ERIKS Bonded seal FKM Compound 514783

The ERIKS Bonded Seal is a robust solution used for static sealing of bolt heads, nuts, screw connections and flange connections. The product consists of a metal ring bonded to a trapezoidal elastomeric sealing element. As standard ERIKS offer two types of design. One without or one with self-centering (type ZC) feature. The ZC type offers ease of installation ensuring the sealing element is centralized. The chemical resistance of the Bonded Seal depends upon the combination of the metal and the elastomer type. The temperature resistance mainly depends on the rubber material.

Characteristics

Material seal: FKM
Compound: 514783
Temperature range: -20 / 200

Technical Information

- Metal materialCarbon steel : Minimal Tensile Strength : 540 N/mm^2
- Stainless steel 316 : Minimal Tensile Strength : 540 N/mm^2
- Other metallic materials (Aluminum, Brass, etc.) upon request.
- Standard surface treatment on the Carbon Steel ring, for anti-oxidation ZnFe Zinc-iron with Cr+3 passivationLayer thickness 8 tot 11 µm
- Corrosion resistance to salt spray test of approx 100 hours or more according to ASTM B117 or ISO 9227
- Other surface treatments (chrome, Nickel, etc.) upon request.

Construction

- Trapezoidal rubber inner ring
- Metal outer ring

Execution

- Standard
- ZC (Self Centralizing)

Operating Principle

- Temperature range -30 °C up to +200 °C (depending on the rubber material)
- The minimum bursting pressure depends on the tensile strength of the metal, therefore the diameters of the metal ring have an influence. When designing an application, a safety factor of 3x the maximum working pressure must be taken into account.

Selection Guideline

- Very wide application in general industry. Particularly in fuel, HVA, hydraulic, food and beverage, heating and oil and gas applications.
- For use in high pressure environments where copper rings cannot be used
- Reliable static sealing due to configuration with metal ring as compression stop, therefore always the correct pre-tension of the rubber element.
- Sealing both liquids and gases.
- Added self-centering lip (ZC) on the inner diameter ensures correct centering on the position.
- Medium to be sealed, temperature and environment determine which elastomer/metal combination should be used. Most commonly used combination is carbon steel with ZnFe Cr+3 coating with NBR rubber.

Options

- Metric sizes
- Inch sizes
- Range inner diameter: 3mm up to 76mm.

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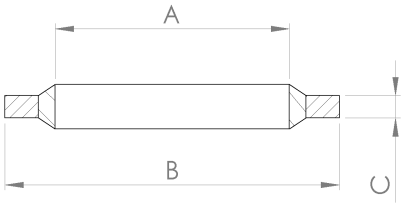

Size table:

A mm	B mm	C mm
6.6	11	1
27.05	34.93	2.5
36.7	46	2
6.7	11	1
8.7	14	1
10.7	16	1.5
13.74	20.57	2.03
10.37	15.88	2.03
17.28	23.8	2.03
21.54	28.58	2.5
31	39	2
33.89	42.8	2.5
38.96	47.75	3.38
42.93	52.38	2.5
46	57	2.5
48.44	58.6	2.5
48.44	58.6	3.38
66.68	79.5	3.38

Material metal	Internal diameter mm	Outer diameter mm	Thickness mm	Article
Mild Steel	6.6	11	1	14014013
Mild Steel	27.05	34.93	2.5	13657033
Mild Steel	36.7	46	2	12437415
Stainless steel 316	6.6	11	1	14014193
Stainless steel 316	6.7	11	1	13593473
Stainless steel 316	8.7	14	1	13630946
Stainless steel 316	10.7	16	1.5	13626249
Stainless steel 316	13.74	20.57	2.03	13603888
Stainless steel 316	10.37	15.88	2.03	11008757
Stainless steel 316	13.74	20.57	2.03	13596070
Stainless steel 316	17.28	23.8	2.03	13603889
Stainless steel 316	21.54	28.58	2.5	13603887
Stainless steel 316	27.05	34.93	2.5	11278792
Stainless steel 316	31	39	2	14014275
Stainless steel 316	33.89	42.8	2.5	13625564
Stainless steel 316	38.96	47.75	3.38	14014230
Stainless steel 316	42.93	52.38	2.5	14014237
Stainless steel 316	46	57	2.5	14014299
Stainless steel 316	48.44	58.6	2.5	14014238
Stainless steel 316	48.44	58.6	3.38	13616398
Stainless steel 316	66.68	79.5	3.38	14014243

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