

Water Current Meter (Vertical Axis-Cup Type)



"Virtual" make Vertical Axis-Cup Type Water Current Meter is used to measure Velocity of water flow directly in m/s. The spindle carrying the cup wheel freely rotates in the pivot assembly. The magnet and reed switch assembly produces one pulse per rotation. The rotation of the Water Current Meter is sensed by sensor & gives pulsed output signal.

As per IS: 3910-1992, the Cup type Water Current Meter employs a bucket wheel assembly that is mounted upon 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 a brass, star-shaped 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 (**sold extra**) wading a stream, or by a cable and wading 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. Revolutions can be monitored by Digital Rev / Time Counter (RTC-K13) (**Sold Extra**) or with the help of "Virtual" make Water Velocity Logger (DVI-K13) (Sold Extra) by configuring the logger with calibration equation A standard rating table can be provided (**chargeable extra**) to convert propeller revolutions to stream velocity in Metric units (meters per second). Standard system comes with spare parts, instrument oil, cleaning cloth, screwdriver and a rugged carrying case.

Specifications:

Model:	6 Cup Wheel Cup type Type
Current meter body:	All parts of brass, chrome plated
Operating Range:	0.3 to 3.5 meter per second
Accuracy:	For velocities up to 0.3 m/s, 1% Full scale, For velocities >0.3 m/s, 0.5% Full Scale
Contact chamber	Magnetic
Dimension	Bucket Open end diameter: 2.0 inch, Bucket diameter: 5.0 inch
Rates spin test	> 75 seconds
Accessories	Instrument oil, cleaning cloth, screwdriver with 10kg fish weigh, 10m suspension wire and a rugged wooden carrying case.

