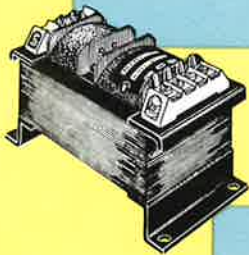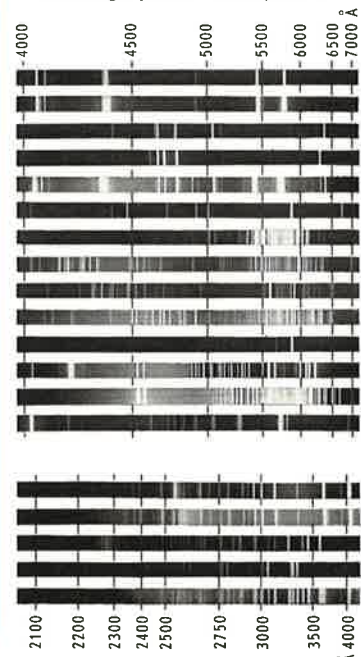# SPECTRAL LAMPS

These lamps consist of a small discharge tube enclosed in a tubular outer bulb made either from glass or from quartz depending on the requirements. The discharge tube is filled with a gas, a metallic vapour or a mixture of both. The electrodes permit of a very high current intensity so that a light source is obtained capable of emitting considerable energy in one spectral line or in a few lines.

These light sources are an important aid in physical and chemical experiments e.g., in spectroscopy, in refractometry, polarimetry etc.
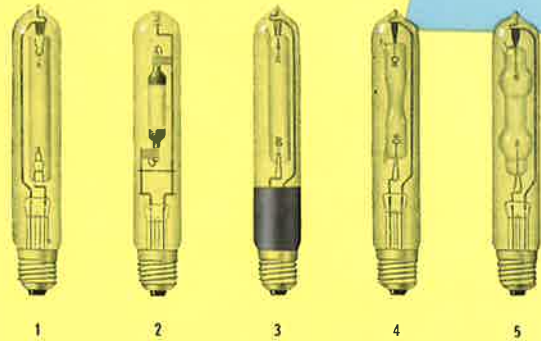
	Gas or vapour		Type number	Fig.	Watts	Length luminous discharge
For visible spectra (with glass tube and bulb)	Hg	(low pressure)	93123	1	15	40
		(high pressure)	93136	2	90	30
	Cd		93162	2	25	30
	Zn		103137	2	25	30
	Hg, Cd, Zn		93145	2	90	30
	He		93098	5	45	32
	Ne		93099	1	25	40
	A		93100	1	15	40
	Kr		93101	1	15	40
	Xe		93102	1	10	40
	Na		93122	3	15	40
	Rb		93104	4	15	40
	Cs		93105	3	10	40
	K		93103	4	10	40
For ultraviolet spectra (with quartz tube and bulb)	Hg	(low pressure)	93109	1	15	40
		(high pressure)	93110	2	90	30
	Cd		93107	2	25	30
	Zn		93106	2	25	30
	Hg, Cd, Zn		93146	2	90	30

Photographs of the spectra

BALLAST FOR SPECTRAL LAMPS

Voltage	Losses W	Catalogue number	Weight kg
115/125 V	26	59003 BD/00	7.8
220 V	24	59003 AH/01	6

NEON TUBES

The neon tube is a glass tube filled with neon gas under low pressure, fitted with an electrode at both extremities and radiating a red light if the correct voltage is applied.

The colour of neon tubes depends on the gas or gas mixture used (neon or neon and mercury) and is further affected by the colour of the glass and a fluorescent coating on the inside of the glass.

Today neon tubes are used for commercial purposes all over the world. Big shopping centres are decorated with huge and elaborate neon signs and we are proud to state that many of them have been made in the Philips factories. Due to the fact that all neon sign installations have their own specific requirements, we invite you to apply for detailed information.