BYK

Gardner Color Comparator

Visual Comparison for Gardner Color

Operating Manual

A member of ALTANA

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1 Overview

6745
6746
6750

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2 Safety Information

Used correctly, this device does not pose any danger, either mechanical or electrical. The following paragraphs contain information about the safe use of the device. Before switching on the device, make sure that the voltage label on the device matches the voltage of your power outlet. The device must be plugged into a grounded outlet.

Only use the accessories specifically provided for the device. Incorrect use of accessories is not covered by the warranty (see delivery package and technical specifications). The manufacturer does not accept liability for damage caused by failure to observe the safety information.

Please ensure that all replacement parts are the correct size and type. Never resort to other types of fuses or short circuiting.

Avoid exposure to continuous humidity and condensation, especially make sure to work only with properly sealed tubes.

Apart from changing the lamp do not carry out any mechanical or electrical repairs. The device must only be opened by trained specialists. Please consult our technical customer service.

3 Description

The Gardner Delta Color Comparator consists of two parts: A comparator of eighteen precision glass standards (6750) and a special illuminator which provides a color-corrected light source (6752 or 6753).

Illustration 1: 6750 Gardner Color Comparator

Illustration 2: Gardner Delta Illuminator: 6752 = 115 V / 6753 = 230 V

Depending on the illuminator unit following variants are available:

- 6745 Gardner Color Comparator 115 V: 6750 and 6752
- 6746 Gardner Color Comparator 230 V: 6750 and 6753

4 Operation

The comparator is composed of an arrangement of two disks, each containing nine optically polished glass fi lters (color standards) ranging in color from water white through deep amber. The standards are equally spaced around the edge of the disk and a channel between the disks holds a tube containing the sample. Please make sure to properly seal the sample when using the instrument. A sample of the test liquid is poured into an empty color comparison tube. The user rotates the color wheels until the fi lter glass closest in color to the liquid is in place. That fi lter notation (or a slightly higher or lower value, if sample appears to be in-between two standards) then becomes the color description for the liquid.

Illustration 3: 6756 Empty Tube Set

Illustration 4: 6757 Filter Wheel - Even Numbers

Illustration 5: 6761-Filter Wheel - Odd Numbers

5 Maintenance

Replaceable Parts

The only user-replaceable part on the color comperator is the lamp. To service the lamp, disconnect device from the wall receptacle and remove the power cord from the back of the instrument. Open the top of the housing, by removing the four screws at the side and tip up the lid to the rear. Unscrew the old light bulb and replace it with a new one. Important: Use only light bulbs according to the specifications (please refer to technical specifications).

Illustration 6: 6754 Incandescent Lamp 115 V for 6745

Illustration 7: 6405 Incandescant Lamp 230 V for 6746

Cleaning Procedure

Do not use any acetone for cleaning the unit! The instrument housing is resistant to a number of solvents, but cannot be guaranteed to withstand all chemicals. You should therefore use a soft, moist cloth for cleaning. For cleaning excessive dirt, use propanol.

6 Declaration

We,

BYK-Gardner USA
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herewith declare that the product

- **Gardner Color Comparator**

complies with the requirements of the following EC directive:

- 2014/30/EU - Electromagnetic Compatibility (EMC)

The following harmonized standards were applied:

- EN 61010-1:2010/A1:2019 - Safety requirements for electrical equipment for measurement, control, and laboratory use
- EN IEC 61326-1:2021 - Electrical equipment for measurement, control, and laboratory use - EMC requirements

March 31, 2025 BYK-Gardner USA

Timothy A. Cassell
President and General Manager

CE

EC - Declaration of Conformity

7 Ordering Information

6405 Incandescant Lamp 230 V for 6746

6745 Gardner Color Comparator 115 V
6746 Gardner Color Comparator 230 V

6750 Gardner Color Comparator (without illumination)

6752 Gardner Delta Illuminator 115V
6753 Gardner Delta Illuminator 230V

6754 Incandescent Lamp 115 V for 6745

6756 Empty Tube Set

6757 Filter Wheel, even numbers
6761 Filter Wheel, odd numbers

8 Specifications

Operating temperature: 10 °C - 40 °C
Storage temperature: 0 °C - 50 °C
Dimensions: 17 x 23 x 20 cm
Weight: 2.7 kg
Lamp: Incandescent light 60 W matte E27
Power:

- 6745: 100 V ~ ; 60 Hz ; max. 65 W
- 6746: 240 V ~ ; 50 Hz ; max. 65 W

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Download your manuals from:
https://www.byk-instruments.com/p/6746

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