

SPECIFICATIONS
PARTICLE SENSOR
KS-28B



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Outline

The KS-28B is a light-scattering particle sensor designed to measure the number concentration of particles in liquids. By connecting it to the liquid-borne particle counter KE-28B, a particle number concentration measurement system can be configured which is capable of measuring particles with a diameter of 0.2 μm and above, and 0.5 μm and above. The sample fluid flow rate is 10 mL per minute. The KS-28B features small and lightweight body. It can be set up also in the narrow place that conventional products cannot be set up.

Besides the above described standard configuration, a particle size change option is also available. Using the particle size change option, a measurement system for particles with a diameter of 0.2 μm /0.3 μm and above, or for particles with a diameter of 0.3 μm /0.5 μm and above can be configured, in conjunction with the liquid-borne particle counter KE-28B.

Since the KS-28B does not include a provision for adjusting the sample fluid, a flow controller, external pump, or similar must be used.

- * All company names and product names mentioned in this specifications are trademarks or registered trademarks of their respective owners.

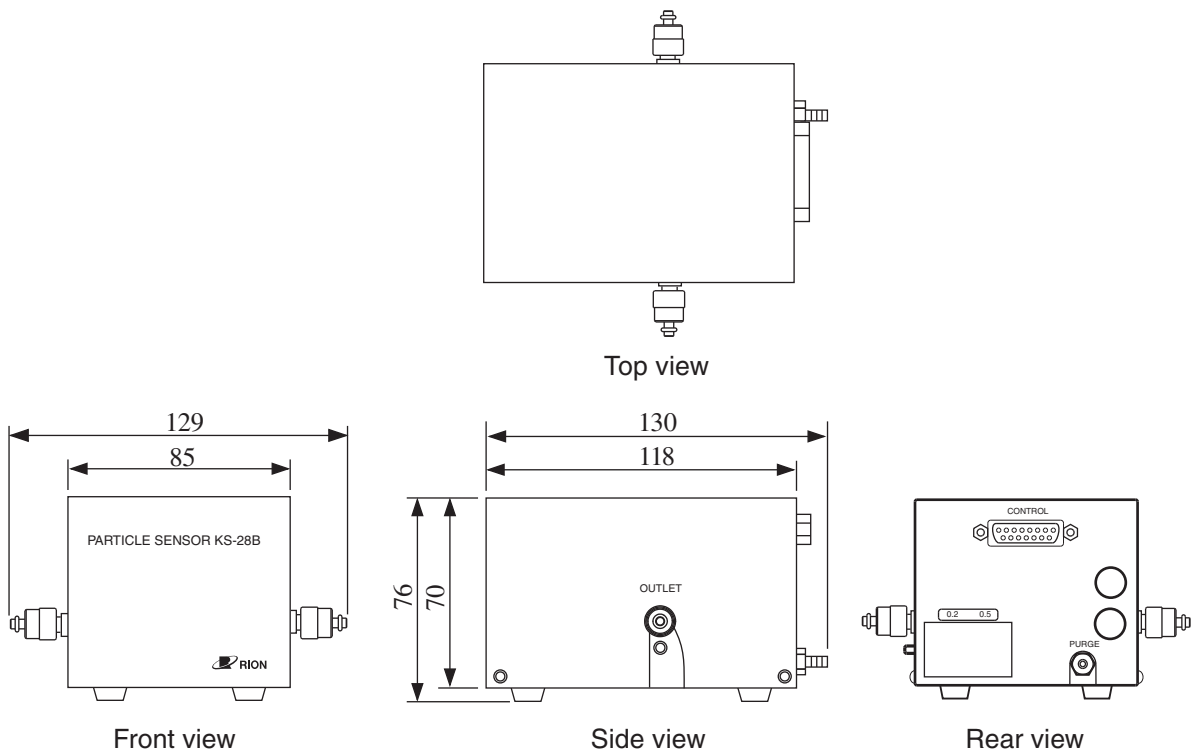
Specifications

Suitable particle counter	Liquid-borne particle counter KE-28B
Standard / Particle size change option	
Optical system	Lateral light-scattering method
Light source	Laser diode (rated output 40 mW; wave length 780 nm)
Laser product class	Class 1, IEC 60825-1:2014
	Internal particle detection mechanism uses class 3B laser
Light detector	PIN type photodiode
Materials of parts exposed to sample fluid	Synthetic quartz, PTFE, PFA
Allowable sample fluid types	Fluids which do not corrode the fluid contact materials
Calibration	Polystyrene latex (PSL) spheres with refractive index 1.6 in pure water
Measurable particle size range	0.2 μm to 2 μm (with PSL particles of refractive index 1.6 in pure water)

Measurement size range	
Standard	Two channels ($\geq 0.2 \mu\text{m}$, $\geq 0.5 \mu\text{m}$)
Particle size change option	
	Two channels ($\geq 0.2 \mu\text{m}$, $\geq 0.3 \mu\text{m}$)
	Two channels ($\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$)
Sampling flow rate	10 mL/min
Maximum particle number concentration	
	1200 particles/mL (coincidence loss 5% for 0.2 μm particles)
Sample fluid temperature range	
	+15°C to +35°C (no moisture condensation on flow cell)
Allowable sample fluid pressure	
	300 kPa or less (gauge pressure)
Warm-up time	10 minutes
Sample fluid ports	
INLET:	Sample fluid inlet, 2 mm \times 4 mm dia. flared tube joint
OUTLET:	Sample fluid outlet, 2 mm \times 4 mm dia. flared tube joint
PURGE:	Purge gas inlet, internal 4-mm diameter tube
Input / output connectors	
CONTROL:	
	Standard / Particle size change option
	For liquid-borne particle counter KE-28B connection
Power supply	
Standard / Particle size change option	
	Supplied via liquid-borne particle counter KE-28B
Ambient conditions for operation	
	+15°C to +35°C, less than 80% RH
Ambient conditions for storage	
	-10°C to +50°C, less than 85% RH
	(no condensation and no freezing in internal piping)
Dimensions	
	76 mm (H) \times 129 mm (W) \times 130 mm (D) (maximum)
	70 mm (H) \times 85 mm (W) \times 118 mm (D) (excluding protruding parts)
Weight	Approx. 750 g

Supplied accessories (Standard / Particle size change option)

Tube A vacuum pack	1
(2 mm × 4 mm dia., 1.5 m flared PFA tube 2, union joint 1)	
Connecting cable B	1
Instruction manual	1
Liquid-Borne Particle Counter Usage Precautions	1
Inspection certificate	1



Unit: mm

Dimensional Drawings

Specifications subject to change without notice