

INSULATION SET GASKET
(JIC 9320-OS)



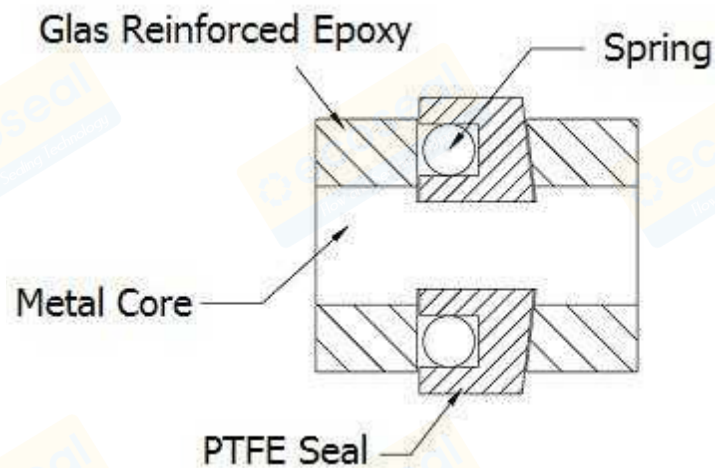
JIC 9320-OS : STARTEC™ Gasket

Glass Reinforced Epoxy Faced Metal Plate with PTFE Seal Gasket

1. Description

JIC 9320-OS provides excellent solution for electrical flange insulation and generally used for high-pressure services. It is installed in the connection of dissimilar flange materials where protection of electrical corrosion desired.

Attached Spring Reinforced PTFE Seal on Glass-Reinforced Epoxy performs superior sealing ability for low-pressure service.



< JIC 9320-OS Cross Section >

2. Composition

1) Metal Core

Attached Stainless Metal Core between Glass Reinforced Epoxy performs superior sealing ability and reinforced insulation characteristic in high pressure. (Max ASME Class 2500)

2) Sealing Material

The laminate material of JIC 9320-OS is composed with Glass Reinforced Epoxy (NEMA LI-1 G10, G11) for excellent insulation. It protects from leakage on over tightening bolt and penetration of fluids induced erosion with deformation.

3) Spring Reinforced PTFE Seal

The selection of sealing material is critical and should be considered its reliability such as each chemical fluid characteristic, temperature and pressure etc.

It is designed for safety from environmental aggressive sealing situation of damages and deformation.

Specially, JIC 9320-OS is minimized Cold Flow by attaching reinforced spring(Stainless Steel 304) on PTFE Seal. Reliable sealing in using micro-vibration or deformation by loosening bolts is available.

3. Advantages of JIC 9320-OS

- A) Superior Sealing and Insulating ability.
- B) Used for low pressure assembly.
- C) High Pressure (Max ASME Class 2500)
- D) Excellent Isolation using NEMA LI-1 G10, G11.
- E) Protection for electrical corrosion in dissimilar metals.
- F) High strength of sealing retainer prevents damages from excess compression.
- G) Easy installation and disassembly.
- H) Available for Ring Joint Flange and Raise Face Flange

4. INSULATION SET

Insulation set is designed for electrical protection between subterranean and ground piping line, where causing electric shock and damages. This set is composed with INSULATION GASKET, INSULATION WASHER, INSULATION SLEEVE, STEEL WASHER, BOLT, NUT and it prevent from electric cathodic protection where connected with dissimilar flange material or electric potential difference on laying materials.

5. INSULATION SET Option Item

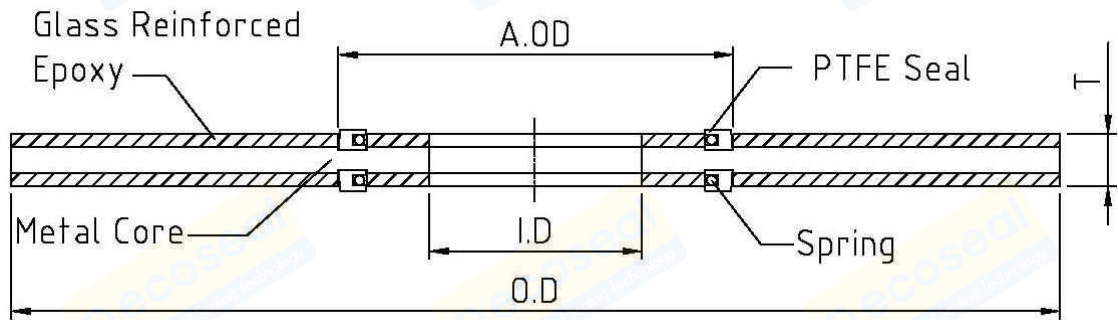
5-1) Insulation Washers & Sleeves

- 5-1-A) GRE(Glass Reinforced Epoxy)
- 5-1-B) Mica

5-2) Steel Washers

- 5-2-A) Carbon Steel
- 5-2-B) Stainless Steel

6. STARTEC™ GASKET TYPE DIMENSION TABLE– JIC 9320-OS



(Unit : mm)

SIZE (NPS)	CLASS 600				
	I.D	OD	A. OD	Raised Face OD	T
1/2	12.7	52.1	27.9	35.1	6.4
3/4	19.1	64.8	34.3	42.9	6.4
			40.6		6.4
1-1/4	31.8	80.7	47.0	63.5	6.4
			53.3		6.4
2	52.5	108.0	76.2	91.9	6.4
			86.4		6.4
3	77.9	146.1	101.6	127.0	6.4
			113.8		6.4
4	102.3	190.5	126.0	157.2	6.4
			151.9		6.4
6	155.0	264.0	186.0	215.9	6.4
			233.7		6.4
10	254.5	396.9	285.5	323.9	6.4
			335.8		6.4
14	336.6	489.0	377.8	412.8	6.4
			428.6		6.4
18	438.2	609.6	492.2	533.4	6.4
			543.0		6.4
24	590.6	787.4	644.6	692.2	6.4

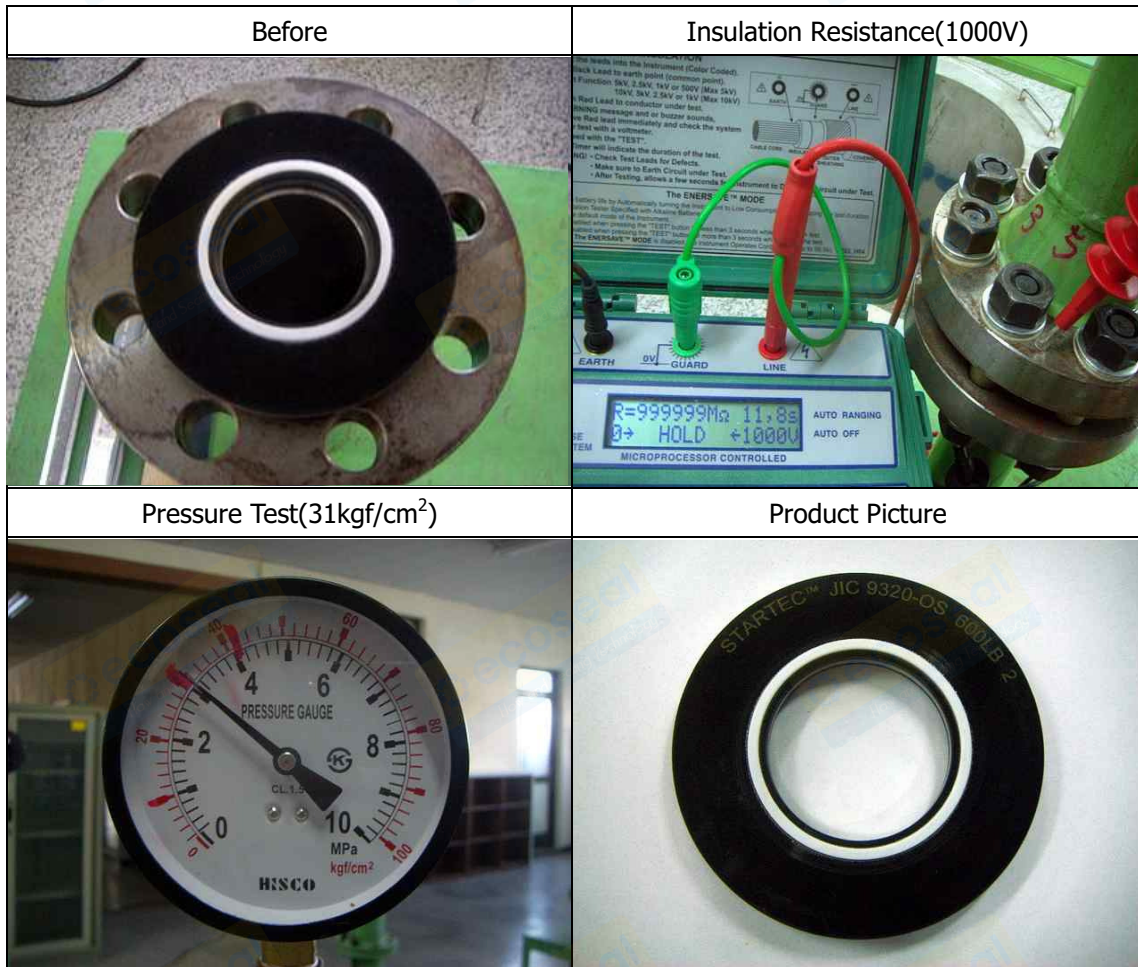
7. STARTEC™ GASKET TYPE TORQUE TABLE– JIC 9320-OS

CLASS 600 - JIC 9320-OS (VCS EQ.)

SIZE (NPS)	BOLT		TOTAL SEATING STRESS(kgf)	BOLT TORQUE (kgf.cm)
	Inch	Number		
1/2	1/2	4	5,066	
3/4	5/8	4	7,066	
1	5/8	4	9,358	
1-1/4	5/8	4	13,941	
1-1/2	3/4	4	17,859	
2			28,645	
2-1/2	3/4	8	34,453	1,499
3	3/4	8	48,993	
3-1/2	7/8	8	54,460	
4	7/8	8	68,210	
5	1	8	85,685	
6			108,700	
8	1-1/8	12	148,186	6,545
10	1-1/4	16	183,701	
12	1-1/4	20	239,348	
14	1-3/8	20	257,861	
16	1-1/2	20	316,627	
18	1-5/8	20	410,038	
20	1-5/8	24	452,901	14,795
24	1-7/8	24	568,095	

8. TEST

1) INSUALTION TEST (600LB 2")



2) ACTAL FLANGE TEST

Flange	Bolt Torque (Kgf.cm)	Test Condition	
		N ₂ Gas Leakage test (31Kgf/cm ²)	Insulation Resistance test(1000V) (Each bolts and the other side of Flanges)
600LB 2" RF FLANGE	1031	No Leakage	Minimum 100 MΩ