



Glossary of Terms

Modulating Service Proportional positioning of a valve between the open and closed position. Used for flow control processes.

MTR Material Test Report

NAMUR International Standard of Interface for actuator accessories connections.

NEMA Rating National electrical code ratings for electrical component enclosures.

NEMA 4 Weather-proof enclosure suitable for indoor/outdoor applications to protect from windblown dust, rain or hose-directed water.

NEMA 4x Offers the same protection as NEMA 4 with the addition of corrosion resistance.

NEMA 6 Enclosure that may be submerged up to six feet for 30 minutes.

NEMA 7 Enclosure for hazardous locations must be capable of withstanding an internal explosion of gases so as not to ignite an external gas-air mixture.

Net Positive Suction Head Amount of energy in the liquid at the pump datum. It must be defined to have a meaning, as either available or required NPSH.

Neoprene Synthetic rubber, chemically and structurally similar to natural rubber

Nominal Size A dimensional value assigned for the purpose of convenient designation.

On-Off Service When the valve is being used to start or stop flow by being cycled to the full open or full closed position.

Operating Pressure The pressure at which system functions. Also known as working pressure.

Pneumatic Actuator An air operated mechanical device used to open and close or modulate a valve. The actuator, which is mounted to the valve by a bracket and coupled to the stem, is designed to convert air pressure into mechanical force sufficient to operate the valve.

Polish To make smooth and shiny by rubbing. Fittings may be machine polished to 180 grit finish. Polish is ID, OD, or both per customer request.

Polypropylene A lightweight synthetic plastic

Pressure The force per unit area applied on a surface in a direction perpendicular to that surface.

Pressure Head Must be considered when a pumping system either begins or terminates in a tank which is under some pressure other than atmospheric. The pressure in such a tank must first be converted to feet of liquid. A vacuum in the suction tank or a positive pressure in the discharge tank must be added to the system head, whereas a positive pressure in the suction tank or vacuum in the discharge tank would be subtracted. The following is a handy formula for converting inches of mercury vacuum into feet of liquid.

$$\text{Vacuum, ft of liquid} = \frac{\text{Vacuum, in. of Hg} \times 1.13}{\text{Sp. Gr.}}$$

The above forms of head, namely static, friction, velocity, and pressure, are combined to make up the total system head at any particular flow rate.

PSI Pounds per square inch

PSIG Pounds per square inch gauge

PTFE Tetrafluoroethylene, DuPont's Teflon®, is a high performance thermo plastic polymer that has excellent dielectric strength, chemical and temperature resistance.

Required NPSH A characteristic of the pump design. It is determined by test or computation and is the energy needed to fill a pump on the suction side and overcome the friction and low losses from the suction connection to that point in the pump at which more energy is added. Required NPSH varies with pump design, pump size and operating conditions and is supplied by the pump manufacturer.

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