

Model MoniSpec-C-AT (MSC-AT)



- Principle of measurement: Triple Wavelength Absorption
- Low maintenance / long service life
- Optimized flow cell for simplified maintenance & cleaning
- Calibration- / maintenance interval 24 months (depending by application)
- Measuring lamp, gas filled (λ 380 - 1100nm), life time approx. 1 years
- Protection class: All parts are at least IP65 / Nema 4x rated
- Flow cell material: stainless steel 1.4404 (optional titanium, PTFE, ...)
- Sight glass material: Sapphire (optional Borosilicate, Plexiglas, ...)
- Gasket material: FKM (optional FFKM, EPDM, silicone, ...)
- Process connections: DIN flanges, ANSI flanges, NPT,
- Span of measuring ranges: 0 - 0.1AU to 0 - 5AU
- Optional use in hazardous area Ex- Zone I)
- Optional air purge
- Cleaning: Cleaning in place / optional cleaning jets

Description:

The color photometer model MoniSpec-C-AT uses the principle of triple wavelength light absorption to detect colour in liquids. The transmitter model Messenger is required to use this sensor. The system has been designed for continuous operation with long life time. Hereby we can configure two measuring wavelength (colors) at the same time. The third reference wavelength is used to compensate disturbance parameter as turbidity, window coating or lamp ageing. The difference between measurement and reference channel ([colour + turbidity] - turbidity = colour) provides the colour signal. The sensor can be installed into almost any type of pipe. Process connection, gasket material, etc. will be selected application specific. Optional cleaning jets will allow a cleaning of the sapphire windows in determined intervals. Calibration can be done in multiple ranges and measurement units like Hazen, APHA, ASTM, Lovibond, etc.. Due to the availability of multiple optical path lengths (2mm up to 500mm) the sensor allows measurement ranges of approximately 0 - 20Hazen up to 0 - 50000Hazen acc. APHA.

Applications:

- Product colour
- Hazen colour according APHA
- ASTM 1500 colour & Saybolt Colour
- Lovibond color & EBC color

Operational areas:

- Chemical industry
- Petrochemical industry
- Water & vegetable oil
- Brew & Beverage

Technical Data:

Line size:	DN 25 – DN 125 / ½" - 5"	Measurement range:	typical 0–20Hazen, 0–50000Hazen
Process pressure:	PN16 / ANSI class 150	Reproducibility:	± 1 %
Process temperature:	maximum 140°C	Detector:	Silica diode
Sensor material:	1.4404 / 316L	Measurement wavelength:	390 - 1050nm
Sight glass material:	Sapphire	Cleaning:	optional cleaning jet probe
Gasket material:	application specific	Sterilization:	CIP (cleaning in place)
Protection class:	IP65 / NEMA 4X	optional hazardous area:	ATEX Zone I or Zone II