

NEMA CONTROL PANEL ENCLOSURES

PP-ER-004 | Part of the Penn Pump Engineering Reference Series

Enclosure Rating	Explanation
NEMA 1 - General Purpose	Prevents accidental contact with enclosed apparatus. Suitable for indoor applications not exposed to unusual service conditions.
NEMA 2 - Driptight	Prevents accidental contact and excludes falling moisture or dirt.
NEMA 3 - Weatherproof	Provides protection against specified weather hazards. Suitable for outdoor use.
NEMA 3R - Raintight	Protects against the entrance of water from beating rain.
NEMA 4 - Watertight	Designed to exclude water applied in hose-stream form during cleaning operations.
NEMA 4X - Watertight and Corrosion Resistant	Same as NEMA 4 with additional corrosion resistance.
NEMA 5 - Dust Tight	Constructed so dust will not enter the enclosed case.
NEMA 6 - Submersible	Permits enclosed apparatus operation when submerged under specified pressure and time.
NEMA 7 - Hazardous Locations Class I	For Class I hazardous locations where explosive atmospheres may be present.
NEMA 8 - Hazardous Locations Oil Immersed	Identical to NEMA 7 except the apparatus is immersed in oil.
NEMA 9 - Hazardous Locations Class II	For combustible dust hazardous locations.
NEMA 10 - Bureau of Mines	Suitable for use in coal mines.
NEMA 11 - Fume Resistant Oil Immersed	Suitable where apparatus is subject to acid or corrosive fumes.
NEMA 12 - Industrial Use	Excludes dust, lint, fibers, flyings, oil, or coolant seepage.

Engineering Reference Notice

The information contained in this document is provided as a general engineering reference only. Users are responsible for verifying all dimensions, capacities, ratings, codes, standards, and application requirements prior to equipment selection, installation, or operation. Penn Pump & Equipment Company assumes no liability for errors, omissions, or the use of this information.