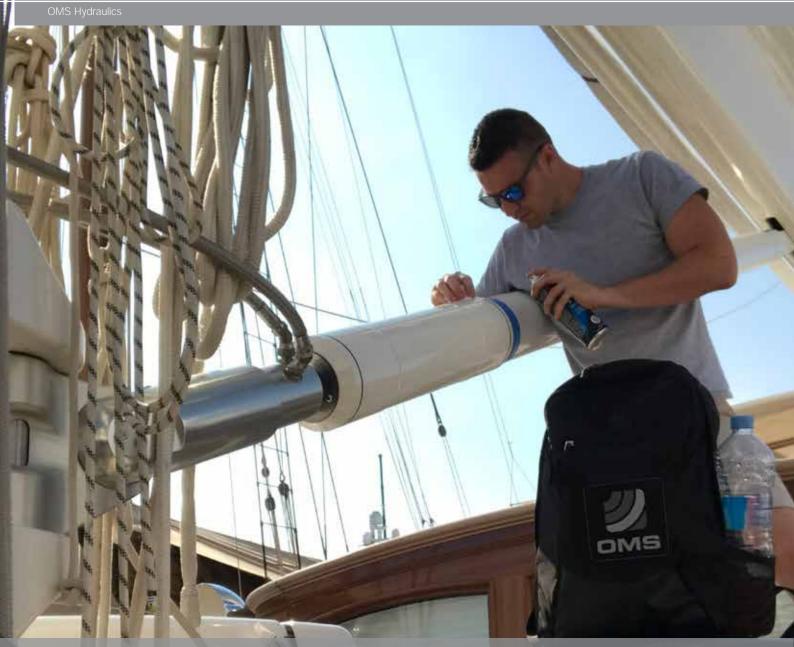




# THRUSTERS • HYDRAULICS

# **About Ocean Marine Systems**

# Contents



### Ocean Marine Systems

OMS specialise in the custom design and manufacture of all products in-house using the latest materials and manufacturing techniques to provide the finest leading-edge solutions.

9/11 7

### Our People

We supply bespoke engineering solutions to award-winning customers around the world, using a network of service agents working with a dedicated in-house project manager. OMS deliver projects on time, within budget and to the highest possible standard customers have come to expect.

### Our Investment

We control as many aspects of the process as we can from customer order through to delivery, from our purpose-built factory and headquarters in Christchurch, UK. To achieve this, as a company we invest in both our people and machinery. Both are key to our success and together this supports our continued growth and development.

Hvdr	aulics Range			Page 04
				-
	1 <b>ders</b> Rams / Aluminium - S	NI 1 4		Page 06
RSA	Size Range: (-0006 to -0150)	Page 07		
/SA	Vangs Aluminium - S		Size Range: (-0010 to -0150)	Page 08
VDA	Vangs Aluminium - D	•	Size Range: (-0040 to -0540)	Page 09
ΓDA		Aluminium- Double Acting	Size Range: (-0006 to -0150)	Page 10
IFS	-	oner System Aluminium	Size Range: (7.3T to 25.6T)	Page 11
STA	Sail Trim Aluminium		Size Range: (-60 to 150)	Page 12
STDA	Sail Trim Double		Size Range: (-60 to 150)	Page 13
<b>NSA</b>	Mechanical Lock Ran	ns Aluminium - Single Acting	Size Range: (-0012 to -0150)	Page 14
owe	er & Control			Page 16
HP		DC Power Packs		Page 17
MFD		<b>Control Manifold Assemblies</b>		Page 20
DCV		<b>Directional Control Valves</b>		Page 21
CRV, F	CV, POC, DCB, VRV	Function Valves		Page 22
PPC		Power Pack Controls		Page 25
MP		Manual Controls		Page 26
/TK		Header Tanks		Page 27
Cust	om			Page 28

Cylir	nders			Page 06
RSA	Rams / Aluminium -	Single Acting	Size Range: (-0006 to -0150)	Page 07
VSA	Vangs Aluminium - S	Bingle Acting	Size Range: (-0010 to -0150)	Page 08
VDA	Vangs Aluminium - D	Oouble Acting	Size Range: (-0040 to -0540)	Page 09
TDA	Double Pull Traveller	Aluminium- Double Acting	Size Range: (-0006 to -0150)	Page 10
IFS	Inner Forestay Tensi	oner System Aluminium	Size Range: (7.3T to 25.6T)	Page 11
STA	Sail Trim Aluminium		Size Range: (-60 to 150)	Page 12
STDA	Sail Trim Double		Size Range: (-60 to 150)	Page 13
MSA	Mechanical Lock Rai	ms Aluminium - Single Acting	Size Range: (-0012 to -0150)	Page 14
Powe	er & Control			Page 16
HP		DC Power Packs		Page 17
MFD		Control Manifold Assemblies	;	Page 20
DCV		<b>Directional Control Valves</b>		Page 21
CRV, F	CV, POC, DCB, VRV	Function Valves		Page 22
PPC		Power Pack Controls		Page 25
MP		Manual Controls		Page 26
VTK		Header Tanks		Page 27
_		Header Tanks		Page 27
_	om	Header Tanks		Page 27 Page 28
vтк <u>Cust</u>	om	Header Tanks		



# Hydraulics

OMS Hydraulics

# Hydraulics Range

We offer a complete range of aluminium and stainless-steel cylinders. Engineered with intelligence and with performance in mind, these cylinders will integrate into most hydraulic systems controlling mast, sail and rigging combinations. Designed and built in the UK, these units are reliable, elegant and proven to suit both race and cruising requirements.

We have a proven track record in providing control cylinders to both production series yachts as well as the worlds largest superyacht applications.

In addition to cylinders, we can provide the associated pumps, power-packs and control systems that make a complete on board hydraulic solution. Custom system design and supply is offered by our highly experienced engineers.



## **Service Network**

We operate an extensive network of service agents worldwide as well as supporting our products direct from the factory.



### Warranty

Ocean Marine Systems warrants its products, in normal usage, to be free of defects in materials and workmanship of one years from the date of original purchase by the user, subject to conditions and materials.

Full warranty terms available on request.

### Location

Ocean Marine Systems Ltd Ocean House, Aviation Business Park, Bournemouth International Airport,

Bournemouth International Airport, Christchurch, Dorset, BH23 6NW United Kingdom

# **Contact us**

Tel: +44 (0)1202 596630 Email: mail@oms.ltd Opening Hours: Mon - Thurs 8 am to 5 pm / Fri 8 am to 12 pm Web: oms.ltd



OMS Hydraulics





# Cylinders



### Rams / Aluminium Single Acting (RSA)

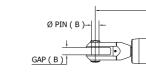
Size Range: (-0006 to -0150)



#### **Description**

The OMS aluminium cylinder range has been engineered to the highest standard, combining excellent strength to weight ratio with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel, coupled with proven in-house design and manufacturing, ensures a robust and reliable performance in the harshest environments.





Part Number	Pull Load @ 150 Bar	Pull Load @ 250 Bar	Max Pull Load @ 350 Bar	Standard Pin to Pin Length	Pin Ø / Gap	Weight	Standard Stroke	Long Stroke	Flattening Reef Stroke
	kg	kg	kg	(A) / mm	(B) / mm	kg	(C) / mm	mm	mm
RSA-0006	639	1065	1491	431	11.11	0.99	230	350	510
RSA-0010	1321	2202	3082	457	12.70	1.49	230	350	510
RSA-0012	1532	2554	3576	508	15.88	2.20	260	375	625
RSA-0017	2152	3587	5021	518	15.88	2.65	260	375	800
RSA-0022	3286	5476	7667	555	19.05	4.03	275	400	900
RSA-0030	4382	7304	10225	610	22.23	6.02	300	450	1025
RSA-0040	6495	10824	15154	652	25.40	9.25	300	475	1150
RSA-0048	7263	12105	16947	681	28.58	10.07	300	475	1150
RSA-0060	8693	14489	20285	790	31.75	14.88	375	550	-
RSA-0076	9367	15612	21857	812	31.75	16.77	375	550	-
RSA-0091	11769	19615	27461	903	34.93	21.84	425	625	-
RSA-0115	15372	25620	35867	997	38.10	32.59	475	700	-
RSA-0150	18884	31474	44064	1052	44.45	43.41	475	700	



A variety of standard, long and flattener cylinders can be supplied to suit any tensioning application.

OMS in-house design and engineering team can customise a solution to fit your application.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518.

#### Suitable Oils

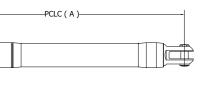
Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 350 bar. Gas: Max gas pressure 5 bar (fully extended).

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessels system for display, warnings and data logging.



### Vangs Aluminium Single Acting (VSA)

Size Range: (-0010 to -0150)



Description

The OMS single acting vang range has been engineered to the highest standard, combining excellent strength to weight ratios with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel coupled with proven in-house design and manufacturing, ensures a robust and reliable performance in the harshest environments. Stainless steel and composite options are available on request.

OMS in-house design and engineering team can customise a solution to fit your application.

Standard cylinders are available from sizes -0010 to -0150, with larger sizes available on request

#### Position Indicator

OMS offer internally fitted position indicators in all our vangs from -0048 upwards. These highly accurate position indicators can be integrated into the vessel's onboard monitoring system.

#### **Pressure Sensor**

In vangs from size -0115 and above, OMS can offer an internally fitted pressure sensor. The output from the pressure sensor can be integrated into the vessel's onboard monitoring system for continuous data logging. If the sensor is not connected, it will automatically record the highest load seen in the vang.

#### **Materials**

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518

#### Suitable Oils

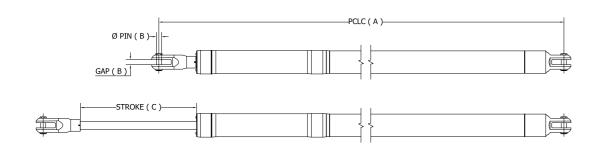
Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 350 bar. Gas: Max gas pressure 40 bar (fully extended).

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessel's system for display, warnings and data logging.



Part Number	Pull Load @ 150 Bar	Pull Load @ 250 Bar	Max Pull Load @ 350 Bar	Max Push Load @ 40 Bar	Max Pin to Pin Length Closed	Pin Ø / Gap	Base Weight (Max PCLC)	Standard Stroke
	kg	kg	kg	kg	(A) / mm	(B) / mm	kg - kg/mm	(C) / mm
VSA-0010	1076	1793	2511	415	1800	12.70	4.34	230
VSA-0012	1171	1951	2732	512	2000	15.88	6.19	250
VSA-0017	1791	2984	4178	678	2200	15.88	8.28	275
VSA-0022	2685	4475	6266	1004	2500	15.88	13.36	275
VSA-0030	3844	6407	8970	1353	2800	19.05	20.26	350
VSA-0040	5835	9725	13616	1948	3800	22.23	40.80	350
VSA-0048	6604	11006	15409	2153	3800	25.40	42.42	350
VSA-0060	8243	13738	19234	2711	4000	25.40	51.83	425
VSA-0076	8406	14011	19615	2890	4000	31.75	56.16	425
VSA-0091	9607	16012	22417	3531	4500	31.75	77.10	450
VSA-0115	12970	21616	30263	4612	4900	34.90	114.29	500
VSA-0150	16813	28021	39230	5836	5300	38.10	178.83	500
	Stainless single acting (VSS) on request. Larger sizes on request.							

### Vangs Aluminium **Double Acting (VDA)**

Size Range: (-0040 to -0540)



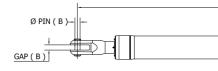
#### **Description**

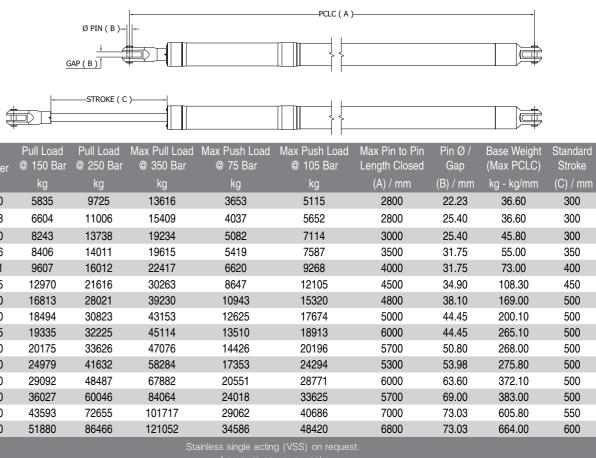
The OMS double acting vang range has been engineered to the highest standard, combining excellent strength to weight ratios with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel coupled with proven in-house design and manufacturing ensures a robust and reliable performance in the harshest environments. Stainless steel and composite options are available on request. Standard cylinders are available from sizes -0040 to -0540, with larger sizes available on request up to -0750.

#### Position Indicator

OMS offer internally fitted position indicators in all our vangs from





Part Number	Pull Load @ 150 Bar	Pull Load @ 250 Bar	Max Pull Load @ 350 Bar	Max Push Load @ 75 Bar
	kg	kg	kg	kg
VDA-0040	5835	9725	13616	3653
VDA-0048	6604	11006	15409	4037
VDA-0060	8243	13738	19234	5082
VDA-0076	8406	14011	19615	5419
VDA-0091	9607	16012	22417	6620
VDA-0115	12970	21616	30263	8647
VDA-0150	16813	28021	39230	10943
VDA-0170	18494	30823	43153	12625
VDA-0195	19335	32225	45114	13510
VDA-0220	20175	33626	47076	14426
VDA-0260	24979	41632	58284	17353
VDA-0320	29092	48487	67882	20551
VDA-0360	36027	60046	84064	24018
VDA-0430	43593	72655	101717	29062
VDA-0540	51880	86466	121052	34586
				ainless single acting
				Larger sizes

Hydraulics



-0048 upwards. These highly accurate position indicators can be integrated into the vessel's onboard monitoring system.

#### Pressure Sensor

In vangs from size -0115 and above,OMS can offer an internally fitted pressure sensor. The output from the pressure sensor can be integrated into the vessel's onboard monitoring system for continuous data logging. If the sensor is not connected, it will automatically record the highest load seen in the vang.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518 & hard anodised finish.

#### Suitable Oils

Mineral oil ISO grade 32-46.

#### Pressures

Pull: Max working pressure 350 bar Push: Max working pressure 105 bar.

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessel's system for display, warnings and data logging.

### **Double Pull Traveller Aluminium Double Acting (TDA)**

Size Range: (-0006 to -0150)



#### **Description**

The OMS double pull aluminium cylinder range has been engineered to the highest standard, combining excellent strength to weight ratio with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel, coupled with proven in house design and manufacturing, ensures robust and reliable performance in the harshest environments.

The stroke length can be varied to suit specific applications as standard and modified rod threads are available as a custom option.

Standard cylinders are available from sizes -0006 to -0150, with larger sizes available on request.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518 & hard anodised finish.

#### Suitable Oils

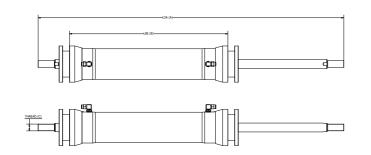
Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 350 bar.

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessel's system for display, warnings and data logging.



Part Number	Pull Load @ 150 Bar	Pull Load @ 250 Bar	Max Pull Load @ 350 Bar	Standard stoke	Length Overall (Standard stroke) (A)	Length Between Ends (Standard stroke) (B)	Standard Rod Thread (C)	Base Weight (Standard Stroke)
	kg	kg	kg	mm	(A) / mm	(B) / mm	(C)	kg - kg/mm
TDA-0006	639	1065	1491	230	720	387	7/8" - 20 UNF	1.441
TDA-0010	1321	2202	3082	230	750	393	1/2" - 20 UNF	2.257
TDA-0012	1532	2554	3576	260	824	425	5/8" - 18 UNF	3.233
TDA-0017	2152	3587	5021	260	834	431	5/8" - 18 UNF	3.976
TDA-0022	3286	5476	7667	275	915	468	3/4" - 16 UNF	6.116
TDA-0030	4382	7304	10225	300	1005	517	7/8" - 14 UNF	9.127
TDA-0040	6495	10824	15154	300	1068	549	1" - 12 UNF	13.638
TDA-0048	7263	12105	16947	300	1091	571	1" - 12 UNF	15.331
TDA-0060	8693	14489	20285	375	1309	670	1 1/4" - 12 UNF	24.049
TDA-0076	9367	15612	21857	375	1323	684	1 1/4" - 12 UNF	26.853
TDA-0091	11769	19615	27461	425	1481	766	1 1/4" - 12 UNF	33.745
TDA-0115	15372	25620	35867	475	1659	856	1 3/8" - 12 UNF	48.732
TDA-0150	18884	31474	44064	475	1717	890	1 1/2 - 12 UNF	68.560
				Stainl	ess (TDS) on reque			

**Inner Forestay Tensioner System** (IFS)

Size Range: (7.3T to 25.6T)

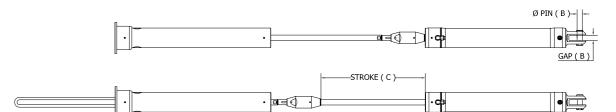


#### **Description**

The OMS Inner forestay tensioner system (IFS) attaches directly onto a standard hydraulic cylinder to provide an elegant solution to tensioning detachable stays, which remain flush and do not clutter the deck when not in use.

The combination of stainless steel mounting plates, marine grade aluminium and dyneema, ensures strength, reliability and corrosion resistance.





Part Number	Max Pull Load @ 250 Bar	Max Strop Load	Pin Ø / Gap	Weight	Stroke
	kg	kg	(B) / mm	kg	(C) / mm
IFSA-0022	5476	7300	19.05	17.90	400
IFSA-0030	7304	7300	22.23	20.70	450
IFSA-0040	10824	14490	25.40	41.20	475
IFSA-0060	14489	14490	31.75	49.70	550
IFSA-0091	19615	25620	34.93	87.10	625
IFSA-0115	25620	25620	38.10	99.50	700
		Larger sizes	on request.		

www.oms.ltd

Hydraulics

Three standard sizes are available:

Up to 7.3T Up to 14.5T Up to 25.6T

Larger sizes can be provided on request.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518 & hard anodised finish.

#### Suitable Oils

Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 350 bar.

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessel's system for display, warnings and data logging.

### Sail Trim Aluminium (STA)

Size Range: (-60 to - 150)



### Description

The OMS aluminium sail trim range has been engineered to the highest standard, combining excellent strength to weight ratio with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel, coupled with proven in-house design and manufacturing, ensures a robust and reliable performance in the harshest environments.

Sail trim (STA) is the powerful solution to trim the highest load you can find on a race sailing yacht. It has a 2:1 tackle powered by a push cylinder in a compact and lightweight solution.

OMS in-house design and engineering team can customise a solution to fit your application.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518.

#### Suitable Oils

Mineral oil ISO grade 32-46.

#### Pressures

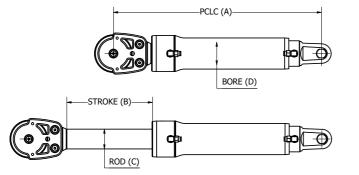
Oil: Max working pressure 250 bar standard. (Custom pressures available on request).

### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessels system for display, warnings and data logging.

#### Position Indicator

OMS offer internally fitted position indicators available on request. These highly accurate position indicators can be integrated into the vessel's onboard monitoring system.



Part Number	Max Push Load @ 250 Bar	Standard Pin to Pin Length Closed	Standard Stroke	Rod Ø	Bore Ø
	kg	(A) / mm	(B) / mm	(C) / mm	(D) mm
STA-60	7205	610	300	50	60
STA-80	12810	681	300	70	80
STA-100	20015	812	375	85	100
STA-120	28822	997	475	100	120
STA-140	39230	TBC	500	120	140
STA-150	45034	TBC	500	130	150
		Stainless steel (S Larger sizes			1

### Sail Trim Double Aluminium (STDA)

Size Range: (-60 to - 150)

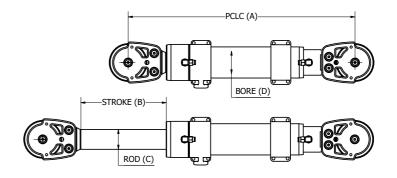


#### Description

The OMS aluminium sail trim range has been engineered to the highest standard, combining excellent strength to weight ratio with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel, coupled with proven in-house design and manufacturing, ensures a robust and reliable performance in the harshest environments.

Sail trim is also available with double fixed pulley (STDA). It has a 4:1 tackle powered by a push cylinder in a compact and lightweight solution.



Part Number	Max Push Load @ 250 Bar	Standard Pin to Pin Length Closed	Standard Stroke	Rod Ø	Bore Ø
	kg	(A) / mm	(B) / mm	(C) / mm	(D) mm
STDA-60	7205	610	300	50	60
STDA-80	12810	681	300	70	80
STDA-100	20015	812	375	85	100
STDA-120	28822	997	475	100	120
STDA-140	39230	TBC	500	120	140
STDA-150	45034	TBC	500	130	150
		Stainless steel (S <sup>-</sup> Larger sizes			

www.oms.ltd

Hydraulics

OMS in-house design and engineering team can customise a solution to fit your application.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518.

#### Suitable Oils

Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 250 bar standard. (Custom pressures available on request)

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessels system for display, warnings and data logging.

#### Position Indicator

OMS offer internally fitted position indicators available on request. These highly accurate position indicators can be integrated into the vessel's onboard monitoring system.

### Mechanical Lock Rams Aluminium Single Acting (MSA)

Size Range: (-0012 to -0150)



**Description** 

The OMS aluminium mechanical lock cylinders have been engineered to the highest standard, combining excellent strength to weight ratio with prolonged corrosion resistance and outstanding service life.

Careful selection of marine grade aluminium and high strength duplex stainless steel, coupled with proven in-house design and manufacturing, ensures robust and reliable performance in the harshest environments.

The lock nut traverses the threaded rod section to allow a position adjustable mechanical lock that resists movement of the

rod without the need for cylinder holding pressure.

A variety of standard and long stroke cylinders can be supplied to suit any tension and holding application.

OMS in-house design and engineering team can customise a solution to fit your application.

Standard cylinders are available from sizes -0006 to -0150, with larger sizes available on request.

#### Materials

Hard anodized marine grade aluminium, duplex and 316 stainless steel components. Polyurethane, nitrile & composite seals to BS 18065518 & hard anodised finish.

#### Suitable Oils

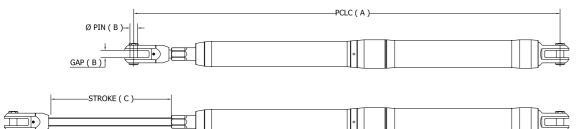
Mineral oil ISO grade 32-46.

#### Pressures

Oil: Max working pressure 350 bar

#### Load Sensing

For accurately understanding and recording loads on a vessel, OMS offer in-built load sensing on all cylinders. The highly accurate output can be integrated into the vessel's system for display, warnings and data logging.



Part Number	Pull Load @150 Bar	Pull Load @250 Bar	Max Pull Load @350 Bar	Standard Pin to Pin Length	Pin Ø / Gap	Weight	Standard Stroke	Long Stroke
	kg	kg	kg	(A) / mm	(B) / mm	kg	(C) / mm	mm
MSA-0012	1532	2554	3576	895	15.88	4.13	260	375
MSA-0017	2152	3587	5021	921	15.88	5.10	260	375
MSA-0022	3286	5476	7667	983	19.05	7.50	275	400
MSA-0030	4382	7304	10225	1092	22.23	11.46	300	450
MSA-0040	6495	10824	15154	1146	25.40	16.48	300	475
MSA-0048	7263	12105	16947	1180	28.58	18.62	300	475
MSA-0060	8693	14489	20285	1398	31.75	28.88	375	550
MSA-0076	9367	15612	21857	1479	31.75	34.36	375	550
MSA-0091	11769	19615	27461	1646	34.93	44.50	425	625
MSA-0115	15327	25620	35867	1826	38.10	63.66	475	700
MSA-0150	18884	31474	44064	1931	44.45	92.78	475	700
				ainless (MSS) on i Larger sizes on re				

CITIL

www.oms.ltd



# **Power & Control**

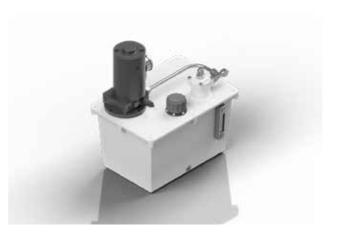


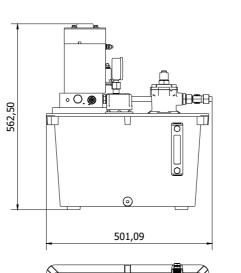
### **DC Power Packs**

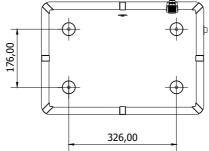
OMS has been building and supplying custom power packs for over 20 years to clients worldwide. Our new range of modular DC power packs have been created to support the increasing interest and demand from various yacht and powerboat manufacturers. The compact and lightweight power pack solutions includes; DC motor pump sets, aluminium oil reservoirs with integral filler breather, return filters and sight level gauge. They can be supplied in single, twin or triple motor configuration to enable a flexible power solution for any type of vessel. AC and custom power packs are available upon request.

**O**B

### DC 24V Power Pack Unit 1 HP-01





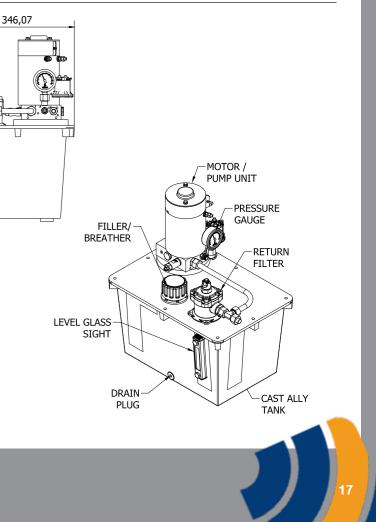


Hydraulics





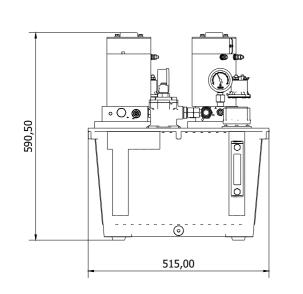
Specific	ations
Power	3 kW
Max Flow	8 l/min
Max Pressure	250 bar
Continuous pressure	150 bar @ 7 l/min
Tank Capacity	25 ltrs
Functions	1 to 4 (Via manifold)
Simultaneous Functions	2 +(2 per motor)
Motor	1 x 24V DC
Weight	15.3 kg approx (dry)
* 12V DC mot	or available

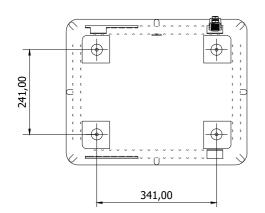


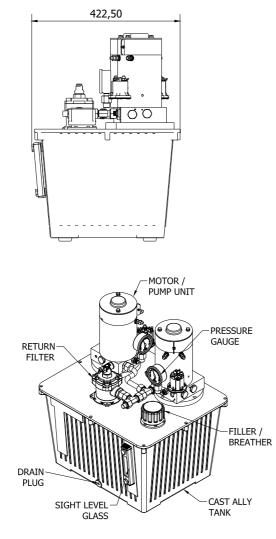
### DC 24V Power Pack Unit 2 HP-02



Specific	cations
Power	6 kW
Max Flow	16 l/min
Max Pressure	250 bar
Continuous pressure	150 bar @ 14 l/min
Tank Capacity	40 ltrs
Functions	Up to 8+ (Via manifold)
Simultaneous Functions	4+ (2 x per motor)
Motor	2 x 24V DC
Weight	34 kg approx (dry)
* 12V DC motor available	

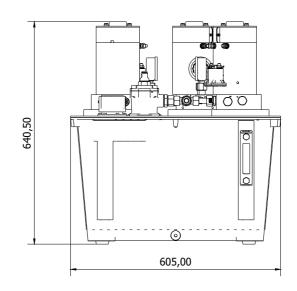


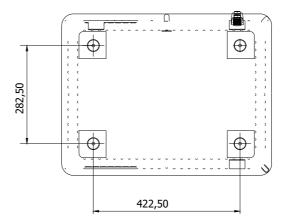




### DC 24V Power Pack Unit 3 HP-03

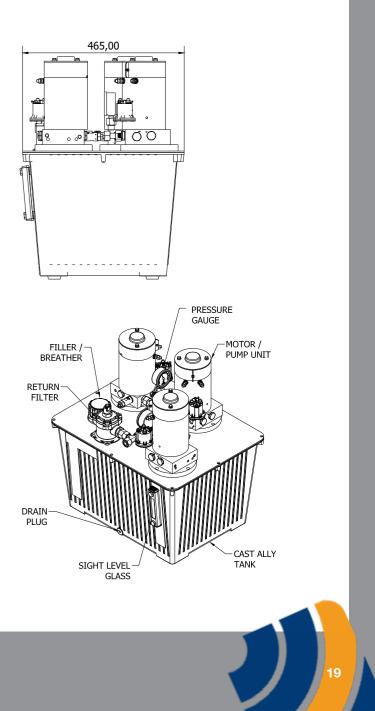






www.oms.ltd

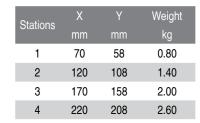
Specifi	cations
Power	9 kW
Max Flow	24 l/min
Max Pressure	250 bar
Continuous pressure	150 bar @ 21 l/min
Tank Capacity	63 ltrs
Functions	Up to 12 (Via manifold)
Simultaneous Functions	6+ (2 x per motor)
Motor	3 x 24V DC
Weight	41.5 kg approx (dry)
* 12V DC mo	otor available

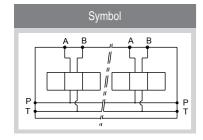


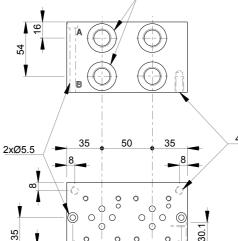
### **Control Manifold Assemblies**

OMS modular manifolds come in single to four function arrangements as standard and can be sited around the vessel close to the equipment being driven. These lightweight anodised aluminium manifolds can be delivered pre-built or supplied separately so that specific function requirements can be built to suit.

Hydraulic Manifold			Specifications
MFD-A-C3-01		Ports	P & T = G1/2" A & B = G3/8"
Aluminium, CETOP3, 1 station, 12LPM		Weight	0.80 kg
Hydraulic Manifold			Specifications
MFD-A-C3-02		Ports	P & T = G1/2" A & B = G3/8"
Aluminium, CETOP3, 2 station, 12LPM		Weight	1.40 kg
Hydraulic Manifold		_	Specifications
MFD-A-C3-03		Ports	P & T = G1/2" A & B = G3/8"
Aluminium, CETOP3, 3 station, 12LPM	2	Weight	2.00 kg
	1 in		
Hydraulic Manifold	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Specifications
MFD-A-C3-04	69.31	Ports	P & T = G1/2" A & B = G3/8"
Aluminium, CETOP3, 4 station, 12LPM		Weight	2.60 kg

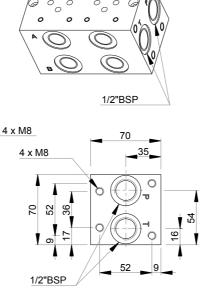






0

3/8"BSF



www.oms.ltd

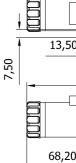
### **Directional Control Valves**

OMS offer a range of different directional control valves to enable effective control to all onboard functions. Open and closed valve spool configurations are available as well as 12 or 24 volt solenoids. Complemented with function control valve elements, any type of cylinder / motor configuration can safely and effectively be controlled.

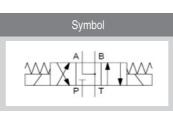
### **Hydraulic Directional Control Valve** DCV-C3-03-01 CETOP3, 12 / 24V solenoid actuated, 3 position

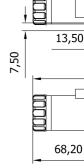
P,A,B,T ports blocked in neutral

Symbol



Hydraulic Directional **Control Valve** DCV-C3-03-02 CETOP3, 12 / 24V solenoid actuated, 3 position A,B To T & P blocked in neutral







	SPECIFICATIONSMax Flow12 l/minMax Pressure250 barPositions3Actuation12 / 24V solenoid
0 206,40	
0 70,00	23,50 46,50 49,19
	SPECIFICATIONSMax Flow12 l/minMax Pressure250 barPositions3Actuation12 / 24V solenoid
206,40	23,50 46,50 49,19

### **Function Valves**

Various function valves are available to ensure correct control for all onboard functions. These function valves will provide effective pressure/load control, flow/speed control as well as various static and dynamic load holding and control. These valves can be prebuilt into function configurations specific to vessel or supplied individually as required.

### **Crossline Relief Valve**

### **CRV-C3-01**

CETOP3, 0-210 bar A To B



SPECIFIC	ATIONS
Max Flow	12 l/min
Max Pressure	210 bar
Range	0-210 bar

SPECIFICATIONS

12 l/min

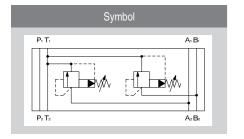
210 bar

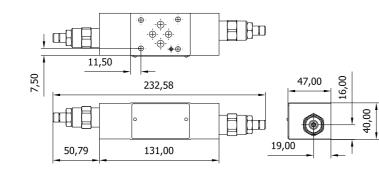
0-210 bar

Max Flow

Max Pressure

Range

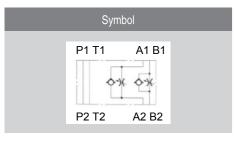


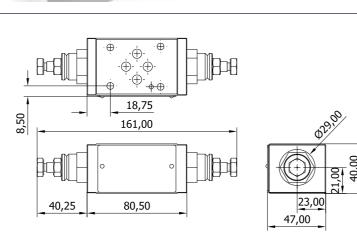


### Adjustable Flow Control Valve FCV-C3-01

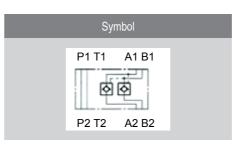
CETOP3, 0-210 bar

A & B independent control

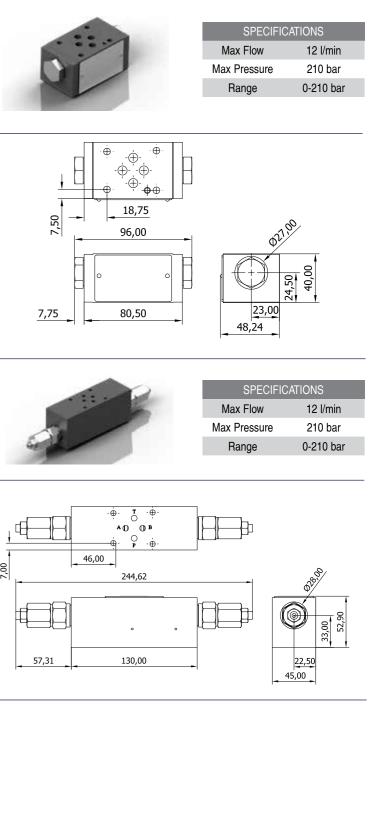


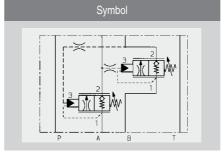


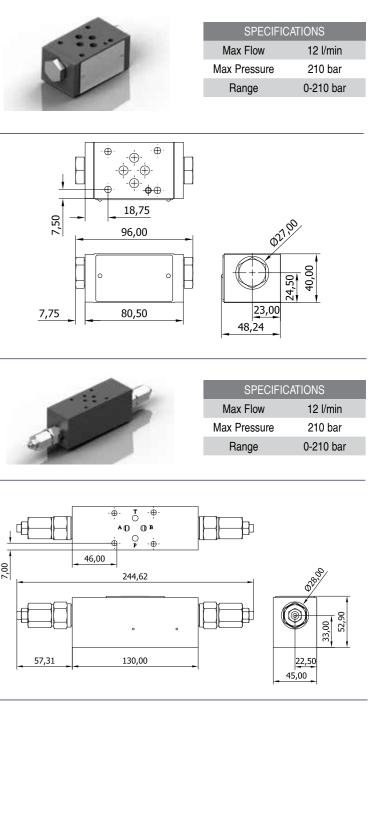
### **Pilot Operated Valve Check** POC-C3-01 CETOP3, 0-210 bar P To T



### **Dual Counter Balance Valve** DCB-C3-01 CETOP3, 0-210 bar P To T









Hydraulics



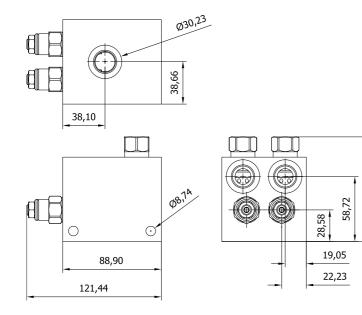
OMS's hold and relief valve has been designed specifically to reduce the risk of over pressure of boom vangs whilst in compression. With the valve assembly fitted close to the boom vang and with adequately sized pipework, loads are minimised.

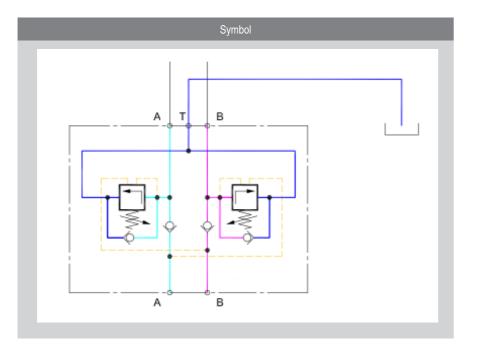
### **Inline Hydraulic Vang** Hold/Relief Valve **VRV-250-09**

0-250 bar A & B To T



SPECIFIC	ATIONS
Max Flow	50 l/min
Max Pressure	250 bar
Port	G1/2"
Range	0-250 bar





### **Power Pack Controls**

To complement our range of DC powerpacks, OMS offer a modular and expandable control system that will provide complete control. The standard system will provide effective motor and function control valve operation, and can be easily expanded to provide level warning, pressure readouts, filter condition and much more.

The OMS TT94, is a universal controller that is already certified (TUV Nord) and used in many commercial applications as well as marine. Programmed in house by our OMS technicians to suit your specific application. The TT format is used for all PLC applications ranging from 30-300 I/O functions. Additional functions can be added on a modular basis. The OMS TT94 is 148 x 181 x 40mm and weighs less than 700 grams.

The compact OMS TT94 module is mounted within an enclosure alongside a suitable sized DIN rail for all external connections. A standard enclosure would be 900mm x 600mm x 230mm allowing ample room for accessing and connections.

In addition to the standard control module, we can add a local touch screen HMI mounted to the cabinet exterior (or remote designated maintenance area), as well as the option of adding a remote access over Wi-Fi module for fault finding or updates.







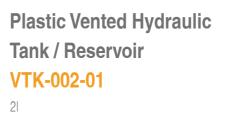
### Manual Controls

OMS manual control panels provide fast and efficient hydraulic power to a range of sail control cylinders. Configured in single or dual speed and single or multiple functions, these compact and efficient units are easy to install and can power a range of functions.



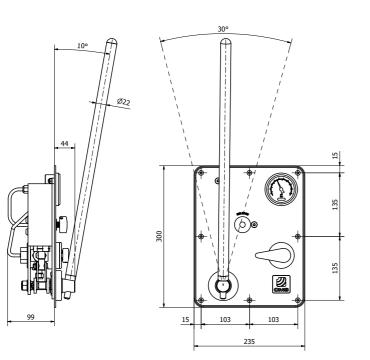
### **Header Tanks**

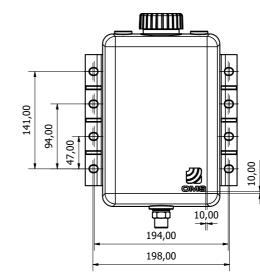
A range of header tanks are available to provide oil flow for our manual function panels, standard sizes include two litre, four litre and twelve litre. Custom sizes and pressurised versions are also available on request.



Plastic Vented Hydraulic Tank / Reservoir VTK-004-01

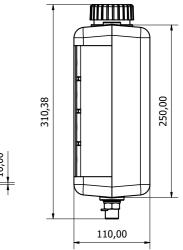
Hydraulics







	SPECI	FICATIONS
	Max Volume	2
	Usable Volume	1.8
9, 1	Туре	Bulkhead mounted
ows J		
-		
•	SPECI	FICATIONS
•	SPECI Max Volume	FICATIONS 4 I
•		
	Max Volume	4
9. con	Max Volume Usable Volume	4   3.6





## Custom



IMAGE: BALTIC YACHTS

OMS has a long and distinguished reputation for designing custom solutions to suit bespoke projects in the marine industry. Our portfolio includes some of the largest superyachts in the world and we are proud of our reputation for being innovative and pushing the boundaries of modern marine technology.

### Hybrid carbon composite vang and deck cylinder package



Custom light weight cylinder package



Custom vang, under deck and stainless steel passerelle cylinders





**Technical Supplier** 



Motorsport / Supercar





OMS Hydraulics

# **Thrusters Range**

OMS offers a complete range of bow and stern thrusters. Our range caters for vessels from 20-150m with power ranging from 15kw to 800kw (20 - 1000 + hp) in both electric and hydraulic variants. As well as standard fixed tunnel units we also offer vertical retracting and swing variations.

OMS also have specific designs that integrate and work as part of dynamic positioning systems and also offer emergency propulsion with our rotating units.

A range of super-lightweight retracting thrusters have been developed specifically for new generation racer / cruiser class yachts. Fully custom solutions are available for commercial or specialist applications.

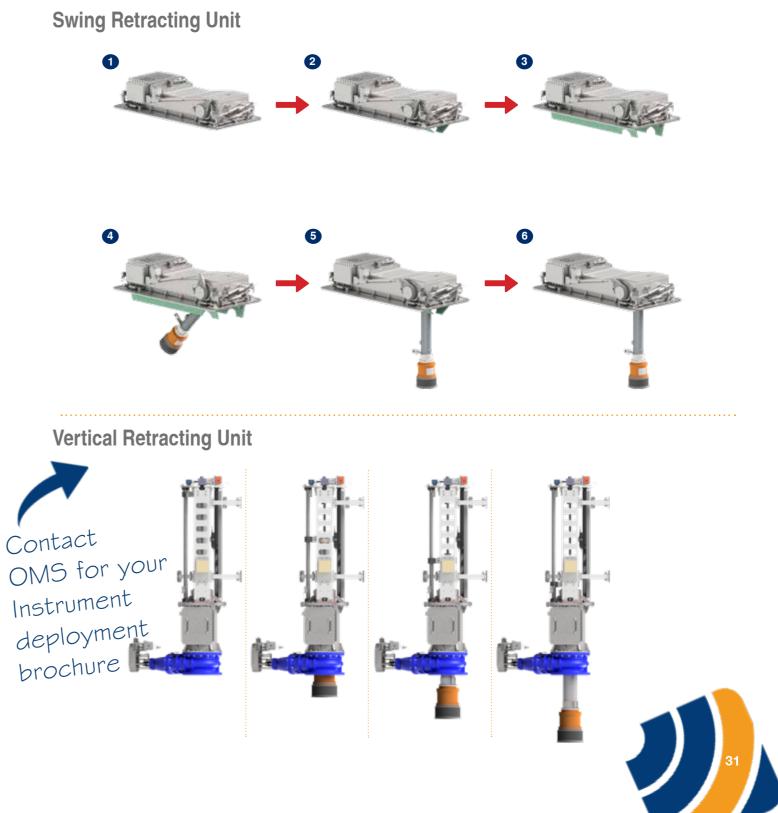


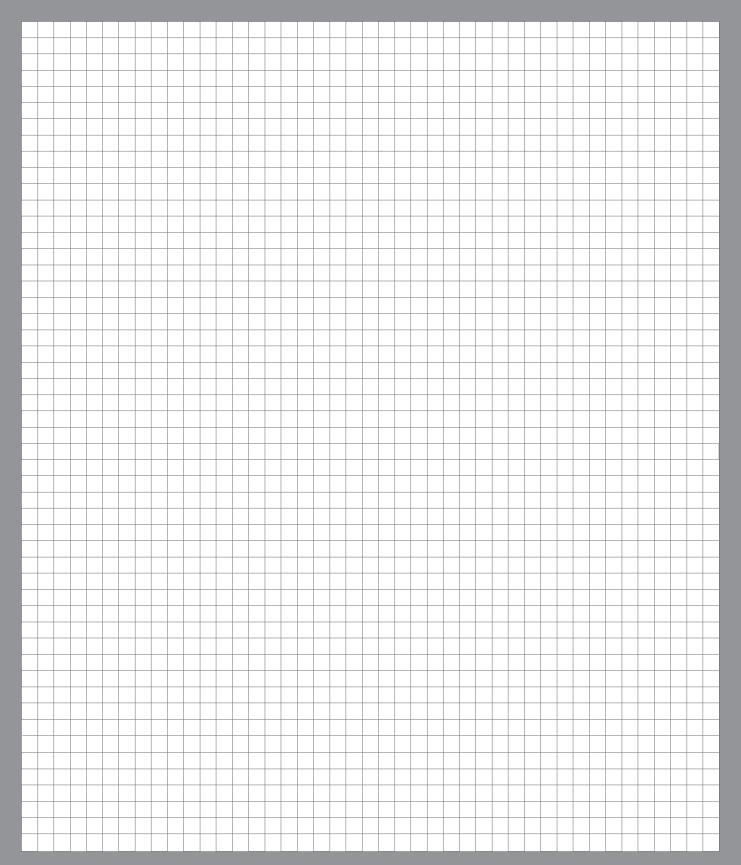
# An Introduction to OMS Instrument Deployment

OMS Hydraulics

## **Instrument Deployment Range**

OMS strive to achieve custom solutions for all applications. Instrument deployment from OMS are all designed and manufactured to order. Whilst we do have standard models, our in-house design team can work with any new or existing structure to deliver the best possible solution. Re-fitting to an existing foundation or working within a restricted envelope is also something we are always happy to discuss.





# Ocean Marine Systems Ocean House, Aviation Business Park, Bournemouth International Airport,

### Contact Us:

#### Web: oms.ltd

