

USA Carter Valve Unveils CARTERUS Series for Critical Industries

New series features six-eccentric tech for extreme temps/cryogenics and a triple-offset valve for ultra-high pressure, offering a total solution.

DENVER, CO, UNITED STATES, August
13, 2025 /EINPresswire.com/ -- USA
Carter Valve Inc., a Colorado-based
leader in industrial flow control
solutions, today announced the launch
of its comprehensive CARTERUS™
High-Performance Butterfly Valve
Series. This expanded portfolio is
engineered to deliver absolute zeroleakage and superior reliability across
the full spectrum of industrial critical
services, from ultra-high pressures to



The newly launched CARTERUS High-Performance Butterfly Valve Series, showcasing from left to right: the CVS-288 for ultra-high pressure, the CVS-290 for high-temperature, and the CVS-290C for cryogenic services.

extreme temperatures and cryogenic applications.

Building on the success of its innovative valve technology, this new series provides a targeted solution for the most persistent challenges in sectors like LNG, petrochemicals, power



Our partners no longer need to compromise.
Whether they face immense pressure, searing heat, or deep cold, there is now a CARTERUS valve built without compromise for that specific duty."

Robert Carter, Chief Engineer,
USA Carter Valve Inc.

generation, and aerospace. The launch introduces three distinct models, each masterfully engineered to dominate its specific operational domain.

"Today, we are not just launching new products; we are offering a complete, integrated isolation valve solution for the industry's toughest problems," said Robert Carter, Chief Engineer at USA Carter Valve Inc. "Our partners no longer need to compromise. Whether they face the immense force of a Class 2500 pipeline, the searing heat of a cracking unit, or the deep cold of liquid nitrogen, there is now a CARTERUS valve built without compromise for that specific duty. This series embodies our commitment to

pushing the boundaries of engineering to enhance safety, drive efficiency, and reduce the total cost of ownership for our clients."

The new CARTERUS High-Performance Series includes:

The CARTERUS CVS-290: The Next-Generation Six-Eccentric Valve for High Temperatures Representing the ultimate evolution in valve technology, the CVS-290 is the flagship of the series. Its groundbreaking six-eccentric, cone-to-cone metal seal design completely eliminates friction and wear during operation. This allows it to deliver true, verifiable zero-leakage in the most severe industrial processes.

- *Key Feature: The revolutionary six-eccentric kinematics reduce operating torque by over 30% compared to triple-offset valves, enabling the use of smaller, more energy-efficient actuators and lowering both capital and operational costs.
- *Applications: Petrochemical Processes, High-Temp Steam & Gas, Power Generation, Thermal Oil Systems
- *Temperature Range: -60°C to +1100°C (-76°F to 2012°F)
- *Pressure Class: Up to PN 100 / Class 600

The CARTERUS CVS-290C: The Definitive Solution for Cryogenic Sealing Specifically engineered for the extreme cold, the CVS-290C utilizes the same friction-free six-eccentric geometry to provide a perfect metal-to-metal seal that remains bubble-tight even at -196°C. The design inherently compensates for material shrinkage at cryogenic temperatures and prevents ice formation from damaging the seal, guaranteeing safety and preventing costly product loss (e.g., LNG boil-off).

- *Key Feature: The non-rubbing design ensures reliable cycling and a long service life in conditions where traditional valves would fail due to galling or ice damage, providing unparalleled safety for hazardous cryogenic media.
- *Applications: Liquefied Natural Gas (LNG), Liquid Nitrogen & Oxygen, Aerospace Fueling, Scientific Research
- *Temperature Range: -196°C to +120°C (-321°F to 248°F)
- *Pressure Class: Up to PN 40 / Class 300

The CARTERUS CVS-288: The Fortress for Ultra-High-Pressure Environments
Designed as a fortress against extreme system pressures, the CVS-288 is an extremely robust, thick-walled butterfly valve built for critical isolation where absolute reliability is paramount. Its proven triple-offset design provides durable, bi-directional zero-leakage shut-off, ensuring maximum integrity and safety in high-pressure pipelines and supercritical steam applications.
*Key Feature: An immensely heavy-duty, often forged body (materials include SA105, SA182 F51/F53) is engineered to withstand immense pipeline stresses and system pressures up to 420 bar (6090 PSI).

- *Applications: High-Pressure Pipelines, Supercritical Steam, Deep Sea Operations, Critical System Isolation
- *Temperature Range: -46°C to +600°C (-51°F to 1112°F)
- *Pressure Class: Up to PN 420 / Class 2500

The CARTERUS series integrates intelligent design features aimed at maximizing uptime. The seal rings are designed for simplified, error-proof installation, and the non-rubbing nature of the six-eccentric models drastically reduces maintenance cycles and the Mean Time to Repair (MTTR), directly boosting plant profitability.

More technical information about the complete CARTERUS High-Performance Butterfly Valve series is available on the company's official website at https://carter-valve.com/.

About USA Carter Valve Inc.

Based in Colorado, USA Carter Valve Inc. is a leading American manufacturer of high-performance industrial valves and flow control solutions. The company specializes in engineering innovative products for critical applications in the energy, chemical processing, aerospace, and defense sectors. With a focus on enhancing operational safety, efficiency, and reliability, USA Carter Valve Inc. is dedicated to solving the most complex challenges for its global clients.

Robert Carter USA Carter Valve Inc. +1 912-248-5408 email us here

This press release can be viewed online at: https://www.einpresswire.com/article/839374473

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.