

# Sanitary gasket

product range



**Your Partner for Sealing Technology**

# Serving the world's processing industries



**Extensive test facilities**  
Strategically positioned materials and development laboratories and fully resourced design and application centers deliver the latest product innovations and customer-focused seal, bearing and custom solutions.



**Innovative material development**  
Developing and formulating materials in-house and engaging in ongoing programs of development, Trelleborg Sealing Solutions is also skilled in the field of applied materials technology.



**Total - Sealing technology**

Trelleborg Sealing Solutions is a major international sealing force uniquely positioned to offer a dedicated design and development service for sealing arrangements from our market-leading product portfolio. Our direct experience with unique and challenging applications positions us well to offer custom design and industry-specific development services for sealing components.

**Expertise - Our proven capabilities**

With over 50 years of experience developing and applying sealing systems, Trelleborg Sealing Solutions engineering personnel contribute their knowledge of this specialized technology directly to customers. This includes project management of design, prototyping, production, test and installation using state-of-the-art design tools, fully customer compatible CAD systems and leading-edge Finite Element Analysis (FEA).

**Purity - In materials and supply**

The state-of-the-art facility that manufactures our sanitary gasket products maintains superior quality control and purity of materials with rigorous standards during each critical step of production. After production, the sanitary gaskets are inspected and packaged in our cosmetic particulate-free box. A step beyond standard packaging, our box is made with cosmetic quality material that gives you a product free of particulates. Each box is clearly labeled with product information for clean inventory control. Lot and batch numbers provide traceability.

**Commitment - To our customers' long-term needs**

We help our customers achieve cost-effective, durable solutions that are precisely matched to their specific system requirements and business needs. This includes our logistical support which effectively delivers over 40,000 different sealing and bearing systems to our customers worldwide. We are one of the world's foremost experts in polymer sealing technology. We develop, manufacture and market safety-critical polymer-based precision seals and bearings and associated systems.

Trelleborg Sealing Solutions sanitary gaskets meet these stringent standards for purity:

- FDA Title 21 CFR 177.2600, 177.1550
- USP; U.S. Pharmacopeia Class VI certification\*
- USP Cytotoxicity criteria\*
- 3-A and P3-A Sanitary standards
- ASME-BPE standards
- NSF
- Current Good Manufacturing Practices (CGMP)
- ISO 9001:2000 and QS9000:1998
- European Pharmacopeia 3.1.9\*
- Animal-derived ingredient-free\*



**Superior logistics support**

Trelleborg Sealing Solutions operates an advanced logistical support system that delivers products to our customers worldwide from central warehouses in the United States, Europe and Asia/Pacific.

\* Buna does not pass U.S. Pharmacopeia Class VI certification and Cytotoxicity and is not ADI-free.

# Sanitary gasket capabilities

## Standard Gaskets



All Trelleborg Sealing Solutions standard sanitary gaskets are molded from FDA-compliant compounds. Our clamp gaskets have all passed 3-A testing. Our EPDM, FKM Fluoroelastomer, Silicone and PTFE clamp gaskets have all passed USP Class VI testing. These gaskets are molded in the United States and are available in Flanged (Type A) and Non-Flanged (Type B) styles.

**AVAILABLE Materials:**

NBR, EPDM, FKM Fluoroelastomer, PTFE, Platinum & peroxide-cured Silicone, Tuf-Flex®(PTFE/EPDM), Tuf-Steel®(PTFE/and Stainless Steel)

**AVAILABLE SIZES:**

1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10", 12"

Trelleborg Sealing Solutions offers metric sanitary gaskets according to ISO 2852 and DIN 32676.

Please contact your local Trelleborg Sealing Solutions sales office for available materials and specific sizes and types.

## Bonded Envelope Gaskets



Tuf-Flex® (bonded envelope gaskets) are unitized gaskets - setting new standards for purity, performance and flexibility. The bonding surface is a layer of PTFE unitized to an EPDM rubber inner core. This totally bonded construction provides a PTFE gasket with the mechanical characteristics, including memory, of an elastomer gasket. Designed to meet critical requirements in biopharmaceutical, ultra-pure water, WFI (water-for-injection) and difficult food and beverage processing, this gasket outperforms other gaskets while eliminating costly process interruptions. Achieve higher performance under SIP/CIP conditions.

**AVAILABLE Materials:**

Tuf-Flex®(PTFE/EPDM), Food-Flex®(PTFE/NBR)

**AVAILABLE SIZES:**

1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4", 6"

## PTFE/Stainless Steel Standard Gaskets



Tuf-Steel® (PTFE and Stainless Steel) delivers leak-proof performance and is composed of a unique 50/50 blend of non-pigmented PTFE and 316L passivated and atomized stainless steel. This gasket is the choice for leak-proof, perfect surface performance and outstanding durability in SIP (steam-in-place) and WFI (water-for-injection) applications. It is ideal for sanitary steam pipe connections in extreme temperatures ranging from -20 °F to 500 °F. Its superior strength eliminates cold flow and creep to prevent maintenance problems and system downtime.

**AVAILABLE SIZES:**

1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4", 6", 8", 10", 12"

## Controlled Compression Gaskets



The Controlled Compression Gasket (CCG) cannot be over-tightened. The CCG is composed of the elastomer of your choice with a ring of Ultem® vulcanized inside the gasket from the ring O.D. to the locating ring of the gasket. This non-compressible ring controls clamp compression to exactly the correct amount, allowing the properly positioned gasket to make a perfect surface I.D. seal with the ferrules. No torque restrictions are necessary. CCG is also available in a tabbed gasket making it more user-friendly while isolating it from unnecessary human contact. CCG helps with position control and speeds up the installation process.

**AVAILABLE ELASTOMERS:**

EPDM, FKM Fluoroelastomer, Silicone

**AVAILABLE SIZES:**

1", 1-1/2", 2", 3"

CCGs meet ASME BPE specifications

patent number 6,857,638

Note: Food-Flex®, Tuf-Flex® and Tuf-Steel® are trademarks of RubberFab Technologies Group.  
Ultem® is a trademark of SABIC Innovative Plastics.

## Validation Gasket



The value of a Smart Gasket® (validation gasket) is proven when validating sterility in a high-purity processing system. A standard sanitary flange utilizing the validation gasket provides the processor the option to capture real - time validation data:

- thermal mapping
- meter fluids in your processing system
- withdraw fluid samples
- facilitate validation using sporetrap challenge test strips

AVAILABLE SIZES:  
1/2", 3/4", 1", 1-1/2", 2", 3", 4"

AVAILABLE PORTS:  
1 to 4 ports

Special clamps are specifically designed for use with with validation gaskets.

## Biological Gasket



The Biological Indicator® gasket (biological gasket) enables the use of a self-contained biological indicator in sanitary process lines. This unique gasket permits either top loading or inline positioning of a self-contained biological indicator and/or a temperature probe. The great advantage of a self-contained biological indicator over the traditional spore strip in glassine is the time saved when confirming spore kill. Results are easily obtained in only 48 hours (versus the five to seven days required with a spore strip) and without problematic laboratory transfer. You can feel secure in knowing that the biological gasket will not be lost downstream in the process. The fail-safe validation gasket holds the indicator in place for easy retrieval.

AVAILABLE SIZES:  
3/4", 1", 1-1/2", 2"

AVAILABLE PORTS:  
1 port in sizes 1", 1-1/2", 2" (not available in 3/4")

patented

## Gauge Safeguard



The Gauge Guard® Isolator (gauge safeguard) seal protects expensive diaphragms and instruments from damage without affecting instrument performance. By combining a quality Trelleborg Sealing Solutions hygienic seal with a membrane, the gauge safeguard isolates hot or caustic saline solution from instrumentation, a necessary and cost-effective step in assuring long life and accurate results from your instruments and gauges. As some gauge manufacturers will suggest the use of a gauge safeguard seal, others note that the failure to use a gauge safeguard seal can void most instrument and gauge warranties.

AVAILABLE Materials:  
FKM Fluoroelastomer, Platinum Silicone, EPDM, PTFE, Tuf-Steel®

AVAILABLE SIZES:  
1/2", 3/4", 1", 1-1/2", 2"

## Gauge Guard Protectors



The Trelleborg Sealing Solutions gauge guard protector protects expensive, fragile gauge diaphragms and other similar instruments from damage during recalibration, maintenance and autoclave procedures.

By using a quality gauge guard protector during maintenance with a gauge safeguard during processing, you have complete gauge diaphragm protection! A necessary and cost-effective step in assuring maximum service life and accurate results from your instruments and gauges!

AVAILABLE Materials:  
Platinum-Cured Silicone, 316 Stainless Steel

AVAILABLE SIZES:  
Size 3/4", 1.5" (fits both 1" and 1.5"), 2"

## Screen Gaskets



Fluid conditioning screen gaskets in 10 micron through four mesh are available from Trelleborg Sealing Solutions. Screen gaskets provide prefiltration for critical membrane filters, coalescence of water vapor from process exhaust lines and particulate removal before fill and finish. Also available in a complete elastomer selection are perforated plate fluid conditioning gaskets, removable sanitary gasket holders for all discs, screen disc inserts, perforated plate disc inserts and orifice plate disc inserts.

**AVAILABLE MATERIALS AND SIZES:**

NBR - 1", 1-1/2", 2", 2-1/2", 3", 4"  
 EPDM - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 FKM (Black) - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 PTFE (White) - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 SILICONE - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 TUF-STEEL® - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"

Please consult your local Trelleborg Sealing Solutions sales office for available micron retention meshes.

## Sock Screen Gaskets



Sock Screen Gaskets are inserted into the I.D. of your stainless steel tubing and provide filtration for a greater soil burden.

## Orifice Plate Gaskets



Our innovative orifice plate gasket line includes a complete selection of solid 316L Stainless Steel that can be custom drilled with an eccentric or concentric bore. T abbed orifice plates and slotted clamps are also available. Tabs help to acknowledge that an orifice plate is in the line and can be laser engraved to indicate the hole diameter, gasket size or with user specified information. A major safety consideration! Orifice plates can advance your system's performance, adjust flow rates, balance backflow and equalize back pressure during SIP procedures: achievable benefits while maintaining sanitary conditions.

**AVAILABLE ELASTOMERS:**

NBR, EPDM, FKM Fluoroelastomer, PTFE, Silicone, Tuf-Steel®

**AVAILABLE SIZES:**

1/2" to 4", consult your local Trelleborg Sealing Solutions sales office for sizes over 6".

**ALSO AVAILABLE:**

Slotted clamps

## Perforated Metal Gaskets

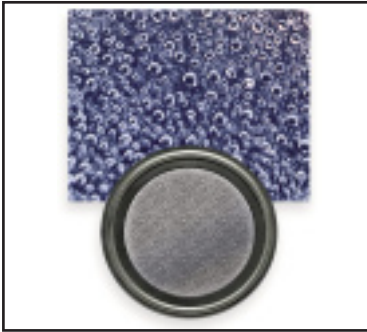


The perforated metal gasket is used for flow control and media filtration.

**AVAILABLE MATERIALS AND SIZES:**

NBR - 1", 1-1/2", 2", 2-1/2", 3", 4"  
 EPDM - 1", 1-1/2", 2", 2-1/2", 3", 4"  
 FKM - 1", 1-1/2", 2", 2-1/2", 3", 4"  
 PTFE (White) - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 SILICONE - 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"  
 TUF-STEEL® - 1", 1-1/2", 2", 2-1/2", 3", 4"

## Sanitary Diffuser Gaskets



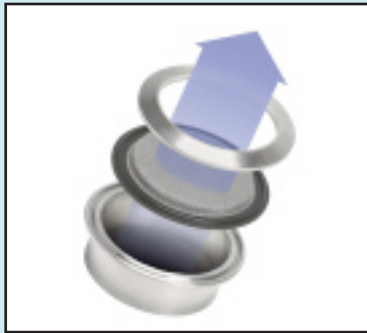
Diffuser aeration systems provide increased oxygen content to high-purity water systems. Diffusers can also be used to diffuse digester gases such as hydrogen sulfide and sulphur dioxide, to introduce ozone for oxidizing and destroying bacterial and organic chemical contaminants, as well as for carbon dioxide injection for carbonization and ph adjustment.

AVAILABLE MATERIALS:  
EPDM, FKM Fluoroelastomer, Silicone

AVAILABLE SIZES:  
1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3"

AVAILABLE MICRON:  
1/2 to 2 micron  
2 micron is standard stock, all other micron is custom.

## V<sup>2</sup>B Vent Gaskets



The V<sup>2</sup>B vent gasket offers an additional answer for vacuum and pressure relief for pharmaceutical and food/beverage processing tank venting when airborne particulate removal is required. Using a 200 mesh screen combined with a 14 mesh screen of sintered construction, the V<sup>2</sup>B vent gasket is a cost-effective alternative to expensive vacuum breakers and venting systems.

AVAILABLE MATERIALS:  
EPDM, FKM, Silicone

AVAILABLE SIZES:  
1", 1-1/2", 2", 2-1/2", 3", 4", 6"

## ANSI Flange 150#



An Ansi Flex® (ANSI Flange 150#) gasket's contact surface is PTFE unitized to an EPDM rubber inner core. This totally bonded construction provides a PTFE gasket with the mechanical characteristics, including memory, of an elastomer gasket with exceptional steam resistance. An ANSI Flange 150# gasket is ideal for applications, such as PVC piping and glass lining pipings, where low seating stress is required.

AVAILABLE SIZES:  
Sizes available up to & including 12"

## Bevel Seat



Bevel seat fittings provide a precision metal-to-metal tight connection. We offer a complete selection of bevel seat gaskets.

AVAILABLE MATERIALS:  
PTFE (White), PTFE (Blue), NBR (Black), EPDM, FKM, Silicone

AVAILABLE SIZES:  
1", 1-1/2", 2", 2-1/2", 3", 4"

patented

Note: Ansi Flex® is a trademark of Rubberfab Technologies Group.

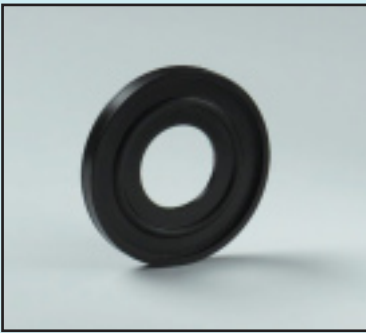
# Sanitary gasket capabilities

## Smart Tracker



The Smart Trakr™ -T (Smart Tracker) is a miniature, battery-powered stand-alone precision temperature recorder. The all-in-one compact, portable, easy-to-use device will measure and record up to 21,845 measurements per channel. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The RTD sensor does not suffer from the cold-junction issues of the thermocouple nor the errors at high and low temperatures of the thermistor. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The Smart Tracker makes data retrieval quick and easy. Simply plug it into an empty COM or USB port and our user-friendly software does the rest.

## I-Line & Q-Line



I-Line is an interlocking design which creates a self-aligning right union. I-Line unions feature an interlocking, metal-to-metal design that ensures gasket control, minimizing gasket extrusion, thus preventing liquid traps. Perfect for in-place cleaning, a favorite for use in the beverage industry.

AVAILABLE MATERIALS: NBR, FKM, EPDM, Silicone, PTFE (blue and white), Tuf-Steel®

AVAILABLE SIZES: 1", 1 1/2", 2", 2 1/2", 3", & 4"

Q-Line components are ideal for use in processing pipeline systems for dairy, beverage, food, pharmaceutical and bio-tech industries. All compounds meet the criteria of the FDA, some have been certified and accepted by the USDA, 3-A Sanitary Standard and USP Class VI certifications.

AVAILABLE MATERIALS: NBR, EPDM, FKM, PTFE, Silicone

AVAILABLE SIZES: 1/2", 3/4", 1", 1-1/2", 2", 2-1/2", 3", 4"

## Schedule 5 (Flanged/Non-Flanged)



Components are used in processing pipeline systems for the food, dairy, beverage, pharmaceutical and biotech industries. The products are manufactured from EPDM, FKM, NBR and Silicone, as well as gaskets made with fluoropolymer. All compounds meet the criteria of the FDA, and some compound formulations have also been certified and accepted by the USDA, 3-A Sanitary Standards and USP Class VI certifications.

AVAILABLE MATERIALS:

NBR (Black), EPDM, FKM (Black), Silicone (Clear), PTFE (White)

AVAILABLE SIZES: Trelleborg Sealing Solutions offers Schedule 5 gaskets. Note: Sizes 1", 1.5", 2", 2.5", 3" are Non-Flanged; Sizes 4", 6", 8", 10", 12" are Flanged except PTFE where all sizes are Non-Flanged.

## APC



Gaskets for A.P.C. (Alloy Products) fittings.

AVAILABLE MATERIALS:

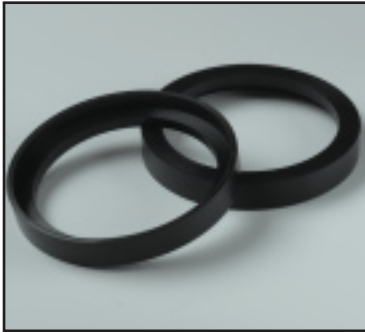
NBR (Gray), NBR (Black)

AVAILABLE SIZES:

1", 1-1/2", 2", 2-1/2", 3", 4"

Note: The Smart Trakr™ -T is a registered trademark of RubberFab Technologies Group.

## John Perry



Components are used in processing pipeline systems for the food, dairy, beverage, pharmaceutical and biotech industries. The products are manufactured from EPDM, FKM, NBR and Silicone, as well as gaskets made with PTFE. All compounds meet the criteria of the FDA, and some compound formulations have also been certified and accepted by the USDA, 3-A Sanitary Standard and USP Class VI certifications.

AVAILABLE MATERIALS:  
NBR, EPDM, FKM (Black), PTFE (White)

AVAILABLE SIZES:  
1", 1 1/2", 2", 2 1/2", 3", & 4"

## Torque Nuts



Torque-Rite® Nuts (torque nuts) allow you to control clamp compression and expansion while maintaining constant inch/pounds force. Torque nuts eliminate the problems associated with over- or under-tightening a gasket which can lead to an unsanitary system. Compression control is easy! When tightened, the torque nut's self-limiting internal mechanism will make an audible click, signaling the user they have reached proper inch/pounds force. If further tightening is attempted, there will be more clicks, but no additional force will be applied on the gasket. If emergency conditions arise, torque nuts have a built-in manual override feature. To use, simply unscrew/remove the clamp wing-nut and install the torque nut.

AVAILABLE:  
30 in-lbs for all elastomers and Tuf-Flex®  
40 in-lbs on a custom basis for rupture disc applications  
50 in-lbs for Tuf-Steel® and PTFE envelope gaskets  
60 in-lbs available on a custom basis

patent number 6,082,941

## Clamps



Trelleborg Sealing Solutions offers a wide variety of sanitary gasket clamps. Clamps can be Hinged 1-pin, Hinged 2-pin, 2-bolt high pressure or special hinged clamps with custom ports for both validation access and/or spore trap access and/or compression controlled tabbed gaskets. Most clamps are stainless steel. We also offer Nylon Hinge clamps. Also available are gold clamps and/or wing nuts for line identification.

Note: Consult your local Trelleborg Sealing Solutions sales office for more information.

## Engraved Gaskets



Laser Engraved® Gaskets (engraved gaskets), screen gaskets and orifice plate gaskets ensure permanent batch and lot traceability. Engraving remains readable throughout the service life of the gasket. Compound type and/or special application markings can also be laser engraved on gaskets at the customer's request.

AVAILABLE MATERIALS:  
Available on all gaskets and fittings, adaptors and crimp collars.

NOTE:  
Consult your local Trelleborg Sealing Solutions sales office for spacing and size limitations.

## Validation Gasket Accessories

### Thermometers

This versatile instrument measures temperature in both °C and °F. The internal memory of the micro-computer stores the minimum and maximum measured temperature for instant recall via the LCD display.

**Temperature Range:**

-90°C to +400°C  
-130°F to +752°F

**Resolution Accuracy:**

0.1°C, 0.2°F +/-0.05%  
READING +/-0.7°C or 1.3°F

Accuracy is specified for operating ambient temperature of 23°C/ 73°F +/-5°C

**Cold junction error for thermocouples:**

For operating ambient temperature for 0°C to +18°C / +32°F to +64°F and +28°C to +50°C / +82°F to 122°F, and an additional error of +/- 0.03°C or 0.03°F

Model ACC-7001H is a high-performance, precision hand-held instrument for the measurement of temperature using type T or K thermocouple probes.



**Extension Leads**

Male to male (sub-miniature type T connectors) 26 gauge. Stranded type to thermocouple wire with blue PVC insulation



**Hole Plug**

Chrome-plated brass head with stainless steel shaft 1-1/2" long, .095 diameter



**Temperature Probes**

Short and long temperature probe for thermocouple gasket. Copper Constantan female socket and bootie



**Stopcock**

To fit sampling/injection tube; chrome-plated brass construction female luer fitting to male luer lock



**Sampling/Injection Tube**

Chrome-plated brass female luer head with 1-1/2" long stainless hypodermic tube, .095 OD, .071 ID



**Thermocouple Wire Probes**

Coated thermocouple wire probe x 10' long with male mini quick disconnect connector for use with thermometer. Specify Kaptan or FEP when ordering.

# Sanitary gasket materials

**Bonded Envelope:** is the world's only unitized gasket, setting new standards for purity, performance and flexibility. A bonded envelope gasket's contact surface is a layer of PTFE unitized to an EPDM rubber inner core. This totally bonded construction provides a PTFE gasket with the mechanical characteristics, including memory, of an elastomer gasket. Designed to meet critical requirements in biopharmaceutical, ultra-pure water, WFI (water-for-injection) and difficult food and beverage processing, bonded envelope outperforms other gaskets while eliminating costly process interruptions. Achieve higher performance under SIP/CIP conditions.

**PTFE/Stainless Steel:** is a unique 50/50 blend of non-pigmented PTFE and 316L water-atomized and passivated stainless steel, PTFE/stainless steel delivers leak-proof performance. PTFE/stainless steel is the choice for leak-proof, perfect surface performance and outstanding durability in SIP (steam-in-place) and WFI (water-for-injection) applications. PTFE/stainless steel is ideal for sanitary steam pipe connections in extreme temperatures ranging from -20 °F to 500 °F. The superior strength of PTFE/stainless steel eliminates cold flow and creep to prevent maintenance problems and system downtime.

**FKM Fluoroelastomer and EPDM:** is specified by many process equipment manufacturers, these materials are generally suitable for a variety of applications. Service life must be considered and a preventative maintenance program be implemented to mitigate degradation. These materials are acceptable, but not recommended for continuous use in SIP procedures.

**PTFE:** is the material of choice whenever low temperature flexibility or gasket memory is not required (not recommended where large temperature variations occur frequently as leakage can occur). PTFE has almost no extractables, has a low absorption rate and excellent resistance to process fluids. It can remain in service for longer periods of time in both water and steam for continuous use. High-pressure clamps are recommended to prevent leakage resulting from temperature variations. PTFE envelope gaskets with an FKM Fluoroelastomer inner core should be used if slight misalignment is observed.

**Platinum-Cured Silicone:** is the material of choice in sanitary water systems when PTFE is not feasible due to severely misaligned fittings, or if the cost of high-pressure clamps does not outweigh the benefits of PTFE (extended service life).

**Our Commitment is Certified:** Trelleborg Sealing Solutions successfully meets the goals and standards set forth by the U.S. Pharmacopeia Class VI certification, passes cytotoxicity criteria and complies with FDA Title 21 CFR 177.2600 and 177.1550 standards.

| 1 = Excellent 2 = Good 3 = Acceptable 4 = Marginal 5 = Poor X = Do Not Use                                 |                              |                  |                         |                    |                   |                        |                    |                                   |
|--|------------------------------|------------------|-------------------------|--------------------|-------------------|------------------------|--------------------|-----------------------------------|
| Gasket   | Temperature Continuous Range | Continuous Steam | Pure Intermittent Steam | Pure Water Ambient | Process Water Hot | Process Fluids Ambient | Process Fluids Hot | Process Fluids (32 °F to >212 °F) |
| <b>Bonded Envelope</b><br>Maintains seal with wide temperature variations. Has extended service life*      | -100 °F to 350 °F            | 1                | 1                       | 1                  | 1                 | 1                      | 1                  | 1                                 |
| <b>PTFE/Stainless Steel</b><br>Maintains seal with wide temperature variations. Has extended service life* | -100 °F to 500 °F            | 1                | 1                       | 1                  | 1                 | 1                      | 1                  | 1                                 |
| <b>PTFE</b><br>Wide temperature variations and may cause leakage at T                                      | -100 °F to 500 °F            | 1                | 1                       | 1                  | 1                 | 1                      | 1                  | 3                                 |
| <b>Silicone (platinum)</b><br>Very flexible low temperature  | -40 °F to 450 °F             | 2                | 2                       | 2                  | 2                 | 2                      | 2                  | 1                                 |
| <b>FKM Fluoroelastomer</b><br>Acceptable for steam applications  | -30 °F to 392 °F             | 3                | 2                       | 2                  | 2                 | 2                      | 2                  | 2                                 |
| <b>EPDM (peroxide)</b><br>Low pressure steam only  | -30 °F to 300 °F             | 3                | 3                       | 2                  | 3                 | 2                      | 3                  | 3                                 |

\* Applications dependent  
This table is a general guide to material selection.  
Please consult your local Trelleborg Sealing Solutions sales office for more information.  
Gasket life dependent upon time and temperature exposure.

**For further information:**

| <b>Europe</b>  | <b>Telephone</b>     | <b>America</b>                               | <b>Telephone</b>     |
|--|----------------------|--|----------------------|
| <b>AUSTRIA - Vienna</b><br>(ALBANIA, BOSNIA AND HERZEGOVINA,<br>CROATIA, HUNGARY, MACEDONIA,<br>SERBIA AND MONTENEGRO, SLOVENIA) | +43 (1) 406 47 33    | <b>AMERICAS - Fort Wayne, IN</b>             | +1 (260) 749 9631    |
| <b>BELGIUM - Dion-Valmont</b><br>(LUXEMBOURG)  | +32 (10) 22 57 50    | <b>BRAZIL - Sao Paulo</b>                    | +55 (11) 3372 4500   |
| <b>BULGARIA - Sofia</b><br>(ROMANIA, RUSSIA)   | +359 2 96 99 510     | <b>CANADA - Ontario</b>                      | +1 (416) 213 9444    |
| <b>CZECH REPUBLIC - Rakovnik</b><br>(SLOVAKIA)   | +420 313 529 111     | <b>MEXICO - Mexico D.F.</b>                  | +52 55 57 19 50 05   |
| <b>DENMARK - Hillerød</b>  | +45 4822 8080        | <b>USA, East - Philadelphia, PA</b>          | +1 (610) 828 3209    |
| <b>FINLAND - Vantaa</b><br>(ESTONIA, LATVIA)   | +358 (0)207 12 13 50 | <b>USA, Great Lakes - Fort Wayne, IN</b>     | +1 (260) 482 4050    |
| <b>FRANCE - Maisons-Laffitte</b>   | +33 (0)1 30 86 56 00 | <b>USA, Midwest - Lombard, IL</b>            | +1 (630) 268 9915    |
| <b>GERMANY - Stuttgart</b>   | +49 (711) 7 86 40    | <b>USA, Mountain - Broomfield, CO</b>        | +1 (303) 469 1357    |
| <b>GREECE</b>  | +41 (21) 631 41 11   | <b>USA, Northern California - Fresno, CA</b> | +1 (559) 449 6070    |
| <b>ITALY - Livorno</b>   | +39 (0586) 22 61 11  | <b>USA, Northwest - Portland, OR</b>         | +1 (503) 595 6565    |
| <b>THE NETHERLANDS - Barendrecht</b>   | +31 (10) 29 22 111   | <b>USA, South - N. Charleston, SC</b>        | +1 (843) 747 7656    |
| <b>NORWAY - Oslo</b>   | +47 22 64 60 80      | <b>USA, Southwest - Houston, TX</b>          | +1 (713) 461 3495    |
| <b>POLAND - Warsaw</b><br>(BELARUS, LITHUANIA, UKRAINE)  | +48 (22) 8 63 30 11  | <b>USA, West - Torrance, CA</b>              | +1 (310) 371 1025    |
| <b>RUSSIA - Moscow</b>   | +7 495 982 39 21     |  |                      |
| <b>SPAIN - Madrid</b><br>(PORTUGAL)  | +34 91 710 5730      | <b>Asia</b>                                  | <b>Telephone</b>     |
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