



Offshore Racing Congress
World leader in rating technology

2021
ORCs
Certificate
M

Central
Rating
Office



Certificate

Number **SY101**
Issued On **13/10/2021**
ORC Ref **03190001MEN**
VPP Ver. **2021 SY1.00**
Valid until **31/12/2021**

Superstructures

Area Front **2.80**
Area Side **3.77**
Dome frontal areas (m²)

Powered Winches

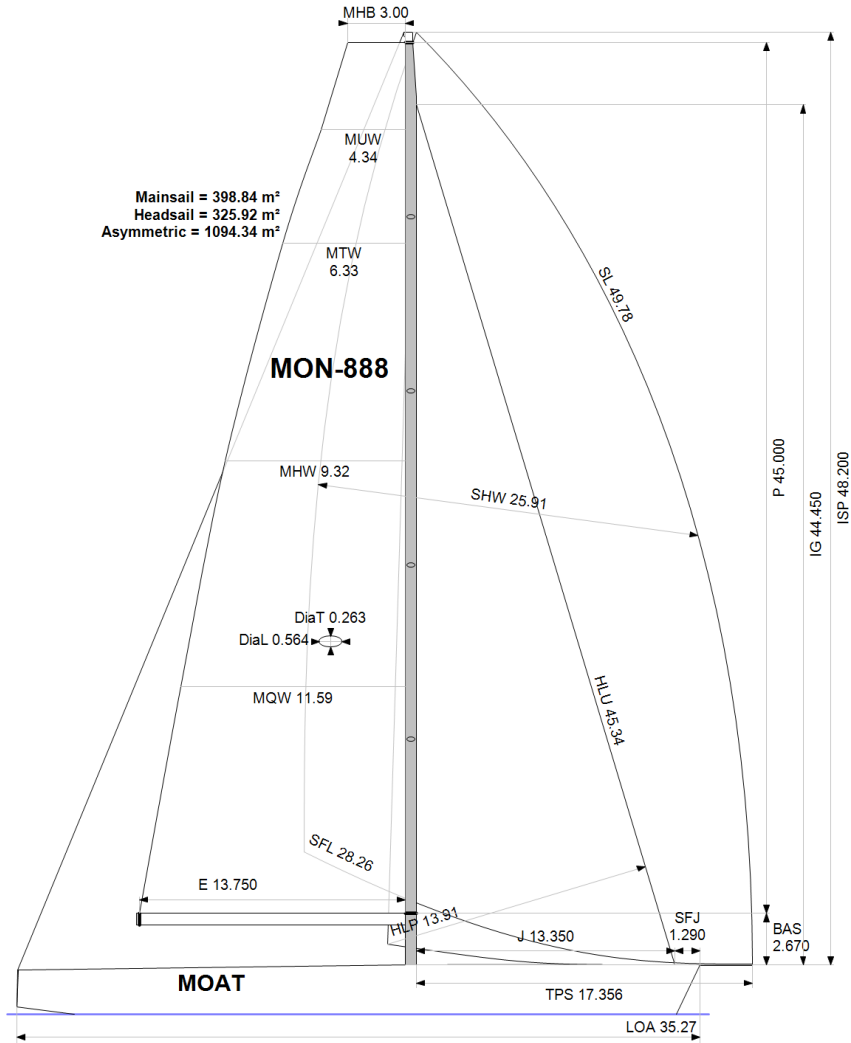
Halyard Power (KW) **21.0**
Halyard Speed (m/min) **90.0**
Sheet Power (KW) **21.0**
Sheet Speed (m/min) **220.0**

Propeller (measured)

No Propeller

Sails

Spinnaker Pole **No**
Furled sails Upwind **0**
Main Furler in Mast **No**
Main Furler in Boom **No**
Multiple Headsails **No**
Headsail Count **2**
Headsail Flying Count **0**
Spinnaker Count **4**
Total Area Upwind **724.77**
Total Area Downwind **1493.17**



BOAT		HULL			
Name MOAT		Data File SY101	LOA 35.270		
Sail Nr MON-888		Offset File SY101A.off	MB 8.132		
GENERAL		Dynamic All. 0.000%	Construction Carbon		
Class Swan 115	Designer Frers	Trim Tab No	Skeg No		
Builder Nautor Swan	Series 01/2014	Carbon Rudder Yes	Aramid Core No		
Age Date 05/2016	OPF up / down 0.0% / 0.0%	MCA Certified No	Bow Thruster D.		
		CDL 28.899			
		IMSL 31.897			
Lightship Trim		Sailing Trim			
Displacement 69,072	VCGD -1.273	Displacement 75,500	VCGD -0.985m		
Draft 6.676	VCGM -1.175	Draft 6.721m	VCGM -0.887m		
RM at 1° 6661.2kg·m		RM at 1° 6825.6kg·m			
RIG DETAILS		CENTERBOARD			
Rig Type Sloop	Non-circular rigging No	N/A			
Carbon mast Yes	Fiber rigging Yes				
Chainplate Width 7.345					
SCORING OPTIONS					
	Light	Light-Moderate	Moderate	Moderate-Strong	Strong
	TWS < 8	8 <= TWS < 11	11 <= TWS < 14	14 <= TWS < 17	TWS >= 17
Time Multiplying Factor TMF (TOT)	1.1497	1.4170	1.6610	1.8275	1.9553
Time allowances (TOD) sec/mi	434.9	352.8	301.0	273.6	255.7

MAINSAIL & MIZZEN						
Area = $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$						
	MHB	MUW	MTW	MHW	MQW	Area
Mainsail	3.00	4.34	6.33	9.32	11.59	398.84
Mizzen						0.00
Mizzen Staysail	YSD	SHW	SFL	Area		
with Spinnaker				0.00		
with Headsail				0.00		

INCLINING TEST AND FREEBOARDS						
Flotation date 19/04/2016			SG 1.0250			
FFM	0.836	FF	0.908	SFFP	-0.016	
FAM	0.400	FA	0.372	SAFP	35.200	
W1	663.0	PD1	96.2	WD	12.330	
W2	663.0	PD2	95.4	GSA	1.0	
W3	663.0	PD3	95.7	RSA	1.0	
W4	663.0	PD4	95.5	PLM	9000.00	
LCF from stem on CL / on sheer				18.915 / 19.304		
RM at 1° (measurement trim)				6727.2kg-m		



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2021
Measurements
Datasheet

HEADSAILS											
Area = $0.1125 \cdot HLU \cdot (1.445 \cdot HLP + 2 \cdot HQW + 2 \cdot HHW + 1.5 \cdot HTW + HUW + 0.5 \cdot HHB)$											
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Flying	Furler*	Meas.Date	Comment
0.20	2.16	3.95	7.28	10.53	13.91	45.34	325.92	No	No	13/10/2021	J1
0.20	2.05	3.75	7.00	10.35	13.88	45.02	316.67	No	No	13/10/2021	J2
Tacking Unfurling Staysail No											
* "TA" denotes "Headsail eligible for allowance because it must be furled more than 50% when tacking"											

Certificate

Number **SY101**
Yacht Name **MOAT**

Sail Nr **MON-888**
Data in **meters/kilograms**
ORC Ref **03190001MEN**
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SPINNAKERS						
Area = $(SLU+SLE)/2 \cdot (SFL + 4 \cdot SHW) / 6$						
SLU	SLE	SHW	SFL	Area	Measured	Comment
52.76	46.80	25.91	28.26	1094.33	13/05/2018	A2B
52.92	46.12	26.27	27.30	1092.58	13/05/2018	A4B
48.15	42.35	25.32	19.10	907.87	13/05/2018	A3
50.07	46.62	15.50	20.65	665.95	26/05/2018	A0

SPINNAKERS						
SLU	SLE	SHW	SFL	Area	Measured	Comment

TANKS							
Id	Use	Volume	LCG	VCG	Sp.Wht	Level Msmt	Level Sailing Description
A	fuel	1,000	17.71	0.10	0.8400	0.300	0.300 port
B	fuel	1,000	17.71	0.10	0.8400	0.180	0.300 stbd
C	fuel	900	10.88	-0.35	0.8400	0.390	0.100 port
D	fuel	900	10.88	-0.35	0.8400	0.000	0.100 stbd
E	water	750	14.95	-0.20	1.0000	0.000	0.100 stbd
F	water	750	14.95	-0.20	1.0000	0.270	0.100 port

COMMENTS

INVENTORY							
Id	Weight Msmt	Weight Sailing	LCG	VCG	Gyr.Adj.	Description	
A	150	0	3.00	-0.30	Y	anchor #1	
B	451	0	4.00	-0.10	Y	chain #1	
C	60	60	6.50	-0.10	Y	anchor #2	
D	90	90	6.50	-0.10	Y	chain #2	
E	100	100	6.00	0.10	Y	rope #2	
F	50	50	5.00	0.10	Y	mooring lines	
G	100	100	18.00	0.40	N	oils & spares	
H	719	0	11.79	1.33	N	various items	