

# THOMSON OPTI-LOAD<sup>®</sup> FKM-MAX

The Opti-Load FKM-MAX gasket is made from a high performance FKM compound that is suitable for a wide variety of chemicals, including: strong acids, caustics, hydrocarbons and also has a good steam resistance.



## FEATURES / BENEFITS

- Raised sealing rings reduce the seating area of the gasket, lowering the required load to achieve a seal.
- Sealing rings also help maintain the seal during thermal and pressure cycling.
- Can replace most Teflon envelope styles as well as other exotic elastomers which reduces inventory and helps prevent misapplication.
- High Temperature capability in comparison to standard elastomers.
- Resistance to Hydrocarbons, Steam and Caustics.
- Identification tab on the outside diameter of the gasket allows operator to verify material and size while in service.

## TYPICAL APPLICATIONS

- Non-metallic flanges and flanges that have limited seating stress available.
- Water; Saturated Steam, Sulfuric Acid.
- Hydrocarbons including greases, oils, petroleum.
- Chlorine wet/dry.
- Applications where external environment may permeate/ degrade other elastomers from the outside.

## SPECIFICATIONS

**Construction:**

High Performance Fluoroelastomer

**Color:** Black

**Temperatures:**

Minimum: -15°F (-26°C)

Intermittent: +400°F (+203°C)

**Durometer, Shore A  $\pm 5$ :** 70

**Pressure, max:** 250 psi (17 bar)

See reverse for recommended bolt torque values and other technical data.

## TECHNICAL DATA - OPTI-LOAD® FKM-MAX

### Physical Properties

TEST METHOD	TYPICAL PHYSICAL PROPERTIES	
ASTM D412	<b>Elongation: %</b>	235
ASTM D395B	<b>Compression set before 70 hrs @ 200°C: %</b>	32

### Bolt Torque Values for Thomson Opti-Load® Gaskets on ASME B16.5 Flat Face Flanges

NPS (IN)	NO. OF BOLTS	SIZE OF BOLTS (IN)	MIN. SUGGESTED TORQUE (FT. LBS.)	PREFERRED TORQUE RANGE (FT. LBS.)	
				MIN	MAX
0.5	4	0.50	5	9	19
0.75	4	0.50	6	12	23
1	4	0.50	7	14	28
1.25	4	0.50	8	16	32
1.5	4	0.50	10	19	37
2	4	0.63	17	33	66
2.5	4	0.63	23	45	90
3	4	0.63	25	49	97
3.5	8	0.63	15	30	60
4	8	0.63	17	33	66
5	8	0.75	21	41	82
6	8	0.75	23	46	92
8	8	0.75	33	66	132
10	12	0.88	32	64	128
12	12	0.88	47	93	186
14	12	1.00	67	134	268
16	16	1.00	60	120	241
18	16	1.13	66	132	264
20	20	1.13	62	124	249
24	20	1.25	87	173	347

### NOTES

This is a general guide and should not be the sole means of selecting or rejecting this material. Consult A.R. Thomson Group when approaching maximum pressure or temperature.

**Limitation of liability:** actual performance may vary and is determined by factors unique to a given application. It is recommended that care be taken in the selection and application of materials for hazardous services and controlled testing be undertaken to determine suitability for a specific application. A.R. Thomson Group does not make or imply any warranty of suitability for a particular purpose and is not liable for any damages arising from the use of the information in this sheet.



Locations across Canada to serve you. For your nearest branch, please visit [www.arthomson.com](http://www.arthomson.com)

Copyright © A.R. Thomson Group - All rights reserved. v1.4