

Power-saving valve gets rugged protection and more from DuPont™ Zenite® LCP



EP-EU-2006-21

Photo: DuPont

ASCO's RedHat Next Generation valve can operate reliably in harsh conditions thanks to the solenoid encapsulation and coil bobbin made of DuPont™ Zenite® LCP.

Power-saving valve gets rugged protection and more from DuPont™ Zenite® LCP

Stevenage, November 2006. Innovative RedHat Next Generation solenoid valves from ASCO®, the world's leading manufacturer of solenoid valves, are protected from harsh conditions by DuPont™ Zenite® LCP liquid crystal polymer. The valve's solenoid is encapsulated in Zenite® and has a coil bobbin moulded from the same material inside. An earlier model uses thermoset epoxy for encapsulation.

"Our RedHat Next Generation valve using Zenite® LCP 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," said Nick Buccheri, vice president of marketing for ASCO.

The valves are certified for use in hazardous locations and watertight applications as outlined in Class I, Division 2 of the National Electrical Code (a US standard for the safe installation of electrical wiring and equipment), according to ASCO. In addition, they meet all NEMA (National Electrical Manufacturers Association in the US) Types 1 through 4X requirements for water- and dust-tight applications. The encapsulated solenoid withstands ASCO's stringent thermal shock testing and meets service temperature requirements of -40 to +200°C.

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 two watts of power to deliver the same performance as a typical 17-watt AC solenoid, according to Buccheri. "Their DC performance is up to 500 percent better than that of standard industry units," he added.

RedHat Next Generation solenoids serve in a wide variety of demanding fluid control applications. Among them are air compressors, fire pumps, gas generators, water softeners, metal cutting equipment, welding equipment and water treatment plants.

DuPont specialists provided valuable assistance to ASCO engineers during development. They provided support in part design, tooling and processing. The resin grade selected by ASCO, 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 moulding process. It contains 30 percent glass fibre reinforcement.

ASCO, a division of Emerson, has been the world's leading manufacturer of solenoid valves for over 100 years. The company markets its products through a network of direct sales offices, technically-oriented representatives, and distributors throughout the world. For more information contact ASCO at 800-972-ASCO, by e-mail at info-valve@asco.com or visit www.ascovalve.com/NextGen.

Emerson (NYSE: EMR), based in St. Louis, is a global leader in bringing technology and engineering together to provide innovative solutions to customers through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. Sales in fiscal 2004 were \$15.6 billion. For more information, visit www.GoToEmerson.com.

The **DuPont Engineering Polymers** business manufactures and sells Crastin® PBT and Rynite® PET thermoplastic polyester resins, Delrin® acetal resins, Hytrel® thermoplastic polyester elastomers, DuPont™ ETPV engineering thermoplastic vulcanizates, Minlon® mineral-reinforced nylon resins, Thermx® PCT polycyclohexylene dimethylterephthalates, Tynex® nylon filaments, Vespel® parts and shapes, Zenite® liquid crystal polymers and Zytel® nylon resins and Zytel® HTN high-performance polyamides. These products serve global markets in the aerospace, appliance, automotive, consumer, electrical, electronic, industrial, sporting goods and many other diversified industries.

DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets including agriculture and food; building and construction; communications; and transportation.

XXX

The DuPont Oval Logo, DuPont™ and Zenite® are registered trademarks or trademarks of DuPont or its affiliates.

ASCO is a registered trademark of ASCO Valve, Inc.

Press contact (UK, Benelux, Scandinavia)

Andrew Wilkins

Tel.: +44 (0)1353 663350

Fax: +44 (0)1353 663350

Email: dupont.press@btconnect.com

<http://uk.news.dupont.com>

DuPont press contact

Horst Ulrich Reimer

Tel.: +49 (0)6172 871297

Fax: +49 (0)6172 871266

Email: horst-ulrich.reimer@deu.dupont.com

EP-EU-2006-21

November 2006