

IMS / ORC MEASUREMENT CERTIFICATE

BOAT	GPH	HULL
Name Dehler 30 one design Sail Nr	599.2	Length Overall 9.140m Maximum Beam 3.278m Displacement 2,796kg Draft 2.188m Plan Review IMS Reg. Division Performance Dynamic Allowance 0.000% Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL		
Class Dehler 30 OD Designer j/v Builder HY Series 05/2019 Age 07/2019 Age Allowance 0.033% Offset File D16A_24d.off - 12/08/2019 08:23:13 Measurement by - 31/07/2019		IMSL 9.006m VCGD -0.150m Sink 15.40kg/mm RL 8.713m VCGM -0.127m WS 19.56m² LSM0 8.835m Displacement/Length ratio 4.0543



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time on Distance	588.8			666.5	
Time on Time	1.0190			1.0128		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	660.5	539.7	487.8	851.3	668.1	599.0
Time on Time	1.0220	1.2507	1.3838	0.7929	1.0103	1.1269

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	923.5	794.8	739.6	715.4	708.6	707.6	705.4
52°	605.2	538.2	517.4	508.6	502.3	500.1	498.5
60°	572.8	521.2	502.3	492.3	485.3	479.9	479.0
75°	550.0	505.3	482.5	467.3	458.6	452.6	449.7
90°	550.1	504.4	476.0	453.9	437.7	427.4	413.5
110°	599.7	514.7	478.8	451.8	431.8	415.1	381.1
120°	614.3	521.2	480.0	443.3	414.5	395.6	361.2
135°	687.1	556.9	502.6	464.5	426.7	388.6	325.4
150°	811.6	649.4	553.7	507.2	479.3	448.8	373.8
Run VMG	937.1	749.9	639.4	584.8	549.2	511.4	431.7

Selected Courses							
Windward / Leeward	930.3	772.4	689.5	650.1	628.9	609.5	568.5
Circular Random	799.6	657.2	583.3	541.3	514.8	495.7	465.4
Coastal / Long Distance	931.0	727.7	624.0	564.1	529.8	499.2	443.9
Non Spinnaker	894.3	721.0	628.1	573.9	540.0	517.1	485.6

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	41.3°	39.0°	38.1°	38.6°	37.5°	39.0°
Beat VMG	3.90	4.53	4.87	5.03	5.08	5.09	5.10
52°	5.95	6.69	6.96	7.08	7.17	7.20	7.22
60°	6.28	6.91	7.17	7.31	7.42	7.50	7.52
75°	6.54	7.12	7.46	7.70	7.85	7.95	8.01
90°	6.54	7.14	7.56	7.93	8.23	8.42	8.71
110°	6.00	6.99	7.52	7.97	8.34	8.67	9.45
120°	5.86	6.91	7.50	8.12	8.69	9.10	9.97
135°	5.24	6.46	7.16	7.75	8.44	9.26	11.06
150°	4.44	5.54	6.50	7.10	7.51	8.02	9.63
Run VMG	3.84	4.80	5.63	6.16	6.56	7.04	8.34
Gybe Angles	144.0°	148.0°	149.0°	151.0°	175.0°	177.0°	141.8°

Certificate

Number
ORC Ref **N/A**
Issued On **13/03/2020**
VPP Ver. **2020 1.01**
Invalid for Racing

Crew Weight

Default 577kg
Maximum **160kg**
Minimum* **75kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	647.4	0.9268
Non Spin OSN	629.8	0.9527

Sails Limitations

Headsails	Spinnakers
5	4

Class Division Length

CDL = 8.851

Storm Sails Areas

Heavy Weather Jib	19.90
Storm Jib (JL=7.89)	7.37
Storm Trysail	8.19

Owner

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

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BOAT	
Name Dehler 30 one	Sail Nr
File D16A_24_06_07	Data in meters/kilograms

RIG				
Forestay Tension	Aft	Spreaders	1	
Inner Stay	None Fitted	Runners/Checkstays	0	
Carbon Mast	Yes	Jib Furler	No	
Fiber Rigging	No	Main Furler	No	
Non-Circular Rigging	No			
Articulated Bowsprit	No			
P	12.000	E	3.900	MDT1
IG	12.100	J	4.100	MDL1
ISP	13.180	SFJ	0.170	MDT2
BAS	1.130	SPL	0.150	MDL2
FSD		TPS	5.430	TL
				MW
				GO
				BD
				MWT
				MCG

INCLINING TEST AND FREEBOARDS				
Inclining Test Enter VCG directly				
Flotation date 29/07/2019		SG 1.0250		
VCGDe -0.150				
FFM	1.075	FF	1.075	SFFP
FAM	0.986	FA	0.986	SAFP
LCF from stem on CL / on sheer		5.254 / 5.489		
Maximum beam station from stem		7.070		
RM Measured		86.5kg-m		
RM Default		67.3kg-m		
Limit of positive stability / Stab.Index		116.8° / 111.3		
Freeboard at mast at 4.270		1.108		



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

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COMMENTS	

MOVABLE BALLAST			
BLR Index	1.0828	Water Ballast Volume	220
		Water Ballast LCG	5.94
		Water Ballast VCG	0.50
		Water Ballast TCG	1.46

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	1.40	1.69	2.21	2.92	3.44	33.49	34.42	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric									
Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL				
	15.00	12.70	13.85	8.60	8.90	99.95		AS · (SFL + 4·SHW) / 6	

HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Flying	Meas.Date	Material	Comment
0.03					8.32	13.90	58.02		Yes		Unknow	# 0
0.12	0.73	1.31	2.28	3.26	4.29	12.50	28.17	Y	No		Unknow	G 3
0.03	0.37	0.72	1.42	2.17	2.95	9.30	13.51		No		Unknow	Staysail

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight Description		

MEASUREMENT INVENTORY				
Id	Item	Weight	Distance	VCG Description
Water Ballast Tanks				
Id	Volume	Distance	VCG	TCG Description
1	220	5.94	0.50	1.46

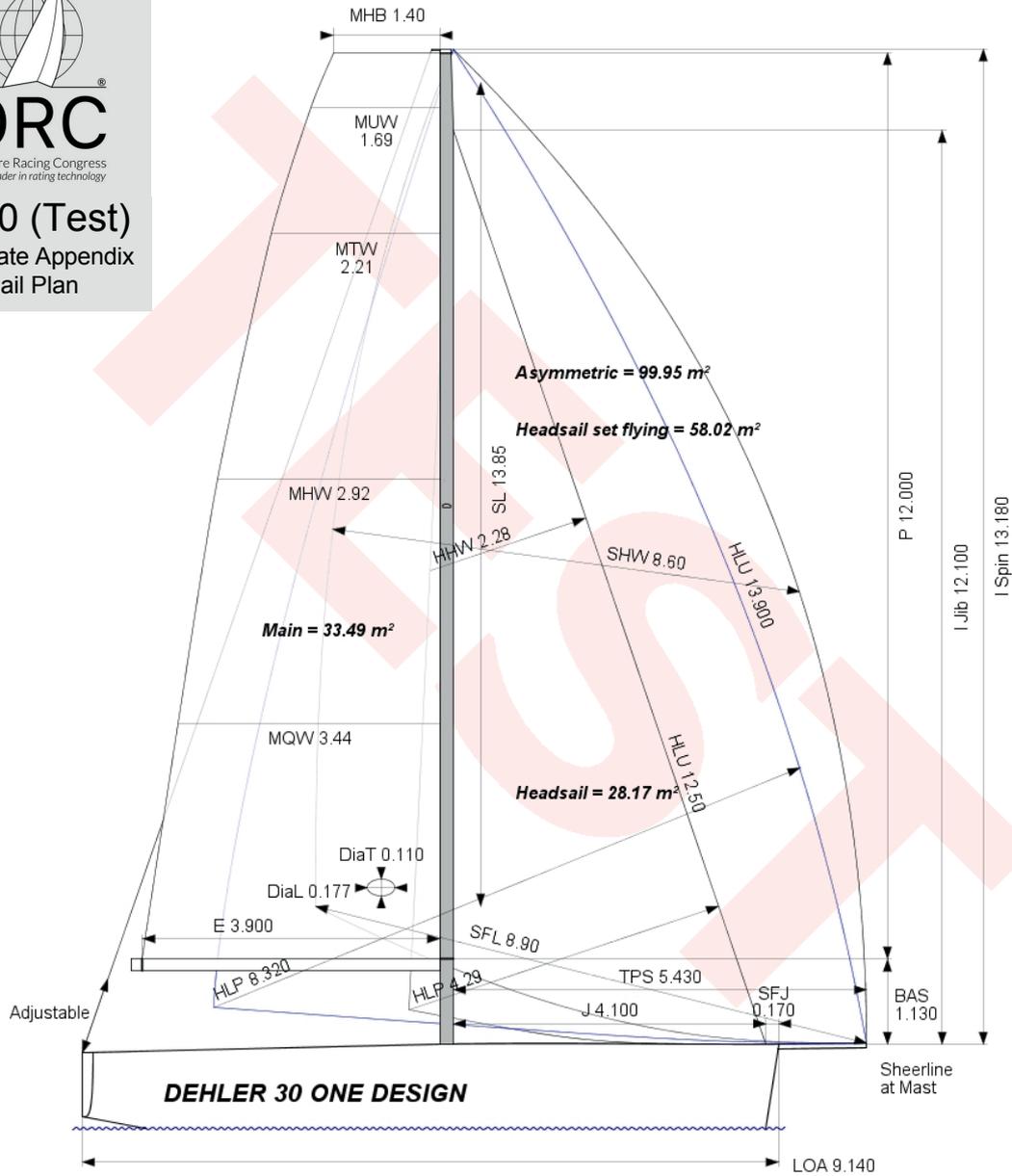
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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
8	1.40	1.69	2.21	2.92	3.44	33.49				Unknown	

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
4	0.03					8.32	13.90	203%	58.02		Yes				Unknown	# 0
2	0.12	0.73	1.31	2.28	3.26	4.29	12.50	105%	28.17	Y	No				Unknown	G 3
5	0.03	0.37	0.72	1.42	2.17	2.95	9.30	72%	13.51		No				Unknown	Staysail

SYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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ASYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
3	15.00	12.70	13.85	8.60	8.90	99.96	asym				Unknown	A 2
6	14.80	12.40	13.60	7.25	8.52	85.05	asym				Unknown	A 5