

General lamp information

Lighting advisory service

Discharge lamps are compact, high output sources and their successful use, particularly in commercial interiors, is dependent on the optical control provided by the luminaire. In addition, interior lighting design requires careful attention to layout and decor to ensure visual satisfaction.

The advice of Thorn Lighting engineers is available on request.

Supply voltage

All lamps are suitable for 220V and 240V supplies with control gear.

All mercury, metal halide, low and high pressure sodium lamps described in this section will start and operate with a 10% reduction in the rated voltage provided that the correct control gear is used. Kolor-Plus mercury tungsten lamps must be operated on the correct supply voltage.

Fusing

For a very short period after switch-on, a discharge lamp may act as a rectifier and as a result the ballast may allow several times the normal circuit current to flow. To avoid fuse failures the ratings recommended in the **Control gear and accessories** section should be used.

Ambient temperature

Minimum for starting -20°C (SON -40°C). The graph shows the effect of ambient temperature on the starting voltage of mercury lamps.

Lumen Output Values

The lumens quoted in this section are average values to be expected from a batch of lamps and the achievements are shown at 100 hours and 2000 hours life.

Manufacturing Tolerances

All performance and dimensional figures quoted in this section are subject to normal manufacturing tolerances and are allowed for in the relevant standards shown below where they exist.

Standards

Lamps conform to the following standards where applicable:

BS 3677 : High pressure mercury vapour lamps.

BS 3767 : Low pressure sodium vapour lamps.

IEC Publication 188 : High pressure mercury vapour lamps.

IEC Publication 192 : Low pressure sodium vapour lamps.

Dimensions

Those shown are maximum.

Cap designations

ES - E27

GES - E40

BC - B22

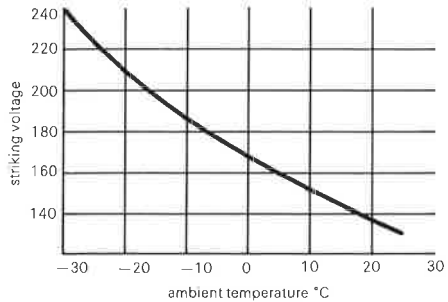
3 pin BC - B22-3

BIPIN - G13

Run-up time

The following table shows typical run-up times to 90% light output. The time will vary depending on location and the type of fitting.

MB, MBF, MBFR	SON, SON-T, SON-TD
50W 5 mins	70W 5 mins
80W 3 mins	150W 4 mins
125W 3 mins	250W 7 mins
250W 4 mins	400W 5 mins
400W 4 mins	1000W 10 mins
700W 3 mins	
1000W 2 mins	SLI
	140W 12 mins
MBI, MBIF	200W 7 mins
250W 2 mins	
400W 2 mins	SOX
1000W 2 mins	35W 6 mins
	55W 6 mins
	90W 7 mins
	135W 8 mins



Re-strike time

The following table shows typical re-strike times after momentary supply interruption. The time taken will vary depending on the ambient temperature and type of fitting. Values for SLI and SOX are not quoted because of the variability in re-strike time, but it is usual for at least 1 out of 5 lamps to re-strike instantaneously.

MB, MBF, MBFR	MBI, MBIF
50W 4 mins	250W 7½ mins
80W 4 mins	400W 8½ mins
125W 4 mins	1000W 12 mins
250W 4½ mins	
400W 5 mins	SON, SON-T, SON-TD
700W 5½ mins	All ratings 1 min
1000W 7 mins	