

## Resistance calculations.

### *Delft Series ('98).*

Resistance according to Delft Series ('98)						
Speed (kn.)	Speed (m/s)	Froude number	Frictional resistance kN	Residual resistance kN	Total resistance kN	Effective power (kW)
0.00	0.000	0.000	0.0000	0.0000	0.0000	0.000
0.50	0.257	0.029	0.0087	0.0000	0.0087	0.002
1.00	0.514	0.059	0.0304	0.0000	0.0304	0.016
1.50	0.772	0.088	0.0634	0.0000	0.0634	0.049
2.00	1.029	0.117	0.1072	0.0000	0.1072	0.110
2.50	1.286	0.146	0.1612	0.0000	0.1612	0.207
3.00	1.543	0.176	0.2251	0.0000	0.2251	0.347
3.50	1.801	0.205	0.2986	0.0000	0.2986	0.538
4.00	2.058	0.234	0.3815	0.1825	0.5640	1.161
4.50	2.315	0.263	0.4736	0.8592	1.3327	3.085
5.00	2.572	0.293	0.5748	2.0747	2.6494	6.815
5.50	2.829	0.322	0.6849	2.6927	3.3776	9.557
6.00	3.087	0.351	0.8039	3.1254	3.9292	12.128
6.50	3.344	0.380	0.9315	3.9815	4.9130	16.429
7.00	3.601	0.410	1.0678	7.5821	8.6499	31.149
7.50	3.858	0.439	1.2126	16.7667	17.9793	69.370
8.00	4.116	0.468	1.3659	30.6599	32.0258	131.804
8.50	4.373	0.497	1.5276	47.4302	48.9578	214.082
9.00	4.630	0.527	1.6975	63.8144	65.5119	303.320
9.50	4.887	0.556	1.8757	79.0319	80.9076	395.414
10.00	5.144	0.585	2.0621	89.8184	91.8805	472.674

### *John Winters (KAPER).*

Resistance according to John Winters (KAPER)					
Speed (kn.)	Speed (m/s)	Froude number	Frictional resistance kN	Residual resistance kN	Total resistance kN
0.00	0.000	0.000	0.0000	0.0000	0.0000
0.50	0.257	0.024	0.0087	0.0000	0.0087
1.00	0.514	0.049	0.0304	0.0000	0.0304
1.50	0.772	0.073	0.0634	0.0000	0.0634
2.00	1.029	0.098	0.1072	0.0000	0.1072
2.50	1.286	0.122	0.1612	0.0000	0.1612
3.00	1.543	0.147	0.2251	0.0000	0.2251
3.50	1.801	0.171	0.2986	0.0000	0.2986
4.00	2.058	0.196	0.3815	0.0000	0.3815
4.50	2.315	0.220	0.4736	0.0000	0.4736
5.00	2.572	0.245	0.5748	0.0107	0.5855
5.50	2.829	0.269	0.6849	0.0000	0.6849
6.00	3.087	0.294	0.8039	0.0000	0.8039
6.50	3.344	0.318	0.9315	0.0000	0.9315
7.00	3.601	0.343	1.0678	0.0000	1.0678
7.50	3.858	0.367	1.2126	2.9199	4.1325
8.00	4.116	0.392	1.3659	7.8277	9.1936
8.50	4.373	0.416	1.5276	12.7866	14.3142

