

Coil Housings

The National Electrical Equipment Manufacturers Association defines the various types of electrical enclosures used as follows:

NEMA 1 enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment in locations where unusual service conditions do not exist. They provide a degree of protection against limited amounts of falling dirt but will not prevent the entry of dust or liquids. They prevent the insertion of a straight rod of a specified diameter into the equipment cavity of the enclosure.

NEMA 4 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, and hose directed water.

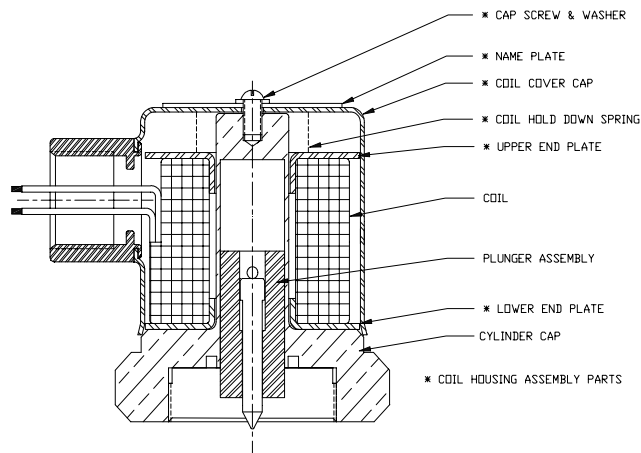
NEMA 7 enclosures are used in hazardous locations and are designed to contain an internal explosion without causing an external hazard. Type 7 enclosures are intended for indoor use and are capable of withstanding the pressures resulting from an internal explosion of specified gasses and contain such an explosion sufficiently that an explosive gas-air mixture existing in the atmosphere surrounding the enclosure will not be ignited. In operation, external surfaces do not reach temperatures capable of igniting explosive gas-air mixtures in the surrounding atmosphere.

NEMA 9 enclosures prevent the entrance of dust and external surfaces do not reach temperatures capable of igniting explosive dust-air mixtures in the surrounding atmosphere. Type 9 enclosures are intended for indoor usage.

In the Atkomatic line, combination NEMA 7 or 9 and 4 enclosures combine the features of waterproof and explosion-proof housings and are intended for either indoor or outdoor usage. Additionally, the NEMA 4 housings meet the requirements of NEMA 2 and 3 that provide lesser degrees of protection from water.

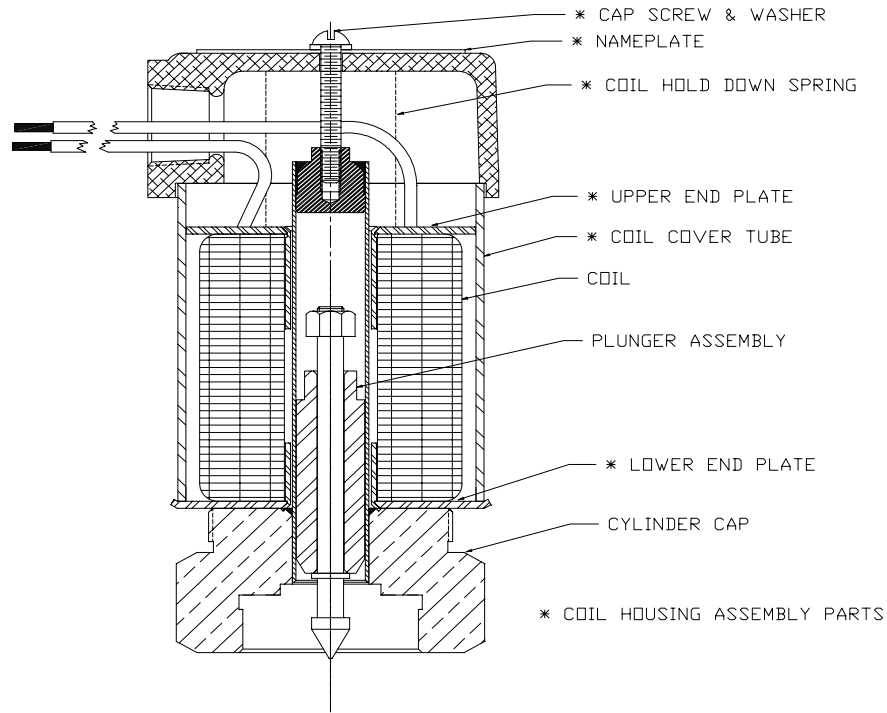
All electrical connections are ½" NPT

Note: Plungers, coils, and cylinder caps are not considered to be part of coil housing subassemblies, but are shown in some of the following cross sections.

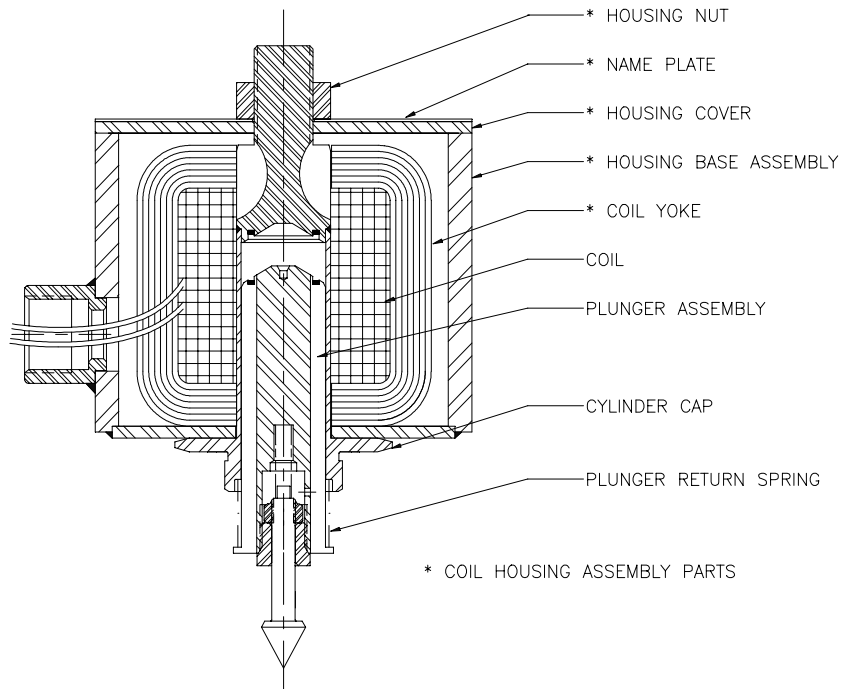


Standard NEMA 1 coil housing option for the following valve series:
JJ, HS, and 500

(See page 22 for a cross section of the NEMA 1 housing used on normally open 500 series valves)

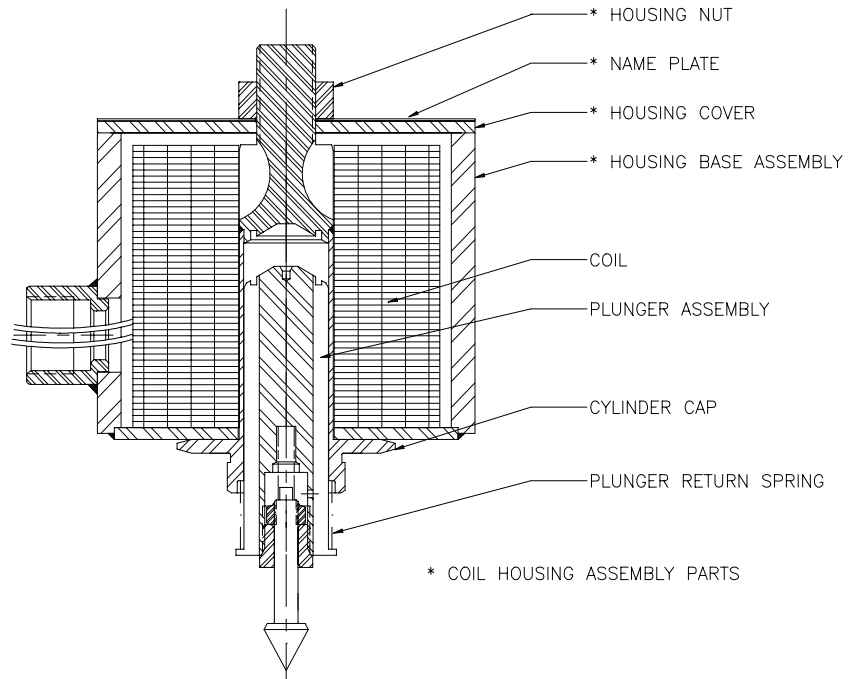


Standard NEMA 1 coil housing option for the following valve series:
2000, 3000, 4000, 5000, 6000, 7000, 8000, 15,400, 15,800, 16,000



Shown with a AC coil
Standard NEMA 1 coil housing option for the following valve series:

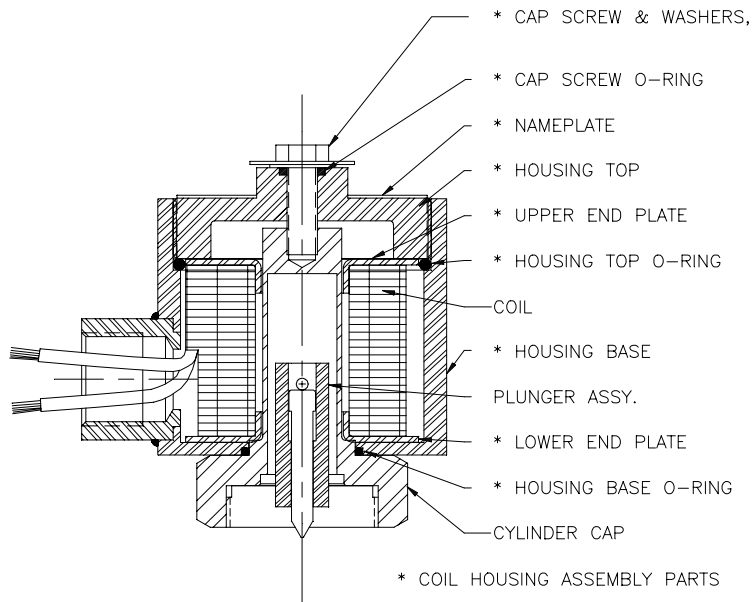
13,000, 30,400, 30,800, 35,000, 40,000, and 50,000



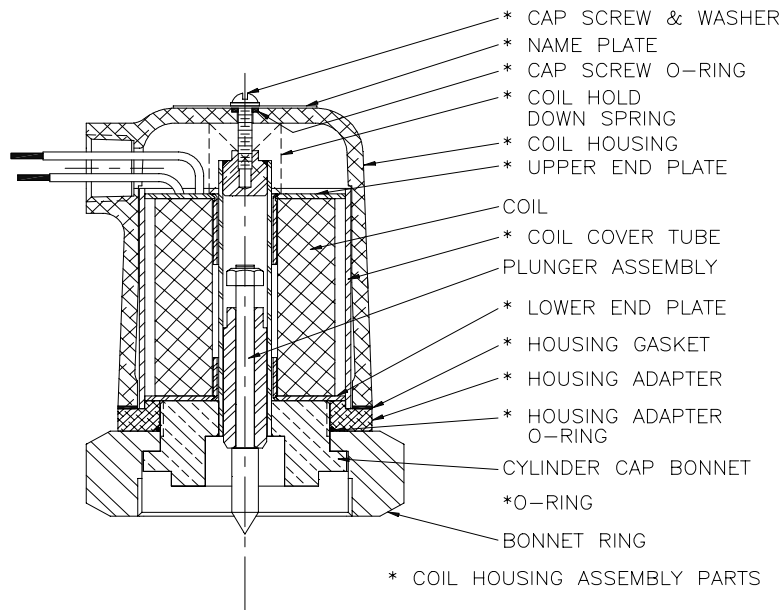
Shown with a DC coil

Standard NEMA 1 coil housing option for the following valve series:

13,000, 30,400, 30,800, 35,000, 40,000, and 50,000

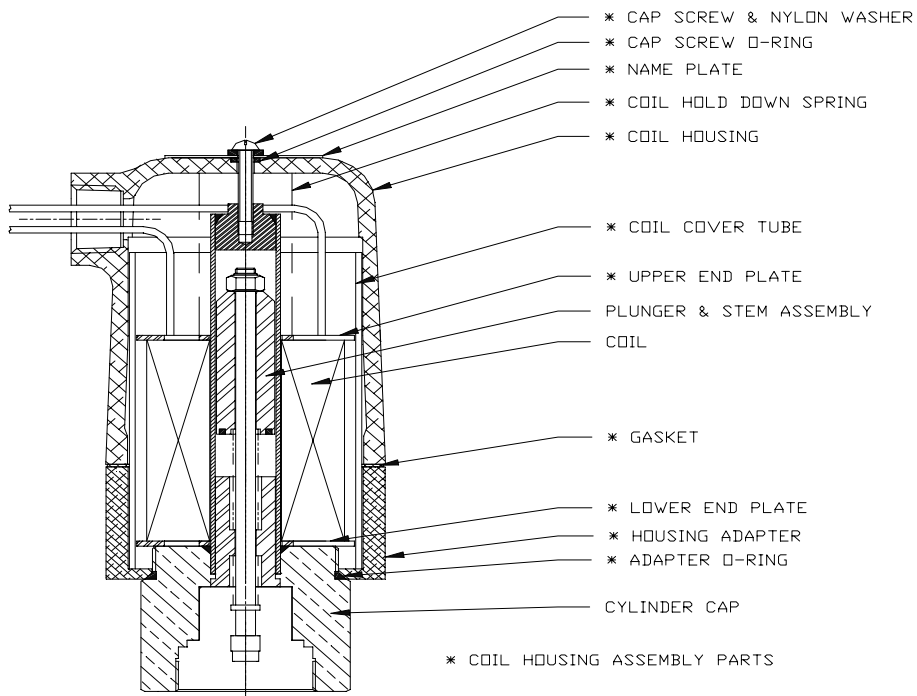


Waterproof NEMA 4 coil housing option for the 500 valve series
(is standard on the 15-794 valve).



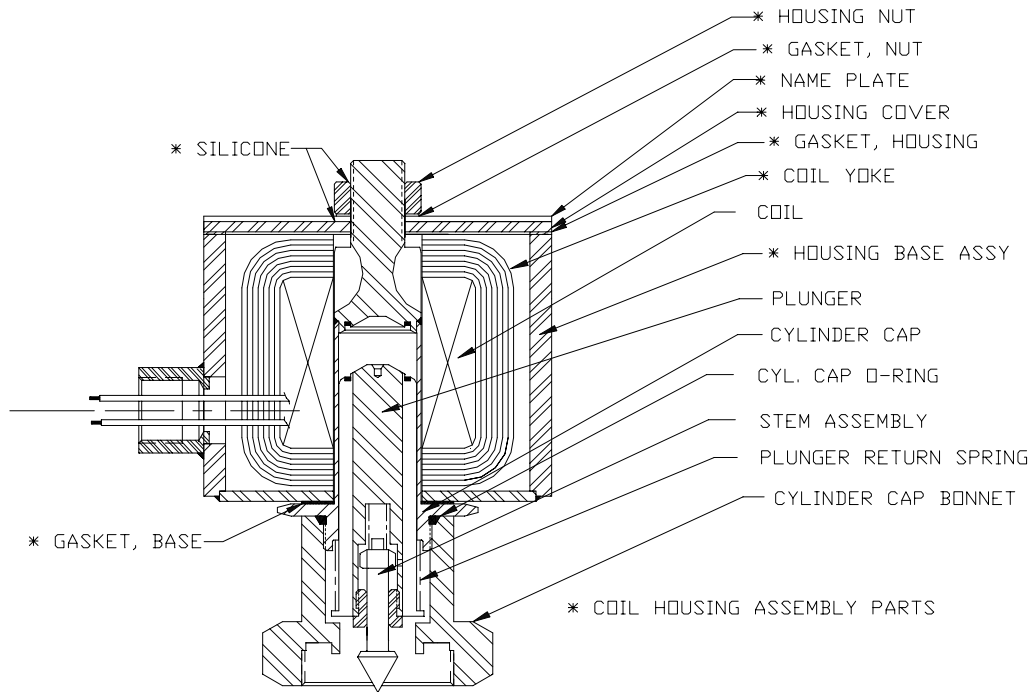
Waterproof NEMA 4 coil housing option for the following normally closed valve series:
2000, 3000, 4000, 5000, 6000, 7000, 8000, 15,400, 15,800, 16,000

Note that there are some minor differences among housings used on these valves



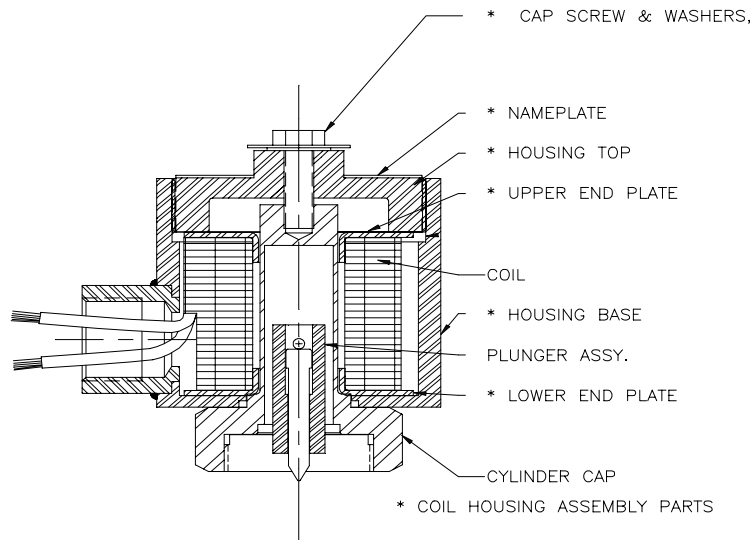
Waterproof NEMA 4 coil housing option for the following normally open valve series:
3001, 4001, 5001, 6001, 8001, 15,401, 15,801, 16,001

Note that there are some minor differences among housings used on these valves

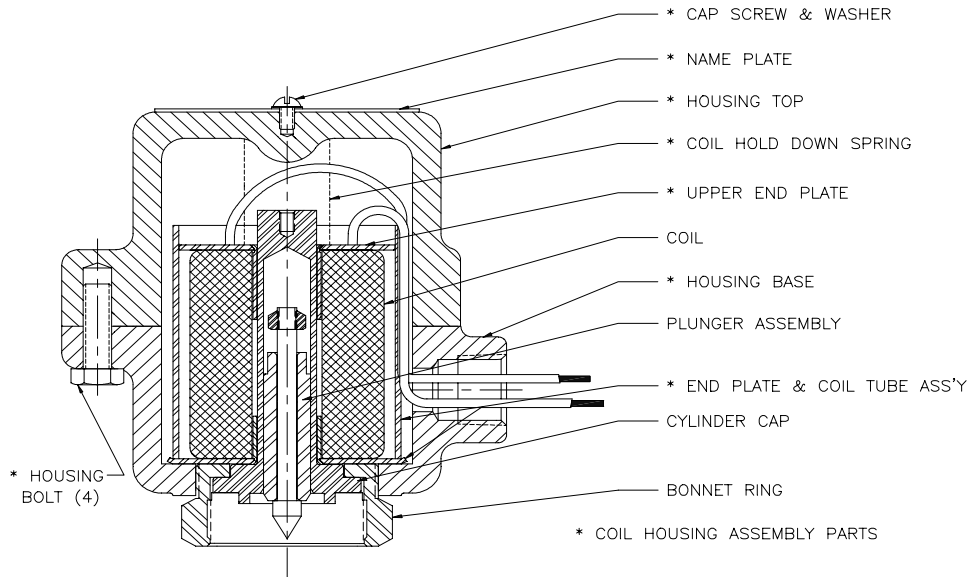


Waterproof NEMA 4 coil housing option for the following valve series:

13,000, 30,400, 30,800, 35,000, 40,000, and 50,000

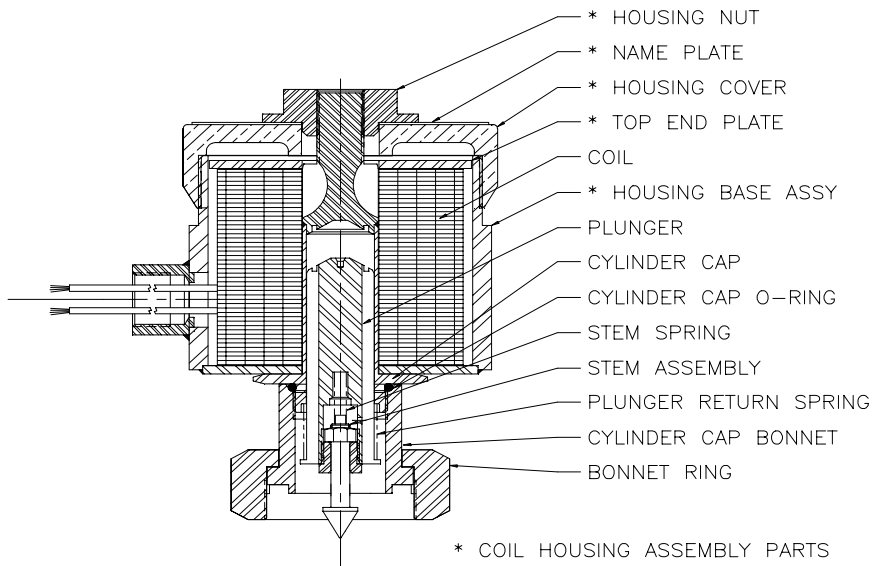


Explosion-proof NEMA 7 & 9 coil housing option for 500 valve series.



Explosion-proof NEMA 7 & 9 coil housing option for the following valve series:
 2000, 3000, 4000, 5000, 6000, 7000, 8000, 15,400, 15,800, 16,000

There are some differences among housings used on these valves. For instance, the 2000 series housings do not use the 4 housing bolts and the housing top is threaded to the top of the cylinder cap. The cap screw & washer is also replaced with a nut that is threaded to the cylinder cap.



Explosion-proof NEMA 7 & 9 coil housing option (Shown with a DC coil) for the following valve series: 13,000; 30,400; 30,800; 35,000; 40,000; and 50,000

Note: These NEMA 7 housings are made into combination waterproof & explosion-proof NEMA 4 & 7 housings by the application of silicone sealant to the outside of the joints.