





# 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. Made in the USA

## FasMate - Instant Threaded Connections

#### **FNL** Internal Connector

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**

**Pilot Port Profile** 

Technical Specifications		
Housing Material	Stainless steel and anodized aluminum	
Seal Material	Buna-N	
Connection Profile	Mates with BSPP, BSPT, Metric, SAE and NPT threads	
Termination Profile	BSPP or NPT female thread port	
Operating Pressure	Vacuum to 5000 psi (Body sizes 1 to 4) Vacuum to 3500 psi (Body size 5) Vacuum to 750 psi (Thin walled pipe models)	
Operating Temp.	-40°F to +250°F (-40°C to +121°C)	
Maximum Side Load Rating for FN Series	12.5 - 75 in-lbs (1.4 - 8.4 Nm)	
For FNV/FNP and FXV/FXP only:		
Pilot Pressure	65 - 120 psi (4.5 to 8 bar)	

1/8" female NPT



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.



Squeeze lever to collapse the threaded collets



2 Insert into threaded port



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	Connection	Term	Body	Min. Insert	
Number	Profile	Profile	Size	Length (mm)	
NPT (per SA	NPT (per SAE J476 or ANSI B1.20)				
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)	
ISO O-Ring I	<b>Metric</b> (per ISC	6149 or SA	E J2244	!)	
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</b> (per SAE J1926 or ISO 11926)					
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)	
BSPP (per ISC	228 or BS 2779)				
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)	
BSPT (per ISC	7 or BS 21)				
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).



#### 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.

#### 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® - Reduced Thread Connectors

## Instant Leak Tight Connection to Internal Threads with Squeeze Lever, Push Button or Pneumatic Actuation







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

Features	Benefits
Minimized thread and insertion length	Instant connections to small or difficult to seal parts, improves productivity
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 prevents 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**

Housing Material	Stainless steel and anodized aluminum
Seal Material	Buna-N
Connection Profile	Mates with NPT, SAE O-Ring Boss, Metric and BSPP
Termination Profile	NPT or BSPP female thread port
Operating Pressure	Vacuum to 2500 psi (172 bar)
Operating Temperature	-40°F to +250°F (-40°C to +121°C)
Maximum Side Load Rating	9.38 - 28.13 in-lbs. (1.06 - 3.18 Nm)

#### For FNVR/FNPR only:

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

#### **Specifications, Parts and Accessories**

For complete dimensions, seals, repair kits and accessories, visit www.fastestinc.com and enter part number into search field.

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

## FasMate Connectors for Internal (Female) Threads

Part Number	Connection Profile	Termination Profile	Body Size	Min. Insert Length †	Main Seals Package <sup>††</sup>
NPT: Per SAE J4	176a, ANSI B1.	.20			
FNLR-022021	1/8" NPT	1/8" NPT	1	0.30 (7.6)	S1108-B70
FNLR-022025	1/8" NPT	1/8" BSPP	1	0.30 (7.6)	S1108-B70
FNLR-042041	1/4" NPT	1/4" NPT	2	0.39 (9.9)	S21250327-B60
FNLR-042045	1/4" NPT	1/4" BSPP	2	0.39 (9.9)	S21250327-B60
FNLR-062061	3/8" NPT	3/8" NPT	3	0.47 (11.9)	S1112-B70
FNLR-062065	3/8" NPT	1/4" BSPP	3	0.47 (11.9)	S1112-B70
SAE O-Ring Bos	s: Per SAE J	1926, ISO 119	26		
FNLR-034021	-3 (3/8-24)	1/8" NPT	1	0.34 (8.6)	S1108-B70
FNLR-034025	-3 (3/8-24)	1/8" BSPP	1	0.34 (8.6)	S1108-B70
FNLR-044K021	-4 (7/16-24)	1/8" NPT	1	0.37 (9.4)	S1109-B70
FNLR-044K025	-4 (7/16-24)	1/8" BSPP	1	0.37 (9.4)	S1109-B70
FNLR-044021	-4 (7/16-20)	1/8" NPT	1	0.34 (8.6)	S1109-B70
FNLR-044025	-4 (7/16-20)	1/8" BSPP	1	0.34 (8.6)	S1109-B70
FNLR-054041	-5 (1/2-20)	1/4" NPT	2	0.39 (9.9)	S21250327-B60
FNLR-054045	-5 (1/2-20)	1/4" BSPP	2	0.39 (9.9)	S21250327-B60
FNLR-064041	-6 (9/16-18)	1/4" NPT	3	0.41 (10.4)	S1111-B70
FNLR-064045	-6 (9/16-18)	1/4" BSPP	3	0.41 (10.4)	S1111-B70
Metric (aka M, IS	O O-Ring Bos	ss): Per SAE	J2244, I	SO 6149, DIN	l 3852 Part 1
FNLR-108021	M10 × 1.0	1/8" NPT	1	0.27 (6.9)	S1108-B70
FNLR-108025	M10 × 1.0	1/8" BSPP	1	0.27 (6.9)	S1108-B70
FNLR-108D021	M10 × 1.25	1/8" NPT	1	0.32 (8.1)	S1108-B70
FNLR-108D025	M10 × 1.25	1/8" BSPP	1	0.32 (8.1)	S1108-B70
FNLR-108E021	M10 × 1.5	1/8" NPT	1	0.34 (8.6)	S1108-B70
FNLR-108E025	M10 × 1.5	1/8" BSPP	1	0.34 (8.6)	S1108-B70
FNLR-128C041	M12 × 1.0	1/4" NPT	2	0.38 (9.7)	S21250327-B60
FNLR-128C045	M12 × 1.0	1/4" BSPP	2	0.38 (9.7)	S21250327-B60
FNLR-128D041	M12 × 1.25	1/4" NPT	2	0.38 (9.7)	S1203-B60
FNLR-128D045	M12 × 1.25	1/4" BSPP	2	0.38 (9.7)	S1203-B60
FNLR-128041	M12 × 1.5	1/4" NPT	2	0.40 (10.2)	S1203-B60
FNLR-128045	M12 × 1.5	1/4" BSPP	2	0.40 (10.2)	S1203-B60
FNLR-148041	M14 × 1.5	1/4" NPT	2	0.43 (10.9)	S1203-B60
FNLR-148045	M14 × 1.5	1/4" BSPP	2	0.43 (10.9)	S1203-B60
FNLR-168061	M16 × 1.5	3/8" NPT	3	0.43 (10.9)	S21200445-B70
FNLR-168065	M16 × 1.5	3/8" BSPP	3	0.43 (10.9)	S21200445-B70
BSPP (aka G): F	Per ISO 228, B	S 2779, DIN 3	852 Par	t 2 Type A and	I B
FNLR-026021	1/8" BSPP	1/8" NPT	1	0.27 (6.9)	S1108-B70
FNLR-026025	1/8" BSPP	1/8" BSPP	1	0.27 (6.9)	S1108-B70
FNLR-046041	1/4" BSPP	1/4" NPT	2	0.39 (9.9)	S21250327-B60
FNLR-046045	1/4" BSPP	1/4" BSPP	2	0.39 (9.9)	S21250327-B60

Substitute "V" or "P" for actuation options: Thumb Valve = FNVR-022021 Automated Pneumatic = FNPR-022021

- † Dimensions in inches (mm).
- \*\* Seals packaged in quantities of 5.



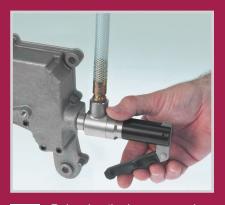
The *FasMate FN Series* for shallow threads instantly seals threaded ports from vacuum up to 2500 psi (172 bar). The patented proprietary design makes sealing threaded ports as easy as 1, 2, 3.



Squeeze lever to collapse the threaded collets



Insert into threaded port



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

## FasMate - Instant Threaded Connections

#### **FXL** External Connector

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**

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

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

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



The **FasMate FX 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.



Squeeze lever to collapse the threaded collets



Insert into threaded port



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

## FasMate® - FX SERIES

#### **Connectors for External (Male) Threads**



- Connects to Internal Threads



- Connects to External Threads

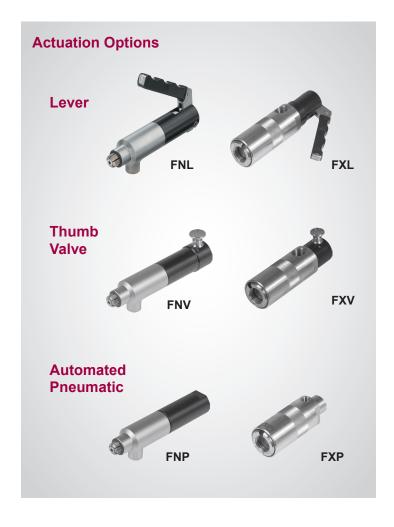


Part Number	Connection Profile	Term Profile	Body Size
NDT (non CAE I			Size
NPT (per SAE J4 FXL-021041	1/8" NPT	1/4" NPT	1
FXL-021041 FXL-041041	1/4" NPT	1/4" NPT	1
FXL-041041 FXL-061061	3/8" NPT	3/8" NPT	
		3/8" NPT	2
FXL-081061	1/2" NPT		2
SAE 37° Flare (			4
FXL-049041 FXL-059041	-4 (7/16-20)	1/4" NPT	1
	-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
SAE 45° Flare (		-	
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			
SAE O-Ring Fac	ce Seal (per SAE	E J1453)	
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
BSPP (per ISO 2	228 or BS 2279)		
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
BSPT (per ISO 7	or BS 21)		
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
NPT, For Thin Walled Pipe			
FXL-061061PT	3/8" NPT	3/8" NPT	2
FXL-081061PT	1/2" NPT	3/8" NPT	2
NPSM (per ASME B1.20.1)			
FXL-04P041	1/4" NPSM	1/4" NPT	1

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

Thumb Valve = FXV-05A041

Automated Pneumatic = FXP-05A041



#### **Specifications, Parts and Accessories**

For complete dimensions, seals, repair kits and accessories visit 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



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#### **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.