The valve’s solenoid is encapsulated in Zenite® 6130 and has a coil bobbins molded from the same material inside. An earlier model uses thermostet epoxy for encapsulation.

The redesigned valve is ideal for use in hazardous locations, aggressive chemical environments and for indoor and outdoor use where protection is required against splashing water, water seepage, falling or hose-directed water, or severe external condensation, according to ASCO.

The RedHat Next Generation line also delivers a sharp reduction in power consumption. Designed to run on either AC or DC power, a RedHat Next Generation solenoid uses only 2 watts of power to deliver the same performance as a typical 17-watt AC solenoid.

Benefits Gained

Withstands harsh conditions. The valves are certified for use in hazardous locations and watertight applications as outlined in Class I, Division 2 of the National Electrical Code. In addition, the valves meet all NEMA Types 1 through 4X requirements for water- and dust-tight applications.

Handles temperature extremes. The solenoid withstands ASCO’s stringent thermal shock testing and can serve at temperatures from -40 to +200ºC.

Lower production costs. Encapsulation with Zenite® via injection molding costs significantly less than the thermostet epoxy technology used for earlier models. Molding cycles are faster, and sprues and runners are recycled, avoiding waste and disposal costs incurred with thermostets.

Development assistance. DuPont specialists provided solid technical support to ASCO engineers in part design, tooling and processing.

Material Selected, and Why

DuPont™ Zenite® 6130 meets this application’s needs for resistance to a wide range of aggressive chemicals, a UL94 V-0 flammability classification, excellent stability and cracking resistance in thermal shock testing and excellent performance in the encapsulation injection molding process. The resin contains 30% by weight of glass fiber reinforcement.
Let's talk

We have the right materials, technology and technical resources to help you design and manufacture superior parts and systems. Please contact the nearest DuPont representative for your country.

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see “DuPont Medical Caution Statement,” H-50102.

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Americas
DuPont Engineering Polymers
P.O. Box 80027
Wilmington, DE 19880-0027
Telephone +1 302 999-4592
Toll-Free (USA) 800 441-0575
Fax +1 302 999-4358

DuPont do Brasil, S.A.
Alameda Itapecuru, 506
06454-080 Barueri, SP Brasil
Telephone +55 11 4166 8542
Fax +55 11 4166 8720

Asia Pacific
DuPont China Holding Co, Ltd.
15th Floor, Shui On Plaza
333 Huai Hai Road (Central)
Shanghai 200021, China
Telephone +86 21 6386 6366
Fax +86 21 6386 6333

Europe / Middle East / Africa
DuPont de Nemours Int’l. S.A.
2, Chemin du Pavillon Box 50
CH-1218 Le Grand Saconnex
Geneva, Switzerland
Telephone +41 22 717 51 11
Fax +41 22 717 55 00

plastics.dupont.com