

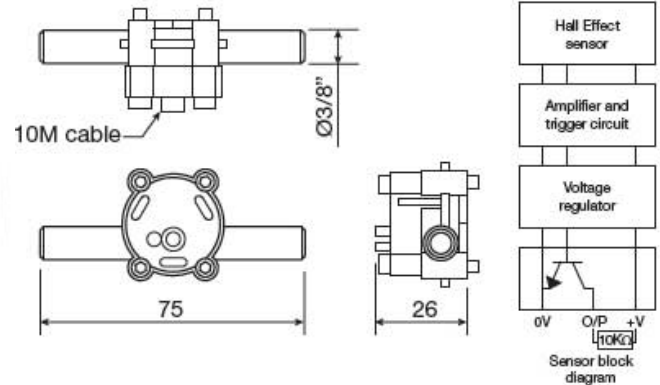


ENGLISH

Datasheet

**RS Pro Beverage Meter**

RS Number: 5114772



RS Number	Flow Range L/Min	Linearity % FSD	Typical Freq. Hz	Approx 'K' Factor	Pressure Drop at Full Flow mBar	Rise & Fall Times	Output Low mV	Current mA	Supply Voltage Vdc	Sensor to Sensor	Repeatability
5114772	0.6 – 10	1.0	235	1420	750	2uS max.	100 max.	10	4.5 - 24	± 3%	± 0.25%
Weight	0.150 kg										

This flowmeter is designed specifically for the drink dispensing industries including beer wines and spirits. They give high performance and competitive pricing with a flow range up to 10 litres per minute. They have totally nonmetallic wetted components which makes them the ideal choice for the metering of food based products and even ultra-pure water. The standard inlet tubes are 3/8” push on pipe connectors. The bearings are made of sapphire for long life and reliability, the body is moulded in a choice of thermoplastics (PVDF as standard) and the ‘O’ ring seal is typically Viton®. At the heart of the meter is a precision turbine that rotates freely on robust sapphire bearings and contains over-moulded magnets that are detected through the chamber wall by a Hall effect detector. The output is a stream of NPN pulses that are directly interfaced with the electronic display. This combination of materials and technology ensures a long life product with reliable operation throughout. Temperature range 0°C to 100°C.

**Installation**

The pipe work must be designed in such a way to eliminate reverse flow as the meter is bi-directional. It should be installed in a position that prevents it from draining down as on start-up serious damage could result by “impacting” an empty flowmeter with a high velocity fluid stream or over-speeding the turbine with air in the line. The fluid should be clean and homogenous. In all cases an upstream filter of at least 80 microns must be fitted. It is recommended that before the flowmeter is installed in the line a “dummy” section of pipe is inserted and the system flushed. This is to eliminate any debris in that section of the line. The pipe must not stress the body of the meter and should be fully supported either side with appropriate isolation valves and in some cases a by-pass valve. On initial start-up increase the flow slowly to ensure no over speeding of the meter occurs as the air is forced from the line. This is best achieved by monitoring the flow rate and ensuring that a 50% over-range is not exceeded. Never blow a flowmeter with an airline. Care should be taken to ensure that no air enters the system (e.g. leaky pump gland) or that no cavitation takes place. With a volatile liquid we recommend at least twice the vapour pressure plus 1 Bar as the operating pressure. Carbonated fluids should have the highest possible back pressure to prevent gas beak-out.

**Electrical Characteristics**

It is recommended that all “signal” cables are run separately to power lines and switched inductive loads and are located well away from inverters and other “noisy” apparatus. Always use sound wiring practice. The Hall Effect detector (NPN) requires a 10k ohm external pull-up resistor connected between the output and a suitable power supply to attain a pulse. This may differ from the PSU voltage.