



## AUTOMATIC COLORIMETER MEASURING SAYBOLT AND ASTM COLOUR

ASTM D6045- ASTM D156 - ASTM D1500- JIS K258-JIS K2580

### MODEL PFX880/P

The PFX880/P is a high precision spectrophotometer for objective colour analysis of petroleum fuels, oils, waxes and petrochemicals according to the Saybolt and ASTM Colour scales. Results can also be displayed in terms of CIE values and spectral data. A factory fitted integrated heater unit for melting solid samples such as fats and waxes and preventing them from solidifying in the cell

Colour Scales	Scope	Range
Saybolt Colour (ASTM D 6045) (ASTM D 156) (JIS K258)	Light coloured petroleum products including aviation fuels, kerosine, white mineral oils, hydrocarbon solvents and petroleum waxes	-16 (darkest) to +30 (lightest)
ASTM Colour (ASTM D 6045) (ASTM D 1500) (JIS K2580)	A wide range of petroleum products including lubricating oils, heating oils and diesel fuel oils	0.5 - 8 units
CIE Values (ASTM E 308)	X Y Z tristimulus values x y Y chromaticity coordinates CIE L*a*b* colour space DE colour difference	Defined by spectrum locus
Spectral data (420 - 710 nm)		0 - 100%

### Brings Precision and Reliability to Colour Measurement

The accuracy, repeatability and reproducibility of data provided by the PFX880/P allow for tighter colour specifications and greater colour consistency, giving companies the confidence needed to make important decisions regarding high value consignments and refining operations. When measuring Saybolt Colour of clear, water-white products, the long sample path length enables the PFX880/P to obtain precise colour measurements, without multiplying errors.

#### Colour Analysis made Simple

The PFX880/P is an easy to use, automatic instrument, which eliminates time-consuming procedures of visual methods. There is no need to build up calibration curves as they are already established in the instrument. The menu system guides operators through the selection of operating parameters.

Thereafter, measurements are initiated by just a single key press and take less than 25 seconds to complete.

### Confidence in Instrument Performance

The PFX880/P is a rugged colorimeter with a fabricated steel housing which is designed to function equally as a QC instrument within the laboratory or on 24 hour operation in a production environment. A diagnostic test routine allows users to conduct periodic checks on the instrument or identify faults. For regular conformance testing the colorimeter is also supplied with a coloured glass filter of known Saybolt value.

### **Technical Specification**

Measuring principle: 16 interference filters

Spectral response: 420 - 710nm

Bandwidth: 20nm

Repeatability:

- Chromaticity: 0.0002

- transmittance: 0.25%

-Saybolt values : 1

Measurement time: Less than 25 seconds

Calibration: Single key press; fully automated

Light Source: 5 Volt, 10 Watt tungsten halogen lamp (lens ended)

Illuminant: CIE Illuminant C

Observer: 2 degrees

Path length: 0.1 - 153mm

Interface: Parallel printer port, RS 232 port

Input voltage: Universal, via external power supply

Approvals: CE

Display: 2 x 40 character, back-lit LCD

Keypad: 21 key membrane keypad, washable polyester with audible feedback

Instructions: 6 languages, English, French, German, Spanish, Portuguese, Dutch

Heater unit: Factory fitted option 95 degrees centigrade max

Instrument housing : Fabricated sheet steel with tough, textured paint finish

Dimensions: Width 515 mm, Depth 195 mm, Height 170 mm Weight: 7.75 kg