

A-D Terms & Definitions

Term	Definition
Accuracy	The degree of precision, expressed in the term of error, as a % of reading.
ANSI	American National Standards Institute.
BAR	ISO pressure standard. 1 Bar = 100kPa or 14.5psi
Batch	A pre selected quantity of liquid to be delivered and recorded by the flow meter.
Bounce	With the mechanical reed switch, as the frequency of make-breaks increase the mechanical action causes oscillation or bounce, this can be read as pulses by receiving instruments without debounce circuits and result in errors of accuracy.
BSP (F)	British Standard Pipe thread, parallel female threads are used on designated models.
Calibration	Tuning or altering of a control device to bring it into specification.
CE	Declaration of Conformity, applies to European Community Countries only.
Centipoise (cp)	A unit of measurement for viscosity equivalent to one-hundredth of a poise and symbolized by cp. The viscosity of water at 20° C. is approximately one centipoise. In metric (SI) units, one cp is one millipascal-second. In the SI system the standard unit of viscosity is the pascal, the conversion factor being one centipoise = $1.000\ 000 \times 10^{-03}$ pascal.
Conduit Connection	The port connection of the pulser cap to allow cabling conduit to be fitted.
Custody Transfer	Relates to the approval of a measurement device for use in calculating payment for product, i.e. petrol bowser flow meter.
DIN	Abbreviation for "Deutsches Institut fur Normung". A collection of German industry standards that are recognized throughout the world.

E-L Terms & Definitions

Term	Definition
Exd	Flameproof enclosure type of protection.
Filter	A filtering device to remove fine particle sizes from liquid, usually for low micron particles.
Flameproof	Exd Flameproof enclosure prevents the transmission of an explosion to the explosive atmosphere surrounding the enclosure.
Flow Conditioning	Most meters require the flow to be conditioned prior and after the meter, normally a number of diameters of straight pipe before and after the meter. This is not required by the majority of fully positive displacement meters.
Flowrate	The volume of liquid passing through the measurement device per unit of time, e.g. Litres per Minute.
Hall Effect Sensor	Is an electronic digital switch, requiring voltage source to operate.
Intrinsically Safe	Intrinsic safety relies on the electrical apparatus being designed so that it is unable to release sufficient energy, by either thermal or electrical means, to cause an ignition of a flammable gas.
IP54	Protected against dust and splashing water. A level of Ingress Protection Rating: 1 st digit is level of dust protection, 2 nd digit is level of moisture protection.
K Factor	The term given to the number of pulses per unit of volume, expressed as Pulses per Litre, and or Pulses per US Gallon
kPa	ISO pressure standard. 1kpa = 0.01 BAR, 0.145 psi
LC Display	Liquid Crystal Display, microprocessor driven display type.

M-P Terms & Definitions

Term	Definition
Mechanical Display	A roller wheel type display with both reset & non reset totalisers, driven by a gear box located within the flow meter.
Mesh	The term given to a filter sieve and relates to the number of holes per square inch, mesh is much courser than a filter, 60 mesh = 0.25mm and 200 mesh = 0.074mm.
National Standards Commission	The Australian Government measurement testing laboratory, overseeing all aspects of testing and approval of custody transfer apparatus.
Nema 13	National Electrical Manufacturers Association, US version of IP, 13 is equivalent to IP54.
NPT (F)	National Pipe thread, parallel female threads are used on designated models.
Maximum Operating Pressure	Typically the maximum operating pressure of the device, which includes a safety factor, threaded meters have a safety factor of 4:1.
Operating Temperature 120°C/248°F.	The temperature of the liquid flowing through the meter. Maximum operating temperature for the meters is 80°C/ 176°F and 120°C/ 248°F for high temperature models.
Particle Size	In this instance it refers to the maximum solid size that the meters can pass without rotor jam.
PCB	Printed Circuit Board, as supplied with our pulse meters.
PED	EU Pressure Equipment directive. 97/23/EC.
PPL	Pulses Per Litre.
PPS	Polyphenylene Sulfide Resins, material used in rotors and small meter bodies.
PPUSG	Pulses per US Gallon
Pressure Drop	The pressure loss across the meter at a given flow and viscosity, expressed as delta P.

P-W Terms & Definitions

Term	Definition
psi	Imperial pressure measurement, 1psi = 0.145kPa
Pulse	The signal unit from the meter, generally referred to in pulses per unit of volume measured.
Pulse Bounce	Used in relation with mechanical switches, i.e. reed switch, where the receiving device is capable of reading mechanical bounce generated by the switch.
Reed Switch	Mechanical switching device operated by the magnet located in the meter rotor, the unit switches electrical signals.
Reset Total	The total recorded on the LC Display or Mechanical totaliser that can be reset back to zero.
Rotor	The measuring element in the meter, oval in shape with a number of fine teeth. The swept area of the rotor is a known volume, so each revolution equal an accurate amount of liquid. Rotors are made from either PPS or 316 Stainless Steel.
SA	Is the symbol used by Standards Australia to signify the hazardous classification of a device.
Total	Total denotes the accumulated volume passed through the meter and is not resettable.
Tracability	In flow metering terms this means that the meters accuracy can be traced back to a known and proven accuracy statement. Our master meters are tested by the National Standards Commission.
Triclover	Clamp type sanitary fitting for use in Clean In Place applications (CIP).
UL	Is the symbol used by Underwriters Laboratories Inc. to signify the hazardous classification of a device.
Viscosity	The resistance of a fluid to flow when subjected to shear stress.
Wetted Components	The meter components that come in contact with the liquid being measured.