

# Petroleum

## Comparators, Gardner 3000/AF650

ASTM D1500-IP196: BS2049: BS5859; ISO2049; FIMS791C 102; NF T60-104; JIS K2580, ASTM D1544-68 (74); A.O.C.S. Td1A-64 and Ka3-63; DIN/ISO 4630.

### Lovibond® Gardner 3000/AF360 Comparators

For the visual determination of the colour of a wide variety of petroleum products, natural and synthetic drying oils, varnishes, lacquers and resins, using colour glass standards which can be set at the two limiting values of a specification, making it easy to see if a sample falls between them.

Operate on the 3-field principle whereby the sample can be viewed between 2 adjacent steps on the colour scale. ABS, fire-retardant plastic housing, with standard halogen light source, timed lighting adjustable in one-minute periods by repeatedly pressing the switch for the required number of minutes operation and low-voltage power supply. Front mounted control knobs operate the two discs, each with 8 colour glass standards. A replaceable white chamber insert ensures consistent background colour throughout operational life. Supplied with glass sample/reference containers, colour standard discs and mains adapter for the illuminator requiring a 120V, 240V 50/60Hz single phase supply. Overall 231 x 233 x 142mm W x D x H. Weight 1.5kg.

**PE240-50** Comparator, AF228, Gardner 3000 resin scale version

**PE240-55** Comparator, AF650, Petroleum version (ASTM D1500, ASTM D6045, ISO2049, IP196)

### Colour Comparator

For routine colour grading of a wide range of liquids – see CS100 *et. seq.* in the *Colorimeter section*.

## Electronic Colorimeters, PFXi-195

Low cost spectrophotometric colorimeters for consistent, reliable, automatic, electronic measurement of colour for specific dedicated applications involving liquids or transparent solids. Ideal for routine analysis and quality control.

- ◆ Choice of instrument versions with international colour scales:
  - Pt-Co/Hazen/APHA, Gardner, Iodine
  - Saybolt, ASTM colour, Pt-Co/Hazen/APHA
  - FAC, Gardner
  - EBC (CIE and 430nm), ASBC (CIE and 430nm) Series 52 (Brown)
  - Ph. Eu., USP, Pt-Co/Hazen/APHA
  - Klett colour (KS-42 blue filter), Honey colour (Pfund equivalents), Series 52 (Brown)
  - ADMI (spectral and tristimulus filter methods), Pt-Co/Hazen/APHA
  - CIE values (stand selection), L\*C\*h colour space, Hunter lab colour space, Judd rgb
- ◆ 9 built-in interference filters with automatic selection
- ◆ Operator prompting in choice of 9 languages - English, French, German, Spanish, Italian, Portuguese, Russian, Chinese and Japanese
- ◆ RS232, USB and LAN outputs
- ◆ Supplied with Windows™-based control/downloading/analysis software which also enables the generation of spectral and CIE programmes

### Technical Specification

<i>Spectral response</i>	<i>nm</i>	420 to 710
<i>Band width</i>	<i>nm</i>	20
<i>Repeatability (using deionised water):</i>		
<i>Chromaticity (x,y):</i>		±0.0004
<i>E:</i>		0.04
<i>Calibration</i>		Single key press
<i>Light source</i>		5V, 10W tungsten halogen lamp
<i>Illuminant</i>		CIE illuminant A, C, D65 (B for PFXi195/4)
<i>Sample chamber</i>	<i>mm</i>	0.1 to 50 path length cells
<i>Outputs</i>		RS232, USB, LAN
<i>Data storage</i>		100,000 measurements
<i>Power requirement</i>		90-240V 50/60Hz single phase supplies
<i>Overall W x D x H</i>	<i>mm</i>	435 x 195 x 170
<i>Weight</i>	<i>kg</i>	6.8

### Colorimeter PFXi-195/1

For liquid chemicals and industrial oils analysis.

Scales: Pt-Co/Hazen/APHA, Gardner, Iodine.

Cells supplied: 1 x 10mm, 1 x 50mm path length.

**CS725-15** PFXi-195/1

### Colorimeter PFXi-195/2

For liquid chemicals and industrial oils analysis.

Scales: Saybolt, ASTM colour, Pt-Co/Hazen/APHA.

Cells supplied: 1 x 33mm, 1 x 50mm path length.

**CS725-25** PFXi-195/2



PE240



CS725