

THOMSON OPTI-LOAD[®] 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 ± 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	Elongation: %	235
ASTM D395B	Compression set before 70 hrs @ 200°C: %	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.

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