

## **Durtec® DurCore®**

# Flexible Graphite Gasket with DurCore® Stainless 316 Core

Physical Properties	
Temp.: Min Max Continuous, Max	-200°C (-328°F) 1,000°C (1,832°F)* 650°C (1,200°F)
pH range, Room Temp.	0-14
Pressure: Max, bar (psi)	317 (4,600)

<sup>\*</sup>Depends on facing material

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

#### **SIZE. TYPES & MATERIALS:**

- Standard ASME, DIN, JIS and BS EN sizes
- Non-standard MSS SP-44, API 605 and other sizes up to 157" (4m) in 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, OmL/min at 50 psig, 0 mL/min at 100psig, OmL/min at 200 psig,



Durlon® Durtec® gaskets are made with a specially engineered corrugated metal core that is bonded on both sides with soft covering layers, typically flexible graphite. The core is produced by patented technology that allows the finished gasket to have the best possible mechanical support function. Corrugations in the Durtec® core are virtually un-crushable 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 blowout 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.

Durtec® Fire Safety test results - Passed modified API 607 fire test and meets the requirements of Shell Specification MESC SPE 85/203 & PVRC SCR Flexible Graphite Spec for FG 600 material.

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 specifications 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 in this flyer are subject to change without notice. This edition cancels and obsoletes all previous editions.



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### **Corrugated Flexible Graphite Gaskets**

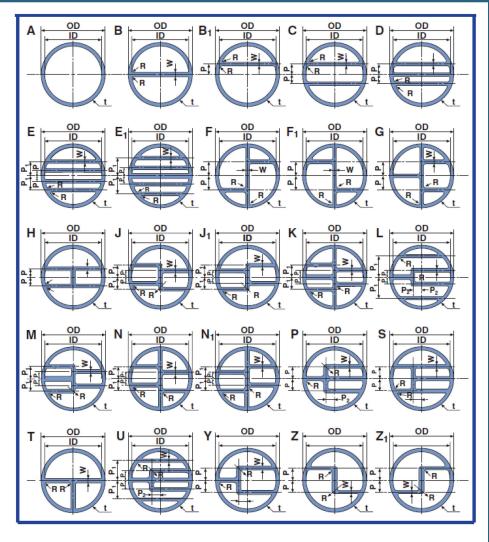
#### **Common Heat Exchanger Shapes**

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 to the right, Triangle Fluid Controls 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 asbestos gasket replacement
- · Heat exchangers

### **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 On larger sizes (10" & above) and for special configurations, 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



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