

# Electrical Metreage “Guide”

For use with Matel resin transformer

2007\*

Argon + Hg gas		Electrical Metres				
Glass dia	8mm	10mm	12mm	15mm	18mm	20mm
Voltage						
1kv	0.8	1	1.5	2.0	2.2	2.4
2kv	1.6	2.3	2.6	3.5	4.5	5
3kv	2.9	3.45	4.0	5.5	6.75	7
4kv	4.0	4.7	5.75	7.75	9.0	9.5
5kv	5.29	6.9	7.75	9.75	11.25	12
6kv	6.5	7.5	9.5	11.75	13.5	14.5
7kv	8.28	9.08	11.3	13.8	15.75	17.2
8kv	9.7	10.7	13.25	16	18.0	19.2
9kv	11.16	12.8	15.1	18	20.1	21.9
10kv	12.7	14.6	16.8	19.8	22.5	24.9

Neon Gas		Electrical Metres				
Glass dia	8mm	10mm	12mm	15mm	18mm	20mm
Voltage						
1kv	0.2	0.5	0.9	1.26	1.4	1.7
2kv	0.7	1.1	2.1	2.0	2.6	3.1
3kv	1.1	2.1	3.0	3.5	4.25	4.8
4kv	1.5	2.97	4.4	4.75	6.25	7.15
5kv	2.3	4.1	5.7	6.6	8.25	9.1
6kv	2.9	5.3	7.2	8.4	10.1	11.2
7kv	3.6	6.6	8.8	10.1	11.9	12.8
8kv	4.6	8.1	10.5	11.5	13.8	15.0
9kv	5.4	9.6	12.4	13.6	15.75	16.9
10kv	6.4	11.2	14.3	16	18.0	19.9

**Electrical metres:** are arrived at by adding 0.5mtr per pair of electrodes (or section of glass) to total linear tube length  
 eg: 6 sections of 18mm glass filled with blue gas, each being 1.0mtr in length =6mtr, plus 3.0mtr for 6 pairs of electrodes = 9.0 electrical metres in total. The corresponding transformer size on the above (Blue) table 18mm dia is 4kv.

## “Important”

**These figures are INDICATIVE only and should ALWAYS be checked with a Milliamp-meter during installation.**