



DRIVEN BY POSSIBILITY™

GATES DATA CENTER COOLING SOLUTIONS

STAY AHEAD OF THE GAME WITH ADVANCED COOLING SOLUTIONS

The amount of power needed to process the large quantities of data for AI technologies and cloud computing generates a significant amount of heat. This requires robust cooling systems to maintain optimal performance.

As data centers expand, the combined heat produced by densely packed servers and networking equipment can reach critical levels. Gates is leading the way in developing cutting-edge solutions to provide superior heat management and meet those growing demands.

THE GATES DIFFERENCE

- Experts in thermal management, materials science, and fluid conveyance in critical applications
- Variety of liquid cooling hoses and nylon tubing to accommodate different system requirements
- Compact and efficient electric water pumps provide a higher power-to-volume ratio
- Reliability and quality are designed into our products to maximize uptime

DISCOVER THE ULTIMATE IN COOLING TECHNOLOGY

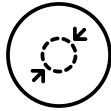
GATES DATA MASTER™ DATA CENTER COOLING HOSE

The Gates Data Master Data Center Cooling hose keeps your data center operational in the toughest conditions with a specially-compounded tube to avoid fluid contamination. Extend the life of your equipment by choosing the right hose for the job.



CLEANER SYSTEMS

Metals-free Peroxide Cured EPDM tube to avoid fluid contamination over time



NARROW PROFILE

Smaller diameter for installation when space is constrained



FLAME-RESISTANT

Meets flame-resistance standards



SUPERIOR FLEXIBILITY

For easier routing in complex configurations



COOLANT COMPATIBLE

Built for a wide range of coolant mixes, including PG25



OZONE-RESISTANT

Excellent ozone resistance to cover degradation from electronics



Construction

Tube: Metal-Free Peroxide-Cured EPDM

Reinforcement: Braided, synthetic textile

Cover: EPDM (Black), Flame-Resistant

Common applications

High-density liquid cooling systems: providing reliable cooling in densely-packed environments

Temperature range

-40°F to +212°F (-40°C to +100°C)

Couplings

Lock-on: Compatible with standard LOC and push-lock style barb designs

Crimped: GLX & S.S.

Clamped: Hose bead with clamp (less than hose rated working pressure)

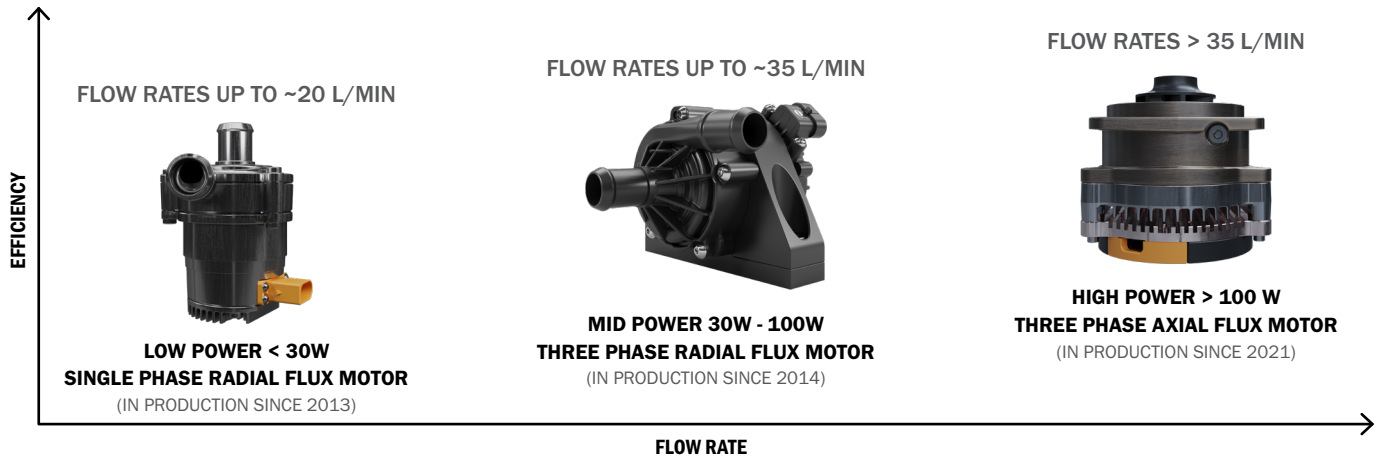


OAK RIDGE NATIONAL LABORATORY

The Oak Ridge National Laboratory is a federally-funded research and development center located in eastern Tennessee. The ORNL features the Summit SuperComputer, which was installed in 2018 as the fastest computer in the world at the time, performing at 200,000 trillion calculations per second. Summit features industry-leading servers which are cooled by Gates Data Center Cooling Hoses.

GATES DATA CENTER COOLING SOLUTIONS

ELECTRIC WATER PUMP PRODUCT FAMILY



ELECTRIC WATER PUMP LINEUP					
	12-20W PLATFORM	30-50W PLATFORM	50-100W PLATFORM	100-150W PLATFORM	100W-7000W PLATFORM
Motor	Single Phase BLDC Motor (Radial Flux)	Three Phase BLDC Motor (Radial Flux)	Three Phase BLDC Motor (Radial Flux)	Three Phase BLDC Motor (Radial Flux)	Three Phase BLDC Motor (Axial Flux)
Control strategy	IO PWM REVERSE CONNECTION	PWM, LIN, CAN PROTECTION FUNCTIONS <ul style="list-style-type: none"> BUS voltage Over temperature Reverse connection Over current No load and over load Locked rotor 	PWM, LIN, CAN PROTECTION FUNCTIONS <ul style="list-style-type: none"> BUS voltage Over temperature Reverse connection Over current No load and over load Locked rotor 	PWM, LIN, CAN PROTECTION FUNCTIONS <ul style="list-style-type: none"> BUS voltage Over temperature Reverse connection Over current No load and over load Locked rotor 	PWM, LIN, CAN PROTECTION FUNCTIONS: <ul style="list-style-type: none"> BUS voltage Over temperature Reverse connection Over current No load and over load Locked rotor
Coolant temperature	-40°F TO -184°F (-40°C TO -120°C)				
Ambient temperature	-40°F TO -209°F (-40°C TO -135°C)				
Features and benefits	<ul style="list-style-type: none"> DC brushless motor Low power consumption Low noise Good damping effect Easy to install 	<ul style="list-style-type: none"> DC brushless motor FOC control, high efficiency Low noise Large scalability Easy to install 	<ul style="list-style-type: none"> DC brushless motor FOC control, high efficiency Low noise Large scalability Low temperature rise Easy to install 	<ul style="list-style-type: none"> DC brushless motor FOC control, high efficiency Low noise Large scalability Low temperature rise Easy to install 	

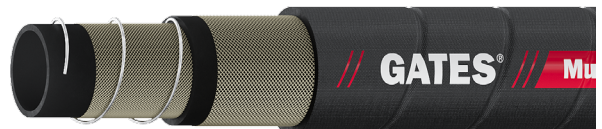
THERMAL-FORMED NYLON TUBING SOLUTIONS

Gates offers several options of smaller profile, custom thermal-molded nylon tubing in alternate colors for tight routings.



OIL-BASED AND LARGE I.D. HOSE SOLUTIONS

Gates offers a wide variety of fluid conveyance solutions to meet data center requirements, including oil-based solutions compatible with dielectric oil and flexible larger diameter solutions.



GATES POWER TRANSMISSION PRODUCT FAMILY

QUAD-POWER™ 4

A premium maintenance-free premium V-belt that delivers unmatched power density, fitting into compact spaces while driving fans, pumps, and compressors with up to 98% total power efficiency.

With Gates Quad-Power 4, you're investing in a long-lasting solution that eliminates retensioning downtime and reduces replacement cycles, allowing your team to focus on the job without interruptions.



MAINTENANCE-FREE

Superior products remove the need to retension the belt drive after installation



ETHYLENE ELASTOMER (EE)

EE rubber compound ensures long-lasting performance and wear-resistance



TEMPERATURE-RESISTANT

Wide temperature range for an extended lifespan in extreme conditions



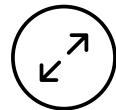
STATIC-CONDUCTIVE

Prevents damage to equipment in sensitive environments



OIL-RESISTANT

Made to withstand temporary contact with oil without being damaged

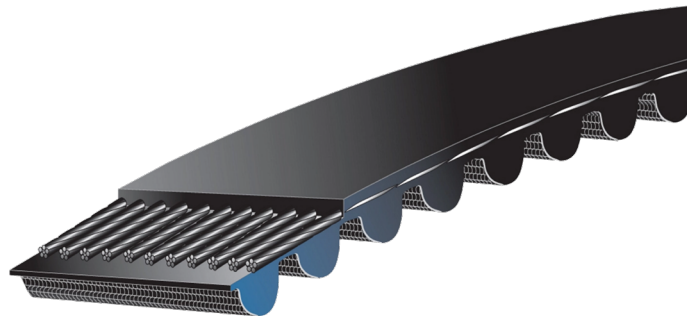


LENGTH-MATCHING

Superior belt tolerance allows multiple belts to be installed on the same drive

POLY CHAIN® GT™ CARBON™

When your data center faces peak operational demands, Poly Chain GT Carbon synchronous belts handle the heaviest loads with ease. Ideal for demanding applications such as high-torque HVAC systems and large-scale coolant pumps. The patented use of carbon fiber tensile cord provides increased horsepower rating for greater power density and compactness.



MAINTENANCE-FREE

Superior products remove the need to retension the belt drive after installation



DURABLE CONSTRUCTION

Polyurethane materials that resist chemicals, oil, pollutants and abrasion



CARBON TENSILE CORD

Robust cord combines minimal stretch with strength and load-carrying capacity



TEMPERATURE-RESISTANT

Wide temperature range: -65°F to +185°F (-54°C to +85°C)



LUBRICATION-FREE

Nylon tooth facing reduces friction and eliminates the need for lubrication



GT TOOTH PROFILE

Provides high shear strength and improved load carrying capacity



**CLICK OR SCAN TO
EXPLORE MORE DATA
CENTER COOLING SYSTEMS**

**ASK YOUR GATES
REPRESENTATIVE FOR
MORE INFORMATION**