Kam® CHA™
Colorimeter Haze Analyzer

Kam® Simple Precision™

KAM® CHA™
Insertable model



PTB 04 ATEX 1027
II 2G Ex db IIB T6 Gb
IECEx PTB 21.0012
Ex db IIB T6 Gb

The KAM® CHA™ Colorimeter/Haze Analyzer is the ideal quantitative solution for in-line monitoring of both the color of refined products and the presence of haze (water and/or sediment).

Utilizing a unique 5-LED design, the KAM® CHA™ detects fluid color variations within 1% of scale. Final outputs are expressed as haze plus one of three industry-standard color scales (Saybolt, Platinum–Cobalt, ASTM D1500) or digitally in X,Y,Z. Measurement is fully automatic, and the output signal can be sent to the SCADA, PLC's, or to a Central Control Room for logging or display on chart recorders or monitors.

The KAM® CHA™ is factory calibrated to certified absolute standards and does not require site calibration. Using long-lasting LED light sources ensures long-term, stable performance with limited maintenance and power requirements. In addition, all electronics are located within an explosion-proof enclosure directly on the atmospheric end of the optical probe, creating a complete and compact unit with maximum installation flexibility.

The KAM® CHA™ probe can be installed in an analyzer loop or in the main line, and because it's easily mounted through a full-opening ball valve, you can insert or retract the probe without ever needing to drain the pipe.

KEY FEATURES

5-LED design offers greater accuracy over other, 3-LED models

Uses LEDs for long-term performance with minimal power and maintenance requirements

Inserts in directly in pipeline under process conditions

Outputs for haze plus industry scales ASTM D1500, Platinum-Colbalt, and Saybolt

All requisite electronics housed on atmospheric end of probe; requires no additional controller

APPLICATIONS

Multi-product pipeline interface detection

Transmix/regrade reduction

Haze monitoring/quality control at refineries and pipeline terminals

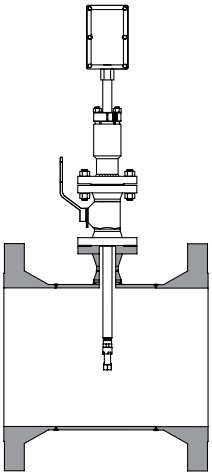
Haze monitoring/quality control for incoming diesel fuel in power and marine applications

Haze/quality control for aviation fuels at pipeline, tank farm, fuel trucks and carts

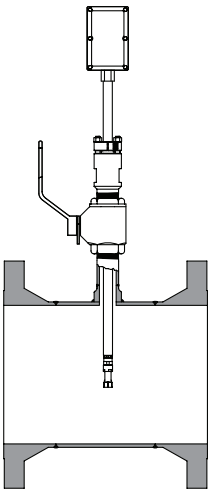
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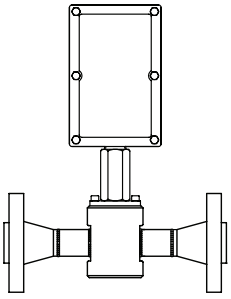
AVAILABLE MODELS and MOUNTING OPTIONS



Insertable CHA™ on a main pipe, with 2", 3", or 4" flanged seal housing



Insertable CHA™ on a main pipe, with 2" MNPT seal housing*



CHA™ flow through spool with 1" or 2" weld-neck flanges

* Seal Housing for 2" MNPT Models are Carbon Steel.

SPECIFICATIONS

Media:	**Refined products**
Material:	**Wetted parts–316 stainless steel*, sapphire Electronics Enclosure–Copper-free aluminum**
Power:	**12–24 VDC 5 Watts max**
Outputs:	**(2) 4-20 mA (haze + color scale) RS485 (MODBUS; X,Y,Z)**
Fluid temperature:	**-40° to 176°F (-40° to 80°C)**
Ambient temp.:	**-4° to 140°F (-20° to 60°C)**
Pressure ratings:	**ANSI 150, 300, 600**
Accuracy:	**Haze ± 5%, Color ± 1%**
Repeatability:	**Haze ± 1%, Color ± 1%**
Reproducibility:	**Haze ± 1%, Color ± 1%**
Haze Range:	**0-100%**
Color Range:	**Complete range of ASTM D 1500; Saybolt; APHA Platinum-Cobalt**
Mounting:	**1" or 2" Flanged Flow Through 2" MNPT Seal Housing* 2", 3", or 4" Flanged Seal Housing**
Hazardous area:	**PTB 04 ATEX 1027 Ex II 2 G Ex db IIB T6 Gb IECEx PTB 21.0012 Ex db IIB T6 Gb**
Sensor Dimensions:	**3.5" x 1.25"Ø (89 mm x 32 mm)**
EX enclosure:	**4.6" x 7.1" x 4.4" (117 mm x 180 mm x 112 mm)**
Shaft length:	**12" to 60" (305mm to 1524mm)**
Pipe size:	**1" to 48" (25 mm to 1219 mm)**
Weight:	**from 20 lbs. (9 kg)**

FOR MORE INFORMATION ON KAM PRODUCTS
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