



### DIMENSIONING ELECTRICAL CABLES AND BATTERY BANK FOR THRUSTERS

TUNNEL (mm) Ø	MODEL	THRUST (KGF)	POWER (KW)	VOLT (V)	CABLE CROSS SECTION RECOMMENDED (overall wire lenght L < 5 m)		CABLE CROSS SECTION RECOMMENDED (overall wire lenght 5,5 < L < 10 m)		CABLE CROSS SECTION RECOMMENDED (overall wire lenght 10,5 < L < 20 m)		MIN. BATTERY GROUP RECOMMENDED (Ah)	CCA (Cold Cranking Amps) SAE J537
					mm²	AWG	mm²	AWG	mm²	AWG		
110	BTQ1102512	25	1,3	12	35mm²	AWG 2	50mm²	AWG 1	70mm²	AWG 2/0	115 - 150	450 - 800
125	BTQ1253012	30	1,5	12	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	115 - 150	450 - 800
	BTQ1254012	40	2,2	12	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	150 - 210	800 - 1100
140	BTQ1403012	30	1,5	12	35mm²	AWG 2	50mm²	AWG 1	70mm²	AWG 2/0	80 - 115	450 - 550
	BTQ1404012	40	2,2	12	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	115 - 150	450 - 800
185	BTQ1805512	55	3	12	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	115 - 150	550 - 800
	BTQ1805524	55	3	24	35mm²	AWG 2	50mm²	AWG 1	70mm²	AWG 2/0	80	450
	BTQ1807512	75	4	12	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	160 - 210	800 - 1100
	BTQ1807524	75	4	24	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	120 - 150	450 - 800
	BTQ1809512	95	6	12	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	2 X 95mm²	2 X AWG 3/0	200 - 250	1000 - 1100
	BTQ1809524	95	6	24	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	120 - 150	550 - 800
185-DP	BTQ/BTR1806512	65	3,3	12	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	120 - 150	550 - 800
	BTQ/BTR1806524	65	3,3	24	50mm²	AWG 1	70mm²	AWG 2/0	95mm²	AWG 3/0	80 - 115	450 - 550
	BTQ/BTR1808512	85	4,3	12	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	2 X 95mm²	2 X AWG 3/0	200 - 250	1000 - 1100
	BTQ/BTR1808524	85	4,3	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	150 - 200	800 - 1000
	BTQ/BTR1810512	105	6,3	12	2 X 70mm²	2 X AWG 2/0	2 X 95mm²	2 X AWG 3/0	2 X 120mm²	2 X AWG 4/0	250 - 300	1100 - 1600
	BTQ/BTR1810524	105	6,3	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	150 - 200	800 - 1000
	BT DC-AC 18510524	105	6,3	24	50mm²	AWG 1	95mm²	AWG 3/0	2 X 70mm²	2 X AWG 2/0	120 - 150	450 - 800
250	BTQ/BTR2512012	120	6,5	12	2 X 70mm²	2 X AWG 2/0	2 X 95mm²	2 X AWG 3/0	2 X 120mm²	2 X AWG 4/0	250 - 300	1100 - 1600
	BTQ/BTR2512024	120	6,5	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	120 - 150	550 - 800
	BTQ/BTR2514024	140	8	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	120 - 150	550 - 800
	BTQ/BTR2524024	240	10	24	2X50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	2 X 95mm²	2 X AWG 3/0	200 - 250	1000 - 1100
	BT DC-AC 25014024	140	8	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 70mm²	2 X AWG 2/0	120 - 150	550 - 800
300	BTQ3025024	250	10	24	70mm²	AWG 2/0	2 X 50mm²	2 X AWG 1	2 X 95mm²	2 X AWG 3/0	150 - 200	800 - 1000
	BTQ3027024	270	12	24	95mm²	AWG 3/0	2 X 95mm²	2 X AWG 3/0	2 X 120mm²	2 X AWG 4/0	250 - 300	1000 - 1100
	BTQ3030048	300	15	48	95mm²	AWG 3/0	150mm²	AWG 300MCM	2 X 95mm²	2 X AWG 3/0	200 - 250	1000 - 1100
	BT DC-AC 30030048	300	15	48	95mm²	AWG 3/0	150mm²	AWG 300MCM	2 X 95mm²	2 X AWG 3/0	200 - 250	1000 - 1100

**NOTE:**

**SIZING CABLES:** The cable section is calculated for intermittent use, so in keeping with the times of use of the thrusters. The dimensioning is not therefore to be considered for a continuous operation.

**BATTERY SIZE:** The values given are not binding but represent a general indication about the battery capacity and Cold Cranking Amps ( CCA ) to be used. Such data may in fact be different for the various battery manufacturers, therefore, the data declared by Quick represent a recommended range of use and NOT a given binding.