

JIS

JAPANESE INDUSTRIAL STANDARD

Low pressure sodium vapour lamps

JIS C 7610—1991

Translated and Published

by

Japanese Standards Association

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

JAPANESE INDUSTRIAL STANDARD

J I S

Low pressure sodium vapour lamps

C 7610-1991

1. Scope

This Japanese Industrial Standard specifies low pressure sodium vapour lamps (hereafter referred to as the "lamps") which are integral type consisting of arc tube and glass tube, where the vapour pressure in the arc tube is approximately 0.5 Pa during operation and a transparent reflecting film for infrared rays is attached inside the glass tube.

Remarks 1. The following Standards are cited in this Standard:

JIS B 7507-Vernier Callipers

JIS C 1102-Electrical Indicating Instruments

JIS C 7709-Lamp Caps and Holders

JIS C 7710-Designation Methods for Glass Bulbs of Lamps

JIS C 7801-General Rules of Testing Method for Lamps

JIS C 8110-Ballasts for High Pressure Mercury Vapour Lamps
and Ballasts for Low-Pressure Sodium Vapour Lamps

JIS H 3100-Copper and Copper Alloy-Sheets, Plates and Strips

JIS Z 8113-Glossary of Lighting Terms

2. The international Standard corresponding to this Standard is given below.

IEC 192 (1979)-Low Pressure Sodium Vapour Lamps

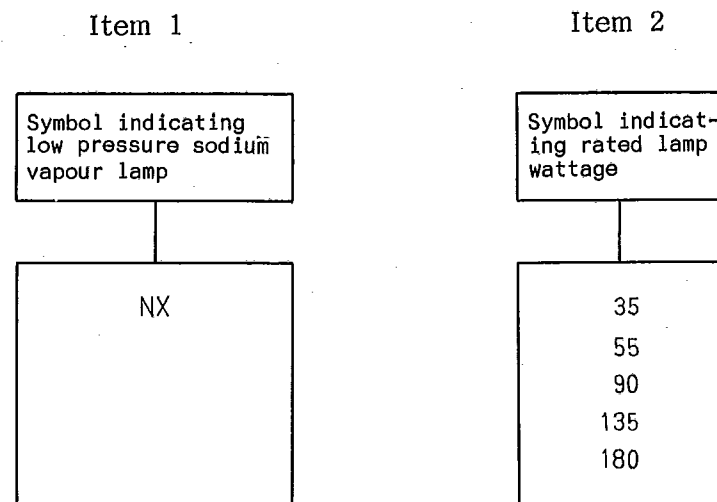
2. Definitions

In addition to the definitions given in JIS Z 8113, for the purpose of this standard the following principal definitions shall apply:

- (1) rated lamp wattage The lamp wattage indicated on a lamp.
- (2) starting Such phenomenon that arc discharge starts between the main electrodes of a lamp.
- (3) initial characteristics Lamp voltage, lamp current, lamp wattage and total luminous flux of a lamp after the lamp has been aged for 100 h.

3. Classification

The lamps are classified as shown in Table 1 according to their types. Types are expressed by arranging the items as follows:



4. Performances

4.1 Adhesive strength of lamp cap The adhesive strength of lamp cap shall withstand a twisting moment of 3 Nm when the test is made in accordance with 9.2.3.

4.2 Starting characteristics The starting characteristics shall be such that the lamp starts when the test is made in accordance with 9.2.4.

4.3 Initial characteristics The initial characteristics shall be such that the values of lamp voltage and lamp current shall be the same as the values specified in Attached Table 1, and the values of total luminous flux shall be not less than 80 % of the values specified in Attached Table 1, when the test is made in accordance with 9.2.5.

5. Construction

Construction shall comply with the following requirements:

- (1) The arc tube shall be fixed firmly in the glass tube.
- (2) The cap shall be fixed so that it will not become loose during service.
- (3) The inclination of axis of glass tube to the cap axis shall be not more than 3°.

6. Shape and dimensions

The shape and dimensions shall be as given in Attached Table 1 and Attached Fig. 1.

7. Appearance

On the glass tube and arc tube, there shall be neither flaws nor other defects detrimental to practical use.