

GRAPHITE ANODES

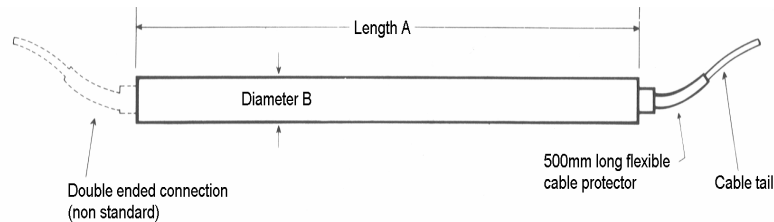
1.4.3

When used with BAC Carbonaceous Backfill, BAC Graphite Anodes provide an economic and reliable medium for buried impressed current systems. They are particularly suitable for use in high resistivity environments where anode current density is not a determining factor.

Graphite has excellent electrical conductivity and therefore ensures good current distribution and uniform material consumption.

Equally suited to applications on land or underwater, the standard BAC Graphite Anode is chemically inert and vacuum impregnated with linseed oil.

The proven performance of BAC standard cable attachments and sealing arrangements insure against the possibility of premature failure.



Anode Type	A	B	Nominal Surface Area	Amps output at varying current densities				Approx. Weight
				2A/m ²	3A/m ²	5A/m ²	10A/m ²	
	mm	mm	m ²					Kgs
BG1	1372	76	0.3	0.60	0.90	1.50	3.00	8.3
BG2	1525	63	0.28	0.56	0.84	1.40	2.30	6.7
BG3		76	0.33	0.66	0.99	1.65	3.30	9.2
BG4		102	0.47	0.92	1.39	2.35	4.70	18.8
BG5	1830	102	0.58	1.16	1.74	2.90	5.80	23.2
BG6		153	0.87	1.64	2.51	4.35	8.70	53.6

Centre Tapped Graphite Anodes

A range of graphite anodes with a centre connection is also available. Operating data is the same as standard graphite anodes but weights are very much reduced.

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Consumption Rates of Graphite Anodes

Rates of consumption vary with current density, environment, and method of installation. The following figures are given for guidance only

Environment	Current Density A/m ²	Consumption rate Kg/Ampere/year
Fresh Water	3	0.1 - 0.2
Salt Water	10	0.1 - 0.2
Wet Carbonaceous backfill	10	0.05 - 0.1
Dry Carbonaceous backfill	10	Negligible

Graphite Anode Ordering Details

ANODE DIMENSIONS, WEIGHTS AND TYPE		
BG1	1372mm x 76mm	8.3 kg
BG2	1525mm x 63mm	6.7 kg
BG3	1525mm x 76mm	9.2 kg
BG4	1525mm x 102mm	18.8 kg
BG5	1830mm x 102mm	23.2 kg
BG6	1830mm x 153mm	53.6 kg

TABLE 1

INSULATION SHEATH (BLACK)	CROSS SECTIONAL SIZE (7 STRAND CORE)	
	10 mm ²	16 mm ²
XLPE/PVC	10XP	16XP
PVF/HMWPE	10KH	16KH
EPR/CSP	10EC	16EC

TABLE 2

STANDARD CABLE LENGTHS IN METRES					
1.0	5	10	15	20	30

TABLE 3

Example: You require a graphite anode 1525mm x 63mm (6.7Kg) complete with 16 mm² XLPE/PVC black cable 10 metre length.

How to Order:

Step 1: Find the reference number for the 1525mm x 63mm anode type in Table 1 - **BG2**

Step 2: Select the cable type from Table 2 - **16XP**

Step 3: Choose the cable length from Table 3 - **10**

Therefore, your requirement is for: **BG2 - 16XP - 10**