE INTERNATIONAL

### **70mm StayPut Latch** (20.5MM CATCH DEPTH)

MP Part no. 15206

SY Part no. 15206-SY

Weight: 435g approx.

- 70mm outer diameter shoot bolt latch
- Flush fitting, 316 stainless steel
- Complete with backplate

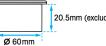
Ø 70 mm 20.5mm (excluding backplate) Ø 60mm

## 70mm Finger Pull Handle

MP Part no. 8385

- SY Part no. 8385-SY Weight: 430g approx.
- 70mm outer diameter
- Handle accommodates lift with two fingers
- Flush fitting, 316 stainless steel
- Complete with backplate

## **Ø** 70 mm



20.5mm (excluding backplate)

### 70mm Mini Pad Eye (ROPE OR STRAP/WEBBING VERSION)

#### Rope:

MP Part no. 11619 SY Part no. 11619-SY Strap / Webbing:

SWL: 400ka

- MP Part no. 11619-STRAP
- S Part no. 11619-STRAP-SY

Weight: 415g approx.

- 70mm outer diameter
- 316 stainless steel with 17-4ph eye
- Flush folding when not in use
- Suitable for securing iet bikes, small tenders / ribs. life rafts and inflatables

#### **Ø** 70 mm

20.5mm (excluding backplate)

Ø 60mm



## 80mm Hatch Handle

MP Part no. 15022 SY Part no. 15022-SY

Weight: 1.1kg approx.

- Clamping 1/4 turn with secure key locking
- Cam operated locking mechanism
- Watertight
- Flush fitting, 316 stainless steel

#### Ø 80 mm



### 80MM HATCH HANDLE (Emergency Release)

MP Part no. 15022-E Part no. 15022-E-SY

15022-E-SY Weight: 1.1kg approx.

- Clamping 1/4 turn with secure key locking
- Internal emergency release pin
- Cam operated locking mechanism
- Watertight
- Flush fitting, 316 stainless steel

#### Ø 80 mm

**Ø** 66mm

### 80MM HATCH HANDLE (Crew Cabin, Emergency Release)

MP Part no. 15022-CC SY Part no. 15022-CC-SY

Weight: 1.35kg approx.

- External key locking 1/4 turn with internal release for Crew Cabin installation
- Cam operated locking mechanism
- Watertight
- Flush fitting, 316 stainless steel
- Ø 80 mm











VIBRATION PROOF!

VIBRATION PROOF!

For installation drawings please contact us or visit our website.



### MONITOR MARINE INTERNATIONAL

### 80mm Vertical Hatch HANDLE (BEAM 65MM FROM CENTRE)

MP Part no. 15025

SY Part no. 15025-SY Weight: 1.1kg approx.

- Vertical installation, clamping 1/4 turn
- Vibration proof ideal for cockpit lockers and high speed ribs
- Secure key locking, watertight
- Cam operated locking mechanism
- Flush fitting, 316 stainless steel

### 80mm Vertical Hatch HANDLE (LONG BEAM, 100MM FROM CENTRE)

MP Part no. 15025-L SY Part no. 15025-L-SY

Weight: 1.13kg approx.

- Vertical installation, clamping and key locking
- 1/4 turn with longer length cramping beam
- Vibration proof ideal for high speed ribs
- Cam operated locking mechanism, watertight
- Flush fitting, 316 stainless steel

### 80mm Hatch Handle (FLUSH TOP. LOCKABLE WITH KEY/HEX KEY)

Flush Top with Key MP Part no. 2114-F SY Part no. 2114-F-SY

with Hex Key 2114-F-HK 2114-F-HK-SY

Weight: 900g approx.

- Clamping 1/4 turn
- Secure key locking
- Cam operated locking mechanism
- Flush fitting, 316 stainless steel

Visual top face comparison of the 80mm Hatch Handle models.



Watertight



### **100MM HATCH HANDLE** (FLUSH TOP)

MP Part no. 2115-F SY Part no. 2115-F-SY

Weight: 1.18kg approx.

- Ideal for larger hatches and thicker panels
- Clamping and locking 1/4 turn
- Cam operated locking mechanism
- Watertight, flush fitting, 316 stainless steel
- Cramping beam can be customised

Ø 100mm



Ø 92mm

### **100MM HATCH HANDLE** (DEEP REACH)

MP Part no. 2115-F-DR SY Part no. 2115-F-DR-SY

Weight: 1.18kg approx.

As above but with a deeper reach cramping beam. which can be customised.

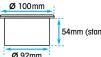


### **100MM HATCH HANDLE** (CREW CABIN)

MP Part no. 2115-F-CC SY Part no. 2115-F-CC-SY

Weight: 1.53kg approx.

- External locking 1/4 turn with internal release for Crew Cabin installation
- Watertight, flush fitting, 316 stainless steel
- Easily customised to fit thicker door panels



54mm (standard depth)

Ø 92mm

This model can easily be customised for very thick panels.

Image to right shows a customised handle.









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### MONITOR MARINE INTERNATIONAL

### **100MM HATCH HANDLE** WITH REAR SHOOTPIN UNIT

MP Part no. 2115-F-RS-100 SY Part no. 2115-F-RS-100-SY

Weight: dependent upon length and type of shootpin.

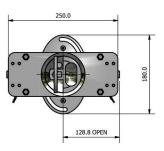
- Ideal for larger doors and hatches
- 316 stainless steel, watertight
- 100mm flush fitting 1/4 turn hatch handle to front
- Finger shutter plate to finger pull
- Shootpin unit to rear

#### Available options:

- Handle for rear operation
- 120v reed switch position sensor
- Customised shootpin length to suit installation
- Key locking / hex key lock, or lock blank









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## 70 & 100mm Deck Drains

These Deck Drains feature unique removable grilles for ease of fitting and enables access to clear any debris to avoid blockages.

#### 70mm deck drain (acetal sleeve)

- 316 stainless steel grille and acetal sleeve
- Flush to deck fitting
- Acetal sleeve accepts 38mm and 50mm hoses

MP Part no. D21910 Weight: 290g approx.

Dimensions: Depth : 74mm Hole diameter required : 50mm

#### **100mm deck drain (acetal sleeve)**

- 316 stainless steel grille and acetal sleeve
- Flush to deck fitting
- Acetal sleeve accepts 38mm, 50mm and 63mm hoses
- Offers a more economic, lighter weight alternative to our standard Deck Drain (9300)

MP Part no. D21908 Weight: 370g approx.

Dimensions: Depth : 140mm Hole diameter required : 70mm

#### **100MM DECK DRAIN**

- 316 stainless steel sleeve and grille
- Barrel takes a 50mm diameter hose allowing quick clearance of excess water
- MP Part no. 9300 Weight: 885g approx.

Dimensions: Depth : 101.7mm Hole diameter required : 70mm

Logos can be incorporated into grilles - please contact us for further information.



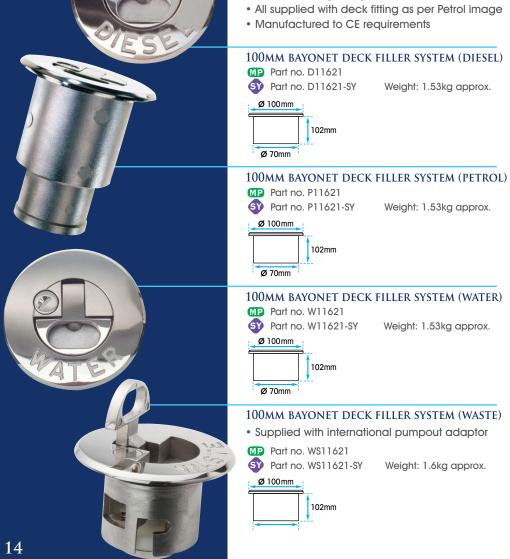




Please note: any text can be engraved, including logos. Contact us for further information.

## 100mm Bayonet Deck Filler System

- Bayonet twist-action with 'pop-up' cap
- Double sealed, secure key locking
- Flush to deck with no visible fixings when closed
- Eliminates problems associated with threaded fillers
- Alternative engraving available





DIESEL

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## 100mm System 5 Deck Fillers

- Unlatches and opens in one smooth movement
- Totally watertight lid, cannot be lost overboard
- Flush top, secure key locking, hinged lid
- When key locked, the handle is disconnected
- 316 stainless steel and black acetal sleeve construction
- Acetal sleeve accepts 38mm, 50mm and 63mm hoses
- Manufactured to CE requirements

#### SYSTEM 5 DECK FILLER (DIESEL)

MP Part no. 2101-D Weight: 646g approx.

Dimensions: Depth : 140mm approx. Hole diameter required : 70mm

#### SYSTEM 5 DECK FILLER (PETROL)

MP Part no. 2101-P Weight: 646g approx.

Dimensions: Depth : 140mm approx. Hole diameter required : 70mm

#### SYSTEM 5 DECK FILLER (WATER)

MP Part no. 2101-W Weight: 646g approx.

Dimensions: Depth : 140mm approx. Hole diameter required : 70mm

#### SYSTEM 5 DECK FILLER (WASTE)

• Flush top hinged lid - cannot be lost overboard

• Pumpout conforms to ISO 8099:2000

MP Part no. 2101-WS Weight: 675g approx.

Dimensions: Depth : 140mm approx. Hole diameter required : 70mm

For installation drawings please contact us or visit our website.

Lid cannot be lost overboard!

Secure hinged lid, totally watertight.

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VAST

PETROL

Please note: any text can be engraved, including logos. Contact us for further information.

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### **MONITOR MARINE INTERNATIONAL**

### RETRACTABLE CLEATS (LENGTH: 200/300/400mm)



A range of manual and power operated Flush Fitting Automatic Retractable Cleats has been developed. The cleat has two positions, stowed and raised ready for use. In the stowed position the entire cleat and base is flush with the deck.

The manual cleat is provided with a control button in the centre of the cross bar. To make the cleat ready for use the control button is

All Cleats are avaiable in three lengths: 200mm, 300mm and 400mm long. When ordering, simply change the second part of the order code for the length you require.

#### Manual Cleat

MP Part no. 9450-200 (200mm long version)
 MP Part no. 9450-300 (300mm long version)
 MP Part no. 9450-400 (400mm long version)

#### **BRIDGE CONTROL MODELS**

 Powered Electric Cleat

 MP
 Part no. 9450-EL-200

 MP
 Part no. 9450-EL-300

 MP
 Part no. 9450-EL-400

 Powered Hydraulic Cleat

 MP
 Part no. 9450-HYD-200

 MP
 Part no. 9450-HYD-300

 MP
 Part no. 9450-HYD-400

depressed. This releases the cleat lock and allows the internal gas struts to drive the cleat top into the ready for use position. The cleat rises at a controlled speed and is locked at the top of its stroke.

The cleat is stowed by pressing the control button and simultaneously pressing the cleat top down. The button can be released once the cleat top has started to descend. The cleat top will automatically lock when the cleat top reaches the stowed position.

The powered electric/hydraulic cleats have the same physical appearance to the manual unit and can be both locally and remotely operated and controlled from the bridge by the use of control panel switchgear. The system can be configured so that the bridge control can inhibit local control.

The cleat is provided with a force sensing system that will prevent personnel injury by trapment.

Weight: 7.3kg approx. for 300mm length version.

- 316 stainless steel, flush fitting when closed
- Lifts when centre button is pressed: gas struts lift the crossbar until it locks in place ready for use
- To retract, press button & push down until locked





## LOW PROFILE PULL-UP CLEATS

A range of high quality mirror polished marine grade 316/17-4 stainless steel, low profile pull-up cleats. Requiring very little under-deck space these cleats need no drainage as they are completely watertight with sliding pistons. Easy to install and simple to operate with one hand, they can be supplied with top face logo or insignia.

- Base plate can be recessed into deck
- Easy-lift streamlined design prevents snagging no sharp edges

Cleats are available in the following range of sizes:

#### 320mm

Height above deck if base plate recessed: 22mm

SY Part no. 9500-320-SY

Weight: 3.8kg approx. MWL: 7,000kg

#### 240mm

Height above deck if base plate recessed: 16mm

SY Part no. 9500-240-SY

Weight: 1.8kg approx. MWL: 6,000kg

180mm Height above deck if base plate recessed: 15mm

SY Part no. 9500-180-SY

Weight: 905g approx. MWL: 3,000kg

120mm Height above deck if base plate recessed: 9mm

Part no. 9500-120-SY
 Weight: 290g approx.
 MWL: 2,000 kg







#### All 4-Bar Hinges are custom made to order.

#### PLEASE CONTACT US WITH YOUR REQUIREMENTS.



Ideal for large SuperYacht doors, hatches and garages.

- 316 stainless steel
- Actual size of hinge plates and closure fixing can be defined for a specific project
- 4-bar mechanism lowers hatch squarely onto its seat ensuring a positive seal
- Optional integrated gas strut
- MP Part no. 9400 Weight: 4.27kg approx. (base length 200mm)



## HELICOPTER TIE-DOWNS

Our unique range of helicopter tie-downs has been developed from a military requirement for securing helicopters on warships at sea. The civil versions offer similar performance but in configurations and materials specifically aimed at SuperYachts, commercial vessels, supply ships and drilling rigs etc.

There are six versions within the range, offering Safe Working Loads up to 4 tonnes - see table below. All tie-downs can be installed to all types of deck structures and ground applications (please contact our design engineers for further information).

Mill certificates are supplied with all tie-downs. Test reports can be supplied on all tie-downs if required.

There is a minimum order requirement of 4 units. Engineering support is available to customise installation requirements, including a design facility for new builds and re-fits.

	T45C	T45R	4-Bar	Surface Mount
SWL*	39kN (4 tonnes)	39kN (4 tonnes)	17kN (1.75 tonnes)	39kN (4 tonnes)
Factor of Safety*	5:1	5:1	5:1	5:1
Max. Loading	20 tonnes	20 tonnes	8.75 tonnes	20 tonnes
Weight	8kg	5kg	2.5kg	5.86kg
Diameter	167mm	142mm	95mm	244mm

#### HELICOPTER TIE-DOWN SPECIFICATION TABLE

\* Safe Working Load and Factor of Safety figures are calculated on a 45 degree line of pull.

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## **4-BAR HELICOPTER TIE-DOWN**

SY Part no. 7516-SY W

Weight: 2.5kg approx.

- The most compact tie-down of the range
- Suitable for securing helicopters to all types of helidecks and helipads (For securing jet bikes, small tenders / ribs, life rafts and inflatables, see Mini Pad Eye on p8.)
- Rotates through 360° for tie-down alignment
- · Bolt-in format, flush fitting when not in use
- Includes integral drain
- Stud and drain lengths to suit application
- Ø 95mm



## DECK HOUSING FOR 4-BAR Helicopter Tie-Down

MP Part no. 21975 Weight: 7kg approx.

Dimensions: Diameter - 130mm, Depth - 145mm

- 316 stainless steel aluminium versions also available
- Supplied with acetal cup for steel or aluminium deck installation

(NB 4-Bar tie-down shown in illustration not included)

## **T45C HELICOPTER TIE-DOWN**

MP Part no. 2037

Weight: 8kg approx.

- Non-rotating designed for commercial applications
- Offers ease of use for ground crew wearing foul weather gear and fireproof gloves
- Fully serviceable, can be rebuilt in situ with only a few minutes down-time
- Suitable for 'weld-in' applications only





## T45R HELICOPTER TIE-DOWN

The T45R has been designed to have all of the performance characteristics of the T45C but in a smaller package.

The eye in the T45R will revolve and allow alignment with the aircraft's position on the deck. This allows a lower number of tie-downs to be fitted to a heli-pad. It also provides flexibility allowing a large range of aircraft types to be accommodated.

This unit is available in both 'bolt-in' and 'weld-in' formats, with options for aluminium decks and installations with no under deck access.

- Rotates through 360° tracking direction of load
- Flush to deck when not in use
- Bolt-in versions: studs to suit application

#### T45R (WELD-IN) HELICOPTER TIE-DOWN

MP Part no. 2079

Weight: 5kg approx.



#### T45R (BOLT-IN) HELICOPTER TIE-DOWN

MP Part no. 2080

Weight: 5kg approx.



#### T45R (BOLT-IN) HELICOPTER TIE-DOWN Complete with Aluminium weld-in Deck Cup and Insulator (shown)

• For aluminium deck installations

MP Part no. 2172

2 Weight: 12.8kg approx.













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#### **MONITOR MARINE INTERNATIONAL**

### SURFACE MOUNT Helicopter Tie-Down

MP Part no. 27275

Weight: 5.86kg approx.

- 316 and 17-4ph stainless steel
- Install directly on the deck or ground by drilling and tapping holes for 6 x M12 bolts
- 26mm high with ramped edges for smooth roll-over by aircraft wheels
- Ideal for re-fits and retro installations

26mm





#### MULTI-PURPOSE PLUG-IN CONNECTOR

The 3 tonne version can be used for helipads, helidecks and rotor blade tie-downs, as well as helipad guard rails and stanchions. Ideal for installations where there is restricted under-deck access.

Please see product listing on page 5 for further information.



### MAINTENANCE KIT

Specifically intended for routine maintenance and general upkeep of all Monitor Marine lock types and deckware.

Part no. 1234 MMK

- Instructions
- Salt-Away Spray -safely removes salt
- Corrosion X kills rust and corrosion
- Super Stainless<sup>™</sup> removes rust staining, cleans and protects
- Silicone Grease to seal & protect locks
- Micro Cloth, cotton buds and tissues
- · White cotton gloves

## **COMMERCIAL FINISHES**

Satin stainless steel or aluminium finishes are available and we also offer powder coated versions.

Please contact us with your requirements and technical specifications and we will quote accordingly.

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### British Designed

British Engineered

British Manufactured



1 1