

Metallic Gaskets

CANFLEX®



**FLUID CONTAINMENT
SPECIALISTS SINCE 1967**

CANFLEX® GASKETS

CANFLEX® Spiral Wound Gaskets

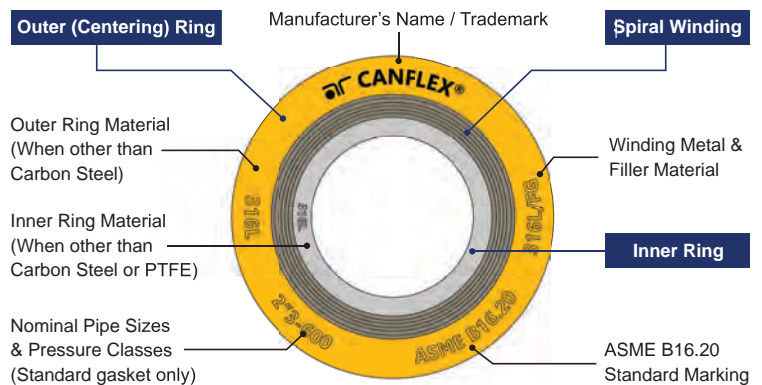
ASME B16.20: Spiral Wound Gasket Performance Testing

As per ASME B16.20-2017, methane leak testing of spiral wound gaskets is now a requirement as detailed in section SW-2.6 (performance testing). A.R. Thomson Group Inc. fulfills this requirement in its Edmonton manufacturing facility.

A.R. Thomson Group Inc.'s methane testing equipment performs multifunctional analysis to ensure gasket deformation and leak rates meet industry standards. The proprietary design of the apparatus accommodates a broad array of NPS/pressure classes, as well as provides testing capacity to validate the performance of non-standard gaskets.



Gasket Identification Markings Required by ASME B16.20



Spiral Wound Specifications

Temperature Limits for Common Metals

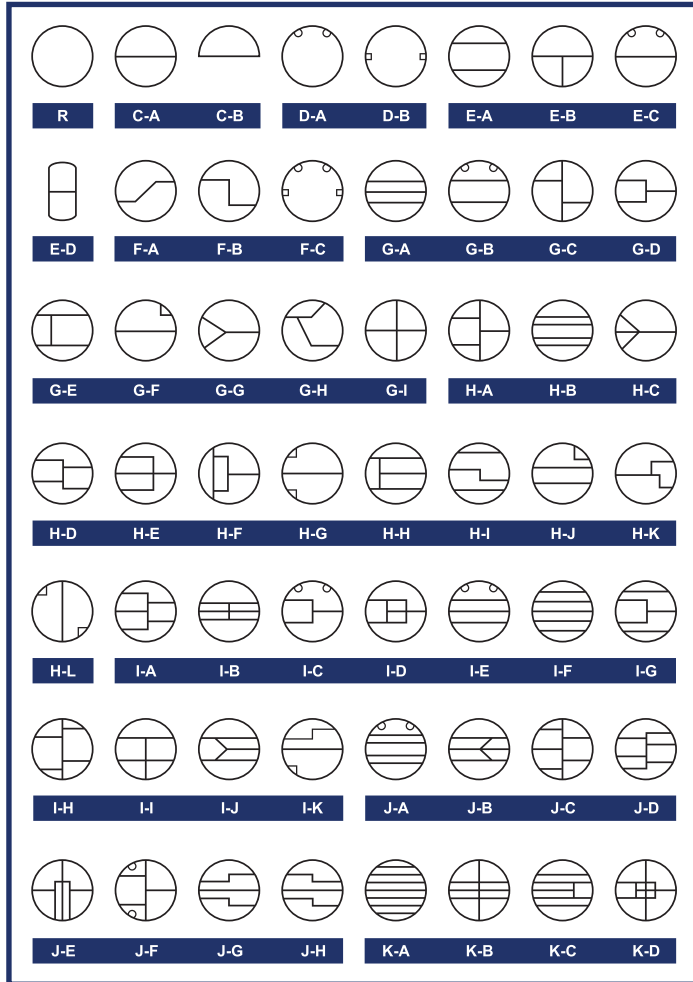
Material	Minimum		Maximum		Abbreviation	Guide Ring Color Code
	°F	°C	°F	°C		
304 Stainless Steel	-320	-195	1400	760	304	Yellow
316L Stainless Steel	-150	-100	1400	760	316L	Green
317L Stainless Steel	-150	-100	1400	760	317L	Maroon
321 Stainless Steel	-320	-195	1400	760	321	Turquoise
347 Stainless Steel	-320	-195	1700	925	347	Blue
Carbon Steel	-40	-40	1000	540	CRS	Silver
20Cb-3 (Alloy 20)	-300	-185	1400	760	A-20	Black
HASTELLOY® B 2	-300	-185	2000	1090	HAST B	Brown
HASTELLOY® C 276	-300	-185	2000	1090	HAST C	Beige
INCOLOY® 800	-150	-100	1600	870	IN 800	White
INCONEL® 600	-150	-100	2000	1090	INC 600	Gold
INCONEL® X750	-150	-100	2000	1090	INX	No Color*
MONEL® 400	-200	-130	1500	820	MON	Orange
Nickel 200	-320	-195	1400	760	NI	Red
Titanium	-320	-195	2000	1090	TI	Purple

Temperature Limits for Filler Material

Material	Minimum		Maximum		Abbreviation	Guide Ring Color Code
	°F	°C	°F	°C		
Ceramic	-350	-212	2000	1090	CER	Light Green
Flexible graphite	-350	-212	950	510	F.G.	Gray
PTFE	-400	-240	500	260	PTFE	White
Canflex High Temp	-350	-212	1832	1000	THT	Light Blue/Grey

CANFLEX® GASKETS

Heat Exchanger Gasket Configurations



CANFLEX® Heat Exchanger Gaskets

Gasket Styles

Style 900 – Corrugated Solid Metal

A plain, all-metal corrugated gasket for use in low pressure applications that require a thin line contact because of space or weight limitations. Corrugated gaskets are a versatile sealing element where the available bolt loads are low. Depending on the materials and construction, these gaskets can be very resilient.



Style 923 – Double-Jacketed

The double-jacketed gasket has good compressibility and resilience and is the most popular clad gasket manufactured.



Style 926 – Double-Jacketed Corrugated

Concentric corrugated sealing element totally encapsulates the soft filler material. The corrugations give improved resilience in applications where thermocycling is a problem.



Style 929 – Double-Jacketed Corrugated with Corrugated Metal Filler

The metal filler in this style has greater resilience to problems resulting from temperature changes. This unique multiply construction provides a more resilient gasket that adapts well to temperature and pressure cycling. The temperature limits of this gasket are governed only by the metal selected.



Style 940 – Solid Metal

This plain solid metal gasket can be supplied in any desired configuration. Where bolting force is sufficient, this style is capable of extremely tight make-ups, giving high mechanical strength, good heat conductivity, and resistance to temperature, corrosion and pressure.



Style 942A – Solid/Serrated Metal

CANFLEX® Kammprofile gaskets combine the desirable qualities of a solid/serrated metal gasket with the advantages of soft facing material, thereby reducing the bolt load requirement to effect a seal. This gasket has the same advantages of strength, heat conductivity, and resistance to temperature, pressure and corrosion.



Other Styles of CANFLEX® Heat Exchanger Gaskets Available Upon Request.

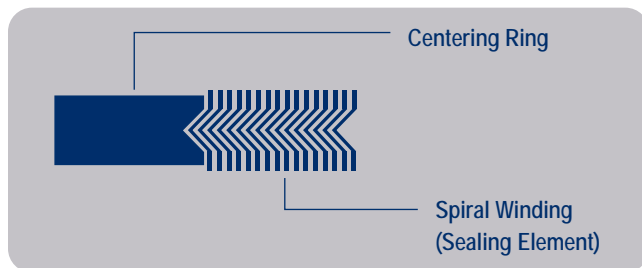
CANFLEX® RW, RWI & CW Gaskets

Advantages

- Durable; easy installation and removal.
- Seals pressures to flange ratings, in accordance with ASME B16.5.
- Suited to temperatures from cryogenic to 2000°F (1093°C).
- Guide ring simplifies centering of sealing element on the flange face.
- Custom-tailored solutions accommodate a variety of conditions by combining various metals and filler materials.

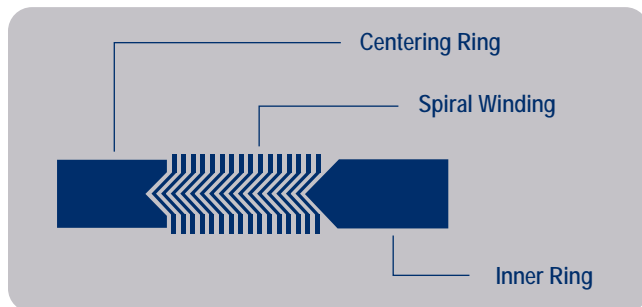
Style RW

- General purpose gasket suitable for flat face and raised face flanges up to Class 2500.
- Centering ring accurately locates the gasket on the flange face, provides additional radial strength, and acts as a compression limiter.
- Spiral winding (sealing element) consists of pre-formed metal and soft filler material.



Style RWI

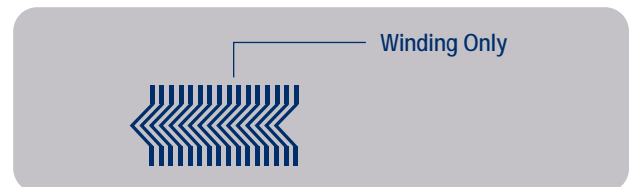
- Suitable for flat face and raised face flanges up to Class 2500.
- Inner rings recommended for B16.5 flange applications per ASME B16.20 specifications.
- Inner ring acts as a compression limiter and protects sealing elements from process media attack.



Style CW

- Suitable for tongue and groove, male-female, or groove-to-flat face flanges.
- Spiral winding only, containing preformed metal and soft filler material.
- Inner and outer diameters of winding are reinforced with several plies of metal without filler to give greater stability.

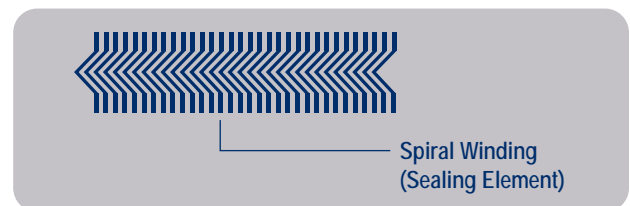
NOTE: Also available with inner rings Style CWI.



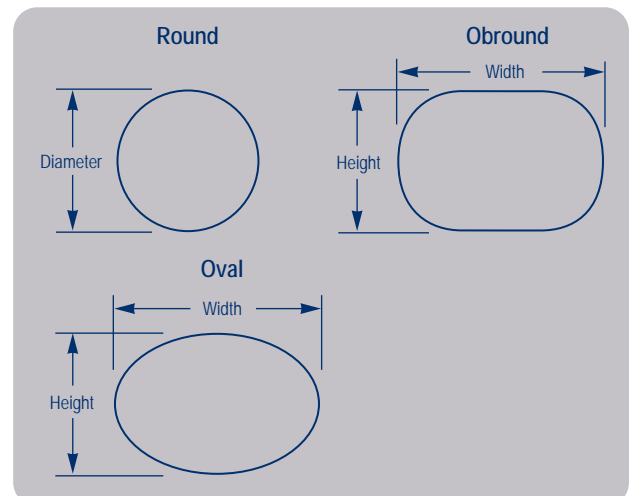
CANFLEX® MC and MCR Gaskets For Manhole Cover Assemblies

MC Gasket (manhole cover)

- Spiral winding only, containing preformed metal and soft filler material.



MC Configurations



CANFLEX® Corrugated Gaskets

The superior technology of the CANFLEX® corrugated family of gaskets ensures excellent sealing performance and reliability, even in the most difficult applications. Each of the styles combines a corrugated metal core with a compressible sealing element of various materials, for resistance to a wide range of harsh conditions, including extreme temperature, corrosive chemicals, and thermal cycling.

Applications

- Valves
- Pumps
- Flanges
- Heat Exchangers
- Vessels

900 - S6G Gasket

- With flexible graphite sealing element
- Accommodates a wide range of temperatures.
 - Seals effectively during thermal cycling.
 - Fire safe - withstood API and FITT fire tests.
 - Chemically resistant.
 - Long service life.

900 - ePTFE Gasket w/ ePTFE sealing element

- Chemically inert.
- Forms a tight seal under low bolt load.
- Conforms to minor sealing surface imperfections.
- Withstands temperatures up to 500°F (260°C).

Construction

Compressible Sealing Element



Standard Metals

- 304 Stainless
- 316L Stainless
- INCONEL® 600
- INCONEL® 625
- INCOLOY® 800
- INCOLOY® 825
- HASTELLOY® C276
- MONEL® 400

Sealing Elements

- Flexible graphite
- ePTFE
- Combination graphite and ePTFE

Ring Joint Gaskets (API 6A)

Thomson RTJ gaskets are manufactured in all configurations (RX, BX, R Oval and Octagonal) and materials for API wellhead assemblies and high pressure/temperature ASME piping systems. Custom profile gaskets and lens rings are also available upon request.

CANFLEX® Kammprofile Gaskets

Applications

- Valves
- Pumps
- Flanges
- Heat Exchangers
- Vessels

Superior Performance

- Serrated solid metal core
- Serrations concentrate bolt load on small area for tight seal at lower stress.
 - Solid metal core resists cold flow, over-compression and blowout.
 - Rigid core provides exceptional stability, even in large sizes, and facilitates handling and installation.

CANFLEX® Kammprofile Styles		
942 A		
942 AR		
942 AR2		
Gasket Factor	"M" = 2.00	"Y" (psi) = 2,500

Benefits

- Accommodates standard ASME flanges as well as weaker and non-circular flanges.
- Seals less-than-perfect flanges.
- Handles pressures from vacuum to Class 2500.
- Performance replacement for jacketed heat exchanger gaskets.

Soft, Conformable Sealing Material

- Under compression, fills seating surface imperfections to form a tight connection.
- Seals under low stress – ideal for weaker flanges.
- Withstands extreme fluctuations in temperature and pressure.
- Integral centering ring ensures optimum gasket positioning.
- Floating centering ring allows for expansion and contraction during thermal cycling.

Other Products



MECHANICAL SEALS

Advanced cartridge and component seals for pumps, mixers, compressors and other rotating equipment. Seal replacements for major brands such as John Crane, Flowserve, AES and more.



FASTENERS

All thread studs – ASTM 193 Grade B7, B7M, B8, B8M, B16, ASTM A320 L7, L7M; heavy hex nuts – ASTM A194 Grade 2H, 2HM, 4, L7, L7M, 8 and 8M; Through hardened washers – ASTM F-436; custom coatings; specialty fabricated and machined studs; CANFLEX® approved thread lubricant.



SUPERLOK CANADA

Instrumentation Tube, Pipe, JIC and DIN Fittings. Instrumentation Ball, Bleed, Check, Double Block and Bleed, Needle, Plug, and Purge Relief Valves. Quick Connects and Filters. Flexible Metal Hose, Tubing and Accessories.



NON-METALLIC GASKETS

Thomson Performance Sealing (TSP) and gaskets fabricated from all types of sheet material including compressed, cork, cork/rubber blends, gasket types, Teflon™, Garlock®, Gore®, all rubber materials, Thomson Multipac and Flexible Graphite.



The A.R. Thomson Group Inc. was established in 1967 as a regional manufacturer & distributor of gaskets and other fluid containment products. With the rapid growth of oil and gas production, petrochemical, oil refining and pulp and paper industries, our manufacturing facilities expanded to meet increased demand for these products. Since 1967, we have developed our expertise and know-how to become the leader in solving fluid containment problems. No matter what your containment needs are, we can help.



Fluid Containment Specialists Since 1967