

## **FasMate**<sup>®</sup>

- Cost, process and quality improvement
- Instant threaded connections up to 5000 psi
- Eliminate thread damage, sealant and wrenches
- Modular design for squeeze lever, push button or pneumatic actuation



### **Instant Threaded Connections with Squeeze Lever, Push Button or Pneumatic Actuation**

**FasTest's** patented **FasMate FN and FX Series** connectors make instant leak tight connections that significantly decrease the time needed for pressure and vacuum testing, media filling or flushing and performance testing.

The split collet operation uses no thread sealant, wrenches and will not damage threads. **FasMate's** rugged design is ideal for production and is available in squeeze lever, push button and pneumatic actuation models.

## 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, we have secured over 50 US and International patents that serve as the design platform for innovative products that enable our customers to achieve testing, manufacturing process and productivity improvements.

### **FasTest** connector benefits:

- Instant temporary, leak tight connections, which are consistent and repeatable and standardize operational processes
- Reliable and secure connections under dynamic high pressure conditions
- Increase production throughput and quality while dramatically reducing operating costs
- Eliminate testing bottlenecks, ideal for automation to accommodate high volume production testing
- Ready-to-use tools, so no more jury-rigged or homemade devices that are often leaky, inadequate and cumbersome
- Wide range of standard and custom products for different connection profiles

### Widely used in:

- Manufacturing leak test, including pressure decay, tracer gas, mass spectrometer
- Pressure or vacuum tests of gauges, metrological transmitters
- Rapid filling or discharge of coolant in refrigeration systems

## **FasMate**<sup>®</sup> - FN AND FX SERIES CONNECTORS

Instant Leak Tight Connection to Threads with Squeeze Lever, Push Button, and Pneumatic Actuation Methods

Features	Benefits
Pressure assisted grip and seal	Locks connector securely, even when used in dynamic hydraulic applications
No wrench tightening, thread damage, tape or sealant	Reduces wear on test piece and prevent contamination of media
Intuitive design and precise engineering	Easy to use, no operator adjustment, sealing with no guesswork
Ergonomic product	Reduces operator stress from repetitive motion
Rugged, durable construction	Endures demanding production environments
Easy service of parts without special tools	Field serviceable, reduces operational cost and maintenance down time

### Technical Specifications

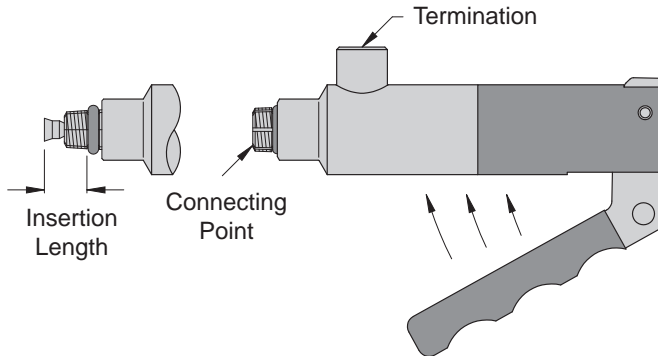
<b>Housing Material</b>	Stainless steel and anodized aluminum
<b>Seal Material</b>	Buna-N
<b>Connection Profile</b>	Mates with BSPP, BSPT, Metric, SAE and NPT threads
<b>Termination Profile</b>	BSPP or NPT female thread port
<b>Operating Pressure</b>	Vacuum to 5000 psi (Body sizes 1 to 4) Vacuum to 3500 psi (Body size 5) Vacuum to 750 psi (Thin walled pipe models)
<b>Operating Temp.</b>	-40°F to +250°F (-40°C to +121°C)
<b>Maximum Side Load Rating for FN Series</b>	12.5 - 75 in-lbs (1.4 - 8.4 Nm)

### For FNV/FNP and FXV/FXP only:

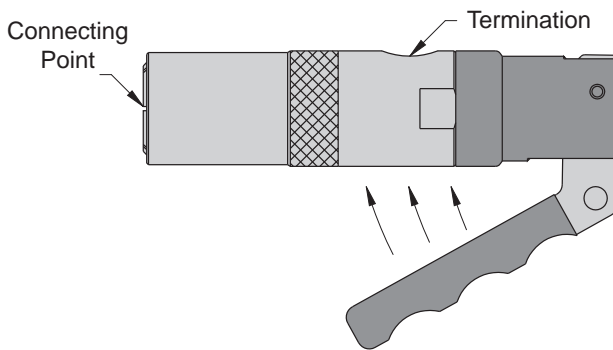
<b>Pilot Pressure</b>	65 - 120 psi (4.5 to 8 bar)
<b>Pilot Port Profile</b>	1/8" female NPT

# FasMate - Instant Threaded Connections

## FNL Internal Connector



## FXL External Connector



## Safe

The pressure assisted grip and proprietary design of the **FasMate Series** locks the connector securely, even when used in dynamic hydraulic applications.

## Ergonomic

With three styles of actuation, operator stress from repetitive motion is eliminated or significantly reduced.

## Easy to Maintain

The practical design allows easy servicing of the external and internal seals, significantly reducing the cost of ownership and down time.

## Made in the USA

Designed and manufactured by **FasTest** from the highest quality materials, **FasTest** provides a full product offering for all standard thread configurations.

## Engineering & Technical Support

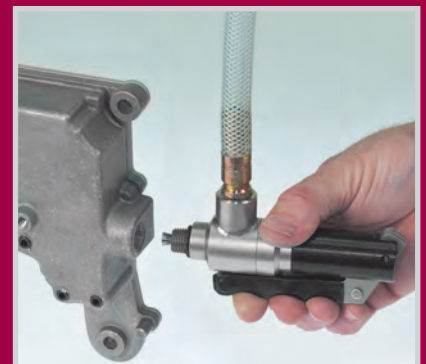
**FasTest** has full engineering and manufacturing capability to provide special accommodations to meet specific applications. Our Sales Engineers are available to review your requirements.

The **FasMate FN Series** instantly seals threaded ports from vacuum up to 5000 psi for most models. The patented proprietary design makes sealing threaded ports as easy as 1, 2, 3.



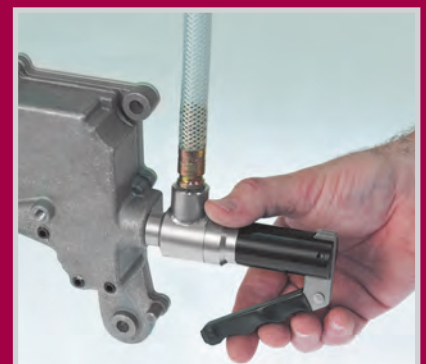
1

Squeeze lever to collapse the threaded collets



2

Insert into threaded port



3

Releasing the lever expands the collets for a safe secure leak free connection

# FasMate® - FN SERIES

## Connectors for Internal (Female) Threads



- Connects to Internal Threads



- Connects to External Threads



Part Number	Connection Profile	Term Profile	Body Size	Min. Insert Length (mm)
<b>NPT (per SAE J476 or ANSI B1.20)</b>				
FNL-022021	1/8" NPT	1/8" NPT	1	0.55 (14.0)
FNL-042041	1/4" NPT	1/4" NPT	2	0.67 (17.1)
FNL-062061	3/8" NPT	3/8" NPT	3	0.67 (17.1)
FNL-082081	1/2" NPT	1/2" NPT	4	0.76 (19.4)
FNL-122121	3/4" NPT	3/4" NPT	5	0.63 (16.0)
FNL-022025	1/8" NPT	1/8" BSPP	1	0.55 (14.0)
FNL-042045	1/4" NPT	1/4" BSPP	2	0.67 (17.1)
FNL-062065	3/8" NPT	3/8" BSPP	3	0.67 (17.1)
FNL-082085	1/2" NPT	1/2" BSPP	4	0.76 (19.4)
FNL-122125	3/4" NPT	3/4" BSPP	5	0.63 (16.0)
<b>ISO O-Ring Metric (per ISO 6149 or SAE J2244)</b>				
FNL-108021	M10 × 1.0	1/8" NPT	1	0.55 (14.0)
FNL-128041	M12 × 1.5	1/4" NPT	2	0.67 (17.1)
FNL-148041	M14 × 1.5	1/4" NPT	2	0.67 (17.1)
FNL-168061	M16 × 1.5	3/8" NPT	3	0.67 (17.1)
FNL-188061	M18 × 1.5	3/8" NPT	4	0.76 (19.4)
FNL-208061	M20 × 1.5	3/8" NPT	4	0.76 (19.4)
FNL-228081	M22 × 1.5	1/2" NPT	4	0.76 (19.4)
FNL-108025	M10 × 1.0	1/8" BSPP	1	0.55 (14.0)
FNL-128045	M12 × 1.5	1/4" BSPP	2	0.67 (17.1)
FNL-148045	M14 × 1.5	1/4" BSPP	2	0.67 (17.1)
FNL-168065	M16 × 1.5	3/8" BSPP	3	0.67 (17.1)
FNL-188065	M18 × 1.5	3/8" BSPP	4	0.76 (19.4)
FNL-208065	M20 × 1.5	3/8" BSPP	4	0.76 (19.4)
FNL-228085	M22 × 1.5	1/2" BSPP	4	0.76 (19.4)

Part Number	Connection Profile	Term Profile	Body Size	Min. Insert Length (mm)
<b>SAE O-Ring (per SAE J1926 or ISO 11926)</b>				
FNL-044021	-4 (7/16-20)	1/8" NPT	1	0.55 (14.0)
FNL-054041	-5 (1/2-20)	1/4" NPT	2	0.67 (17.1)
FNL-064041	-6 (9/16-18)	1/4" NPT	3	0.67 (17.1)
FNL-084061	-8 (3/4-16)	3/8" NPT	4	0.76 (19.4)
FNL-104081	-10 (7/8-14)	1/2" NPT	4	0.76 (19.4)
FNL-124121	-12 (1 1/16-12)	3/4" NPT	5	0.63 (16.0)
FNL-044025	-4 (7/16-20)	1/8" BSPP	1	0.55 (14.0)
FNL-054045	-5 (1/2-20)	1/4" BSPP	2	0.67 (17.1)
FNL-064045	-6 (9/16-18)	1/4" BSPP	3	0.67 (17.1)
FNL-084065	-8 (3/4-16)	3/8" BSPP	4	0.76 (19.4)
FNL-104085	-10 (7/8-14)	1/2" BSPP	4	0.76 (19.4)
<b>BSPP (per ISO 228 or BS 2779)</b>				
FNL-026021	1/8" BSPP	1/8" NPT	1	0.55 (14.0)
FNL-046041	1/4" BSPP	1/4" NPT	2	0.67 (17.1)
FNL-066061	3/8" BSPP	3/8" NPT	3	0.67 (17.1)
FNL-086081	1/2" BSPP	1/2" NPT	4	0.76 (19.4)
FNL-126121	3/4" BSPP	3/4" NPT	5	0.63 (16.0)
FNL-026025	1/8" BSPP	1/8" BSPP	1	0.55 (14.0)
FNL-046045	1/4" BSPP	1/4" BSPP	2	0.67 (17.1)
FNL-066065	3/8" BSPP	3/8" BSPP	3	0.67 (17.1)
FNL-086085	1/2" BSPP	1/2" BSPP	4	0.76 (19.4)
FNL-126125	3/4" BSPP	3/4" BSPP	5	0.63 (16.0)
<b>BSPT (per ISO 7 or BS 21)</b>				
FNL-026T025	1/8" BSPT	1/8" BSPP	1	0.55 (14.0)
FNL-046T045	1/4" BSPT	1/4" BSPP	2	0.67 (17.1)
FNL-066T065	3/8" BSPT	3/8" BSPP	3	0.67 (17.1)
FNL-086T085	1/2" BSPT	1/2" BSPP	4	0.76 (19.4)
FNL-126T125	3/4" BSPT	3/4" BSPP	5	0.63 (16.0)

Substitute "V" or "P" for actuation options:

Thumb Valve = FNV-082085

Automated Pneumatic = FNP-082085

**Note:**

Connectors can be quickly adapted to lever, pneumatic or thumb valve actuation for all FN models.

FXL and FXV are also interchangeable. (FXP is excluded).

# FasMate® - FX SERIES

## Connectors for External (Male) Threads

 - Connects to Internal Threads  - Connects to External Threads



Part Number	Connection Profile	Term Profile	Body Size
<b>NPT (per SAE J476 or ANSI B1.20)</b>			
FXL-021041	1/8" NPT	1/4" NPT	1
FXL-041041	1/4" NPT	1/4" NPT	1
FXL-061061	3/8" NPT	3/8" NPT	2
FXL-081061	1/2" NPT	3/8" NPT	2
<b>SAE 37° Flare (per SAE J514 or ISO 12151-5)</b>			
FXL-049041	-4 (7/16-20)	1/4" NPT	1
FXL-059041	-5 (1/2-20)	1/4" NPT	1
FXL-069041	-6 (9/16-18)	1/4" NPT	1
FXL-089061	-8 (3/4-16)	3/8" NPT	2
<b>SAE 45° Flare (per SAE J512 or J513)</b>			
FXL-04A041	-4 (7/16-20)	1/4" NPT	1
FXL-05A041	-5 (1/2-20)	1/4" NPT	1
FXL-06A061	-6 (5/8-18)	3/8" NPT	2
FXL-08A061	-8 (3/4-16)	3/8" NPT	2
<b>SAE O-Ring Face Seal (per SAE J1453)</b>			
FXL-009041	-4 (9/16-18)	1/4" NPT	1
FXL-011061	-6 (11/16-16)	3/8" NPT	2
FXL-013061	-8 (13/16-16)	3/8" NPT	2
<b>BSPP (per ISO 228 or BS 2279)</b>			
FXL-025041	1/8" BSPP	1/4" NPT	1
FXL-045041	1/4" BSPP	1/4" NPT	1
FXL-065061	3/8" BSPP	3/8" NPT	2
FXL-085061	1/2" BSPP	3/8" NPT	2
<b>BSPT (per ISO 7 or BS 21)</b>			
FXL-025T041	1/8" BSPT	1/4" NPT	1
FXL-045T041	1/4" BSPT	1/4" NPT	1
FXL-065T061	3/8" BSPT	3/8" NPT	2
FXL-085T061	1/2" BSPT	3/8" NPT	2
<b>NPT, For Thin Walled Pipe</b>			
FXL-061061PT	3/8" NPT	3/8" NPT	2
FXL-081061PT	1/2" NPT	3/8" NPT	2
<b>NPSM (per ASME B1.20.1)</b>			
FXL-04P041	1/4" NPSM	1/4" NPT	1

Substitute "V" or "P" for actuation options:

Thumb Valve = FX**V**-05A041

Automated Pneumatic = FX**P**-05A041

### Actuation Options

#### Lever



#### Thumb Valve



#### Automated Pneumatic



### Specifications, Parts and Accessories

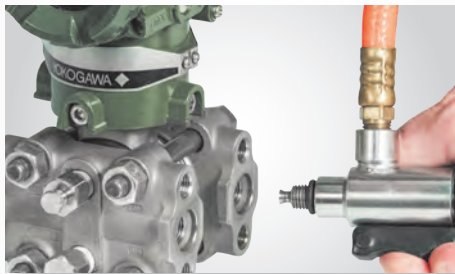
For complete dimensions, seals, repair kits and accessories visit [www.fastestinc.com](http://www.fastestinc.com) and enter part number into part number search field.

For ordering information or technical support contact **FasTest** or your local distributor.

**FasMate® Quick Connectors  
Industry Applications:**



Manifolds, Engine Blocks,  
Transmissions, Brake and Steering  
Systems Testing



Transmitters, Valves, Gauges  
and Instrumentation Calibration



Pressure Vessels, Pipes, Plumbing,  
Irrigation and Spray Systems Filling  
or Testing

# Fastest®

**Headquarters in USA**

1646 Terrace Drive • Roseville, MN 55113-1317

Phone: +1.651.645.6266

Fax: +1.651.645.7390

www.fastestinc.com

**Asia Office in Hong Kong**

+852.2886.1650 • asia@fastestinc.com

**Notifications and Copyright**

Specifications in this brochure are subject to change without notice. FasTest also reserves the right to make modifications and makes no guarantee of the accuracy of the information contained herein.

FasTest is a registered trademark with the US Patent & Trademark Office.

© 2013 FasTest Inc. All rights reserved.

No part of this publication may be reproduced without written permission.

**Patents**

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.





## 株式会社 大手技研

<http://www.ohtegiken.co.jp> [main.sales@ohtegiken.co.jp](mailto:main.sales@ohtegiken.co.jp)

本 社:茨城県つくば市千現 2-9-1  
TEL: 029-855-8778 FAX: 029-855-8700

関西営業所:兵庫県明石市松の内 2-1-8 6 階  
TEL: 078-926-1178 FAX: 078-926-1180

テクノロジーセンター:茨城県かすみがうら市中台 258-1  
TEL: 029-840-9111 FAX: 029-840-9100