



# Hygienic Sanitary Gasket

Compression Controlled Gaskets  
with Full Traceability of Materials

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding





# Hygienic Sanitary Gasket

## Superior Performance for High Purity Processing

Parker's hygienic sanitary gaskets are patent pending designs which offer long-term sealability, excellent wear performance, complete material traceability and easy installation. They are designed to meet typical ASME-BPE requirements for hygienic clamp unions with a nearly flush interface ( $\pm .008"$ ), preventing the entrapment of any media within a dead space that can lead to microbial growth and contamination. In addition, the flush interface helps prevent erosion of the elastomeric gasket that could contaminate the process stream.

Typical applications are aseptic manufacturing processes such as pharmaceutical production, biotechnology, cosmetics industry, chemical processing, food and beverage.

### Product Features

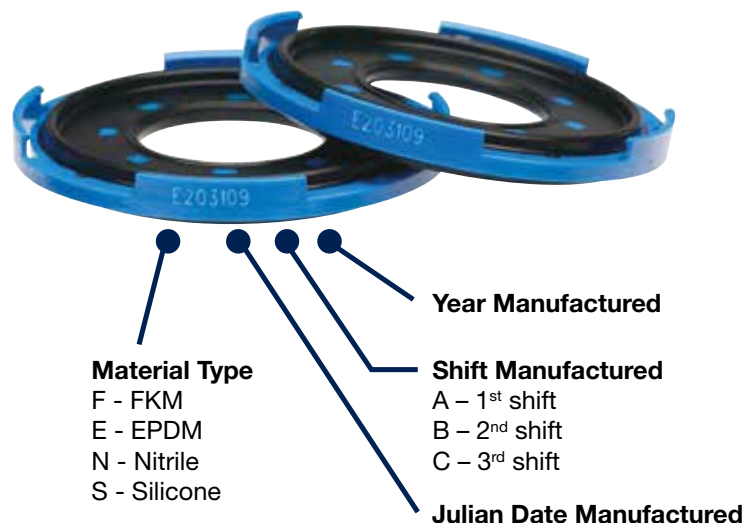
- Inner seal beads provide primary point of sealing.
- Extended plastic on one inch and larger sizes helps support seal beads and maintain flush interface.
- Redesigned outer bead geometry maintains sealing capability without an overfill condition that would cause the material to extrude into the ID during thermal expansion.
- Outer clips help to align gasket to the flange.

### Benefits

- Full material traceability back to the raw ingredients
- Easy part alignment during installation
- Easy part removal from the flange after use
- Compression on the gasket is automatically controlled by plastic carrier
- Long-term sealability

### Material Traceability

Each sanitary gasket has a laser etched product identification on the part to allow full traceability. The etched identification includes codes for the material type, manufacturing date, shift and month of production. Parker's internal rubber development and mixing capability ensures full traceability back to the raw ingredients used in production.





### Over-Molded Rubber to Plastic Design

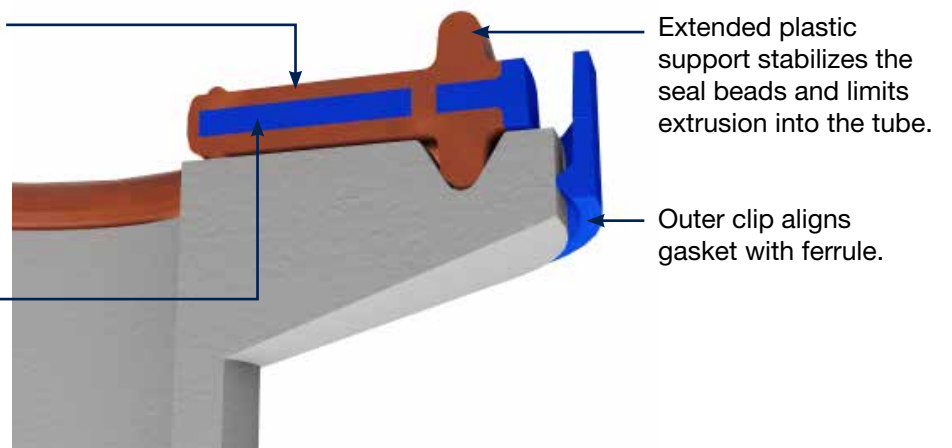
Parker's hygienic sanitary gasket type B design provides superior sealability, alignment and traceability.



### Special Characteristics

Reduced outer bead size prevents over-fill condition that would cause seal bead to extrude into tube.

Inner seal beads provide primary point of sealing (increased sealing pressure over existing designs).



Extended plastic support stabilizes the seal beads and limits extrusion into the tube.

Outer clip aligns gasket with ferrule.

# Materials

Good manufacturing practice (GMP)

Parker can offer a wide range of elastomers to accommodate the various critical sealing challenges and most stringent purity requirements faced in pharmaceutical production, biotechnology, the cosmetics industry, chemical processing, and the food and beverage industry.

Due to leading global materials expertise and market know-how in the field of aseptic processes, we offer hygienic sanitary gaskets with all relevant approvals and conformities.

## Material Selection

Parker Compound	Base Material	Hardness (Shore A)	Color	Temperature range (°C)	Conformities
E3609-70	EPDM	70	black	-50 to 150	FDA 21. CFR 177.2600, (EC) No. 1935/2004, (EC) No. 1907/2006, USP Class VI,
EJ590-70	EPDM	70	white	-50 to 150	FDA 21. CFR 177.2600, (EC) No. 1935/2004, (EC) No. 1907/2006, USP Class VI, 3A Class III ADI-free
N1069-70	NBR	70	black	-30 to 100	FDA 21. CFR 177.2600, (EC) No. 1935/2004, (EC) No. 1907/2006, 3A Class III
S0317-60	VMQ	60	red	-55 to 200	FDA 21. CFR 177.2600, (EC) No. 1935/2004, (EC) No. 1907/2006, USP Class VI, 3A Class IV ADI-free
S7387-70	VMQ	70	translucent	-55 to 200	(EC) No. 1935/2004, (EC) No. 1907/2006, USP Class VI ADI-free
V1274-80	FKM	80	black	-25 to 200	FDA 21. CFR 177.2600, (EC) No. 1935/2004, (EC) No. 1907/2006, USP Class VI, 3A Class I ADI-free

## Chemical Selection Guide

Selecting a suitable material is critical in the manufacturing processes to ensure long-term sealability and zero contamination.

Parker Compound	Physical properties						Chemical resistance								
	Abrasion resistance	Compression set	Heat resistance	Low-temperature resistance	Tear strength	Tensile strength	Alcohol	Alkaline solutions	Phosphoric acid	Soaps/bleaches/cleaning agents	Sodium hydroxide solution	Sodium hypochloride	Ultrapure steam (< 200 °C)	Vegetable oils	Water
E3609-70	2	2	2	1	2	2	1	1	1	1	1	1	1	3	1
EJ590-70	2	2	2	1	2	2	1	1	1	1	1	1	1	3	1
N1069-70	2	2	3	2	2	2	3	2	2	2	2	2	4	1	2
S0317-60	4	1	1	1	4	4	2	1	3	3	1	2	3	2	2
V1274-80	2	1	1	3	2	2	2	2	1	2	2	1	2	1	1

1 = Excellent, volume change < 10 %

2 = Good, volume change 10 – 20 %

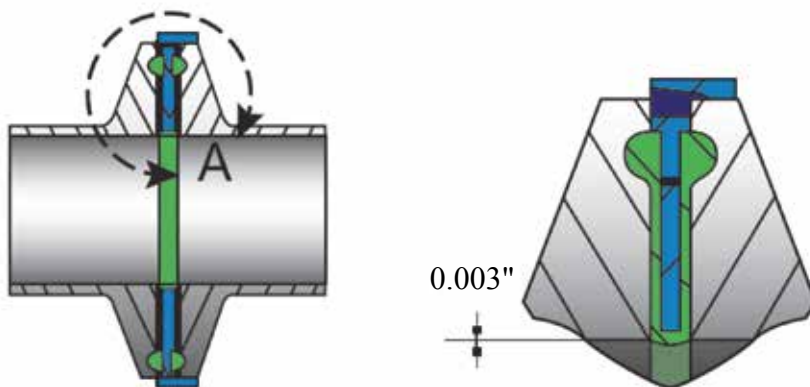
3 = Recommended with limitations, volume change 20 – 40 %

4 = Not recommended, volume change > 40 %

## Laboratory Testing for Intrusion and Sealability

During product development, Parker's sanitary gaskets were evaluated by an independent test laboratory. The tests have confirmed that Parker's products perform better than other products currently available on the market.

### Test Results



After completion of 500 SIP cycles, Parker's gaskets exhibited an average of .003" of intrusion. Compared to a competitor's gaskets, Parker's ethylene propylene (EPDM) gaskets displayed:

- A minimum of 90 % less intrusion
- The ability to hold pressure without having to re-torque the clamp, resulting in labor cost savings.
- The ability to disassemble the joint and remove the gasket by hand without the use of external tools, improving the safe removal of the gasket and reducing labor costs.

# Product Offering

Parker's hygienic sanitary gaskets are offered in our E3609-70 compound, a USP Class VI, FDA and NSF approved ethylene propylene (EPDM) material; as well as fluorocarbon (FKM) and silicone (VQM) materials.



## Hygienic Sanitary Gasket

Part number	Material suffix	Plastic colour	Size (OD)	Type
8404	see below	-	1/4"	A
8406	see below	-	3/8"	A
8408	see below	-	1/2"	A
8412	see below	-	3/4"	A
8416	see below	-	1"	A
8516	see below	-	1"	B
8524	see below	see below	1 1/2"	B
8532	see below	see below	2"	B
8540	see below	see below	2 1/2"	B
8548	see below	see below	3"	B
8564	see below	see below	4"	B
8596	see below	see below	6"	B

### Order Code

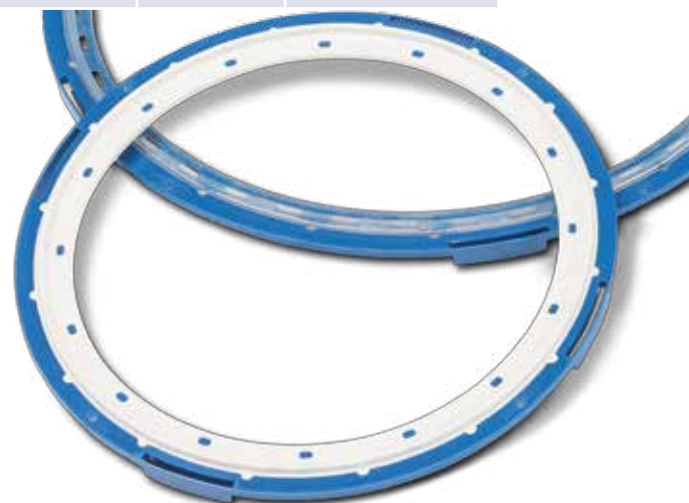
84 16 - 1 - B

**Tubing O.D.**  
in sixteenths of an inch

**Sanitary Gasket Identifier**  
84 – Type A, all-rubber gasket design  
85 – Type B, over-molded rubber to plastic design

### Rubber Material/Color Suffix

- 1 Silicone/Rust
- 2 FKM/Black
- 3 EPDM/White
- 4 Nitrile/Black
- 5 Silicone/Clear
- 6 EPDM/Black





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