



Figure 42

Common use fluorescent lamps, GR8, G23, G24q-2, G24d-1, E27, 2G11, G13, G5, etc.

#### 2.4 High Pressure Mercury (also HID, Mercury Vapour, MVP Technique)

In this type of lamp a discharge takes place in a quartz discharge tube containing mercury vapour at high pressure (2 to 10 atmospheres). Some of the radiation from the discharge occurs in the visible spectrum but part of the radiation is emitted in the ultraviolet. The outer bulb of the lamp is coated internally with a phosphor that converts this UV radiation into

light. The general construction of the lamp is shown in Figure 43 below.

The operation of the lamp is quite complex and needs to be considered in three phases:

- Ignition
- Run-up
- Stable running.