

ENGINE ACCESSORIES

Up to 125 mhp



Call for Yanmar solutions



Yanmar Marine

Yanmar Marine is completely dedicated to boating, all around the world. Generations of expertise and experience, combined with unrivalled innovation and industry-leading technology, are built into every Yanmar engine. Yanmar and respect for nature go hand in hand. The engines are designed with the environment in mind, allowing you to enjoy your boating and still hold on the nature's glow.

Yanmar diesel engines are the lightest and toughest solutions available for sailboat inboard power. Smooth and quiet, innovative and built to last, the reputation of these engines is second-to-none. Yanmar has been building diesel engines for 100 years, always with the philosophy of developing more power for less weight.

Yanmar has always invested heavily in research, development and manufacturing processes and will continue to do so on behalf of its customers and boating in general. In pleasure boating, the worldwide reputation of Yanmar Marine is second to none.



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Note: pictures can be different from original.



Brief overview map engine installation

			
Engine Model	1GM10	2YM15	3YM20
Pk / omw-1	9/ 3600	14/ 3600	21/ 3600
Reversing clutch / oil	KM2P1 / SAE30	KM2P1 / SAE30	KM2P1 / SAE30
Reversing clutch / oil			
Reversing clutch / oil			
Reversing clutch / oil			
Cable drive / oil	SD20 / 15W40	SD20 / 80W90 (GL4)	SD20 / 80W90 (GL4)
Engine rubbers distr. side	2x 70 or 2x 50	2x 100 or 2x 100	2x 100 or 2x 100
Engine rubbers KK side	2x 50 or 1x 130	2x 75 or 1x 150	2x 75 or 1x 230
Engine rubbers SB side			
Engine rubbers BB side			
Fuel system			
Max. suction height	0.5 m	0.5 m	0.5 m
Connections	8.3 mm	8 mm	8 mm
Min. cap. filter	0.3 l/min	0.3 l/min	0.5 l/min
Cooling system			
Output	5 l/min	27.5 l/min	27.5 l/min
Diam. suction sump	14 mm	17.3 mm	17-18 mm
Boiler connection	NA	PT 3/8 and M16x1.5	PT 3/8 and M16x1.5
Tapping bronze		0.2 kgm	0.2 kgm
Tapping plastic	hand-tight 1x	hand-tight	hand-tight
Coolant		Yanmar NLC 4 ltr	Yanmar NLC 5 ltr
Lubricating oil	15W40 1.3 ltr	15W40 1 ltr	15W40 2 ltr
Intake and exhaust			
Internal diameter exhaust	45 mm	51 mm	51 mm
Water cup	4 m	3 m	3.5 m
Water cup volume	0.5 litre per metre hose	1 litre per metre hose	0.85 litre per metre hose
Forced ventilation	0.5 m3/min	5.5 m3/min	4 m3/min
Natural ventilation	0.5 dm2	0.5 dm2	0.4 dm2
Electrical System			
Voltage	12 VDC nominal	12 VDC nominal	12 VDC nominal
Battery cap.	60 Ah	60 Ah	70 Ah
Trial run			
Idling RPM	825-875 RPM	825-875 RPM	825-875 RPM
Max. load speed	3600-3650 RPM	3250-3700 RPM	3250-3700 RPM
Max. no load speed	3800-3850 RPM	3825-3875 RPM	3825-3875 RPM
Max. temp. intake air	45°C	50°C	50°C
Max. temp. exhaust gas	580°C	500°C	600°C
Turbo pressure			
Max. exhaust gas backpressure	70 mbar	150 mbar	150 mbar

No rights derived; always consult a Yanmar dealer.

Brief overview map engine installation

			
Engine Model	3YM30	3JH5E	4JH5E
Pk / omw-1	29/ 3600	39/ 3000	53/ 3000
Reversing clutch / oil	KM2P1 / SAE30	KM35P2 or A2 / 0.6 ltr SAE30	KM35P2 or A2 / 0 ltr SAE30
Reversing clutch / oil		KM4A1 / 2.3 ltr SAE30	KM4A1 / 2.3ltr SAE30
Reversing clutch / oil		ZF30M / 1.1 ltr ATF	ZF30M / 1.1 ltr ATF
Reversing clutch / oil		ZF25 or A / 3 ltr ATF	ZF25 or A / 3 ltr ATF
Cable drive / oil	SD20 / 80W90 (GL4)	SD50 / 2.2 ltr HPG	SD50 / 2.2 ltr HPG
Engine rubbers distr. side	2x 100 or 2x 100		
Engine rubbers KK side	2x 75 or 1x 230		
Engine rubbers SB side		2x 100 or SD: distr. side 2x 200	2x 100 or SD: distr. side 2x 250
Engine rubbers BB side		2x 150 or SD side: 1x 230	2x 150 or SD side: 1x 430
Fuel system			
Max. suction height	0.5 m	0.5 m	0.5 m
Connections	8 mm	8 mm	8 mm
Min. cap. filter	0.5 l/min	0.6 l/min	Yanmar standard pre-filter
Cooling system			
Output	27.5 l/min	63 l/min	63 l/min
Diam. suction sump	17-18 mm	26 mm	26 mm
Boiler connection	PT 3/8 and M16x1.5	PT 3/8	PT 3/8
Tapping bronze	0.2 kgm	0.2 kgm	0.2 kgm
Tapping plastic	hand-tight	hand-tight	hand-tight
Coolant	Yanmar NLC 5 ltr	Yanmar NLC 5 ltr	Yanmar NLC 7 ltr
Lubricating oil	15W40 2 ltr	15W40 5 ltr	15W40 5 ltr
Intake and exhaust			
Internal diameter exhaust	51 mm	76 mm	76 mm
Water cup	4 m	3.5 m	4.5 m
Water cup volume	0.7 litre per metre hose	2 litre per metre hose	1.5 litre per metre hose
Forced ventilation	5.5 m3/min	6 m3/min	8 m3/min
Natural ventilation	0.5 dm2	1.0 dm2	1.5 dm2
Electrical System			
Voltage	12 VDC nominal	12 VDC nominal	12 VDC nominal
Battery cap.	70 Ah	80 Ah	80 Ah
Trial run			
Idling RPM	825-875 RPM	775-825 RPM	775-825 RPM
Max. load speed	3250-3700 RPM	3000 RPM	3000 RPM
Max. no load speed	3825-3875 RPM	3275-3325 RPM	3275-3325 RPM
Max. temp. intake air	50°C	60°C	60°C
Max. temp. exhaust gas	600°C	650°C	655°C
Turbo pressure			
Max. exhaust gas backpressure	150 mbar	300 mbar	300 mbar

No rights derived; always consult a Yanmar dealer.

Brief overview map engine installation

			
Engine Model	4JH4-TE	4JH4-HTE	4JH3-DTE
Pk / omw-1	75/ 3800	110/ 3800	125/ 3800
Reversing clutch / oil	KM4A1 / 2.3 ltr SAE30	KM4A1 / 2.3 ltr SAE30	KMH4A / 2 ltr SAE30
Reversing clutch / oil	KMH4A / 2ltr SAE30	KMH4A / 2 ltr SAE30	ZF63A / ATF
Reversing clutch / oil	ZF30M / 1.1 ltr ATF	ZF30M / 1.1 ltr ATF	
Reversing clutch / oil	ZF25 or A / 3 ltr ATF	ZF25 or A / 3 ltr ATF	
Cable drive / oil	SD50-4T / 2.2 ltr HPG		
Engine rubbers distr. side	2x 200 or SD: distr. side 2x 350	2x 200	
Engine rubbers KK side	2x 200 or SD side: 1x 430	2x 200	
Engine rubbers SB side			2x 200 or ZF: 3x 200
Engine rubbers BB side			2x 200 or ZF: 3x 200
Fuel system			
Max. suction height	0.5 m	0.5 m	0.5 m
Connections	8 mm	8 mm	8 mm
Min. cap. filter	120 l/min	120 l/min	2 l/min
Cooling system			
Output	63 l/min	67 l/min	60 l/min
Diam. suction sump	26 mm	26 mm	26 mm
Boiler connection	PT 3/8	PT 3/8	PT 3/8
Tapping bronze	0.2 kgm	0.2 kgm	0.2 kgm
Tapping plastic	hand-tight	hand-tight	hand-tight
Coolant	Yanmar NLC 8 ltr	Yanmar NLC 8 ltr	Yanmar NLC
Lubricating oil	15W40 7 ltr	15W40 7 ltr	15W40 7 ltr
Intake and exhaust			
Internal diameter exhaust	76 mm	76 mm	90 mm
Water cup	4.5 m	4.5 m	6 m
Water cup volume	1.5 litre per metre hose	1.5 litre per metre hose	2 litre per metre hose
Forced ventilation	12 m3/min	18 m3/min	20 m3/min
Natural ventilation	2.5 dm2	3.0 dm2	4 dm2
Electrical System			
Voltage	12 VDC nominal	12 VDC nominal	12 VDC nominal
Battery cap.	80 Ah	80 Ah	80 Ah
Trial run			
Idling RPM	775-825 RPM	775-825 RPM	675-725 RPM
Max. load speed	3200-3300 RPM	3200-3300 RPM	3825-3875 RPM
Max. no load speed	3700-3800 RPM	3700-3800 RPM	4275-4325 RPM
Max. temp. intake air	60°C	60°C	45°C
Max. temp. exhaust gas	675°C	675°C	710°C
Turbo pressure	1.1 to 1.3 bar	1.1 to 1.3 bar	1.5 to 1.8 bar
Max. exhaust gas backpressure	300 mbar	300 mbar	100 mbar

No rights derived; always consult a Yanmar dealer.



Service Kits

Spare parts, oils and coolant as shown on the next pages can be obtained only via our Customer Service Parts department.

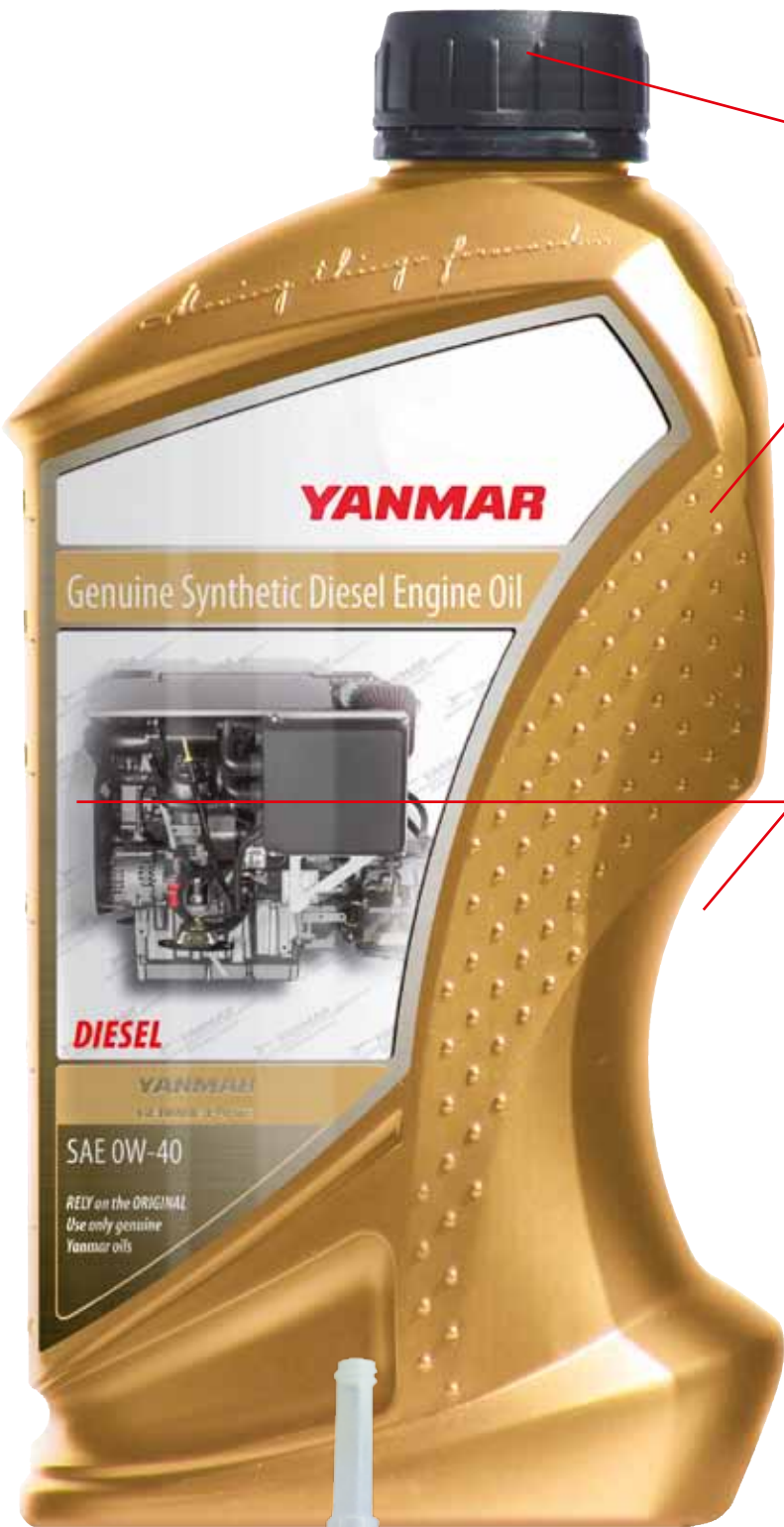
By carrying out regular maintenance and using original parts and the specified Yanmar oil and coolant, you will be able to ensure that your engine has a long service life. It will simply run and run...

All in one box!
Service kits contain oil filter, fuel filter, impeller and necessary gaskets. Vinyl bag is included for the disposal of used parts.

Engine Model	Yanmar Service Kit Part number
1GM/ 1GM10	YEU-SERVKIT-001
2GM	YEU-SERVKIT-002
2GM20	
3GM/3GMD	
3GM30	
2GMF	YEU-SERVKIT-003
2GM20F	
3GMF / 3GMDF	
3GM30F	
3HM	YEU-SERVKIT-004
3HMF	
3HM35	
3HM35F	
2GM20-YEU	YEU-SERVKIT-005
2GM20F-YEU	
3GM30-YEU	
3GM30F-YEU	
2YM15	
3YM20	
3YM30	
3JH2E / 3JH2T	YEU-SERVKIT-006
3JH3E	YEU-SERVKIT-007
3JH4E	
4JH-E / TE / HTE / DTE	YEU-SERVKIT-008
4JH2-E / TE / HTE / DTE	
4JH2-UTE	YEU-SERVKIT-009
4JH3-E	YEU-SERVKIT-010
4JH4-E	
4JH3-TE / DTE	YEU-SERVKIT-011
4JH4-TE / HTE / HTE1	
4JH4-AE / 4JH5-E / 3JH5	YEU-SERVKIT-012



The right bottle makes a difference!



Easy fill-up without content spilling

Easy to grip
Textured grip surface reduces chances of dropping the bottle

Peel off label
Safety information in 18 languages

Ergonomic shape

See through content strip

Delivered in 6-packs

5 liter
Extra big handle for easy pouring



Delivered in 4-packs



Pull-up straw

Yanmar Genuine Diesel Oil



Viscosity: SAE 15W-40
Grade: API CI-4/CH-4/CG-4/CF-4/SL
ACEA E7-04/E5-02/E3-96/A3-02/B3-98

Advanced Conventional Oil for Extra Long-life is formulated to maintain excellent overall lubrication and provides outstanding performance and protection in all operating conditions. It offers a string of advantages: longer intervals between oil changes, cleaner engines and reduced wear.

Part number	Fits engine	Quantity	Pack
15W40-1	All	1 Liter	Plastic bottle
15W40-5	All	5 Liter	Plastic container
15W40-205	All	205 Liter	Metal barrel

Yanmar Genuine Synthetic Diesel Engine Oil



Viscosity: SAE 0W-40
Grade: API CF/SM
ACEA B3/A3, B4/A3

Premium Synthetic Oil for Extra Long-life is formulated to maintain excellent overall lubrication and provides outstanding performance and protection in all operating conditions. It offers a string of advantages: improves cold-start, ensures excellent component cleanliness, reduces oil consumption and improves fuel efficiency.

Part number	Fits engine	Quantity	Pack
0W40-1	BY and 8LV series	1 Liter	Plastic bottle
0W40-5	BY and 8LV series	5 Liter	Plastic container
0W40-205	BY and 8LV series	205 Liter	Metal barrel

Yanmar Genuine Engine Coolant



Ready to use
-40°C

Yanmar antifreeze coolant for Extra Long-life is formulated from balanced additive system that provides protection for Yanmar diesels against freezing, boiling and corrosion.

Part number	Fits engine	Quantity	Pack
Coolant-1	All	1 Liter	Plastic bottle

Yanmar Genuine Saildrive Oil



Viscosity: SAE 80W90
Grade: API GL-5

High performance Saildrive and Sterndrive Oil is formulated specially to maintain excellent overall lubrication. It provides an unique performance and protection in all operating conditions.

Part number	Fits engine	Quantity	Pack
80W90-1	SD20	1 Liter	Plastic bottle

Yanmar Genuine Transmission Oil



Viscosity: SAE 30
Grade: API SF/CF

High performance heavy-duty mono-grade diesel engine lubricant that meets the transmission fluid requirements, enables longer product life and offers good keep-clean performance.
This product resists oil thickening and provides effective detergency.

Part number	Fits engine	Quantity	Pack
SAE30-1	Yanmar gearboxes	1 Liter	Plastic bottle

Yanmar Synthetic Transmission Fluid



Viscosity: ATF 220

High-graded automatic transmission fluid based on a unique blend base oil and special EP-additives.
Especially developed for use in ZF gearboxes, power-steeringpump, and other equipment which require a synthetic transmission fluid.

Part number	Fits engine	Quantity	Pack
ATF220-1	Yanmar gearboxes	1 Liter	Plastic bottle

Yanmar Genuine greases offer a superior lubrication and protection to our applications.

All greases are EP-2.
Containers size: 400gr
Application:
Yanmar pleasure craft engines
Yanmar gearboxes & sterndrives



Lithium complex multi-purpose grease

Parts code:
Grease-complex

Yanmar Grease is specially designed for lubrication of mechanism and bearings submitted to heavy load, operating under medium and high speed in a wide temperature range. It can be used in high temperatures without the loss of the physic and chemical properties.

Lithium calcium grease

Parts code:
Grease-calcium

Yanmar Lithium Calcium Grease offers optimum shear stability, low oil separation and good rust and oxidation inhibiting properties. It has a smooth texture and dropping point above 180C. This product exhibits excellent film forming characteristics.

Lithium ptfe grease

Parts code:
Grease-teflon

Yanmar Genuine Lithium PTFE Grease provides a strong protection against rust and water with high wear resistance. Highly recommended for drive shaft splines, ball and roller bearings. It is mixable with other lithium greases.

Apply on:

- Engine damper disk spline
 - Gearbox input shaft
 - Drive unit pilot
 - Drive shaft splines

- Propeller shaft splines
 - Steering cable end
 - Power steering bushines
 - Upper & lower pivot bolts

- Bell housing studs
 - O-ring seals
 - Anchor pin threads
 - Shift cable

Yanmar Genuine touch-up-paint restores the beauty of your product by blending into your original finish.

Colour: Yanmar Ecole Silver Metallic
Application: Yanmar pleasure craft engines up to 500HP, Yanmar gearboxes, ZT370, SD series from serial number: SD20 (1881-08), SD50 (1403-08), SD50-4T (T001-09)



Aerosol



Brush-in-cap bottle

1. Brush-in-cap bottle

Container size: 17.7ml
Parts code:
paint-002

The brush-in-cap bottle comes in a clear container for quick colour recognition. The tapered insert acts as a brush wiper to prevent paint build-up at the neck. It also serves as a spill stopper if the bottle is tipped over and the portable size makes it easy to carry in your pocket for quick touch-ups.

2. Aerosol

Container size: 457ml
Parts code:
paint-001

The aerosol can offers a superior finish quality, “invisibly” blending touchup paint into the original coating. Just shake and spray - no air source required. Aerosols are ideal for recessed and other hard- to-reach areas.

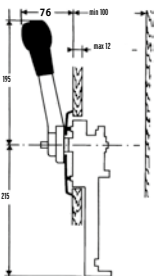
B80, B80/S & CH2800/2850



CH2800/2850



B80/S



Suitable for power boats with single engines and one or two helm stations. More than 1 million sold worldwide. Available with trim and tilt and/or neutral interlock

Features:

- Heavy duty lever in black polyester powder coated finish
- Flush mount design
- Neutral safety switch option (prevents starting in gear)
Item code 065025
- Suitable for 33C- type control cables CC230, CC330 or CCX633.

Item code CH2800

Item code CH2850

Item code 065006

With Twistgrip Switch for bow thruster control
Without Twistgrip Switch

B80/s Special control designed for sail boats (172103)

Item code 065007

B80 Standard control box (box 172105)

Item code 065008

B80/L Idem, with interlock.

Item code 065009

B80/LT Idem, with interlock & trim.

Item code 065010

B80/T Idem, with trim.

Item code 065016

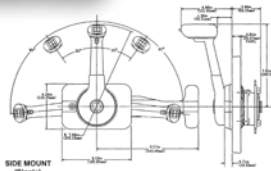
B80/TR With grey handle, for use with 1 cable only (172227).

Item code 065025

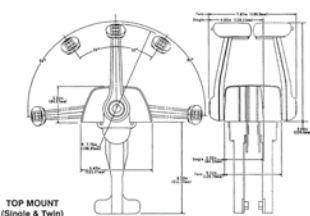
Neutral safety switch.

SL3

Teleflex
MARINE



SIDE MOUNT (Single)



TOP MOUNT (Single & Twin)

Dual action top & side mount controls

SL3 Top and Side Mount Controls Range
Modern styling, dual action, top and side mount controls.
Black satin finish available in single and twin engine versions, with or without trim and/or tilt switches. Suits 33C
With start-in-gear-protection

(CC230, CC330 & CCX633) OMC and Mercury cables
(CC205, CC213, CCX214, CC189, CC179, CCX179)

Item code 065640

SL3 Side mount control

Item code 065641

SL3 Side mount control + trim

Item code 065648

SL3 Side mount control + trim & tilt

Item code 065642

SL3 Top mount Single control

Item code 065643

SL3 Top mount Single control + trim

Item code 065644

SL3 Top mount Twin control

Item code 065645

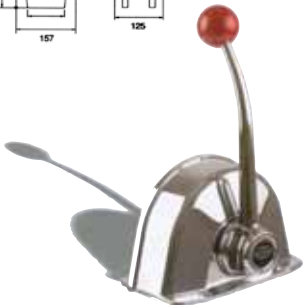
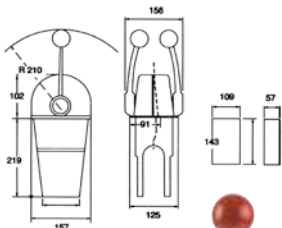
SL3 Top mount Twin control + trim

Item code 065646

SL3 Topmount Twin control + trim& tilt

MT3

Teleflex
MARINE



Dual action top mount controls

Worlds most popular classic design, dual action, top mount controls.

- Type MT3-Single, for 1 engine
 - Type MT3-Twin, for 2 engines
- Suits **CC230, CC330 & CCX633** cables.

Available with trim and tilt and/or neutral interlock

Item Code 065601

MT3-single control.

Item Code 065602

MT3-twin control.

Item Code 065605

Heavy duty conversion kit
(MT3 Single => CCX433 (43C) cable)

Original

CH7500



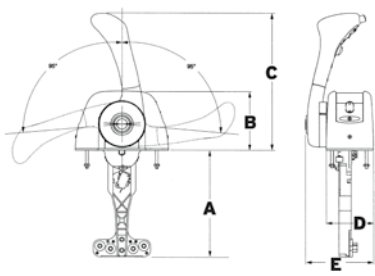
Dual Action Top Mount Control

With focus on ergonomics in every detail.
The result is an engine control which is rugged and substantial,
yet feels natural in every function.
Dual action design with multiple function options.
Suits cables CC230, CC330, CCX633, CC205, CC213, CC189,
CC179 & CCX179.

Features:

- Precise, smooth, positive action
- Ergonomically designed handle
- Soft touch grip
- Start in gear protection
- Neutral interlock
- Supplied with generic relay harness
- Handle & cover both chromed

- Item code 065535 CH7500 Standard.
- Item code 065536 CH7500 With trim.
- Item code 065537 CH7500 With trim & tilt



A= 195mm, B= 109mm, C=252mm, D=88mm, E=125mm

CH1700



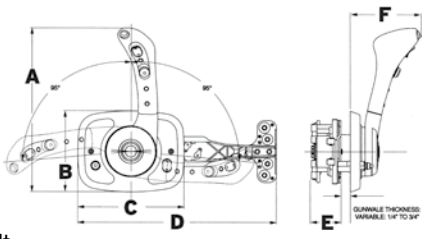
Dual Action Top Side Mount Control

With focus on ergonomics in every detail.
The result is an engine control which is rugged and substantial,
yet feels natural in every function.
Dual action design with multiple function options.
Suits cables CC230, CC330, CCX633, CC205, CC213, CC189,
CC179 & CCX179.

Features:

- Precise, smooth, positive action
- Ergonomically designed handle
- Soft touch grip
- Start in gear protection
- Neutral interlock
- Supplied with generic relay harness
- Handle & cover both chromed

- Item code 065505 CH1700 Standard
- Item code 065506 CH1700 With trim
- Item code 065507 CH1700 With trim & tilt.



A= 275mm, B= 136mm, C=177mm, D=332mm, E=49mm, F= 121mm

CH7800 Osprey



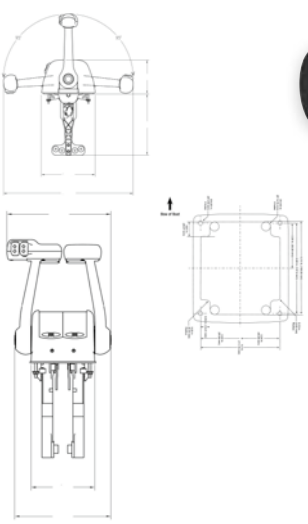
Dual Action Top Mount Twin Control

„Osprey“ - State-of-the-art Top Mount Control. Double action control
with perfect ergonomics. Very rugged and substantial, yet feels natural
in every function. Suits cables CC230, CC330, CCX633, CC205,
CC213, CC189, CC179 & CCX179. Also these controls are available in
a number of OEM configurable options e.g.: branding, tilt switch, trim
switch, emergency cut off switch etc.

Features:

- Precise, smooth, positive action
- Ergonomically designed handle
- Soft touch grip
- Start in gear protection
- Neutral interlock
- Supplied with generic relay harness

- Item code 065550 CH7800, chrome
- Item code 065551 CH7800, chrome, with trim



KE-4+ CANbus



Electronic Engine Control, CANbus-System

- Features:

 - For Inboards, Outboards & Stern Drives
 - Outboard model with optional trim & tilt switch in lever
 - New LED-display
 - For Diesel & Gasoline engines
 - 12V or 24V
 - Suitable for up to 4 stations
 - Engine synchronisation standard feature
 - Complete self-diagnostic system
 - Start-in-gear protection
 - Optional mechanical backup
 - Adjustable control-speed, shift-pauze & throttle-delay
 - Optional trolling system



		Single engine		Twin engines		
		Number of Stations				
		One	Two	Three	Four	Five
KE 4+ CANbus System						
Electronic Engine Control System - Inboard Style (SST)						
Suitable for mechanical throttle and mechanical shift						
Item Code	Description					
064751	Control Head Single, Inboard style (SST), chrome	1	2	–	–	(1)
064756	Control Head Twin, Inboard style (SST), chrome	–	–	1	2	(1)
064754	Processor 12/24V	1	1	2	2	(2)
064752	Actuator 12/12V	1	1	2	2	(3)
064778	Can Bus Harness 8m (please specify if any other length is required)	1	2	2	3	(4)
064830	Harness Power Supply 5m	2	2	4	4	(5)
064831	Harness Power Supply 10m	Option				(5)
064761	T Harness (R/C 1)	1	1	1	1	(6)
064762	T Harness (R/C)	–	1	–	1	(7)
064763	T Harness (SINGLE)	1	1	–	–	(8)
064764	T Harness (PORT)	–	–	1	1	(8)
064765	T Harness (STBD)	–	–	1	1	(9)
CCX63306	Push Pull Cable 6’ (1,83m)	2	2	4	4	(10)
064766	Idle Switch	Option				(11)
064760	Idle Switch Extension Harness	Option				–
064922	Circuit Breaker 20A	2	2	4	4	–
064920	Buzzer 12V	1	2	1	2	–
064921	Buzzer 24V	Option				–
		Item Code 064731	Item Code 064732	Item Code 064733	Item Code 064734	
		Complete-Kits >				

Complete-Kits >

Throttle/shift control cable

CC230 Inboard-, stern drive- and outboard engines:Yanmar. Nominal stroke 76mm. 10/32 UNF ends.



CC230xx

Throttle/shift control cable

CC330 as **CC230**, but extra strong and with stainless steel end fittings.
Nominal stroke: 76mm. 10/32 UNF ends.



CC330xx + CCX633xx

CCX633 TFXtreme Cable for minimal friction. Ideal for long cable routings! Stainless steel fittings and terminals. 10/32 UNF thread. Nominal stroke 76 mm

CC230 (ex CC172)	CC330	CCX633 TFXtreme	CC230 (ex CC172)	CC330	CCX633 TFXtreme
L in cm	L in cm	L in ft	L in cm	L in cm	L in ft
CC23006	CC33006	CCX63306	CC23016	CC33016	CCX63316
CC23007	CC33007	CCX63307	CC23017	CC33017	CCX63317
CC23008	CC33008	CCX63308	CC23018	CC33018	CCX63318
CC23009	CC33009	CCX63309	CC23019	CC33019	CCX63319
CC23010	CC33010	CCX63310	CC23020	CC33020	CCX63320
CC23011	CC33011	CCX63311	CC23021	CC33021	CCX63321
CC23012	CC33012	CCX63312	CC23022	CC33022	CCX63322
CC23013	CC33013	CCX63313	CC23023	CC33023	CCX63323
CC23014	CC33014	CCX63314	CC23024	CC33024	CCX63324
CC23015	CC33015	CCX63315			

(1 Foot = 30,5cm) * CCX633, CCX179 & CCX433 are also available in longer lengths.



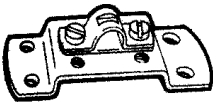
Isolator kit

Item code 065960
Isolator kit for control cables



Control Cable Bracket

Item code A333
With pre-mounted cable clamp (A314)
For cables CC230, CC330 & CCX633



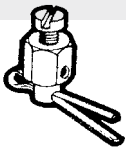
Pivot

Item code A312
For cables CC230, CC330 & CCX633



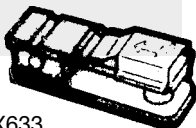
Nipple

Item code A313
Nipple for control cables CC170 and stop cables



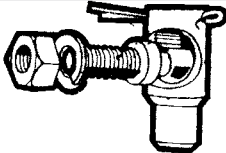
Clevis

Item code A325 For cables CC230, CC330 & CCX633
Item code A326 With inner thread 6mm



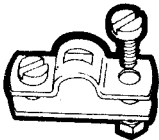
Balljoint

Item code A337
For cables **CC230, CC330 & CCX633**



Cable clamp

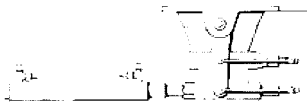
Item code A314 For cables CC230, CC330 & CCX633
Item code 065911 For 43C-cable



SeaStar Hydraulic Stern Drive Steering Kits



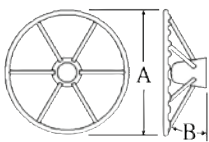
HC5328-3 (125-8EM)



Item code 074028 Kit '89, all with power assist
Item code 074128 Idem, but with tilt helm (HH6541)

- Components:**
- Item code HH5271 (or HH6541) Helm
 - Item code HC5328-3 Cylinder
 - Item code HA5430 Hydraulic oil (2x 1l)
 - Item code HT5101 Nylon tubing 20 m
 - All fittings

Leader Elegant / Leader Silver



Leader Elegant 6-Spoke, stainless steel wheel with carbon look
Item code 062123 A = 370 mm, B = 100 mm
Leader Silver 6-Spoke, stainless steel wheel with silver look
Item code 062137 A = 370mm, B = 100 mm

Modell „22“



068710



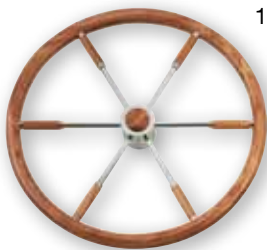
068712



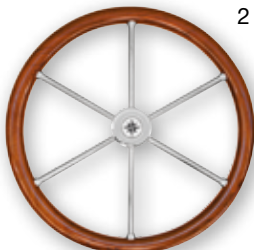
068711

3-Spoke S/S wheel
Item code 068710 with carbon-look rim
Item code 068711 with walnut-look rim
Item code 068712 with black polyurethane rim A = 350 mm

Type 6 en 6N Steering Wheel



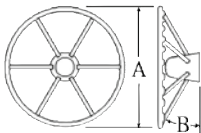
1



2

Type 6 6-Spoke classic mahogany wheel with wooden rim with finger grip. Including insert to adapt to no. 2 different shaft cones
Item Code 068650 A = 500 mm, B = 65 mm
Item Code 068670 A = 700 mm, B = 65 mm
Type 6N 6-Spoke classic teak wheel with wooden rim with finger grip. Including insert to adapt to no. 2 different shaft cones
Item Code 068650/N A = 500 mm, B = 60 mm
Item Code 068660/N A = 600 mm, B = 60 mm

Type 9 Steering Wheel



6-Spoke stainless steel wheel with black polyurethane rim and grip. Including insert to adapt to no. 2 different shaft cones
Item Code 068945 A = 450 mm, B = 60 mm
Item Code 068955 A = 550 mm, B = 60 mm
Item Code 068970 A = 700 mm, B = 60 mm

Safe-T QC Rotary Steering System up to 173kW/235Hp

TeleflexMARINE

Steering kit complete in box, consisting of:
Helm, Bezel + Mounting Hardware and Cable

This kit is also available complete with steering wheel
(Riviera, black). Please add suffix “/R” to the item code number:
e.g. SS13710/R.

Item Code		Length ft.	Length cm
SS13706	Incl. cable	06	183
SS13707	Incl. cable	07	213
SS13708	Incl. cable	08	244
SS13709	Incl. cable	09	274
SS13710	Incl. cable	10	305
SS13711	Incl. cable	11	335
SS13712	Incl. cable	12	366
SS13713	Incl. cable	13	396
SS13714	Incl. cable	14	427
SS13715	Incl. cable	15	457
SS13716	Incl. cable	16	488
SS13717	Incl. cable	17	518
SS13718	Incl. cable	18	549
SS13719	Incl. cable	19	579
SS13720	Incl. cable	20	610
SS13721	Incl. cable	21	641
SS13722	Incl. cable	22	671
SS13723	Incl. cable	23	702
SS13724	Incl. cable	24	732
SS13725	Incl. cable	25	763



BayStar Inboard Hydraulic Steering System

BayStar Inboard Kit 30 kgm Item code HK4401

- Components:**
BayStar 1.4 Helm 23cc (HH4314)
Inboard Cylinder 30kgm (HC4461)
Volume 58cc, Stroke 153mm, Turns 2,53
Tubing Kit 20' (HT4420)
Hydraulic Oil (1x) (HA5430)
All fittings included

BayStar kit 52kgm set Item code HK4400

- Components:**
BayStar 1.4 Helm 23cc (HH4314)
Inboard Cylinder 30kgm (HC4461)
Volume 105cc, Stroke 159mm, Turns 4,58
Tubing Kit 20' (HT4420)
Hydraulic Oil (1x) (HA5430)
All fittings included

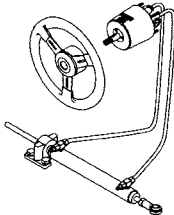


SeaStar Complete Inboard Steering System Set-4

Item code 074182 – 82kgm
Complete system for 1 helm position.
Number of turns: 4.25 lock-to-lock.

- Components:**
- HH5272 SeaStar 2.4 helm
 - HC5314-3 Alum. cylinder type BA150-7ATM
 - HT5101 16m. 3/8" nylon tubing
 - HA5430 2 litre hydraulic oil
 - All fittings included

Inboard



Diesel & Petrol Resistant Rubber Hose with Steel Spiral Inlay



Suitable for diesel, bio-diesel and unleaded fuel.

Standards: • SAE J 1527: 2004 • USCG A1 R2
 • ISO 7840: 2004 A1 CE

Approved: • CE • CE 0474 RINA • LLOYD'S REGISTER

• Colour: black with red label with Print

• Temp. range: -30° C to + 100° C

Item Code 852532 25 x 32mm – max 10 bar

Item Code 853245 32 x 44mm – max 10 bar

Item Code 853852 38 x 51mm – max 10 bar

Item Code 855065 51 x 64mm – max 10 bar

Diesel & Petrol Resistant Rubber Hose



Suitable for diesel, bio-diesel and unleaded fuel.

Standards: • SAE J 1527: 2004 • USCG A1 R1
 • ISO 7840: 2004 A1 CE

Approved: • CE • CE 0474 RINA • LLOYD'S REGISTER

Colour: Black with print •Temperature range: -30°C + 100°C

Item Code 002012 6 x 16mm – max 14 bar

Item Code 002013 8 x 17mm – max 14 bar

Item Code 002060 10 x 19mm – max 14 bar

Item Code 002014 16 x 26mm – max 10 bar

Deck Entries

Chromed brass. Complete with key.
Inner thread 1-1/2"

Item Code 001173 „FUEL“
Item Code 001175 „AQUA“



Deck Entries

Item Code 078220 „FUEL“
Item Code 078221 „WATER“

S/S deck entries for 38mm hose.
Dims.: cover Ø76mm. Cut out Ø45mm. L= 76mm.



Breather Nipples



Breather Nipples, chromed brass

Item Code 001191	Ø 16mm, straight	Item Code 482050	Ø 16mm, straight
Item Code 001190	Ø 20mm, straight	Item Code 482052	Ø 19mm, straight
Item Code 001188/S	Ø 16mm, angled		

Fuel Filters(Diesel) with Water Separator



ISO 10088 cert.

Item Code 486401 Double fuel filter with aluminum settling bowls and bleeding screw and complete with interchangeable cartridges. For engines max 3.500cc. Max. allowed flow 50 l/h. Excluding hose fittings.

Item Code 486420 Fuel filter with settling, aluminum bowl and bleeding screw and Complete with interchangeable cartridge. For engines max 3.500cc. Max. allowed flow 50 l/h. Excluding hose fittings.

Item Code 486470 Spare cartridge element for filters 486400, 410 & 420. For engines max 3.500cc. Max. allowed flow 50 l/h.

Item Code 486491 Kit of 2 swiveling fittings + 2 hose connection ø 8 mm + 4 seal rings.

Item Code 486492 Kit of 2 swiveling fittings + 2 hose connection ø 10 mm + 4 seal rings.

Item Code 486493 Kit of 2 straight hose fittings ø 8 mm + 4 seal rings.

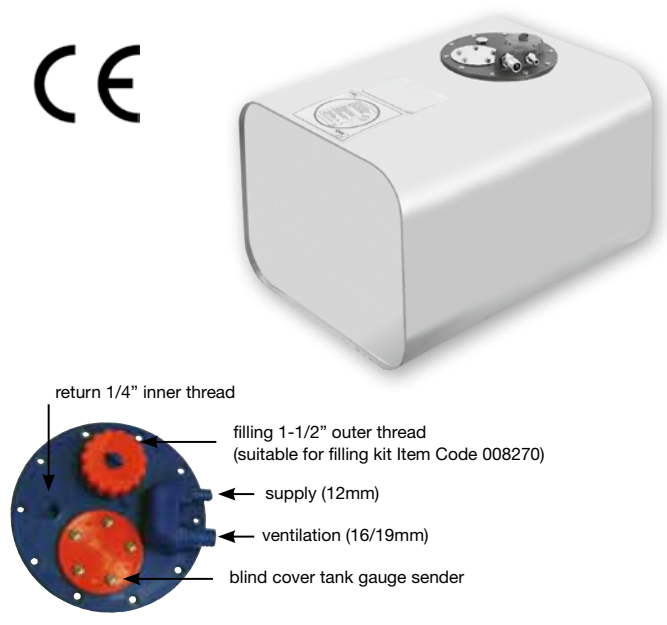
Item Code 486494 Kit of 2 straight hose fittings ø 10 mm + 4 seal rings.

Stainless Steel Fuel Tanks with Connector Flange

Stainless Steel Fuel Tanks with Flange & Connectors (except vertical 21 & 32 Litre Tanks), with Return- and Ventilation Connection. Complete with 1/4" Drain Plug. All Tanks have a blind cover for tank gauge sender (Teleflex/VDO mounting pattern) except 21 Litre Tank.

- Material Thickness up to 90 Litres Tank: 1 mm.
- Material Thickness 120 Litres Tank: 1,2 mm.
- Tanks of 50 Litres and up are provided with baffles.
- Calculation of Tank Capacity is based on the Rectangular sizes without reckoning the radius!

Item Code	Capacity	Shape	Size(mm)
020001	21 l horizontal	30x35x20	(LxBxH)
020002	21 l vertical	30x20x35	(LxBxH)
035001	32 l horizontal	60x35x17	(LxBxH)
035002	32 l vertical	60x17x35	(LxBxH)
050001	50 l horizontal	70x35x20	(LxBxH)
050002	50 l vertical	70x20x35	(LxBxH)
070000	70 l horizontal	70x35x28	(LxBxH)
090000	90 l horizontal	90x35x28	(LxBxH)
120000	120 l horizontal	120x35x28	(LxBxH)

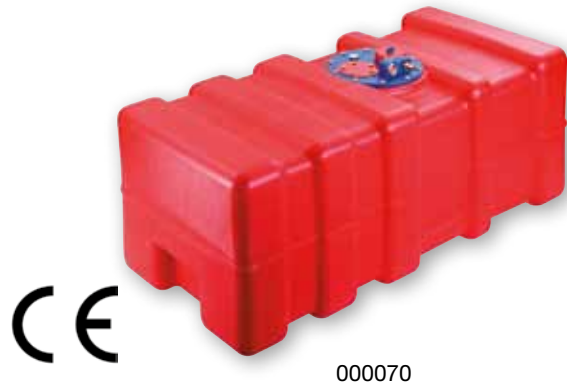


Plastic Inboard Fuel Tanks

Fuel tanks made of High Density Polythene.

Standard with pre-mounted flange & connectors

Item Code 000042	42 ltr	500x350x300	(+20) mm (lxbxh)
Item Code 000055	55 ltr	650x350x300	(+20) mm (lxbxh)
Item Code 000070	70 ltr	800x350x300	(+20) mm (lxbxh)
Item Code 008033	33 ltr	500x350x230	(+20) mm (lxbxh)
Item Code 008043	43 ltr	650x350x230	(+20) mm (lxbxh)
Item Code 008053	53 ltr	800x350x230	(+20) mm (lxbxh)
Item Code 008080	62 ltr	660x300x410	(+25) mm (lxbxh)
Item Code 008110	91 ltr	910x300x410	(+25) mm (lxbxh)
Item Code 008102	102 ltr	800x400x400	(+25) mm (lxbxh)
Item Code 008120	120 ltr	950x400x400	(+25) mm (lxbxh)
Item Code 008140	140 ltr	1100x400x400	(+25) mm (lxbxh)



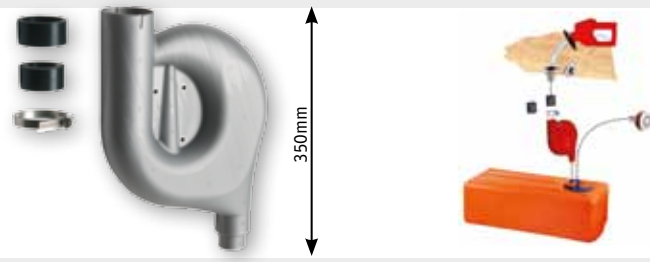
Filler Kit for Fuel Tanks

Item Code 008270 Filler Kit for Fuel Tanks. Fuel Hose Connection: 38-50-60 mm. (straight & angled). Colour Blue.



Fuel Foam-Stop

Item Code 486590 This foam-stop which is directly connected to the deck entry, avoids that foam and fuel come out during the filling of the tank, coming back into the body of the foamstop which transforms the foam in liquid and send to the tank. Provided with 2 rubber adaptors complete with clamp to connect to the deck entry with diam. 38mm or 50mm. Connection with the tank by hose connection with diam. 38mm or 50mm.



Fuel Sender and gauge

CODE F

- Fuel Sender (240-33 Ohm range, S/W match 5-Hole flange, adjustable for left or right arm. Adjustable for 4-24" (10-61cm) deep tanks
 - Delrin flange, w/metal insert & (2) 10 stud terminals (includes Viton gasket and screws)
- art. 90424K Fuel sender
art. 57902E Fuel sender



Brass Hose Pillars



Item Code 1004A6	1/4"x 6 mm	Item Code 1004D13	3/4"x 13 mm	Item Code 1004F40	1 1/4" x 40 mm
Item Code 1004A8	1/4"x 8 mm	Item Code 1004D16	3/4"x 16 mm	Item Code 1004G38	1 1/2" x 38 mm
Item Code 1004A10	1/4"x 10 mm	Item Code 1004D20	3/4"x 20 mm	Item Code 1004G40	1 1/2" x 40 mm
Item Code 1004B10	3/8"x 10 mm	Item Code 1004D25	3/4"x 25 mm	Item Code 1004G45	1 1/2" x 45 mm
Item Code 1004B13	3/8"x 13 mm	Item Code 1004E25	1" x 25 mm	Item Code 1004G50	1 1/2" x 50 mm
Item Code 1004B15	3/8"x 15 mm	Item Code 1004E30	1" x 30 mm	Item Code 1004J50	2" x 50 mm
Item Code 1004C14	1/2"x 14 mm	Item Code 1004E32	1" x 32 mm	Item Code 1004J60	2" x 60 mm
Item Code 1004C16	1/2"x 16 mm	Item Code 1004F32	1 1/4" x 32 mm	Item Code 1004K70	2 1/2" x 70 mm
Item Code 1004C20	1/2"x 20 mm	Item Code 1004F38	1 1/4" x 38 mm	Item Code 1004L80	3" x 80 mm

Brass Skin Fittings



Item Code 001121B	3/8"	Item Code 001121G	1 1/2"	Item Code 001121E	1"
Item Code 001121F	1 1/4"	Item Code 001121D	3/4"	Item Code 001121K	2 1/2"
Item Code 001121C	1/2"	Item Code 001121J	2"	Item Code 001121L	3"

Chromed Brass Ball Valves



Item Code 001540A	1/4"	Item Code 001540D	3/4"	Item Code 001540G	1 1/2"
Item Code 001540B	3/8"	Item Code 001540E	1"	Item Code 001540J	2"
Item Code 001540C	1/2"	Item Code 001540F	1 1/4"	Item Code 001540K	2 1/2"

Brass grated Water Scoops



Item Code 001120B	3/8"	Item Code 001120C	1/2"	Item Code 001120D	3/4"
Item Code 001120F	1 1/4"	Item Code 001120G	1 1/2"	Item Code 001120J	2"

Brass Skin Fittings with Hose Pillar



Item Code 001123B15	3/8"x15mm	Item Code 001123E30	1"x 30mm	Item Code 001123J57	2"x 57mm
Item Code 001123C18	1/2"x18mm	Item Code 001123F40	1 1/4"x40mm	Item Code 001123K70	2 1/2"x72mm
Item Code 001123D24	3/4"x 24mm	Item Code 001123G45	1 1/2"x45mm	Item Code 001123L80	3"x80mm

Stainless Steel Hose Clamps

For very strong clamping (10-45 kg/cm2) With bolt and bevelled edges.
 Re-usable **Item Codes FA2602 - FA2630**

Hose clips with punched wedged thread and fixed housing **Item Codes FA2631-FA2647**



Item C	ømm	H (mm)	L (mm)	VpE	Item C	ømm	H (mm)	L (mm)	VpE	Item C	ømm	H (mm)	L (mm)	VpE
FA2602	29-31	20x0,8	6x 50	25	FA2617	98-103	24x1,5	8x 85	10	FA2632	11- 20	12,7	50	3
FA2603	32-35	20x0,8	6x 50	25	FA2618	104-112	24x1,5	8x 85	10	FA2633	13- 23	12,7	50	3
FA2604	36-39	20x0,8	6x 50	25	FA2619	113-121	24x1,5	8x 85	10	FA2634	14- 27	12,7	50	3
FA2605	40-43	20x0,8	6x 50	25	FA2620	122-130	24x1,5	8x 85	10	FA2635	21- 38	12,7	30	3
FA2606	44-47	22x1,2	7x 60	25	FA2621	131-139	26x1,7	10x 95	10	FA2636	21- 44	12,7	30	3
FA2607	48-51	22x1,2	7x 60	25	FA2622	140-148	26x1,7	10x 95	10	FA2637	27- 51	12,7	30	4
FA2608	52-55	22x1,2	7x 60	25	FA2623	149-161	26x1,7	10x 95	10	FA2638	40- 64	12,7	20	4
FA2609	56-59	22x1,2	7x 60	20	FA2624	162-174	26x1,7	10x105	10	FA2639	46- 70	12,7	20	4
FA2610	60-63	22x1,2	7x 60	20	FA2625	175-187	26x1,7	10x105	10	FA2640	59- 83	12,7	20	4
FA2611	64-67	22x1,2	7x 60	20	FA2626	188-200	26x1,7	10x105	10	FA2641	71- 95	12,7	20	4
FA2612	68-73	24x1,5	8x 75	10	FA2627	201-213	26x1,7	10x105	10	FA2642	78-102	12,7	20	4
FA2613	74-79	24x1,5	8x 75	10	FA2628	214-226	26x1,7	10x105	10	FA2644	91-114	12,7	20	4
FA2614	80-85	24x1,5	8x 75	10	FA2629	227-239	26x1,7	10x105	10	FA2645	48-127	12,7	20	4
FA2615	86-91	24x1,5	8x 75	10	FA2630	240-252	26x1,7	10x105	10	FA2646	64-140	12,7	10	4
FA2616	92-97	24x1,5	8x 85	10	FA2631	8-12	12,7	50	3	FA2647	79-152	12,7	10	4

Cooling Water Strainer Kit

Nickel plated brass with stainless steel strainer and transparent polycarbonate cover sealed with a neoprene O-ring. Easily opened with supplied key. Capacity given at 0,1 bar.

General: Gas thread = iSO 228/1 (BS2779)
Item Code 001160B 3/8" 1800 l/Hour, H = 105mm
Item Code 001160C 1/2" 2250 l/Hour, H = 105mm
Item Code 001160D 3/4" 4750 l/Hour, H = 105mm

Separate parts for cooling water filter 001160:
Item Code 001460 Cover
Item Code 001460/A Ring (neoprene)
Item Code 001460/C Strainer
Item Code 001460/E Key



Cooling Water Strainers

Nickel plated brass with stainless steel strainer and transparent polycarbonate cover, fitted with bolts and sealed with a neoprene O-ring. Capacity given at 0,1 bar
Item Code 001164E 1" 7950 l/h, H=144 mm
Item Code 001164F 1-1/4" 12500 l/h, H=178 mm
Item Code 001164G 1-1/2" 19100 l/h, H=178 mm
RINA-Approval No. 11/449/88-Dip. 29-7-88



Cooling Water Strainers

Sturdy, plastic strainer with transparent cover Quick Fit type

Item Code 052150 150l/min
Hose connection 12-16-19mm
D=123mm, H=130mm (205mm incl. hose connection)
Item Code 052325 300l/min
Hose connection 19-25-32mm
D=168mm, H=175mm (245mm incl. hose connection)



Cold Water Hoses

Transparent PVC hose with polyester inlay

- Food Quality
- Temp. -20°C - +60°C Max. bar at +20°C (working pressure)
- Do not use for engine cololing water

Item Code 800814	14 x 8 mm	20 bar	Item Code 802534	34 x 25 mm	13 bar
Item Code 801319	19 x 13 mm	15 bar	Item Code 803242	42 x 32 mm	10 bar
Item Code 801521	21 x 15 mm	14 bar	Item Code 803848	48 x 38 mm	8 bar
Item Code 801927	27 x 19 mm	14 bar	Item Code 805060	60 x 50 mm	6 bar

Do not use with coolant



Cold Water Hoses

Transparent PVC hose with steel spiral inlay

- Temp. -15°C - +65°C
- Max. bar at +20°C (working pressure):

Item Code 861016	10 x 16 mm	7 bar	Item Code 862533	25 x 33 mm	5 bar
Item Code 861319	13 x 19 mm	6 bar	Item Code 863241	32 x 41 mm	4 bar
Item Code 861623	16 x 23 mm	6 bar	Item Code 863847	38 x 47 mm	4 bar
Item Code 862027	20 x 27 mm	5 bar			



Exhaust Hose with Lloyd's Approval



Very flexible exhaust hose with steel spiral inlay. Black with green tape print: "Ma-
rine Wet Exhaust – Approved Lloyd's Register no. 96/00127 (E3) & 96/00126 (E3)"

Item Code		Item Code		Item Code	
800040	50 x 40mm	800060	70 x 60mm	800100	113 x 102 mm
800045	55 x 45mm	800075	86 x 76mm	800127	137 x 127mm
800050	62 x 50mm	800090	100 x 90mm	800152	164 x 152mm

Stainless Steel Hose Clamps

For very strong clamping (10-45 kg/cm2) With bolt and bevelled edges.
Re-usable **Item Codes FA2602 - FA2630**



Hose clips with punched wedged thread and fixed housing **Item Codes FA2631-FA2647**

Item C	ømm	H (mm)	L (mm)	VpE	Item C	ømm	H (mm)	L (mm)	VpE	Item C	ømm	H (mm)	L (mm)	VpE
FA2602	29-31	20x0,8	6x 50	25	FA2608	52-55	22x1,2	7x 60	25	FA2614	80-85	24x1,5	8x 75	10
FA2603	32-35	20x0,8	6x 50	25	FA2609	56-59	22x1,2	7x 60	20	FA2615	86-91	24x1,5	8x 75	10
FA2604	36-39	20x0,8	6x 50	25	FA2610	60-63	22x1,2	7x 60	20	FA2616	92-97	24x1,5	8x 85	10
FA2605	40-43	20x0,8	6x 50	25	FA2611	64-67	22x1,2	7x 60	20	FA2617	98-103	24x1,5	8x 85	10
FA2606	44-47	22x1,2	7x 60	25	FA2612	68-73	24x1,5	8x 75	10	FA2618	104-112	24x1,5	8x 85	10
FA2607	48-51	22x1,2	7x 60	25	FA2613	74-79	24x1,5	8x 75	10	FA2619	113-121	24x1,5	8x 85	10

Johnson Pump Syphon breaker

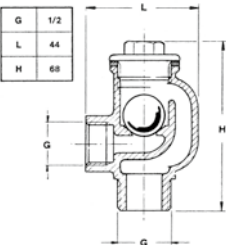
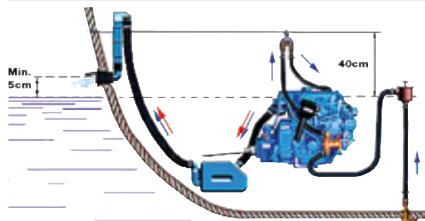


- Features:**
- Non corrosive
 - With vacuum valve
 - Easy to install
 - Does not leak
 - 5 Hose connection sizes

Plastic syphon breaker for water cooled engines.

Item Code 66-09-47316-01	12mm
Item Code 66-09-47316-02	16mm
Item Code 66-09-47316-03	19mm
Item Code 66-09-47316-04	22mm
Item Code 66-09-47316-05	25mm
Item Code 66-09-47316-06	Servicekit

Air Vent Kits



Installation of an air vent into the exhaust and cooling system is of great importance if the water injection point is only 150 mm above the waterline or below. The stainless steel floating check ball may eventually be removed to get a complete open system if there is for example, a chance of stoppage due to salt crystallisation

The air vent kit comes complete with bronze T-fitting, 2 x elbow fittings and hose pillars.

Item Code 001250/13	For ø 13mm hose
Item Code 001250/16	For ø 16mm hose
Item Code 001250/20	For ø 20mm hose
Item Code 001250/32	For ø 32mm hose
Item Code 001250/38	For ø 38mm hose

Cold Water Hoses



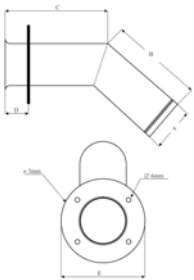
Transparent PVC hose with steel spiral inlay

- Temp. -15°C - +65°C
- Max. bar at +20°C (working pressure):

Item Code 861016	10 x 16 mm	7 bar	Item Code 861623	16 x 23 mm	6 bar
Item Code 861319	13 x 19 mm	6 bar	Item Code 862027	20 x 27 mm	5 bar

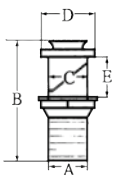
Stainless steel skin fitting for exhaust - 45 °

	A mm	B mm	C mm	D mm	E mm
Item Code 048545	45	70	70	15.0	80
Item Code 048550	50	75	75	16.5	86
Item Code 048576	76	110	110	25.0	130
Item Code 048602	102	115	115	35.0	175



Skin Fittings Stainless steel for engine cooling water

Item Code	A mm	B mm	C mm	D mm	E mm
078700	38	138	57	80	53
078701	50	138	57	80	53
078702	76	146	88	118	46



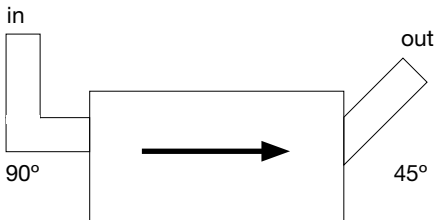
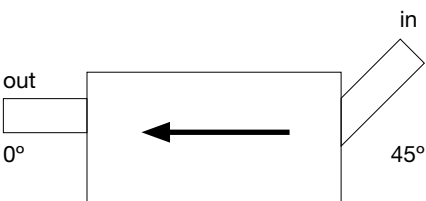
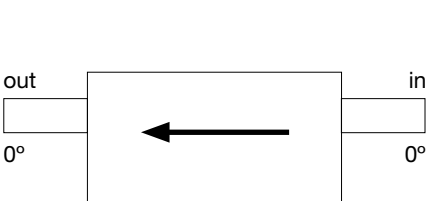
Brass Skin Fittings with Hose Pillar

Item Code 001123F40	1 1/4" x 40 mm
Item Code 001123G45	1 1/2" x 45 mm
Item Code 001123J57	2" x 57 mm
Item Code 001123K70	2 1/2" x 72 mm



Stainless Steel Waterlock/Muffler

Item Code	Connection	Capacity	In	Out	Dimensions (L x Ø)
05241547	45 mm	4 l	0°	0°	200 x 160 mm
05241545	45 mm	4 l	45°	0°	200 x 160 mm
05241548	51 mm	4 l	0°	0°	200 x 160 mm
05261699	51 mm	4 l	45°	0°	200 x 160 mm
05241549	51 mm	6 l	0°	0°	300 x 160 mm
05261698	51 mm	6 l	45°	0°	300 x 160 mm
05241552	76 mm	8 l	0°	0°	400 x 160 mm
05254547	76 mm	8 l	45°	0°	400 x 160 mm
05241551	76 mm	8 l	90°	45°	400 x 160 mm
05262975	102 mm	17 l	0°	0°	500 x 215 mm
05262977	102 mm	17 l	45°	0°	500 x 215 mm



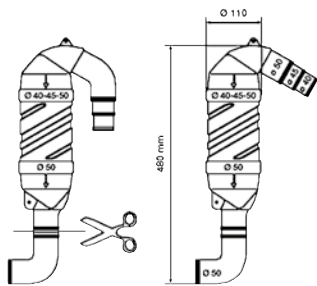
Transom Exhaust Connection



Item Code 486215

Rubber connector for pipe Ø 40/45/50 mm.
With stainless steel mounting ring.

Plastic Goosenecks



486205

486206



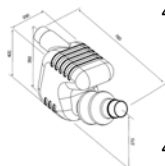
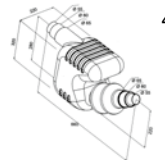
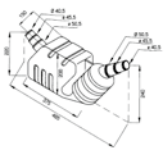
For exhaust hose Ø 40, 45 and 50 mm, Transom side connection Ø 50 mm

Item Code 486205 180°

Item Code 486206 150°



Water Lock Mufflers



486200

486201

486210

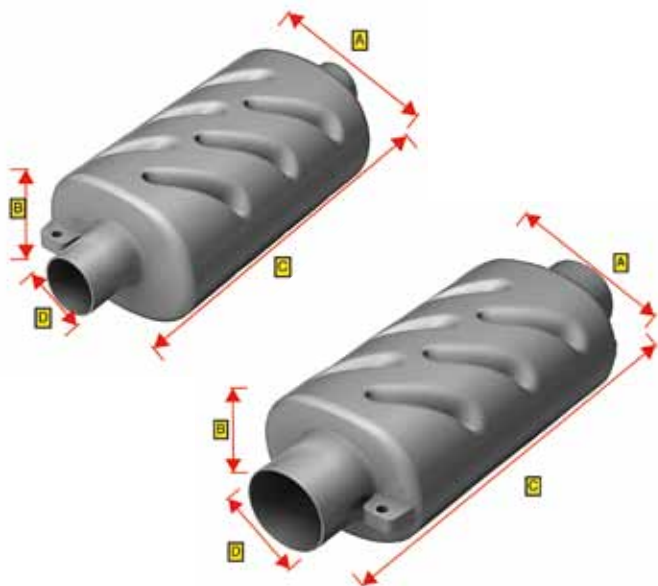


Plastic water lock with integrated muffler. 8 mm Material. Provided with a drain plug for winterising.

Item Code	Diameter	Inhoud	Capaciteit
486200	40/45/50 mm	7 liter	tot 50pk
486201	55/60/65 mm	20 liter	tot 115pk
486210	75/90 mm	33 liter	tot 150pk
486211	100/115 mm	33 liter	tot 300pk



Plastic Mufflers



Thanks to the design of these mufflers, the noise reduction is considerable

	D mm	A mm	B mm	C mm
Item Code 486230	40	150	105	375
Item Code 486231	45	150	105	375
Item Code 486232	50	150	105	375
Item Code 486233	60	150	105	375
Item Code 486234	75	150	105	375
Item Code 486235	90	183	135	460
Item Code 486236	102	183	135	460

Inline-blower

Item Code 078250
Capacity 168 m3/h, Plastic Housing with
Ø 75 mm Hose connections



Extraction Ventilator

Ignition Protected, Capacity 260 m3/h. Plastic Housing
Hose Connection Inlet: Ø 75 mm Item Code 001212 Blower 12V
Hose Connection Outlet: Ø 70 mm Item Code 001224 Blower 24V



Johnson Pump - AirV Extra Heavy Duty Radial Blowers

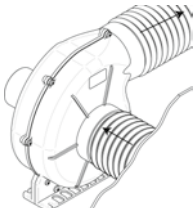
Flex Mount

Item Code	Description	Capacity	Dimensions (h x b x l)	Connections	Amp.
66-80-47420-01	AirV 4-550 Flex Mount, 12V	550 m3/Std.	290 x 257 x 150 mm	Inlet: 110 mm - Auslass: 103 mm	11,5
66-80-47420-02	AirV 4-550 Flex Mount, 24V	550 m3/Std.	290 x 257 x 150 mm	Inlet: 110 mm - Auslass: 103 mm	7
66-80-47421-01	AirV 4-750 Flex Mount, 12V	750 m3/Std.	290 x 257 x 150 mm	Inlet: 150 mm - Auslass: 103 mm	19
66-80-47421-02	AirV 4-750 Flex Mount, 24V	750 m3/Std.	290 x 257 x 150 mm	Inlet: 150 mm - Auslass: 103 mm	11

- CE marked according to following standards:
- ISO 9097:1991 Marine (Small craft, Electrical fans)
 - ISO 8846:1990 (Ignition protection)
 - ISO 10133: 2000 (Electrical systems)
 - EN 55014-1:2006 (2004/108EC)
 - Complies with: N.M.M.A USCG 183.410



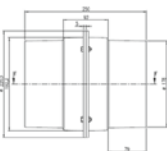
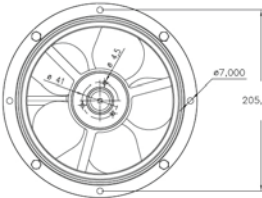
Flange mount



Extraction ventilator, ignition protected

For extracting of heat in engine rooms of diesel- en petrol engines after the engines are stopped and pre-start extraction of petrol vapour when petrol engines are installed. Suitable for bulkhead mounting and for air ducting hose Ø 178 mm.
Item Code 018300 Ventilator 12V-5.5A, 750 m3/hour, static pressure 28 mm H2O

- CE marked according to following standards:
- ISO 9097:1991 Marine (Small craft, Electrical fans)
 - ISO 8846:1990 (Ignition protection)
 - ISO 10133: 2000 (Electrical systems)
 - EN 55014-1:2006 (2004/108EC)
 - Complies with: N.M.M.A USCG 183.410



Stainless Steel Grills for blowers

Stainless Steel Grills

Item Code Z2210840 Ø Outer 110 mm, Ø Cut out 80 mm	Item Code Z2211054 Ø Outer 180 mm, Ø Cut out 150 mm
Item Code Z2211040 Ø Outer 130 mm, Ø Cut out 100 mm	Item Code Z2211640 Ø Outer 180 mm, Ø Cut out 160 mm
Item Code Z2211240 Ø Outer 150 mm, Ø Cut out 120 mm	Item Code Z2212040 Ø Outer 240 mm, Ø Cut out 200 mm
Item Code Z2211044 Ø Outer 180 mm, Ø Cut out 140 mm	



Hose for blower

Ventilation hose (Price per meter/Supply per length of 6 meter)
Item Code 817606 Ø 76mm (Suction side Blower)
Item Code 180300 Ø 80mm (Suction side Blower)
Item Code 180305 Ø 110mm (Suction side Blower)
Item Code 180315 Ø 150mm (Suction side Blower) Item Code 180310 Ø 100 102mm (Pressure side Blower)



Water Lubricated Propeller Shaft Assembly System-1E



- System consists of:**
- Tapered stainless steel propeller shaft with key & propeller nut. L = 1500/2000 mm
 - Neoprene outer bearing with brass shell incorporated in tube
 - Bronze stern tube, one side threaded for outer flange L = 1300/1600mm
 - Adjustable inside mounting flange for stern tube
 - Self-aligning inner bearing with dual lip seal
 - Can easily be made to measure without machining

- Item Code 076125E** Set 1E with propeller shaft
ø25 x 1500 mm, stern tube L= 1300 mm
- Item Code 076126E** Set 1E with propeller shaft
ø25 x 2000 mm, stern tube L= 1600 mm
- Item Code 076130E** Set 1E with propeller shaft
ø30 x 1500 mm, stern tube L= 1300 mm
- Item Code 076131E** Set 1E with propeller shaft
ø30 x 2000 mm, stern tube L= 1600 mm

Water Lubricated Propeller Shaft Assembly System- 1P with glass fiber stern tube



- System consists of:**
- Tapered stainless steel propeller shaft with key & propeller nut. L= 1500/2000 mm
 - Neoprene outer bearing with brass shell incorporated in tube
 - Glass fiber stern tube L= 1200 mm
 - Self-aligning rubber inner bearing with dual lip seal
 - Can easily be made to measure without machining

- Item Code 076125P** Set 1P with propeller shaft ø25 x 1500 mm,
stern tube L= 1200 mm
- Item Code 076130P** Set 1P with propeller shaft ø30 x 1500 mm,
stern tube L= 1200 mm
- Item Code 076135P** Set 1P with propeller shaft ø35 x 2000 mm,
stern tube L= 1200 mm
- Item Code 076140P** Set 1P with propeller shaft ø40 x 2000 mm,
tern tube L= 1200 mm

Neoprene Bearings



Neoprene bearings with brass outer shell

Item Code	ø shaft	ø outer (mm)	length (mm)
408022	22	31,75 (1 1/4")	76,20 (3")
408025	25	38,10 (1 1/2")	101,60 (4")
408030	30	44,45 (1 3/4")	127,00 (5")
408035	35	47,62 (1 7/8")	139,70 (5 1/2")
408040	40	53,97 (2 1/8")	165,10 (6 1/2")
408045	45	60,32 (2 3/8")	177,80 (7")
408050	50	66,67 (2 5/8")	203,20 (8")
408055	55	76,20 (3")	228,60 (9")
408060	60	82,55 (3 1/4")	241,30 (9 1/2")
408065	65	85,72 (3 3/8")	266,70 (10 1/2")
408070	70	95,25 (3 3/4")	279,40 (11")
408075	75	101,60 (4")	304,80 (12")
408080	80	101,60 (4")	304,80 (12")
408090	90	114,30 (4 1/2")	355,60 (14")

Neoprene Bearings



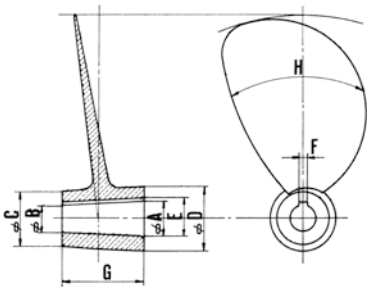
Neoprene bearings with resin outer shell

Item Code	ø shaft	ø outer (mm)	length (mm)
428025	25	38,10 (1 1/2")	101,60 (4")
428030	30	44,45 (1 3/4")	127,00 (5")
428035	35	47,62 (1 7/8")	139,70 (5 1/2")
428040	40	53,97 (2 1/8")	165,10 (6 1/2")
428045	45	60,32 (2 3/8")	177,80 (7")
428050	50	66,67 (2 5/8")	203,20 (8")
428055	55	76,20 (3")	228,60 (9")
428060	60	82,55 (3 1/4")	241,30 (9 1/2")

Propellers

A	B	D	E	C	G	F
20	15.8	35	22.7	30	42	6
22	17.0	39	24.7	37	50	6
25	19.2	42	27.7	37	58	6
28	21.2	45	31.2	40	68	8
30	22.4	52	33.2	45	76	8
32	24.4	52	35.7	45	76	10
35	26.4	57	38.7	50	86	10

A	B	D	E	C	G	F
40	30.4	64	43.7	55	96	12
45	34.4	75	49.2	65	106	14
50	38.5	84	54.2	75	115	14
55	42.0	94	60.2	80	130	16
60	46.0	105	65.3	90	140	18
65	49.5	120	70.3	100	155	18
70	54.5	120	76.3	100	155	20



Propeller Shafts Stainless Steel 316

Item C	ø shaft (mm)	length (mm)
420100	20	1000
420150	20	1500
420200	20	2000
420250	20	2500
425100	25	1000
425150	25	1500
425200	25	2000
425250	25	2500
425300	25	3000
425350	25	3500
430100	30	1000
430150	30	1500
430200	30	2000
430250	30	2500
430300	30	3000
430350	30	3500
435100	35	1000
435150	35	1500
435200	35	2000
435250	35	2500
435300	35	3000
435350	35	3500
435400	35	4000
440150	40	1500

Item C	ø shaft (mm)	length (mm)
440200	40	2000
440250	40	2500
440300	40	3000
440350	40	3500
440400	40	4000
445150	45	1500
445200	45	2000
445250	45	2500
445300	45	3000
445350	45	3500
445400	45	4000
450150	50	1500
450200	50	2000
450250	50	2500
450300	50	3000
450350	50	3500
450400	50	4000
455150	55	1500
455200	55	2000
455250	55	2500
455300	55	3000
455350	55	3500
455400	55	4000
460150	60	1500

Item C	ø shaft (mm)	length (mm)
460200	60	2000
460250	60	2500
460300	60	3000
460350	60	3500
460400	60	4000

All Propeller Shafts are completely machined and come with propeller nut with zinc, key and lock washer.

Standard taper 1:10

ISO 4566

Key Sizes (lxbxh in mm):

As 20mm:	6x6x35
As 25mm:	6x6x50
As 30mm:	8x7x58
As 35mm:	10x8x65
As 40mm:	12x8x76
As 45mm:	14x9x90
As 50mm:	14x9x90
As 55mm:	18x11x115
As 60mm:	18x11x115



Propeller Nuts with Zinc Anode

Propeller nuts with zinc anode, complete with S/S lock washer, for use in seawater

Complete Zinc lock nut			Zinc cone only	Lock washer only	Extra aluminum ring shaped anode for use in fresh- & brackish water
Item Code	ø Shaft (mm)	Thread	Item Code	Item Code	Item Code
465020	20	M12 x 1,5	465120	465220	
465025	25	M16 x 1,5	465125	465225	077325
465030	30	M20 x 1,5	465130	465230	077330
465035	35	M24 x 2	465135	465235	077335
465040	40	M27 x 2	465140	465240	077340
465045	45	M33 x 2	465145	465245	077345
465050	50	M36 x 3	465150	465250	077350
465055	55	M40 x 3	465155	465255	
465060	60	M45 x 3	465160	465260	

Propeller shafts are made of stainless steel AISI 316, always grinded and carefully worked with rectified supporting surfaces.



Inner Bearings with Dual Lip Seal

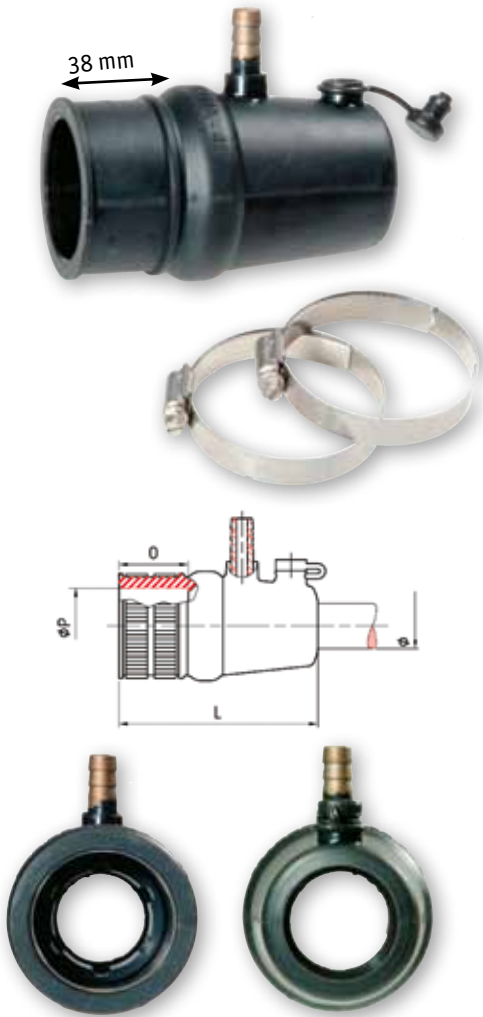


Water lubricated self-aligning bronze inner bearing with rubber sleeve and dual lip seal. Complete with adjustable mounting flange for stern tube. The bearing comes with spare seals.

Item Code 042540 For propeller shaft 25 mm and stern tube 40 mm

Item Code 043045 For propeller shaft 30 mm and stern tube 45 mm

Rubber bearings with dual lip seal



Water lubricated neoprene propeller shaft seal with dual lip seal. Low friction and oil and grease proof. Temperature range lip seals -10° to +80° C. Temperature range bearing housing actually -20° to +140° C. Suitable for bronze en glass fiber shaft logs. Water intake ø 12 mm and separate input for silicone grease (1 x season).

Bearing comes complete with S/S clamps, silicone grease and mounting clip.

Item Code	ShaftØ (mm)	P (mm)	L (mm)	O (mm)
463422	22	39	111	38
463425	25	39	111	38
463425/P	25	42	111	38
463430	30	45	116	38
463430/P	30	48	116	38
463435	35	48	123	38
463435/P	35	54	123	38
463440	40	54	129	38
463440/P	40	60	129	38

Water Scoop Kit



Kit with grated water scoop, ball valve, hose pillar and 1m of water hose with hose clamps

Item Code 013012 Kit with 12 mm hose

Item Code 013015 Kit with 14 mm hose

Item Code 013019 Kit with 19 mm hose

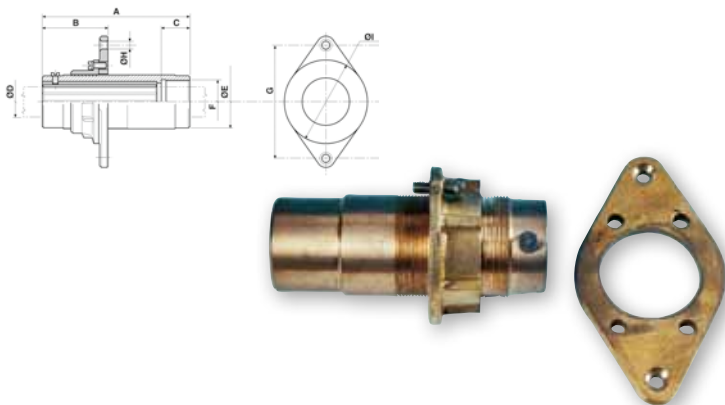
All raw materials are in accordance with UNI EN ISO. Propeller shafts are made of stainless steel AISI 316, always grinded and carefully worked with rectified supporting surfaces.

Stern tubes: High-tensile brass alloy OTS63 – treatment: normalized
Glands and struts: bronze OTS2 – casted

Outer Bearings

Item C	Dimensions (mm)								
	A	B	C	D	E	F	G	H	I
562019	110	45-55	25	20	42	M35x1,5	105	5	65
562020	129	45-75	25	25	48	M40x1,5	110	7	75
562021	153	55-85	20	30	54	M45x1,5	125	7	85
562022	175	65-95	20	35	61	M50x1,5	150	8,5	95
562023	206	70-100	40	40	68	M55x2	165	10,5	110
562024	236	75-105	50	45	74	M60x2	175	10,5	112
562025	266	80-110	60	50	80	M65x2	180	10,5	120
562027	308	80-110	60	60	96	M80x2	175	10,5	140

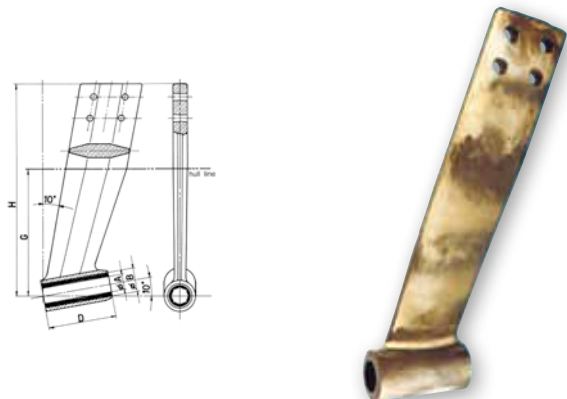
Bronze outer bearings with flange and nut and inner thread for stern tube.



Propeller Shaft Struts

Bronze shaft struts with neoprene bearing
For polyester and wood-epoxy boats

Item C	Dimensions (mm)				
	ø Shaft	B± W0,05	D	G	H
468025	25	38,10	102	220	400
468030	30	44,45	130	220	400
468035	35	47,62	140	260	450
468040	40	53,97	165	280	450
468045	45	60,32	180	330	550
468050	50	66,67	205	350	550
468060	60	82,55	255	400	670



Brass Stern tubes

Item Code	ø Shaft	Dimensions (mm)	Item Code	ø Shaft	Dimensions (mm)
OT6325	25	40x34	OT6350	50	65x
OT6330	30	45x39	OT6360	60	80x
OT6335	35	50x43			
OT6340	40	55x45			
OT6345	45	60x50			

Thread on tube is optional! Price per meter.



Adjustable Mounting Flanges for Stern Tube

Item Code 052025	Flange for tube ø 40mm (as ø 25mm)	Item Code 052035	Flange for tube ø 50mm (as ø 35mm)
Item Code 052030	Flange for tube ø 45mm (as ø 30mm)	Item Code 052040	Flange for tube ø 55mm (as ø 40mm)



Intermediate Neoprene Shaft Bearings with Internal Thread

Item Code 040025	for shaft ø 25 mm (Thread M40 x 1,5)	Item Code 040040	for shaft ø 40 mm (Thread M55 x 2)
Item Code 040030	for shaft ø 30 mm (Thread M45 x 1,5)	Item Code 040045	for shaft ø 45 mm (Thread M60 x 2)
Item Code 040035	for shaft ø 35 mm (Thread M50 x 1,5)	Item Code 040050	for shaft ø 50 mm (Thread M65 x 2)



Centaflex M-127

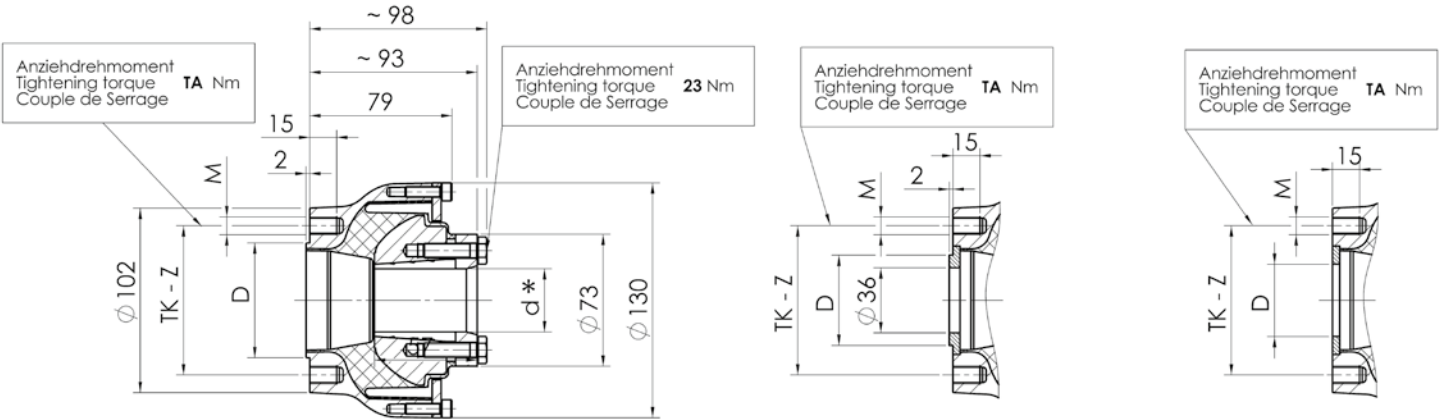


Centaflex Flexible Marine Couplings M-127

Highly flexible couplings for mounting between gear and propeller shaft providing a dramatic reduction of noise and vibration. Due to the large volume of rubber used a very smooth transmission of torque and propeller thrust is achieved. The noise level will drop up to 5dBA, meaning a reduction of to one-third. The couplings have a fail-save device which ensures that power can continue to be transmitted even if the rubber fails. All couplings are fastened to the plain cylindrical propeller shaft by means of a securely dimensioned clamping hub. The couplings are electrically insulating and therefore give protection from electrolysis damage.

Centaflex-M-127
Max. Propeller Shaft

Max. rpm	Torque (Nm)	Commercial Pleasure	Max. allow. angular misalignment
4500	175	250	2°



Item code	Type	D	M	Tk	Z	Geartype (TKN > Tgear output)	TA (Nm)
088001	M-127-K1.0-*	63,5	M10	82,5	4x90°	4"-Flange, HBW, SOM, Velvet, ZF-BW7-A+C, BW12, Technodrive	45
088001 YANMAR	M-127-K2.2-*	50	M10	78	4x90°	Kanzaki KC30, KC100, Yanmar 3YM30 (3GM30, 3HM), KM2P	45

Standard bores M-127 for propeller shafts: d*= 20, 25, 30, 35mm, 1", 1-1/2"

When ordering a flexible coupling you need to specify the right clamping hub for your propeller shaft diameter: **088001Kxx**.
 For example: Technodrive gearbox TMC40M, with a propeller shaft of Ø25: 088001 (M-127) plus **088001K25** (clamping hub).
When ordering, please state brand, type and ratio of you gearbox, hole pitch and centering ring of the output flange and the propeller shaft diameter!

Centaflex M-160

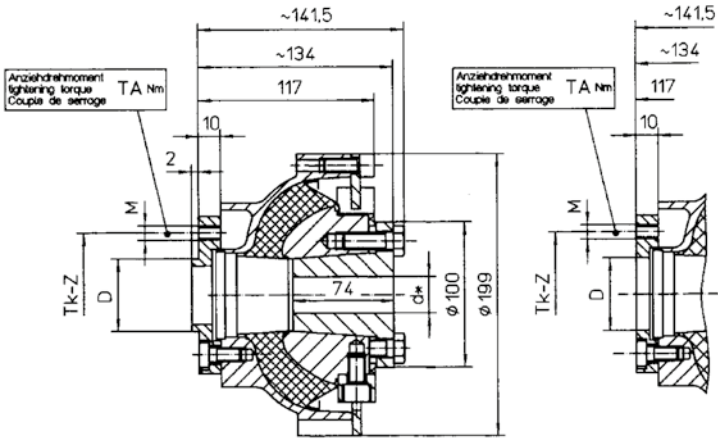
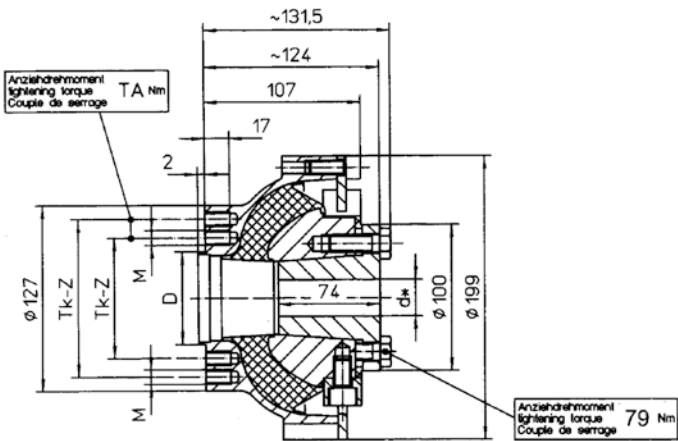
Centaflex Flexible Marine Couplings M-160

Highly flexible couplings for mounting between gear and propeller shaft providing a dramatic reduction of noise and vibration. Due to the large volume of rubber used a very smooth transmission of torque and propeller thrust is achieved. The noise level will drop up to 5dBA, meaning a reduction of to onethird. The couplings have a fail-safe device which ensures that power can continue to be transmitted even if the rubber fails. All couplings are fastened to the plain cylindrical propeller shaft by means of a securely dimensioned clamping hub. The couplings are electrically insulating and therefore give protection from electrolysis damage.



Centaflex-M-160
Max. Propeller Shaft

Max. rpm	Torque (Nm)	Commercial Pleasure	Max. allow. angular misalignment
3500	350	500	2°

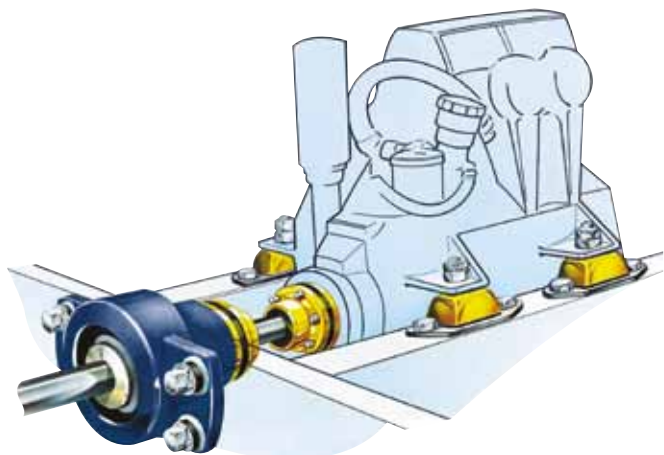


Item code	Type	D	M	Tk	Z	Geartype (TKN > Tgear output)	TA (Nm)
088002	M-160-K1.0-*	63,5	M10	82,5+108	4x90°	4"-5"-Flange, HBW, SOM, Velvet, ZF-BW7-A+C, BW12, Technodrive	45
088002YANMAR	M-160-K2.2-*	50	M10	78	4x90°	Kanzaki KC30, KC100,Yanmar 3GM30, 3HM	45
088002/YANM23	M-160-K2.3*	65	M10	100	4x90°	Kanzaki KC180	45
Standard bores M-160 for propeller shafts : d*=25, 30, 35, 40mm, 1", 1-1/4", 1-1/2"							

When ordering a flexible coupling you need to specify the right clamping hub for your propeller shaft diameter: **088002Kxx**.
For example: Technodrive gearbox TMC60P, with a propeller shaft of Ø30: 088002 (M-160) plus **088002K30** (clamping hub).
When ordering, please state brand, type and ratio of you gearbox, hole pitch and centering ring of the output flange and the propeller shaft diameter!

CV-drive Shaft systems

a-flex



Features:

- A propulsion system which reduces noise and vibrations up to 90%
- Simplifies engine/gearbox installations significantly
- Alignment procedure is very easily accomplished due to self-aligning propeller shaft clamp hub in thrust bearing
- Can handle angular misalignments of up to $2 \times 8^\circ$
- CV drive shaft of variable length with two true plunging Constant Velocity joints working independently at any angle
- Solid thrust bearing transfers massive propulsion thrusts directly to the hull and not to the engine thus providing the possibility of softer flexible engine mounts
- Thrust bearing coupling is fastened to the plain cylindrical propeller shaft by means of a securely dimensioned clamping hub

A complete system consists of: CV-Drive Shaft, Thrust Bearing and Gearbox Adapter according to measure as well as bolts, nuts and rings, while the kit price is fixed.

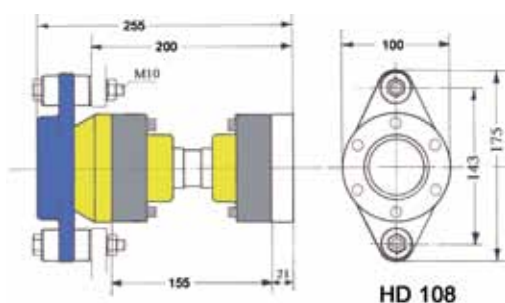
When ordering, please state engine power and max. rpm, brand of gearbox, type and ratio, hole centre and centering ring of the output flange and the propeller shaft diameter.

Note: The given max. values for torque and propeller thrust are meant for pleasure craft with less than 100 hours at full load. For commercial applications 60-80% of the given values should be considered as max. load.

Max. installation angle is related to propeller shaft rpm:

- 8° angle per joint => max 1200 rpm
- 6° angle per joint => max 1500 rpm
- 5° angle per joint => max 2000 rpm

Type HD-108



HD 108

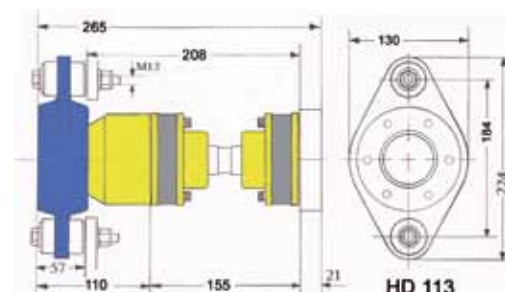
Suitable for engine powers up to ± 50 HP

- Max. propeller thrust 4300 N
- Max. shaft torque 485 Nm
- Max. shaft rpm: 5000
- Length CV-shaft: 155 ± 25 mm
- Propeller shaft diameters: 25
- Propeller shaft depth in thrust bearing: 60mm

Item Code 099500

Set HD-108 with thrust bearing, CV-shaft and adapter flange

Type HD-113



HD 113

Suitable for engine powers up to ± 80 HP

- Max. propeller thrust 10500 N
- Max. shaft torque 690 Nm
- Max. shaft rpm: 5000 omw./min-1
- Length CV-shaft: 155 ± 25 mm
- Propeller shaft diameters: 30, 35
- Propeller shaft depth in thrust bearing: 90mm

Item Code 099505

Set HD-113 with thrust bearing, CV-shaft and adapter flange

Type HD-115L

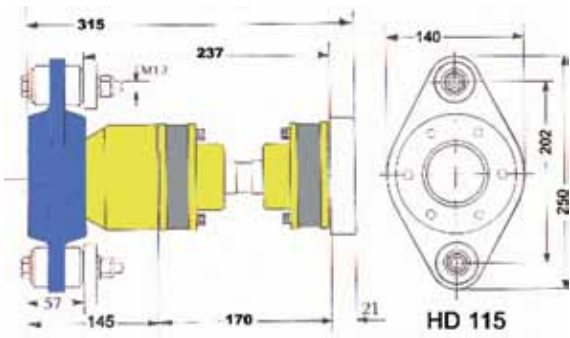
a-flex

Suitable for engine powers up to ± 90 HP

- Max. propeller thrust 12500 N
- Max. shaft torque 800 Nm
- Max. shaft rpm: 5000
- Length CV-shaft: 170 ± 25 mm
- Propeller shaft diameters: 35, 40,
- Full planing vessels: up to 135 HP
- Propeller shaft depth in thrust bearing: 110mm

Item Code 099510

Set HD-115L with thrust bearing, CV-shaft and adapter flange



Type HD-125

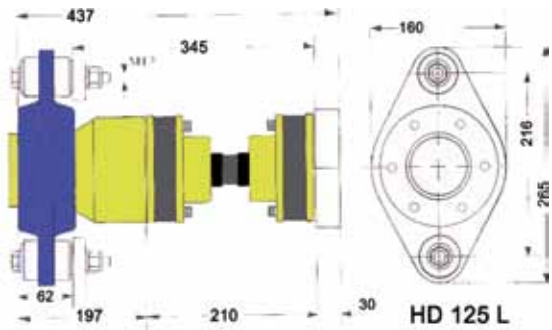
a-flex

Suitable for engine powers up to ± 170 HP

- Max. propeller thrust 18000 N
- Max. shaft torque 1100 Nm
- Max. shaft rpm: 4000
- Length CV-shaft: 210 ± 40 mm
- Propeller shaft diameters: 35, 40, 45
- Full planing vessels: up to 220 HP

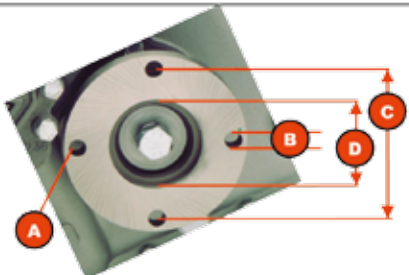
Item Code 099515

Set HD-125 with thrust bearing, CV-shaft and adapter flange

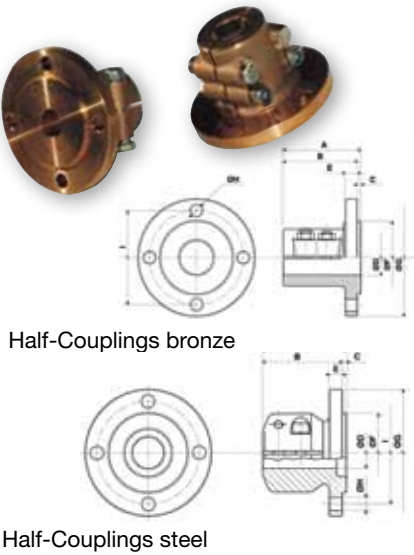


Gearbox Adapters

a-flex

a-flex Selection Table Gearbox Adapters		Flange outer Ø	Flange outer Ø	A: No. of holes	B: Hole diameter	C: Hole pitch	D: Centering ring	CV-joint model			
Gearbox brand:		(")	(mm)		(mm)	(mm)	(mm)	HD108	HD113	HD115	HD125
Blank adapter								09979 0	09979 0	09975 7	09976 1
Kanzaki		4	101,6 0	4	10	78	50	09974 6	09974 6		
Kanzaki		5	127,0 0	4	10	100	65	09975 0	09975 0	09974 7	
		Replacement clamps for thrust bearings:									
		Shaft diameter 25mm						09979 1			
		Shaft diameter 30mm						09980 3	09979 3		
		Shaft diameter 35mm							09979 8	09979 8	09979 7*
		Shaft diameter 38mm							09979 2	09979 2	
		Shaft diameter 40mm							09979 4	09979 4	09979 7*
		Shaft diameter 45mm								09979 6	09979 7*
		Shaft diameter 50mm								09979 7	09979 7

Bronze & Steel Half-Couplings with centering ring



Item C	A	B	C	D	E	F	G	H	I	Material	Ref.
518004	68	65	3	20	10	63,5	102	10,5	82,5	Bronze	
518005	68	65	3	25	10	63,5	102	10,5	82,5	Bronze	
518006	68	65	3	30	10	63,5	102	10,5	82,5	Bronze	
518007	68	85	3	35	11	63,5	127	11,5	107,95	Bronze	
518007/30	68	85	3	30	11	63,5	127	11,5	107,95	Steel	
518008	68	85	3	40	11	63,5	127	11,5	107,95	Bronze	
518009	68	65	3	25	10,5	63,5	102	10,5	82,5	Steel	
5180095	68	65	3	30	10,5	63,5	102	10,5	82,5	Steel	
518011	93	90	3	35	11,5	63,5	127	11,5	107,95	Steel	
5180115	120	117	3	35	11,8	63,5	102	10,5	82,5	Steel	
518009Y	70	67	3	25	10,5	50	100	10,5	78	Steel	
518010Y	70	67	3	30	10,5	50	100	10,5	78	Steel	
518011Y	93	90	3	35	11,8	63,5	127	12,5	107,95	Steel	
518012Y	93	90	3	40	11,8	63,5	127	12,5	107,95	Steel	

Steel Half-Couplings



Item Code 522125	Ø 25 mm, 100 x 78 x 50 mm - voor KM2P-1/KM35A(P)
Item Code 522130	Ø 30 mm, 100 x 78 x 50 mm - voor KM2P-1/KM35A(P)
Item Code 522230	Ø 30 mm, 120 x 100 x 65 mm - voor KM(H)4A
Item Code 522235	Ø 35 mm, 120 x 100 x 65 mm - voor KM(H)4A
Item Code 522330	Ø 30 mm, 102 x 82,5 x 63,5 mm - voor ZF25(A)
Item Code 522335	Ø 35 mm, 102 x 82,5 x 63,5 mm - voor ZF25(A)





2-Blade Bronze Folding Propellers for Saildrive or Propeller Shaft



2-Blade Folding Propellers for Saildrive

Diam.	Pitch:
13" =>	8", 9", 10" of 11"
14" =>	9", 10", 11", of 12"
15" =>	9", 10", 11", 12" of 13"
16" =>	10", 11", 12", 13" of 14"
17" =>	11", 12", 13", 14" of 15"
18" =>	13", 14", 15" of 16"
20" =>	14", 15", 16" of 17"

SD20: Fixing Nut M16 x 2
SD40/SD50: Fixing Nut M20 x 2

2-Blade Folding Propellers for Shaft Ø 25, 30, 35, 40 mm

Diam.	Pitch:
13" =>	8", 9", 10" of 11"
14" =>	9", 10", 11", of 12"
15" =>	9", 10", 11", 12" of 13"
16" =>	10", 11", 12", 13" of 14"
17" =>	11", 12", 13", 14" of 15"
18" =>	13", 14", 15" of 16"
20" =>	14", 15", 16" of 17"

3-Blade Bronze Folding Propellers for Saildrive or Propeller Shaft



3-Blade Folding Propellers for Saildrive

Diam.	Pitch:
15" =>	10", 11", 12" of 13"
16" =>	10", 11", 12", 13" of 14"
17" =>	11", 12", 13", 14" of 15"
18" =>	12", 13", 14", 15" of 16"
20" =>	13", 14", 15", 16" of 17"

SD20: Fixing Nut M16 x 2
SD40/SD50: Fixing Nut M20 x 2

3-Blade Folding Propellers for Shaft Ø 25, 30, 35, 40 mm

Diam.	Pitch:
15" =>	10", 11", 12" of 13"
16" =>	10", 11", 12", 13" of 14"
17" =>	11", 12", 13", 14" of 15"
18" =>	12", 13", 14", 15" of 16"
20" =>	13", 14", 15", 16" of 17"
22" =>	14", 15", 16", 17" of 18"
24" =>	15", 16", 17", 18", 19" of 20"

Flexofold-spare parts



- Item Code 070173

Pivot pin Ø14 mm for 2-blade folding propeller
- Item Code 070174

Pivot pin Ø16 mm for 3-blade folding propeller
- Item Code 070167

Pivot pin-locking screw M8x25
- Item Code 070166

Pivot pin-locking screw M8x30
- Item Code 070175

Kit of 2 zinc anodes with mounting screws for 2-blade folding propeller
- Item Code 070170

Zinc anode (1x) with mounting screw for 3-blade folding propeller
- Item Code 070165

Shock absorber for 2 & 3-blade folding propeller

Working tolerance: ISO 484 – class 1o

Mechanical characteristics of our alloys:

OTMAN (Cu-Zn):

- Mechanical Resistance: Rm ≥ 535 N/mm2
- Yielding: S ≥ 220 N/mm2
- Elongation: As ≥ 25%

2-Bladed folding propellers for shaft

2-Bladed manganese bronze folding propellers

Available in diameters from 12” up to 20”. Cone page 21.
Standard-Stock-Folding-Propellers are:

Item Code	Item Code	Item Code	Item Code
K110825R	K130925R	K150925R	K171330R
K120825R	K131025R	K151125R	K171430R
K120925R	K131125R	K151325R	K171530R
K121025R	K140925R	K161225R	K181330R
K130725R	K141025R	K171230R	K181430R
K130825R	K141125R	K171325R	K181530R

How to order: K-14-09-25-R

K	14”	09”	25	R
2 bladfolding	Diameter	Pitch	Ø Shaft	Rotation



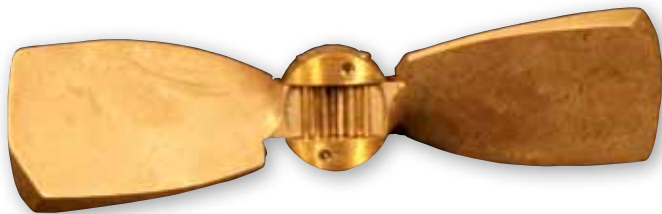
2-Bladed folding propellers for Yanmar Sail Drive SD20, SD40 and SD50

The sense of rotation for these propellers is: LEFT.
2-Bladed manganese bronze folding propellers.
Available in diameters from 14” tot 16”.
Standard-Stock-Folding-Propellers are:

Item Code	Item Code	Item Code	Item Code
K1308SDL	K1511SDL	K1610SDL	K1711SDL
K1408SDL	K1512SDL	K1611SDL	K1712SDL
K1409SDL	K1513SDL	K1612SDL	K1713SDL
K1509SDL	K1311SDL	K1613SDL	
K1510SDL	K1609SDL	K1710SDL	

How to order: K-14-09-SD-R

K	14”	09”	SD	L
2 bladfolding	Diameter	Pitch	Shaft	Rotation



Working tolerance: ISO 484 – class 1o

Mechanical characteristics of the aluminum/magnesium alloy:

- Mechanical Resistance: R = 210 N/mm2
- Yielding: S = 100 N/mm2
- Elongation: A5 =12%

2-Blade Left Handed Aluminum Propellers Saildrive SD20, SD40 and SD50



For Saildrive. Available in diameters from 14” up to 19”. Standard-Stock-Propellers are:

Item Code	Item Code	Item Code	Item Code
21408SDL-AL	21510SDL-AL	21612SDL-AL	21814SDL-AL
21409SDL-AL	21511SDL-AL	21613SDL-AL	21810SDL-AL
21410SDL-AL	21513SDL-AL	21712SDL-AL	21811SDL-AL
21411SDL-AL	21609SDL-AL	21713SDL-AL	21813SDL-AL
21509SDL-AL	21611SDL-AL	21714SDL-AL	

How to order: 2-14-09-SD-L-AL

2	14”	09”	SD	L	AL
No. of blades	Diameter	Pitch	Saildrive	Rotation	Aluminium

3-Blade Left Handed Aluminum Propellers Saildrive SD20, SD40 and SD50



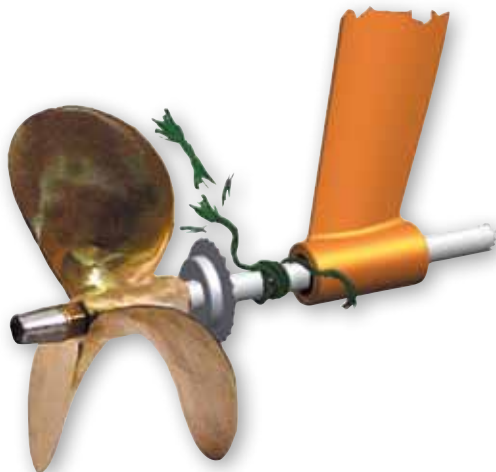
Available in diameters from 13” up to 18”. Standard-Stock-Propellers are:

Item Code	Item Code	Item Code	Item Code
31309SDL-AL	31511SDL-AL	31613SDL-AL	31816SDL-AL
31409SDL-AL	31512SDL-AL	31712SDL-AL	21810SDL-AL
31410SDL-AL	31610SDL-AL	31713SDL-AL	21811SDL-AL
31411SDL-AL	31611SDL-AL	31715SDL-AL	21813SDL-AL
31412SDL-AL	31612SDL-AL	31716SDL-AL	

How to order: 3-16-10-SD-L-AL

3	16”	10”	SD	L	AL
No. of blades	Diameter	Pitch	Saildrive	Rotation	Aluminium

Rope Cutters



Rope Cutters for Propeller Shafts and Saildrives

Cuts nylon ropes, fishing nets, Kevlar® and thin steel cables (max.7mm). Made of high grade stainless steel AISI-316L. Sharp as a razor! Very easy installation.

Rope Cutters for Propeller Shafts:

Item Code	ø Shaft	Diam.	Width
22.40022022	22 mm	80 mm	17 mm
22.40025022	25 mm	80 mm	17 mm
22.40030022	30 mm	80 mm	17 mm
22.40035022	35 mm	100 mm	17 mm
22.40040022	40 mm	100 mm	17 mm
22.40045022	45 mm	120 mm	17 mm
22.40050022	50 mm	120 mm	17 mm
22.40060022	60 mm	150 mm	30 mm

Cone dimensions – 1:10 – are according ISO 4566

Mechanical characteristics of our alloys:

- OTMAN (Cu-Zn):
- Mechanical Resistance: $R_m \geq 510 \text{ N/mm}^2$
- Yielding: $R_p 0.2\% \geq 200 \text{ N/mm}^2$
- Elongation: $A_{sd} \geq 22\%$

Propellers

2-Bladed manganese bronze boat propellers type K11.

Available in diameters from 12" up to 21"

Standard-Stock-Propellers are:

Item Code

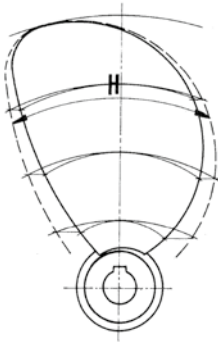
- 2120925R
- 2131025R
- 2151125R
- 2161125R
- 2161325R
- 2161425R
- 2181330R

How to order: 2-12-09-25-R

2	12"	09"	25	R
No. of blades	Diameter	Pitch	Ø Shaft	Rotation



K 11 $\frac{Fa/F}{AS/AD} = 0,3432$



$H = 0,376 D$
K 11



Propellers

3-Bladed manganese bronze boat propellers type E13

Available in diameters from 12" up to 30"

Standard-Stock-Propellers are:

Item Code

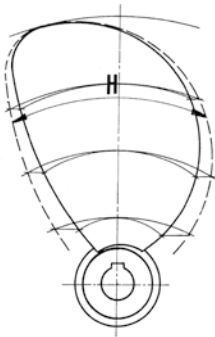
- 3120825R
- 3130925R
- 3141025R
- 3141125R
- 3151225R
- 3151325R
- 3161325R
- 3171330R
- 3171530R
- 3181235R
- 3181330R
- 3181530R
- 3191335R
- 3191430R
- 3191435R
- 3201435R
- 3211430R
- 3221430R
- 3221435R
- 3221440R
- 3231440R

How to order: 3-12-08-25-R

3	12"	08"	25	R
No. of blades	Diameter	Pitch	Ø Shaft	Rotation



E 13 $\frac{Fa/F}{AS/AD} = 0,5150$



$H = 0,376 D$
E 13



Propellers

4-Bladed manganese bronze boat propellers type B6

Available in diameters from 16" up to 30"

Standard-Stock-Propellers are:

Item C

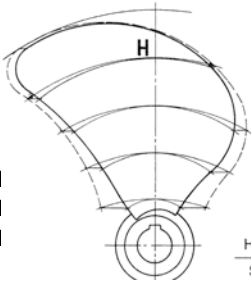
- 4161330R
- 4161335R
- 4161430R
- 4161435R
- 4171230R
- 4171235R
- 4171330R
- 4171335R
- 4171530R
- 4181230R
- 4181235R
- 4181335R
- 4181435R
- 4191535R
- 4191635R
- 4201435R
- 4211430R
- 4211435R
- 4211535R
- 4211540R
- 4211635I
- 4211640I
- 4231540I

How to order: 4-17-12-30-R

4	17"	12"	30	R
No. of blades	Diameter	Pitch	Ø Shaft	Rotation



B 6 $\frac{Fa/F}{AS/AD} = 0,5689$



$H = 0,413 D$
S.8

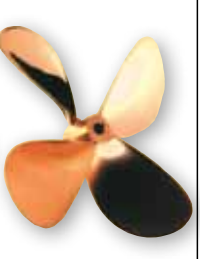
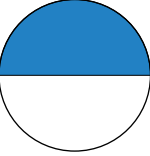
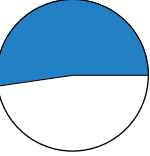
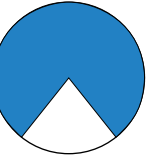
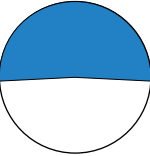
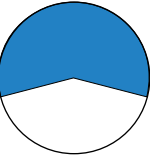


Cone dimensions – 1:10 – are according ISO 4566

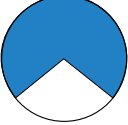
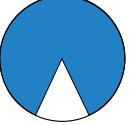
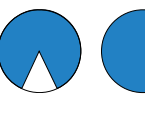
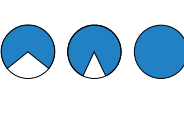
Mechanical characteristics of our alloys:

• OTMAN (Cu-Zn):				• MIBRAL (Cu-Al):			
• Mechanical Resistance:	Rm	≥ 510 N/mm2		• Mechanical Resistance:	Rm	≥ 650 N/mm2	
• Yielding:	Rp 0.2%	≥ 200 N/mm2		• Yielding:	Rp 0.2%	≥ 245 N/mm2	
• Elongation:	Asd	≥ 22%		• Elongation:	Asd	≥ 16%	

Propellers for Pleasure Crafts

					
Model	E-13	C-7	D-10	B-6	B-7
					
FA/F	0.515	0.547	0.75	0.568	0.687
P/D Max	0,7	1,2	1,5	0,7	0,7
Class	ISO 2°	ISO 1°	ISO 1°	ISO 2°	ISO 2°
Alloy	OTMAN	OTMAN	OTMAN	OTMAN	OTMAN
Application	DISPLACEMENT	SEMI PLANING PLANING	PLANING	DISPLACEMENT	SEMI PLANING
Speed	8/16 kn	17/30 kn	25/35 kn	9/15 kn	15/22 kn

Below given propellers are a selection of our total range. A number of models are standard stock or available on short notice. The eventual availability will be decided by the required combination of propeller diameter, pitch, shaft diameter, taper and sense of rotation.

				
Model	S-8	S8-90	S-9	S-5
				
FA/F	0.75	0.90	0.9 1.0	0.75 0.9 1.0
P/D Max	1,5	1,5	1,5	0,9
Class	ISO 1°	ISO 1°	ISO 1°	ISO 1°
Alloy	OTMAN	OTMAN	OTMAN MIBRAL	OTMAN MIBRAL
Application	SEMI PLANING PLANING	PLANING	PLANING	DISPLACEMENT BOATS SEMI PLANING
Speed	18/30 kn	25/35 kn	20/30 kn	10/30 kn

Electrical Oil Extraction Pump

Capacity at 20°C with oil type SAE-20:
Ø 14 mm – 480 litre/h
Ø 8 mm – 75 litre/h
Self priming up to 1m
Item Code 06132 12V / 10A
Item Code 06133 24V / 5A
Item Code 06130 Slangkit



Oil change pump F3B-19 - "Oil Change"

The Johnson F3B-19 Oil Change Pump is a reversible rubber impeller pump with integrated quick reversing switch. The pump is designed to remove old oil from the engine, and then with the integral reversing switch., the flow direction can be changed to pump a measured amount of new oil back into the engine.

- Item Code 66-10-24760-01**
- Item Code 66-10-24760-02**
- Item Code 66-09-843S-9**
- F3B19 Oil change, 12V
- F3B19 Oil change, 24V
- Replacement Impeller



Oil Extraction Pumps

Can be mounted on the engine. Extra heavy, brass execution

- Item Code 001125** Capacity 52cc
- Item Code 001127** Capacity 100cc
- Item Code P0280000** Capacity 80cc



Battery Terminal Sets



Item Code 078480 60 x 37 mm (L x B)

Battery Terminal Sets



Item Code 078481 With Plastic Cover 65 x 45 x 24 mm (L x W x H)

Battery Main Switches



210086210084/N210084/C

Item Code 210086 120 A continuous, CE-approval, plastic, double pole

Item Code 210084/N 100A continuous, plastic

Item Code 210084/C 140A continuous, chromed brass/plastic

Battery Selector Switch



Item Code L0670002 Battery main switch. Continuous 180A.

With plastic built-in unit and cover. Ø70mm

Battery Selector Switches



Item Code 078260(A)175 A

Item Code 000600(B)*220 A

* Switchable with running engine

Battery Switches & Selector Switch



Item Code 041460 275A – Battery Switch, ON/OFF

275A: Continuous - 455A: 5 min - 1250A: 10 sec., 12/24V, Dims. 68x 68x76 mm. Max 48V

2x10mm Tin plated copper studs and nuts

Also suitable for recess mount: cut out size Ø52 mm

Removable knob

Item Code 041464 600A – Battery Switch, ON/OFF

600A: Continuous - 800A: 5 min - 2500A: 10 sec., 12/24V, Dims.102x102x90 mm. Max. 48V

2x12mm Tin plated copper studs and nuts

Also suitable for recess mount: cut out size Ø85 mm

Item Code 041462 350A – Battery Selector Switch, 1-2-Both-OFF

350A: Continuous - 500A: 5 min - 1500A: 10 sec., 12/24V, Dims.102x102x90 mm. Max 48V

3x10mm Tin plated copper studs and nuts

Also suitable for recess mount: cut out size Ø85 mm

Contour Lock system with removable plates for connection from all sides! Selector switch can also be padlocked.

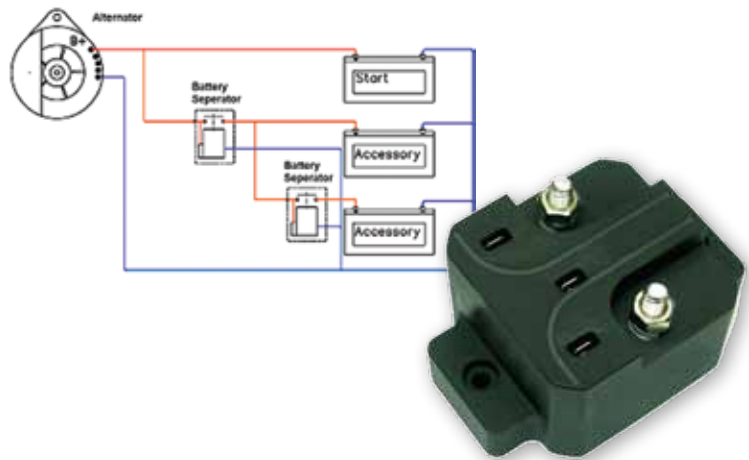
Battery Separators

BS/BSW intelligent battery separators: a new alternative for diode battery isolators

These battery separators are microprocessor controlled high power mechanical switches. They can automatically and delayed separate batteries from each other if the voltage drops below a certain value. If the voltage of one of the batteries rises above a certain value, the BS/BSW parallels the auxiliary batteries. These battery separators can also be used as a voltage dependent switch: sometimes it is desirable that an extra input voltage only is available if the vessel (dynamo/battery charger) is running.

Features

- No loss of voltage.
- The system voltage is automatically set on 12V or 24V.
- Prioritises the starter battery; the starter battery is connected to the dynamo, other batteries can be connected to the starter battery by an intelligent battery separator.
- Unique bipolar--switching: if a charger is connected to the second battery and the battery reaches 13.2V(26.4V) for at least 7 seconds, the starter battery will be charged also.
- Because the switching process takes place without signal lines of the vehicle/vessel, the BS/BSW relays can be easily be connected, even in modern vehicles with CAN--BUS systems.



Item Code	056150	056152	056154
BS Battery Separator	BS100	BSW160- IP67	BSW250-IP67
Continuous Current (A)	100	160	250
Continuous Current (A)	13,2 / 26,4	13,2 /26,4	13,2 / 26,4
Disconnect Voltage	12,8 / 25,6	12,8 /25,6	12,8 / 25,6
Standby Current	<3 mA	<3 mA	<5 mA
Protection Class	IP54	IP54	IP67
Weight (kg)	0,11	0,47	0,42
Dimensions HxWxL (mm)	46x46x80	108x72x58	90x65x60

With a **Diode Block (DB)** more batteries can be loaded simultaneously with one dynamo. During discharging the batteries are separated by diodes. if e.g. a light battery is discharging, the starter battery will remain loaded. Thanks to the application of efficient diodes the loss of voltage is very low (0.3V). **Thus the loss of voltage over the charging current dispensing diodes will be compensated.** Does not work with 60, 150 and 180 Alternator.

Item Code	056173	056174	056175	056176
Diode Battery Isolator	DB120-2C	DB120-3C	DB160-2C	DB160-3C
Maximum Charge Current (A)	100	100	130	130
Maximum Alternator Current (A)	120	120	160	160
Number of Batteries	2	3	2	3
Connection	M8	M8	M8	M8
Connection Compensation Diode	M4	M4	M4	M4
Weight (kg)	0,8	1,2	1,2	1,5
Dimensions HxWxL (mm)	60x120x100	60x120x150	60x120x150	60x120x200



Battery Combining Schottky Diode (BCD)

The BCD is used to supply mission-critical equipment with a guaranteed continuously voltage, e.g. an electronic motor control system. With a BCD two or more DC power sources can be used parallel to supply critical load. If one power source goes out, the critical voltage load will not be interrupted.

Item Code	Model	IN V	OUT V	Current A	Number of Batteries IN	Weight Kg.	Dimensions LxWxH(mm)
056160	BCD 702	12/24	12/24	70	2	0,6	130
056161	BCD 703	12/24	12/24	70	2	0,8	160



Battery watch



056180

Battery Watch

Smart piece of equipment which monitors the status of the battery and displays it in an intelligent way.

Item Code 056180 BW--02 Battery Watch Monitor
Water resistant top, Ø 35 mm (M32/T=20mm), weight 40 gr.

If the battery is connected to a voltage between 7 and 32V, it will detect the battery voltage before displaying the status of the battery.
Automatic program LED's 12V:
voltage > 14,8 Volt (default): Buzzer and walking light
voltage > 13,3 Volt: GREEN/YELLOW/RED (walking light)
voltage > 12,4 Volt: GREEN
voltage > 11,6 Volt: GREEN/YELLOW
voltage > 11,1 Volt: YELLOW
voltage > 10,9 Volt: YELLOW/ RED
voltage > 10,5 Volt: RED
voltage < 10,5 Volt (default): alarm (LED and Buzzer)

Battery watch



056181



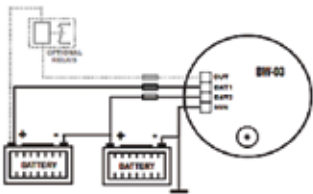
056182

Item Code 056181 BW-03 Battery Watch Monitor - Green
Item Code 056182 BW-03 Battery Watch Monitor - Red
The BW03 is a smart battery meter that can measure and display the voltage of one or more batteries. It can also generate an alarm from under--and over-- voltage difference.

- Features**
- Water-resistant front site, Ø60 mm (M55/T=20 mm), Weight 70 gr.
 - low mounting depth
 - several battery monitoring
 - programmable
 - very low power consumption
 - Switched alarm output
 - auto voltage detection
 - Power--save function
 - easy installation

Connecting:
A total of 5 different battery configurations are possible on the BW03:

1. 1x12V
2. 1x24V
3. 2x12V
4. 2x24V
5. 1x12V & 1x24V



Battery watch



56185

Item Code 056185 Universal Battery Alarm with buzzer and alarm contact Ø45 mm, H=20 mm

The UBA has 3 main programs with buzzer and alarm contact. The first two programs to "remember" the consumer to recharge the battery from the electric vehicle. The third program is meant as an universal under voltage alarm for 12V or 24V systems.

START-/STOP system for generator or charger:
Through the alarm output from the UBA, it is possible to connect for example a generator or battery charger. In case of under voltage, it will start and if the battery is full, stopped.

Smartfuse: Battery Guard and Fuse:

Smartfuse: Battery Guard and Fuse:

The Smartfuse is a battery guard + fuse which can detect under voltage, over voltage, over current (overload) and then disconnect the circuit. The voltage- and current values are programmable. The Smartfuse can also be used with a (little) remote switch as a Battery (Main) Switch. Instead of three different individual products, you have with one Smartfuse a reduction in costs in purchasing and installation time. After shutdown (Smartfuse) the consumers by under voltage from the battery (under voltage shutdown), the Smartfuse will let charge current through to the battery, e.g. with a combined converter (charger/converter/AC transfer switch combination), so that the battery can be recharged. Only when an “on” voltage has been reached, it is possible to get again current/power from the battery.

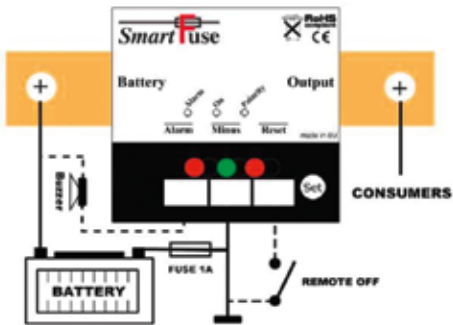
Item Code 056195 Smartfuse without mounting plate
Item Code 056196 Smartfuse with mounting plate

Features:

- safely and without sparking connection at the battery
- after overload/over current shutdown => activation with a push button
- prevents deep discharge of the battery => four under voltage programs
- charging the battery is possible in case of under voltage shutdown, disconnection of the users
- alarm contact e.g. of the buzzer or light signal, start of aggregate or battery charger
- over voltage shutdown / security (>16V@12V mode, >32V@24V mode)
- high overload / start- up current (peak power) resist - Smartfuse is fast, common fuse is slow by overload
- no sticking or burning in of contacts possible, likewise no sparks or oxidation of the contacts, as with large DC currents, by use of relays happens.
- automatic voltage detection: 12V or 24V
- temperature protection
- watertight IP67 housing - reverse polarity protection of plus / minus battery
- Ompoolbeveiliging



Item Code 056196



Smart Fuse	Auto Detec	Shutdown Current (6 programs)	Under--/Upper Voltage Threshold (4 programs)	Peak Current	Weight	Dimensions DxWxH
	12 / 24V	75- 100- 125- 200- 150- 250A	12V Modus: 9,5-11,3V/12,8V 24V Modus: 19-22,6V/25,6V	500A@5sec	0,5 (0,7) Kg	52x115x46 (100x115x52)mm

Battery Guard

BG-40 Battery Guard

12/24V, maximum load 40-45A, peak current 120A. Size 80x60x40 mm
Prevent deep discharging of you battery. Disconnect load before it is not possible to start you vehicle anymore. The Battery Guard is a programmable battery watch, which disconnects the battery from non-essential loads before it is completely discharged or before it has insufficient power (programmable) left to crank the engine.

Item Code 056202



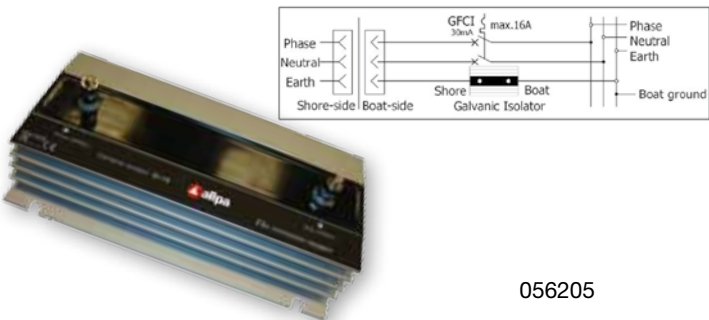
056202

Corrosion Stopper

GI Corrosive Stopper. the alternative for a isolation transformer!

Peak 1600A/20ms, 100% waterproof (IP67). Size: 55x120x200mm, weight 1kg. In case a ship has been connected to the shore electrically corrosion can occur. To reduce this a corrosive stopper can be placed. This galvanic isolator ensures a threshold voltage of 1 Volt. Herewith the voltage difference will be lifted and corrosion of your ship will be reduced.

Item Code 056205



056205

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