High sensitivity allows measurement of 0.04 μm particles in liquid

Liquid-Borne Particle Sensor
KS-18FX

- Detects particles down to 0.04 μm size, at a flow rate of 10 mL per minute
- User selectable particle size range up to 10 channels within measuring range using KE-40B1
- Integrated leak sensor with alarm output
- Sapphire flow cell
Specifications [KS-18FX]

Optical system  Light-scattering method
Light source  Q-switched pulsed solid state laser (rated output 500 mW, wavelength 532 nm)
Large product class  Class 1, IEC 60825-1
Light detector  Silicon photodiode
Materials of parts exposed to sample  Sapphire, PFA
Allowable sample fluid type  Fluids which do not corrode the fluid contact materials
Calibration  Polyethylene latex (PSL) particles with refractive index 1.6 in pure water
Size range  4 channels (factory default)
9 channels (user selectable)
User selectable channels  1 to 10 channels
Setting range  0.04 μm to 0.15 μm
Flow rate  10 mL/min
Counting efficiency  3 %
Maximum particle count concentration  30,000 particles/mL (coincidence loss less than 10 %)
Sample pressure range  300 kPa (gauge pressure) or less
Sample inlet / outlet  Φ 2 mm x Φ 4 mm, flared joint for tube
Purge air port  One-touch type joint for dia. 6 tube
Input / output connectors  CONTROLLER  Connection to KE-40B1
LIQUID LEAK ALARM  Relay contacts
Controller KE-40B1
Display  Particle size range (max. 10 channels), Count (max. 8 digits)
Controls  Touch panel, Sheet switches
Measurement  Measurement time  10 seconds to 2 hours, or manual
Measurement modes  Automatic measurement: mean value measurement, moving average measurement,
periodic measurement, scheduled time measurement
Alarm  When measured value in a selected channel reaches the preset alarm level,
a buzzer sounds and alarm terminals are shorted by relay contacts
Maximum connected load: DC 30 V, 1 A
Communication  RS-232C
Printer  Printout of measurement results, date and time
Recording paper  Thermal paper, TP-08, Clean thermal paper: TP-10
Memory  CompactFlash (CF) card (automatic storage in TSV format)
Power  100 to 240 V AC, 50/60 Hz, Approx. 130 VA
Dimensions and weight  140 (H) x 240 (W) x 146 (D) mm (excluding protruding parts), approx. 3 kg
Accessories  Power cord x 1, Thermal paper TP-08 x 2 rolls, Dummy card
Options  Communication cable CC-61A, Thermal paper TP-08, Clean thermal paper TP-10,
Memory card (128 MB) MC-12CF1/(256 MB) MC-25CF1, CFcard adapter CFC-ADP03
Factory option  D/A converter interface KE-40-S06
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+ Specifications subject to change without notice.

For operation control of particle sensor and display of measurement data

Controller KE-40B1

* Particle size range can be freely set for up to 10 channels.
* Built-in printer.
Measurement data can be stored on memory card (CF card).