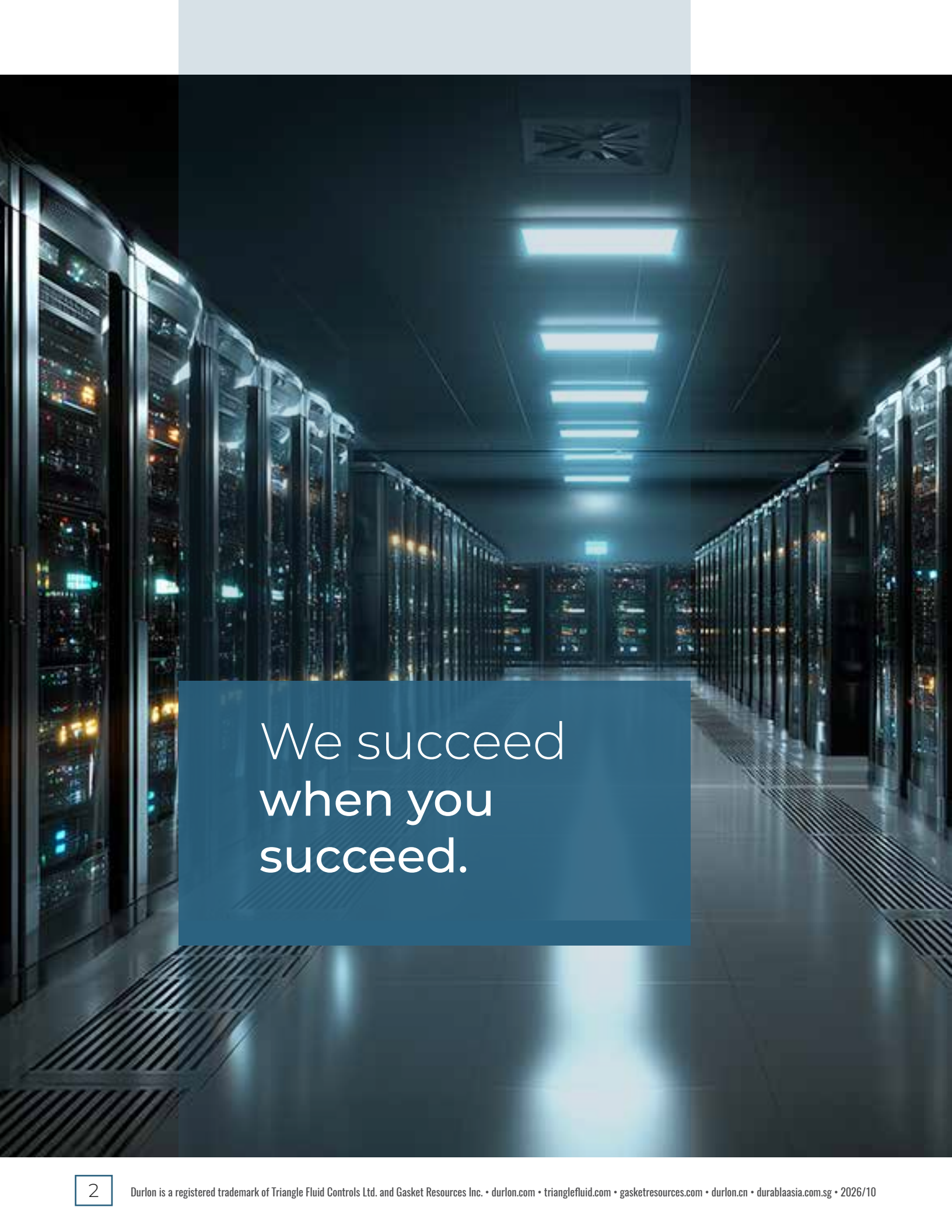




www.durlon.com
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SEALING SOLUTIONS FOR
Data Centers



We succeed
when you
succeed.



Our Vision

Evolution isn't a choice in today's business landscape; it's the only way to succeed.

Progress relies on everything moving forward, from people to machinery to production. Everything must flow.

As we engineer our way to a better world, we are breaking down barriers, making sure each process is in place, always reflecting and improving. We are experts at delivering the best sealing solutions to help our customers unlock their highest potential.

Our global community of industry-leading specialists drive our innovative production and materials to consistently raise the bar.

Whether exposed to the stress of everyday use, specialized applications, high-temperature environments, liquids, or gases, our products deliver reliable sustainable integrity.

At Durlon, we succeed when you succeed.



Sealing Solutions for Data Centers

Supporting the Infrastructure Behind the Digital World

Every email sent, video streamed, file stored in the cloud, and online transaction completed depends on a physical network of facilities known as data centers. These buildings house rows of servers, electrical infrastructure, mechanical cooling systems, and monitoring equipment that work continuously to keep digital information available, secure, and moving.

Although data centers may look like commercial buildings from the outside, their operating demands are very different. Servers run twenty-four hours a day, every day of the year. This constant operation consumes large amounts of electricity, and nearly all of that energy is ultimately converted into heat. As a result, data centers are not only IT facilities; they are energy-intensive facilities where power, heat, and reliability must be managed without interruption.

Critical Operating Requirements

Data centers must address three essential challenges:

Continuous Power

Servers cannot shut down unexpectedly. Even brief power interruptions can lead to data loss, service disruption, or outages affecting thousands or millions of users. Data centers rely on robust electrical infrastructure, backup power

systems, switchgear, and power distribution equipment to keep systems energized.

Continuous Cooling

Because servers generate heat constantly, cooling systems must operate continuously. Data center cooling is not designed for comfort; it is required to protect equipment and maintain reliable operation. Chillers, cooling towers, pumps, air handling units, and rack-level cooling equipment help maintain safe operating temperatures.

Continuous Operation

Data centers are built for uptime. Maintenance, repairs, and equipment failures must be managed without shutting down the facility. This need for reliability drives the use of redundancy across mechanical, electrical, and control systems.

Where Durlon Fits

Data centers depend on mechanical and electrical infrastructure that must perform reliably under demanding, continuous-duty conditions. Sealing products used in cooling loops, pumps, piping systems, heat exchangers, backup power systems, and supporting utilities must help maintain system integrity and reduce the risk of leaks, downtime, and unplanned maintenance.

Durlon sealing solutions support the reliability

requirements of data center infrastructure by helping critical systems operate safely, efficiently, and continuously.

Data centers are built on uptime, efficiency, and reliability. Behind every rack, server, and electrical system is a network of critical support equipment that must perform without interruption. Cooling loops, backup power systems, water treatment, fire suppression, HVAC equipment, and facility piping all depend on secure, dependable sealing solutions.

A data center can be viewed as a facility dedicated to computing, processing information rather than manufacturing physical products.

At Durlon®, we understand that sealing performance is part of operational continuity. Our products are designed to support the systems that keep data centers running safely, efficiently, and reliably.

Data centers rely on mechanical and utility systems that operate continuously to protect IT equipment, maintain environmental conditions, and provide emergency backup when needed. Gaskets are used throughout these systems to help prevent leaks, reduce maintenance requirements, and support safe operation.

Typical data center systems include:

Cooling Systems

Chillers, cooling towers, pumps, heat exchangers, HVAC units, piping loops, and glycol-based cooling systems all require dependable sealing solutions.

These systems may involve water, glycols, corrosion inhibitors, and biocides.

Backup Power Systems

Generator exhaust, fuel delivery, coolant loops, and lubrication systems support business continuity during utility power interruptions. Gaskets used in these areas may encounter diesel, oils, coolants, elevated temperatures, and vibration.

Water Treatment Systems

Reverse osmosis, filtration, chemical dosing, and treatment skids help support cooling water quality and system efficiency.

Sealing materials must be selected with consideration for water chemistry, treatment chemicals, and service conditions.

Fire Suppression Systems

Data centers may use clean-agent, inert-gas, CO₂, or water-based fire suppression systems depending on facility design.

These systems require sealing solutions that support reliability when safety systems are called into service.

General Facility Piping

Air, water, drainage, utility, and support piping throughout the facility all require practical, reliable gasket solutions for day-to-day operation and maintenance.

A data center is a building or dedicated space that houses numerous computer servers and networking equipment used to store, process, and deliver digital information.

Reliability Matters

In data centers, uptime is essential. Every system that supports power, cooling, and operation must be dependable. Durlon products help support these mission-critical environments where sealing performance contributes to safety, efficiency, and continuous operation.



Innovative products
Unparalleled service

Durlon® Product Recommendations



Durlon® 7910



Durlon® 8500



Durlon® 9000



Durlon® 9002

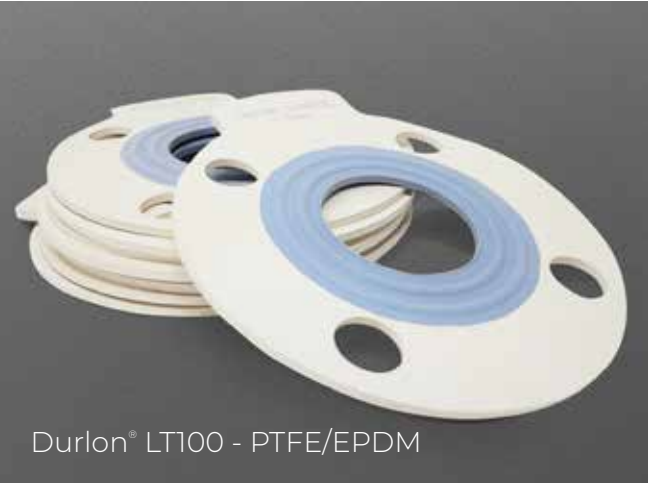
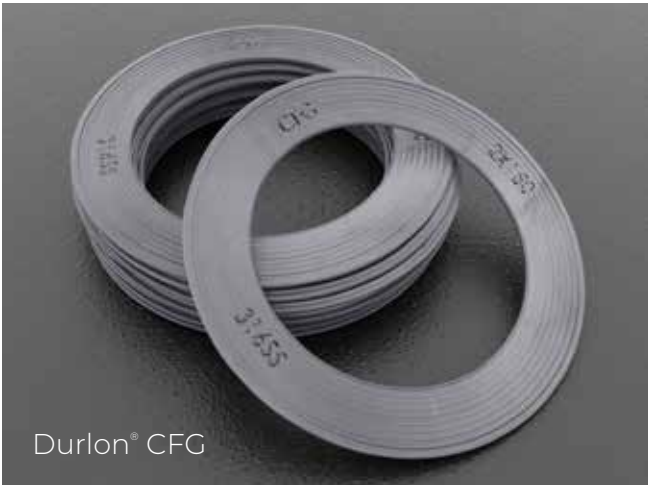
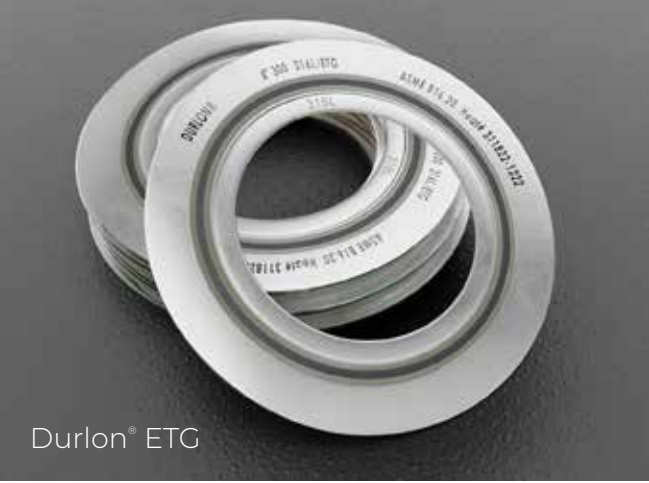


Durlon® 9200



Durlon® 9600

Durlon® Product Recommendations



Physical Properties & Certifications

Physical Properties	7910	8500	9000	9200	9600	9645	LT100	SWG
Composition	Aramid -Inorganic NBR	Aramid -Inorganic NBR	Inorganic Filler / Pure PTFE Resins	Barium Sulfate Filler / Pure PTFE Resins	100% Pure Expanded PTFE	Microcellular PTFE with Rigid PTFE core	Pure PTFE, Bonded to EPDM	Spiral Wound Gasket
Color	White	Green	Blue	Off White	White	White	White/Blue	Style: DRI
Temperature: Min Max Continuous, Max	-40°C (-40°F) 371°C (700°F) 260°C (500°F)	-40°C (-40°F) 371°C (700°F) 287°C (548°F)	-212°C (-350°F) 271°C (520°F) 260°C (500°F)	-268°C (-450°F) 260°C (500°F) -	-268°C (-450°F) 316°C (600°F) 260°C (500°F)	-260°C (-436°F) 260°C (500°F) -	-40°C (-40°F) 150°C (300°F) -	- - -
Pressure, max, bar (psi)	83 (1,200)	103 (1,500)	103 (1,500)	83 (1,203)	200 (2,900)	60 (870)	17 (250)	-
Density, g/cm ³ (lb/ft ³)	1.7 (106)	1.7 (106)	2.2 (138)	-	0.9 (56.2)	1.3 (81)	-	-
Compressibility, %	9-19	8-16	8-16	4-10	50-60	>44	-	-
Recovery, %	40	50	40	40	>10	>6.3	-	-
Creep Relaxation, %	25	20	30	15	22	<26	-	-
Tensile Strength, MPa (psi)	11 (1,600)	13.8 (2,000)	13.8 (2,000)	14 (2,030)	20 (2,800)	-	-	-
Sealability ASTM F2378 (Nitrogen)	0.05 mL/min	0.03 mL/min	0.01 mL/min	-		-	-	-

Please refer to durlon.com/products for the physical properties of all Durlon® products.

Style	Certifications
7910	Certified to NSF/ANSI/CAN 61 for potable water applications at 23°C (73°F) and commercial hot water up to 82°C (180°F); RoHS and REACH Declaration compliant.
8500	California Proposition 65 and RoHS REACH Declaration compliant, API 6FB Fire Test with average temperature >650°C, 30 minutes, 40 bar, 1 mL/(in·min) maximum allowable leakage, Conforms to the FDA requirements of 21 CFR 177.2600, ABS Tier 2 - PDA Issued.
9000	Passed API 6FA, 3rd Edition Fire Test, Meets USP Plastic Class VI requirements at 121°C (250°F), Conforms to the requirements of 21 CFR 177.1550 for FDA, TA-Luft (VDI Guideline 2440) approved material, ABS-PDA approved; listed in Chlorine Institute Pamphlet 95, (EC) 1935/2004 & EU (10/2011) approved material.
9002	Conforms to FDA requirements of 21 CFR 177.1550 for food and drug contact. Approved for BAM oxygen service in gaseous and liquid oxygen applications up to 260°C (500°F) at 52 bar (754 psi). LOX mechanical impact testing to ASTM G86 and ISO 21010 resulted in zero reactions in 20 tests. RoHS REACH Declaration compliant.
9200	TA-Luft (VDI Guideline 2440), BAM oxygen service, ABS-PDA and Pamphlet 95, (EC) 1935/2004 and EU, Blow-Out and DVGW approved materials, and conforms with FDA requirements under 21 CFR 177.1550 for food and drug contact.
9600	Conforms to FDA requirements of 21 CFR 177.1550 for food and drug contact. Meets USP Plastic Class VI requirements at 121°C (250°F), and compliant with RoHS REACH Declaration. Approved material for ABS-PDA.
9645	Conforms to FDA requirements of 21 CFR 177.1550 for food and drug contact, TA-Luft (VDI Guideline 2440)
SWG	TA-luft (VDI Guideline 2440), API Standard 6FB Fire Test – 6 inch Class 300 SWG FG
CFG	RoHS REACH Declaration compliant, API 6FB Fire Test
ETG	API 6FB, Fourth Edition 2019, Type 1 (Onshore Test), API 6FB, Fourth Edition 2019, Type 2 (Offshore Test); API 607, 4th edition Fire Test with Exxon modifications.
HT1000®	API 607, 4th edition Fire Test with Exxon modifications.

Note: ASTM properties are based on 1/16" sheet thickness, except ASTM F38 which is based on 1/32" sheet thickness. This is a general guide only and should not be the sole means of accepting or rejecting this material. The data listed here falls within the normal range of product properties, but should not be used to establish specification limits nor used alone as the basis of design. For applications above Class 300, contact our technical department.

Warning: Durlon® gasket materials should never be recommended when both temperature and pressure are at the maximum listed. Properties and applications stated are typical. No applications should be undertaken by anyone without independent study and evaluation for suitability. Never use more than one gasket in one flange joint and never reuse a gasket. Improper use or gasket selection could cause property damage and/or serious injury. Data reported is a compilation of field testing, field service reports and/or in-house testing. While the utmost care has gone into publishing the information contained herein, we assume no responsibility for errors. Specifications and information contained within are subject to change without notice. This edition cancels and obsoletes all previous editions.

Data Center Process Flow Diagram

2 Cooling Plant

Chiller nozzles, heat exchanger flanges, pump suction/discharge flanges, valve flanges/body joints, strainers, cooling tower piping

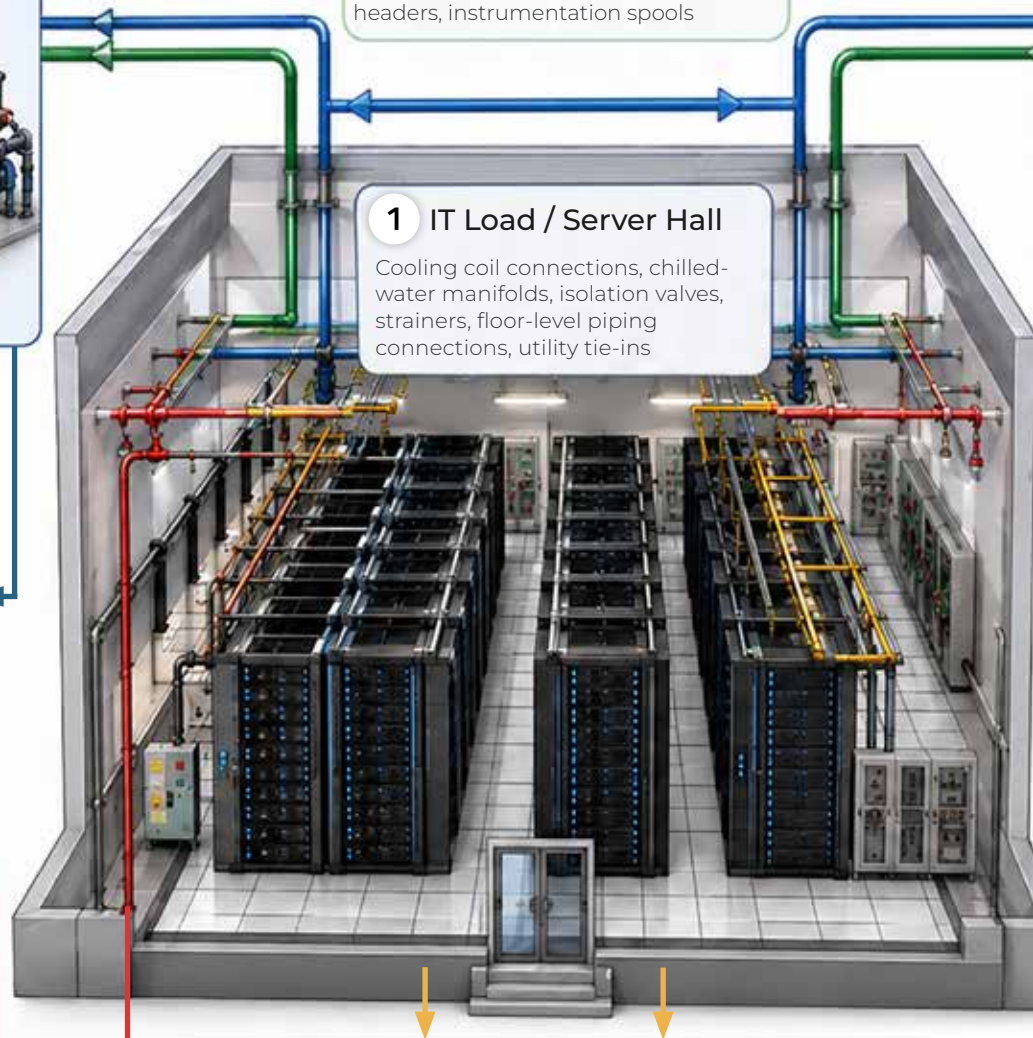


3 Closed Cooling Loop

Treated water/glycol loop flanges, pump connections, plate-and-frame heat exchanger ports, valve flanges, bypass headers, instrumentation spools

1 IT Load / Server Hall

Cooling coil connections, chilled-water manifolds, isolation valves, strainers, floor-level piping connections, utility tie-ins



4 Water Treatment Skid

RO skid piping, filter housings, chemical dosing connections, tank nozzles, metering pump connections, chemical feed lines



7 Fire Suppression System

Agent cylinder manifold flanges, distribution piping flanges, valve assemblies, discharge headers, pressure switch/test connections



8 General Facility Piping

Domestic water, process water, compressed air, drainage, utility headers, mechanical room valves, pumps, strainers, flanged fittings



NOTE: This is a graphical representation of a typical data center showing the primary infrastructure and flow paths. It does not show every system detail; rather, it focuses on the major equipment and supporting systems. It illustrates how these components interact to support reliable data center operation.

5 Backup Generator System

Coolant piping flanges, lube oil service connections, jacket-water heat exchanger flanges, exhaust system joints, turbo/exhaust transitions



6 Fuel Storage & Transfer

Diesel storage tank nozzles, day tank flanges, transfer pump flanges, fuel filter housings, fuel piping valves and unions



Work Flow Process

Durlon® gaskets are primarily used at flanged and other bolted or removable mechanical joints within the illustrated data center systems. These joints are found throughout piping systems, pumps, valves, tanks, skids, heat exchangers, generators, and fire-suppression equipment where reliable sealing is required.

Durlon® iGuard™ flange isolation kits are applicable where electrical isolation or mitigation of galvanic corrosion is required at flanged joints. These kits are designed to provide electrical isolation between mating flanges and associated fasteners and include an isolation gasket, sleeves, and washers. Available gasket/carrier options include Durlon® 8500 and 9000.

Recommended Durlon® Product List:

- 1 **8500** or **LT100** for chilled-water and glycol loop flanges. **9645** where lower seating stress or PTFE chemical resistance is required. **7910** for potable- and domestic-water tie-ins.
- 2 **8500** for standard chiller, condenser-water, pump, valve, and strainer flanges. **CFG** or **SWG DRI with graphite filler** for chiller nozzles, heat exchangers, high-bolt-load joints, large flanges, thermal cycling, vibration, or pressure spikes. **9000, 9200, or 9600** where cooling-tower chemicals, biocides, chlorination, or aggressive treatment chemicals are present.
- 3 **8500** or **LT100** for treated water/glycol flanges, pump connections, bypass headers, valve flanges, and instrumentation spools. **9000** or **9645** where corrosion inhibitors, water-treatment chemicals, or lower seating stress requirements favor PTFE. **CFG** for heat-exchanger flange connections with cycling or vibration.
- 4 **9000** as the general chemical-service gasket. **9200** for more aggressive caustic, chlorine, or chemical-dosing service. **9600** or **9645** for irregular flange surfaces, FRP/PVC or glass-lined equipment, and low-bolt-load flange connections. **7910** for certified potable-water service where NSF/ANSI 61 is required.
- 5 **8500** for coolant and jacket-water flanges. **8500/CFG** for lube-oil service. **CFG**, or **SWG DRI with graphite filler** for jacket-water heat-exchanger flanges and higher-load/vibration joints. **HT1000** or **ETG SWG** for exhaust joints, turbo/exhaust transitions, and very high-temperature flange connections.
- 6 **8500** for standard diesel tank nozzles, day-tank flanges, transfer pumps, fuel-filter housings, valves, and unions. **CFG/SWG DRI graphite** for fire-safe, higher-pressure, large-diameter, or vibration-prone joints. **9000/9600** where biodiesel content or fuel additives require enhanced chemical resistance.
- 7 **9000** for clean-agent, CO₂, inert-gas, and critical low-leak service. **9002** is suitable for specified oxygen-service applications. Finished gaskets requiring oxygen cleanliness can be supplied cleaned, bagged, labeled, and sealed after fabrication. **SWG DRI with PTFE or graphite filler** for high-pressure discharge headers/manifold flanges, depending on the agent and fire-temperature exposure.
- 8 **8500** or **LT100** as general-purpose facility gasket options for process water, utility water, mechanical-room piping, pumps, valves, and strainers. **7910** for potable domestic water. **9000, 9200, 9600, or 9645** for chemical drains, aggressive process water, or applications requiring PTFE sealing. **CFG** or **SWG** where pressure, temperature, thermal cycling, vibration, or blowout-resistance requirements govern gasket selection.



The core of the Durlon® brand is to provide fluid sealing solutions that make sense, both financially and strategically. We accomplish this through process-oriented design, sector-specific knowledge, and extensive testing.

For data centers, sealing reliability extends beyond piping performance. It helps support uptime,

equipment integrity, operational safety, and long-term facility efficiency.

At Durlon, we offer specially developed sealing solutions tailored to your specific needs.

DURLON®
SEALING SOLUTIONS

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