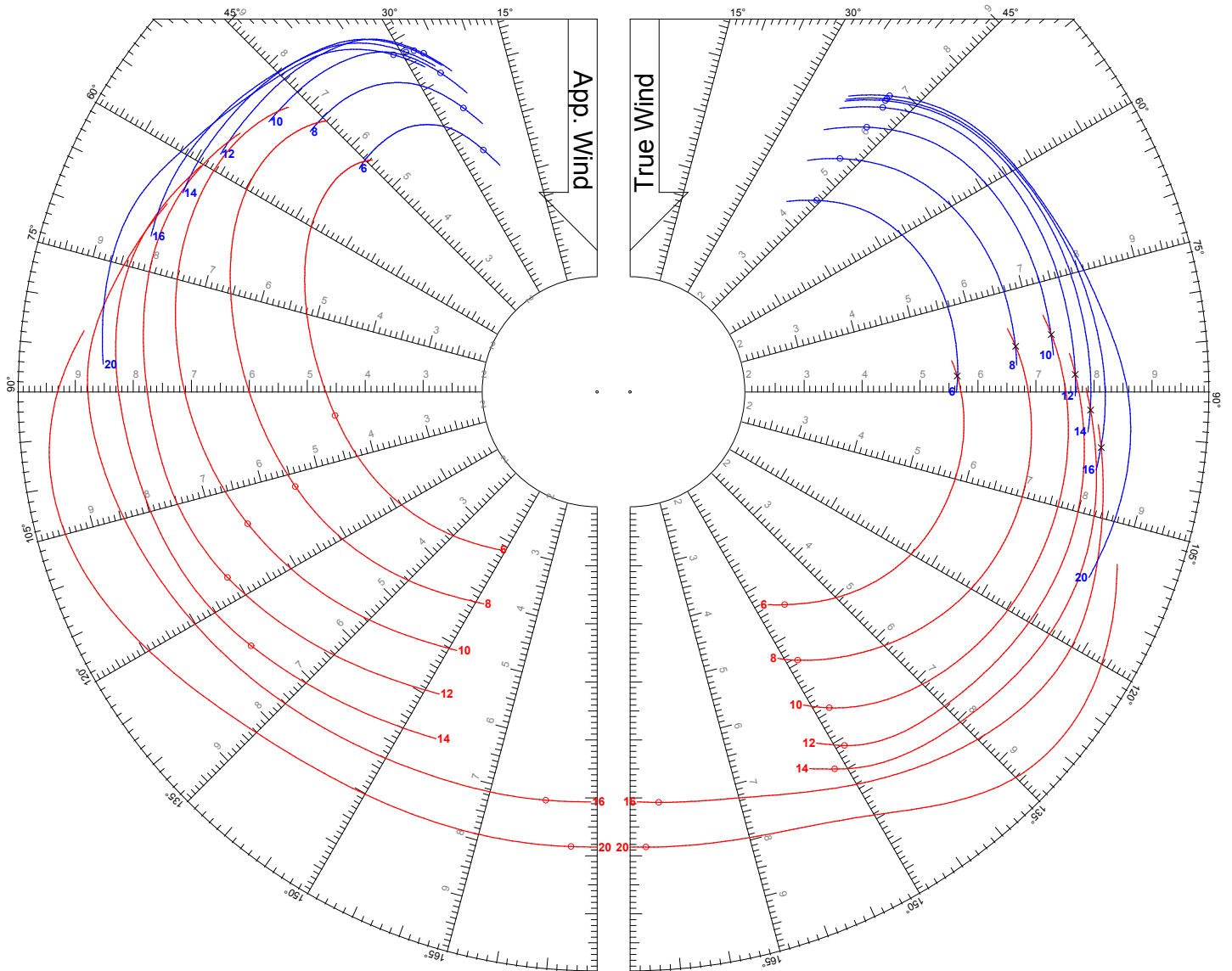


SPEED GUIDE MD PINHEAD



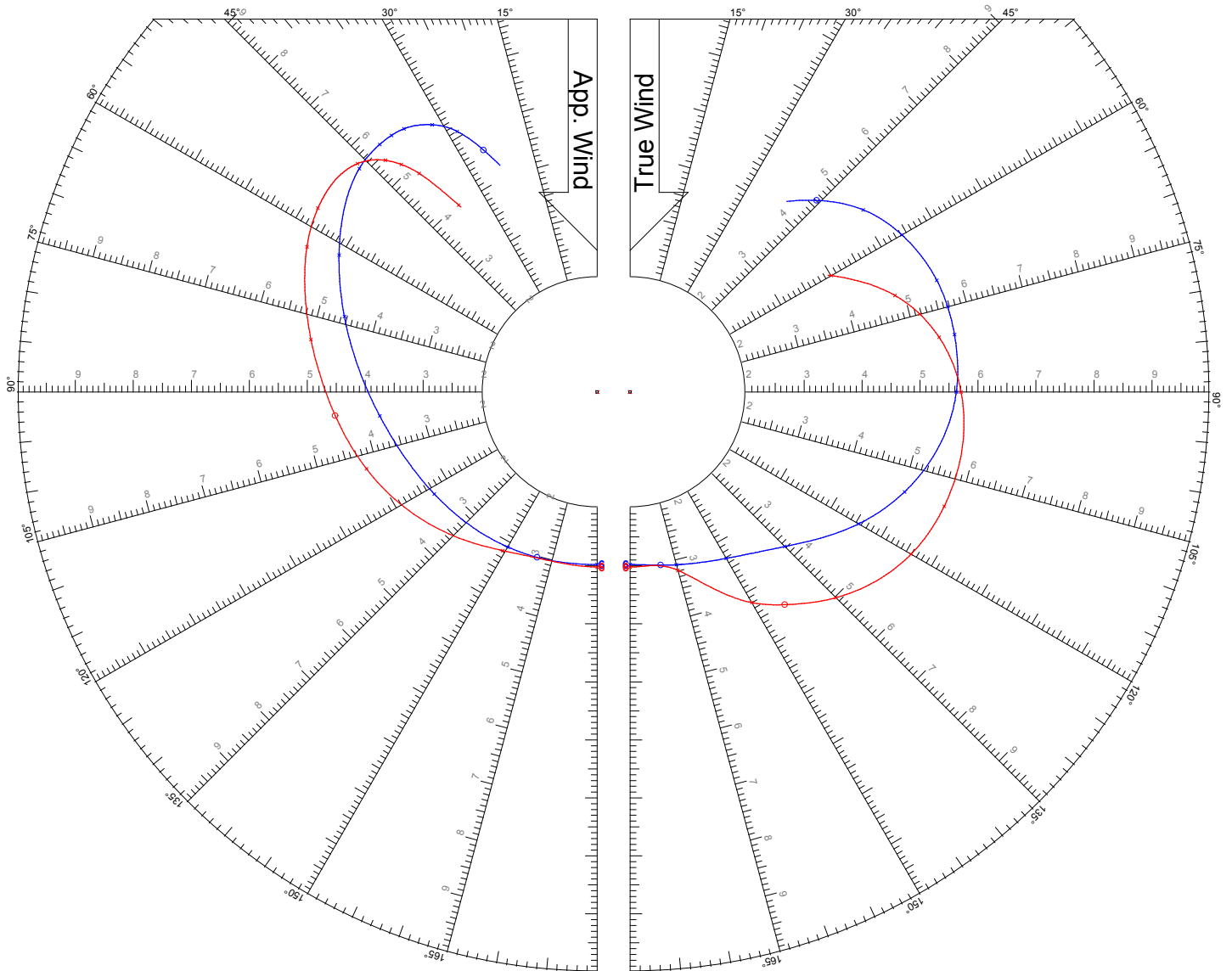
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 6, 8, 10, 12, 14, 16, 20 kts

Headsail

Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



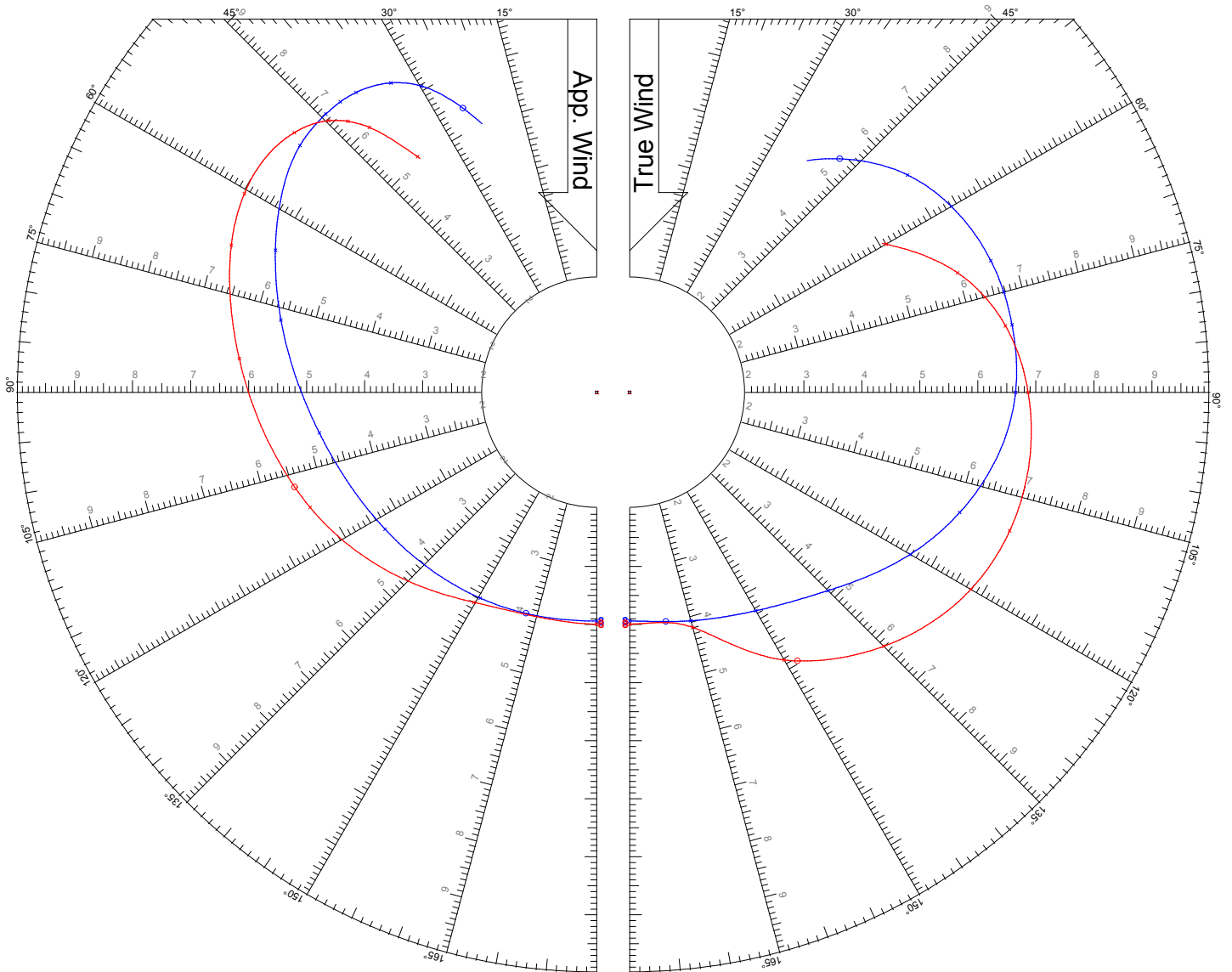
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 6 kts

Headsail

Asymmetric Spinnaker on Centerline

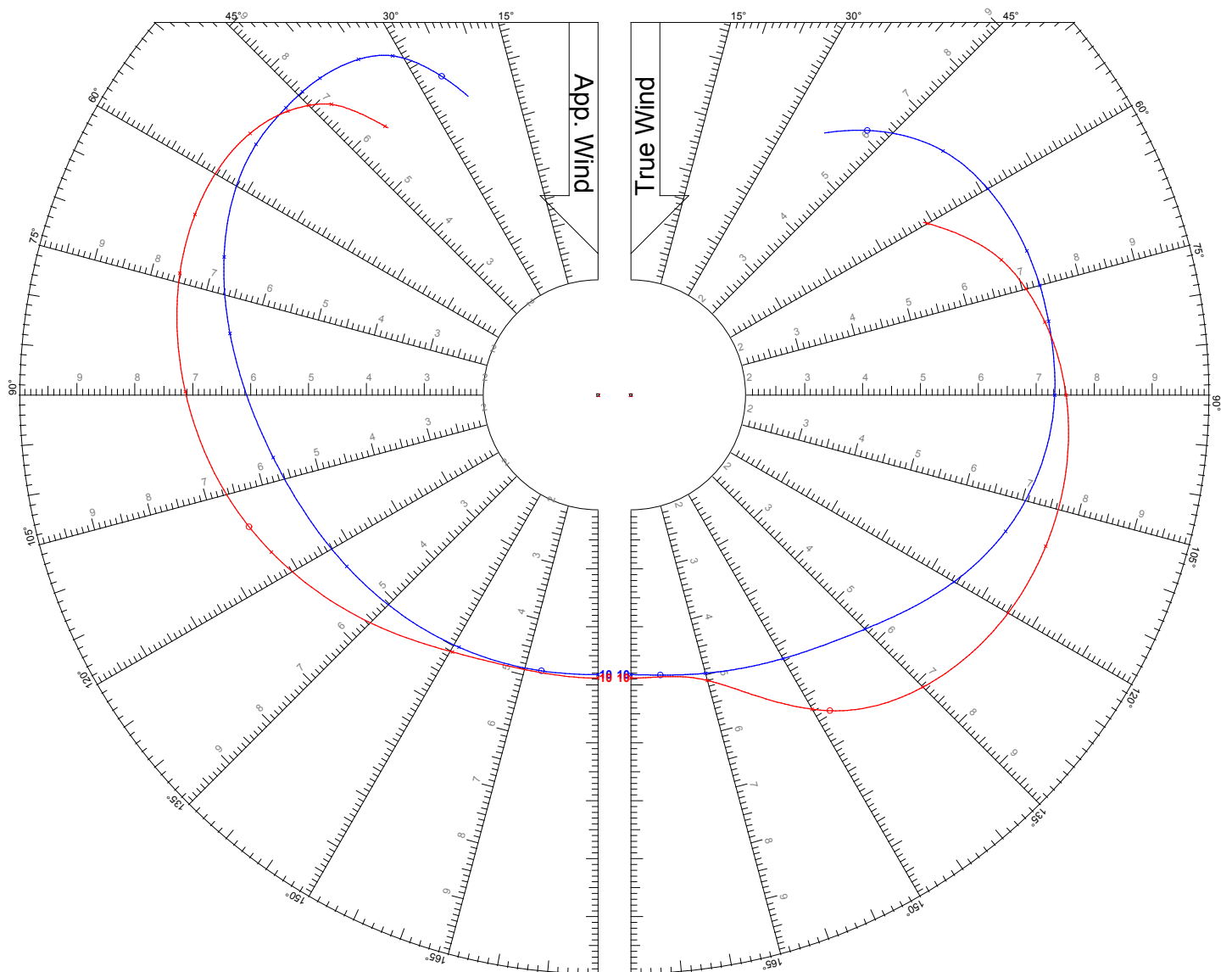
SPEED GUIDE MD PINHEAD



Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 8 kts
Headsail
Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



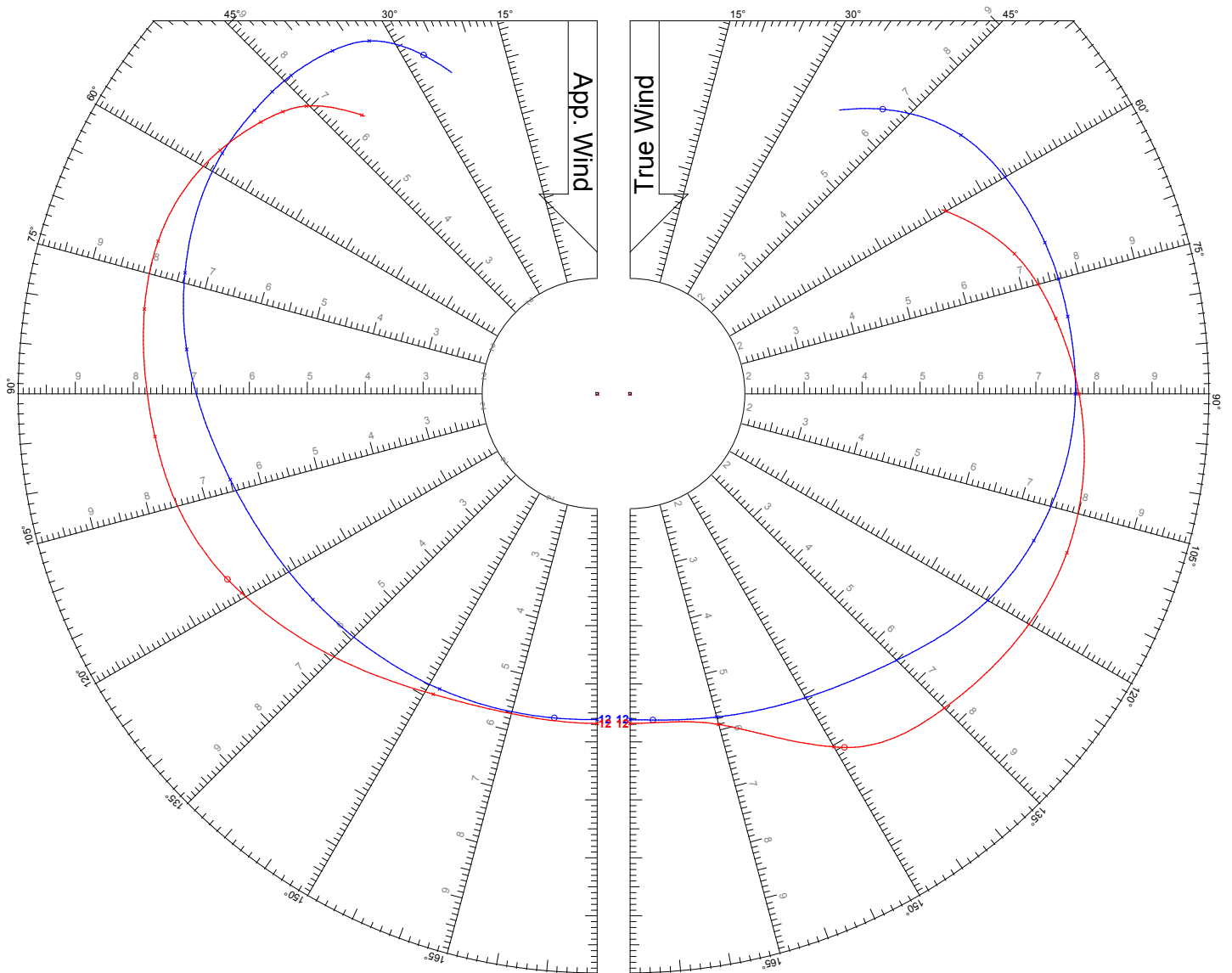
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 10 kts

Headsail

Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



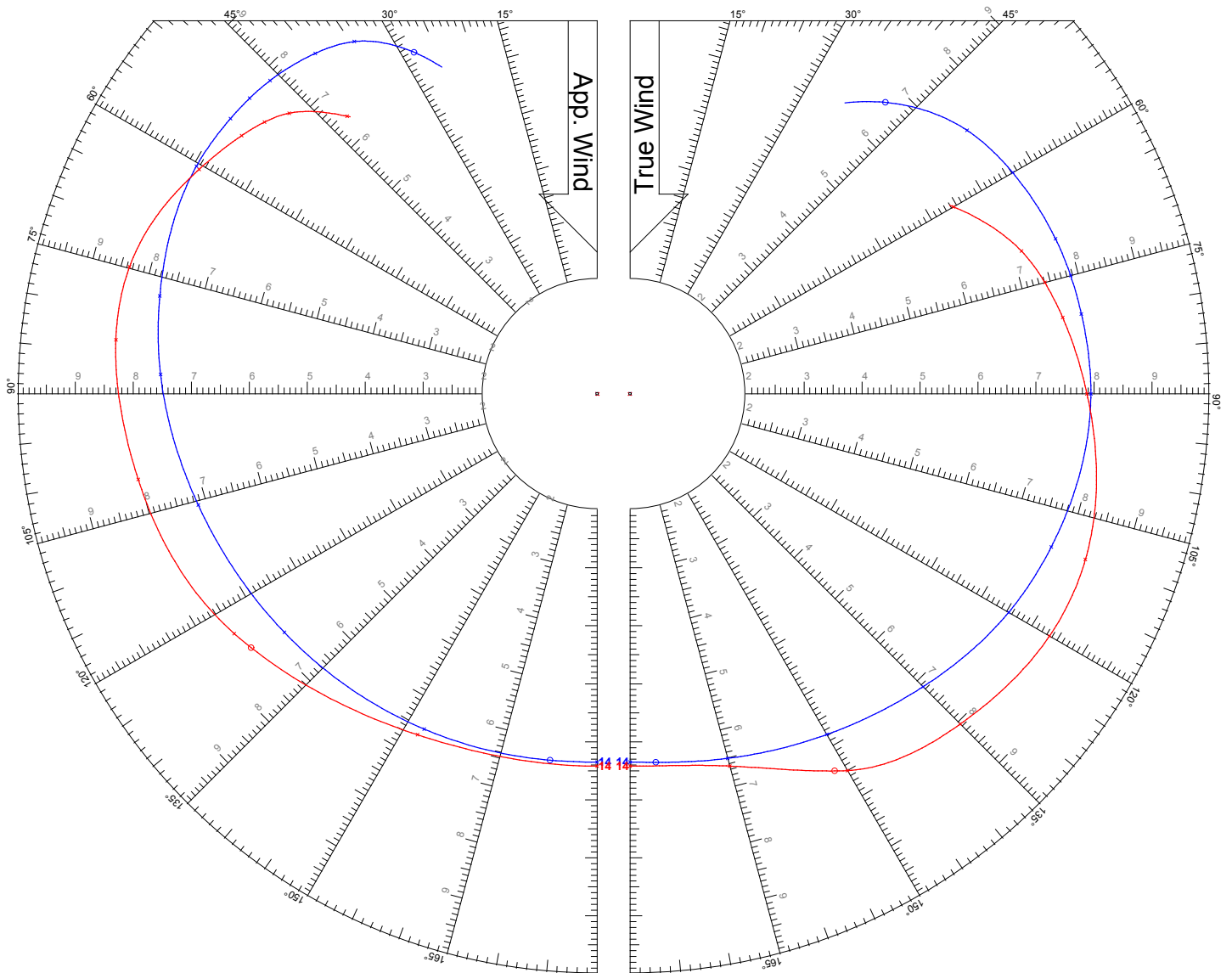
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 12 kts

Headsail

Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



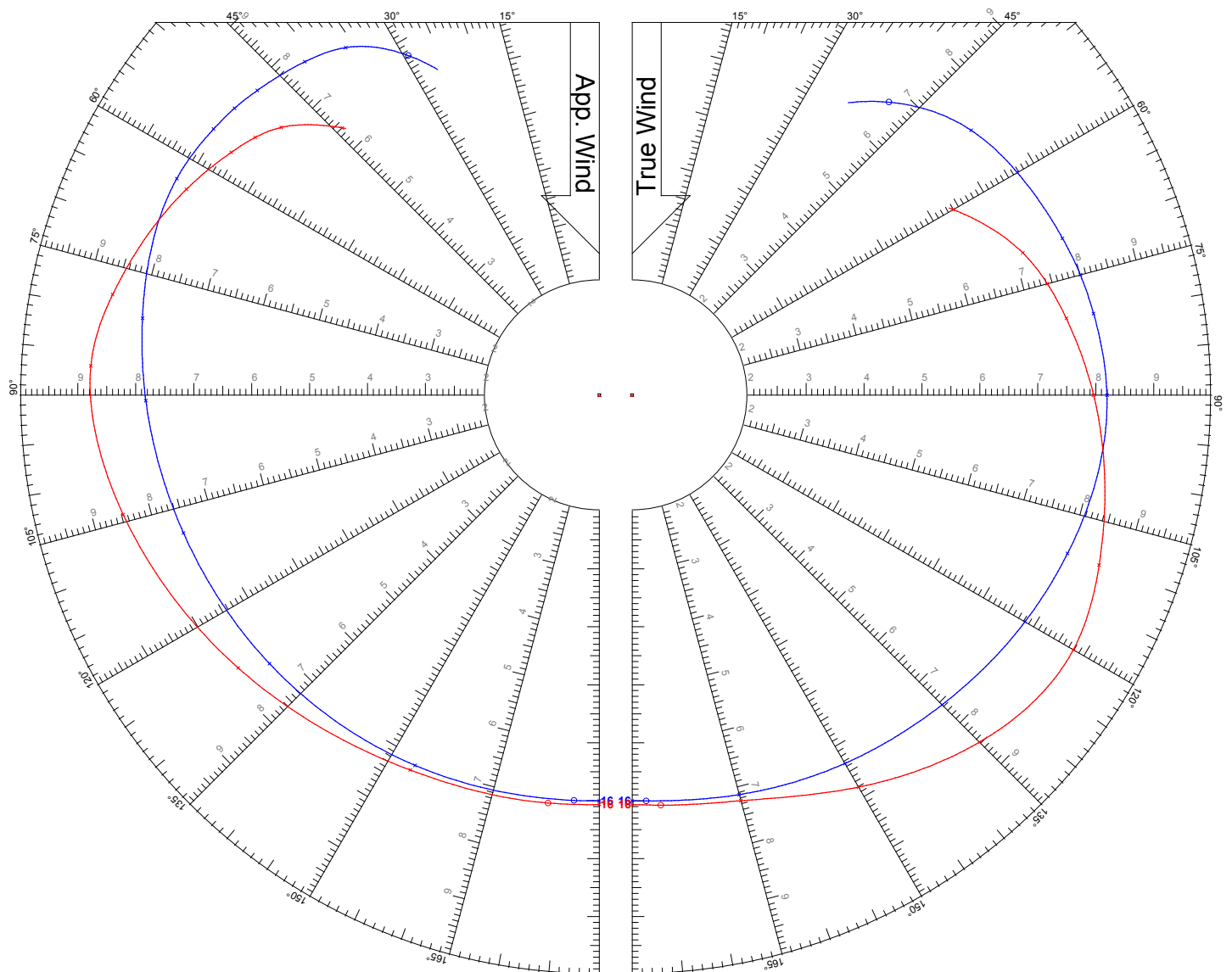
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 14 kts

Headsail

Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



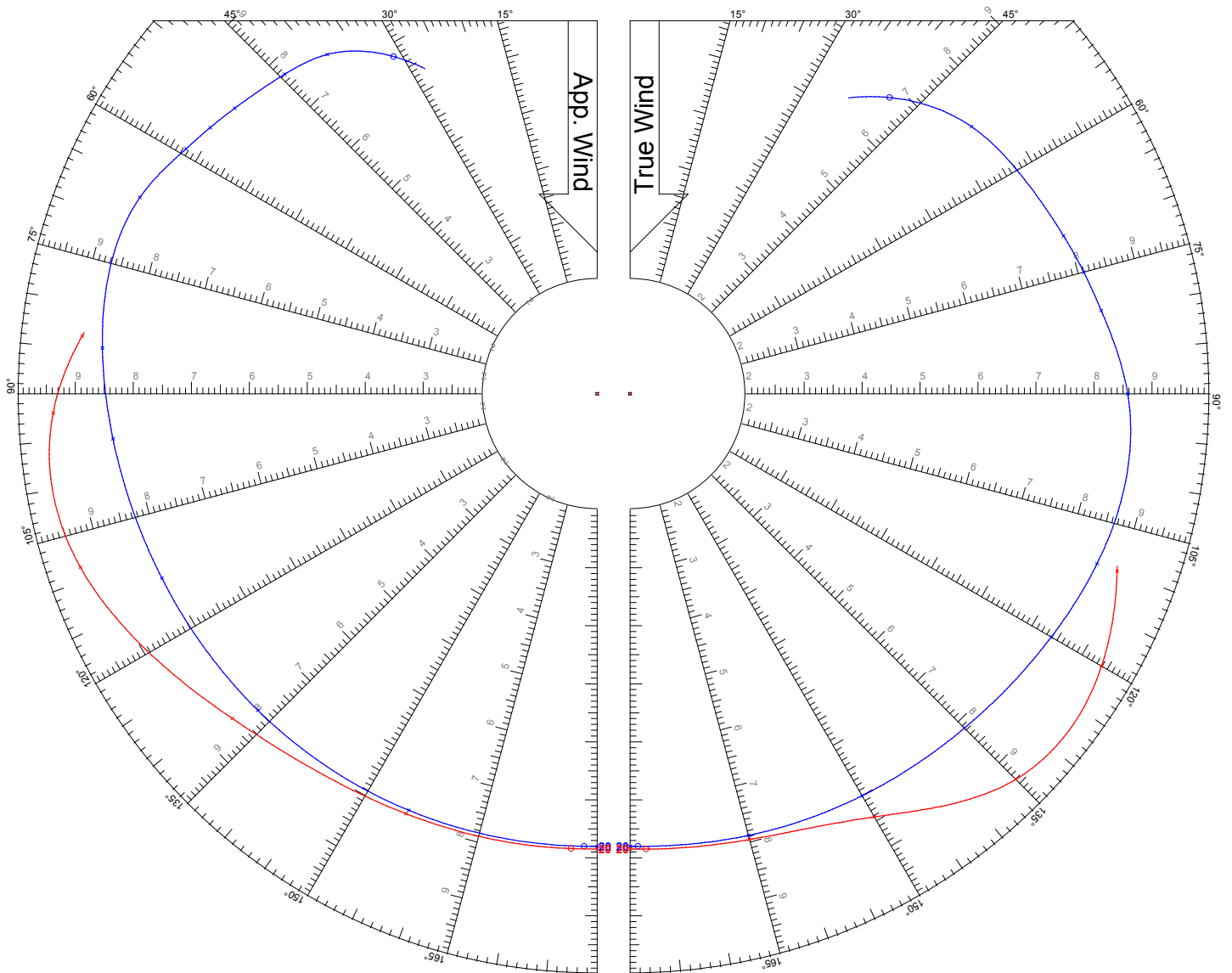
Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 16 kts

Headsail

Asymmetric Spinnaker on Centerline

SPEED GUIDE MD PINHEAD



Polar Plot for Boat	
Name	
Sail Number	
Class	DEHLER 38
Designer	JUDEL/VROLIJK & CO
Builder	HANSE
Issued On	15/05/2020 - VPP 2020 1.01

TWS: 20 kts

Headsail

Asymmetric Spinnaker on Centerline



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Polar Tables

Boat Name:

Sail No:

Sail: **Best Performance**

Issued On: **15/05/2020 - VPP 2020 1.01**

TWS = 6 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.3° (b)	4.61	3.30	9.84	25.2°	5.7°	1.00	1.00
52°	5.10	3.14	9.98	28.3°	4.3°	1.00	1.00
60°	5.41	2.71	9.89	31.7°	4.1°	1.00	1.00
70°	5.63	1.92	9.53	36.3°	3.4°	1.00	1.00
75°	5.67	1.47	9.26	38.7°	3.0°	1.00	1.00
80°	5.68	0.99	8.95	41.3°	2.5°	1.00	1.00
90°	5.71	0.00	8.28	46.4°	5.7°	1.00	0.98
110°	5.77	1.97	6.75	56.6°	2.9°	1.00	1.00
120°	5.60	2.80	5.81	63.5°	1.1°	1.00	1.00
135°	5.02	3.55	4.31	79.6°	-0.1°	1.00	1.00
150°	4.20	3.63	3.16	108.5°	0.2°	1.00	1.00
165°	3.18	3.08	3.04	149.3°	3.6°	1.00	1.00
180°	3.02	3.02	2.98	180.0°	3.4°	1.00	1.00
144.0° (r)	4.54	3.67	3.54	95.2°	0.0°	1.00	1.00

TWS = 8 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
42.0° (b)	5.41	4.02	12.55	25.2°	9.3°	1.00	0.99
52°	6.08	3.74	12.68	29.8°	9.7°	1.00	1.00
60°	6.40	3.20	12.50	33.7°	9.2°	1.00	1.00
70°	6.62	2.27	12.01	38.8°	8.0°	1.00	1.00
75°	6.67	1.73	11.67	41.5°	7.2°	1.00	1.00
80°	6.69	1.16	11.28	44.3°	6.3°	1.00	1.00
90°	6.87	0.00	10.54	49.4°	12.8°	1.00	0.99
110°	6.97	2.38	8.63	60.6°	7.5°	1.00	1.00
120°	6.79	3.39	7.47	68.1°	4.2°	1.00	1.00
135°	6.19	4.38	5.68	84.6°	0.0°	1.00	1.00
150°	5.32	4.61	4.31	111.8°	1.2°	1.00	1.00
165°	4.19	4.05	4.10	149.6°	4.1°	1.00	1.00
180°	3.99	3.99	4.01	180.0°	3.4°	1.00	1.00
148.0° (r)	5.46	4.63	4.44	107.4°	-0.2°	1.00	1.00

TWS = 10 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.8° (b)	6.12	4.56	15.13	26.1°	15.5°	1.00	0.97
52°	6.84	4.21	15.20	31.2°	16.5°	1.00	1.00
60°	7.12	3.56	14.89	35.6°	15.4°	1.00	1.00
70°	7.28	2.49	14.24	41.3°	13.2°	1.00	1.00
75°	7.31	1.89	13.83	44.3°	11.9°	1.00	1.00
80°	7.32	1.27	13.38	47.4°	10.6°	1.00	1.00
90°	7.51	0.00	12.51	53.1°	20.3°	1.00	0.97
110°	7.62	2.61	10.29	65.9°	12.4°	1.00	1.00
120°	7.52	3.76	9.02	73.8°	7.3°	1.00	1.00
135°	7.13	5.04	7.07	89.5°	1.3°	1.00	1.00
150°	6.26	5.42	5.55	115.6°	3.1°	1.00	1.00
165°	5.10	4.92	5.24	150.4°	4.7°	1.00	1.00
180°	4.88	4.88	5.12	180.0°	3.5°	1.00	1.00
147.8° (r)	6.44	5.45	5.70	110.7°	0.1°	1.00	1.00

TWS = 12 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.6° (b)	6.56	4.90	17.46	27.2°	22.3°	1.00	0.93
52°	7.24	4.46	17.42	32.9°	22.8°	1.00	0.96
60°	7.47	3.73	17.01	37.7°	21.8°	1.00	0.98
70°	7.61	2.60	16.26	43.9°	19.1°	1.00	1.00
75°	7.65	1.98	15.81	47.1°	17.2°	1.00	1.00
80°	7.67	1.33	15.32	50.5°	15.1°	1.00	1.00
90°	7.74	0.00	14.28	57.2°	22.1°	0.94	0.93
110°	8.02	2.74	11.94	70.9°	17.7°	1.00	1.00
120°	7.94	3.97	10.57	79.4°	10.7°	1.00	1.00
135°	7.66	5.42	8.53	95.5°	2.8°	1.00	1.00
150°	7.03	6.09	6.88	119.3°	4.6°	1.00	1.00
165°	5.90	5.70	6.48	151.4°	5.3°	1.00	1.00
180°	5.68	5.68	6.32	180.0°	3.6°	1.00	1.00
148.8° (r)	7.13	6.10	6.97	116.7°	3.5°	1.00	1.00

TWS = 14 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.68	5.02	19.52	28.2°	23.9°	1.00	0.81
52°	7.37	4.54	19.43	34.6°	25.9°	1.00	0.86
60°	7.62	3.81	18.99	39.7°	26.9°	1.00	0.92
70°	7.81	2.67	18.21	46.3°	24.3°	1.00	0.96
75°	7.87	2.04	17.74	49.6°	22.5°	1.00	0.98
80°	7.90	1.37	17.23	53.1°	20.5°	1.00	1.00
90°	7.95	0.00	16.10	60.4°	14.8°	1.00	1.00
110°	8.36	2.86	13.63	74.8°	21.9°	1.00	0.96
120°	8.35	4.18	12.20	83.6°	14.6°	1.00	1.00
135°	8.05	5.69	10.07	100.6°	4.6°	1.00	1.00
150°	7.50	6.50	8.39	123.4°	5.0°	1.00	1.00
165°	6.64	6.42	7.77	152.2°	5.8°	1.00	1.00
180°	6.42	6.42	7.58	180.0°	3.6°	1.00	1.00
151.5° (r)	7.40	6.50	8.29	126.3°	3.8°	1.00	1.00

TWS = 16 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.72	5.05	21.51	29.4°	24.6°	1.00	0.69
52°	7.42	4.57	21.38	36.1°	26.8°	1.00	0.75
60°	7.67	3.84	20.92	41.5°	27.7°	1.00	0.80
70°	7.90	2.70	20.12	48.3°	28.0°	1.00	0.89
75°	8.01	2.07	19.66	51.8°	27.1°	1.00	0.94
80°	8.09	1.40	19.14	55.4°	24.7°	1.00	0.96
90°	8.19	0.00	17.98	62.9°	19.3°	1.00	1.00
110°	8.58	2.93	15.35	78.3°	22.0°	0.94	0.94
120°	8.79	4.39	13.88	86.7°	19.4°	1.00	1.00
135°	8.47	5.99	11.67	104.1°	6.7°	1.00	1.00
150°	7.81	6.76	10.03	127.1°	5.4°	1.00	1.00
165°	7.25	7.00	9.19	153.2°	6.5°	1.00	1.00
180°	7.07	7.07	8.93	180.0°	3.7°	1.00	1.00
176.0° (r)	7.10	7.08	8.94	172.8°	4.9°	1.00	1.00

TWS = 20 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.79	5.10	25.50	31.1°	22.4°	0.50	0.61
52°	7.47	4.60	25.30	38.5°	23.5°	0.63	0.61
60°	7.70	3.85	24.77	44.4°	24.4°	0.81	0.61
70°	7.95	2.72	23.92	51.8°	29.1°	1.00	0.69
75°	8.10	2.10	23.44	55.5°	29.8°	1.00	0.76
80°	8.25	1.43	22.92	59.2°	29.7°	1.00	0.82
90°	8.58	0.00	21.76	66.8°	27.9°	1.00	0.95
110°	8.94	3.06	18.91	83.6°	22.3°	0.85	0.90
120°	9.39	4.69	17.33	92.0°	22.0°	0.95	0.94
135°	9.40	6.65	14.92	108.5°	12.3°	1.00	1.00
150°	8.42	7.29	13.39	131.7°	6.2°	1.00	1.00
165°	7.96	7.68	12.49	155.5°	5.8°	1.00	1.00
180°	7.85	7.85	12.15	180.0°	3.8°	1.00	1.00
178.0° (r)	7.85	7.85	12.15	176.7°	1.9°	1.00	1.00



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Polar Tables

Boat Name:
Sail No:
Sail: **Jib**
Issued On: **15/05/2020 - VPP 2020 1.01**

TWS = 8 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
42.0° (b)	5.41	4.02	12.28	24.6°	9.3°	1.00	0.99
52°	6.08	3.74	12.40	29.0°	9.7°	1.00	1.00
60°	6.40	3.20	12.22	32.8°	9.2°	1.00	1.00
70°	6.62	2.27	11.75	37.9°	8.0°	1.00	1.00
75°	6.67	1.73	11.42	40.6°	7.2°	1.00	1.00
80°	6.69	1.16	11.05	43.4°	6.3°	1.00	1.00
90°	6.65	0.00	10.20	49.3°	4.4°	1.00	1.00
110°	6.05	2.07	8.06	65.1°	0.2°	1.00	1.00
120°	5.58	2.79	6.95	76.0°	0.0°	1.00	1.00
135°	4.83	3.42	5.57	97.1°	0.0°	1.00	1.00
150°	4.34	3.76	4.57	121.8°	4.9°	1.00	1.00
165°	4.07	3.93	3.97	149.7°	4.5°	1.00	1.00
180°	3.94	3.94	3.82	180.0°	4.1°	1.00	1.00
171.0° (r)	4.00	3.95	3.86	161.7°	2.7°	1.00	1.00

TWS = 12 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.6° (b)	6.56	4.90	16.74	25.0°	22.3°	1.00	0.93
52°	7.24	4.46	16.59	30.3°	22.8°	1.00	0.96
60°	7.47	3.73	16.16	35.0°	21.8°	1.00	0.98
70°	7.61	2.60	15.47	41.6°	19.1°	1.00	1.00
75°	7.65	1.98	15.08	45.1°	17.2°	1.00	1.00
80°	7.67	1.33	14.67	48.7°	15.1°	1.00	1.00
90°	7.68	0.00	13.75	56.0°	11.1°	1.00	1.00
110°	7.41	2.53	11.47	72.7°	3.9°	1.00	1.00
120°	7.12	3.56	10.21	82.8°	1.4°	1.00	1.00
135°	6.50	4.60	8.48	102.2°	0.3°	1.00	1.00
150°	6.05	5.24	7.09	125.0°	6.2°	1.00	1.00
165°	5.77	5.57	6.24	151.3°	5.2°	1.00	1.00
180°	5.62	5.62	6.02	180.0°	4.3°	1.00	1.00
176.0° (r)	5.64	5.62	6.03	172.3°	4.5°	1.00	1.00

TWS = 16 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.72	5.05	20.35	26.7°	24.6°	1.00	0.69
52°	7.42	4.57	19.92	32.5°	26.8°	1.00	0.75
60°	7.67	3.84	19.24	37.4°	27.7°	1.00	0.80
70°	7.90	2.70	18.23	44.0°	28.0°	1.00	0.89
75°	8.01	2.07	17.78	47.7°	27.1°	1.00	0.94
80°	8.09	1.40	17.43	51.9°	24.7°	1.00	0.96
90°	8.19	0.00	16.71	60.6°	19.3°	1.00	1.00
110°	8.00	2.73	14.72	79.6°	8.3°	1.00	1.00
120°	7.83	3.91	13.47	89.9°	5.0°	1.00	1.00
135°	7.56	5.35	11.51	107.6°	6.4°	1.00	1.00
150°	7.34	6.36	9.84	128.5°	8.2°	1.00	1.00
165°	7.14	6.89	8.81	153.0°	6.2°	1.00	1.00
180°	7.00	7.00	8.52	180.0°	4.6°	1.00	1.00
178.0° (r)	7.01	7.00	8.52	176.4°	1.5°	1.00	1.00

TWS = 6 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.3° (b)	4.61	3.30	9.66	24.7°	5.7°	1.00	1.00
52°	5.10	3.14	9.81	27.8°	4.3°	1.00	1.00
60°	5.41	2.71	9.72	31.1°	4.1°	1.00	1.00
70°	5.63	1.92	9.37	35.6°	3.4°	1.00	1.00
75°	5.67	1.47	9.11	38.0°	3.0°	1.00	1.00
80°	5.68	0.99	8.80	40.5°	2.5°	1.00	1.00
90°	5.63	0.00	8.09	46.0°	1.3°	1.00	1.00
110°	5.04	1.72	6.26	60.9°	0.0°	1.00	1.00
120°	4.55	2.28	5.31	72.1°	0.0°	1.00	1.00
135°	3.77	2.67	4.16	95.1°	0.0°	1.00	1.00
150°	3.31	2.87	3.40	120.9°	4.5°	1.00	1.00
165°	3.09	2.98	2.95	149.4°	4.2°	1.00	1.00
180°	2.98	2.98	2.84	180.0°	4.0°	1.00	1.00
170.0° (r)	3.03	2.99	2.88	159.5°	1.4°	1.00	1.00

TWS = 10 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.8° (b)	6.12	4.56	14.69	25.0°	15.5°	1.00	0.97
52°	6.84	4.21	14.72	29.7°	16.5°	1.00	1.00
60°	7.12	3.56	14.41	34.0°	15.4°	1.00	1.00
70°	7.28	2.49	13.79	39.9°	13.2°	1.00	1.00
75°	7.31	1.89	13.41	43.0°	11.9°	1.00	1.00
80°	7.32	1.27	12.99	46.1°	10.6°	1.00	1.00
90°	7.32	0.00	12.08	52.7°	7.6°	1.00	1.00
110°	6.88	2.35	9.80	68.7°	2.0°	1.00	1.00
120°	6.44	3.22	8.58	79.4°	0.0°	1.00	1.00
135°	5.71	4.04	7.01	99.8°	0.2°	1.00	1.00
150°	5.25	4.55	5.80	123.3°	5.5°	1.00	1.00
165°	4.97	4.80	5.06	150.4°	4.8°	1.00	1.00
180°	4.82	4.82	4.88	180.0°	4.2°	1.00	1.00
174.0° (r)	4.86	4.83	4.89	168.1°	2.4°	1.00	1.00

TWS = 14 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.68	5.02	18.58	25.7°	23.9°	1.00	0.81
52°	7.37	4.54	18.26	31.3°	25.9°	1.00	0.86
60°	7.62	3.81	17.65	35.8°	26.9°	1.00	0.92
70°	7.81	2.67	16.91	42.8°	24.3°	1.00	0.96
75°	7.87	2.04	16.52	46.6°	22.5°	1.00	0.98
80°	7.90	1.37	16.11	50.5°	20.5°	1.00	1.00
90°	7.95	0.00	15.32	58.7°	14.8°	1.00	1.00
110°	7.73	2.64	13.10	76.5°	5.9°	1.00	1.00
120°	7.54	3.77	11.83	86.6°	3.0°	1.00	1.00
135°	7.14	5.05	9.97	104.7°	3.7°	1.00	1.00
150°	6.78	5.87	8.42	126.5°	6.8°	1.00	1.00
165°	6.51	6.28	7.48	152.1°	5.6°	1.00	1.00
180°	6.35	6.35	7.23	180.0°	4.4°	1.00	1.00
176.0° (r)	6.37	6.35	7.24	172.5°	4.7°	1.00	1.00

TWS = 20 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
41.3° (b)	6.79	5.10	23.80	28.7°	22.4°	0.50	0.61
52°	7.47	4.60	23.40	35.5°	23.5°	0.63	0.61
60°	7.70	3.85	22.72	41.0°	24.4°	0.81	0.61
70°	7.95	2.72	21.24	47.2°	29.1°	1.00	0.69
75°	8.10	2.10	20.56	50.7°	29.8°	1.00	0.76
80°	8.25	1.43	19.97	54.6°	29.7°	1.00	0.82
90°	8.58	0.00	18.97	63.1°	27.9°	1.00	0.95
110°	8.57	2.93	17.78	83.8°	14.6°	1.00	1.00
120°	8.39	4.19	16.68	94.7°	10.1°	1.00	1.00
135°	8.15	5.76	14.82	112.4°	6.4°	1.00	1.00
150°	8.00	6.93	13.05	132.6°	8.4°	1.00	1.00
165°	7.88	7.61	11.94	155.3°	7.1°	1.00	1.00
180°	7.80	7.80	11.59	180.0°	5.0°	1.00	1.00
179.0° (r)	7.81	7.80	11.60	178.3°	1.9°	1.00	1.00

SPEED GUIDE

MD PINHEAD



Offshore Racing Congress

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Polar Tables

Boat Name:

Sail No:

Sail: **Asymmetric Spinnaker on CL**

Issued On: 15/05/2020 - VPP 2020 1.01

TWS = 8 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	5.10	2.55	11.31	36.8°	9.5°	1.00	0.96
70°	6.02	2.06	11.35	39.8°	12.7°	1.00	0.96
75°	6.34	1.64	11.21	41.6°	13.5°	1.00	0.96
80°	6.58	1.14	10.98	43.6°	13.8°	1.00	0.97
90°	6.87	0.00	10.34	48.4°	12.8°	1.00	0.99
110°	6.97	2.38	8.53	60.1°	7.5°	1.00	1.00
120°	6.79	3.39	7.42	67.7°	4.2°	1.00	1.00
135°	6.19	4.38	5.64	84.1°	0.0°	1.00	1.00
150°	5.32	4.61	4.25	111.2°	1.2°	1.00	1.00
165°	4.19	4.05	3.99	149.3°	4.1°	1.00	1.00
180°	3.99	3.99	3.89	180.0°	3.4°	1.00	1.00
148.0° (r)	5.46	4.63	4.38	106.7°	-0.2°	1.00	1.00

TWS = 12 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	6.29	3.14	15.38	37.8°	22.1°	0.93	0.93
70°	7.05	2.41	15.02	42.6°	22.1°	0.89	0.93
75°	7.28	1.89	14.69	45.4°	22.2°	0.90	0.92
80°	7.45	1.29	14.29	48.4°	22.2°	0.91	0.93
90°	7.74	0.00	13.35	54.6°	22.1°	0.94	0.93
110°	8.02	2.74	11.33	69.5°	17.7°	1.00	1.00
120°	7.94	3.97	10.31	78.8°	10.7°	1.00	1.00
135°	7.66	5.42	8.43	95.1°	2.8°	1.00	1.00
150°	7.03	6.09	6.75	118.8°	4.6°	1.00	1.00
165°	5.90	5.70	6.32	151.1°	5.3°	1.00	1.00
180°	5.68	5.68	6.15	180.0°	3.6°	1.00	1.00
148.8° (r)	7.13	6.10	6.85	116.2°	3.5°	1.00	1.00

TWS = 16 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	6.40	3.20	18.79	41.1°	23.0°	0.85	0.71
70°	7.17	2.45	18.32	47.1°	22.9°	0.85	0.68
75°	7.42	1.92	17.93	50.4°	22.8°	0.85	0.69
80°	7.61	1.32	17.46	53.8°	22.7°	0.85	0.71
90°	7.96	0.00	16.42	61.0°	22.3°	0.85	0.79
110°	8.58	2.93	14.02	76.7°	22.0°	0.94	0.94
120°	8.79	4.39	12.91	86.0°	19.4°	1.00	1.00
135°	8.47	5.99	11.45	103.8°	6.7°	1.00	1.00
150°	7.81	6.76	9.82	126.8°	5.4°	1.00	1.00
165°	7.25	7.00	8.97	153.1°	6.5°	1.00	1.00
180°	7.07	7.07	8.71	180.0°	3.7°	1.00	1.00
176.0° (r)	7.10	7.08	8.71	172.8°	4.9°	1.00	1.00

TWS = 6 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	4.01	2.00	8.67	36.4°	3.4°	1.00	0.96
70°	4.86	1.66	8.87	38.9°	5.1°	1.00	0.96
75°	5.17	1.34	8.82	40.4°	5.7°	1.00	0.97
80°	5.41	0.94	8.69	42.1°	6.0°	1.00	0.97
90°	5.71	0.00	8.23	46.1°	5.7°	1.00	0.98
110°	5.77	1.97	6.72	56.3°	2.9°	1.00	1.00
120°	5.60	2.80	5.78	63.1°	1.1°	1.00	1.00
135°	5.02	3.55	4.29	79.1°	-0.1°	1.00	1.00
150°	4.20	3.63	3.12	107.7°	0.2°	1.00	1.00
165°	3.18	3.08	2.96	148.9°	3.6°	1.00	1.00
180°	3.02	3.02	2.89	180.0°	3.4°	1.00	1.00
144.0° (r)	4.54	3.67	3.51	94.5°	0.0°	1.00	1.00

TWS = 10 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	5.92	2.96	13.57	36.9°	17.8°	1.00	0.95
70°	6.81	2.33	13.31	40.1°	22.0°	1.00	0.93
75°	7.07	1.83	13.04	42.5°	22.1°	0.99	0.93
80°	7.26	1.26	12.70	45.1°	22.1°	1.00	0.93
90°	7.51	0.00	11.92	50.9°	20.3°	1.00	0.97
110°	7.62	2.61	10.03	65.0°	12.4°	1.00	1.00
120°	7.52	3.76	8.90	73.3°	7.3°	1.00	1.00
135°	7.13	5.04	7.01	89.0°	1.3°	1.00	1.00
150°	6.26	5.42	5.45	115.1°	3.1°	1.00	1.00
165°	5.10	4.92	5.11	150.1°	4.7°	1.00	1.00
180°	4.88	4.88	4.97	180.0°	3.5°	1.00	1.00
147.8° (r)	6.44	5.45	5.63	110.1°	0.1°	1.00	1.00

TWS = 14 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	6.44	3.22	17.12	39.4°	22.3°	0.85	0.89
70°	7.18	2.46	16.70	44.9°	22.4°	0.85	0.83
75°	7.41	1.92	16.32	48.0°	22.3°	0.85	0.85
80°	7.57	1.32	15.87	51.3°	22.2°	0.85	0.88
90°	7.88	0.00	14.86	58.0°	22.2°	0.87	0.92
110°	8.36	2.86	12.56	73.1°	21.9°	1.00	0.96
120°	8.35	4.18	11.69	83.0°	14.6°	1.00	1.00
135°	8.05	5.69	9.93	100.2°	4.6°	1.00	1.00
150°	7.50	6.50	8.22	123.0°	5.0°	1.00	1.00
165°	6.64	6.42	7.58	152.0°	5.8°	1.00	1.00
180°	6.42	6.42	7.38	180.0°	3.6°	1.00	1.00
151.5° (r)	7.40	6.50	8.13	125.9°	3.8°	1.00	1.00

TWS = 20 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
0.0° (b)	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
52°	-0.01	-0.01	0.00	0.0°	0.0°	0.00	0.00
60°	-0.01	-0.01	17.83	57.2°	26.4°	0.85	0.62
70°	-0.01	-0.01	17.55	67.9°	26.4°	0.85	0.62
75°	-0.01	-0.01	17.45	73.4°	26.4°	0.85	0.62
80°	-0.01	-0.01	17.37	78.9°	26.4°	0.85	0.62
90°	-0.01	-0.01	17.31	90.0°	26.4°	0.85	0.62
110°	8.94	3.06	17.01	82.2°	22.3°	0.85	0.90
120°	9.39	4.69	15.70	91.4°	22.0°	0.95	0.94
135°	9.40	6.65	14.39	108.5°	12.3°	1.00	1.00
150°	8.42	7.29	13.11	131.5°	6.2°	1.00	1.00
165°	7.96	7.68	12.21	155.4°	5.8°	1.00	1.00
180°	7.85	7.85	11.87	180.0°	3.8°	1.00	1.00
178.0° (r)	7.85	7.85	11.87	176.7°	1.9°	1.00	1.00