

# FE & FI Connector Series

## Improving Automated Product Testing

- **Lower manufacturing costs** through testing efficiency
- **Maximize production capacity** with high volume automated testing
- **Durable & reliable** high performance seal material
- **Uniform seal movement** ensures leak tight connection
- **Instant connections** for testing up to 500 psi

### ***Industry Leading Tube/Bore and Thread Connectors***

The FE and FI Series connectors deliver fast, leak free connections for vacuum and pressure testing, fluid filling or flushing applications.

Compressed air activates the seals for a full-flow test with air, gas or liquid.

The uniform seal movement makes a leak-proof connection for virtually all tube types, even over threaded, rough and oily surfaces.



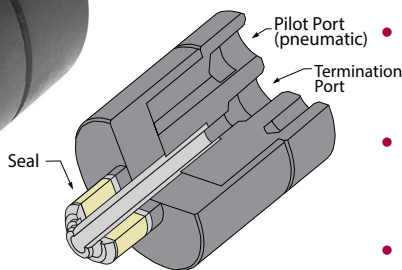
**VLS**

Valley  
International  
Supply

# FasTest Internal (FI) - Pneumatic Tube and Threaded

## FI Series

Internal Tube and Thread Connections



### The FI Advantage

- **Pneumatic actuation** accommodates high volume production testing
- **Capable of sealing** smooth, porous, rough, threaded, and out-of-round ports
- **Delicate touch seals thin wall materials** will not mar test piece
- **Adaptable** for pick and place robotic applications
- **Simple** maintenance for extended life

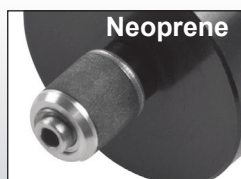
### FasTest Internal (FI)

connectors use pneumatic pressure to expand seals, creating a leak-tight internal connection to virtually any type of port. FI Connectors are ideal for automation in high volume production testing.

### Technical Specifications

Operating Pressure	Vacuum to 120 psi (8 bar)
Connection Profile	Internal Tubes, Bores and Threads
Termination Profile	Female 10-32" UNF, M5X8, NPT/BSPP: 1/8" to 2 1/2"
Mounting Port	Female 10-32" to 3/8-24" UNF, M5X8 to M11X1.5, 4-40" to 3/8-24" UNC
Pilot Port	Female 10-32" UNF, M5X8, 1/8" NPT/BSPP
Pilot Pressure	60-90 psi
Housing Material	Aluminum and Stainless steel
Seal Material	Standard: Neoprene, Urethane Optional: FKM (Viton), Buna-N or EPDM
Operating Temperatures	0°F to 200°F (-17°C to 93°C) Neoprene 32°F to 175°F (0°C to 79°C) Urethane

## Offering Choice of Seal Materials & Special Applications



Example: FI5-51



Example: FI5-51UR

### Neoprene Seals or Urethane Seals

#### Standard Seals for FI Connectors

- Neoprene for smooth bores and cast surfaces
- Urethane for irregular surfaces and high wear applications



Example: FI5-51-0100

### Shaft Extensions

#### 1" or 2" Extensions Available

- Access remote ports
- Offset connectors when side-by-side mounting is unavailable
- Integrated with stroke limiter, prevents excessive travel of the seals



Example: FI5-1 1/4NPT

### Additional Face Seal For threaded ports

- Prevent scratching of test pieces

## Industry's Broadest Standard Product Offering

Sealing Range	Base Connector (English)	Base Connector (Metric)	Connector Seal Set*	Bulk Seal Kit **	Repair Kits
<b>Internal (FI) Connectors for Smooth Tubes - Neoprene Seals</b>					
0.310"-0.330" 0.330"-0.394"	<b>FI01</b>	<b>FIM01</b>	<b>FIS01-0300</b>	FIB01-0300	FIR01
			<b>FIS01-01</b>	FIB01-01	
0.394"-0.472" 0.472"-0.551" 0.551"-0.630"	<b>FI1</b>	<b>FIM1</b>	<b>FIS1-11</b>	FIB1-11	FIR1
			<b>FIS1-12</b>	FIB1-12	
			<b>FIS1-13</b>	FIB1-13	
0.630"-0.709" 0.709"-0.787" 0.787"-0.866"	<b>FI2</b>	<b>FIM2</b>	<b>FIS2-21</b>	FIB2-21	FIR1
			<b>FIS2-22</b>	FIB2-22	
			<b>FIS2-23</b>	FIB2-23	
0.866"-0.945" 0.945"-1.024" 1.024"-1.102"	<b>FI3</b>	<b>FIM3</b>	<b>FIS3-31</b>	FIB3-31	FIR3
			<b>FIS3-32</b>	FIB3-32	
			<b>FIS3-33</b>	FIB3-33	
1.102"-1.181" 1.181"-1.260" 1.260"-1.339"	<b>FI4</b>	<b>FIM4</b>	<b>FIS4-41</b>	FIB4-41	FIR3
			<b>FIS4-42</b>	FIB4-42	
			<b>FIS4-43</b>	FIB4-43	
1.339"-1.457" 1.457"-1.575" 1.575"-1.693"	<b>FI5</b>	<b>FIM5</b>	<b>FIS5-51</b>	FIB5-51	FIR6
			<b>FIS5-52</b>	FIB5-52	
			<b>FIS5-53</b>	FIB5-53	
1.693"-1.850" 1.850"-2.008" 2.008"-2.165"	<b>FI6</b>	<b>FIM6</b>	<b>FIS6-61</b>	FIB6-61	FIR6
			<b>FIS6-62</b>	FIB6-62	
			<b>FIS6-63</b>	FIB6-63	
2.165"-2.305" 2.305"-2.445" 2.445"-2.585"	<b>FI7</b>	<b>FIM7</b>	<b>FIS7-71</b>	FIB7-71	FIR7
			<b>FIS7-72</b>	FIB7-72	
			<b>FIS7-73</b>	FIB7-73	
2.585"-2.725" 2.725"-2.865" 2.865"-3.005"	<b>FI8</b>	<b>FIM8</b>	<b>FIS8-81</b>	FIB8-81	FIR7
			<b>FIS8-82</b>	FIB8-82	
			<b>FIS8-83</b>	FIB8-83	

- FI connectors are also designed for NPT, BSPT, BSPP, SAE and NPS style ports, please contact FasTest for more information
- English base connectors are designed for NPT and UNF ports; metric base connectors are designed for BSPP and metric ports
- \*Includes main seals and washers for one seal change; must choose one seal set when purchasing base connector
- \*\*Includes only main seals for five seal changes, please contact FasTest for more information

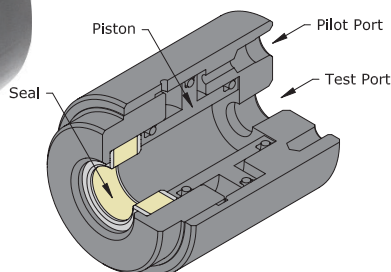
Visit [www.fastestinc.com](http://www.fastestinc.com)

For additional information on product dimensions, seal kits and connector variations

# FasTest External (FE) - Pneumatic Tube and Thread

## FE Series

External Tube and Thread Connections



### The FE Advantage

- **Pneumatic actuation** accommodates high volume production testing
- **Capable of sealing** smooth, porous, rough, threaded, out-of-round, flared, beaded, swaged and formed end ports
- **Delicate touch seals thin wall materials** will not mar test piece
- **Adaptable** for pick and place robotic applications
- **Simple** maintenance for extended life

### FasTest External (FE)

connectors use pneumatic pressure to expand seals, creating a leak-tight external connection to virtually any type of male port. FE connectors are ideally suited for flow accommodation.

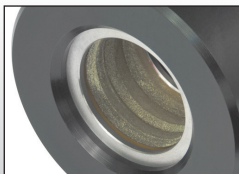
### Technical Specifications

Operating Pressure	500 psi (34 bar)
Connection Profile	External Tubes and Threads
Termination Profile	Female 10-32" UNF, M5X8, NPT/BSPP: 1/8" to 2 1/2"
Mounting Port	Female 10-32" to 3/8-24" UNF, M5X8 to M11X1.5, 4-40" to 3/8-24" UNC
Pilot Port	Female 10-32" UNF, M5X8, 1/8" NPT/BSPP
Pilot Pressure	60-600 psi
Housing Material	Aluminum and Stainless steel
Seal Material	Standard: Neoprene, Urethane Optional: FKM (Viton), Buna-N or EPDM
Operating Temperatures	0°F to 200°F (-17°C to 93°C) Neoprene 32°F to 175°F (0°C to 79°C) Urethane

## Offering Choice of Seal Materials & Special Applications



Example: FE3-31



Example: FE3-31UR

### Neoprene Seals or Urethane Seals

#### Standard Seals for FE Connectors

- Neoprene for smooth bores and cast surfaces
- Urethane for irregular surfaces and high wear applications



Example: PB-1015

### Pilot Pressure Booster

#### For threaded ports

- Deliver actuation pressure up to 400-600 PSI using pneumatic pressure
- For FE connector only

## Industry's Broadest Standard Product Offerings

Sealing Range	Base Connector (English)	Base Connector (Metric)	Connector Seal Set*	Bulk Seal Kit **	Repair Kits
<b>External (FE) Connectors for Smooth Tubes - Neoprene Seals</b>					
0.030"-0.050"	<b>FE001</b>	<b>FEM001</b>	<b>FES001-0050</b>	FEB001-0050	FER001
0.050"-0.080"			<b>FES001-001</b>	FEB001-001	
0.080"-0.130"			<b>FES001-002</b>	FEB001-002	
0.100"-0.180"	<b>FE01</b>	<b>FEM01</b>	<b>FES01-01</b>	FEB01-01	FER01
0.180"-0.260"			<b>FES01-02</b>	FEB01-02	
0.260"-0.340"			<b>FES01-03</b>	FEB01-03	
0.340"-0.420"			<b>FES01-04</b>	FEB01-04	
0.420"-0.510"			<b>FES01-05</b>	FEB01-05	
0.433"-0.512"	<b>FE1</b>	<b>FEM1</b>	<b>FES1-15</b>	FEB1-15	FER1
0.512"-0.591"			<b>FES1-16</b>	FEB1-16	
0.591"-0.669"			<b>FES1-17</b>	FEB1-17	
0.669"-0.750"			<b>FES1-18</b>	FEB1-18	
0.750"-0.827"			<b>FES1-19</b>	FEB1-19	
0.787"-0.866"	<b>FE2</b>	<b>FEM2</b>	<b>FES2-21</b>	FEB2-21	FER2
0.866"-0.945"			<b>FES2-22</b>	FEB2-22	
0.945"-1.024"			<b>FES2-23</b>	FEB2-23	
1.024"-1.102"			<b>FES2-24</b>	FEB2-24	
1.102"-1.181"			<b>FES2-25</b>	FEB2-25	
1.181"-1.260"			<b>FES2-26</b>	FEB2-26	
1.260"-1.339"			<b>FES2-27</b>	FEB2-27	
1.339"-1.417"			<b>FES2-28</b>	FEB2-28	
1.417"-1.510"			<b>FES2-29</b>	FEB2-29	
1.496"-1.614"	<b>FE3</b>	<b>FEM3</b>	<b>FES3-31</b>	FEB3-31	FER3
1.614"-1.732"			<b>FES3-32</b>	FEB3-32	
1.732"-1.850"			<b>FES3-33</b>	FEB3-33	
1.850"-1.969"			<b>FES3-34</b>	FEB3-34	
1.969"-2.087"	<b>FE4</b>	<b>FEM4</b>	<b>FES4-41</b>	FEB4-41	FER4
2.087"-2.205"			<b>FES4-42</b>	FEB4-42	
2.205"-2.323"			<b>FES4-43</b>	FEB4-43	
2.323"-2.441"			<b>FES4-44</b>	FEB4-44	
2.441"-2.559"			<b>FES4-45</b>	FEB4-45	
2.559"-2.677"			<b>FES4-46</b>	FEB4-46	
2.677"-2.795"			<b>FES4-47</b>	FEB4-47	
2.795"-2.913"			<b>FES4-48</b>	FEB4-48	
2.913"-3.032"			<b>FES4-49</b>	FEB4-49	

- FastTest also offers additional FE connectors sizes, up to a 5.040" ceiling range, for smooth tube connections
- FE connectors are also designed for NPT, BSPT, BSPP, SAE and NPS style ports, please contact FastTest for more information
- English base connectors are designed for NPT and UNF ports; metric base connectors are designed for BSPP and metric ports
- \*Includes main seals and washers for one seal change; must choose one seal set when purchasing base connector
- \*\*Includes only main seals for five or ten seal changes, please contact FastTest for more information

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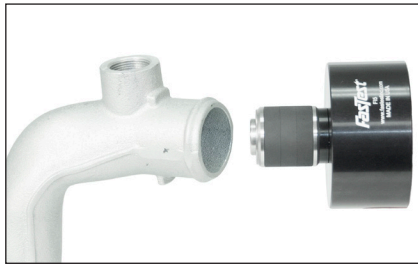
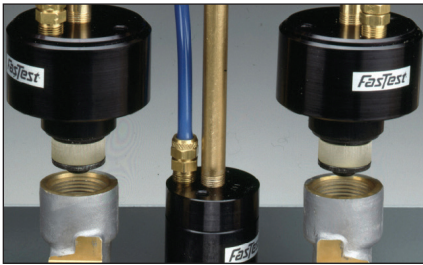
For additional information on product dimensions, seal kits and connector variations



# Applications & Innovative Technology

## FI Series

Internal Tube and  
Thread Connections



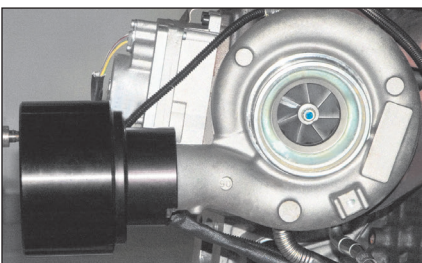
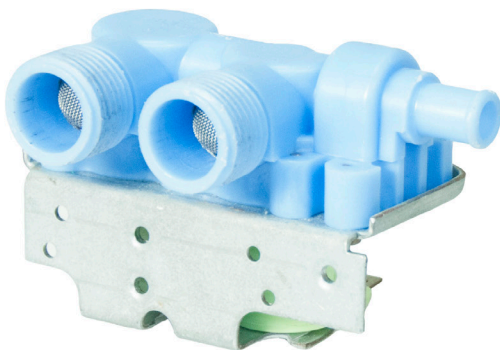
## *FasTest Internal (FI) & FasTest External (FE)*

Connectors offer a leak-tight connection to virtually any type of tube and are ideal for automation in high volume production testing. FasTest's industry leading connectors allow for pneumatic and hydrostatic testing of a wide variety of applications, including:

- *Reservoir bottles*
- *Manifolds*
- *Suspension/Struts*
- *Transmissions*
- *Engines*
- *Castings/plumbing*
- *Radiators*
- *Plastic ports/features*
- *Run tests*
- *Hot engine testing*
- *Sensor/gauges*
- *Lamp assemblies*
- *Fuel pumps*
- *Heat exchangers*

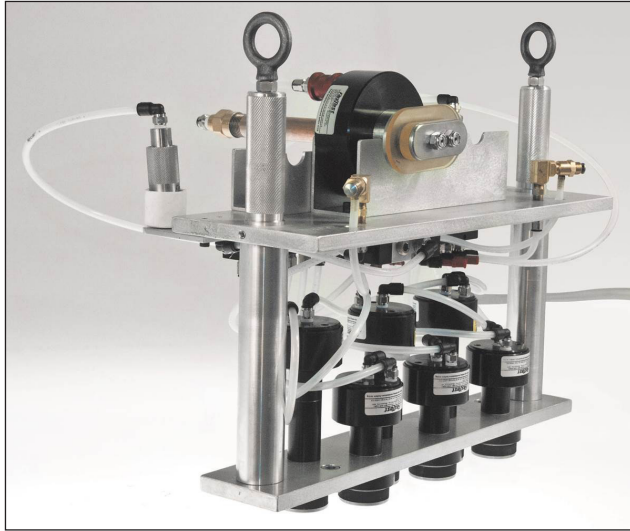
## FE Series

External Tube and  
Thread Connections



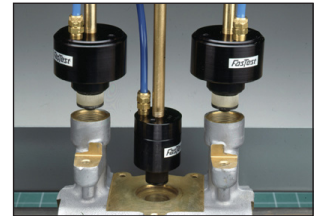
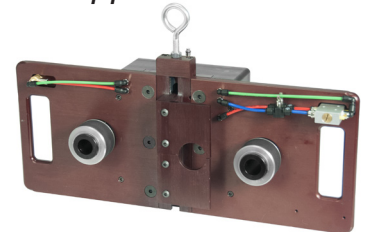
## Fixturing for Leak Test Workholding

*FasTest offers custom applications and integrated fixturing solutions and services*



### ***FasTest Deliverables:***

- *Integrated fixture & connectors*
- *Customized design solution*
- *Project scope & delivery*
- *Ongoing technical support*



## Technology Development



### **Electronic Tool System (ETS)**

FasTest offers electronically controlled sealing options for leak test applications that require ultimate seal control and clean operation.

***Instant data feedback on any platform***

***Cycle count management and tracking***

***Automated test pressure control***

***Compatible with all industry leading testing systems for:***

- Air leak
- Air flow
- Mass flow
- Pressure decay
- Differential pressure
- Functional testing

*Supports multiple independent channels & customized pneumatics*

## Where to Buy



**Purchase through  
local distributor**



**VIS**

Valley  
International  
Supply

### Valley International Supply

1474 W. Price Rd. Ste 107  
Brownsville, Texas 78520  
Phone 956.592.1927  
www.valleyintlsupply.com

## Cost, Process and Quality Improvement

Since 1985, **FasTest, Inc.** has manufactured quick test connectors and valves that maximize efficiency, productivity and profitability for the Industrial Manufacturing, HVAC-R and Compressed Gas Industries.

Relying on our core engineering skills, FasTest has secured over 50 US and International patents. These patents serve as the design platform for innovative products that enable our customers to improve testing, manufacturing processes and productivity.

## Proudly Serving



**Medtronic**  
*When Life Depends on Medical Technology*



**KOHLER**



# FasTest®

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**Proudly Made in  
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**Proudly Manufactured  
in the U.S.A.**

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FasTest Inc. takes pride in its innovative quick disconnect coupling solutions, many of which have been awarded United States and International patents. FasTest Inc. has a strong tradition of leadership in the quick disconnect market, and aggressively pursues and protects its proprietary information and intellectual property.

All products are designed and manufactured by Fastest Inc. USA

### Limited Express Warranty

FasTest Inc. warrants its products against defects in workmanship and materials for 12 months from the date of sale by FasTest Inc. or its authorized distributor. This warranty is void if the product is misused, tampered with or used in a manner that is contrary to FasTest Inc.'s written recommendations and/or instructions.

See website for complete warranty information.

### Custom Applications

FasTest has full engineering and manufacturing capability to provide special accommodations to meet specific applications. Our engineers are available to review your unique application requirements.

### Certifications

FasTest Inc. is ISO 9001: 2008 certified.