H.I.D. lamps

Blended light (self-ballasted)

These lamps consist of a gas-filled ovoid glass bulb internally coated with a phosphor. They contain a quartz high-pressure mercury-discharge tube connected in series with a tungsten filament which acts both as an incandescent light source and as a current-limiting device. They offer a combination of high luminous flux and good colour rendering. MLR lamps include an internal reflector.

The outer bulb is filled with a mixture of argon and a percentage of nitrogen. ML lamps emit a spectrum composed of a continuum from the incandescent source and a line spectrum from the high-pressure mercury source. Blended light lamps cannot be dimmed.

The self-ballasting ML lamps are a direct retrofit in luminaires for incandescent lamps.

It is advisable to protect the normal glass types (100 W, 160 W and 250 W versions) against water splashes.

ML 100 W and 160 W: burning position of +/- 30 degs, base up or down.
ML 250 W and 500 W: universal burning position permissible, but vertical position +/- 45 degs, base up or down recommended, especially when undervoltage is expected.

MLR lamps: base up +/- 30 degs.

Applications
- ML: streets, squares, car parks, petrol stations, workshops, garages and shops.
- MLR: plant irradiation, workshops, small industrial units, garages, shops and petrol stations.

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### Blended light (self ballasted)

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### Spectral power distributions

![Spectral power distributions](image1.png)

### Lamp performance during run-up

![Lamp performance during run-up](image2.png)

### Effects of mains voltage variations

![Effects of mains voltage variations](image3.png)