# Water Velocity Measuring Instruments

## Cup Type Water Current Meter (RK-02)

### <u>As per IS: 3910-1992</u>

#### **Product Description**

**"RKEC"** make Vertical Axis-Cup type Water current Meter is used to measure Velocity of water flow directly in m/s. The Stainless Steel Spindle carrying the cup wheel freely rotates in the bearing assembly. The magnet and reed switch assembly produces one pulse per Rotation. The rotation of the water current meter is sensed by sensor & given Pulsed output signal.

As per IS: 3910-1992, the Cup Type Water Current Meter employs a bucket wheel assembly that is mounted up on a shaft and rotates in response to fluid flow, generating a signal that is proportional to the fluid flow velocity. The current bucket wheel assembly is made of plated brass. It employs six hollow conical cups that are hand formed from sheet metal and individually soldered to brass, starshaped frame. The finished unit is then plated. The frame is shaped so that a strut connects the apex of each cup to the outer diameter of the following cup around the frame.

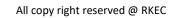


The cup type Water Current Meter can be suspended by means of a Fish weight wadding a stream, or by a cable and wadding rod from an overhead structure. A tailpiece assembly assures proper alignment of the meter to water flow when suspended by a cable. Velocity is determined by counting the number of revolutions of the bucket wheel over a given period of time. Revolution cab be monitored by Digital Rev/ Time Counter or with the help of "RKEC" make water Velocity Logger /Indicator (DVI-V1) OR (DVI-K13) by configuring the logger with calibration equation (Provided with each meter), it will result the direct current velocity of the Stream in m/s.

#### **Specification**

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Model and Brand	:	RK-02 (RKEC)
<b>Current Meter Body</b>	:	All Part of Brass, chrome Plated
Sensor Type	:	6 Cup Wheel contact every one revolution range 0.015 to 0.9 m/s
		(Starting up to maximum operational Velocity)
<b>Operating Range</b>	:	0.3 to 3.5 meter per second
Accuracy	:	For velocity up to 0.3 m/s; 1% full scale, for velocities>.3m/s;0.5% full scale
Contact chamber	:	Magnetic or Fiber Optic
Dimension	:	Bucket open end diameter: 2.0 inches; bucket diameter: 0.5 inch
<b>Rates Spin Test</b>	:	>75 second

Suspension wading rod total length 3 m, graduation in cm, cable 20 meter from meter to counter , 10meter Suspension cable with 10 kg fish weight, Instrument oil, Cleaning Cloths, Screw Drivers.





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