

## Durtec® with DurCore® Technology

### Flexible Graphite Gasket with DurCore® Stainless 316 Core

Durtec® is a registered trademark of Triangle Fluid Controls Ltd.  
DurCore® is a registered trademark of Gasket Resources Inc. in the US and of Triangle Fluid Controls Ltd. anywhere outside of the US.



#### Physical Properties

Temp.: Min	-200°C (-328°F)
Max	1,000°C (1,832°F)*
Continuous, Max	650°C (1,200°F)
pH range, Room Temp.	0-14
Pressure: Max, bar (psi)	430.9 (6,250)

\*Depends on facing material and metallurgy of core.

#### SIZE, TYPES & MATERIALS:

- Standard ASME, DIN, JIS and BS EN sizes
- Non-standard flanges 1/2" thru 157" diameter
- Ovals (normal & irregular) manways, track shapes, diamonds, squares/rectangles, ribs etc.
- Standard core material is 316L stainless steel. Other core materials: SS304, SS321, SS316Ti, Monel® Titanium, Hastelloy® & Alloy 20 can be manufactured to your specifications on request
- Alternate facing material is available upon request. Popular materials include Durlon® 9600 expanded PTFE (ePTFE), mica & ceramic
- Average bolt torque loss (with no adjustments): Upstream 45%; Downstream 33%
- Fire, Cool-Down & Post-Burn: Combined Leak Rate (2 gaskets) 0 mL/min at 30 psig avg.
- Exxon requirements post burn: Combined Leak Rate (2 gaskets) with no flange bolt re-torques at any test pressure 0 mL/min at 30 psig, 0mL/min at 50 psig, 0 mL/min at 100psig, 0mL/min at 200 psig,

**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.

\*Passed modified API 607 fire test and meets the requirements of Shell Specification MESG SPE 85/203 & PVRC SCR Flexible Graphite Spec for FG 600 material.

Durlon® Durtec® gaskets are made with a specially engineered machined metal core that is bonded on both sides with soft covering layers, typically flexible graphite. The core is produced by proprietary technology that allows the finished gasket to have the best possible mechanical support function. The Durtec® core is virtually uncrushable, unlike conventional corrugated metal core gaskets. The precision construction guarantees that Durlon® Durtec® gaskets will have excellent sealing characteristics even under low bolt loads.

The Durtec® gasket is designed to withstand high temperatures and pressures, to be blow out resistant, to be fire safe, and to resist toxic and or corrosive chemicals for such applications as: pipeline flanges, valves, small & large pressure vessels, heat exchangers, towers and tanks.

#### INDUSTRY APPLICATIONS:

- Water & Waste Water
- Oil & Gas
- Mining
- Food & Beverage
- OEM Services
- Petrochemical
- Power Generation
- General Industrial
- Marine
- Chemical Processing
- Pulp & Paper

#### Gasket Factors

G <sub>b</sub> psi (MPa)	187 (1.29)
a	0.467
G <sub>s</sub> psi (MPa)	0.5 (0.003)
m, Y psi (MPa)	1.5, 833 (5.74)

#### Certifications

Fire Test*	API 607, 4th edition with Exxon modifications
RoHS Reach Declaration	Compliant

#### COMMON HEAT EXCHANGER SHAPES

There are many styles of heat exchanger gaskets and most have complicated rib designs or partitions. While some of the most common designs are shown below, we can provide almost any configuration of heat exchanger type gasket utilizing our Durlon® Durtec® technology.

- Anywhere fire safety is a concern
- High temperature
- Low available assembly loads

- Heavy vibrations
- Extreme temperature fluctuations
- Remote field applications
- Large diameter gasket replacement

#### Advantages:

- Fire Safe - SS316L/Graphite Passed Modified API 607 fire test, 4th Edition
- Blow out Resistant - Metal core provides excellent resistance to internal pressure spikes

- Reusable - The core may be refaced with new material and reused providing lower cost of ownership
- Superior Core Technology - Durtec® design can allow for complete replacement of spiral wound and kammprofile gaskets with improved performance and lower life cycle cost
- Easy and safe to handle, easy to install
- Seals tightly with lower bolt loads vs. spiral wounds and Kammprofiles

