

Seal Replacement Instructions

FI Model Connector

US patent 5,343,79

FI Connector for Smooth Ports

To install seal sets in NEW CONNECTORS or to change sizes of seal sets for different sealing ranges.

1. For seal replacement, remove retaining ring from shaft tip and slide off old seal set and washers. Spacer piece is to remain on connector shaft.
2. Seal Set contains elastomer seals, washers and retaining ring per Chart 1. Seals are also available in packages of five seal changes with locking rings (Bulk Pack).
3. Verify that seals and washers are the same size (outside diameter).
4. Assemble seal set onto shaft per Diagram 1.
5. **Attach new retaining ring to groove in shaft tip. Flat side of retaining ring must face away from washer.**

WARNING: Do not apply pilot pressure into FI model unless connector is inserted into test piece, as damage may result.

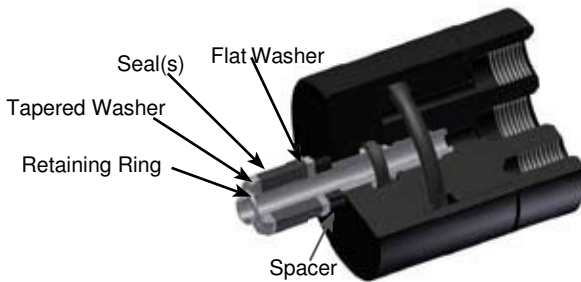


Diagram 1: FI1 with FIS1-12 Seal Set

Chart 1: Seal Set Parts Required

| Seal Set | Main Seal(s) | Flat Washer | Tapered Washer | Retaining Ring |
|------------------|--------------|-------------|----------------|----------------|
| FIS01-** | 1 | 0 | 1 | 1 |
| FIS1-**, FIS2-** | 1 | 1 | 1 | 1 |
| FIS3-**, FIS4-** | 2 | 1 | 1 | 1 |
| FIS5-**, FIS6-** | 3 | 1 | 1 | 1 |
| FIS7-**, FIS8-** | 3 | 1 | 1 | 1 |

| Bulk Pack | Main Seal(s) | Flat Washer | Tapered Washer | Retaining Ring |
|------------------|--------------|-------------|----------------|----------------|
| FIB01-** | 5 | 0 | 0 | 5 |
| FIB1-**, FIB2-** | 5 | 0 | 0 | 5 |
| FIB3-**, FIB4-** | 10 | 0 | 0 | 5 |
| FIB5-**, FIB6-** | 15 | 0 | 0 | 5 |
| FIB7-**, FIB8-** | 15 | 0 | 0 | 5 |

Note: A tapered washer with a counterbore is used on all FI01, FI1, FI2, FI3 and FI4 connectors. The retaining ring will be recessed in the washer's counterbore when the connector is pressurized

FI Connector for Threaded Ports

To install seal sets in NEW CONNECTORS or to change sizes of seal sets for different sealing ranges.

- 1) FI-NPT seal sets contain urethane main seal, washer(s), neoprene face seal(s), face seal mounting plate - to replace spacer (nominal), and locking ring. Seals are also available in packages of five seal changes with locking rings (Bulk Pack).
- 2) Assemble seal set per Diagram 2. Attach new retaining ring to groove in shaft tip. Flat side of retaining ring must face away from the washer.

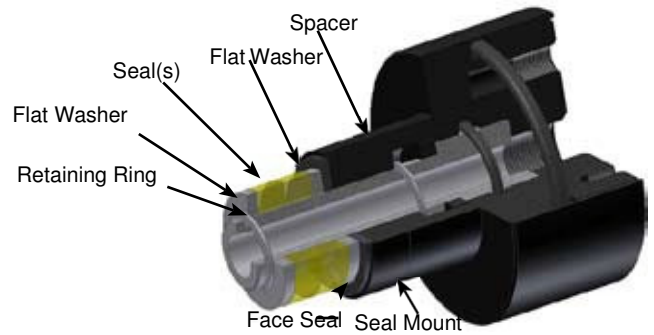


Diagram 2: FI7 with extended shaft and 2" NPT seal set

Chart 2: Seal Set Parts Required

| Seal Set | Main Seal(s) | Flat Washer | Tapered Washer | Retaining Ring |
|------------------|--------------|-------------|----------------|----------------|
| FIS01-** | 1 | 0 | 1 | 1 |
| FIS1-**, FIS2-** | 1 | 1 | 1 | 1 |
| FIS3-**, FIS4-** | 2 | 1 | 1 | 1 |
| FIS5-**, FIS6-** | 3 | 1 | 1 | 1 |
| FIS7-**, FIS8-** | 3 | 1 | 1 | 1 |

| Bulk Pack | Main Seal(s) | Flat Washer | Tapered Washer | Retaining Ring |
|------------------|--------------|-------------|----------------|----------------|
| FIB01-** | 5 | 0 | 0 | 5 |
| FIB1-**, FIB2-** | 5 | 0 | 0 | 5 |
| FIB3-**, FIB4-** | 10 | 0 | 0 | 5 |
| FIB5-**, FIB6-** | 15 | 0 | 0 | 5 |
| FIB7-**, FIB8-** | 15 | 0 | 0 | 5 |

| NPT Seal Set | Main Seal(s) | Face Seal | Flat Washer | Tapered Washer | Seal Mount | Retaining Ring |
|------------------|--------------|-----------|-------------|----------------|------------|----------------|
| FIS01-** | 1 | 1 | 1 | 1 | 1 | 1 |
| FIS1-**, FIS2-** | 1 | 1 | 1 | 1 | 1 | 1 |
| FIS3-**, FIS4-** | 1 | 1 | 1 | 1 | 1 | 1 |
| FIS5-**, FIS6-** | 2 | 1 | 1 | 1 | 1 | 1 |
| FIS7-**, FIS8-** | 2 | 1 | 1 | 1 | 1 | 1 |

| NPT Bulk Pack | Main Seal(s) | Face Seal | Flat Washer | Tapered Washer | Seal Mount | Retaining Ring |
|------------------|--------------|-----------|-------------|----------------|------------|----------------|
| FIB01-** | 5 | 5 | 0 | 0 | 0 | 5 |
| FIB1-**, FIB2-** | 5 | 5 | 0 | 0 | 0 | 5 |
| FIB3-**, FIB4-** | 5 | 5 | 0 | 0 | 0 | 5 |
| FIB5-**, FIB6-** | 10 | 5 | 0 | 0 | 0 | 5 |
| FIB7-**, FIB8-** | 10 | 5 | 0 | 0 | 0 | 5 |