



GX Series

SPARK GAPS

INTRODUCTION

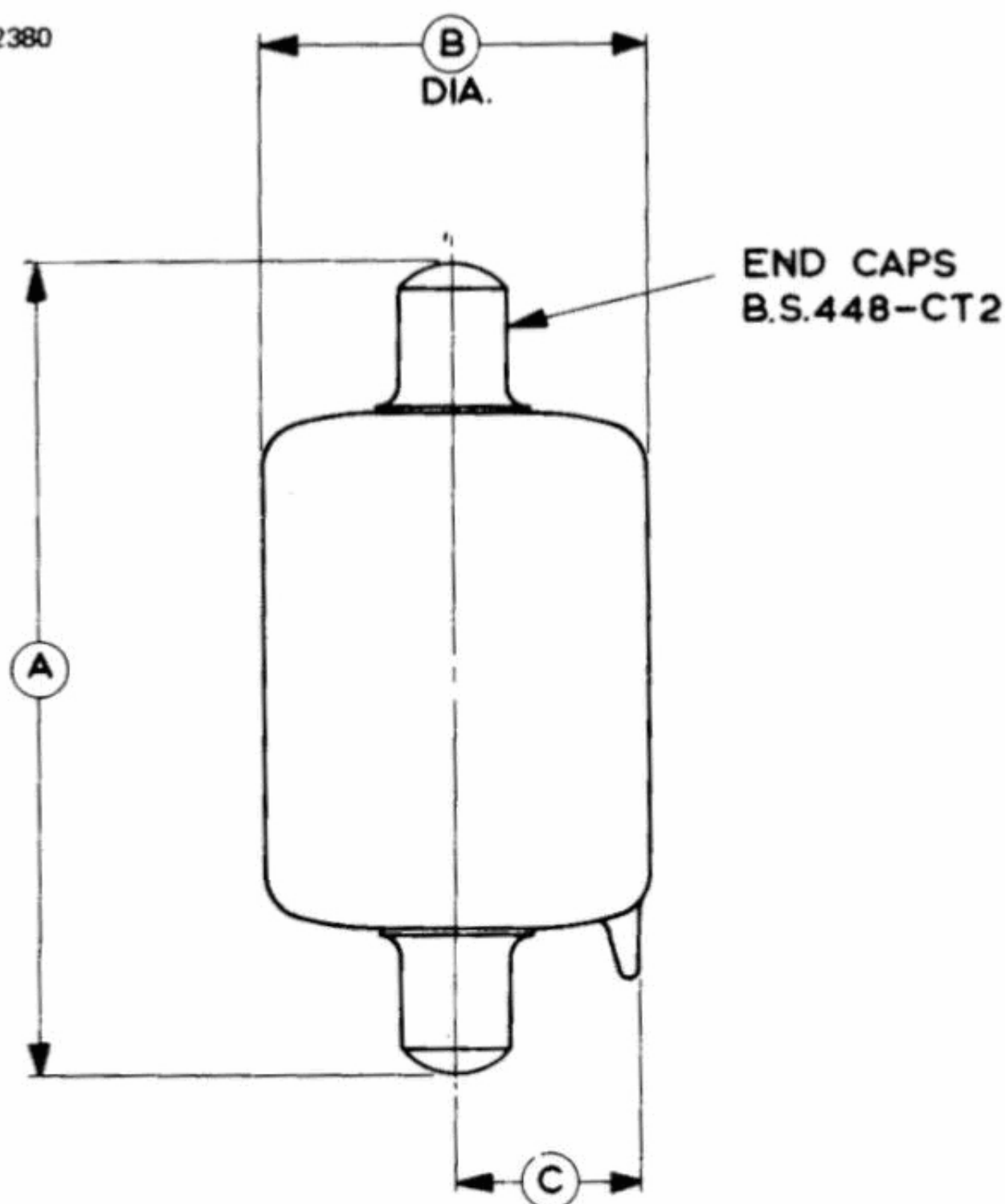
The following list gives examples of the present range of spark gaps in the GX series. The types listed can be manufactured with other values of breakdown voltage, in multiples of 100V.

Type	CV number	Previously known as	Breakdown voltage (V)	Tolerance (\pm V)	See page
GXA50	233	BS5	5000*	500	2
GXA60	1743	BS112	6000*	500	
GXA80	402	BS68	8000*	500	
GXA85	295	BS54	8500*	500	
GXA95	488	BS90	9500*	500	
GXA160	1859	BS4A	16 000*	1000	
GXB160	8296	BS142	16 000*	1000	3
GXE8	—	BS136	800	50	4
GXE15	—	BS208	1500	150	
GXE30	—	BS470	3000	150	
GXF5	—	BS192	500	50	5
GXF15	—	BS408	1500	75	
GXF17	—	BS598	1700	85	
GXF22	—	BS436	2200	110	
GXF25	—	BS422	2500	125	

* Measured under the following pulse conditions; pulse length $1.0\mu\text{s}$, repetition rate 1000p.p.s., rate of rise of voltage 50 to $100\text{kV}/\mu\text{s}$.

STYLE B OUTLINE

2380



Dimensions for GXB160

Ref	Millimetres	Inches
A	63.5 ± 5.0	2.500 ± 0.197
B	30.0 ± 1.0	1.181 ± 0.039
C	17.5 max	0.689 max

Inch dimensions have been derived from millimetres.

Type	GXM5A	GXMT40	GXE	GXP	GXK	GXL	GXM70	GXA	GXB	GXC	GXN	GXR	GXV	GXH	GXQ	GXW	GXF
Cumulative charge (coulombs)	30	30	30	50	50	50	50	100	100	100	400	400	400	600	1000	1000	20 000
Max. discharge energy (joules)	10	10	10	10	10	10	10	10	10	10	75	75	75	100	2000	2000	5000
Max. current (A)	2500	2500	1500	2500	2500	2500	2500	3000	3000	3000	4000	4000	4000	10 000	75 000	75 000	80 000
Breakdown voltage (kV)	0.5 – 1.5	2 – 5	0.5 – 3.0	0.4 – 12	0.4 – 12	0.4 – 12	3 – 7	5 – 16 pulsed	5 – 16 pulsed	5 – 16	0.4 – 12	0.4 – 12	0.4 – 12	0.5 – 6	10 – 40	0.4 – 20	0.25 – 15
Capacitance (pF)	1.5	1.5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.4	0.4	1.3	0.5	2	2	2
Impulse ratio †	6 – 2.7	—	6 – 1.7	7.5 – 1.7	7.5 – 1.7	—	—	—	—	—	7.5 – 1.7	7.5 – 1.7	7.5 – 1.7	6 – 1.8	—	7.5 – 1.5	12 – 1.6
Minimum trigger voltage (open circuit) (kV)	—	3	—	—	—	1	4	—	—	—	—	—	—	—	5	—	—
Number of electrodes	2	3	2	2	2	3	3	2	2	2	2	2	2	2	3	2	2
Construction G = glass C = ceramic	C	C	G	G	G	G	C	G	G	G	G	G	C	G	C	C	G
Terminations	2 caps 2 leads	2 leads 1 wire	2 flex	1 cap 1 stud	2 caps	1 wire 2 caps	2 leads 1 wire	1 cap octal	2 caps	2 leads	2 caps	1 cap 1 stud	1 cap 1 stud	1 cap 1 screw	screw mounted	screw mounted	2 studs
Overall dimensions height (mm max) dia. (mm max)	33 14	35 14	45 20	47 19	45 19	53 19	48 21	70 35	69 30	75 40	52 19	40 19	53 21	47 28	78 63	78 63	127 104
Weight (grammes)	13.5	10	7.5	15	12	12.5	40	35	27.5	138	18	20	29	37	465	450	900

† The impulse ratio of a spark gap is defined as the breakdown voltage of the device measured under an impulse condition, divided by the d.c. breakdown voltage. The values given are obtained using a 15 kV/μs voltage impulse.

The value of impulse ratio depends on the d.c. breakdown voltage to which the gap is made; the impulse ratio is highest for low voltage gaps. Two values of impulse ratio are given for each type, the first being typical of the minimum breakdown voltage while the second value refers to a gap made to the maximum breakdown voltage.