

Glossary of Terminology

The following descriptions are provided to explain in greater detail the statements made in the **Product Description** section of this website. Where no term is used in the product description then it is considered to have no relevance to that particular product.

TERM	MEANING	
ATEX	This acronym is derived from Appareils destinés à être utilisés en ATmosphères EXplosibles (Units intended to be used in Explosive Atmospheres). Unless otherwise stated, no equipment offered on this website is intended for use in explosive atmospheres. Buyers intending to use our products in an explosive atmosphere should in the first instance contact our sales office.	
Auxiliary Connection	This is customarily the gauge connection but may be used for other purposes. Reference should be made to the device detail drawing or specification for exact definition.	
CE Mark	CE marking is a mandatory conformance mark on declared groups of products placed on the open market in the European Economic Area (EEA) ,(which combines the 27 EU and 3 EFTA member states). Within the fluidiccontrol industry, CE marking is typically applied to equipment made and sold by the end manufacturer and so is rarely applied to sub-assemblies and component parts. Where it is applied assurance can be gained that the equipment has been assessed as satisfying appropriate Health and Safety regulations.	
Clean Room	Where appropriate three classifications of clean room are used to describe the environment within which the item is manufactured: Uncontrolled: meaning without any specified environmental control Controlled: meaning under some appropriate environmental control but not certified to any particular standard Certified: meaning under environmental control to a certified standard (as, noted in the product description).	
Connections	 Connection 1: This is the primary device connection and is customarily the pressure or flow inlet connection. Connection 2: Connection 2 This is customarily the primary controlled outlet connection. Connection 3: This is customarily the secondary controlled outlet connection where the device has three ports. Typically this is a gauge connection but could be an exhaust, drain or vent connection. Reference should be made to the device detail drawing or specification for exact definition. Connecion 4, 5 etc: Certain products may have additional connections, for example a 5-port valve. Reference should be made to the device detail drawing or specification for exact definition of these additional connections. 	
Country of Origin	This is the country within which the final process of the item manufacture or assembly is performed. For example a part machined in Italy and assembled in the UK, the country of origin is United Kingdom.	
Effective Orifice Size	Where a component is not an orifice per se, then this is the effect the particular component has on system performance as if it were an orifice. It has been determined by measuring the flow through the component at a specific pressure drop, and computing the equivalent orifice diameter.	
Flow/Flow Rate	For components which are direction of flow sensitive, this is indicated on the component drawing. Flow rates are generally indicated at a given pressure drop or for varying pressure drops.	
Hysteresis	Hysteresis describes the difference between a given predetermined set point depending on whether the previous value was larger or smaller and is usually expressed as a +/- percentage of the mean set point.	

IP Rating	This is the degree of ingress protection designed into the component according to standard EN 60529/IEC529. The IP code is characterised by two numerals, for example IP65. The first numeral describes the degree of ,protection against foreign objects (ranging from 0 non-pro- tected to 6 totally dust-tight) and the second describes the degree of protection against water (from 0 non-protected to 8 totally protected against continuous immersion in water). Where applicable, the most common combinations are: 1st number 5 - Protected against dust 6 - Dust-tight 2nd number 5 - Protected against water jets 6 - Protected against powerful water jets 7 - Protected against temporary immersion in water
Linearity	Linearity is the behaviour of a device in which one parameter (typically the output) varies in direct proportion to another parameter (the input). Any divergence, expressed as a percent- age, is calculated from the maximum deviation from the ideal characteristic curve.
Maximum Inlet Pressure	Where appropriate, this is the maximum gauge pressure permitted at the inlet to the device and must not be exceeded.
Minimum Inlet Pressure	This is the minimum gauge pressure required to ensure satisfactory operation of the device. Pressures below this minimum level could result in the device not working to specification or malfunctioning.
Mounting Style and Orientation	This is the method by which the product is installed in a system. Line or In-Line mounted means via pipe or tube connectors in the fluid line with no additional mechanical support required. Direct mounted means attached to associated component without the need for tubes, fittings or brackets. Panel mounted means supported in the system via a threaded body and retaining nut and provides access to both sides of the part. Bracket mounted means via an integral or separate mechanical support for wall or panel fixing. Manifold mounted means the item is bolted to a standard or special manifold designed to accept the product, thereby providing the necessary flow paths. Flush mounted means the part has the facility to be placed on a flat surface either hooked, bolted, clamped or freestanding. The orientation of the device is taken to be any (ie horizontal, vertical or anything between) unless otherwise stated.
Operating Outlet Pressure	This is the pressure at which the outgoing gas or fluid is regulated. This can vary between the minimum inlet pressure and the maximum (ie safe recommended) pressure. The operating outlet pressure is usually expressed as the maximum recommended pressure.
REACH	'Registration, Evaluation, Authorisation and restriction of CHemicals'. This EU Directive lists a number of substances of very high concern (SVHC's) which have to be declared and registered if used in a product in quantities >0.1% by volume or sold separately. By virtue of all products offered on this website being finished articles not containing SVHC's, they are declared Compliant. For further information log on to: <u>ec.europa.eu/environment/chemicals/</u> <u>reach/reach_intro.htm</u>
Recommended Filtration	In most cases this will be expressed as 'To suit application and media used'. Care should be taken when selecting appropriate filters to take account of nominal and absolute ratings. In essence a 20μ nominally rated filter will remove >50% of particles that size, whereas a 20μ absolute rated filter will remove >99.9% of particles of that size. Unless otherwise stated any given recommended filter ratings are nominal.
Repeatability	Repeatability is expressed as a percentage and is an indication of the level of achieving and repeating a previously determined value. Repeatability is positively influenced by low hysteresis. Where not applicable, no mention is made.
Response Time	Response time is effectively the delay between application of a signal to change a parameter and the parameter reaching a new stable level. This measure is usually only applied to electrically controlled devices.
RoHS	'R estriction o f the use of certain H azardous S ubstances' in Electrical and Electronic Equipment. Implicit in this regulation is that it applies only to electrical and electronic equipment. A given statement of compliance with this regulation therefore relates only to electrical and electronic equipment. For further information log on to: <u>www.rohs.eu</u>
Sensitivity	Sensitivity is the minimum change in an input parameter that results in a change in outlet parameter and is usually expressed as a percentage of the desired outlet parameter.
Temperature	 Ambient - Ambient temperature is the surrounding atmosphere temperature range through which the item will function correctly where all other parameters are within stated limits. Media - Media temperature is the contained fluid temperature range through which the item will function correctly where all other parameters are within stated limits. Operating - Where no distinction is made between Ambient and Media temperatures, then the temperature range is expressed as Operating.

Vacuum	A partial vacuum exists when a referenced pressure is below atmospheric pressure. Vacuum readings increase as the referenced pressure goes from atmospheric to absolute zero (Opsia), or a full vacuum. A vacuum gauge at rest reads zero (Opsig) and increases until it could read -14.7 psig or 29.92"Hg if it were measuring a perfect vacuum. However, on Earth, assuming an atmospheric pressure of 14.7 psia, a full vacuum can never be more than -14.7 psig or -29.92"Hg. Vacuum is therefore generally to be taken as a partial vacuum between less than atmospheric pressure and the theoretical absolute zero pressure.
Voltage	This is the voltage required to be applied to the component for satisfactory functioning and is expressed as DC (direct current) or AC (alternating current). In some cases a voltage range will be given for satisfactory functioning. Voltages below the minimum stated will likely cause the valve to malfunction, whilst over-voltage may cause permanent damage.
Wattage	This is the instantaneous electrical power that the component will consume/produce. This is a function of the electrical resistance and voltage applied. For a DC energised component Power (watts) = Voltage (volts) x Current (amps). For an AC energised component the Average Power (vA or watts) = RMS Voltage (volts) x RMS current (amps). From this data the power consumption over time can be calculated and expressed as kWh.
WEEE	WEEE (ie 'Waste Electrical & Electronic Equipment') compliance indicates that the UK regulations for the marking and recycling requirements of the WEEE regulations have been satisfied.
Wetted and Non-Wetted Materials	Wetted materials are those that come into direct contact with the fluid passing through the component. Non-wetted materials do not come into direct contact with the fluid passing through the component, but should be considered as possibly coming into indirect contact.
Weight	This is the total item nett weight not including packaging.

ABBREVIATIONS

c/w	Complete with
ID	Inside (or internal) Diameter
L/H	Left Hand (or anticlockwise)
OD	Outside (or external) Diameter
R/H	Right Hand (or clockwise)

THREAD FORMS

BSPP	British Standard Pipe Parallel	Metric
BSPT	British Standard Pipe Taper	Metric
NPT	National Pipe Thread (Taper) United States	Imperial



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