

## R Series

### Oval

- » The original ring joint design.
- » Used on standard ring joint flat bottom groove flanges.
- » Can be used on older round bottom groove flanges.
- » Available in Ring No. R11 to R105.



Nominal Pipe Size (inch)	Class Rating
1/2" - 24"	150 - 2500 ANSI B16.5 and BS1560
26" - 36"	300 - 600 MSS SP44 and BS3293
26" - 36"	900 MSS SP44
1 (1/2)" - 20"	API 6A Spec.

### Octagonal

- » Modified oval joint ring to provide better sealing performance.
- » Used on standard ring joint flat bottom groove flanges.
- » Available in Ring No. R11 to R105.



Nominal Pipe Size (inch)	Class Rating
1/2" - 24"	150 - 2500 ANSI B16.5 and BS1560
26" - 36"	300 - 600 MSS SP44 and BS3293
26" - 36"	900 MSS SP44
1 (1/2)" - 20"	API 6A Spec.

## RX Series

- » Provides a pressure energised seal.
- » Used on standard ring joint flat bottom groove flanges.
- » Available in Ring No. RX20 to RX215.



Nominal Pipe Size (inch)	Class Rating
1 (1/2)" - 20"	720 - 5000 API Flanges

Fully interchangeable with R Series of identical Ring No.

## BX Series

- » Used in special applications involving high pressures from 350 bar to 1400 bar.
- » Provides a pressure energised seal.
- » Not recommended for reuse.
- » Available in Ring No. BX150 to BX172.



Nominal Pipe Size (inch)	Class Rating
1 (11/16)" - 21 (1/4)"	5000 - 20000 API Flanges

### Material Availability and Technical Information for API and Solid Metal Ring Joints

Material	Brinell Hardness	Rockwell B	Temperature Limits°C	Identification
Soft Iron	90	56	-60 +500	D
Low Carbon Steel	120	68	-40 +500	S
4% - 6% Chrome 1/2% Mo	130	72	-125 +500	F5
S/S 304	160	83	-250 +500	S304
S/S 316	160	83	-110 +550	S316
S/S 321	160	83	-250 +550	S321
S/S 347	160	83	-250 +550	S347
S/S 410	170	87	-20 +500	S410

Other materials, Monel, Copper, Brass, Aluminium, Inconel, Incoloy, Titanium etc. others available on request.



Component		1	2	3	4	5	6
Dielectric Strength	Volts/Mil.	500	200	400/500	140	4000	1500
Compressive Strength	N/mm <sup>2</sup>	250	250	-	-	-	180
Flexural Strength	N/mm <sup>2</sup>	150	150	-	-	-	-
Water Absorption	%	1.6	1.0	0.01	1.0	0.8	10.6
Max. Operating Temperature	°C	107	107	66	107	180	300

Component Key	Material
1 • Type E and F Central Gasket	• 3.2 mm Neoprene faced phenolic
2 • Insulating Washer	• 3.2 mm Reinforced phenolic
3 • Insulating Sleeve	• 3.2 mm Polyethylene
4 • Insulating Sleeve	• 3.2 mm Phenolic
5 • Insulating Sleeve	• 3.2 mm Mylar
6 • Type E and F Central Gasket	• 3.0 mm Compressed Non-Asbestos - KLINGERsil C4430
	• 3.0 mm Steel Zinc plated with clear passivate

**What are they?**

- » Designed to minimise the effects of electro chemical erosion.
- » Used to isolate sections of pipework.
- » Made from materials with high dielectric strength.
- » Each set comprises of:
  - One central flat or oval section gasket.
  - One insulating sleeve per bolt.
  - Two insulating and two plated steel washers per bolt.

Individually packed and clearly labelled with the flange rating, size, type and material combination.

- » Manufactured to suit flanged joints to ANSI, BS, DIN and customer designs.

**Further Protection**

It is recommended that PVC tape be wrapped around the outside of the flange to prevent the ingress of conductive matter.

**Ordering Information**

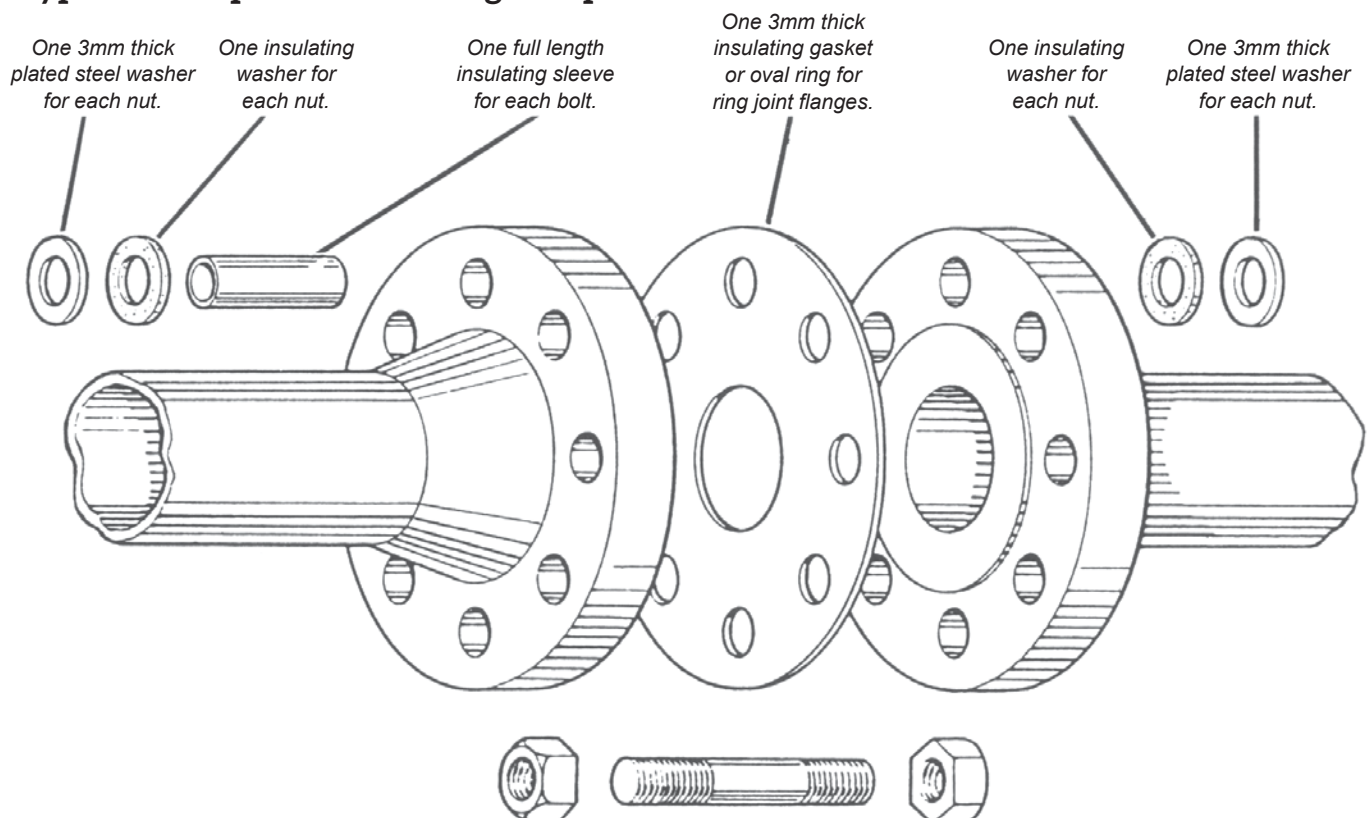
When ordering please submit the following details:

- » Flange pressure class and standard.
- » Nominal pipe size.
- » Type E, F or D central gasket.
- » Type of insulating material required for central gasket and sleeves.

**Our Product Range**

- » "Maxiflex" Spiral Wound Gaskets
- » Heat Exchanger Gaskets
- » Solid Metal Gaskets
- » Ring Joint Gaskets
- » Soft Gaskets
- » Gasket Jointing
- » PTFE Products
- » Fluid Control Products

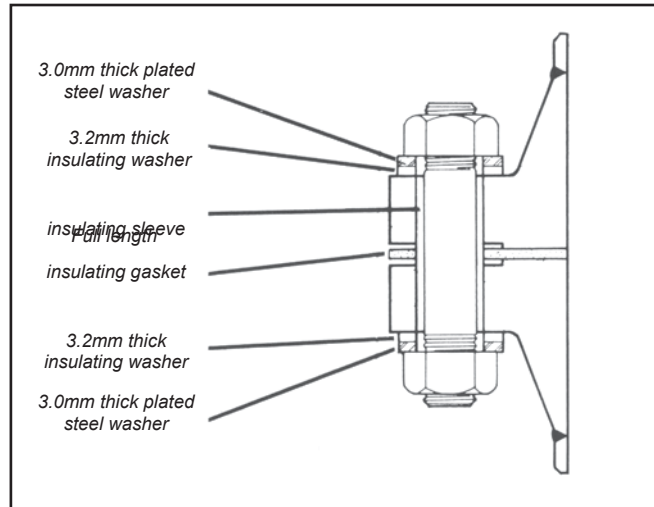
**Typical Example for Insulating Components**





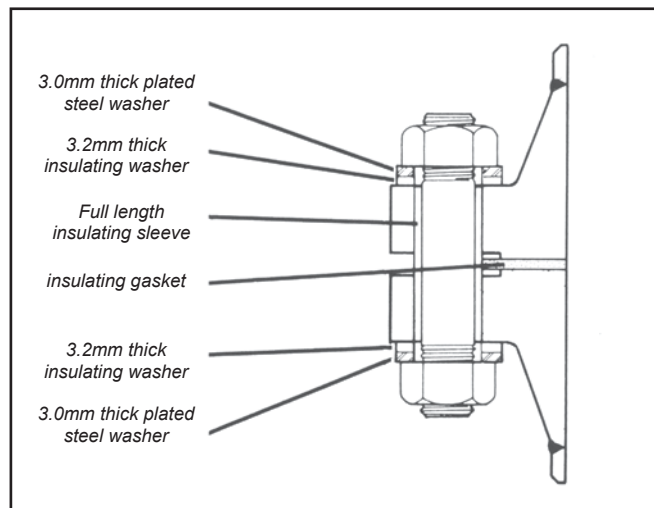
### Type E Full Face

- » Full face gasket.
- » **Materials:**
  - 3.2mm. thick neoprene faced phenolic\*. or KLINGERSil C4430 (3.0mm).
- » Insulating sleeve, polyethylene, phenolic or mylar.
- » Insulating washer, reinforced phenolic.



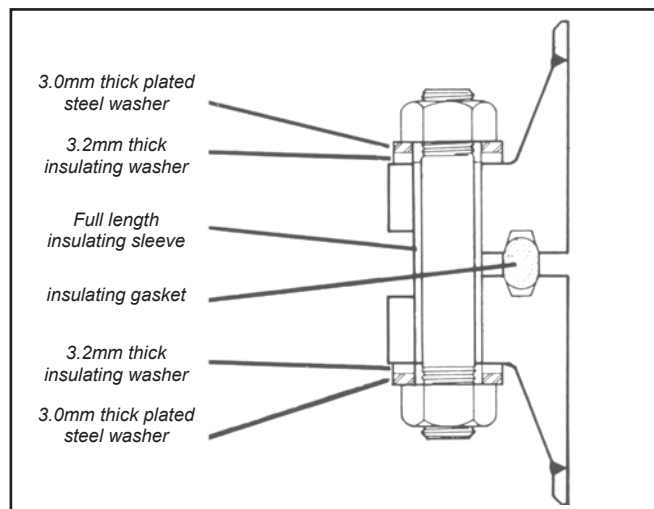
### Type F Raised Face

- » Inner bolt circle flat gasket.
- » **Materials:**
  - 3.2mm. thick neoprene faced reinforced phenolic\*. or KLINGERSil C4430 (3.0mm).
- » Insulating sleeve, polyethylene, phenolic or mylar.
- » Insulating washer, reinforced phenolic.



### Type D Ring Groove

- » Oval central gasket.
- » Used on ring-joint flanges.
- » Only available in reinforced phenolic.
- » Insulating sleeve, polyethylene, phenolic or mylar.
- » Insulating washer reinforced phenolic.



\* Unless otherwise specified, this gasket material will be supplied.

