Leak Test Connector Selection Guide







Introduction to FasTest

Leak Testing Today ...

Since 1985, *FasTest* advanced engineering creates connecting solutions that are easier, safer and more reliable while dramatically lowering your operating costs. With *FasTest*, you can expect increased operational throughput and a fast return on your investment.

Tens of thousands of satisfied customers have made the switch from their inadequate, unproductive leak test connectors to our engineered testing and filling solutions.

FasTest products are used by every major automotive manufacturer, top appliance companies, medical device manufacturers, aerospace, power generation, plus hundreds of other industries throughout the world.

Our complete selection of engineers products combined with extensive experience and expertise allows us to help you specify the right connector for your application. Small differences can diminish the suitability of a connector for your application. At *FasTest* we can modify standard products to fit your specific needs or engineer a total custom test system.



Cumbersome leak testing methods using jury-rigged adapters, fittings and test jigs is time-consuming, unreliable and may be unsafe to your workers.

FasTest connecting tools are available in many configurations - each precision engineered to perform specific pressure and vacuum test and built to fit your testing and process requirements.

FasTest offers extensive expertise to help you arrive at the optimum solution for your application and workflow. With over 50 patents and as the acknowledged expert in the field, chances are we've solved an application like yours, no matter how challenging.

Do as thousands of others have done. Make the switch from older inadequate or homemade jury-rigged adapters to *FasTest* engineered testing and filling solutions.

Seal Materials ...

Selecting the right seal material is critical to the reliability of the connector and the amount of maintenance required. *FasTest* manufactured seals exhibit superior wear resistance and maintain its sealing properties.

FasTest offers neoprene, urethane, Viton, EPDM, Buna-N, and FDA white neoprene. Our seals are manufactured via **FasTest** proprietary process which is why our seals are more durable, longer lasting and create a better leak tight connection.







































Web Tools Search Tips: Connectors, Replacement

Seals and Instructions, etc.

Pages B4, D16, F6, G3, K7-K8

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*See section pages for detailed selection guides



Technology Overview

The FasTest "FI" Internal and "FE" External connectors provide fast, leak free connections for pressure and vacuum testing, fluid filling and flushing. The connectors are air-actuated and are ideal for automation to accommodate high volume production testing. Capable of sealing conventional and nonstandard surfaces, connects to any tube or pipe, smooth or thread.

Compressed air activates the elastomeric seals. Uniform seal movement makes a virtually leak-proof connection, even over threaded, rough and oily surfaces. Testing, filling or flushing of the test piece is accomplished by introducing media through the *FasTest* connector.

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"FI" Connectors for Internal Tubes / Female Threads



"FE" Connectors for External Tubes / Male Threads

- Connects to Internal Tubes / Threads



Sealing Materials

FasTest offers many elastomer materials durometers for the FE and FI connectors that are readily available to satisfy a wide variety of testing conditions and seal life requirements. 40 durometer Neoprene is the recommended sealing material for general testing applications. Neoprene provides excellent seal life and sealability for low abrasion applications, has good compression set characteristics and a temperature range of -40° to 250°F. 60 durometer Urethane seals should be used for high abrasion (threads), high test pressure and high cycle duty applications. Urethane also has good resistance to petroleum oils. Additional elastomer formulations available for special temperature and test requirements are: Buna N, Fluorocarbon (Viton), EPDM and FDA White Neoprene.

Test Piece Surfaces

FE and FI connectors are designed to seal various types of surface conditions that may exist on the part or component to be tested. Test piece connection surfaces may be smooth, porous, out-of-round or threaded. In addition, the test connection end may be flared, beaded, swaged or have a formed end profile.



Test Fixture Requirements

FasTest strongly recommends the FE and FI Series pneumatic operated connector and test piece be secured during pressure testing with a mechanical grip or fixture. The FE and FI Series are sealing only connectors and possess limited gripping capabilities. For vacuum testing, it is not necessary to secure the test piece or connector.

Custom Test Connectors

Custom FE and FI connectors designed to a specific customer's requirements are available from FasTest to accommodate limited clearance, various profiles, surface conditions and other application requirements.

Please contact *FasTest* for additional assistance.



The FE or FI connector must be secured to the test piece with a mechanical or other device to assure the connector is not uncoupled from the test piece by the uncoupling force of the test itself. The securing or holding device may be a fixture, clamp, cylinder or other appropriate means that prevents ejection of the test piece from the connector.



Phone: (972) 931-8666



Features and Benefits - "FI Series"

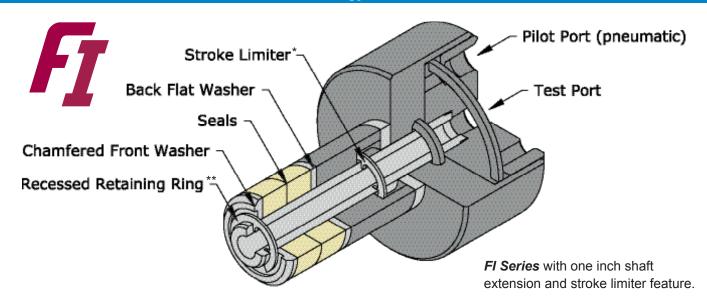
- Automated sealing inside holes and ports 0.310" to 3.005". Up to 6.00" on request
- Automated sealing of threaded ports 1/8" to 2-1/2" NPT, including BSPP, BSPT, Metric and UNF straight threaded ports
- Vacuum to 120 psi
- Replaceable seals in a range of sizes and materials
- Neoprene and Urethane as standard seal material.
 Buna N, Fluorocarbon, EPDM and FDA White
 Neoprene available

- Adaptable for pick and place and delicate robotic material handling applications
- Delicate touch seals thin wall material and will not scratch or mar test piece
- Expert help can evaluate and adapt to your special requirements
- · Extended shaft configurations available

Note:

Connectors with extended shafts are designed for sealing remote ports or for applications requiring connectors to be offset rather than side-by-side mounted which may be required when multiple test ports have close center to center distances. The extended shaft increases the distance of the seal from the connector body. 1" and 2" extended shafts are common sizes. The shaft is one piece and must be factory installed. Other size extensions are available per request.

The Technology - "FI Series"



How to Operate:

- Step 1 Insert connector into test piece and secure test piece and connector.
- Step 2 Introduce pilot pressure to active seal.

 Generally, 60 to 90 psi pneumatic pilot pressure.

 Use of minimum required pilot pressure will prolong seal life.
- Step 3 Introduce test pressure:

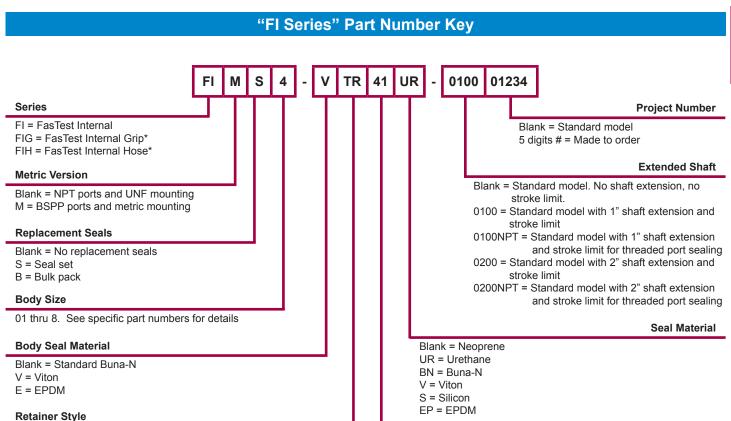
 Maximum rated test pressure for FI Series models is 120 psi.
- * Stroke limit standard feature with 1" and 2" shaft extension option.
- ** Recessed retaining ring standard feature for FI01 thru FI4's.



For threaded retaining nut option consult factory

- Connects to Internal Tubes / Threads





retainer Otyle

Blank = Spring retainer TR = Threaded retainer

Sealing Range

Phone: (972) 931-8666

Blank = Connector without seal set 0.310" to 3.005". See specific part numbers for details

Notes:

Part Number Keys are to assist in IDENTIFICATION ONLY. Verify new part numbers with factory; some configurations are not possible.

* FIG and FIH - Contact factory for sizing and application assistance.

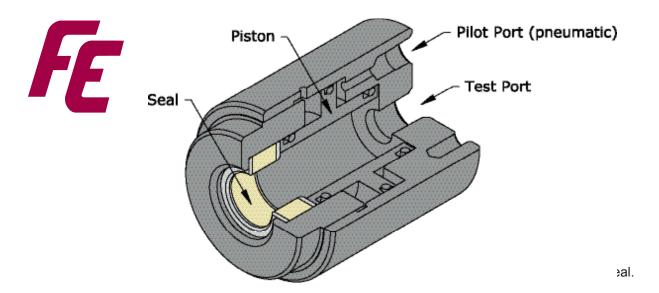


Features and Benefits - "FE Series"

- Automated sealing over tubes and pipes 0.030" to 5.040"
- Automated sealing over threads 1/8" to 2-1/2" NPT including BSPP, BSPT, Metric and UNF straight threads
- Vacuum to 500 psi
- Replaceable seals in a range of sizes and materials
- Neoprene and Urethane as standard seal material.
 Buna N, Fluorocarbon, EPDM and FDA White
 Neoprene available

- Adaptable for pick and place and delicate robotic material handling applications
- Delicate touch seals thin wall material and will not scratch or mar test piece
- Off-the-shelf sealing solutions
- Expert help can evaluate and adapt to your special requirements

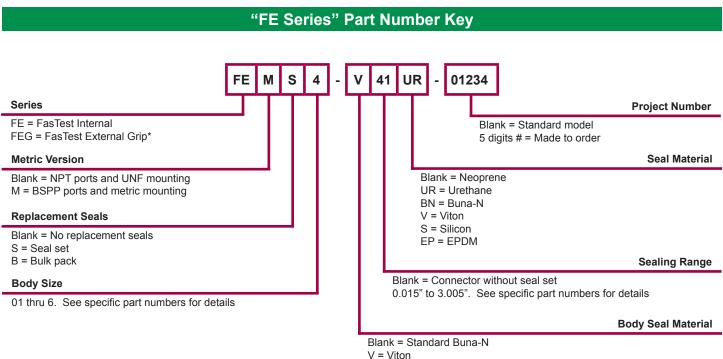
The Technology - "FE Series"



How to Operate:

- **Step 1** Insert test piece into connector and secure test piece and connector.
- Step 2 Introduce pilot pressure to active seal. Generally, 60 to 90 psi pneumatic pilot pressure for smooth tube applications. 90 to 120 psi for rough case and out-of-round parts.
 300 to 600 psi for threaded applications.
 Use of minimum required pilot pressure will prolong seal life.
- Step 3 Introduce test pressure: Maximum rated test pressure for FE Series models is 500 psi.

- Connects to Internal Tubes / Threads "FI" and "FE" - Automated Tube and Thread Connectors



E = EPDM

Notes:

Part Number Keys are to assist in IDENTIFICATION ONLY.

Verify new part numbers with factory; some configurations are not possible.

* FEG - Contact factory for sizing and application assistance.



Pilot Booster for Multiple FE Series Connector Applications



Pilot Booster with Accessory Kit PBA-02

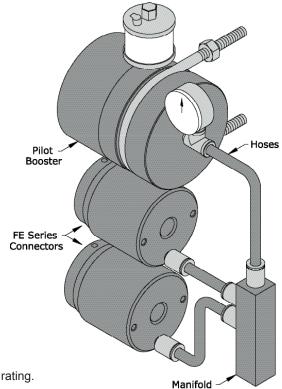
The PB-1015 Pilot Pressure Booster is a pressure intensifier designed to provide the 400 - 600 psi hydraulic pressure for sealing external threads and irregular surfaces with the FE Series Connectors. A sealing system consisting of an FE Connector, urethane main seal and PB-1015 Pressure Booster can produce the seal movement and long life performance needed in production testing applications.

Urethane sealing material is superior to neoprene material in high pressure, high abrasion and high cycle applications. The increased elastomer movement required for sealing irregular shapes or into threads requires urethane seal material. Up to 600 psi pilot pressure is needed to seal deep root external threads. Production testing of threads and hard to seal surfaces can now be automated using the Pilot Pressure Booster and a proper sized urethane seal set in a FE Series Connector.

DO NOT use the booster with the FI Series connectors due to lower pressure rating.

• Uses 30 - 65 psi regulated compressed air to produce up to 600 psi hydraulic pressure

- Simple in-line installation with standard FE Series Connectors
- · Safe air over oil pressure intensifier with limited displacement
- Multiple FE Series connector capacity
- Compact, lightweight design 4-1/2" x 4-1/4" body size weighs less than 5 pounds



Pilot Booster, Accessories and Technical Data

Part Number	Description
PB-1015	Pilot Pressure Booster
PBH32	1 quart hydraulic oil, 60 SSU petroleum based
A02M3	Manifold - 1/8" NPT inlet with three 1/8" NPT outlets
A02M4	Manifold - 1/8" NPT inlet with four 1/8" NPT outlets
A02M5	Manifold - 1/8" NPT inlet with five 1/8" NPT outlets
AT021R	Run Tee - 1/8" NPT
H012X036	Hose - 10-32 male x 1/8" NPT male - 36" length
H012X072	Hose - 10-32 male x 1/8" NPT male - 72" length
H022X018	Hose - 1/8" NPT male x 1/8" NPT male - 18" length
H022X036	Hose - 1/8" NPT male x 1/8" NPT male - 36" length
H022X072	Hose - 1/8" NPT male x 1/8" NPT male - 72" length
PBA-01	Accessory Kit for FE01 Connectors 1 qt. oil, 0-600 psi gauge, run tee, 10-32 male x 1/8" NPT male - 72" hose
PBA-02	Accessory Kit for FE1-FE6 Connectors 1 qt. oil, 0-600 psi gauge, run tee, 1/8" NPT male x 1/8" NPT male - 72" hose

Booster Guidelines

FE01 - 8 Connectors

FE1 - 4 Connectors

FE2 - 2 Connectors

FE3 - 1 Connector

FE4 - 1 Connector

Booster Technical Data

Seals: Nitrile

Material: Alum

Material: Aluminum

Inlet Pressure: 65 psi max.

Outlet Pressure: 600 psi max.

Pressure Ratio: 9.2 to 1

Displacement: 1.5 in.3

Inlet Port: 1/4" NPT

A10 Wilson Company

16301 Addison Road, Addison, TX 75001

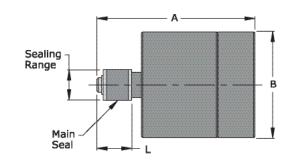
Phone: (972) 931-8666

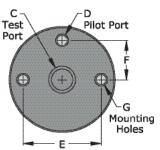
www.wilson-company.com



FasTest Internal "FI" - Connectors for Internal Tubes and Bores







Internal (FI) Connectors for Smooth Tubes - Neoprene Seals**

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Flow Dia.	Repair Kit	Main Seal Set*	Main Seals Package (5)
FI01-0300	0.310"-0.330"	1.98"	1.25"	10.22	" I INIE	0.80"	0.40"	10-32"	0.48"	0.06"	FIR01	FIS01-0300	FIB01-0300
FI01-01	0.330"-0.394"	1.90	1.25	10-32" UNF		0.80	0.40	UNF	0.40	0.00	FIKUI	FIS01-01	FIB01-01
FI1-11	0.394"-0.472"							444.000				FIS1-11	FIB1-11
FI1-12	0.472"-0.551"	2.44"	1.57"	1/8" NPT		1.02"	0.51"	1/4-28" UNF	0.62"	0.13"	FIR1	FIS1-12	FIB1-12
FI1-13	0.551"-0.630"											FIS1-13	FIB1-13
FI2-21	0.630"-0.709"											FIS2-21	FIB2-21
FI2-22	0.709"-0.787"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.62"	0.17"	FIR1	FIS2-22	FIB2-22
FI2-23	0.787"-0.866"											FIS2-23	FIB2-23
FI3-31	0.866"-0.945"											FIS3-31	FIB3-31
FI3-32	0.945"-1.024"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	1/4-28" UNF	1.10"	0.21"	FIR3	FIS3-32	FIB3-32
FI3-33	1.024"-1.102"											FIS3-33	FIB3-33
FI4-41	1.102"-1.181"											FIS4-41	FIB4-41
FI4-42	1.181"-1.260"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	, 1/4-28" UNF	1.10"	0.28"	FIR3	FIS4-42	FIB4-42
FI4-43	1.260"-1.339"											FIS4-43	FIB4-43
FI5-51	1.339"-1.457"											FIS5-51	FIB5-51
FI5-52	1.457"-1.575"	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	1.62"	0.56"	FIR6	FIS5-52	FIB5-52
FI5-53	1.575"-1.693"											FIS5-53	FIB5-53
FI6-61	1.693"-1.850"											FIS6-61	FIB6-61
FI6-62	1.850"-2.008"	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	1.62"	0.72"	FIR6	FIS6-62	FIB6-62
FI6-63	2.008"-2.165"											FIS6-63	FIB6-63
FI7-71	2.165"-2.305"			0.4411	4 (0)							FIS7-71	FIB7-71
FI7-72	2.305"-2.445"	3.36"	4.20"	3/4" NPT	1/8" NPT	3.00"	1.50"	1/4-28" UNF	1.67"	0.92"	FIR7	FIS7-72	FIB7-72
FI7-73	2.445"-2.585"											FIS7-73	FIB7-73
FI8-81	2.585"-2.725"											FIS8-81	FIB8-81
FI8-82	2.725"-2.865"	3.36"	4.20"	3/4" NPT	1/8" NPT	3.00"	1.50"	1/4-28" UNF	1.67"	0.92"	FIR7	FIS8-82	FIB8-82
FI8-83	2.865"-3.005"				'`' '			0141				FIS8-83	FIB8-83

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FI1-12 $\underline{\mathsf{UR}}$ = Urethane FI1-12 $\underline{\mathsf{V}}$ = FKM (Viton)

FI1-12BN = Buna N

Phone: (972) 931-8666

FI1-12EP = EPDM

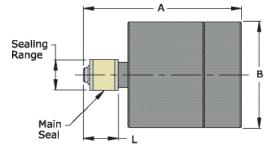
^{**}Optional seal materials are Urethane, FKM (Viton), Buna N and EPDM.

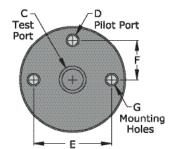
FasTest*

"FI" and "FE" - Automated Tube and Thread Connectors

FasTest Internal "FI" - Connectors for Internal Tubes and Bores







Internal (FI) Connectors for Smooth Tubes - Urethane Seals**

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Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Flow Dia.	Repair Kit	Main Seal Set*	Main Seals Package (5)
0.310"-0.330"	1 00"	1 25"	10.22	" I INIE	0.90"	0.40"	10-32"	0.40"	0.06"	FIB04	FIS01-0300UR	FIB01-0300UR
0.330"-0.394"	1.90	1.25	10-32	UNF	0.60	0.40	UNF	0.46	0.06	FIRUI	FIS01-01UR	FIB01-01UR
0.394"-0.472"											FIS1-11UR	FIB1-11UR
0.472"-0.551"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"		0.62"	0.13"	FIR1	FIS1-12UR	FIB1-12UR
0.551"-0.630"											FIS1-13UR	FIB1-13UR
0.630"-0.709"											FIS2-21UR	FIB2-21UR
0.709"-0.787"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"		0.62"	0.17"	FIR1	FIS2-22UR	FIB2-22UR
0.787"-0.866"							0,				FIS2-23UR	FIB2-23UR
0.866"-0.945"											FIS3-31UR	FIB3-31UR
0.945"-1.024"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"		1.10"	0.21"	FIR3	FIS3-32UR	FIB3-32UR
1.024"-1.102"							0,				FIS3-33UR	FIB3-33UR
1.102"-1.181"											FIS4-41UR	FIB4-41UR
1.181"-1.260"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	" 1/4-28" UNF	1.10"	0.28"	FIR3	FIS4-42UR	FIB4-42UR
1.260"-1.339"											FIS4-43UR	FIB4-43UR
1.339"-1.457"											FIS5-51UR	FIB5-51UR
1.457"-1.575"	3.68"	3.49"			2.31"	1.16"	-	1.62"	0.56"	FIR6	FIS5-52UR	FIB5-52UR
1.575"-1.693"				' ' '			0,				FIS5-53UR	FIB5-53UR
1.693"-1.850"											FIS6-61UR	FIB6-61UR
1.850"-2.008"	3.68"	3.49"			2.31"	1.16"		1.62"	0.72"	FIR6	FIS6-62UR	FIB6-62UR
2.008"-2.165"				' ' '			0				FIS6-63UR	FIB6-63UR
2.165"-2.305"											FIS7-71UR	FIB7-71UR
2.305"-2.445"	3.36"	4.20"			3.00"	1.50"		1.67"	0.92"	FIR7	FIS7-72UR	FIB7-72UR
2.445"-2.585"							0				FIS7-73UR	FIB7-73UR
2.585"-2.725"											FIS8-81UR	FIB8-81UR
2.725"-2.865"	3.36"	4.20"			3.00"	1.50"		1.67"	0.92"	FIR7	FIS8-82UR	FIB8-82UR
2.865"-3.005"					0.00		UNF				FIS8-83UR	FIB8-83UR
	Sealing Range 0.310"-0.330" 0.330"-0.394" 0.394"-0.472" 0.472"-0.551" 0.551"-0.630" 0.630"-0.709" 0.709"-0.787" 0.787"-0.866" 0.866"-0.945" 1.024"-1.102" 1.102"-1.181" 1.181"-1.260" 1.260"-1.339" 1.339"-1.457" 1.457"-1.575" 1.575"-1.693" 1.693"-1.850" 2.165"-2.305" 2.305"-2.445" 2.445"-2.585" 2.725"-2.865"	Sealing Range Dim A 0.310"-0.330" 1.98" 0.330"-0.394" 2.44" 0.394"-0.472" 2.44" 0.551"-0.630" 2.44" 0.551"-0.630" 2.44" 0.709"-0.787" 2.44" 0.787"-0.866" 2.61" 0.945"-1.024" 2.61" 1.024"-1.102" 2.61" 1.102"-1.181" 2.61" 1.260"-1.339" 2.61" 1.339"-1.457" 3.68" 1.575"-1.693" 3.68" 1.693"-1.850" 3.68" 2.008"-2.165" 2.165"-2.305" 2.305"-2.445" 3.36" 2.585"-2.725" 2.725"-2.865"	Sealing Range Dim A Dim B 0.310"-0.330" 1.98" 1.25" 0.330"-0.394" 2.44" 1.57" 0.394"-0.472" 2.44" 1.57" 0.551"-0.630" 2.44" 1.57" 0.709"-0.787" 2.44" 1.57" 0.787"-0.866" 2.61" 2.36" 0.945"-1.024" 2.61" 2.36" 1.024"-1.102" 2.61" 2.36" 1.260"-1.339" 2.61" 2.36" 1.260"-1.339" 3.68" 3.49" 1.575"-1.693" 3.68" 3.49" 1.693"-1.850" 3.68" 3.49" 2.008"-2.165" 3.36" 4.20" 2.445"-2.585" 2.585"-2.725" 2.725"-2.865"	Sealing Range Dim A Dim B Dim C 0.310"-0.330" 1.98" 1.25" 10-32 0.330"-0.394" 2.44" 1.57" 1/8" 0.394"-0.472" 2.44" 1.57" 1/8" 0.551"-0.630" 2.44" 1.57" 1/8" 0.709"-0.787" 2.44" 1.57" 1/8" 0.787"-0.866" 2.44" 1.57" 1/8" 0.945"-1.024" 2.61" 2.36" 1/8" 1.024"-1.102" 2.61" 2.36" 1/8" 1.260"-1.339" 2.61" 2.36" 1/8" 1.260"-1.339" 3.68" 3.49" 1/2" 1.457"-1.575" 3.68" 3.49" 1/2" 1.850"-2.008" 3.68" 3.49" 1/2" 2.165"-2.305" 3.36" 4.20" 3/4" 2.445"-2.585" 2.585"-2.725" 3.36" 4.20" 3/4" 2.725"-2.865" 3.36" 4.20" 3/4"	Sealing Range Dim A Dim B Dim C Dim D 0.310"-0.330" 1.98" 1.25" 10-32" UNF 0.330"-0.394" 2.44" 1.57" 1/8" NPT 0.472"-0.551" 2.44" 1.57" 1/8" NPT 0.551"-0.630" 2.44" 1.57" 1/8" NPT 0.709"-0.787" 2.44" 1.57" 1/8" NPT 0.787"-0.866" 2.61" 2.36" 1/8" NPT 0.945"-1.024" 2.61" 2.36" 1/8" NPT 1.024"-1.102" 2.61" 2.36" 1/8" NPT 1.260"-1.339" 2.61" 2.36" 1/8" NPT 1.457"-1.575" 3.68" 3.49" 1/2" NPT 1/8" NPT 1.693"-1.850" 3.68" 3.49" 1/2" NPT 1/8" NPT 2.165"-2.305" 3.36" 4.20" 3/4" NPT 1/8" NPT 2.445"-2.585" 2.585"-2.725" 3.36" 4.20" NPT NPT	Sealing Range Dim A Dim B Dim C Dim Dim Dim E Dim E 0.310"-0.330" 1.98" 1.25" 10-32" UNF 0.80" 0.394"-0.472" 2.44" 1.57" 1/8" NPT 1.02" 0.551"-0.630" 2.44" 1.57" 1/8" NPT 1.02" 0.709"-0.787" 2.44" 1.57" 1/8" NPT 1.02" 0.787"-0.866" 2.661" 2.36" 1/8" NPT 1.60" 1.024"-1.102" 2.61" 2.36" 1/8" NPT 1.60" 1.102"-1.181" 2.61" 2.36" 1/8" NPT 1.60" 1.260"-1.339" 3.68" 3.49" 1/2" NPT 1/8" NPT 2.31" 1.693"-1.650" 3.68" 3.49" 1/2" NPT 1/8" NPT 2.31" 2.305"-2.445" 3.36" 4.20" 3/4" NPT 1/8" NPT 3.00" 2.585"-2.725" 2.725"-2.865" 3.36" 4.20" 3/4" NPT 1/8" NPT 3.00"	Sealing Range Dim A Dim B Dim C Dim D Dim E Dim F 0.310"-0.330" 0.330"-0.394" 1.98" 1.25" 10-32" UNF 0.80" 0.40" 0.394"-0.472" 0.472"-0.551" 2.44" 1.57" 1/8" NPT 1.02" 0.51" 0.551"-0.630" 0.630"-0.709" 0.709"-0.787" 0.787"-0.866" 2.44" 1.57" 1/8" NPT 1.02" 0.51" 0.866"-0.945" 0.945"-1.024" 1.024"-1.102" 2.61" 2.36" 1/8" NPT 1.60" 0.80" 1.102"-1.181" 1.457"-1.575" 1.575"-1.693" 1.575"-1.693" 1.575"-1.693" 1.575"-1.693" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.305" 2.165"-2.2865" 3.49" 1/2" NPT 1/8" NPT 2.31" 1.16" 1.16"	Sealing Range	Sealing Range	Sealing Range A	Sealing Range	Sealing Range

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FI2-21 = Neoprene

FI2-21<u>∨</u> = FKM (Viton)

FI2-21BN = Buna N

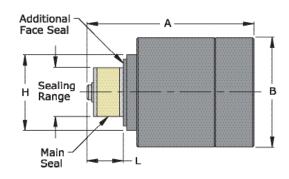
FI2-21EP = EPDM

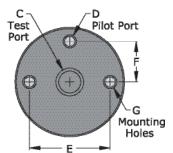
^{**}Optional seal materials are Neoprene, FKM (Viton), Buna N and EPDM.



FasTest Internal "FI" - Connectors for Internal Threads







Internal (FI) Connectors for NPT, BSPP and BSPT Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim H	Dim L	Flow Dia.	Repair Kit	Main Seal Set*	Main Seals Package (5)
FI01-1/8NPT	1/8"	1.98"	1.25"	10-32	" UNF	0.80"	0.40"	10-32" UNF	0.62"	0.48"	0.06"	FIR01	FIS01-1/8NPT	FIB01-1/8NPT
FI1-1/4NPT	1/4"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.76"	0.57"	0.13"	FIR1	FIS1-1/4NPT	FIB1-1/4NPT
FI2-3/8NPT	3/8"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.88"	0.57"	0.17"	FIR1	FIS2-3/8NPT	FIB2-3/8NPT
FI2-1/2NPT	1/2"	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	1.07"	0.57"	0.17"	FIR1	FIS2-1/2NPT	FIB2-1/2NPT
FI3-3/4NPT	3/4"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	1/4-28" UNF	1.26"	0.71"	0.21"	FIR3	FIS3-3/4NPT	FIB3-3/4NPT
FI4-1NPT	1"	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	1/4-28" UNF	1.57"	0.71"	0.28"	FIR3	FIS4-1NPT	FIB4-1NPT
FI5-1 1/4NPT	1-1/4"	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	1.88"	1.24"	0.56"	FIR6	FIS5-1 1/4NPT	FIB5-1 1/4NPT
FI6-1 1/2NPT	1-1/2"	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	2.13"	1.24"	0.72"	FIR6	FIS6-1 1/2NPT	FIB6-1 1/2NPT
FI7-2NPT	2"	3.36"	4.20"	3/4"	1/8"	2 00"	1.50"	1/4-28"	2.75"	1.33"	0.92"	FIR7	FIS7-2NPT	FIB7-2NPT
FI7-2 1/2NPT	2-1/2"	3.30	4.20	NPT	NPT	3.00"	1.50	UNF	2.70	1.33	0.92	FIK!	FIS7-2 1/2NPT	FIB7-2 1/2NPT

^{*}Includes seals(s) and metal parts for one complete seal change.

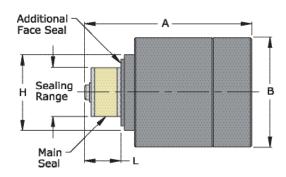
NPT per SAE J476a BSPP per ISO 228

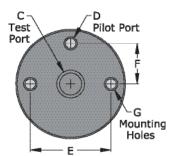
BSPT per ISO 7, JIS B8363 and B2351



FasTest Internal "FI" - Connectors for Internal Threads







Internal (FI) Connectors for SAE O-Ring Port Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim H	Dim L	Flow Dia.	Repair Kit	Main Seal Set*	Main Seals Package (5)
FI01-4SAE	-4 (7/16-20)	1.98"	1.25"	10-32	" UNF	0.80"	0.40"	10-32" UNF	0.62"	0.48"	0.06"	FIR01	FIS01-4SAE	FIB01-4SAE
FI1-5SAE	-5 (1/2-20)	2.44"	1 57"	1/0"	4 (0" NDT		0.51"	1/4-28"	0.76"	0.57"	0.42"	FID4	FIS1-5SAE	FIB1-5SAE
FI1-6SAE	-6 (9/16-18)	2.44	1.57"	1/6	1/8" NPT		0.51"	UNF	INF 0.76" 0.5		0.13"	FIR1	FIS1-6SAE	FIB1-6SAE
FI2-7SAE	-8 (3/4-16)	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.88"	0.57"	0.17"	FIR1	FIS2-7SAE	FIB2-7SAE
FI3-8SAE	-10 (7/8-14)	2.61"	2 26"	1/0"	NPT	1.60"	0.80" 1/4-28"	1/4-28"	" 1.26" C	0.71"	0.21"	FIR3	FIS3-8SAE	FIB3-8SAE
FI3-9SAE	-12 (1 1/16-12)	2.01	2.30	1/0	INFI	1.60	0.60	UNF	1.20	0.71	0.21	FIRS	FIS3-9SAE	FIB3-9SAE
FI4-10SAE	-14 (1 3/16-12)	2.61"	2 26"	1/0"	NPT	1.60"	0.90"	1/4-28"	1 57"	0.71"	0.20"	FIR3	FIS4-10SAE	FIB4-10SAE
FI4-11SAE	-16 (1 5/16-12)	2.01	2.30	1/0	INPI	1.60	0.60	UNF	1.57	0.71	0.20	LIKS	FIS4-11SAE	FIB4-11SAE
FI5-12SAE	-20 (1 5/8-12)	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	1.88"	1.24"	0.56"	FIR6	FIS5-12SAE	FIB5-12SAE
FI6-13SAE	-24 (1 7/8-12)	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	2.13"	1.24"	0.72"	FIR6	FIS6-13SAE	FIB6-13SAE
FI7-14SAE	-32 (2 1/2-12)	3.36"	4.20"	3/4" NPT	1/8" NPT	3.00"	1.50"	1/4-28" UNF	2.75"	1.33"	0.92"	FIR7	FIS7-14SAE	FIB7-14SAE

^{*}Includes seals(s) and metal parts for one complete seal change.

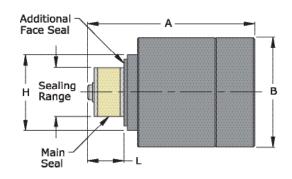
O-Ring Port per SAE J1926 or ISO 11926

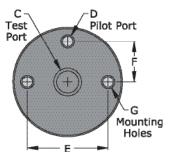




FasTest Internal "FI" - Connectors for Internal Threads







Internal (FI) Connectors for Metric ISO O-Ring Port Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim H	Dim L	Flow Dia.	Repair Kit	Main Seal Set*	Main Seals Package (5)
FI01-M10	M10 x 1.0	1.98"	1.25"	10-32	" UNF	0.80"	0.40"	10-32" UNF	0.62"	0.48"	0.06"	FIR01	FIS01-M10	FIB01-M10
FI1-M12	M12 x 1.5												FIS1-M12	FIB1-M12
FI1-M14	M14 x 1.5	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.76"	0.57"	0.13"	FIR1	FIS1-M14	FIB1-M14
FI1-M16	M16 x 1.5												FIS1-M16	FIB1-M16
FI2-M18	M18 x 1.5												FIS2-M18	FIB2-M18
FI2-M20	M20 x 1.5	2.44"	1.57"	1/8"	NPT	1.02"	0.51"	1/4-28" UNF	0.88"	0.57"	0.17"	FIR1	FIS2-M20	FIB2-M20
FI2-M22	M22 x 1.5												FIS2-M22	FIB2-M22
FI3-M24	M24 x 1.5												FIS3-M24	FIB3-M24
FI3-M26	M26 x 1.5	2.61"	2 26"	1/0"	NPT	1 60"	0.80"	1/4-28"	1 26"	0.71"	0.21"	FIR3	FIS3-M26	FIB3-M26
FI3-M27	M27 x 2	2.01	2.30	1/0	INPI	1.60	0.60	UNF	1.20	0.71	0.21	LIKS	FIS3-M27	FIB3-M27
FI3-M28	M28 x 1.5												FIS3-M28	FIB3-M28
FI4-M30	M30 x 1.5												FIS4-M30	FIB4-M30
FI4-M33	M33 x 2	2.61"	2.36"	1/8"	NPT	1.60"	0.80"	1/4-28" UNF	1.57"	0.71"	0.28"	FIR3	FIS4-M33	FIB4-M33
FI4-M36	M36 x 2												FIS4-M36	FIB4-M36
FI5-M42	M42 x 2	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	1.88"	1.24"	0.56"	FIR6	FIS5-M42	FIB5-M42
FI6-M48	M48 x 2	3.68"	3.49"	1/2" NPT	1/8" NPT	2.31"	1.16"	1/4-28" UNF	2.13"	1.24"	0.72"	FIR6	FIS6-M48	FIB6-M48
FI7-M60	M60 x 2	3.36"	4.20"	3/4" NPT	1/8" NPT	3.00"	1.50"	1/4-28" UNF	2.75"	1.33"	0.92"	FIR7	FIS7-M60	FIB7-M60

^{*}Includes seals(s) and metal parts for one complete seal change.

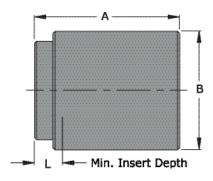
O-Ring Port per ISO 6149

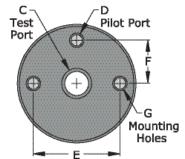
Metric Flat Face Port per DIN 3852 Part 1 (ISO 9974)



FasTest External "FE" - Connectors for External Tubes







External (FE) Connectors for Smooth Tubes - Neoprene Seals**

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
FE001-0050	0.030"-0.050"										FES001-0050	FEB001-0050
FE001-001	0.050"-0.080"	1.72"	0.84"	1/8" NPT	10-32" UNF	0.63"	N/A	4-40" UNC	0.16"	FER001	FES001-001	FEB001-001
FE001-002	0.080"-0.130"										FES001-002	FEB001-002
FE01-01	0.100"-0.180"										FES01-01	FEB01-01
FE01-02	0.180"-0.260"										FES01-02	FEB01-02
FE01-03	0.260"-0.340"	2.05"	1.49"	1/8" NPT	10-32" UNF	1.10"	0.55"	10-32" UNC	0.58"	FER01	FES01-03	FEB01-03
FE01-04	0.340"-0.420"										FES01-04	FEB01-04
FE01-05	0.420"-0.510"										FES01-05	FEB01-05
FE1-15	0.433"-0.512"										FES1-15	FEB1-15
FE1-16	0.512"-0.591"		2.22"	1/4" NPT	1/8" NPT	1.62"					FES1-16	FEB1-16
FE1-17	0.591"-0.669"	2.72"					0.81"	1/4-28" UNC	0.61"	FER1	FES1-17	FEB1-17
FE1-18	0.669"-0.750"										FES1-18	FEB1-18
FE1-19	0.750"-0.827"										FES1-19	FEB1-19
FE2-21	0.787"-0.866"										FES2-21	FEB2-21
FE2-22	0.866"-0.945"										FES2-22	FEB2-22
FE2-23	0.945"-1.024"										FES2-23	FEB2-23
FE2-24	1.024"-1.102"										FES2-24	FEB2-24
FE2-25	1.102"-1.181"	3.50"	3.11"	1/2" NPT	1/8" NPT	2.50"	1.25"	1/4-28" UNC	1.06"	FER2	FES2-25	FEB2-25
FE2-26	1.181"-1.260"										FES2-26	FEB2-26
FE2-27	1.260"-1.339"										FES2-27	FEB2-27
FE2-28	1.339"-1.417"										FES2-28	FEB2-28
FE2-29	1.417"-1.510"										FES2-29	FEB2-29
FE3-31	1.496"-1.614"										FES3-31	FEB3-31
FE3-32	1.614"-1.732"	4.48"	4 22"	, 1" NPT	1/8"	2 25"	1 62"	1/4-28"	1.64"	EED2	FES3-32	FEB3-32
FE3-33	1.732"-1.850"	4.48	4.23"		NPT S	3.25"	1.63"	UNC	1.04	FER3	FES3-33	FEB3-33
FE3-34	1.850"-1.969"	4.40									FES3-34	FEB3-34

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FE1-15<u>UR</u> = Urethane FE1-15<u>V</u> = FKM (Viton)

FE1-15BN = Buna N

FE1-15<u>EP</u> = EPDM

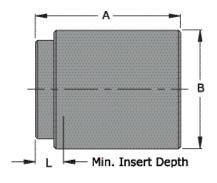
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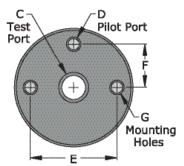
^{**}Optional seal materials are Urethane, FKM (Viton), Buna N and EPDM.



FasTest External "FE" - Connectors for External Tubes







External (FE) Connectors for Smooth Tubes - Neoprene Seals**

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
FE4-41	1.969"-2.087"										FES4-41	FEB4-41
FE4-42	2.087"-2.205"]									FES4-42	FEB4-42
FE4-43	2.205"-2.323"										FES4-43	FEB4-43
FE4-44	2.323"-2.441"										FES4-44	FEB4-44
FE4-45	2.441"-2.559"	4.60"	5.48"	1-1/2" NPT	1/8" NPT	4.25"	2.13"	1/4-28" UNC	1.64"	FER4	FES4-45	FEB4-45
FE4-46	2.559"-2.677"]			''' '						FES4-46	FEB4-46
FE4-47	2.677"-2.795"]									FES4-47	FEB4-47
FE4-48	2.795"-2.913"	1									FES4-48	FEB4-48
FE4-49	2.913"-3.032"	1									FES4-49	FEB4-49
FE5-51	2.970"-3.100"										FES5-51	FEB5-51
FE5-52	3.100"-3.230"										FES5-52	FEB5-52
FE5-53	3.230"-3.360"										FES5-53	FEB5-53
FE5-54	3.360"-3.490"			2" NPT							FES5-54	FEB5-54
FE5-55	3.490"-3.620"	4.60"	6.98"		1/8" NPT	5.50"	2.25"	3/8-24" UNC	1.64"	FER5	FES5-55	FEB5-55
FE5-56	3.620"-3.750"										FES5-56	FEB5-56
FE5-57	3.750"-3.880"	1									FES5-57	FEB5-57
FE5-58	3.880"-4.010"	1									FES5-58	FEB5-58
FE5-59	4.010"-4.130"										FES5-59	FEB5-59
FE6-61	4.130"-4.260"										FES6-61	FEB6-61
FE6-62	4.260"-4.390"]									FES6-62	FEB6-62
FE6-63	4.390"-4.520"]									FES6-63	FEB6-63
FE6-64	4.520"-4.650"	4.97"	7.48"	2-1/2" NPT	1/8" NPT	6.12"	3.06"	3/8-24" UNC	1.64"	FER6	FES6-64	FEB6-64
FE6-65	4.650"-4.780"]		'''	'*'			0.10			FES6-65	FEB6-65
FE6-66	4.780"-4.910"	1									FES6-66	FEB6-66
FE6-67	4.910"-5.040"	1									FES6-67	FEB6-67

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FE5-51<u>UR</u> = Urethane FE5-51<u>V</u> = FKM (Viton)

FE5-51<u>BN</u> = Buna N

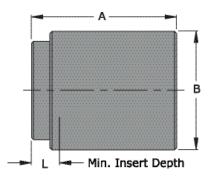
FE5-51<u>EP</u> = EPDM

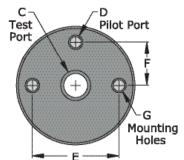
^{**}Optional seal materials are Urethane, FKM (Viton), Buna N and EPDM.



FasTest External "FE" - Connectors for External Tubes







External (FE) Connectors for Smooth Tubes - Urethane Seals**

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
FE001-0050UR	0.030"-0.050"										FES001-0050UR	FEB001-0050UR
FE001-001UR	0.050"-0.080"	1.72"	0.84"	1/8" NPT	10-32" UNF	0.63"	N/A	4-40" UNC	0.16"	FER001	FES001-001UR	FEB001-001UR
FE001-002UR	0.080"-0.130"							0.10			FES001-002UR	FEB001-002UR
FE01-01UR	0.100"-0.180"										FES01-01UR	FEB01-01UR
FE01-02UR	0.180"-0.260"										FES01-02UR	FEB01-02UR
FE01-03UR	0.260"-0.340"	2.05"	1.49"	1/8" NPT	10-32" UNF	1.10"	0.55"	10-32" UNC	0.58"	FER01	FES01-03UR	FEB01-03UR
FE01-04UR	0.340"-0.420"										FES01-04UR	FEB01-04UR
FE01-05UR	0.420"-0.510"										FES01-05UR	FEB01-05UR
FE1-15UR	0.433"-0.512"										FES1-15UR	FEB1-15UR
FE1-16UR	0.512"-0.591"		2.22"		1/8" NPT						FES1-16UR	FEB1-16UR
FE1-17UR	0.591"-0.669"	2.72"		1/4" NPT		1.62"	0.81"	1/4-28" UNC	0.61"	FER1	FES1-17UR	FEB1-17UR
FE1-18UR	0.669"-0.750"	2.72		'				0			FES1-18UR	FEB1-18UR
FE1-19UR	0.750"-0.827"										FES1-19UR	FEB1-19UR
FE2-21UR	0.787"-0.866"										FES2-21UR	FEB2-21UR
FE2-22UR	0.866"-0.945"										FES2-22UR	FEB2-22UR
FE2-23UR	0.945"-1.024"										FES2-23UR	FEB2-23UR
FE2-24UR	1.024"-1.102"										FES2-24UR	FEB2-24UR
FE2-25UR	1.102"-1.181"	3.50"	3.11"	1/2" NPT	1/8" NPT	2.50"	1.25"	1/4-28" UNC	1.06"	FER2	FES2-25UR	FEB2-25UR
FE2-26UR	1.181"-1.260"										FES2-26UR	FEB2-26UR
FE2-27UR	1.260"-1.339"										FES2-27UR	FEB2-27UR
FE2-28UR	1.339"-1.417"										FES2-28UR	FEB2-28UR
FE2-29UR	1.417"-1.510"										FES2-29UR	FEB2-29UR
FE3-31UR	1.496"-1.614"										FES3-31UR	FEB3-31UR
FE3-32UR	1.614"-1.732"	4 40"	4 22"	1"	1/8"	2 25"	1 62"	1/4-28"	1 64"	EED2	FES3-32UR	FEB3-32UR
FE3-33UR	1.732"-1.850"	4.48	4.23"	1" NPT	NPT	3.25"	1.03	UNC	1.64"	FER3	FES3-33UR	FEB3-33UR
FE3-34UR	1.850"-1.969"										FES3-34UR	FEB3-34UR

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FE1-15 = Neoprene FE1-15 \underline{V} = FKM (Viton)

FE1-15<u>BN</u> = Buna N

FE1-15<u>EP</u> = EPDM

A18

Wilson Company

16301 Addison Road, Addison, TX 75001

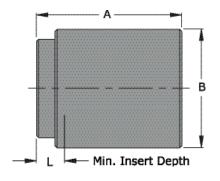
Phone: (972) 931-8666

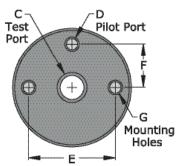
^{**}Optional seal materials are Urethane, FKM (Viton), Buna N and EPDM.



FasTest External "FE" - Connectors for External Tubes







External (FE) Connectors for Smooth Tubes - Urethane Seals**

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
FE4-41UR	1.969"-2.087"										FES4-41UR	FEB4-41UR
FE4-42UR	2.087"-2.205"										FES4-42UR	FEB4-42UR
FE4-43UR	2.205"-2.323"]									FES4-43UR	FEB4-43UR
FE4-44UR	2.323"-2.441"	1									FES4-44UR	FEB4-44UR
FE4-45UR	2.441"-2.559"	4.60"	5.48"	1-1/2" NPT	1/8" NPT	4.25"	2.13"	1/4-28" UNC	1.64"	FER4	FES4-45UR	FEB4-45UR
FE4-46UR	2.559"-2.677"							0.10			FES4-46UR	FEB4-46UR
FE4-47UR	2.677"-2.795"]									FES4-47UR	FEB4-47UR
FE4-48UR	2.795"-2.913"	1									FES4-48UR	FEB4-48UR
FE4-49UR	2.913"-3.032"										FES4-49UR	FEB4-49UR
FE5-51UR	2.970"-3.100"										FES5-51UR	FEB5-51UR
FE5-52UR	3.100"-3.230"										FES5-52UR	FEB5-52UR
FE5-53UR	3.230"-3.360"										FES5-53UR	FEB5-53UR
FE5-54UR	3.360"-3.490"										FES5-54UR	FEB5-54UR
FE5-55UR	3.490"-3.620"	4.60"	6.98"	2" NPT	1/8" NPT	5.50"	2.25"	3/8-24" UNC	1.64"	FER5	FES5-55UR	FEB5-55UR
FE5-56UR	3.620"-3.750"							0.10			FES5-56UR	FEB5-56UR
FE5-57UR	3.750"-3.880"										FES5-57UR	FEB5-57UR
FE5-58UR	3.880"-4.010"										FES5-58UR	FEB5-58UR
FE5-59UR	4.010"-4.130"										FES5-59UR	FEB5-59UR
FE6-61UR	4.130"-4.260"										FES6-61UR	FEB6-61UR
FE6-62UR	4.260"-4.390"										FES6-62UR	FEB6-62UR
FE6-63UR	4.390"-4.520"										FES6-63UR	FEB6-63UR
FE6-64UR	4.520"-4.650"	4.97"	7.48"	2-1/2" NPT	1/8" NPT	6.12"	3.06"	3/8-24" UNC	1.64"	FER6	FES6-64UR	FEB6-64UR
FE6-65UR	4.650"-4.780"			' ' '	''' '			0.10			FES6-65UR	FEB6-65UR
FE6-66UR	4.780"-4.910"	1									FES6-66UR	FEB6-66UR
FE6-67UR	4.910"-5.040"	1									FES6-67UR	FEB6-67UR

^{*}Includes seals(s) and metal parts for one complete seal change.

Examples: FE5-51 = Neoprene FE5-51<u>V</u> = FKM (Viton)

FE5-51BN = Buna N

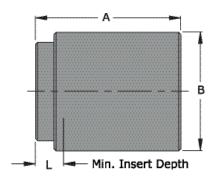
FE5-51<u>EP</u> = EPDM

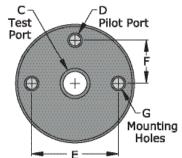
^{**}Optional seal materials are Urethane, FKM (Viton), Buna N and EPDM.



FasTest External "FE" - Connectors for External Threads







External (FE) Connectors for NPT, BSPP and BSPT Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)				
FE01-1/8 NPT	1/8"	2.05"	1.49"	1/8" NPT	10-32" UNF	1.10"	0.55"	10-32" UNC	0.58"	FER01	FES01-1/8 NPT	FEB01-1/8 NPT				
FE1-1/4 NPT	1/4"	2.72"	0.00"	1/4"	1/8"	4 60"	0.81"	1/4-28"	0.61"	FER1	FES1-1/4 NPT	FEB1-1/4 NPT				
FE1-3/8 NPT	3/8"	2.12	2.22	NPT	NPT	1.02	0.61	UNC	0.61	FERT	FES1-3/8 NPT	FEB1-3/8 NPT				
FE2-1/2 NPT	1/2"										FES2-1/2 NPT	FEB2-1/2 NPT				
FE2-3/4 NPT	3/4"	3.50"	3.11"	1/2" NPT	1/8" NPT	2.50"	1.25"	1/4-28" UNC	0.69"	FER2	FES2-3/4 NPT	FEB2-3/4 NPT				
FE2-1 NPT	1"		0.11								FES2-1 NPT	FEB2-1 NPT				
FE3-1 1/4 NPT	1-1/4"	4 40"	4 00"	4 22"	4 22"	4 22"	1"	1/8"	2 25"	1.63"	1/4-28"	0.89"	FER3	FES3-1 1/4 NPT	FEB3-1 1/4 NPT	
FE3-1 1/2 NPT	1-1/2"	4.40	4.23"	4.23"	4.23"	4.23"	4.23"	NPT	NPT	3.23	1.03	UNC	0.69	FERS	FES3-1 1/2 NPT	FEB3-1 1/2 NPT
FE4-2 NPT	2"	4.60"	5.48"	1-1/2"	1/8"	4 25"	2.13"	1/4-28"	0.89"	FER4	FES4-2 NPT	FEB4-2 NPT				
FE4-2 1/2 NPT	2-1/2"	4.00		NPT	NPT	4.25	2.13	UNC	0.89	FER4	FES4-2 1/2 NPT	FEB4-2 1/2 NPT				

^{*}Includes seals(s) and metal parts for one complete seal change.

NPT per SAE J476 BSPP per ISO 228 BSPT per ISO 7

Note: For sealing external threads or irregular shapes with the FE connectors, typically 400 to 600 psi pilot pressure is required to seal deep rooted external threads (see page A10).

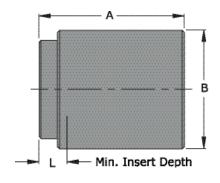
<u>DO NOT use a pilot booster with FI connectors</u>. Sealing internal threads with FI connectors is accomplished with a specific seal set for threaded ports. See page A13-A15 for more information.

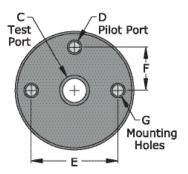
A20



FasTest External "FE" - Connectors for External Threads







External (FE) Connectors for Male Inch Straight Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
FE01-0450UR	7/16"	2.05"	1.49"	1/8" NPT	10-32" UNF	1.10"	0.55"	10-32" UNC	0.58"	FER01	FES01-0450UR	FEB01-0450UR
FE1-0510UR	1/2"										FES1-0510UR	FEB1-0510UR
FE1-0570UR	9/16"	0.70"	0.00"	1/4"	1/8"	4 00"	0.04"	1/4-28"	0.04"	EED4	FES1-0570UR	FEB1-0570UR
FE1-0640UR	5/8"	2.72	2.22"	NPT	NPT	1.62	0.81"	UNC	0.61"	FER1	FEB1-0640UR	FEB1-0640UR
FE1-0700UR	11/16"										FEB1-0700UR	FEB1-0700UR
FE2-T0760UR	3/4"				Ì						FES2-T0760UR	FEB2-T0760UR
FE2-T0800UR	13/16"										FES2-T0800UR	FEB2-T0800UR
FE2-T0885UR	7/8"					2.50"	1.25"				FES2-T0885UR	FEB2-T0885UR
FE2-T1010UR	1"			1/2" NPT	1/8" NPT						FES2-T1010UR	FEB2-T1010UR
FE2-3/4 NPT	1-1/16"	3.50"	3.11"					5" 1/4-28" UNC	0.69"	FER2	FES2-3/4 NPT	FEB2-3/4 NPT
FE2-T1200UR	1-3/16"										FES2-T1200UR	FEB2-T1200UR
FE2-T1260UR	1-1/4"										FES2-T1260UR	FEB2-T1260UR
FE2-1 NPT	1-5/16"										FES2-1 NPT	FEB2-1 NPT
FE2-T1385UR	1-3/8"										FES2-T1385UR	FEB2-T1385UR
FE3-T1460UR	1-7/16"										FES3-T1460UR	FEB3-T1460UR
FE3-T1640UR	1-5/8"	4.40"	4.00"	1"	1/8"	2 05"	4.00"	1/4-28"	0.00"	FED2	FES3-T1640UR	FEB3-T1640UR
FE3-T1710UR	1-11/16"	4.48"	4.23	NPT	NPT	3.25	1.63"	UNC	0.89"	FER3	FES3-T1710UR	FEB3-T1710UR
FE3-T1890UR	1-7/8"										FES3-T1890UR	FEB3-T1890UR
FE4-T2020UR	2"	4.00"	F 40"	1-1/2" NPT	1/8" NPT	4.25"	0.40"	1/4-28"	I II XU	0.89" FER4	FES4-T2020UR	FEB4-T2020UR
FE4-T2520UR	2-1/2"	4.60″	1.60" 5.48"				2.13"	3" 1/4-28" UNC			FES4-T2520UR	FEB4-T2520UR

^{*}Includes seals(s) and metal parts for one complete seal change.

O-Ring Port per SAE J1453

37° Flare per SAE J514

45° Flare per SAE J512/J513

24° Cone per SAE J514

Note: For sealing external threads or irregular shapes with the FE connectors, typically 400 to 600 psi pilot pressure is required to seal deep rooted external threads (see page A10).

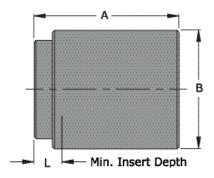
DO NOT use a pilot booster with FI connectors. Sealing internal threads with FI connectors is accomplished with a specific seal set for threaded ports. See page A13-A15 for more information.

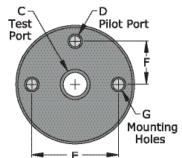
Phone: (972) 931-8666



FasTest External "FE" - Connectors for External Threads







External (FE) Connectors for Male Metric Straight Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)	
FE01-1/8 NPT	M10	2.05"	1.49"	1/8" NPT	10-32" UNF	1.10"	0.55"	10-32" UNC	0.58"	FER01	FES01-1/8 NPT	FEB01-1/8 NPT	
FE1-0480UR	M12										FES1-0480UR	FEB1-0480UR	
FE1-0570UR	M14	0.70"	0.00"	1/4"	1/8"	4 00"	0.81"	1/4-28"	0.04"	FER1	FES1-0570UR	FEB1-0570UR	
FE1-0640UR	M16	2.12	2.72"	2.22	NPT	NPT	1.02	0.61	UNC	0.61"	FERT	FES1-0640UR	FEB1-0640UR
FE1-0720UR	M18										FES1-0720UR	FEB1-0720UR	
FE2-T0800UR	M20										FES2-T0800UR	FEB2-T0800UR	
FE2-T21UR	M22										FES2-T21UR	FEB2-T21UR	
FE2-T22UR	M24						1.25"		0.69"		FES2-T22UR	FEB2-T22UR	
FE2-T23UR	M26				1/8" NPT	2.50"		4/4 00"			FES2-T23UR	FEB2-T23UR	
FE2-T1075UR	M27	3.50"	3.11"	1/2" NPT				1/4-28" UNC		FER2	FES2-T1075UR	FEB2-T1075UR	
FE2-T24UR	M28							Gille			FES2-T24UR	FEB2-T24UR	
FE2-T25UR	M30	1									FES2-T25UR	FEB2-T25UR	
FE2-T1320UR	M33	1									FES2-T1320UR	FEB2-T1320UR	
FE2-T1400UR	M35	1									FES2-T1400UR	FEB2-T1400UR	
FE3-T1440UR	M36										FES3-T1440UR	FEB3-T1440UR	
FE3-T1595UR	M40	4.40"	4 00"	1"	1/8"	2.05"	1 00"	1/4-28"	0.00"	FFDa	FES3-T1595UR	FEB3-T1595UR	
FE3-T1675UR	M42	4.48	4.23"	NPT	NPT	3.25	1.63"	UNC	0.89"	FER3	FES3-T1675UR	FEB3-T1675UR	
FE3-T1790UR	M45										FES3-T1790UR	FEB3-T1790UR	
FE4-T1910UR	M48										FES4-T1910UR	FEB4-T1910UR	
FE4-T2070UR	M52	4.60"	5.48"	1-1/2" NPT	1/8" NPT	4.25"	" 2.13"	2.13" 1/4-28" UNC	10 89"	39" FER4	FES4-T2070UR	FEB4-T2070UR	
FE4-T2380UR	M60										FES4-T2380UR	FEB4-T2380UR	

^{*}Includes seals(s) and metal parts for one complete seal change.

Note: For sealing external threads or irregular shapes with the FE connectors, typically 400 to 600 psi pilot pressure is required to seal deep rooted external threads (see page A10).

<u>DO NOT use a pilot booster with FI connectors</u>. Sealing internal threads with FI connectors is accomplished with a specific seal set for threaded ports. See page A13-A15 for more information.

A22

^{24°} Cone Flareless per ISO 8434-1 and -4

^{24°} Cone Flareless per JIS B2353

^{24°} Cone Flareless per DIN 3902/3853/3861

^{60°} Cone per DIN 7831/7647



Technology Overview



The FasTest ME and ML Series are specifically designed for medical device testing.

- Host Material Clear bright dipped anodized aluminum host material.
 Stainless steel offered as an option
- Seal Materials White FDA Neoprene or FDA listed fluorocarbon main seals
- Cleaning All parts are washed in an aqueous solution utilizing ultrasonic agitation at a temperature of 140 degrees F. Components are then rinsed in a cascading rinse tank and dried using 99.999% Nitrogen Controlled Environment – Assembled is in a Clean Room defined as a 100,000 ppm level controlled environment
- Components Inspection & Assembly Pre-assembly inspection of all components. Assembled, tested and placed in double bag packaging inside controlled environment
- Lubrication Krytox is the standard lubricant. Krytox is FDA approved for oxygen service applications. Petroleum jelly is the alternate lubricant upon request
- Certification White FDA Neoprene main seal material to be compliant to 21CFR177.2600.
 We also utilize FDA listed fluorocarbon seal material

Medical External - "ME Series"

- For external sealing of Catheters, Lumens, Luers and other cylindrical parts
- Test pressure ranges from vacuum to 500 psi
- Clear anodized aluminum construction



ME Medical Series Connectors seal conventional and non-standard surfaces of tubes, luers, catheters and other smooth or threaded parts. Compressed air activates the elastomeric seal for testing to 500 psi.

Uniform seal movement makes a leak-proof connection. Testing, filling or flushing, using air, gas or liquid, of the test piece is accomplished by introducing the media through the *FasTest* connector.

Medical Luer - "ML Series"

- For fixturing and sealing of male or female Luer fittings
- Test pressure ranges from vacuum to 500 psi
- · Clear anodized aluminum construction





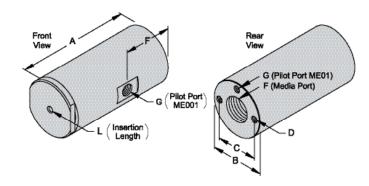
ML Medical Series Connectors are specifically designed to test many types of luers. *FasTest's* proprietary hold and seal design secures the luer while a special piston seals the internal portion of the luer.

ML series connectors can be used manually or automated with sealing pressures to 500 psi. Actual pressure will vary based on the type of luer.



FasTest Medical External "ME " - Connectors for External Sealing of Cylindrical Parts





Medical External (ME) Connectors - English Mounting Holes and Pilot Ports

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
ME001-0030	0.015"-0.030"			0.63"							MES001-0030	MEB001-0030
ME001-0050	0.030"-0.050"	4 70"	0.04"		4-40	0.72"	1/8"	10-32	0.16"	MER001	MES001-0050	MEB001-0050
ME001-001	0.050"-0.080"	1.72"	0.84"		UNC		NPT	UNF			MES001-001	MEB001-001
ME001-002	0.080"-0.130"										MES001-002	MEB001-002
ME01-01	0.100"-0.180"					N/A	1/8" NPT		1.58"		MES01-01	MEB01-01
ME01-02	0.180"-0.260"									MER01	MES01-02	MEB01-02
ME01-03	0.260"-0.340"	2.05"	1.49"	1.10"	10-32 UNF			10-32 UNF			MES01-03	MEB01-03
ME01-04	0.340"-0.420"										MES01-04	MEB01-04
ME01-05	0.420"-0.510"										MES01-05	MEB01-05

Medical External (ME) Connectors - Metric Mounting Holes and Pilot Ports

Part Number	Sealing Range (mm)	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G	Dim L	Repair Kit	Main Seal Set*	Main Seals Package (5)
ME001-0030M	0.38-0.80										MES001-0030	MEB001-0030
ME001-0050M	0.80-1.30	1.72"	0.84"	0.63"	M2.5	0.72"	1/8"	M5	0.16"	MER001	MES001-0050	MEB001-0050
ME001-001M	1.30-2.00	1.72	0.04		1012.5		BSPP	IVIO	0.10		MES001-001	MEB001-001
ME001-002M	2.00-3.30										MES001-002	MEB001-002
ME01-01M	2.50-4.60						1/8" BSPP	M5	1.58"		MES01-01	MEB01-01
ME01-02M	4.60-6.60									" MER01	MES01-02	MEB01-02
ME01-03M	6.60-8.60	2.05"	1.49"	1.10"	M5	N/A					MES01-03	MEB01-03
ME01-04M	8.60-10.70										MES01-04	MEB01-04
ME01-05M	10.70-13.00										MES01-05	MEB01-05

^{*}Includes seals(s) and metal parts for one complete seal change.

Notes

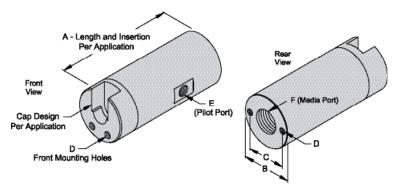
Above ME's available in optional stainless steel by adding SS to the part number. Example: ME01-01SS

"ME" and "ML" Series for Medical Devices



FasTest Medical Luer "ML" - Connectors for External Sealing of Luers





Medical Luer (ML) Connectors - English Mounting Holes and Pilot Ports

Part	Sealing	Dim	Dim	Dim	Dim	Dim	Dim	Repair	Main	Main Seals
Number	Range	A	B	C	D	E	F	Kit	Seal Set	Package (5)
ML001	Sized to Part	Application Dependent	0.84"	0.63"	4-40 UNC	10-32 UNF	1/8" NPT	MER001	Sized to Part	Sized to Part

Medical Luer (ML) Connectors - Metric Mounting Holes and Pilot Ports

Part	Sealing	Dim	Dim	Dim	Dim	Dim	Dim	Repair	Main	Main Seals
Number	Range	A	B	C	D	E	F	Kit	Seal Set	Package (5)
ML001 M	Sized to Part	Application Dependent	0.84"	0.63"	M2.5	M5	1/8" BSPP	MER001	Sized to Part	Sized to Part

Notes:

The Medical Luer "ML Series" connectors are designed to your specific application requirements.

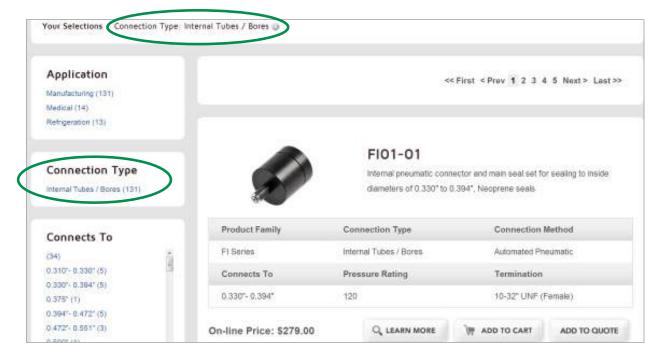
To obtain a part number and price quotation:

- Contact FasTest with details regarding your application such as test pressure, media and tolerances (detailed drawing preferred).
- Provide two sample parts for design and testing purposes.



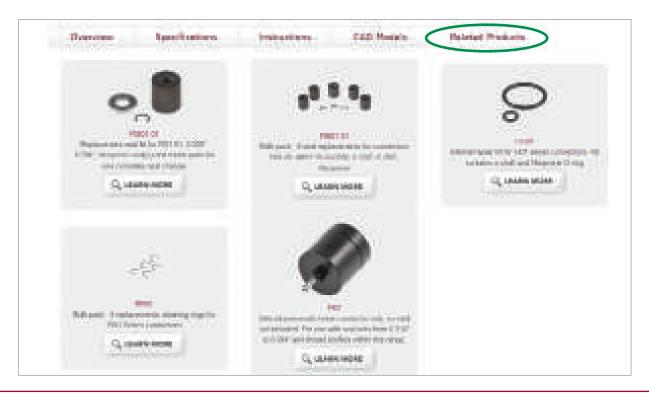
Need assistance finding connector options for your application?

- Visit www.fastestinc.com and select "Connection Type" under "Products"
- Select a basic feature of your application such as "Internal Tubes / Bores"
- Select additional applications features such as "Connects to" and "Connection method" to shorten your results list



Need assistance identifying replacement seals and repair kits for your connector?

- Find your connector above or use the part number search field in the website header, click the "Learn More" button
- Select the "Related Products" tab to display seals, repair kits and replacement parts







FasTest's ETS is an electronic sealing device for leak test applications requiring ultimate seal control and clean operation. Our full featured drive systems provide Serial, Ethernet or DeviceNet communication for data acquisition and seamless integration into automated leak test systems.



	Contents	Page(s)
1	Tech Info	C1 - C7
ads	0.310"-0.394"	C8
Internal es / Thre	1/8" NPT	Co
Internal Tubes / Threads	0.394"-1.339"	C9 - C10
Tub	1/4" to 1" NPT	C10
al eads	0.030"-0.130"	C11
External Tubes / Threads	0.100"-0.827"	C12 - C13
E Tube	1/8" to 3/8" NPT	C13
1	Accessories / Installation Example	C14



- Eliminate the mess, clutter and potential contamination from traditional air control devices
- Ultimate seal control via the drive tool which receives its drive signal from the control unit
- Serial, Ethernet or DeviceNet communication allows remote monitoring or data acquisition capability





Serial or Ethernet Interface - Customer Supplied

- · Actuate Tool from Laptop or PLC controller
- · Communication of Tool status
- · Remotely monitor and or change Tool settings

Control Cable (I/O cable)

- 4-wire cable available in 2, 4 or 6 meter lengths
- For actuation of Tool with external switch / contacts such as foot switch



Power Cord

 120 VAC input to Controller

Controller

- · Controls Tool operation and sealing force
- Monitor and/or change tool settings

Why Choose Electric over Pneumatic?

Simplify Your Pressure & Leak Test Procedures

Do you want seal control?

- With the ETS controller, you "dial in" a repeatable sealing force from a soft touch for delicate parts to a firm grip for work holding.
- · Safe. "Locks on", even with loss of power.

Do you want easier system integration?

- I/O M12 connection and / or optional Serial,
 Ethernet or DeviceNet communication allows remote operation, monitoring and data acquisition.
- Plug & Play installation. Simply plug in, make the M12 cable connections and go!

Do you want clean, robust operation?

- 24 VDC eliminates contaminants & moisture found with compressed air systems.
- · Elimination of internal seals that wear and fail.

Testing Methods	Pneumatic	Electronic
Water dunk	✓	
Bubble leak	✓	✓
Helium/Tracer gas		✓
Pressure decay		✓
Proof testing		✓
Flow testing	✓	✓
General Overview	Pneumatic	Electronic
Ease of use	✓	✓
Speed of actuation	✓	
Sealing force - light to heavy		✓
Gripping ability		✓
Elimination of seal creep		✓
Elimination of internal leakage		✓
Reduced energy consumption		✓
Integration into control system (PLC)		✓
Data collection		✓
Versatility		✓
Clean operation		✓





Leak Test Instrument - Customer Supplied

· ETS easily integrates into most leak test systems for manual, semi or fully automated testing

ETS Internal Sealing Tool

- · Sealing range from 0.310" to 1.339" ID's
- · Test pressures from Vacuum to 120 psi
- 24 VDC

Test Media Connection -Customer Supplied

- Connection from pressure source to Tool
- · For monitoring test status



ETS External Sealing Tool

- · Sealing range from 0.030" to 0.827" OD's
- Test pressures from vacuum to 500 psi.
- 24 VDC



Tool Cable

- · Powers the Tool
- · Available in 2, 4 or 6 meter lengths

Applications



Female Luer Connector

The ETS seals directly over the luer thread. Our proprietary FDA grade seal material is exceptionally durable. The same ETS Tool can seal all female luer styles.



Plastic Molded Parts

Plastic Molded Parts often have a flashing / parting line that requires elevated seal force. The ETS has the equivalent seal force of up to 600 psi pilot pressure.



Lumens & Medical Connections

Lumens and Medical Connections come in numerous designs and sizes. The ETS provides the greatest ability to seal without damage or occlusion. Designs are available to provide internal support as needed for improved testing.



Automation Pick - Test - Place.

The ETS is easily automated and can be a superior end effecter. Our wear resistant seal will form to grip and seal the part for testing and pick and place.

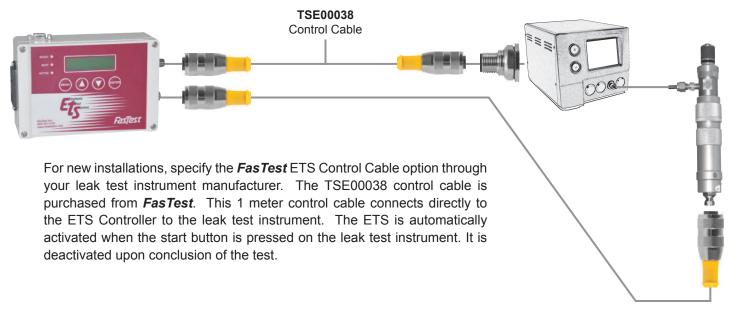


System Integration with Leak Test Instrument

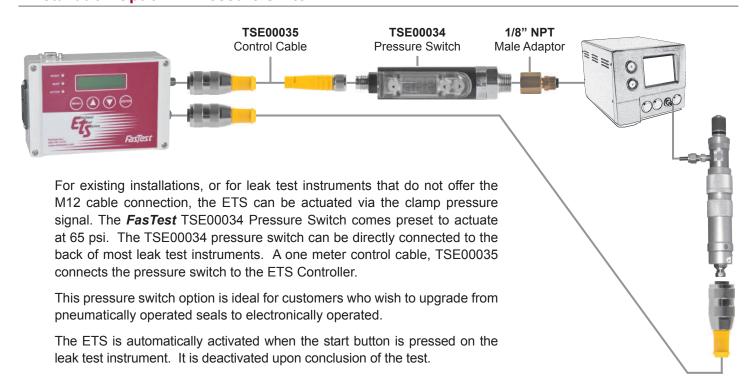
FasTest provides two options for easy integration of the ETS sealing system for new and existing installations that utilize control features currently available through the leak test instrument manufacturer. Leak test instrument manufacturers offer a M12 cable connection to operate the ETS or pilot signal for controlling clamp valves.

Listed below is explanation describing each installation option.

Installation Option 1: Control Cable



Installation Option 2: Pressure Switch





System Integration with Leak Test Instrument

How to Order:

Option 1: Control Cable

For installations with new leak test instrument purchase

- Specify the ETS M12 Cable Connection Option with the leak test instrument manufacturer.
- Purchase from FasTest TSE00038 Control Cable when ordering your ETS system.

Option 2: Pressure Switch

For existing applications in which leak test instrument has clamp valve feature, purchase from FasTest TSE00035 Pressure Switch and TSE00035 Control Cable.

Installation and Operational instructions provided with the pressure switch.

Controller Specifications



100, 200 and 300 Series

ETS-100

Most basic model. The system is pre-configured at the factory to support one tool type. The user is able to adjust drive current setpoint via single turn potentiometer. Tool activation is achieved by closing a switch connected to the I/O port on the control unit.

ETS-200

Same feature set as ETS-100 series models, plus the addition of a communication port for remote connection and automation, and a tool status relay for feedback.

ETS-300

Fully featured models. Devices include a keypad, backlit display, and status indicator LED's on front panel. User can select any supported tool type and size.

Specifications:

- Approx. 7.1" x 4.75" x 2.5" (L x W x H) ABS
- 120 VAC operation

Wilson Company

• Tool and Controller options based on customer specifications

I/O Options:

- Clamp Valve / Pressure Switch 1/8" NPT female connection Max pressure input is 75 psi
- M12 Direct interface to leak test instrument Leak test instrument pin-out instructions available on request
- Custom configured Tools to match customer's application



The ETS400 Riser Series can incorporate from 1 to 4 ETS Tool(s) including Controller and cables into one compact rugged enclosure. As a complete fully functioning fixture, the ETS 400 Riser can significantly reduce the time and costs associated with custom build or self made leak test fixturing.

As a stand alone fixture, or easily incorporated with new or existing leak test instruments, the ETS 400 Riser can operated each Tool concurrently or simultaneously. Touch pad display to configure and monitor Tool status.

Our unique "Plug & Play" installation is specifically designed for use with compact leak test instruments. Simply place the Riser on top of a bench or workstation, plug into power outlet, place your leak test instrument on top of Riser, make the test media connections, make the clamp valve or M12 I/O connection and start testing!

Specifications:

- Approx. 14" x 12" x 7" (L x W x H) Polycarbonate
- 120 VAC operation

Phone: (972) 931-8666

Tool and Controller options based on customer specifications

I/O Options:

- Clamp Valve / Pressure Switch 1/8" NPT female connection Max pressure input is 75 psi
- M12 Direct interface to leak test instrument Leak test instrument pin-out instructions available on request
- Start Push Button(s) 1 to 4 start buttons for simultaneous or concurrent operation. Set up per customers request

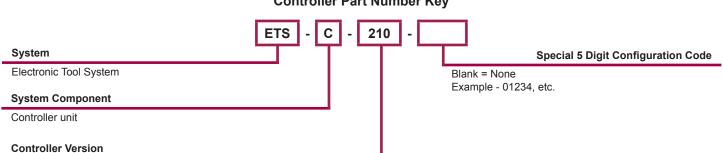
www.wilson-company.com

Custom configured Tools to match customer's application



ETS Series Part Number Keys

Controller Part Number Key



Factory Configured with Momentary Contact for Tool Actuation

- 100 Manually adjustable for minimum to maximum seal movement, M12 (4-pin) connection for tool actuation and tool status relay
- 200 Same as version 100, plus RS232 serial port connection for tool status and remote tool actuation
- 201 Same as version 100, plus Ethernet connection for tool status and remote tool actuation
- 202 Same as version 100, plus DeviceNet connection for tool status and remote tool actuation

Factory Configured with Continual Contact for Tool Actuation

- 110 Same as 100 with continuously closed contact for tool actuation
- 210 Same as 200 with continuously closed contact for tool actuation
- 211 Same as 201 with continuously closed contact for tool actuation
- 212 Same as 202 with continuously closed contact for tool actuation

Field Configurable

- 300 Keypad and display to configure all ETS tools Digitally adjustable for minimum to maximum seal movement Select either continual or momentary contact for tool actuation 3 LED tool status lights, M12 (4-pin) connection for tool actuation and tool status relay, RS232 serial port connection for tool configuration and actuation
- 301 Same as version 300 plus Ethernet connection for remote tool configuration and actuation
- 302 Same as version 300 plus DeviceNet connection for remote tool configuration and actuation

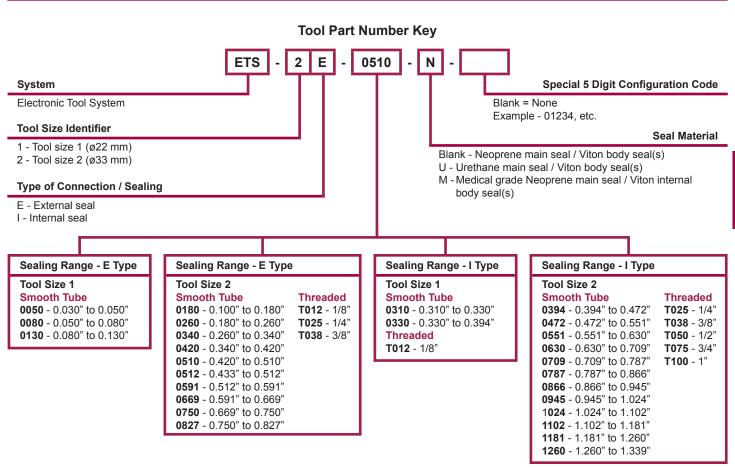
Factory Configured with 1 to 4 Tools*

- 4001 Riser base for (1) tool Keypad and display to configure all ETS tools Digitally adjustable for minimum to maximum seal movement Select either continual or momentary contact for tool actuation
- 4001P Same as 4001 with pressure switch tool actuation
- 4002 Riser base for (2) tools, same functions as 4001
- 4002P Riser base for (2) tools, same as 4002 with pressure switch tool actuation
- 4003 Riser base for (3) tools, same functions as 4001
- 4001P Riser base for (3) tools, same as 4003 with pressure switch
- 4004 Riser base for (4) tools, same functions as 4001
- 4004P Riser base for (4) tools, same as 4004 with pressure switch tool actuation

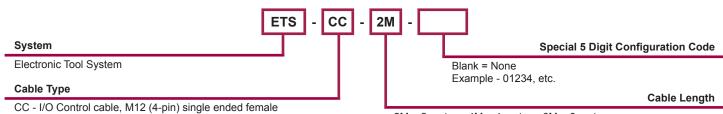
^{*} The 400 Series Riser and Controller is factory configured to your application and leak test instrument requirements. Please contact the factory for application assistance and control options.



ETS Series Part Number Keys



Cable Part Number Key

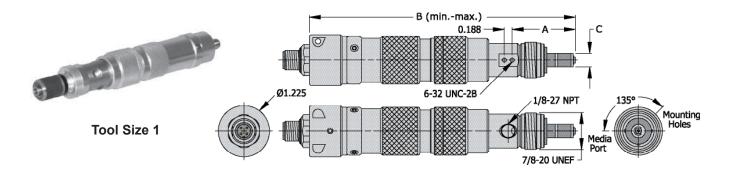


2M = 2 meters; 4M = 4 meters; 6M = 6 meters Additional lengths available, consult factory

TC - Tool cable, M12 (4-pin) male to female extension



FasTest ETS Internal - Connectors for Internal Tubes and Threads



Internal "I Type" Connectors for Smooth Tubes - Neoprene Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-1I-0310	0.310"-0.330"	1 506"	6.838"-6.593" -	0.300"	Magnrana	FIS01-0300	FIB01-0300
ETS-1I-0330	0.330"-0.394"	1.506"		0.330"	Neoprene	FIS01-01	FIB01-01

Internal "I Type" Connectors for Smooth Tubes - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-1I-0310-U	0.310"-0.330"	1.506"	6.838"-6.593"	0.300"	Urothono	FIS01-0300UR	FIB01-0300UR
ETS-1I-0330-U	0.330"-0.394"	1.506		0.330"	Urethane	FIS01-01UR	FIB01-01UR

Internal "I Type" Connectors for Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-1I-T012	1/8" NPT	1.506"	6.838"-6.593"	0.330"	Urethane	FIS01-1/8NPT	FIB01-1/8NPT

Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

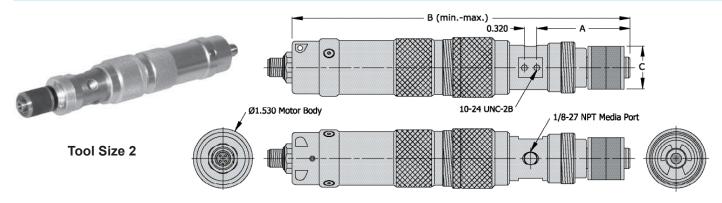
^{*}Includes seal(s) and metal parts for one complete seal change.

Electronic Tool System (ETS)



FasTest ETS Internal - Connectors for Internal Tubes and Threads

- Connects to Internal Tubes / Threads



Internal "I Type" Connectors for Smooth Tubes - Neoprene Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2I-0394	0.394"-0.472"	1.900"	8.800"-8.440"	0.382"		FIS1-11	FIB1-11
ETS-2I-0472	0.472"-0.551"			0.460"	Neoprene	FIS1-12	FIB1-12
ETS-2I-0551	0.551"-0.630"			0.539"		FIS1-13	FIB1-13
ETS-2I-0630	0.630"-0.709"			0.618"		FIS2-21	FIB2-21
ETS-2I-0709	0.709"-0.787"			0.697"		FIS2-22	FIB2-22
ETS-2I-0787	0.787"-0.866"			0.775"		FIS2-23	FIB2-23
ETS-2I-0866	0.866"-0.945"			0.854"		FIS3-31	FIB3-31
ETS-2I-0945	0.945"-1.024"			0.933"		FIS3-32	FIB3-32
ETS-2I-1024	1.024"-1.102"	2 400"	0 200" 9 040"	1.012"		FIS3-33	FIB3-33
ETS-2I-1102	1.102"-1.181"	2.400"	9.300"-8.940"	1.090"		FIS4-41	FIB4-41
ETS-2I-1181	1.181"-1.260"			1.169"		FIS4-42	FIB4-42
ETS-2I-1260	1.260"-1.339"			1.248"		FIS4-43	FIB4-43

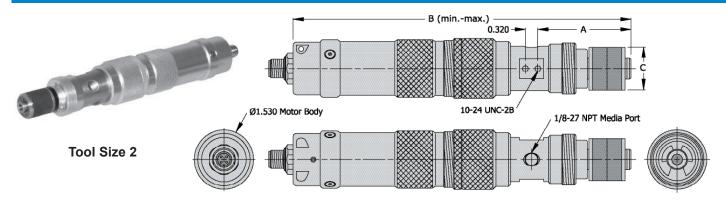
Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

Phone: (972) 931-8666

^{*}Includes seal(s) and metal parts for one complete seal change.



FasTest ETS Internal - Connectors for Internal Tubes and Threads



Internal "I Type" Connectors for Smooth Tubes - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2I-0394-U	0.394"-0.472"	1.900"	8.800"-8.440"	0.382"	Urethane	FIS1-11UR	FIB1-11UR
ETS-2I-0472-U	0.472"-0.551"			0.460"		FIS1-12UR	FIB1-12UR
ETS-2I-0551-U	0.551"-0.630"			0.539"		FIS1-13UR	FIB1-13UR
ETS-2I-0630-U	0.630"-0.709"			0.618"		FIS2-21UR	FIB2-21UR
ETS-2I-0709-U	0.709"-0.787"			0.697"		FIS2-22UR	FIB2-22UR
ETS-2I-0787-U	0.787"-0.866"			0.775"		FIS2-23UR	FIB2-23UR
ETS-2I-0866-U	0.866"-0.945"	2.400"	9.300"-8.940"	0.854"		FIS3-31UR	FIB3-31UR
ETS-2I-0945-U	0.945"-1.024"			0.933"		FIS3-32UR	FIB3-32UR
ETS-2I-1024-U	1.024"-1.102"			1.012"		FIS3-33UR	FIB3-33UR
ETS-2I-1102-U	1.102"-1.181"			1.090"		FIS4-41UR	FIB4-41UR
ETS-2I-1181-U	1.181"-1.260"			1.169"		FIS4-42UR	FIB4-42UR
ETS-2I-1260-U	1.260"-1.339"			1.248"		FIS4-43UR	FIB4-43UR

Internal "I Type" Connectors for Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2I-T025	1/4" NPT	1.900"	8.800"-8.440"	0.425"	Urethane	FIS1-1/4NPT	FIB1-1/4NPT
ETS-2I-T038	3/8" NPT			0.560"		FIS2-3/8NPT	FIB2-3/8NPT
ETS-2I-T050	1/2" NPT			0.690"		FIS2-1/2NPT	FIB2-1/2NPT
ETS-2I-T075	3/4" NPT	2.400"	9.300"-8.940"	0.890"		FIS3-3/4NPT	FIB3-3/4NPT
ETS-2I-T100	1" NPT			1.125"		FIS4-1NPT	FIB4-1NPT

Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

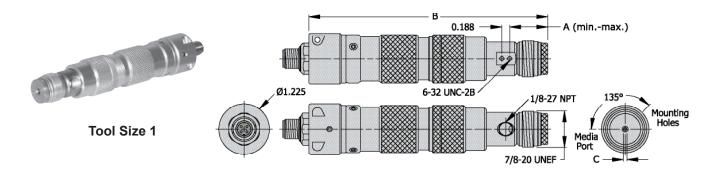
^{*}Includes seal(s) and metal parts for one complete seal change.

Electronic Tool System (ETS)



FasTest ETS External - Connectors for External Tubes and Threads

- Connects to Internal Tubes / Threads



External "E Type" Connectors for Smooth Tubes - Neoprene Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-1E-0050	0.030"-0.050"	0.936"-1.150"		0.050" ETS-S0050		FEB001-0050	
ETS-1E-0080	0.050"-0.080"	0.906"-1.150"	6.238"	0.086"	Neoprene	ETS-S0080	FEB001-001
ETS-1E-0130	0.080"-0.130"	0.936"-1.150"		0.136"		ETS-S0130	FEB001-002

External "E Type" Connectors for Smooth Tubes - Medical Viton Seals

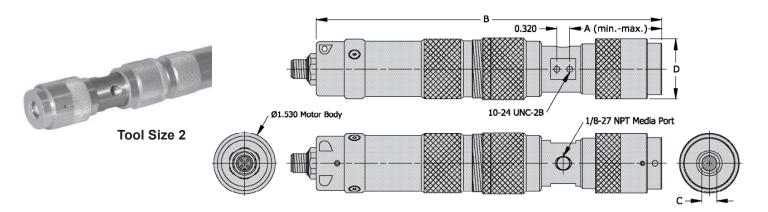
Part Number	Sealing Range	Dim A	Dim B	Dim C	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-1E-0050-M	0.030"-0.050"	0.936"-1.150"		0.050"		ETS-S0050M	MEB001-0050
ETS-1E-0080-M	0.050"-0.080"	0.906"-1.150"	6.238"	0.086"	Medical Viton	ETS-S0080M	MEB001-001
ETS-1E-0130-M	0.080"-0.130"	0.936"-1.150"		0.136"		ETS-S0130M	MEB001-002

Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

^{*}Includes seal(s) and metal parts for one complete seal change.



FasTest ETS External - Connectors for External Tubes and Threads



External "E Type" Connectors for Smooth Tubes - Neoprene Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2E-0180	0.100"-0.180"			0.190"			FES01-01	FEB01-01
ETS-2E-0260	0.180"-0.260"			0.270"			FES01-02	FEB01-02
ETS-2E-0340	0.260"-0.340"	2.170"-2.530"	9.071"	0.350"	1.490"		FES01-03	FEB01-03
ETS-2E-0420	0.340"-0.420"			0.430"		Neoprene	FES01-04	FEB01-04
ETS-2E-0510	0.420"-0.510"			0.520"			FES01-05	FEB01-05
ETS-2E-0512	0.433"-0.512"			0.524"			FES1-15	FEB1-15
ETS-2E-0591	0.512"-0.591"			0.603"			FES1-16	FEB1-16
ETS-2E-0669	0.591"-0.669"	2.410"-2.770" 9.3	9.311"	0.679"	2.220"		FES1-17	FEB1-17
ETS-2E-0750	0.669"-0.750"			0.760"			FES1-18	FEB1-18
ETS-2E-0827	0.750"-0.827"			0.839"			FES1-19	FEB1-19

External "E Type" Connectors for Smooth Tubes - Medical Viton Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2E-0180-M	0.100"-0.180"			0.190"			MES01-01	MEB01-01
ETS-2E-0260-M	0.180"-0.260"		9.071"	0.270"	1.490"	1.490" Medical Viton	MES01-02	MEB01-02
ETS-2E-0340-M	0.260"-0.340"	2.170"-2.530"		0.350"			MES01-03	MEB01-03
ETS-2E-0420-M	0.340"-0.420"			0.430"			MES01-04	MEB01-04
ETS-2E-0510-M	0.420"-0.510"			0.520"			MES01-05	MEB01-05

Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

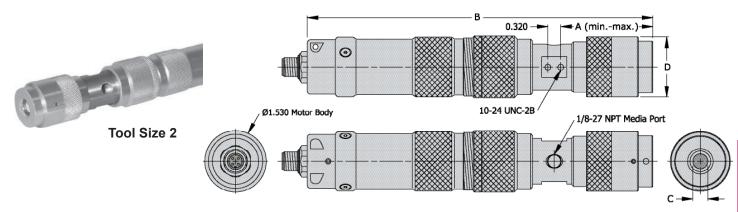
^{*}Includes seal(s) and metal parts for one complete seal change.

Electronic Tool System (ETS)



FasTest ETS External - Connectors for External Tubes and Threads

- Connects to Internal Tubes / Threads



External "E Type" Connectors for Smooth Tubes - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Seal Material	Main Seal Set*	Main Seals Package (5)
ETS-2E-0180-U	0.100"-0.180"			0.190"			FES01-01UR	FEB01-01UR
ETS-2E-0260-U	0.180"-0.260"			0.270"			FES01-02UR	FEB01-02UR
ETS-2E-0340-U	0.260"-0.340"	2.170"-2.530" 9.0	9.071"	0.350"	1.490"	1.490" Urethane	FES01-03UR	FEB01-03UR
ETS-2E-0420-U	0.340"-0.420"			0.430"			FES01-04UR	FEB01-04UR
ETS-2E-0510-U	0.420"-0.510"			0.520"			FES01-05UR	FEB01-05UR
ETS-2E-0512-U	0.433"-0.512"			0.524"			FES1-15UR	FEB1-15UR
ETS-2E-0591-U	0.512"-0.591"			0.603"			FES1-16UR	FEB1-16UR
ETS-2E-0669-U	0.591"-0.669"	2.410"-2.770" 9.311"	0.679"	2.220"		FES1-17UR	FEB1-17UR	
ETS-2E-0750-U	0.669"-0.750"			0.760"			FES1-18UR	FEB1-18UR
ETS-2E-0827-U	0.750"-0.827"			0.839"			FES1-19UR	FEB1-19UR

External "E Type" Connectors for Threads - Urethane Seals

Part Number	Sealing Range	Dim A	Dim B	Dim C	Dim D	Seal Material	Main Seal Set*	Main Seal Package (5)
ETS-2E-T012	1/8" NPT	2.170"-2.530"	9.071"	0.410"	1.490"		FES01-1/8NPT	FEB01-1/8NPT
ETS-2E-T025	1/4" NPT	2 410" 2 770"	9.311"	0.550"	2.220"	Urethane	FES1-1/4NPT	FEB1-1/4NPT
ETS-2E-T038	3/8" NPT	2.410"-2.770"	9.511	0.679"	2.220		FES1-3/8NPT	FEB1-3/8NPT

Housing Materials: Stainless steel and clear anodized aluminum Body Seal(s) Viton

^{*}Includes seal(s) and metal parts for one complete seal change.



Accessories

Foot Mounting Brackets



The Foot Bracket securely holds the Tool by clamping around the outside diameter. There are optional mounting holds within the midsection of the Tool. Refer to installation instructions or contact *FasTest* for assistance.



TS1901 Tool Size 1



TS2901 Tool Size 2

Typical ETS 400 Installation

Compact Leak Test Instrument



ETS 400 Riser Configuration with 4 Type E, Size 2 Tools

The ETS 400 can incorporate from 1 to 4 ETS Tools into one compact rugged enclosure. Our unique "Plug & Play" installation is specifically designed for use with compact leak test instruments.

Simply place the ETS 400 on top of a bench or workstation, place your leak test instrument on top, make the test media connection(s), make the clamp valve or optional M12 I/O connection and start testing!

The ETS 400 is typically configured to meet application requirements, consult factory with details regarding your application.



TwistMate[™]

FasTest's complete product family of TwistMate connectors, plugs and caps provide fast leak tight threaded connections for testing, filling, flushing, plugging, calibrating or venting applications. Simply spin our connectors finger-tight onto thread until face seal contacts test piece.

TwistMates seal automatically when the system is pressurized. Air, gas or hydraulic pressure in the system provides a sealing force that presses the main seal against the face of the threads. This automatic internal piston action maintains the seal with minimum pressure.



Features:

- Pressure assisted grip and seal technology
- Available in NPT, BSPP, BSPT, SAE, Metric and special thread profiles
- Repair kits available for extended connector service life
- Finger-tight pneumatic or hydraulic connections from vacuum to 10,000 psi
- · Stainless steel construction for corrosion resistance
- Reduce production losses, retest time, scrap and test damage repair costs

Applications:

- Water dunk leak testing
- · Leak, flow, flushing or washing
- Cylinders, manifolds, valves, pumps filters and assemblies
- Bubble, pressure decay and mass spectrometer testing
- · Heat exchangers, brake and steering system assemblies
- Capping and plugging pipes, fittings or hose ends

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Inte	Plugs - All	D9
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<u>s</u>	NPT	D11
ıreac	SAE	D13
ıal Th	BSPP	D14
External Threads	BSPT	D14
û	Caps - All	D15

D1



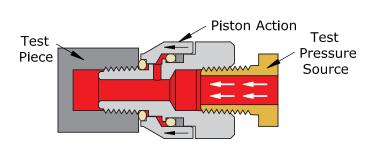
The TwistMate Technology

The **TwistMate** family of products use an innovative "twist to connect" and pressure assisted grip and seal technology to deliver a fast, safe and repeatable high pressure or vacuum testing connection in threaded ports

or tubing. This sealing technique creates an improved seal as pressures increase and eliminates the traditional sealing methods using tape and wrenches that can damage internal or external threads.

"MIT Series" Connectors for Internal / Female Threads

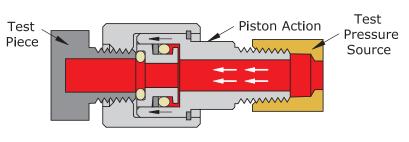




- 1. Spin *TwistMate* into the threaded port until the seal makes contact.
- 2. Introduce the media and pressure. The external sleeve automatically moves toward the test piece enhancing the seal squeeze. Vacuum applications will require finger tightening.

"MET Series" Connectors for External / Male Threads



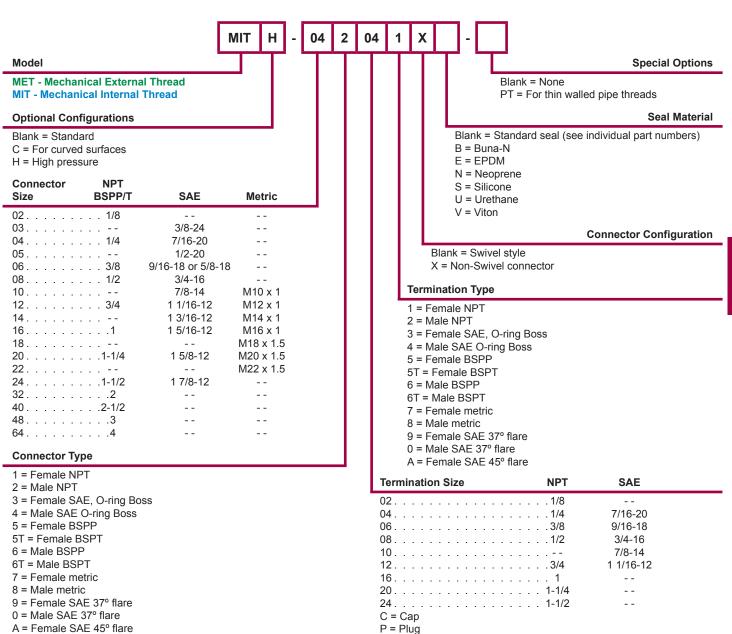


- 1. Spin *TwistMate* on to the threaded port until the seal makes contact.
- 2. Introduce the media and pressure. The internal piston automatically moves toward the test piece enhancing the seal squeeze. Vacuum applications will require finger tightening.

- Connects to Internal Threads



TwistMate Part Number Key



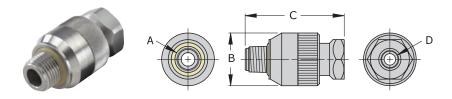
Notes:

Part Number Keys are to assist in IDENTIFICATION ONLY.

Verify new part numbers with factory; some configurations are not possible.



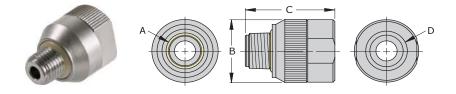
Connectors for Internal (Female) NPT Threads



NPT - Swivel Style (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-022021	1/8" NPT	0.82"	1.68"	1/8" NPT	5000			MITR-020	S1109-U70
MIT-042041	1/4" NPT	1.00"	1.88"	1/4" NPT	3000	5000		MITR-040	S1111-U70
MIT-062061	3/8" NPT	1.18"	2.09"	3/8" NPT			el Urethane*	MITR-060	S1113-U70
MIT-082081	1/2" NPT	1.36"	2.57"	1/2" NPT	4000	Swivel		MITR-080	S1209-U70
MIT-122121	3/4" NPT	1.68"	2.73"	3/4" NPT	4000			MITR-120	S1213-U70
MIT-162161	1" NPT	2.00"	3.27"	1" NPT				MITR-160	S1216-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-022021 = EPDM



NPT - Non-Swivel Style (per SAE J476 or ANSI B1.20)

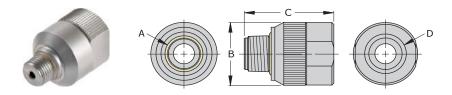
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-022021X	1/8" NPT	0.82"	1.24"	1/8" NPT	5000			MITR-02	S1109-U70
MIT-042041X	1/4" NPT	1.00"	1.41"	1/4" NPT	5000			MITR-04	S1111-U70
MIT-062061X	3/8" NPT	1.18"	1.48"	3/8" NPT				MITR-06	S1113-U70
MIT-082081X	1/2" NPT	1.36"	1.85"	1/2" NPT				MITR-08	S1209-U70
MIT-122121X	3/4" NPT	1.68"	1.94"	3/4" NPT	4000		II Irethane*	MITR-12	S1213-U70
MIT-162161X	1" NPT	2.00"	2.07"	1" NPT		Non		MITR-16	S1216-U70
MIT-202201X	1-1/4" NPT	2.38"	2.13"	1-1/4" NPT		Swivel		MITR-20	S1222-U70
MIT-242241X	1-1/2" NPT	2.74"	2.40"	1-1/2" NPT	3000			MITR-24	S1327-U70
MIT-322161X	2" NPT	3.47"	2.68"	1" NPT	2500			MITR-32	S1331-U70
MIT-402161X	2-1/2" NPT	3.97"	3.42"	1" NPT	1500			MITR-40	S1335-U70
MIT-482161X	3" NPT	4.73"	3.68"	1" NPT	1500			MITR-48	S1340-U70
MIT-642161X	4" NPT	5.73"	3.68"	1" NPT	1000			MITR-64	S1348-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-022021XV = FKM (Viton)



Connectors for Internal (Female) NPT Threads on Curved Surfaces

- Connects to Internal Threads



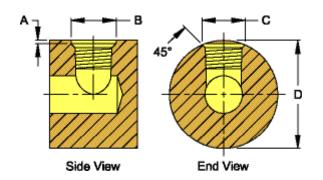
NPT - Non-Swivel Style for Curved Surfaces (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MITC-022021X	1/8" NPT	0.82"	1.24"	1/8" NPT	5000	Non	Lirothana*	MITR-02	S1010-U70
MITC-042041X	1/4" NPT	1.00"	1.41"	1/4" NPT	5000	Swivel	Urethane*	MITR-04	S1013-U70

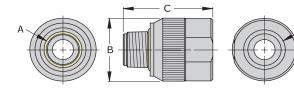
^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MITC-042041XB = Buna N

The TwistMate MITC Series connectors are designed to seal the port on the round of a surface better and with less effort. The unique chamfer seal design provides positive sealing with no thread sealants or wrench tightening.

Part Number	Max. at Dim A	Bore Ø. Dim B	Chamfer Ø Dim C	Min. Body Ø Dim D	
MITC-022021X	0.030"	0.500"	0.440"	0.880"	
MITC-042041X	0.045"	0.625"	0.570"	1.200"	







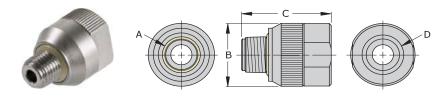
NPT - Non-Swivel Style for High Pressure (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MITH-022021X	1/8" NPT	0.82"	1.24"	1/8" NPT				MITR-02	S1109-U70
MITH-042041X	1/4" NPT	1.00"	1.41"	1/4" NPT	10,000			MITR-04	S1111-U70
MITH-062061X	3/8" NPT	1.18"	1.48"	3/8" NPT		Non	II Irethane*	MITR-06	S1113-U70
MITH-082081X	1/2" NPT	1.36"	1.85"	1/2" NPT	8000	Swivel		MITR-08	S1209-U70
MITH-122121X	3/4" NPT	1.68"	1.94"	3/4" NPT	7500			MITR-12	S1213-U70
MITH-162161X	1" NPT	2.00"	2.07"	1" NPT	6500			MITR-16	S1216-U70

^{*}Optional seal materials is EPDM - Example: MITH-042041XE = EPDM



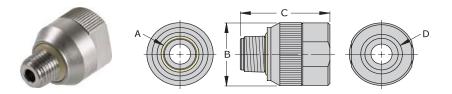
Connectors for Internal (Female) SAE O-Ring Boss Threads



SAE - Non-Swivel Style (per SAE J1926 or ISO 11926)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-034021X	-3 (3/8-24)	0.82"	1.29"	1/8" NPT				MITR-02	S1109-U70
MIT-044021X	-4 (7/16-20)	0.82"	1.29"	1/8" NPT	E000			IVII I R-UZ	S1109-U70
MIT-054041X	-5 (1/2-20)	1.00"	1.41"	1/4" NPT	5000			MITR-04	S1111-U70
MIT-064041X	-6 (9/16-18)	1.00"	1.41"	1/4" NPT				IVII I K-U4	S1111-U70
MIT-084081X	-8 (3/4-16)	1.36"	1.85"	1/2" NPT		Non	Urethane*	MITR-08	S1209-U70
MIT-104081X	-10 (7/8-14)	1.36"	1.85"	1/2" NPT		Swivel	Swivel	IVII I K-UO	S1209-U70
MIT-124121X	-12 (1 1/16-12)	1.68"	1.94"	3/4" NPT	4000			MITR-12	S1213-U70
MIT-144161X	-14 (1 3/16-12)	2.00"	2.13"	1" NPT	4000			MITR-16	S1216-U70
MIT-164161X	-16 (1 5/16-12)	2.00"	2.13"	1" NPT		1		IVII I R-16	S1217-U70
MIT-204201X	-20 (1 5/8-12)	2.38"	2.13"	1-1/4" NPT				MITR-20	S1222-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-044021XV = FKM (Viton)



SAE - Non-Swivel Style for High Pressure (per SAE J1926 or ISO 11926)

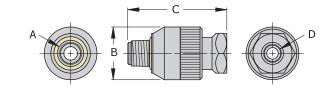
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MITH-044021X	-4 (7/16-20)	0.82"	1.29"	1/8" NPT	10,000			MITR-02	S1109-U70
MITH-064041X	-6 (9/16-18)	1.00"	1.41"	1/4" NPT	10,000			MITR-04	S1111-U70
MITH-084081X	-8 (3/4-16)	1.36"	1.85"	1/2" NPT	8000		II Irothano*	MITR-08	S1209-U70
MITH-104081X	-10 (7/8-14)	1.36"	1.85"	1/2" NPT	7500	Non Swivel		IVII I K-UO	S1209-U70
MITH-124121X	-12 (1 1/16-12)	1.68"	1.94"	3/4" NPT	7500			MITR-12	S1213-U70
MITH-144161X	-14 (1 3/16-12)	2.00"	2.13"	1" NPT	7000			MITR-16	S1216-U70
MITH-164161X	-16 (1 5/16-12)	2.00"	2.13"	1" NPT				IVIIIIR-10	S1217-U70

^{*}Optional seal materials is EPDM - Example: MITH-064041XE = EPDM



Connectors for Internal (Female) BSPP Threads





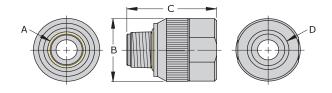
BSPP - Swivel Style (per ISO 228 or BS 2779)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-026021	1/8" BSPP	0.82"	1.24"	1/8" NPT	5000			MITR-020	S1109-U70
MIT-046041	1/4" BSPP	1.00"	1.41"	1/4" NPT	5000	Swivel	Urethane*	MITR-040	S1111-U70
MIT-066061	3/8" BSPP	1.18"	1.48"	3/8" NPT	4000	Swivei		MITR-060	S1113-U70
MIT-086081	1/2" BSPP	1.36"	1.85"	1/2" NPT	4000	4000		MITR-080	S1209-U70

- Connects to Internal Threads

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-046041XB = Buna N





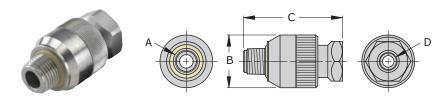
BSPP - Non-Swivel Style (per ISO 228 or BS 2779)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-126121X	3/4" BSPP	1.68"	1.94"	3/4" NPT	4000	Non	Lirothano*	MITR-12	S1213-U70
MIT-166161X	1" BSPP	2.00"	2.07"	1" NPT	4000	Swivel	Urethane*	MITR-16	S1216-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-126121XV = FKM (Viton)



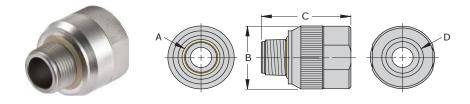
Connectors for Internal (Female) BSPT Threads



BSPT - Swivel Style (per ISO 7 or BS 21)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-026T021	1/8" BSPT	0.82"	1.24"	1/8" NPT	5000			MITR-020	S1109-U70
MIT-046T041	1/4" BSPT	1.00"	1.41"	1/4" NPT	5000		Urethane*	MITR-040	S1111-U70
MIT-066T061	3/8" BSPT	1.18"	1.48"	3/8" NPT	4000	Swivel 4000		MITR-060	S1113-U70
MIT-086T081	1/2" BSPT	1.36"	1.85"	1/2" NPT	4000			MITR-080	S1209-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-046T041XV = FKM (Viton)



BSPT - Non-Swivel Style (per ISO 7 or BS 21)

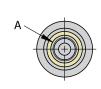
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-126T121X	3/4" BSPT	1.68"	1.94"	3/4" NPT	4000	Non		MITR-12	S1213-U70
MIT-166T161X	1" BSPT	2.00"	2.07"	1" NPT	4000	Swivel	Urethane*	MITR-16	S1216-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-126T121 = EPDM

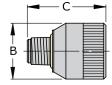


Plugs for Internal (Female) NPT, BSPP and BSPT Threads





- Connects to Internal Threads



NPT Threads (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)								
MIT-022P	1/8" NPT	0.82"	1.24"	5000			MITR-02	S1109-U70								
MIT-042P	1/4" NPT	1.00"	1.41"	3000		MITR-04	S1111-U70									
MIT-062P	3/8" NPT	1.18"	1.48"		Plug Urethane*	MITR-06	S1113-U70									
MIT-082P	1/2" NPT	1.36"	1.85"	4000		MITR-08	S1209-U70									
MIT-122P	3/4" NPT	1.68"	1.94"	4000	4000	." 4000] 4000	4000	4000	4000	4000				Consult	S1213-U70
MIT-162P	1" NPT	2.00"	2.07"				Factory	S1216-U70								

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-042P¥ = FKM (Viton)

BSPP Threads (per ISO 228 or BS 2779)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-026P	1/8" BSPP	0.82"	1.24"	F000			MITR-02	S1109-U70
MIT-046P	1/4" BSPP	1.00"	1.41"	5000	Plug	Urethane*	MITR-04	S1111-U70
MIT-066P	3/8" BSPP	1.18"	1.48"	4000			MITR-06	S1113-U70
MIT-086P	1/2" BSPP	1.36"	1.85"	4000			MITR-08	S1209-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-046PE = EPDM

BSPT Threads (per ISO 7 or BS 21)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-026TP	1/8" BSPT	0.82"	1.24"	5000			MITR-02	S1109-U70
MIT-046TP	1/4" BSPT	1.00"	1.41"	3000	Plug	Urethane*	MITR-04	S1111-U70
MIT-066TP	3/8" BSPT	1.18"	1.48"	4000			MITR-06	S1113-U70
MIT-086TP	1/2" BSPT	1.36"	1.85"	4000			MITR-08	S1209-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-046PB = Buna N

TwistMate Internal Repair Kits

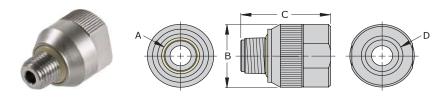
Swivel style repair kits contains 2 internal Buna N O-rings, 2 backup rings and 1 snap ring. Non-Swivel style repair kits contain 1 internal Buna N O-ring and 1 backup ring. Repair kits do not include main seal replacement.

For additional kits consult factory.





Connectors for Internal (Female) ISO O-Ring Metric Threads



ISO O-Ring Metric - Non-Swivel Style (per ISO 6149 or SAE J2244)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MIT-108021X	M10 x 1.0	0.82"	1.30"	1/8" NPT				MITR-02	S1109-U70
MIT-128041X	M12 x 1.5	1.00"	1.42"	1/4" NPT	5000			MITD 04	S1110-U70
MIT-148041X	M14 x 1.5	1.00"	1.42"	1/4" NPT		Non	Lirothana*	MITR-04	S1111-U70
MIT-168061X	M16 x 1.5	1.18"	1.56"	3/8" NPT		Swivel	Urethane*	MITD OF	S1113-U70
MIT-188061X	M18 x 1.5	1.18"	1.56"	3/8" NPT	4000	0		MITR-06	S1114-U70
MIT-228081X	M22 x 1.5	1.36"	1.87"	1/2" NPT				MITR-08	S1116-U70

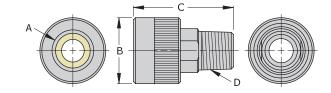
^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-148041XV = FKM (Viton)



Connectors for External (Male) NPT Threads



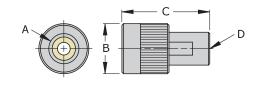
- Connects to Internal Threads



NPT Threads (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-021022	1/8" NPT	0.82"	1.51"	1/8" NPT	5000			METR-02	S1105-U70
MET-041042	1/4" NPT	0.94"	1.74"	1/4" NPT	3000			METR-04	S1108-U70
MET-061062	3/8" NPT	1.18"	1.78"	3/8" NPT			Urethane*	METR-06	S1110-U70
MET-081082	1/2" NPT	1.60"	2.05"	1/2" NPT	4000	Swivel		METR-08	S1112-U70
MET-121122	3/4" NPT	1.68"	2.34"	3/4" NPT	4000			METR-12	S1115-U70
MET-161162	1" NPT	2.00"	2.74"	1" NPT				METR-16	S1212-U70
MET-201202	1-1/4" NPT	2.37"	3.27"	1-1/4" NPT	2500			METR-20	S1217-U70





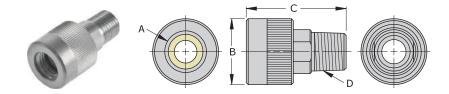
NPT Threads (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-241161	1-1/2" NPT	2.37"	3.27"	1" NPT	1000			METR-24	METB24
MET-321161	2" NPT	3.00"	2.53"	1" NPT	750		Swivel Urethane*	METR-32	METB32
MET-401161	2-1/2" NPT	3.40"	2.54"	1" NPT	500			METR-40	METB40
MET-481161	3" NPT	4.25"	2.61"	1" NPT	300			METR-48	METB48

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-041042 = EPDM



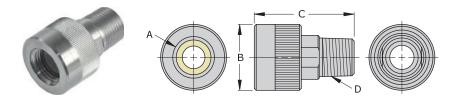
Connectors for External (Male) NPT Threads



NPT Threads for High Pressure (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
METH-021022	1/8" NPT	0.82"	1.51"	1/8" NPT	10,000			METR-02	S1105-U70
METH-041042	1/4" NPT	0.94"	1.74"	1/4" NPT	9000			METR-04	S1108-U70
METH-061062	3/8" NPT	1.18"	1.78"	3/8" NPT	8000	Swivel	Urethane*	METR-06	S1110-U70
METH-081082	1/2" NPT	1.60"	2.05"	1/2" NPT	6000	Swivei	Orethane	METR-08	S1112-U70
METH-121122	3/4" NPT	1.68"	2.34"	3/4" NPT	5500			METR-12	S1115-U70
METH-161162	1" NPT	2.00"	2.74"	1" NPT	5000			METR-16	S1212-U70

^{*}Optional seal materials is EPDM - Example: METH-041042E = EPDM



NPT Threads on Thin Walled Threaded Pipe (per SAE J476 or ANSI B1.20)

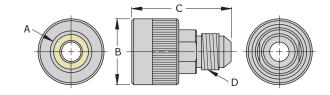
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-041042-PT	1/4" NPT	0.94"	1.74"	1/4" NPT				METR-04	METB-04PT
MET-061062-PT	3/8" NPT	1.18"	1.78"	3/8" NPT			Buna N	METR-06	METB-06PT
MET-081082-PT	1/2" NPT	1.60"	2.05"	1/2" NPT				METR-08	METB-08PT
MET-121122-PT	3/4" NPT	1.68"	2.34"	3/4" NPT	750			METR-12	METB-12PT
MET-161162-PT	1" NPT	2.00"	2.74"	1" NPT	750	Swivel		METR-16	METB-16PT
MET-201202-PT	1-1/4" NPT	2.37"	3.27"	1-1/4" NPT		Swivei		METR-20	METB-20PT
MET-241161*	1-1/2" NPT	2.37"	3.27"	1" NPT				METR-24	METB24
MET-321161	2" NPT	3.00"	2.53"	1" NPT			11	METR-32	METB32
MET-401161	2-1/2" NPT	3.40"	2.54"	1" NPT	500		Urethane	METR-40	METB40
MET-481161	3" NPT	4.25"	2.61"	1" NPT	500			METR-48	METB48

^{*}Connector pressure rating reduced to 750 psi for thin wall threaded pipe applications.



Connectors for External (Male) SAE Flare Threads





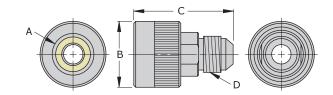
SAE - 37° Flare, "AN" Standard, Swivel Style for High Pressure (per SAE J514 or ISO 12151-5)

- Connects to Internal Threads

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
METH-049040	-4 (7/16-20)	0.95"	1.76"	-4 (7/16-20)				METR-049	S2070-0270B70
METH-069060	-6 (9/16-18)	1.20"	1.83"	-6 (9/16-18)				METR-06	S1012-B70
METH-089080	-8 (3/4-16)	1.38"	2.00"	-8 (3/4-16)	10,000	Swivel	Buna N*	METD 00	S1015-B70
METH-109100	-10 (7/8-14)	1.51"	2.35"	-10 (7/8-14)	1			METR-08	S1016-B70
METH-129120	-12 (1 1/16-12)	1.70"	2.52"	-12 (1 1/16-12)				METR-12	S1018-B70

^{*}Optional seal materials is EPDM - Example: METH-069060E = EPDM





For SAE 45° Flare (per SAE J512 or J513)

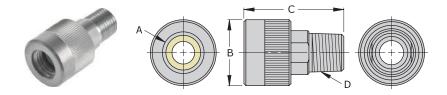
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-04A042B	-4 (7/16-20)	0.95"	1.76"	1/4" NPT	5000		Buna N**	METR-049	S2060-0246B70
MET-06A062N	-6 (5/8-18)	1.20"	1.83"	3/8" NPT			Neoprene*	METR-06	S1012-N70
MET-08A082N	-8 (3/4-16)	1.38"	2.00"	1/2" NPT		Swivel		METR-08	S1014-N70
MET-10A082N	-10 (7/8-14)	1.51"	2.35"	1/2" NPT	4000				S1015-N70
MET-12A122N	-12 (1 16-14)	1.70"	2.52"	3/4" NPT				METR-12	S1117-N70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-08A082N $\underline{\textbf{E}}$ = EPDM

^{**}Optional seal materials are FKM (Viton) and EPDM - Example: MET-04A042BV = FKM (Viton)



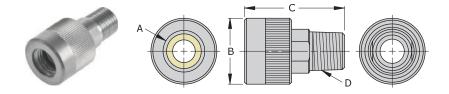
Connectors for External (Male) BSPP and BSPT Threads



BSPP - Swivel Style (per ISO 228 or BS 2779)

Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-025022	1/8" BSPP	0.80"	1.62"	1/8" NPT	5000			METR-02	S1105-U70
MET-045042	1/4" BSPP	0.93"	1.63"	1/4" NPT	5000	Cuival	Urethane*	METR-04	S1108-U70
MET-065062	3/8" BSPP	1.20"	1.31"	3/8" NPT	4000	Swivel		METR-06	S1110-U70
MET-085082	1/2" BSPP	1.36"	1.46"	1/2" NPT	4000			METR-08	S1112-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-045042B = Buna N



BSPT - Swivel Style (per ISO 7 or BS 21)

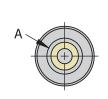
Part Number	Dim A	Dim B	Dim C	Dim D	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-025T022	1/8" BSPT	0.80"	1.62"	1/8" NPT	5000			METR-02	S1105-U70
MET-045T042	1/4" BSPT	0.93"	1.63"	1/4" NPT	5000	Curival	L luckbono*	METR-04	S1108-U70
MET-065T062	3/8" BSPT	1.20"	1.31"	3/8" NPT	4000	Swivel Urethan	Urethane*	METR-06	S1110-U70
MET-085T082	1/2" BSPT	1.36"	1.46"	1/2" NPT	4000			METR-08	S1112-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-045T042E = EPDM



Caps for External (Male) NPT, BSPP and BSPT Threads





- Connects to Internal Threads



Cap Style for NPT Threads (per SAE J476 or ANSI B1.20)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-021C	1/8" NPT	0.80"	0.83"	5000			METR-02	S1105-U70
MET-041C	1/4" NPT	0.93"	0.88"	5000	Can	Urothono*	METR-04	S1108-U70
MET-061C	3/8" NPT	1.20"	0.90"	4000	Сар	Urethane*	METR-06	S1110-U70
MET-081C	1/2" NPT	1.36"	0.97"	4000			METR-08	S1112-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-041CV = FKM (Viton)

Cap Style for BSPP Threads (per ISO 228 or BS 2779)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-025C	1/8" BSPP	0.80"	0.83"	5000			METR-02	S1105-U70
MET-045C	1/4" BSPP	0.93"	0.88"	5000	Can	Lirothana*	METR-04	S1108-U70
MET-065C	3/8" BSPP	1.20"	0.90"	4000	Сар	Urethane*	METR-06	S1110-U70
MET-085C	1/2" BSPP	1.36"	0.97"	4000			METR-08	S1112-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MET-045CE = EPDM

Cap Style for BSPT Threads (per ISO 7 or BS 21)

Part Number	Dim A	Dim B	Dim C	Rating PSI	Housing Style	Seal Material	Repair Kit	Main Seals Package (5)
MET-025TC	1/8" BSPT	0.80"	0.83"	5000			METR-02	S1105-U70
MET-045TC	1/4" BSPT	0.93"	0.88"		Con	ap Urethane*	METR-04	S1108-U70
MET-065TC	3/8" BSPT	1.20"	0.90"	4000	Сар		METR-06	S1110-U70
MET-085TC	1/2" BSPT	1.36"	0.97"	4000			METR-08	S1112-U70

^{*}Optional seal materials are FKM (Viton), EPDM and Buna N - Example: MIT-045TCB = Buna N

TwistMate Internal Repair Kits

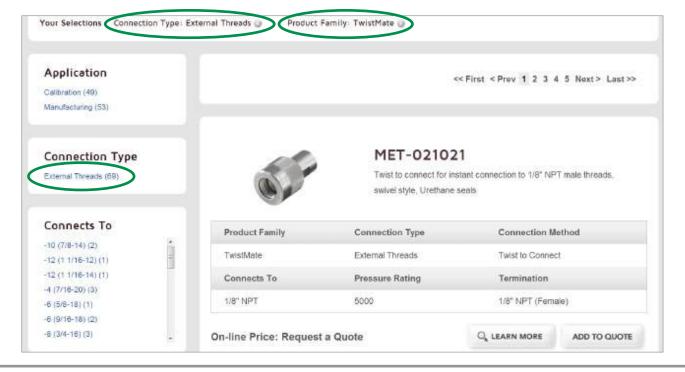
Swivel style repair kits contains 2 internal Buna N O-rings, 2 backup rings and 1 snap ring. Non-Swivel style repair kits contain 1 internal Buna N O-ring and 1 backup ring. Repair kits do not include main seal replacement.

For additional kits consult factory.



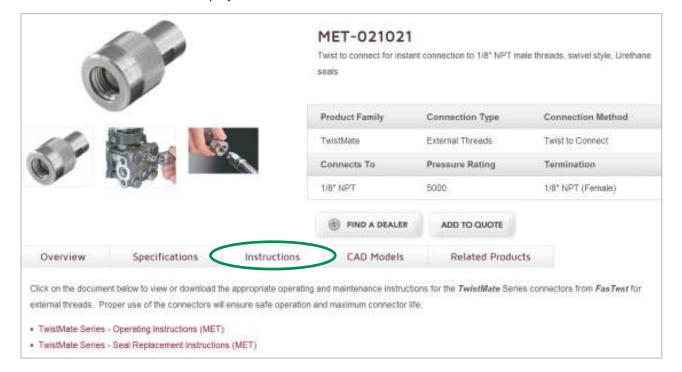
Need assistance finding a TwistMate connector for your application?

- Visit www.fastestinc.com and select "Connection Type" under "Products"
- Select a basic feature of your application such as "External Threads"
- Select TwistMate under Product Family or applications features such as "Connects to" to shorten your results list



Need operating or seal replacement instructions to extend connector service life?

- Find your connector above or use the part number search field in the website header, click "Learn More" button
- Select the "Instructions" tab to display links to current instruction documents

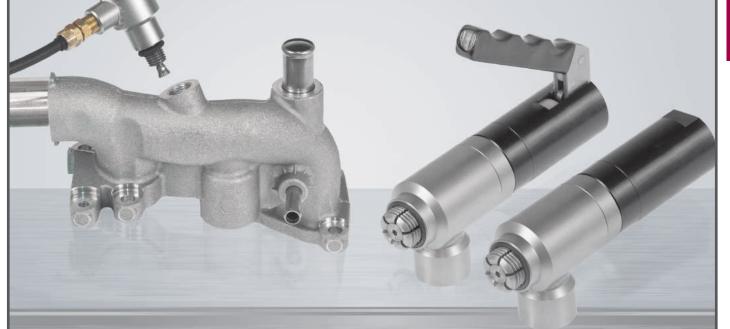






- ✓ Instant Connection to Internal Threaded Ports
- ✓ Seals to 5000 psi for Pneumatic / Hydraulic Testing
- ✓ Safe, Reliable, Leak Tight Connections
- ✓ Eliminate Thread or Product Damage, Sealants and Wrench Tightening
- ✓ Durable Stainless Steel Construction. Available in Multiple Thread Profiles

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Internal Threads	Thumb	E8
드는	Pneumatic	E10



FasMate - Instant Threaded Connections

FasTest's patented squeeze lever actuation and split collet design of the FasMate FN Series connectors provide an instant connection that can significantly decrease the time needed for pressure and vacuum testing, filling, flushing and performance testing.

The squeeze lever / split collet operation uses no thread sealant, no wrench tightening and will not damage the port threads. Its rugged design is ideal for production use and *FN Series* offers the following actuations methods: squeeze lever, pneumatic pilot or pneumatic thumb valve.



Instant Threaded Connections. As Easy as 1 - 2 - 3

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







2 Insert into the threaded port



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

Safe

The pressure assisted grip and proprietary design of the *FN Series* locks the connector securely to the port, 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.

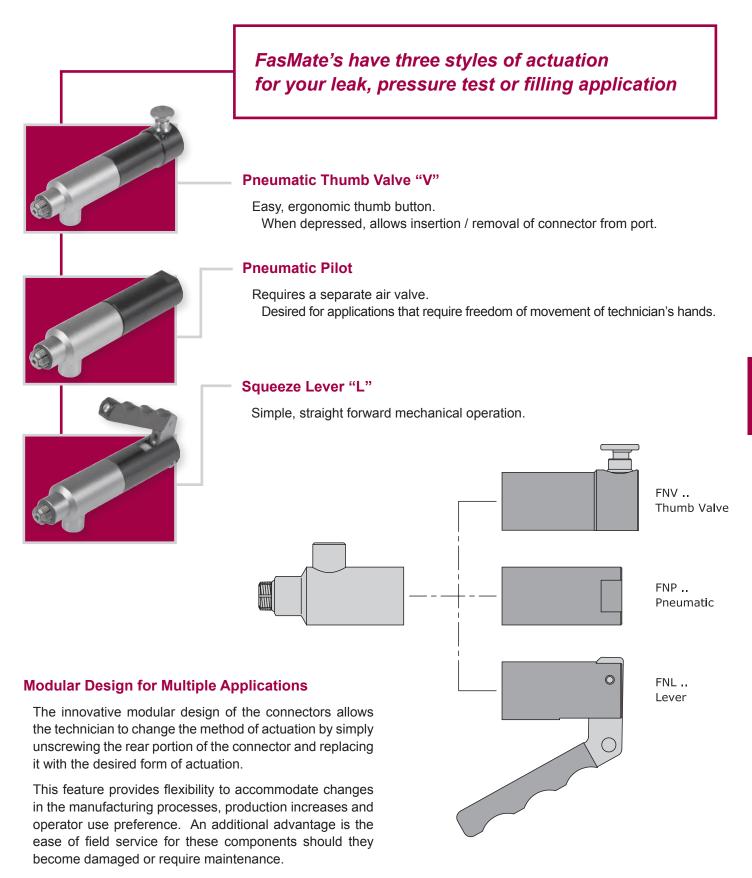
Made in the USA

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.

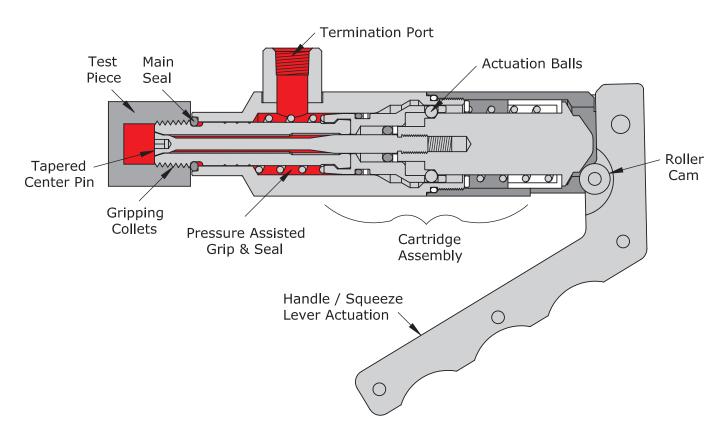




Phone: (972) 931-8666



FasMate Technology



A Look Inside at the Technology

The Lever actuator uses a rugged roller cam mechanism, that when squeezed, moves the Cartridge Assembly forward. As the Cartridge Assembly moves, so does the Gripping Collets and Tapered Center Pin. The Gripping Collets and Tapered Center Pin move independently due to an innovative Actuation Ball method unique to *FasTest*. This innovative actuation ball technology significantly reduces the effort needed to squeeze the lever. When the lever is released, the gripping collets expand into the port.

As media pressure increases, the sealing and connection force increases. This Pressure Assisted Grip & Seal feature ensures a leak free connection.

Grip & Seal Technology

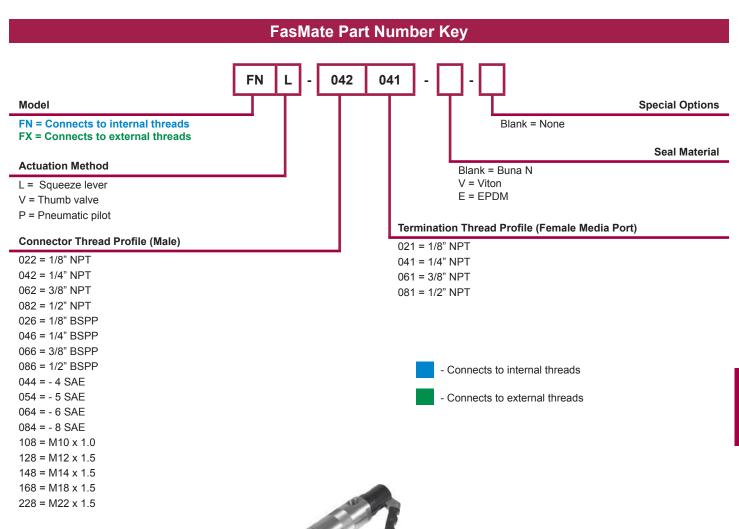
The *FasMate* FN family of products use an innovative collapsing collet with tapered center pin that together locks the connector to the port. As pressure increases, it becomes difficult to impossible to accidentally or inadvertently disconnect from the port*. The expanding collets and pressure assisted sealing concept makes a leak free connection with no thread sealants, no wrench tightening and no product damage.

* For more information about the Pressure Assisted Grip & Seal feature, and how it may apply to your specific application, please contact FasTest. Inc.

Proven Design

FasTest has years of designing and manufacturing innovative connection technology. The **FN Series** has been extensively field tested for durability, safety, ease of use and operator comfort. Service parts are readily available for fast maintenance or repairs in the field. Regular maintenance of seals and parts will result in the **FN Series** providing years of reliable service.





For additional sizes and models for external threads (FX), consult factory.

Notes:

Part Number Keys are to assist in IDENTIFICATION ONLY.

Verify new part numbers with factory; some configurations are not possible.



Connectors for Internal (Female) Threads



- Instant connections from vacuum to 5000 psi eliminate tape, sealants and wrenches
- Compatible to NPT, SAE O-Ring, BSPP and ISO O-Ring threads
- No damage to threaded parts
- · Durable stainless steel construction



For additional sizes and models for external threads (FXL), consult factory.

Lever Actuated - NPT Threads

Part Numbe	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-0220	21 1/8" NPT		1/8" NPT	0.60"	BS1			RFN022021	S1108-B70
FNL-0420	1/4" NPT	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel	Buna N	RFN042041	S21250327-B60
FNL-0620	3/8" NPT		3/8" NPT	0.90"	BS3			RFN062061	S1112-B70
FNL-0820	1/2 " NPT		1/2" NPT	1.10"	BS4			RFN082081	S1208-B70

Lever Actuated - SAE O-Ring Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-044021	-4 (7/16-20)		1/8" NPT	0.60"	BS1			RFN044021	S1109-B70
FNL-054041	-5 (1/2-20)	Vacuum to 5000	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel	Buna N	RFN054041	S21250327-B60
FNL-064041	-6 (9/16-18)		1/4" NPT	0.75"	BS3			RFN064041	S1111-B70
FNL-084061	-8 (3/4-16)		3/8" NPT	0.90"	BS4			RFN084061	S1207-B70

Lever Actuated - BSPP Threads

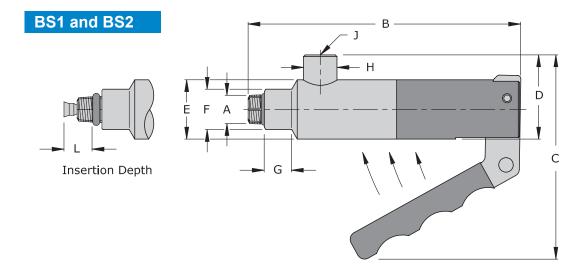
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-026021	1/8" BSPP		1/8" NPT	0.60"	BS1			RFN026021	S1108-B70
FNL-046041	1/4" BSPP	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	Dung M	RFN046041	S21250327-B60
FNL-066061	3/8" BSPP	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Buna N	RFN066061	S1112-B70
FNL-086081	1/2" BSPP		1/2" NPT	1.10"	BS4			RFN086081	S1208-B70

Lever Actuated - ISO O-Ring Metric Threads

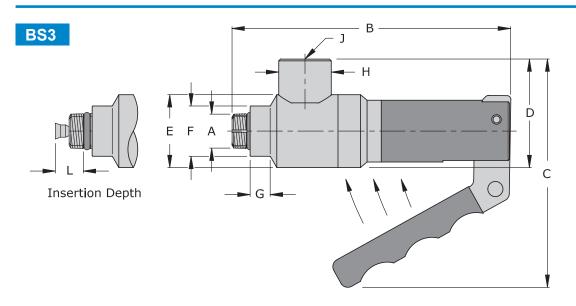
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-108021	M10x1.0		1/8" NPT	0.60"	BS1			RFN108021	S1108-B70
FNL-128041	M12x1.5		1/4" NPT	0.75"	BS2			RFN128041	S21250327-B60
FNL-148041	M14x1.5	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &		RFN148041	S21250327-B60
FNL-168061	M16x1.5	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Buna N	RFN168061	S1112-B70
FNL-188061	M18x1.5		3/8" NPT	0.90"	BS4			RFN188061	S1206-B70
FNL-228081	M22x1.5		1/2" NPT	1.10"	BS4			RFN228081	S1209-B70

- Connects to Internal Threads

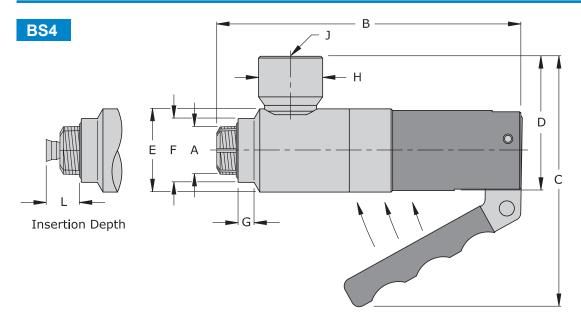




Dim	BS1	BS2		
Α	See Cor	nects to		
В	4.80"	5.00"		
С	3.70"	4.00"		
D	1.50"	1.70"		
E	1.06"	1.06"		
F	0.65"	0.72"		
G	0.50"	0.50"		
Н	0.60"	0.75"		
J	1/8" NPT	1/4" NPT		
L	0.55"	0.67"		



Dim	BS3
Α	See Connects to
В	5.00"
С	3.90"
D	1.86"
E	1.25"
F	0.86"
G	0.35"
Н	See Term Diameter
J	See Term Thread
L	0.67"



Dim	BS4					
Α	See Connects to					
В	5.27"					
С	4.40"					
D	2.33"					
E	1.43"					
F	1.09"					
G	0.27"					
Н	See Term Diameter					
J	See Term Thread					
L	0.76"					



Connectors for Internal (Female) Threads



- Instant connections from vacuum to 5000 psi eliminate tape, sealants and wrenches
- Compatible to NPT, SAE O-Ring, BSPP and ISO O-Ring threads
- No damage to threaded parts
- · Durable stainless steel construction



For additional sizes and models for external threads (FXV), consult factory.

Thumb Valve Actuated - NPT Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNV-022021	1/8" NPT		1/8" NPT	0.60"	BS1			RFN022021	S1108-B70
FNV-042041	1/4" NPT	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	Buna N	RFN042041	S21250327-B60
FNV-062061	3/8" NPT	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Dulla IN	RFN062061	S1112-B70
FNV-082081	1/2" NPT		1/2" NPT	1.10"	BS4			RFN082081	S1208-B70

Thumb Valve Actuated - SAE O-Ring Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNV-044021	-4 (7/16-20)		1/8" NPT	0.60"	BS1			RFN044021	S1109-B70
FNV-054041	-5 (1/2-20)	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	Dung N	RFN054041	S21250327-B60
FNV-064041	-6 (9/16-18)	to 5000	1/4" NPT	0.75"	BS3	Stainless Steel	Buna N	RFN064041	S1111-B70
FNV-084061	-8 (3/4-16)		3/8" NPT	0.90"	BS4			RFN084061	S1207-B70

Thumb Valve Actuated - BSPP Threads

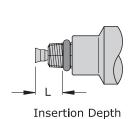
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNV-026021	1/8" BSPP		1/8" NPT	0.60"	BS1			RFN026021	S1108-B70
FNV-046041	1/4" BSPP	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	Buna N	RFN046041	S21250327-B60
FNV-066061	3/8" BSPP	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Dulla IN	RFN066061	S1112-B70
FNV-086081	1/2" BSPP		1/2" NPT	1.10"	BS4			RFN086081	S1208-B70

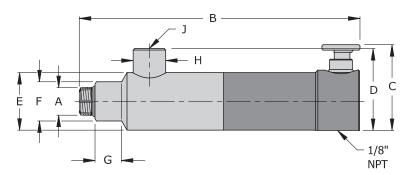
Thumb Valve Actuated - ISO O-Ring Metric Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNV-108021	M10x1.0		1/8" NPT	0.60"	BS1			RFN108021	S1108-B70
FNV-128041	M12x1.5		1/4" NPT	0.75"	BS2			RFN128041	S21250327-B60
FNV-148041	M14x1.5	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	5	RFN148041	S21250327-B60
FNV-168061	M16x1.5	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Buna N	RFN168061	S1112-B70
FNV-188061	M18x1.5		3/8" NPT	0.90"	BS4			RFN188061	S1206-B70
FNV-228081	M22x1.5		1/2" NPT	1.10"	BS4			RFN228081	S1209-B70

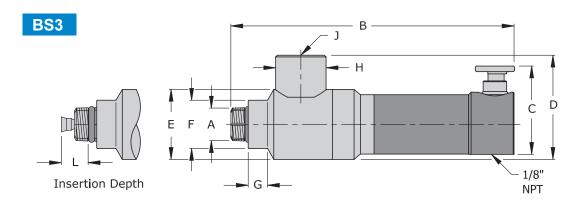




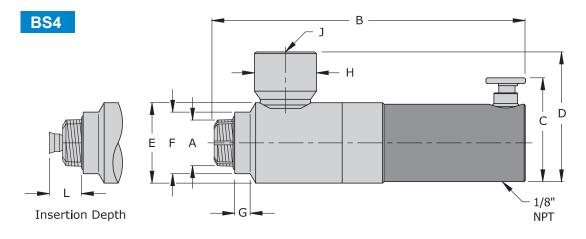




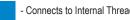
Dim	BS1	BS2
Α	See Cor	nects to
В	5.13"	5.21"
С	1.58"	1.58"
D	1.50"	1.70"
E	1.06"	1.06"
F	0.65"	0.72"
G	0.50"	0.50"
Н	0.60"	0.75"
J	1/8" NPT	1/4" NPT
L	0.55"	0.67"



Dim	BS3
Α	See Connects to
В	5.05"
С	1.58"
D	1.86"
E	1.25"
F	0.86"
G	0.35"
Н	See Term Diameter
J	See Term Thread
L	0.67"



Dim	BS4					
Α	See Connects to					
В	5.27"					
С	1.85"					
D	2.33"					
E	1.43"					
F	1.09"					
G	0.27"					
Н	See Term Diameter					
J	See Term Thread					
L	0.76"					





Connectors for Internal (Female) Threads



- Instant connections from vacuum to 5000 psi eliminate tape, sealants and wrenches
- Compatible to NPT, SAE O-Ring, BSPP and ISO O-Ring threads
- No damage to threaded parts
- Durable stainless steel construction



For additional sizes and models for external threads (FXP), consult factory.

Pneumatic Actuated - NPT Threads

ı	Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FN	IP-022021	1/8" NPT	Vacuum	1/8" NPT	0.60"	BS1	Aluminum &	Buna N	RFN022021	S1108-B70
FN	IP-042041	1/4" NPT		1/4" NPT	0.75"	BS2			RFN042041	S21250327-B60
FN	IP-062061	3/8" NPT	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel		RFN062061	S1112-B70
FN	IP-082081	1/2" NPT		1/2" NPT	1.10"	BS4			RFN082081	S1208-B70

Pneumatic Actuated - SAE O-Ring Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNP-044021	-4 (7/16-20)	1/2-20) Vacuum 1/4" NPT 0.75" BS2 Aluminum &	RFN044021	S1109-B70					
FNP-054041	-5 (1/2-20)		1/4" NPT	0.75"	BS2	Aluminum &	Buna N	RFN054041	S21250327-B60
FNP-064041	-6 (9/16-18)	to 5000	1/4" NPT	0.75"	BS3	Stainless Steel		RFN064041	S1111-B70
FNP-084061	-8 (3/4-16)		3/8" NPT	0.90"	BS4			RFN084061	S1207-B70

Pneumatic Actuated - BSPP Threads

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNP-026021	1/8" BSPP		1/8" NPT	0.60"	BS1			RFN026021	S1108-B70
FNP-046041	1/4" BSPP	Vacuum	1/4" NPT	0.75"	BS2	Aluminum &	Dung N	RFN046041	S21250327-B60
FNP-066061	3/8" BSPP	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel	Buna N	RFN066061	S1112-B70
FNP-086081	1/2" BSPP		1/2" NPT	1.10"	BS4			RFN086081	S1208-B70

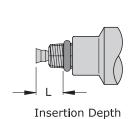
Pneumatic Actuated - ISO O-Ring Metric Threads

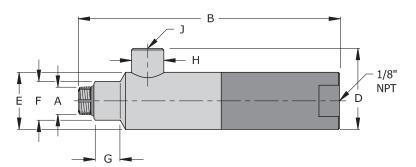
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNP-108021	M10x1.0		1/8" NPT	0.60"	BS1	Aluminum &	Buna N	RFN108021	S1108-B70
FNP-128041	M12x1.5		1/4" NPT	0.75"	BS2			RFN128041	S21250327-B60
FNP-148041	M14x1.5	Vacuum	1/4" NPT	0.75"	BS2			RFN148041	S21250327-B60
FNP-168061	M16x1.5	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel		RFN168061	S1112-B70
FNP-188061	M18x1.5		3/8" NPT	0.90"	BS4			RFN188061	S1206-B70
FNP-228081	M22x1.5		1/2" NPT	1.10"	BS4			RFN228081	S1209-B70

- Connects to Internal Threads

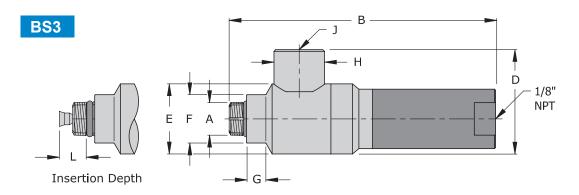




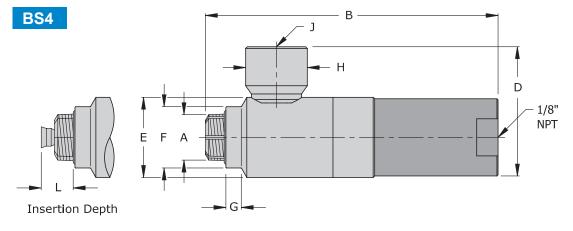




Dim	BS1	BS2				
Α	See Cor	nects to				
В	4.90"	5.00"				
С	N/A	N/A				
D	1.50"	1.70"				
E	1.06"	1.06"				
F	0.65"	0.72"				
G	0.50"	0.50"				
Н	0.60"	0.75"				
J	1/8" NPT	1/4" NPT				
L	0.55"	0.67"				



Dim	BS3						
Α	See Connects to						
В	4.80"						
С	N/A						
D	1.86"						
Е	1.25"						
F	0.86"						
G	0.35"						
Н	See Term Diameter						
J	See Term Thread						
L	0.67"						



Dim	BS4						
Α	See Connects to						
В	5.34"						
С	N/A						
D	2.33"						
E	1.43"						
F	1.09"						
G	0.27"						
Н	See Term Diameter						
J	See Term Thread						
L	0.76"						

"JNL" and "JXL" - Smooth Tube Connectors



Technology Overview

The **NuJaws Series** provides quick and effortless connections for tubing especially copper, steel and aluminum tubes that are used with refrigerant based products. The unique collet gripping and sealing design provides unmatched sealing reliability and resists removal under pressure.

Both connector series utilize a singular seal which can be quickly replaced at your work center to minimize down-time, maintenance and tool inventory. Neoprene seals are standard for refrigerant based applications but they are available with any elastomer required for your application.





JNL0 and JNL1 Series

	Contents	Page(s)
	Tech Info	F1-F2
nternal Tubes	0.375"-0.875"	F3
Internal Tubes	1.000"-1.625"	F4
External Tubes	0.250"-0.875"	F5





"JNL" Connectors for Internal Tubes and Bores



"JXL" Connectors for External Tubes

"JNL" and "JXL" - Smooth Tube Connectors



Features and Benefits - "JNL and JXL Series"

- Connects to Internal Tubes

- Pressures to 1000 psi for manual connections*
- Resists removal under pressure
- Reliable, pressure enhanced sealing
- · Quick and easy seal replacement
- Vacuum to 10 millitorr (micron)

- Temperature range from -40°F to 250°F
- Body Anodized aluminum with Delrin handle
- Gripping Collets Stainless steel snap rings, collets and springs
- Main Seal Neoprene (others available on request)

JNL Series





*JNL pressure rating based on test piece having a surface finish greater than 16rms and a hardness of no more than 95 Rb to grip and seal at the rated pressure. A surface finish of 8rms may be acceptable if the test piece has a hardness no greater than 40 Rb.

JXL Series

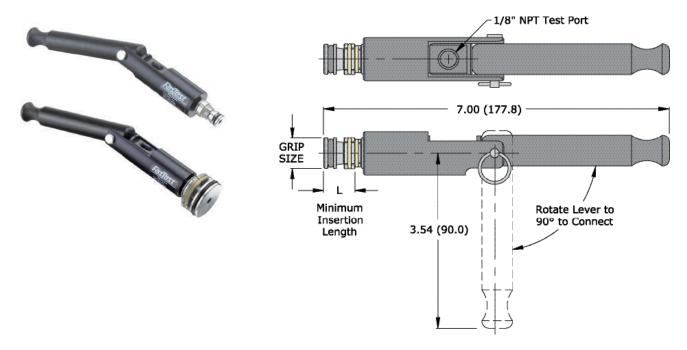




*JXL pressure rating based on metal test piece not exceeding 30 Rockwell C hardness. As a general guideline, surface must be 5 micro inches or greater. Surfaces less than 5 micro inches not recommended.



FasTest "JNL" Series - Connectors for Internal Tube Grip and Seal Applications



JNL0 and JNL1 - Lever Actuated Connectors for Internal Tubes / Bores

Part Number	Grip Size (+0.010"/-0.010")	Rated PSI*	Flow Diameter	Dim L	Housing Materials	Seal Material	Main Seals Package (5)
JNL0-0375H	0.375"		0.11"	0.50"			SN0-0375H
JNL0-0500H	0.500"		0.11	0.53"		Neoprene	SN0-0500H
JNL1-0590	0.590"	Vacuum		0.63"	Aluminum,		SN1-0590
JNL1-0625	0.625"	to			Stainless Steel and Delrin		SN1-0625
JNL1-0750	0.750"	1000	0.17"				SN1-0750
JNL1-0785	0.785"						SN1-0785
JNL1-0875	0.875"						SN1-0875

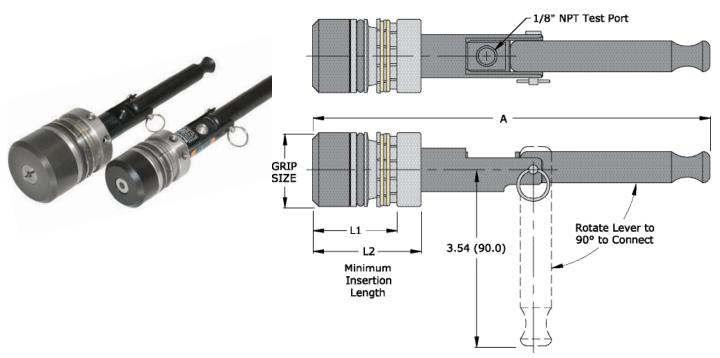
^{*} Pressure rating based on the test piece having a surface finish greater than 16 rms and a hardness of no more than 95 Rb to grip and seal at the rated pressure. A surface finish of 8 rms may be acceptable if the test piece has a hardness no greater than 40 Rb.

"JNL" and "JXL" - Smooth Tube Connectors



FasTest "JNL" Series - Connectors for Internal Tube Grip and Seal Applications

- Connects to Internal Tubes



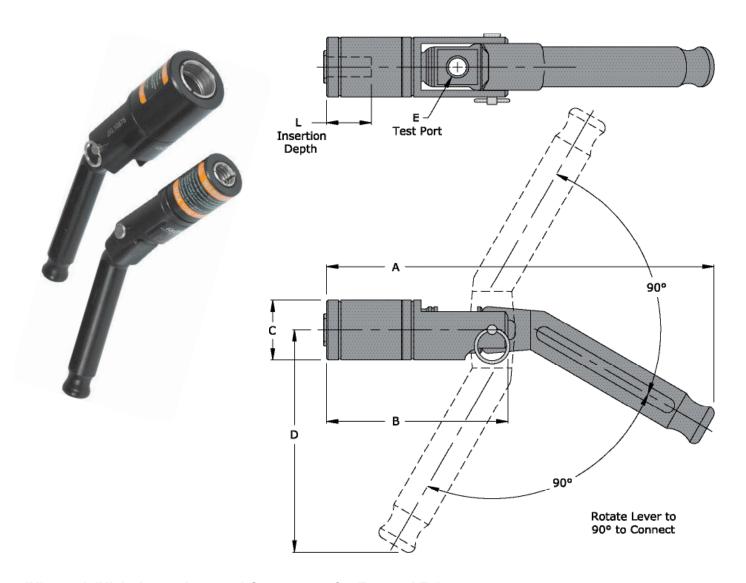
JNL2 - Lever Actuated Connectors for Internal Tubes / Bores

Part Number	Grip Size (+0.030"/-0.010")	Rated PSI*	Flow Diameter	Dim A	Dim "L1"	Dim "L2"	Housing Materials	Seal Material	Main Seals Package (5)
JNL2-1000	1.000"		0.17"	7.18"	1.31"	1.39"	Aluminum, Stainless Steel and Delrin	Neoprene	Consult Factory
JNL2-1125	1.125"		0.17	7.10	1.31				
JNL2-1250	1.250"	Vacuum	0.47"	7.30"	1.44"	1.51"			
JNL2-1375	1.375"	to 750	0.17"	7.84"	1.56"	2.05"			
JNL2-1500	1.500"	Ī	0.17"	7.91"	1.69"	2.12"			
JNL2-1625	1.625"			8.09"	1.81"	2.30"]		

^{*} Pressure rating based on the test piece having a surface finish greater than 16 rms and a hardness of no more than 95 Rb to grip and seal at the rated pressure. A surface finish of 8 rms may be acceptable if the test piece has a hardness no greater than 40 Rb.



FasTest "JXL" Series - Connectors for External Tube Grip and Seal Applications



JXL0 and JXL1 - Lever Actuated Connectors for External Tubes

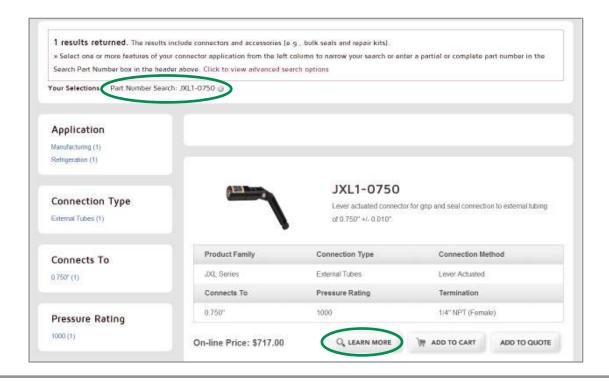
Part Number	Grip Size (±0.010")	Rated PSI*	Dim A	Dim B	Dim C	Dim D	Dim E	Dim L	Max. Flow Ø	Housing Materials	Seal Material	Main Seals Package (5)		
JXL0-0250	0.250"						1/8" NPT	0.85 (21.6)		0.24 (6.0) Aluminum, Stainless Steel	Neoprene	SXL0-0250		
JXL0-0312	0.312"		7.27	3.42 (86.9)	1.13 (28.8)	4.22 (107.2)			0.24			SXL0-0312		
JXL0-0375	0.375"	Vacuum	(184.7)						(6.0)			SXL0-0375		
JXL0-0500	0.500"	to										SXL0-0500		
JXL1-0625	0.625"	1000	1000	1000								and Delrin		SXL0-0625
JXL1-0750	0.750"		7.27 (184.7)	3.42 (86.9)	1.62 (41.2)	4.22 (107.2)	1/4" NPT	0.85	0.27 (6.8)			SXL0-0750		
JXL1-0875	0.875"							(110)	(= 1.5)			SXL0-0875		

^{*} Pressure rating based on metal test piece not exceeding 30 Rockwell C hardness. As a general guideline, surface must be 5 micro inches or greater. Surfaces less than 5 micro inches not recommended.

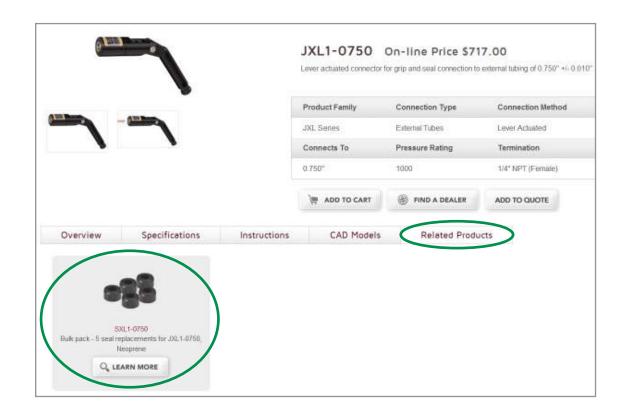


Need assistance finding replacement seals for your JNL or JXL connectors?

- · Visit www.fastestinc.com and enter a part number in the "Search Part Number" field
- · Click the "Learn More" button



· Select the "Related Products" tab to display seals, repair kits and replacement parts





Technology Overview

The **ST Series** connectors make reliable, leak tight connections with straight tubes for evacuation or pressure applications such as leak testing, proof testing and processing. The ergonomic sliding sleeve operation makes an instant connection that is further enhanced by pressure and without operator adjustments.

Rugged, heat treated steel components provide excellent resistance to mechanical handling damage but are not recommended for water dunk applications. The mating seal is radially squeezed around the tube upon connection and it is easily replaced without disassembly. The unique collet locking mechanism resists removal under pressure for added safety.

The **XT Series** connectors provide quick and effortless connections for expanded tubing especially copper, steel, and aluminum tubes that are used with refrigerant based products. These connectors utilize redundant seals on the inside of the tube, which is enhanced by pressure, and a sleeve lock which resists removal under pressure and requires no operator adjustments.

The XT's are manufactured from hardened steel material with seals that can be quickly replaced, without disassembly, at your work center minimizing downtime, maintenance and tool inventory. Neoprene seals are standard for refrigerant based applications but they are available with any elastomer required for your application.

Features and Benefits

"ST Series"

- Fits straight tubing sizes 1/4", 5/16", 3/8"
- Seals vacuum to 1000 psi, -40°F to +250°F
- Reliable leak tight sealing to 10-7 cc/sec
- Durable, replaceable seals with no connector disassembly
- Heat treated steel body assures long life and protection against mechanical damage
- Positive gripping No operator adjustments!



For Smooth / Swaged Tubes

"XT Series"

- Fits expanded tubing sizes 3/8", 1/2", 5/8", 3/4", 7/8"
- Seals vacuum to 625 psi, -40°F to +250°F
- Reliable leak tight sealing to 10-7 cc/sec
- · Works well with tube size variation or rough cut ends
- Durable, replaceable seals with no connector disassembly
- Heat treated steel body assures long life and protection against mechanical damage
- Positive gripping No operator adjustments!



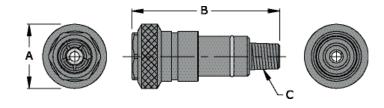
For Formed / Expanded Tubes

"ST" and "XT" - Smooth & Formed Tube Connectors



FasTest "ST Series" - Connectors for External Smooth / Swaged Tubes



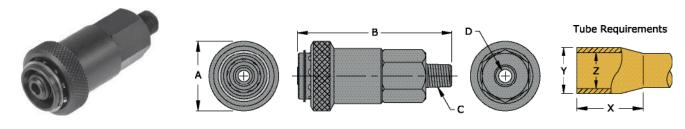


"ST Series" - Sleeve Actuated Connectors for Straight / Swaged Tubes

Part Number	Grip Size (+0.015"/-0.010")	Rated PSI	Dim A	Dim B	Dim C	Insertion Depth	Seal Material	Replacement Collet Sets	Main Seals Package (5)
ST-04042	0.250"		1.14"	2.75"		0.62"		STC04	STB04
ST-05042	0.312"	Vacuum to 1000	1.19"	2.75	1/4" NPT	0.62	Neoprene	STC05	STB05
ST-06042	0.375"		1.50"	3.23"		0.75"		STC06	STB06

Note: Not recommended for water dunk applications.

FasTest "XT Series" - Connectors for External Formed / Expanded Tubes



"XT Series" - Sleeve Actuated Connectors for Formed / Expanded Tubes

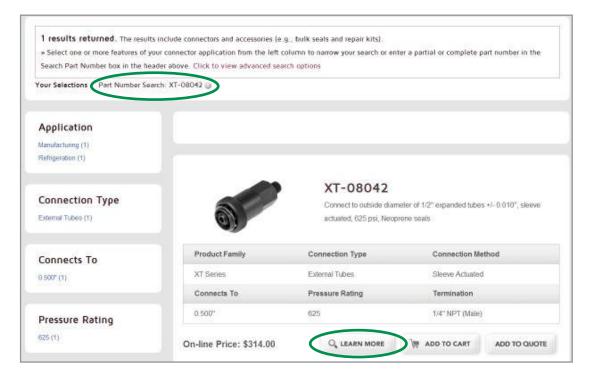
Part Number	Grip Size (±0.010")	Rated PSI	Dim A	Dim B	Dim C	Flow Ø Dim D	Dim X	Dim Y	Dim Z	Seal Material	Repair Kit	Main Seals Package (5)
XT-06042	0.375"		1.25"	3.31"		0.12"		0.500"	0.368"		XTR06	XTB06
XT-08042	0.500"		1.37"	3.31		0.22"	0.30"-1.00"	0.625"	0.491"		XTR08	XTB08
XT-10042	0.625"	Vacuum to 625	1.50"		1/4" NPT	0.25"		0.730"	0.616"	Neoprene	XTR10	XTB10
XT-12042	0.750"		1.62"	3.33"		0.27"	0.27" 1.00"	0.858"	0.741"		XTR12	XTB12
XT-14042	0.875"		1.72"			0.28"	0.37"-1.00"	0.996"	0.867"]	XTR14	XTB14

Note: Not recommended for water dunk applications.

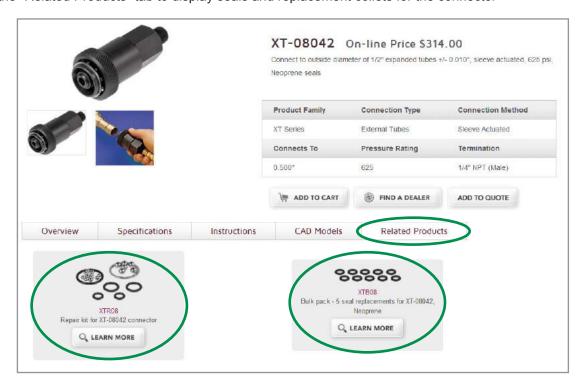


Need assistance finding replacement seals or collets for your ST or XT connectors?

- Visit www.fastestinc.com and enter a part number in the "Search Part Number" field
- Click the "Learn More" button



· Select the "Related Products" tab to display seals and replacement collets for the connector



"60 and HPB Series" - Sleeve Actuated Connectors



Technology Overviews

The **60 Series** connectors have a sliding sleeve and threaded collet design for instantly sealed connections to 750 psi. The design incorporates an internal piston that seals the mating part and enhances the seal as pressure increases. Connections are made with a simple push and snap motion.

The internal sealing piston provides a straight through flow for minimal restriction and pressure loss. Standard products are manufactured in stainless steel with Buna N seals. Other seal materials and custom designs are available for all your applications. The *HPB Series* connectors have a sliding sleeve and threaded collet design for instantly sealed connections to 5000 psi. The design is the ideal and preferred method for fast, safe and repeatable connections to NPT, "AN" SAE 37° flare and SAE 45° flare profile male threads. Additional models are available for compression fittings custom thread applications.

Simply push the connector on to the male threads to connect and pull sleeve away from connection to release. Standard products are manufactured in stainless steel with Buna N seals. Other seal materials and custom designs are available for all your applications.

Features and Benefits

"60 Series"

- Compatible to NPT, SAE 37° "AN" flare and SAE 45° flare male threads
- Instant connections from vacuum to 750 psi eliminate tape, sealant, wrenches and thread damage
- High flow design for short filling and testing times
- Rugged stainless steel housing
- -40°F to +250°F operating temperature



For External Threads

"HPB Series"

- Compatible to NPT, "AN" SAE 37° flare and SAE 45° flare male threads
- Instant connections from vacuum to 5000 psi eliminate tape, sealant, wrenches and thread damage
- Safety feature will not allow disconnect under pressure
- Split collet design locks securely
- · Easy to replace main seal

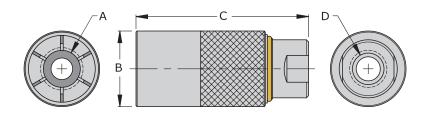


For External Threads



FasTest "60 Series" - Connectors for External Threads





"60 Series" Sleeve Actuated for NPT Threads (per SAE J476)

Part Number	Dim A	Dim B	Dim C	Dim D	Rated PSI	Housing Material	Seal Material	Main Seals Package (5)	
60G-1T02	1/8" NPT	0.99"		1/8" NPT				S1105-B70	
60G-1T04	1/4" NPT	1.19"	2.95"	1/4" NPT					S1109-B70
60G-1T06	3/8" NPT	1.19		1/4" NPT	Vacuum	Stainless	Dung M	S1111-B70	
60G-1T08	1/2" NPT	1.38"	3.15"	1/2" NPT	to 750	Steel	Dulla IN	S1112-B70	
60G-1T12	3/4" NPT	1.58"	3.15	1/2" NPT				Consult	
60G-1T16	1" NPT	1.97"	3.54"	3/4" NPT				Factory	

"60 Series" Sleeve Actuated for "AN" SAE 37° Flare Threads (per SAE J514)

Part Number	Dim A	Dim B	Dim C	Dim D	Rated PSI	Housing Material	Seal Material	Main Seals Package (5)
60G-049	-4 (7/16-20)	0.99"	2.95"	1/8" NPT				S1010-B70
60G-069	-6 (9/16-18)	1.19"	2.95	3/8" NPT				
60G-089	-8 (3/4-16)	1.58"	3.15"	3/8" NPT	Vacuum	Stainless	Dung N	S1014-B70
60G-109	-10 (7/8-14)	1.78"	3.54"	1/2" NPT	to 750	Steel	Material Material	S1016-B70
60G-129	-12 (1 1/16-12)	1.70	3.34	3/4" NPT				Consult Factory
60G-169	-16 (1 5/15-12)	1.97"	3.54"	3/4" NPT				S1120-B70

"60 Series" Sleeve Actuated for SAE 45° Flare Threads (per SAE J512/513)

Part Number	Dim A	Dim B	Dim C	Dim D	Rated PSI	Housing Material	Seal Material	Main Seals Package (5)	
60G-A04	-4 (7/16-20)	0.99"	2.95"	1/8" NPT				S2060-0246B70	
60G-A06	-6 (5/8-18)	4.20"	2.45"	2/0" NDT			Material		S1012-B70
60G-A08	-8 (3/4-16)	1.38"	3.15"	3/8" NPT				S1015-B70	
60G-A10	-10 (7/8-14)	4.70"			Vacuum to 750	Stainless Steel	Material	S1015-B70	
60G-A12	-12 (1 1/16-14)	1.78"	0.54"	0/4" NIDT		0.00.		S1117-B70	
60G-A14	-14 (1 1/4-12)	4.07"	3.54"	3/4" NPT				Canacilt Factori	
60G-A16	-16 (1 3/8-12)	1.97"						Consult Factory	

Notes:

Additional sizes available for 60 Series connectors. Consult factory for details.

Optional seal materials available are FKM (Viton) and EPDM.

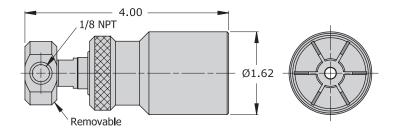
Examples: 60G-xxx<u>V</u> = FKM (Viton) 60G-xxx<u>E</u> = EPDM

"60 and HPB Series" - Sleeve Actuated Connectors



FasTest "HPB Series" - Connectors for External Threads / Compression Fittings





"HPB Series" Sleeve Actuated for NPT Threads (per SAE J476)

Part Number	Connects to	Termination Port	Rated PSI	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)	
HPB-041021	1/4" NPT						S1108-B70	
HPB-061021	3/8" NPT	1/8" NPT	. Vacuum Stainless Buna N	Stainless Steel Buna N		S1110-B70		
HPB-081021	1/2" NPT			5.501	,661			S1112-B70

"HPB Series" Sleeve Actuated for "AN" SAE 37° Flare Threads (per SAE J514)

Part Number	Connects to	Termination Port	Rated PSI	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
HPB-049021	- 4 (7/16-20)						S2070-0270B70
HPB-069021	- 6 (9/16-18)	1/8" NPT	Vacuum to 5000	Stainless Steel	Buna N		HPBR
HPB-089021	- 8 (3/4-16)						S1015-B70

For Compression Fittings - Swagelok® or Equivalent

Part Number	Connects to	Termination Port	Rated PSI	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)	
HPB-CF04021	1/4" (7/16-20)				ss Buna N			S1008-B70
HPB-CF06021	3/8" (9/16-20)	1/8" NPT	Vacuum to 5000	Stainless Steel		HPBR	S1011-B70	
HPB-CF08021	1/2" (3/4-20)						S1013-B70	

For Compression Fittings - Ferulok® or Equivalent

Part Number	Connects to	Termination Port	Rated PSI	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
HPB-CF04021F	1/4" (7/16-20)	1/8" NPT	Vacuum to 5000				S1008-B70
HPB-CF06021F	3/8" (9/16-18)			Stainless Steel	Buna N		HPBR
HPB-CF08021F	1/2" (3/4-16)						S1013-B70

Notes:

Optional seal materials available are FKM (Viton) and EPDM.

Examples: HPB-xxx021<u>V</u> = FKM (Viton) HPB-xxx021<u>E</u> = EPDM



FasTest "70 Series" - Connectors for a Variety of Tube Features

Technology Overview

The **70 Series** connectors have a sliding sleeve and threaded collet design for instantly sealed connections from vacuum to 750 psi. The design incorporates an internal piston that seals the mating part and enhances the seal as pressure increases. Connections are made with a simple push and snap motion.

The internal sealing piston provides a straight through flow for minimal restriction and pressure loss. Standard products are manufactured in stainless steel with Buna N seals. Other seal materials and custom designs are available for all your applications.



Features and Benefits







Flared Tube



Barbed Tube



Beaded Tube



Formed End Tube

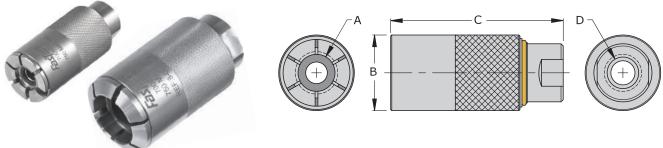
- Connect to fittings, expanded, flared, barbed, beaded and formed end tubes
- Instant connections from vacuum to 750 psi eliminate tape, sealant, wrenches and part damage
- High flow design for short filling and testing times
- · Rugged stainless steel housing
- -40°F to +250°F operating temperature





For Custom External Connections

FasTest "70 Series" - Connectors for a Variety Fittings and Tubes



"70 Series" Sleeve Actuated for Expanded, Flared, Barbed, Beaded and Formed End Tubes

Body Size	Range (OD) Dim A	Dim B	Dim C	Dim D	Rated PSI	Housing Material	Seal Material	Main Seals Package (5)
1	Up to 0.32"	0.87"		1/8" NPT				
2	0.32" to 0.43"	0.99"	2.95"	I/O INPT				
3	0.43" to 0.59"	1.19"		1/4" NPT				
4	0.59" to 0.79"	1.38"	3.15"	3/8" NPT				
5	0.79" to 0.98"	1.58"	3.15	1/2" NPT	Vacuum	Stainless	Determined	Determined
6	0.98" to 1.18"	1.78"			to 750	Steel	by application	by application
7	1.18" to 1.42"	1.97"	3.54"	3/4" NPT				
8	1.42" to 1.65"	2.17"						
9	1.65" to 1.85"	2.36"	2 54"	1" NPT				
10	1.85" to 2.04"	2.76"	3.54"	1-1/4" NPT				

How to Order

The 70 Series connectors are designed for mechanical gripping on a feature of the test piece and pressure enhanced sealing. Connectors are designed, engineered and manufactured to your specific application requirements.

For part number and a price quotation:

- 1) Identify the gripping and sealing areas of your test piece.
- 2) Contact FasTest with information on test pressure, media and provide detailed drawing, including tolerances of test piece.
- 3) Two sample parts will be required at the time of order for final design and testing purposes.



FasTest "MBE and MRE Series" Connectors for Expanded Tubes

Technology Overview



Custom, made to application samples and drawings required with application request.

The *MBE Series* (Ball Grip) and *MRE Series* (Ring Grip) connectors make reliable, leak tight connections for vacuum or pressure applications up to 625 psi. Designed for high flow applications such as run testing. Also ideal for helium leak testing, proof testing, pressure decay and other related processes. The sliding sleeve locks when pressurized to make safe secure instant connections with no operator adjustment.

To Connect: Insert the tube into the connector and push the external sleeve until it clicks into the locked position.

To Disconnect: Relieve pressure, push the connector toward the tube to release the safety lock and retract the external sleeve to withdraw the connector.

Features and Benefits



- High flow non-valved with pressure activated safety lock
- Unique design grips until pressure is dissipated, no operator adjustments for added safety
- Mating seal is easily replaced without disassembly cutting maintenance costs
- · Ideal for high flow testing
- -40°F to +250°F operating temperature

"MBE and MRE Series" - Sleeve Actuated for Expanded Tubes - Sizing Guidelines

Body Size	Tube Ø	Expanded Tube Ø	Expansion Length Min.	Flow Ø	Termination (male)	Rated PSI	Housing Material	Seal Material	Main Seals Package (5)
04	1/4"	0.316 (8.03)		0.190 (4.82)	1/4" NPT				
05	5/16"	0.382 (9.71)		0.248 (6.29)	1/4 INF1				
06	3/8"	0.444 (11.28)		0.311 (7.89)					
08	1/2"	0.570 (14.48)		0.436 (11.07)	3/8" NPT				
10	5/8"	0.700 (17.78)	0.300 (7.62)	0.555 (14.09)		Vacuum	Stainless	Neoprene	Consult
12	3/4"	0.840 (21.34)	0.300 (7.02)	0.666 (16.91)	3/4" NPT	to 625	Steel	Neoprene	Factory
14	7/8"	0.970 (24.64)		0.785 (19.93)	3/4 INFT				
16	1"	1.120 (28.45)		0.940 (23.87)	1" NPT				
18	1-1/8"	1.230 (31.25)		1.025 (26.03)	1-1/4" NPT				
22	1-3/8"	1.490 (37.85)		1.265 (32.13)	1-1/4 NP1				

How to Order

The MBE and MRE Series connectors are designed for mechanical gripping on expanded tubing. Connectors are designed, engineered and manufactured to your specific application requirements.

For part number and a price quotation:

- 1) Identify the gripping and sealing areas of your test piece.
- Contact FasTest with information on test pressure, media and provide detailed drawing, including tolerances of test piece.
- 3) Two sample parts will be required at the time of order for final design and testing purposes.

Custom Connectors



FasTest "FE Series" - Connectors for Special Tube Applications

Technology Overview

The FE Series connectors can be customized to accommodate unique shaped tubing or multiple tube sealing configurations. Whether the requirement is for manual or automated sealing these custom connectors can make guick work of what used to be a tedious task.

These connectors are air-actuated and are ideal for automation to accommodate high volume production testing. Compressed air activates the elastomeric seals.



The uniform seal movement makes a virtually leakproof connection, even over threaded, rough and oily surfaces. Testing, filling or flushing of the test piece is accomplished by introducing media through the FasTest connector.



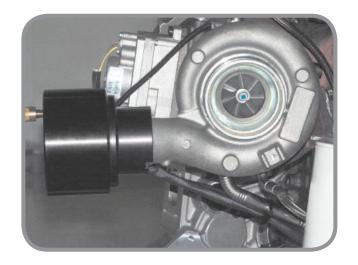
FasTest "FEG Series" - Connectors for Alternative Manual Mounting

Technology Overview

The FEG Series custom connectors are an excellent option for applications where the connectors need to be manually inserted into sealing position. Leveraging the patented FE style technology with the addition of a yoke style shaft allows the user to manually insert the connector into the application where permanent or automated mounting options are limited.

The design of the yoke style shaft is quickly mounted by placing the connector onto a feature of the test piece. The connector essentially hangs in position and is then air-actuated to move the internal piston toward the test piece and create a face seal for leak or pressure testing. These connectors are commonly used in automotive engine leak tests.







FasTest "FIG Series" - Connectors for Grip and Internal Sealing Applications

Technology Overview

The **FIG Series** custom connectors are for sealing rough case or out of round ports with a bead for openings as large as 6" in diameter. Primarily designed for the diesel engine industry, the connectors feature a unique system that seals on the internal surface while gripping on the exterior. Mechanically gripping to the external bead while the pneumatically operated elastomer compresses into the ID and provides a leak tight connection.

This is ideal for applications where mounting the connector is not practical or desirable. The FIG is easy to use since no operator adjustment is needed and the new gripping





feature virtually eliminates the possibility of accidental disengagement. Each FIG is configured to meet your requirements with pressure capabilities ranging from vacuum to 120 psi.

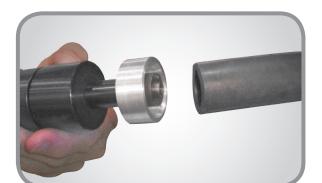


FasTest "FIH Series" - Connectors for Internal Flexible Hose Sealing Applications

Technology Overview

The **FIH Series** custom connectors are an ideal solution for applications where sealing and testing flexible hoses is required. Whether the requirement is for manual or automated sealing of automotive radiator hoses or plastic tubing assemblies, the FIH Series connectors make quick work of what used to be a tedious task.

Simply insert your flexible hose or tube into the shroud of the FIH and apply pressure. The shroud is sized to your hose or tubing OD.



The expanding seal provides a leak-tight connection and compresses the hose or tube against the shroud providing the needed gripping.







Date:	Application	Evaluation	Sheet

Evaluation and design will be based on information provided.
Please provide as much detail as possible.

**************************************	*Company:		*Phone:	
**Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Product Manufactured: Pro	*Contact:	,	*Fax:	
Product Manufactured: 1. Testing Specifications Test Pressure	*Address:		*E-mail:	
Test Pressure	*City:	*State:		*Zip Code:
Test Pressure Test Temperatures Test Temperatures Test Medium Number of Connectors Required Type of Test: Bubble Leak Water Dunk Pressure Decay Proof Test Tracer Gas Mass Spectrometer - Helium Concentration Other 2. Type of Application Automated Manual Pneumatically Operated - Fixtured (Seal Only) Twist and Seal Pneumatically Operated Diameter to Seal Internal External Identify Gripping Surface: (Grip and Seal Connectors Only) Smooth Tube Beaded Tube Flared Tube Internal External External	Product Manufactured:			
Test Temperatures	1. Testing Specifications			
Test Medium	Test Pressure	Flow Require	ed	
Number of Connectors Required Type of Test:	Test Temperatures	Acceptable L	eak Rate	
Type of Test: Bubble Leak Water Dunk Pressure Decay Proof Test Tracer Gas Mass Spectrometer - Helium Concentration Other Automated Manual Pneumatically Operated - Fixtured (Seal Only) Twist and Seal Pneumatically Operated Lever Action / Sleeve Locking Other Automated Pneumatically Operated Lever Action / Sleeve Locking	Test Medium	Available Pile	ot Pressure	
Mass Spectrometer - Helium Concentration Other 2. Type of Application Automated Manual Pneumatically Operated - Fixtured (Seal Only) Twist and Seal Pneumatically Operated - Grip and Seal Pneumatically Operated Lever Action / Sleeve Locking Other 3. Part Specifications *Required Field 2 prints detailing all dimensions, tolerances, features. 2 actual production parts that are quality assurance approved. Identify Surface to be Sealed: Machined Cast Threaded Other Diameter to Seal Internal External Identify Gripping Surface: (Grip and Seal Connectors Only) Smooth Tube Beaded Tube Flared Tube Threaded Tube Other Diameter to Grip Internal External	Number of Connectors Required	_		
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Note:

Index contains all published connectors and unique seal part numbers for products such as the FE and FI series. Common seals and repair kits used in multiple connectors such as TwistMate are not listed here. All replacement seals and repair kits can be found on pages with the connectors.

000 1700	ETO 05 0540 M	ETO 00400 044	FF0 00UD A40
60G-1T02	ETS-2E-0510-M	ETS-S0130	FE2-26UR
60G-1T04	ETS-2E-0510-0	FE001-001	FE2-27URA18
60G-1T08	ETS-2E-0512	FE1-1/4 NPT	FE2-28
00G-1100112	L13-2L-0312-0	1 L 1-1/4 INF 1	1 L2-20
60G-1T12	ETS-2E-0591	FE01-1/8 NPT	FE2-28URA18
60G-1T16	ETS-2E-0591-U	FE001-001URA18	FE2-29
60G-049	ETS-2E-0669	FE001-002	FE2-29UR
60G-069	ETS-2E-0669-U	FE001-002URA18	FE2-T21URA22
60G-089	ETS-2E-0750	FE01-03	FE2-T22UR
60G-109	ETS-2E-0750-U	FE1-3/8 NPT	FE2-T23UR
60G-129	ETS-2E-0827	FE01-03URA18	FE2-T24UR
60G-169	ETS-2E-0827-U	FE01-04	FE2-T25UR
60G-A04	ETS-2E-T012	FE01-04URA18	FE2-T0760URA21
60G-A06H2	ETS-2E-T025	FE01-05	FE2-T0800UR A21, A22
60G-A08	ETS-2E-T038	FE01-05UR	FE2-T0885UR
60G-A10	ETS-2I-0394	FE1-15	FE2-T1010UR
60G-A12H2	ETS-2I-0394-U	FE1-15UR	FE2-T1075UR
60G-A14	ETS-2I-0472	FE1-16	FE2-T1200UR
60G-A16	ETS-2I-0472-U	FE1-16URA18	FE2-T1260UR
70 Series	ETS-2I-0551	FE1-17	FE2-T1320UR
A02M3	ETS-2I-0551-U	FE1-17UR	FE2-T1385UR
A02M4	ETS-2I-0630	FE1-18	FE2-T1400UR
A02M5	ETS-2I-0630-U	FE1-18URA18	FE3-1 1/2 NPT
AT021RA10	ETS-2I-0709	FE1-19	FE3-1 1/4 NPT
ETO 4E 00E0 044	ETO 01 0700 11	EE4 4011D	EE0 04
ETS-1E-0050	ETS-2I-0709-U	FE1-19UR	FE3-31
ETS-1E-0050-M	ETS-2I-0787	FE001-0050	FE3-31UR
ETS-1E-0050-M	ETS-2I-0787	FE001-0050	FE3-31UR
ETS-1E-0050-M	ETS-2I-0787	FE001-0050	FE3-31URA18
ETS-1E-0050-M	ETS-2I-0787C9 ETS-2I-0787-UC10 ETS-2I-0866C9	FE001-0050	FE3-31UR
ETS-1E-0050-M	ETS-2I-0787C9 ETS-2I-0787-UC10 ETS-2I-0866C9 ETS-2I-0866-UC10	FE001-0050	FE3-31UR. A18 FE3-32 A16 FE3-32UR. A18 FE3-33 A16
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ETS-1E-0050-M C11 ETS-1E-0080 C11 ETS-1E-0080-M C11 ETS-1E-0130 C11 ETS-1E-0130-M C11 ETS-11-0310 C8 ETS-11-0310-U C8 ETS-11-0330 C8	ETS-2I-0787C9 ETS-2I-0787-UC10 ETS-2I-0866C9 ETS-2I-0866-UC10 ETS-2I-0945C9 ETS-2I-0945-UC10 ETS-2I-1024C9 ETS-2I-1024-UC10	FE001-0050 A16 FE001-0050UR A18 FE01-0450UR A21 FE1-0480UR A22 FE1-0510UR A21 FE1-0570UR A21, A22 FE1-0640UR A21, A22 FE1-0700UR A21	FE3-31UR. A18 FE3-32 A16 FE3-32UR. A18 FE3-33 A16 FE3-33UR. A18 FE3-34 A16 FE3-34UR. A18 FE3-34UR. A18 FE3-T1440UR A22
ETS-1E-0050-M C11 ETS-1E-0080 C11 ETS-1E-0080-M C11 ETS-1E-0130 C11 ETS-1E-0130-M C11 ETS-1I-0310 C8 ETS-1I-0330-U C8 ETS-1I-0330-U C8	ETS-2I-0787 C9 ETS-2I-0787-U C10 ETS-2I-0866 C9 ETS-2I-0866-U C10 ETS-2I-0945 C9 ETS-2I-0945-U C10 ETS-2I-1024 C9 ETS-2I-1024-U C10 ETS-2I-1102 C9	FE001-0050 A16 FE001-0050UR A18 FE01-0450UR A21 FE1-0480UR A22 FE1-0510UR A21 FE1-0570UR A21, A22 FE1-0640UR A21, A22 FE1-0700UR A21 FE1-0720UR A21	FE3-31UR. A18 FE3-32 A16 FE3-32UR. A18 FE3-33 A16 FE3-33UR. A18 FE3-34 A16 FE3-34UR. A18 FE3-34UR. A18 FE3-T1440UR A22 FE3-T1460UR A21
ETS-1E-0050-M C11 ETS-1E-0080 C11 ETS-1E-0080-M C11 ETS-1E-0130 C11 ETS-1E-0130-M C11 ETS-11-0310 C8 ETS-11-0330 C8 ETS-11-0330 C8 ETS-11-0330-U C8 ETS-11-1012 C8	ETS-2I-0787 C9 ETS-2I-0787-U C10 ETS-2I-0866 C9 ETS-2I-0866-U C10 ETS-2I-0945 C9 ETS-2I-0945-U C10 ETS-2I-1024 C9 ETS-2I-1024-U C10 ETS-2I-1102 C9 ETS-2I-1102-U C10	FE001-0050 A16 FE001-0050UR A18 FE01-0450UR A21 FE1-0480UR A22 FE1-0510UR A21 FE1-0570UR A21, A22 FE1-0640UR A21, A22 FE1-0700UR A21 FE1-0720UR A22 FE2-1/2 NPT A20	FE3-31UR. A18 FE3-32 A16 FE3-32UR. A18 FE3-33 A16 FE3-33UR. A18 FE3-34 A16 FE3-34UR. A18 FE3-T1440UR A22 FE3-T1460UR A21 FE3-T1595UR A22
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Part Number Index / Reference Information



Note:

Index contains all published connectors and unique seal part numbers for products such as the FE and FI series. Common seals and repair kits used in multiple connectors such as TwistMate are not listed here. All replacement seals and repair kits can be found on pages with the connectors.

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Note:

Index contains all published connectors and unique seal part numbers for products such as the FE and FI series. Common seals and repair kits used in multiple connectors such as TwistMate are not listed here. All replacement seals and repair kits can be found on pages with the connectors.

EEO Cariaa Cuatara 14	FFC0 07UD A40	FFC4.4F	F104.04
FEG Series - Custom J4 FES001-001	FES2-27UR	FES4-45	FI01-01
FES1-1/4 NPT	FES2-28UR	FES4-46	FI01-1/8NPTA13
FES01-1/8 NPT	FES2-29A16	FES4-46UR	FI01-01UR
1 L301-1/0 NF1 A20, A22	1 L32-29	1 L34-400KA19	1101-010KA12
FES001-001UR	FES2-29UR	FES4-47A17	FI01-4SAE
FES001-002A16	FES2-T21UR	FES4-47UR	FI1-5SAE
FES001-002URA18	FES2-T22UR	FES4-48A17	FI1-6SAE
FES01-03A16	FES2-T23UR	FES4-48UR	FI1-11
1200100	1202 12001(1201 1001(
FES1-3/8 NPT	FES2-T24UR	FES4-49	FI1-11UR
FES01-03UR	FES2-T25UR	FES4-49UR	FI1-12A11
FES01-04	FES2-T0760UR	FES4-T1910UR	FI1-12UR
FES01-04UR	FES2-T0800UR A21, A22	FES4-T2020UR	FI1-13A11
	,		
FES01-05A16	FES2-T0885UR	FES4-T2070UR	FI1-13UR
FES01-05UR	FES2-T1010UR	FES4-T2380UR	FI01-0300
FES1-15A16	FES2-T1075UR	FES4-T2520UR	FI01-0300UR
FES1-15UR	FES2-T1200UR	FES5-51	FI01-M10
FES1-16A16	FES2-T1260UR	FES5-51UR	FI1-M12
FES1-16UR	FES2-T1320UR	FES5-52	FI1-M14
FES1-17	FES2-T1385UR	FES5-52UR	FI1-M16
FES1-17UR	FES2-T1400UR	FES5-53	FI2-1/2NPT
FES1-18	FES3-1 1/2 NPT	FES5-53UR	FI2-3/8NPT
FES1-18UR	FES3-1 1/4 NPT	FES5-54	FI2-7SAE
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FES001-0050UR	FES3-32UR	FES5-56	FI2-22UR
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FES01-0450UR A21 FES1-0480UR A22 FES1-0510UR A21 FES1-0570UR A21, A22 FES1-0640UR A22 FES1-0720UR A22 FES2-1/2 NPT A20 FES2-1 NPT A20, A21 FES2-3/4 NPT A20, A21 FES2-21 A16 FES2-21UR A18 FES2-22 A16 FES2-22UR A18	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES6-61 A17 FES6-61 A19 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-63 A17 FES6-64 A19 FES6-64 A17	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31UR A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20	FES5-56UR .A19 FES5-57 .A17 FES5-57UR .A19 FES5-58 .A17 FES5-58UR .A19 FES5-59 .A17 FES6-61 .A17 FES6-61 .A17 FES6-62 .A17 FES6-62 .A17 FES6-63 .A17 FES6-63UR .A19 FES6-63UR .A19	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31UR A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12
FES01-0450UR A21 FES1-0480UR A22 FES1-0510UR A21 FES1-0570UR A21, A22 FES1-0640UR A22 FES1-0720UR A22 FES2-1/2 NPT A20 FES2-1 NPT A20, A21 FES2-3/4 NPT A20, A21 FES2-21 A16 FES2-21 A16 FES2-22UR A18 FES2-23 A16 FES2-23UR A18	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-63 A17 FES6-64 A19 FES6-64 A17 FES6-64 A17	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31UR A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A22 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17 FES4-41UR A19	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-64 A17 FES6-64 A17 FES6-65 A17 FES6-65UR A19 FES6-65UR A19 FES6-65UR A19	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31UR A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15 FI3-M26 A15 FI3-M27 A15
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17 FES4-41UR A19 FES4-42 A17	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-64 A17 FES6-64 A17 FES6-65 A17	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31UR A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15 FI3-M26 A15
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17 FES4-41UR A19 FES4-42 A17	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-64 A17 FES6-64 A17 FES6-65 A17 FES6-65UR A19 FES6-65UR A19 FES6-65UR A19	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31 A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15 FI3-M26 A15 FI3-M27 A15
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17 FES4-41UR A19 FES4-42 A17 FES4-42UR A19	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-63UR A19 FES6-64 A17 FES6-65 A17 FES6-65 A17 FES6-65 A17 FES6-66 A19 FES6-66 A17	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31 A12 FI3-32 A11 FI3-32 A11 FI3-33 A11 FI3-33 A11 FI3-31 A12 FI3-M24 A15 FI3-M26 A15 FI3-M27 A15 FI3-M28 A15
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41 A17 FES4-41UR A19 FES4-42 A17 FES4-43 A17	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-63UR A19 FES6-64 A17 FES6-65 A17 FES6-65 A17 FES6-66 A17 FES6-66 A17 FES6-66 A17 FES6-66UR A19 FES6-66UR A19	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31 A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15 FI3-M26 A15 FI3-M27 A15 FI3-M28 A15 FI4-1NPT A13
FES01-0450UR	FES3-33 A16 FES3-33UR A18 FES3-34 A16 FES3-34UR A18 FES3-T1440UR A22 FES3-T1460UR A21 FES3-T1595UR A22 FES3-T1640UR A21 FES3-T1675UR A22 FES3-T1710UR A21 FES3-T1790UR A22 FES3-T1890UR A21 FES4-2 1/2 NPT A20 FES4-2 NPT A20 FES4-41UR A19 FES4-42UR A19 FES4-43 A17 FES4-43UR A19	FES5-56UR A19 FES5-57 A17 FES5-57UR A19 FES5-58 A17 FES5-58UR A19 FES5-59 A17 FES5-59UR A19 FES6-61 A17 FES6-62 A17 FES6-62 A17 FES6-63 A17 FES6-63 A17 FES6-64 A17 FES6-65 A17 FES6-65 A17 FES6-66 A17 FES6-66 A17 FES6-66 A17 FES6-66 A17 FES6-66 A17 FES6-66 A17	FI2-23 A11 FI2-23UR A12 FI2-M18 A15 FI2-M20 A15 FI2-M22 A15 FI3-3/4NPT A13 FI3-8SAE A14 FI3-9SAE A14 FI3-31 A11 FI3-31 A12 FI3-32 A11 FI3-32UR A12 FI3-33 A11 FI3-33UR A12 FI3-M24 A15 FI3-M26 A15 FI3-M27 A15 FI3-M28 A15 FI4-1NPT A13 FI4-1NPT A13 FI4-10SAE A14



Note:

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FI4-41UR	FIB1-6SAE	FIB4-M33	FIS1-12UR
FI4-42	FIB1-11A11	FIB4-M36	FIS1-13A11
FI4-42UR	FIB1-11UR	FIB5-1 1/4NPT	FIS1-13UR
FI4-43	FIB1-12A11	FIB5-12SAE	FIS01-0300A11
FI4-43UR	FIB1-12UR	FIB5-51A11	FIS01-0300UR
FI4-M30	FIB1-13	FIB5-51UR	FIS01-M10
FI4-M33	FIB1-13UR	FIB5-52	FIS1-M12
FI4-M36	FIB01-0300A11	FIB5-52UR	FIS1-M14
FI5-1 1/4NPT	FIB01-0300UR	FIB5-53A11	FIS1-M16
FI5-12SAE	FIB01-M10	FIB5-53UR	FIS2-1/2NPTA13
FI5-51	FIB1-M12	FIB5-M42	FIS2-3/8NPT
FI5-51UR	FIB1-M14	FIB6-1 1/2NPT	FIS2-7SAE
515.50	5104.1440	FID0 4004F	5100.04
FI5-52	FIB1-M16	FIB6-13SAE	FIS2-21
FI5-53	FIB2-3/8NPT	FIB6-61UR	FIS2-22
FI5-53UR	FIB2-3/6NP1A13	FIB6-62	FIS2-22UR
113-3301(1 ID2-7 SAL	1150-02ATI	1102-2201(A12
FI5-M42	FIB2-21A11	FIB6-62UR	FIS2-23A11
FI6-1 1/2NPT	FIB2-21UR	FIB6-63A11	FIS2-23UR
FI6-13SAE	FIB2-22A11	FIB6-63UR	FIS2-M18
FI6-61	FIB2-22UR	FIB6-M48	FIS2-M20
FI6-61UR	FIB2-23A11	FIB7-2 1/2NPT	FIS2-M22
FI6-62A12	FIB2-23UR	FIB7-2 1/2NF1	FIS3-3/4NPT
FI6-62UR	FIB2-M18	FIB7-14SAE	FIS3-8SAE
FI6-63A11	FIB2-M20	FIB7-71A11	FIS3-9SAE
FI6-63UR	FIB2-M22	FIB7-71UR	FIS3-31A11
FI6-M48	FIB3-3/4NPTA13	FIB7-72A11	FIS3-31UR
FI7-2 1/2NPT	FIB3-8SAE	FIB7-72UR	FIS3-32A11
FI7-2NPT	FIB3-9SAE	FIB7-73A11	FIS3-32UR
FI7-14SAE	FIB3-31A11	FIB7-73UR	FIS3-33A11
FI7-71	FIB3-31UR	FIB7-M60	FIS3-33UR
FI7-71UR	FIB3-32A11	FIB8-81	FIS3-M24
FI7-72A11	FIB3-32UR	FIB8-81UR	FIS3-M26
FI7-72UR	FIB3-33	FIB8-82	FIS3-M27
FI7-73	FIB3-33UR	FIB8-82UR	FIS3-M28
FI7-73UR	FIB3-M24	FIB8-83	FIS4-1NPT
F17-IVI00	FIB3-M26	FIBO-03UR	F154-105AE
FI8-81A11	FIB3-M27	FIG Series - Custom J5	FIS4-11SAE
FI8-81UR	FIB3-M28	FIH Series - Custom J5	FIS4-41A11
FI8-82A11	FIB4-1NPT	FIS01-01A11	FIS4-41UR
FI8-82UR	FIB4-10SAE	FIS1-1/4NPT	FIS4-42
FI8-83A11	FIB4-11SAE	FIS01-1/8NPTA13	FIS4-42UR
FI8-83UR	FIB4-11SAE	FIS01-1/8NP1	FIS4-43
FIB01-01A11	FIB4-41UR	FIS01-4SAE	FIS4-43UR
FIB1-1/4NPTA13	FIB4-42A11	FIS1-5SAE	FIS4-M30
FIB01-1/8NPTA13	FIB4-42UR	FIS1-6SAE	FIS4-M33
FIB01-01UR	FIB4-43A11	FIS1-11A11	FIS4-M36
FIB01-4SAE	FIB4-43UR	FIS1-11UR	FIS5-1 1/4NPT
FIB1-5SAE	FIB4-M30	FIS1-12A11	FIS5-12SAE



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FIS5-51A11	FNL-188061	HPB-CF06021H3	MES001-002B2
FIS5-51UR	FNL-228081	HPB-CF06021F	MES01-03
FIS5-52A11	FNP-022021E10	HPB-CF08021	MES01-04
FIS5-52UR	FNP-026021E10	HPB-CF08021F	MES01-05
FIS5-53A11	FNP-042041E10	JNL0-0375H	MES001-0030B2
FIS5-53UR	FNP-044021E10	JNL0-0500H	MES001-0050B2
FIS5-M42	FNP-046041E10	JNL1-0590 F3	MET-04A042B
FIS6-1 1/2NPT	FNP-054041E10	JNL1-0625	MET-06A062N
FIS6-13SAE	FNP-062061E10	JNL1-0750 F3	MET-08A082N
FIS6-61	FNP-064041E10	JNL1-0785	MET-10A082N
FIS6-61UR	FNP-066061E10	JNL1-0875	MET-12A122N
FIS6-62	FNP-082081E10	JNL2-1000	MET-021C
1130-02A11	1 NF -002001	3NLZ-1000 4	WIE1-0210
FIS6-62UR	FNP-084061E10	JNL2-1125	MET-025C
FIS6-63A11	FNP-086081E10	JNL2-1250	MET-025T022D14
FIS6-63UR	FNP-108021E10	JNL2-1375	MET-025TC
FIS6-M48	FNP-128041E10	JNL2-1500	MET-041C
FIS7-2 1/2NPT	FNP-148041E10	JNL2-1625	MET-045C
FIS7-2NPT	FNP-168061E10	JXL0-0250	MET-045T042
FIS7-14SAE	FNP-188061E10	JXL0-0230	MET-045TC
FIS7-71A11	FNP-228081E10	JXL0-0375	MET-061C
FIS7-71ATI	FNP-220001E10	JALU-03/5F5	WE1-061C
FIS7-71UR	FNV-022021	JXL0-0500	MET-065C
FIS7-72A11	FNV-026021E8	JXL1-0625	MET-065T062D14
FIS7-72UR	FNV-042041	JXL1-0750	MET-065TC
FIS7-73A11	FNV-044021	JXL1-0875	MET-081C
FIS7-73UR	FNV-046041E8	MBE Series - CustomJ3	MET-085C
FIS7-M60	FNV-054041E8	ME001-001B2	MET-085C
FIS8-81A13	FNV-062061E8	ME001-001M	MET-085T0
FIS8-81UR	FNV-064041	ME001-001M	MET-0831C
FISO-0 TUR	FNV-004041	ME001-002	WE 1-021022
	FNV-066061E8	ME001-002M	MET-025022D14
FIS8-82A11	FINV-000001	IVI⊑UU I-UUZIVI	WIL 1-023022
FIS8-82	FNV-082081	ME01-03B2	MET-041042D11
FIS8-82UR	FNV-082081	ME01-03B2	MET-041042D11
FIS8-82UR	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8	ME01-03	MET-041042D11 MET-041042-PTD12 MET-045042D14
FIS8-82UR .A12 FIS8-83 .A11 FIS8-83UR .A12 FNL-022021 .E6	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2	MET-041042
FIS8-82UR A12 FIS8-83 A11 FIS8-83UR A12 FNL-022021 E6 FNL-026021 E6	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2 ME01-05 B2	MET-041042
FIS8-82UR A12 FIS8-83 A11 FIS8-83UR A12 FNL-022021 E6 FNL-026021 E6 FNL-042041 E6	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2 ME01-05 B2 ME01-05M B2	MET-041042
FIS8-82UR A12 FIS8-83 A11 FIS8-83UR A12 FNL-022021 E6 FNL-026021 E6	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2 ME01-05 B2	MET-041042
FIS8-82UR A12 FIS8-83 A11 FIS8-83UR A12 FNL-022021 E6 FNL-026021 E6 FNL-042041 E6	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2 ME01-05 B2 ME01-05M B2	MET-041042
FIS8-82UR	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8 FNV-168061 E8 FNV-188061 E8	ME01-03. B2 ME01-03M B2 ME01-04. B2 ME01-04M B2 ME01-05. B2 ME01-05M B2 ME001-0030 B2	MET-041042
FIS8-82UR	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8 FNV-168061 E8	ME01-03. B2 ME01-03M B2 ME01-04. B2 ME01-04M B2 ME01-05. B2 ME01-05M B2 ME001-0030 B2	MET-041042. D11 MET-041042-PT D12 MET-045042. D14 MET-061062. D11 MET-061062-PT D12 MET-065062. D14 MET-081082. D11 MET-081082-PT D12
FIS8-82UR	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8 FNV-148061 E8 FNV-188061 E8 FNV-228081 E8	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-04M B2 ME01-05 B2 ME01-05M B2 ME001-0030 B2 ME001-0030M B2 ME001-0050 B2	MET-041042. D11 MET-041042-PT D12 MET-045042. D14 MET-061062. D11 MET-061062-PT D12 MET-065062. D14 MET-081082. D11 MET-081082-PT D12 MET-085082. D14
FIS8-82UR	FNV-082081 E8 FNV-084061 E8 FNV-086081 E8 FNV-108021 E8 FNV-128041 E8 FNV-148041 E8 FNV-148061 E8 FNV-228081 E8 H012X036 A10 H012X072 A10	ME01-03 B2 ME01-03M B2 ME01-04 B2 ME01-05 B2 ME01-05M B2 ME01-0030 B2 ME001-0030M B2 ME001-0050 B2 ME001-0050M B2 ME001-0050M B2 MEB001-001 B2	MET-041042. D11 MET-041042-PT D12 MET-045042. D14 MET-061062. D11 MET-061062-PT D12 MET-065062. D14 MET-081082. D11 MET-081082-PT D12 MET-085082. D14 MET-121122 D11 MET-121122-PT D12
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Note:

Index contains all published connectors and unique seal part numbers for products such as the FE and FI series. Common seals and repair kits used in multiple connectors such as TwistMate are not listed here. All replacement seals and repair kits can be found on pages with the connectors.

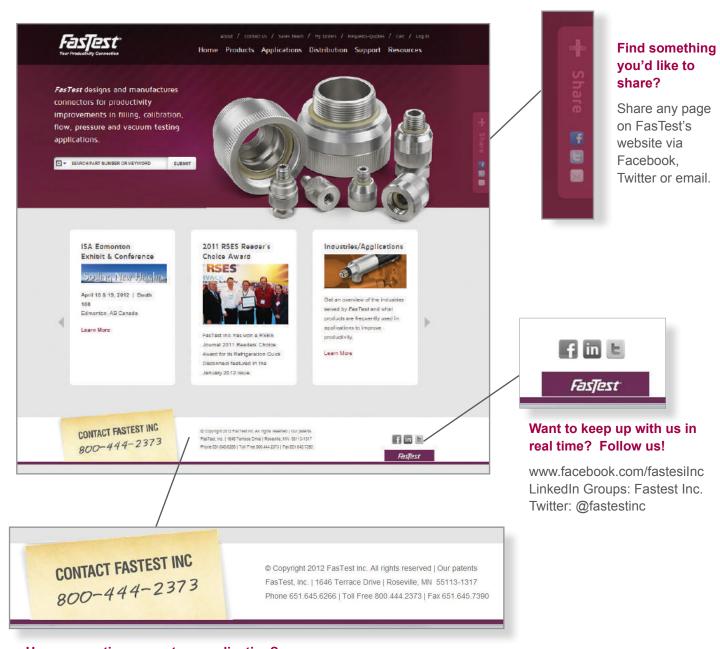
METH-021022 D12	MIT-046P	MIT-204201X	STB04 G2
METH-041042 D12	MIT-046T041	MIT-228081X D10	STB05 G2
METH-049040 D13	MIT-046TP	MIT-242241X	STB06 G2
METH-061062 D12	MIT-054041X	MIT-322161X	STC04 G2
METH-069060	MIT-062061	MIT-402161X	STC05 G2
METH-081082 D12	MIT-062061X	MIT-482161X	STC06 G2
METH-089080 D13	MIT-062P	MIT-642161X	TS1901
METH-109100	MIT-064041X	MITC-022021X	TS2901
METH-121122	MIT-066061	MITC-042041X	TSE00034
METH-129120	MIT-066T061	MITH-022021X	TSE00035
METH-161162	MIT-082081	MITH-042041X	TSE00038
MIT-066P	MIT-082081X	MITH-044021X	XT-06042
MIT-066TP	MIT-082P	MITH-062061X	XT-08042
MIT-086P	MIT-084081X	MITH-064041X	XT-10042
MIT-086TP	MIT-086081	MITH-082081X	XT-12042
MIT-122P	MIT-086T081	MITH-084081X	XT-14042
MIT-126T121X	MIT-104081X	MITH-104081X	XTB06
MIT-162P	MIT-108021X D10	MITH-122121X	XTB08 G2
MIT-166T161X	MIT-122121	MITH-124121X	XTB10
MIT-022021	MIT-122121X	MITH-144161X	XTB12 G2
MIT-022021X	MIT-124121X	MITH-162161X	XTB14 G2
MIT-022P	MIT-126121X	MITH-164161X	XTR06
MIT-026021	MIT-128041X	ML001B3	XTR08
MIT-026P	MIT-144161X	ML001 M	XTR10
MIT-026T021	MIT-148041X	MRE Series - Custom J3	XTR12
MIT-026TP	MIT-162161	PB-1015	XTR14 G2
MIT-034021X	MIT-162161X	PBA-01A10	
MIT-042041	MIT-164161X	PBA-02A10	
MIT-042041X	MIT-166161X	PBH32	
MIT-042P	MIT-168061X	ST-04042	
MIT-044021X	MIT-188061X	ST-05042	
MIT-046041	MIT-202201X	ST-06042	
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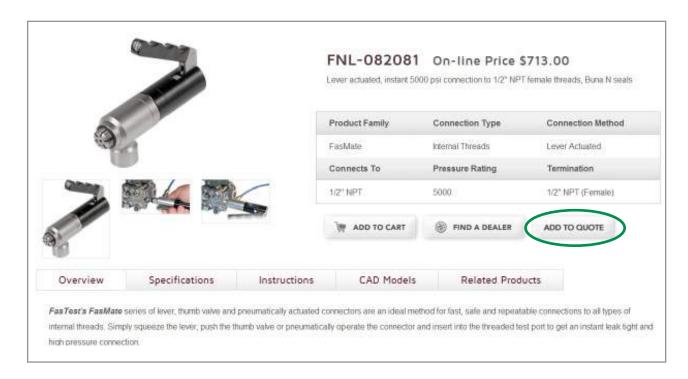
Have a question or custom application?

FasTest is available to support you in several areas of your application or purchase. From customer service to custom product applications our goal is to provide the best products for your application and best answers to your questions.

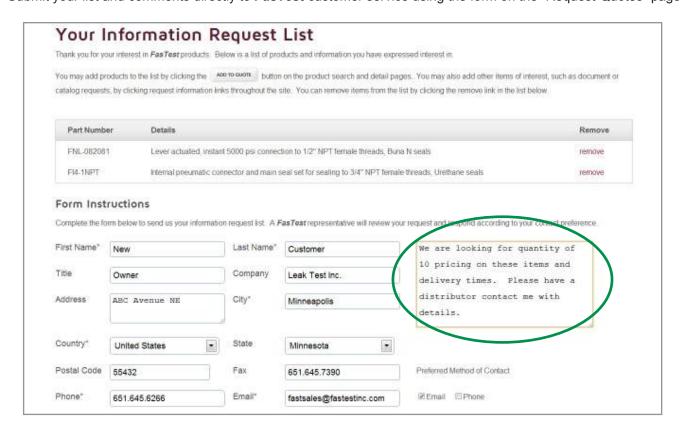


Need to request a quote or check on product availability?

· Visit www.fastestinc.com and add your selected products in the "Add to Quote" feature



• Submit your list and comments directly to FasTest customer service using the form on the "Request-Quotes" page





Connector Refurbishment Program



Extend the service life and warranty of your investment - Our connector refurbishment and competitor replacement program delivers the latest product improvements and ensures proper connector operation and performance in your application. Connectors routinely maintained can be refurbished or replaced economically relative to the cost of a new connector replacement.

Visit www.fastestinc.com or contact FasTest for details.

Warranty

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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 distributors. 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.

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Calibration Connectors

The *FasCal* complete line of plug and play connectors for lab and field instrument calibration without the use of tapes, sealants and wrenches.



Medical Connectors

Versatile product line of connectors and systems for sealing and testing a wide variety of medical products and drug delivery devices.



Refrigeration Connections

The **CoreMax** system of high flow processing valves and connectors for the refrigeration manufacturing and service industry.



Compressed Gas Connectors

Innovative gas connectors for common CGA standards used in conventional and residual pressure valve filling applications.



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www.fastestinc.com



60 and 70 Series Connectors







- Instant connections from vacuum to 750 psi
- No wrenches, sealants or thread damage
- Connect to expanded, flare, barbed, beaded and form end tubes

- Connect to compression fittings, NPT, SAE 37° "AN" and 45° flare male threads
- High flow design for short filling and testing times
- Rugged stainless steel housing

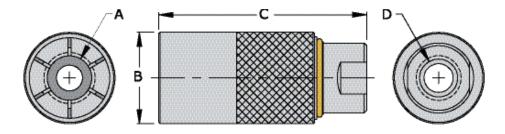


Sleeve Actuated Connectors for Male Threads & Tubing

FasTest sleeve actuated **60 and 70 Series** connectors are the preferred method for fast, safe and repeatable connections to a wide variety of thread and tube profiles used in the process and manufacturing industries for filling, pressure and leak testing, and instrument calibration. Simply pull back on latching sleeve, insert male threaded or tube end into the connector and push the latching sleeve forward to complete the connection. Remove test pressure and pull back the latching sleeve to release the connection.



Dimensional Drawing for 60 / 70 Series Connectors



60 Series for NPT Pipe Threads

Part Number	Connects to Dim "A"	Diameter Dim "B"	Length Dim "C"	Term. Thread Dim "D"	Rating PSI	Housing Material	Seal Material	Main Seals Package (5)
60G-1T02	1/8" NPT	0.99"	2.95"	1/8" NPT				S1105-B70
60G-1T04	1/4" NPT	1.19"	2.95"	1/4" NPT				S1109-B70
60G-1T04021	1/4" NPT	1.19"	2.95"	1/8" NPT	750	Stainless	ainless B	S1109-B70
60G-1T06	3/8" NPT	1.38"	3.15"	3/8" NPT	750	Steel	Buna N	S1111-B70
60G-1T08	1/2" NPT	1.38"	3.15"	1/2" NPT				S1112-B70
60G-1T08021	1/2" NPT	1.38"	3.15"	1/8" NPT				S1112-B70

60 Series for SAE 45° Flare

Part Number	Connects to Dim "A"	Diameter Dim "B"	Length Dim "C"	Term. Thread Dim "D"	Rating PSI	Housing Material	Seal Material	Main Seals Package (5)
60G-A04	-4 (7/16-20)	0.99"	2.95"	1/8" NPT				S2060-0246-B70
60G-A06	-6 (5/8-18)	1.38"	3.15"	3/8" NPT		750 Stainless Steel		S1012-B70
60G-A08	-8 (3/4-16)	1.38"	3.15"	3/8" NPT	750		Buna N	S1014-B70
60G-A10	-10 (7/8-14)	1.78"	3.54"	3/4" NPT		Oleci		S1015-B70
60G-A12	-12 (1 1/16-14)	1.78"	3.54"	3/4" NPT				S1117-B70

60 Series for SAE 37° Flare - "AN" Type

Part Number	Connects to Dim "A"	Diameter Dim "B"	Length Dim "C"	Term. Thread Dim "D"	Rating PSI	Housing Material	Seal Material	Main Seals Package (5)
60G-049	-4 (7/16-20)	0.99"	2.95"	1/8" NPT				S1010-B70
60G-069	-6 (9/16-18)	1.19"	2.95"	3/8" NPT	750	Stainless Steel	Buna N	S1012-B70
60G-089	-8 (3/4-16)	1.58"	3.15"	3/8" NPT		Oleci		S1014-B70

60 Series for Double Ferrule Compression Style Fittings

Part Number	Connects to	Diameter	Length	Term. Thread	Rating	Housing	Seal	Main Seals
	Dim "A"	Dim "B"	Dim "C"	Dim "D"	PSI	Material	Material	Package (5)
60G-CF04	-4 (7/16-20)	1.19"	2.95"	1/8" NPT	750	Stainless Steel	Buna N	S1008-B70

Note: Additional sizes and seal options available for all 60 Series connectors. Consult factory for details.



70 Series Connectors

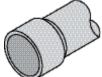
How to Order

The 70 Series connectors are designed for mechanical gripping on a feature of the test piece and pressure enhanced sealing. Connectors are designed, engineered and manufactured to your specific application requirements.

For part number and a price quotation:

- 1) Identify the gripping and sealing areas of your test piece.
- Contact FasTest with information on test pressure, test media and provide a detailed drawing, including tolerances, of your test piece.
- 3) Two sample parts will be required at the time of order for final design and testing purposes.









Flared Tube



Barbed Tube



Beaded Tube



Form End Tube

70 Series for Expanded, Flared, Barbed, Beaded and Form End Tubes

Body Size	Range (OD) Dim "A"	Diameter Dim "B"	Length Dim "C"	Term. Thread Dim "D"	Rating PSI	Housing Material	Seal Material	Main Seals Package (5)
1	Up to 0.32"	0.87"	2.95"	1/8" NPT				
2	0.32" to 0.43"	0.99"	2.95"	1/8" NPT				
3	0.43" to 0.59"	1.19"	2.95"	1/4" NPT				
4	0.59" to 0.79"	1.38"	3.15"	3/8" NPT				Determined by application
5	0.79" to 0.98"	1.58"	3.15"	1/2" NPT	750	Stainless	Determined by	
6	0.98" to 1.18"	1.78"	3.54"	3/4" NPT	750	Steel	application	
7	1.18" to 1.42"	1.97"	3.54"	3/4" NPT				
8	1.42" to 1.65"	2.17"	3.54"	3/4" NPT				
9	1.65" to 1.85"	2.36"	3.54"	1" NPT				
10	1.85" to 2.04"	2.76"	3.54"	1 1/4" NPT				

Note: Additional seal options available for all 70 Series connectors. Consult factory for details.



Additional Products and Brochures from FasTest



Engineering & Application Guide

Engineering and
Application Guide to
Connectors for
Pressure Testing &
Processing details our
complete offering for all
applications.



Medical Connectors

Versatile product line of connectors for sealing and testing a variety of medical products and drug delivery devices.



Refrigeration Connectors

The CoreMax system of high flow processing valves and connectors for the refrigeration manufacturing and service industry.

Additional Options and Services from FasTest

ReConnect - Our connector refurbishment and competitor replacement program ensures proper connector operation and performance and extends the service life and warranty of your investment. Connectors routinely maintained can be refurbished or replaced economically relative the cost of a new connector replacement. Visit www.fastestinc.com/reconnect or contact FasTest for details.



Custom Applications - Customized products are available for unusual or unique connection requirements.

High Pressure Connectors - Optional connectors are available for pressures up to 10,000 psi. Contact FasTest for details.

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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.

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The sole and exclusive remedy under this warranty is limited to replacement of the product or an account credit in the amount of the original selling price, at the option of FasTest Inc. All allegedly defective products must be returned prepaid transportation to FasTest Inc., together with information describing the product's performance, unless disposition in the field is authorized in writing by FasTest Inc.

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AEROSPACE HIGH PRESSURE CONNECTION TECHNOLOGY







PROCESS AND QUALITY IMPROVEMENT IN THE AEROSPACE INDUSTRY

- Reduce high pressure test connection time
- Improve part throughput
- Eliminate thread damage, sealant and wrenches
- Safe & reliable leak tight, uniform connections that are non operator dependent



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CONNECTORS FOR PRESSURE & PERFORMANCE TESTING IN AE

Civil Aviation | Military Aerospace and Defense | Calibration | Engine

Why Choose FasTest?

FasTest Systems offer:

- Nondestructive testing
- Measurements and techniques for fault diagnosis
- Design and implementation of laboratory tests, including reliability, environmental, burn in and quality testing
- Qualification tests for components and systems
- Instrumentation and measurement methods for testing and diagnostics (destructive and non-destructive testing, vibration monitoring, built-in test equipment and automatic test equipment, etc)

Common Fitting Applications

Our products connect to a variety of fittings used in the aerospace industry including:

- 37° Male & Female (MS33656)
- Male Flareless MS (MS33514)
- Dynamic Beam Seal 8-30 (Rosan)





Tube Assemblies

Industry leading connectors for pneumatic and hydrostatic testing of tube assemblies.

FasTest solutions:

JXL Series, 70 Series



Component Testing

Pressure and leak testing connections for a range of engine, fluid flow and hydraulic components. Instant connections to internal and external threads.

FasTest solutions: FasMate, 60 Series



Engine Testing

FasTest's line of rapid test connection products dramatically improves test stand through put and eliminates thread damage from testing.

FasTest solutions: 60 Series, TwistMate



Valve, Gauge & Ground Support Tests

Connections for valve, transducer testing, gauge calibration and ground hydraulic system testing (tire pressure gauges, jacks) and all ranges of male fittings.

FasTest solutions: TwistMate, HPB Series



In Place Calibration

Quick, finger-tight test connections to 10,000 psi for calibration of instrumentation to ISO 17025 standards.

FasTest solutions: *Manifolds, Transitions, Hose Assemblies*



Other Applications

- Oxygen bottle filling
- Tire gauge pressure checks
- Oxygen regulation; ducts
- Hydraulic test stands
- Fuel flow regulation



FasTest Connectors



60 Series

Instant Connections to External Threads and Compression Fittings

- Instant connections from vacuum to 750 psi (51 bar)
- No damage to threaded parts
- Easy sleeve action to connect



Hose Assemblies

- High pressure hose assemblies with 1/8" NPT fittings
- Compatible FasCal connectors allows quick change of sizes or types without the use of tape or wrenches



70 Series

Instant Connections to External Tubes

- Connect to fittings, expanded, flared, barbed, beaded and formed end tubes from vacuum to 750 psi (51 bar)
- No damage to test piece features
- Easy sleeve action to connect



Manifolds

- 2 and 4-port stainless steel manifolds rated up to 10,000 psi
- Compatible FasCal connectors allows quick change of sizes or types without the use of tape or wrenches



TwistMate Series (MET/MIT)

Twist to Connect for Internal or External Threads and Fittings

- For vacuum or pressure test applications up to 10,000 psi (689 bar)
- Rugged stainless steel construction endures demanding production environments



Transitions

- Flow bench styles provide incremental steps from AN 32 down to AN 4
- Reduces potential of damaging expensive tube style flow transmitters
- Pressure rated from 4,000 to 10,000 psi



HPB Series

Instant Connections to External Threads and Compression Fittings

- Connect from vacuum to 5000 psi with no damage to threaded parts
- · Easy sleeve action connect



JXL Series

Fast Lever Actuated Connections to External Tubes

- Instant connections from vacuum (10 micron) to 1000 psi
- Seals straight bore, step bore, smooth or cast surfaces



FasMate Series

Instant Connections to Internal and External Threads

- Instant connections from vacuum up to 5000 psi
- Three operation methods lever, thumb valve and pneumatic



Engineered and Manufactured in the USA

Learn more at www.fastestinc.com

WHERE TO BUY



Wilson Company

16301 Addison Road Addison, TX 75001 Phone 214.647.8060 www.wilson-company.com

LEARN MORE

See the Products in Action

Visit www.fastestinc.com and view demonstrations and product videos





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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.





PROCESS AND QUALITY IMPROVEMENT IN THE AUTOMOTIVE INDUSTRY

- Reduce high pressure test connection time
- Improve throughput
- Eliminate thread damage, sealant and wrenches
- Safe & reliable leak tight, uniform connections

CONNECTORS FOR PRESSURE & PERFORMANCE TESTING IN EN

Passenger Vehicles | Heavy Truck | Off Road | Agriculture | Recreational Vehicles

The FasTest Advantage

- The industry's most extensive line of connectors offers a perfect connection to virtually any type of automotive testing application
- FasTest is ISO certified. Our product designs, and manufacturing processes have gone through the most stringent testing to ensure the highest quality products for your testing process.
- FasTest delivers innovative technology to meet your application needs, no matter how complex the test requirements.
- Custom connectors are available for unique requirements.

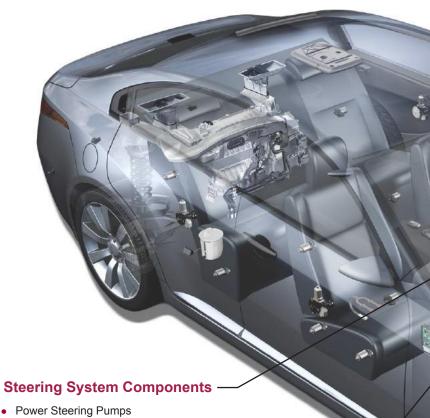
Comprehensive Vehicle Solutions

FasTest offers products for a variety of engine and vehicle systems including:

- Automotive Cars and light trucks
- Over the Road Trucks
- Construction Bulldozers, cranes, and backhoes
- Recreational vehicles Boats, snowmobiles, and motorcycles
- Agricultural Tractors and combines
- Off Road / Mining
- Lawn & Garden Products -Generators, power washers, and lawn mowers
- Industrial



FasTest offers solutions for windshield washer systems. Reservoir molded parts are quickly sealed with the EZ Connect™ ZN's manu sealing range.



- Rack & Pinion Housings
- Hose & Tube Assemblies

TwistMate™, FN and FX Series connectors can handle pressures to 5000 psi, allowing you to proof and function test high pressure components quickly and effortlessly.

Intake/Exhaust Components-



- Manifolds
- Catalytic Converters
- Mufflers & Pipes
- **Turbo Chargers**

Pictured Product: FE & FI

FE and FI Series™ connectors can seal rough cast and fabricated metal components commonly used in exhaust systems. The durable elastomer used with these connectors provide a seal where other products fail.

Transmissions/Drive

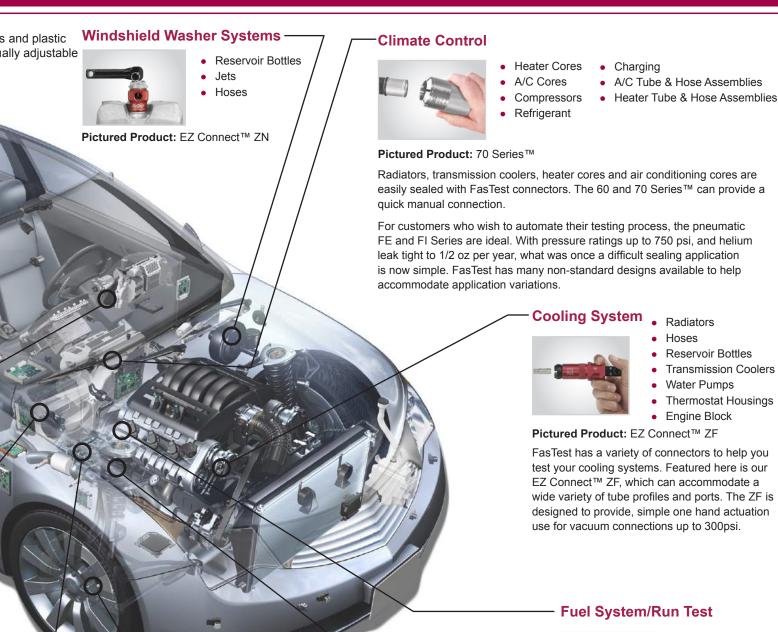


- Tra
- Axle

Pictur

Testing the porosity of transm is a typical use of our connect axle assemblies, our FI's can shafts to seal and isolate the connectors featured here, and in metric and UNF style threa threaded ports.

GINE AND VEHICLE SYSTEMS



que Converters nsmission Housings

ed Product: MIT

Train

ission and axle housings ors. To seal deep into the be supplied with extended required areas. TwistMate IFN Series are available ds to quickly seal most

Brake Systems

- Master Cylinders
- Tube & Hose Assemblies

Suspension Components

Air Suspension Components

Struts and Shock Absorbers

Calipers

Pictured Product: FNL

The FasMate Series™ connector featured here can be used as an individual test connector, or engineered to be a multi-station automated fixture for up to 5000 psi. Ideal for testing beaded, threaded, or banjo style brake lines. For lower pressure testing with the same high reliability, our FN, FX, 60, 70 or TwistMate Series™ connectors may also meet your needs.



- Fuel Rails
- Fuel Pumps
- Fuel Filters
- Sensors/Gauges
 - Fuel Tanks

Pictured Product: 70 Series™ for Fuel Rail

FasTest is the world leader in providing connectors for engine Hot and Cold testing. We design our connectors to be safe and secure. Our 70 Series™ connector featured here can be offered with an internal shutoff valve to stop the flow of fuel upon disconnect, eliminating potential spills.



EZ Connect Leak Testing Just Got Easier F



EZ Connect™ZF Benefits

- Wide tolerance seal design provides fit to a range of tube diameters
- Sleeve handle design for intuitive one-hand operation
- Auto-aligning connector provides wide port size and design tolerance
- Color coded by size for easy identification
- Aluminum design for a lightweight, durable product





Patent Pending





70 Series™ Benefits

- Push/pull connection for simple operation
- High flow design for optimal engine run testing
- Integrated stop valve prevents flow of fuel when disconnected
- Vacuum to 200 psi accommodates a wide testing spectrum
- Stainless steel components provides a robust, durable product

AUTOMOTIVE APPLICATIONS



	Connectors		Applications
	Internal "FI" and External "FE" for Automated Tube a Pneumatically actuated for automated or semi-automated operation in applications where speed is a priority Seal over or into smooth tubes, bumped or beaded tube ends, rough cast or threaded surfaces	 Can be used for helium leak testing, proof testing, run testing, pressure decay testing, filling and flushing applications Standard sizes or custom models available For vacuum or pressure applications 	Radiators Reservoir Bottles Manifolds Suspension/Struts Transmissions Engines Sensors/Gauges Lamp Assemblies Fuel Pumps
	 EZ Connect™ ZF for Formed Tubes Wide tolerance design accommodates a wide variety of tube sizes and designs Designed with self-aligning seals which reduce failures and operator errors 	 Easy service and repair in the field Sleeve handle for easy, one hand operation Tool cable connection ensures safe use 	Engines Manifolds Radiators Reservoir Castings
15 E	 EZ Connect™ ZN for Reduced Pressure Two way actuation handle with adjustable lock ring allows for easy connection to various seal diameters Simple design and field service maintenance kits require no special tools for easy seal replacement 	 High flow design can be adapted for plug applications Mix and match seal sets can be used to seal tapered or unique testing applications 	Fuel Tanks Pumps Radiators Reservoir Castings Transmissions Engines
	 70 Series™ for Fuel Rail Push/pull connection for simple operation High flow design for optimal engine run Integral stop valve prevents flow of fuel when disconnected 	 Vacuum to 750psi accommodates a wide testing spectrum Stainless steel host material provides a robust, durable product 	Fuel Lines Fuel Rails Fuel Pumps
	 70 Series™ for Expanded, Flared, Barbed, Beaded at Sleeve action makes an instant leak tight connection For use on a variety formed tube ends found on tube assemblies, reservoirs and cast parts Designed for helium leak testing, run testing, proof testing, pressure decay, water dunk and other related processes 	 Makes safe secure instant connections with no operator adjustment Designed specifically to your size and requirements For vacuum or pressure applications 	Fuel Lines Fuel Rails Climate Components Thermostat Housing Reservoir Bottles
	Threaded Connectors	s	Applications
	 60 Series™ for External Thread Sleeve action makes an instant leak tight connection to male threaded ends on tube and hose assemblies Designed for helium leak testing, run testing, proof testing, pressure decay, water dunk and other related processes 	 Safe secure instant connections with no operator adjustment Standard sizes or custom models available For vacuum or pressure applications 	Power Steering Hose & Tube Assemblies Brakes Lines Fuel Lines A/C Hose & Tube Assemblies Vacuum Lines Sensors
	 FasMate Series™ – "FN" for Internal Threads, "FX" f Squeeze lever, thumb valve or pneumatic operation makes instant leak tight connection to internal threads Modular design allows for quick change method of connector actuation and field maintenance 	 Proprietary design locks connector securely even in dynamic hydraulic applications Make safe connections with no operator adjustment Standard sizes or custom models available For pressure applications 	Power Steering Hose & Tube Assemblies Brake Line Fuel Lines A/C Hose & Tube Assemblies Vacuum Lines Sensors/Gauges Antilock Braking Systems
	TwistMate Series™ for Mechanical Internal and Extern Mechanical Internal Thread "MIT" for manual quick threading to internal threads Mechanical External Thread "MET" for manual quick threading to external threads	 Pressure assisted sealing eliminates wrench tightening and thread sealants for safe connections Standard sizes or custom models available For vacuum or pressure applications 	Power Steering Brake Calipers Transmissions Engine – Fuel/Oil Sensors/Gauges Antilock Braking Systems Vacuum Lines

Phone: (972) 931-8666

Where to Buy





Wilson Company 16301 Addison Road Addison, TX 75001 Phone 214.647.8060 www.wilson-company.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

























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EZ Connect Leak Testing Just Got Easier

- Wide tolerance design accommodates variance in tube size and design
- Self-aligning connection eliminates operator adjustment



EZ Connect ZF™ for Formed Tubes

The EZ Connect ZF™ connectors deliver fast, leak free connections for leak testing up to 300 psi. The intuitive sleeve handle design and color coded handles simplify the testing process for operators, and the auto-aligning seals provide a leak-proof connection for virtually all formed tube types.



Wide Tolerance Connectors for Formed Tubes

Variable | Lightweight | Standard





The ZF Advantage -

- Wide tolerance seal design provides fit to a range of tube diameters
- Lightweight aluminum body puts less strain on operator
- Finger grooves create an intuitive onehand operation
- Auto-aligning connector reduces connection failures
- Color coded handles help operator identify correct connector
- Connectors fit in tight placements providing improved fixture possibilities



Applications

The **EZ Connect ZF™** is the industry leading leak test solution for applications including:

- · Engines and manifolds
- Radiators and reservoirs
- Castings
- Small appliances
- Lawn and garden products
- Plastic barbed tubes

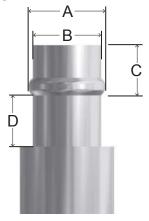
Fits Multiple Formed Tube Connection Styles







EZ Connect ZF™ incorporates a manual sleeve actuation to create a leak-tight external connection to a wide variety of formed tube styles. The ZF connectors are ideal for a diverse range of manufacturing testing systems.



For the sizing specifications illustrated above, reference technical specifications tables below and to the right.

Operating Pressu	ire	Vacuum to 300 psi (ZF1-ZF4), 250 psi (ZF5)		
Connection Profi	le	External Forme	ed Tubes (SAE J1231)	
Termination Prof	ile	1/8" to 3/8" NPT		
Housing Material		Anodized Alum	inum	
Seal Material		Neoprene		
Operating Tempe	ratures	0°F to 200°F (-	17°C to 93°C)	
Min./Max. Bead D	epth (C)	0.13"/0.32" [3.3	8mm/8.1mm]	
Minimum Clearar	nce (D)	0.31" [7.9mm]		
Connector		(E)	(Ø F)	
ZF1	4.60	" [116mm]	0.98" [24.8mm]	
ZF2	4.90	" [124mm]	1.14" [28.9mm]	
ZF3	4.96	" [126mm]	1.23" [31.2mm]	
ZF4	5.18	" [131mm]	1.38" [35.0mm]	
ZF5	5.25	" [133mm]	1.55" [39.4mm]	
Ø F		E		

Body Size	Ø Bead Dia. Range (A)	Ø Tube Dia. Range (B)	SAE J1231	Rated PSI	Termination Port (90°)	Ø Flow Dia.	Main Seal Pack	Repair Kit
EZ Connect Zi	F for Formed Tubes -	Neoprene Seals						
ZF1	0.31" - 0.40" 7.87mm -10.16mm	0.25" - 0.34" 6.54mm-8.74mm	-5	300	1/8" NPT	0.17" 4.3mm	S-ZF1	R-ZF1
ZF2	0.40" - 0.49" 10.2mm-12.4mm	0.34" - 0.44" 8.7mm-11.0mm	-6	300	1/8" NPT	0.19" 4.8mm	S-ZF2	R-ZF2
ZF3	0.49" - 0.58" 12.4mm-14.7mm	0.44" - 0.52" 11.0mm-13.2mm	-7 & -8	300	1/4" NPT	0.21" 5.3mm	S-ZF3	R-ZF3
ZF4	0.58" - 0.67" 14.7mm-17.0mm	0.52" - 0.61" 13.2mm-15.5mm	-9	300	1/4" NPT	0.32" 8.1mm	S-ZF4	R-ZF4
ZF5	0.67" - 0.76" 17.0mm-19.3mm	0.61" - 0.70" 15.5mm-17.8mm	-10	250	3/8" NPT	0.38" 9.6mm	S-ZF5	R-ZF5

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Proudly Manufactured in the U.S.A.

EZ Connect ZF Patent Pending

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New Value Connectors for Simple Vacuum, Leak and Pressure **Testing Applications - Now With New Lock Ring Feature!**

The **EZ Connect ZN** manual connector for reduced pressure is the latest innovation for testing:

- Radiators, Hoses, Reservoirs
- Plastic Molded Components
- Plumbing Fixtures
- Fuel Tanks, Pumps, Filters
- Hydronic Heating
- Engines, Axles, Transmissions
- Castings, Fabricated Housings Small Appliances, Pumps
 - Tubing and Assemblies



FasTest - The One Stop Shop for Testing!

The FasTest EZ Connect ZN connectors are the ideal solution for reduced pressure, manual applications and are a compliment to the highly engineered FasTest automated connector products.

- Simple adjustment Twist to adjust collar is easily sized for various seal diameters
- · Quick change seal sets to accommodate multiple size tubing and port applications
- Simple design and field service maintenance kits require no special tools for easy seal replacement
- High flow design can be quickly adapted for plug style applications
- Two way actuation handle is simple and ergonomic for production applications
- Mix and match seal sets can be used to seal tapered or unique testing applications
- See your local FasTest distributor for more information and support







Value Series Connectors for Reduced Pressures

Common Applications:







Specifications:

Pressure rating. Vacuum to 50 psi / 3.44 bar (clean and dry surface pneumatic applications) Materials Aluminum housing with Stainless Steel components, Molded Nylon handle

Seals.... Neoprene (main), Buna N (internal)

Body Size	Part Number	Sealing Range	Insertion Depth	Termination Port	Flow Diameter	Maintenance Kit
1	ZN1-01 ZN1-11 ZN1-12 ZN1-13	0.375"-0.394" 0.394"-0.472" 0.472"-0.551" 0.551"-0.630"	0.57"	1/8" NPT	0.10"	ZNB1-0360 ZNB1-11 ZNB1-12 ZNB1-13
2	ZN2-21 ZN2-22 ZN2-23	0.630"-0.709" 0.709"-0.787" 0.787"-0.866"	0.77"	1/4" NPT	0.17"	ZNB2-21 ZNB2-22 ZNB2-23
3	ZN3-31 ZN3-32 ZN3-33	0.866"-0.945" 0.945"-1.024" 1.024"-1.102"	1.20"	1/4" NPT	0.26"	ZNB3-31 ZNB3-32 ZNB3-33
4	ZN4-41 ZN4-42 ZN4-43	1.102"-1.181" 1.181"-1.260" 1.260"-1.339"	1.25"	3/8" NPT	0.28"	ZNB4-41 ZNB4-42 ZNB4-43

- Additional value 5 complete rebuilds to extend connector service life in each maintenance kit!
- See your local FasTest distributor for more information and support:



Product Safety:

All FasTest products have been designed with safety in mind, however, it is the responsibility of the product users to design each process in such a way to avoid mishaps that can cause physical hazard or property loss. Secondary restraints such as safety chains, shields, cages or fixtures are all good choices depending on the application. FasTest can recommend or assist you in clarifying potential hazards of your application.

Phone: (972) 931-8666







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

reclinical 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)			

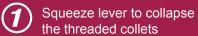
1/8" female NPT



Your Productivity Connection

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.







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



Dowl	Commontion	т.,	Darks	Min Incent	
Part Number	Connection Profile	Term Profile	Body Size	Min. Insert Length (mm)	
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	Metric (per ISC	6149 or SA	E J2244	<u> </u>	
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)		
SAE O-Ring (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 ^{††}
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	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

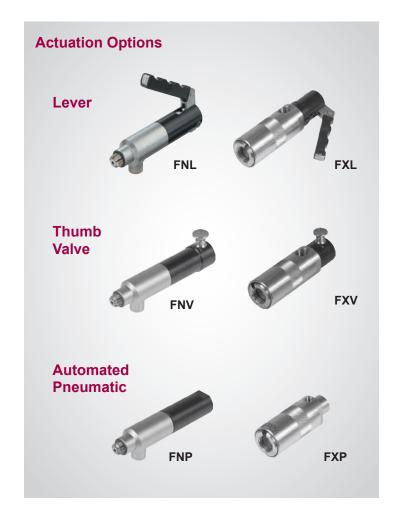


Part Number	Term Profile	Body Size	
NPT (per SAE J	Profile 476 or ANSI B1 2		Oize
FXL-021041	1/8" NPT	1/4" NPT	1
FXL-041041	1/4" NPT	1/4" NPT	1
FXL-061061	3/8" NPT	3/8" NPT	2
FXL-081061	1/2" NPT	3/8" NPT	2
SAE 37° Flare (
FXL-049041	-4 (7/16-20)	1/4" NPT	1
FXL-059041	-5 (1/2-20)	1/4" NPT	1
FXL-069041	-6 (9/16-18)	1/4" NPT	1
FXL-089061	-8 (3/4-16)	3/8" NPT	2
SAE 45° Flare (per SAE J512 or		
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
SAE O-Ring Fac	c e Seal (per SAE	 E J1453)	ı
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	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 W	/alled Pipe		
FXL-061061PT	3/8" NPT	3/8" NPT	2
FXL-081061PT	1/2" NPT	3/8" NPT	2
NPSM (per ASM	E 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.



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.



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
- Port umatic) Delicate touch seals thin wall
 Termination 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)

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 21/2"
Mounting Port	Female 10-32" to %-24" UNF, M5X8 to M11X1.5, 4-40" to %-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: FI5-51UR

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

Shaft Extensions



Example: FI5-51-0100

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

d Port Connectors



Industry's Broadest Standard Product Offering

Sealing Range	Base Connector (English)	Base Connector (Metric)	Connector Seal Set*	Bulk Seal Kit **	Repair Kits					
Internal (FI) Connectors for Smooth Tubes - Neoprene Seals										
0.310"-0.330" 0.330"-0.394"	FI01	FIM01	FIS01-0300 FIS01-01	FIB01-0300 FIB01-01	FIR01					
0.394"-0.472"			FISU1-01	FIB01-01 FIB1-11						
0.472"-0.551"	FI1	FIM1	FIS1-11	FIB1-11	FIR1					
0.472 -0.551	FII	LIIVII	FIS1-12 FIS1-13	FIB1-12	FIKI					
0.630"-0.709"			FIS2-21	FIB2-21						
0.709"-0.787"	FI2	FIM2	FIS2-22	FIB2-22	FIR1					
0.787"-0.866"	1 12	1 11412	FIS2-23	FIB2-23	1 1131					
0.866"-0.945"			FIS3-31	FIB3-31						
0.945"-1.024"	FI3	FIM3	FIS3-32	FIB3-32	FIR3					
1.024"-1.102"			FIS3-33	FIB3-33						
1.102"-1.181"			FIS4-41	FIB4-41						
1.181"-1.260"	FI4	FIM4	FIS4-42	FIB4-42	FIR3					
1.260"-1.339"			FIS4-43	FIB4-43						
1.339"-1.457"			FIS5-51	FIB5-51						
1.457"-1.575"	FI5	FIM5	FIS5-52	FIB5-52	FIR6					
1.575"-1.693"			FIS5-53	FIB5-53						
1.693"-1.850"			FIS6-61	FIB6-61						
1.850"-2.008"	FI6	FIM6	FIS6-62	FIB6-62	FIR6					
2.008"-2.165"			FIS6-63	FIB6-63						
2.165"-2.305"			FIS7-71	FIB7-71						
2.305"-2.445"	FI7	FIM7	FIS7-72	FIB7-72	FIR7					
2.445"-2.585"			FIS7-73	FIB7-73						
2.585"-2.725"			FIS8-81	FIB8-81						
2.725"-2.865"	FI8	FIM8	FIS8-82	FIB8-82	FIR7					
2.865"-3.005"			FIS8-83	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

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 21/2"
Mounting Port	Female 10-32" to %-24" UNF, M5X8 to M11X1.5, 4-40" to %-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

led Port Connectors



Industry's Broadest Standard Product Offerings

Sealing Range	Base Connector (English)	Base Connector (Metric)	Connector Seal Set*	Bulk Seal Kit **	Repair Kits
External (FE) Conne	ctors for Smooth Tub	oes - Neoprene Seals			
0.030"-0.050"			FES001-0050	FEB001-0050	
0.050"-0.080"	FE001	FEM001	FES001-001	FEB001-001	FER001
0.080"-0.130"			FES001-002	FEB001-002	
0.100"-0.180"			FES01-01	FEB01-01	
0.180"-0.260"			FES01-02	FEB01-02	
0.260"-0.340"	FE01	FEM01	FES01-03	FEB01-03	FER01
0.340"-0.420"			FES01-04	FEB01-04	
0.420"-0.510"			FES01-05	FEB01-05	
0.433"-0.512"			FES1-15	FEB1-15	
0.512"-0.591"			FES1-16	FEB1-16	
0.591"-0.669"	FE1	FEM1	FES1-17	FEB1-17	FER1
0.669"-0.750"			FES1-18	FEB1-18	
0.750"-0.827"			FES1-19	FEB1-19	
0.787"-0.866"			FES2-21	FEB2-21	
0.866"-0.945"			FES2-22	FEB2-22	
0.945"-1.024"			FES2-23	FEB2-23	
1.024"-1.102"			FES2-24	FEB2-24	
1.102"-1.181"	FE2	FEM2	FES2-25	FEB2-25	FER2
1.181"-1.260"			FES2-26	FEB2-26	
1.260"-1.339"			FES2-27	FEB2-27	
1.339"-1.417"			FES2-28	FEB2-28	
1.417"-1.510"			FES2-29	FEB2-29	
1.496"-1.614"			FES3-31	FEB3-31	
1.614"-1.732"	FE3	FEM3	FES3-32	FEB3-32	FER3
1.732"-1.850"	I LJ	I FIAI2	FES3-33	FEB3-33	I LIVO
1.850"-1.969"			FES3-34	FEB3-34	
1.969"-2.087"			FES4-41	FEB4-41	
2.087"-2.205"			FES4-42	FEB4-42	
2.205"-2.323"			FES4-43	FEB4-43	
2.323"-2.441"			FES4-44	FEB4-44	
2.441"-2.559"	FE4	FEM4	FES4-45	FEB4-45	FER4
2.559"-2.677"			FES4-46	FEB4-46	
2.677"-2.795"			FES4-47	FEB4-47	
2.795"-2.913"			FES4-48	FEB4-48	
2.913"-3.032"			FES4-49	FEB4-49	

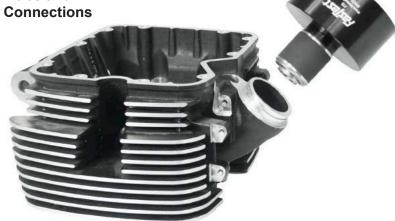
- FasTest also offers additional FE connectors sizes, up to a 5.040" ceiling range, for smooth tube connections
- FE connectors are also designed for NPT, BSPT, BSPP, SAE and NPS style ports, please contact FasTest for more information
- English base connectors are designed for NPT and UNF ports; metric 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 or ten seal changes, please contact FasTest for more information

Visit www.fastestinc.com

Applications & Innovative Technology

FI Series

Internal Tube and Thread Connections







FE Series

External 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



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





Wilson Company 16301 Addison Road Addison, TX 75001 Phone 214.647.8060

www.wilson-company.com

Cost, Process and Quality Improvement

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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























FasTest Inc.

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Fax: +1.651.645.7390
www.fastestinc.com



Proudly Manufactured in the U.S.A.

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

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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.

HPB Series





NEW Stainless Steel Connectors for Female Swivel End Hose Fittings

The newest **FasTest HPB Series** manual connectors are specially designed to connect to female swivel **SAE 37 Degree** and **SAE O-Ring Face Seal** fittings



- Quick connect to JIC swivel female fittings
- Reduce set up time for test procedures
- Split collet design and sleeve actuation requires no wrenching
- No stress applied to threads of fitting
- Eliminate operator fatigue from torqueing plugs into fittings



Simple Manual Actuation

The HPB utilizes pressure generated by the spring loaded piston to grip the hex nut of the female swivel with the connectors collets and press a seal against the face of the port, creating an instant, leak tight connection.

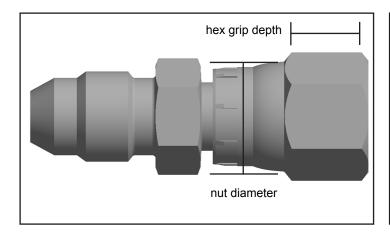


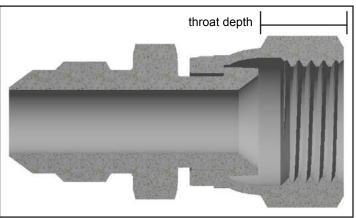


HPB Series









Specifications:

Pressure rating Vacuum to 5000 psi / 345 bar

Materials Stainless steel sleeve and components

Part Number	Female Swivel Connection	Hex Grip Depth	Throat Depth Max	Hex Corner to Corner	Rated PSI	Thread Size	Hex Size		Main Seal Pack
HPB049H021	SAE 37° JIC-4	Ø.34" +.03/02"	Ø.349" +.020/000"	Ø.65	5000	7/16-20	9/16	Ø.555	S20560176B70
HPB069H021	SAE 37° JIC-6	Ø.375" +.030/000"	Ø.383" +.020/000"	Ø.794	5000	9/16-18	11/16	Ø.680	S20760266B70
HPB089H021	SAE 37° JIC-8	Ø.440" +.030/000"	Ø.435" +.020/000"	1.01	5000	3/4-16	7/8	Ø.869	S20800406B70
HPB009H021	SAE ORFS-4	Ø.317" +.030/000"	Ø.300" +.030/000"	Ø.794	5000	9/16-18	11/16	Ø.688	S1107B70
HPB011H021	SAE ORFS-6	Ø.370" +.030/000"	Ø.328" +.030/000"	Ø.939	5000	11/16-16	13/16	Ø.813	S1109B70
HPB013H021	SAE ORFS-8	Ø.472" +.020/000"	Ø.431 +.020/000"	1.083	5000	13/16-16	15/16	Ø.942	S1110B70

Product Safety:

All FasTest products have been designed with safety in mind, however, it is the responsibility of the product users to design each process in such a way to avoid mishaps that can cause physical hazard or property loss. Secondary restraints such as safety chains, shields, cages or fixtures are all good choices depending on the application. FasTest can recommend or assist you in clarifying potential hazards of your application.

JNL Series





Internal Smooth Tube Connector

The **JNL Series** are ideal for internal connections to copper, steel and aluminum tubes used manufacturing and refrigerant based products such as heat exchangers, pressure vessels, gauges, valves, and HVAC-R systems.



- Instant connections from vacuum to 1000 psi
- Seals straight bore, step bore, smooth or cast surfaces
- Safety design feature prevents accidental disconnect under pressure
- Collet design provides maximum grip with minimum distortion of test piece



Fast Lever Actuated Connections to Internal Tubes

The unique collet gripping and sealing design seals reliably and resists removal under pressure.





JNL Series





JNL₂ JNL0 and JNL1 1/8" NPT Test Port 1/8" NPT Test Port 7.00 (177.8) GRIP GRIP SIZE Minimum Rotate Lever to Insertion 90° to Connect Rotate Lever to 3.54 (90.0) Length 90° to Connect 3.54 (90.0) Minimum Insertion Length

JNL0 and JNL1 - Lever Actuated Connectors for Internal Tubes / Bores

Part Number	Grip Size (+0.010"/-0.010")	Rated PSI*	Flow Diameter	Dim L	Housing Materials	Seal Material	Main Seals Package (5)
JNL0-0375H	0.375"		0.11	0.53			SN0-0375H
JNL0-0500H	0.500"		(2.8)	(13.5)			SN0-0500H
JNL1-0590	0.590"	Vacuum			Aluminum,		SN1-0590
JNL1-0625	0.625"	to Stainless Steel Neoprene and Delrin	SN1-0625				
JNL1-0750	0.750"		0.750" 1000		and Delrin		SN1-0750
JNL1-0785	0.785"		(4.3)	(16.1)			SN1-0785
JNL1-0875	0.875"						SN1-0875

JNL2 - Lever Actuated Connectors for Internal Tubes / Bores

Part Number	Grip Size (+0.030"/-0.010")	Rated PSI*	Flow Diameter	Dim A	Dim L1	Dim L2	Housing Materials	Seal Material	Main Seals Package (5)			
JNL2-1000	1.000"			0.17	7.18	1.31	1.39					
JNL2-1125	1.125"		(4.3)	(182.4)	(33.3)	(35.4)						
JNL2-1250	1.250"	Vacuum to 750 0.17 (4.3)					7.30	1.44	1.51	Aluminum,		
JNL2-1375	1.375"		7.84	1.56	2.05	Stainless Steel and Delrin	Neoprene	Consult Factory				
JNL2-1500	1.500"						7 91 1 69 2 12	and Bernin				
JNL2-1625	1.625"		(4.3)	8.09	1.81	2.30						

^{*} Pressure rating based on the test piece having a surface finish greater than 16 rms and a hardness of no more than 95 Rb to grip and seal at the rated pressure. A surface finish of 8 rms may be acceptable if the test piece has a hardness no greater than 40 Rb.

Note: Dimensions are in inches (mm).

JXL Series





External Smooth Tube Connector

The *JXL Series* connectors are ideal for external connections to copper, steel and aluminum tubes, and are used in manufacturing and refrigerant based products such as heat exchangers, pressure vessels, gauges, valves, and HVAC-R systems.



- Instant connections from vacuum to 1000 psi
- Seals straight bore, step bore, smooth or cast surfaces
- Safety design feature prevents accidental disconnect under pressure
- Collet design provides maximum grip with minimum distortion of test piece



Fast Lever Actuated Connections to External Tubes

The unique collet gripping and sealing design seals reliably and resists removal under pressure.



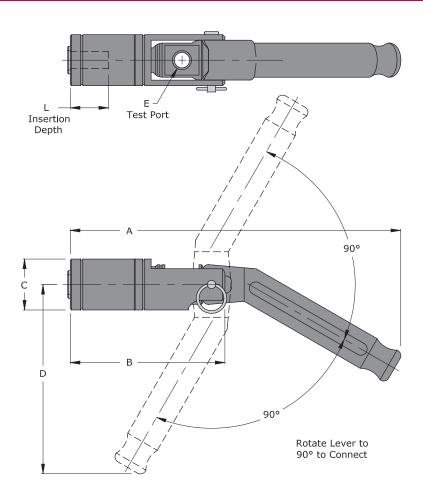


JXL Series









JXL0 and JXL1 - Lever Actuated Connectors for External Tubes

Part Number	Grip Size (±0.010")	Rated PSI*	Dim A	Dim B	Dim C	Dim D	Dim E	Dim L	Max. Flow Ø	Housing Materials	Seal Material	Main Seals Package (5)
JXL0-0250	0.250"											SXL0-0250
JXL0-0312	0.312"		7.27	3.42	1.13	4.22	1/8"	0.85	0.24			SXL0-0312
JXL0-0375	0.375"	Vacuum	(184.7)	(86.9)	(28.8)	(107.2)	NPT	(21.6)	(6.0)	Aluminum,		SXL0-0375
JXL0-0500	0.500"	to								Stainless	Neoprene	SXL0-0500
JXL1-0625	0.625"	1000	7.07	0.40	4.00	4.00	4 / 4 ?	Dolrin	Steel and Delrin		SXL0-0625	
JXL1-0750	0.750"		7.27 (184.7)	3.42 (86.9)	1.62 (41.2)	4.22 (107.2)	1/4" NPT	(21.6)	0.27 (6.8)			SXL0-0750
JXL1-0875	0.875"		(104.7)	(60.9)	(41.2)	(107.2)	ואודו	(21.0)	(0.6)			SXL0-0875

^{*} Pressure rating based on metal test piece not exceeding 30 Rockwell C hardness. As a general guideline, surface must be 5 micro inches or greater. Surfaces less than 5 micro inches not recommended.

Note: Dimensions are in inches (mm).

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PROCESS AND QUALITY IMPROVEMENT IN THE MEDICAL INDUSTRY

- Instant vacuum, leak or pressure test connections
- **Improve** part throughput & reduce test connection time
- Reliable leak tight, uniform connections that are nonoperator dependent
- FDA seal materials



MEDICAL CONNECTORS TO SIMPLIFY LEAK & PRESSURE TESTIN

Why Choose FasTest?

- FasTest is an industry leader in supplying high quality leak test connectors to the medical industry.
- FasTest's patented test connectors are designed and manufactured to meet the pace of current manufacturing environments.
- FasTest possess the knowledge and experience to meet your application needs, no matter how complex the test requirements, by offering the most up-to-date leak testing technology available.
- Custom connectors are available for unique requirements.

Medical Applications







FasTest offers a wide range of quick connectors designed to accommodate various fittings and other medical device testing applications. Designed to simplify the testing process, FasTest's quick connectors provide reliable and repeatable testing solutions for medical products, including:

- Drug delivery devices
- Infusion pumps
- IV components and luers
- · Catheter connectors and accessories
- Syringes and components
- Valves
- Lumens
- Gauges
- Dialysis
- Stents

Production-Ready Test Solutions for Luers and Common Tubes



FasTest LuerMate™ Product Solutions



ME Series

Automated Connections to Medical Devices and Tubing

- Pneumatic actuation accomodates high volume production testing
- FDA approved seals
- Sizes ranging from 0.030" to 0.510"
- Clear anodized construction



ME101

Automated Connections for High Volume Testing

- Enhanced piston performance for stronger sealing grip of complex fittings up to 500 psi
- Sizes ranging from 0.100" to 0.510"



MLL

Low Pressure LuerMate for Medical Device Manufacturing

- For vacuum or pressure test applications up to 100 psi
- Ideal for applications where tolerance to misalignment and ease of use are necessary
- Tactile response to connection lets user know seal has actuated



ML Series

Custom Designed Pneumatic Connector for Medical Luers

- Piston moves forward to seal and hold luer fitting in place
- For fixturing and sealing of male or female luer fittings
- Test pressure ranges from vacuum to 500 psi



60M

Sleeve Actuated Connector for Standard Luers

- Splitting collet design locks securely to any luer feature for instant test connections from vacuum to 750 psi
- Easy sleeve action is ergonomic and eliminates repetitive twisting and turning



MLH

High Pressure LuerMate for Medical Device Manufacturing

- For vacuum or pressure test applications up to 500 psi
- Spring to seal actuation ideal for manual or semi-automated applications where higher pressures and secure holdings are needed



Electronic Tool System (ETS)

- · Electronic actuation for leak testing
- Eliminate the clutter and potential contamination from traditional air control devices
- Ultimate seal control via the drive tool which receives its drive signal from the control unit
- Serial, Ethernet or DeviceNet communication allows remote monitoring or data acquisition capability



Engineered and Manufactured in the USA

Where to Buy





Wilson Company 16301 Addison Road Addison, TX 75001 Phone 214.647.8060 www.wilson-company.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





Medironic

Johnson Johnson MEDICAL

Scientific







Headquarters in USA

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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.





TwistMate[™]

- Finger tighten seals up to 10,000 psi (689 bar) for pneumatic and hydraulic testing
- Safe and Reliable leak tight connections to male and female threads
- Eliminate thread damage, sealant and wrenches
- Durable stainless steel construction available in multiple thread types



Quick Sealing with a "Twist to Connect" Actuation Method

The **TwistMate** family of products use an innovative "twist to connect", pressure assisted grip and seal technology to deliver a fast, safe and repeatable connection to male and female threads. This sealing method creates an improved seal as pressures increase and eliminates the traditional sealing methods using tape and wrenches that frequently damage threads.

Made in the USA



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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:

- Quick 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

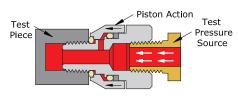
TwistMate® - Threaded Connectors

Quick Leak Tight Connection to Male and Female Threads

How to Operate

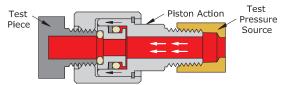
Spin connectors into or over threads until seal makes contact, apply test pressure

MIT - Internal Threads





MET - External Threads





Features	Benefits
Twist to connect	Lower cost solution, ideal for smaller volume production
Pressure assisted grip and seal	Sealing to test piece improves as vacuum or pressure are applied
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 necessary, sealing with no guesswork
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
Seal Material	Urethane, Neoprene or Buna N
Connection Profiles	Mates with NPT, SAE O-Ring Boss, 37° and 45° Flare, Metric, BSPP and BSPT
Termination Profiles	NPT, SAE 37° Flare and BSPP
Operating Pressures	Vacuum to 10,000 psi (689 bar)
Operating Temperature	-40°F to 200°F (-40°C to 93°C)

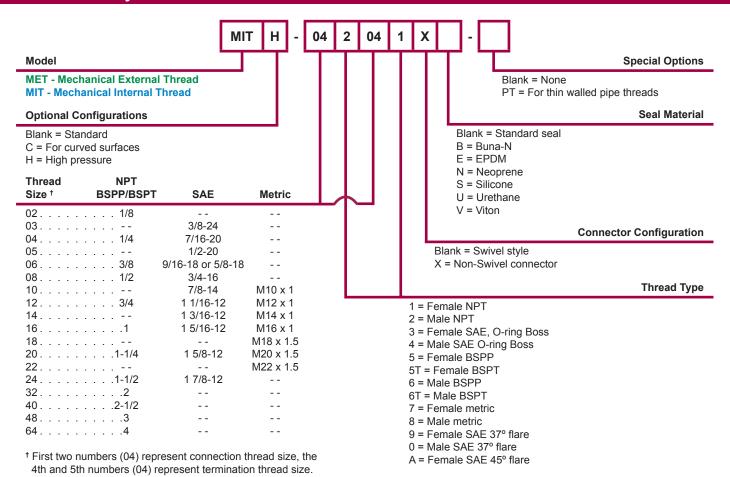
Specifications, Parts and Accessories

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.



Part Number Key



Notes:

Part Number Keys are to assist in IDENTIFICATION ONLY.

Verify new part numbers with factory; some configurations are not possible.

MIT Swivel	MIT Non-Swivel	MIT Plug

Thread Standards

NPT: Per SAE J476a, ANSI B1.20

SAE O-Ring Boss: Per SAE J1926, ISO 11926

SAE 37° Flare: Per SAE J514, ISO 12151-5

SAE 45° Flare: Per SAE J512 or J513 **BSPP (aka G):** Per ISO 228, BS 2779,

DIN 3852 Part 2 Type A and B

BSPT: Per ISO 7, BS 21, DIN 3852 Part 2 Type C

Metric (aka M, ISO O-Ring Boss): Per SAE J2244, ISO 6149,

DIN 3852 Part 1

MET Swivel Female Termination MET Cap MET Swivel Male Termination MET Cap

TwistMate Repair Kits

Swivel Style Repair Kits

2 internal O-rings, 2 backup rings and 1 snap ring.

Non-Swivel Style Repair Kits

1 internal O-ring and 1 backup ring.

Repair kits do not include main seal replacement.

For additional kits consult factory.



MIT Connectors for Internal (Female) Threads

Part Number	Connection Profile	Termination Profile	Rated psi (bar)
NPT, Swivel			
MIT-022021	1/8" NPT	1/8" NPT	5000 (345)
MIT-042021	1/4" NPT	1/8" NPT	5000 (345)
MIT-042041	1/4" NPT	1/4" NPT	5000 (345)
MIT-062021	3/8" NPT	1/8" NPT	4000 (275)
MIT-062061	3/8" NPT	3/8" NPT	4000 (275)
MIT-082021	1/2" NPT	1/8" NPT	4000 (275)
MIT-082081	1/2" NPT	1/2" NPT	4000 (275)
MIT-122121	3/4" NPT	3/4" NPT	4000 (275)
MIT-162161	1" NPT	1" NPT	4000 (275)
NPT, Non-Swive			
MIT-022021X	1/8" NPT	1/8" NPT	5000 (345)
MITH-022021X	1/8" NPT	1/8" NPT	10,000 (689)
MIT-042041X	1/4" NPT	1/4" NPT	5000 (345)
MITH-042041X	1/4" NPT	1/4" NPT	10,000 (689)
MIT-062061X	3/8" NPT	3/8" NPT	4000 (275)
MITH-062061X	3/8" NPT	3/8" NPT	10,000 (689)
MIT-082081X	1/2" NPT	1/2" NPT	4000 (275)
MITH-082081X	1/2" NPT	1/2" NPT	8000 (551)
MIT-122121X	3/4" NPT	3/4" NPT	4000 (275)
MITH-122121X	3/4" NPT	3/4" NPT	7500 (517)
MIT-162161X	1" NPT	1" NPT	4000 (275)
MITH-162161X	1" NPT	1" NPT	6500 (448)
MIT-202201X	1-1/4" NPT	1-1/4" NPT	4000 (275)
MIT-242241X	1-1/2" NPT	1-1/2" NPT	3000 (206)
MIT-322161X	2" NPT	1" NPT	2500 (172)
MIT-402161X	2-1/2" NPT	1" NPT	1500 (103)
MIT-482161X	3" NPT	1" NPT	1500 (103)
MIT-642161X	4" NPT	1" NPT	1000 (68)
IEC Transmitter			
MIT-042021TM	1/4" IEC	1/8" NPT	5000 (345)
NPT, Non-Swive			E000 (0.45)
MITC-022021X	1/8" NPT	1/8" NPT	5000 (345)
MITC-042041X	1/4" NPT	1/4" NPT	5000 (345)
NPT, Plug	4/0" NDT	, , , ! -	E000 (045)
MIT-022P	1/8" NPT	n/a	5000 (345)
MIT-042P	1/4" NPT	n/a	5000 (345)
MIT-062P	3/8" NPT	n/a	4000 (275)
MIT-082P MIT-122P	1/2" NPT	n/a	4000 (275)
MIT-122P MIT-162P	3/4" NPT 1" NPT	n/a	4000 (275)
IVII I - 102P	INPI	n/a	4000 (275)

[†] MITC styles have a unique chamfer seal design for sealing on curved surfaces. See website for application details.

Part Number	Connection	Termination	Rated
SAE O Bing Bo	Profile	Profile	psi (bar)
SAE O-Ring Bos		1/8" NPT	E000 (24E)
MIT-034021X	-3 (3/8-24)		5000 (345)
MIT-044021X	-4 (7/16-20)	1/8" NPT	5000 (345)
MITH-044021X	-4 (7/16-20)	1/8" NPT	10,000 (689)
MIT-054041X	-5 (1/2-20)	1/4" NPT	5000 (345)
MIT-064041X	-6 (9/16-18)	1/4" NPT	5000 (345)
MITH-064041X	-6 (9/16-18)	1/4" NPT	10,000 (689)
MIT-084081X	-8 (3/4-16)	1/2" NPT	4000 (275)
MITH-084081X	-8 (3/4-16)	1/2" NPT	8000 (551)
MIT-104081X	-10 (7/8-14)	1/2" NPT	4000 (275)
MITH-104081X	-10 (7/8-14)	1/2" NPT	7500 (517)
MIT-124121X	-12 (1 1/16-12)	3/4" NPT	4000 (275)
MITH-124121X	-12 (1 1/16-12)	3/4" NPT	7500 (517)
MIT-144161X	-14 (1 3/16-12)	1" NPT	4000 (275)
MITH-144161X	-14 (1 3/16-12)	1" NPT	7000 (482)
MIT-164161X	-16 (1 5/16-12)	1" NPT	4000 (275)
MITH-164161X	-16 (1 5/16-12)	1" NPT	7000 (482)
MIT-204201X	-20 (1 5/8-12)	1-1/4" NPT	4000 (275)
Metric, Swivel			
MIT-108025	M10 x 1.0	1/8" BSPP	5000 (345)
MIT-128045	M12 x 1.5	1/4" BSPP	5000 (345)
MIT-148045	M14 x 1.5	1/4" BSPP	5000 (345)
MIT-168065	M16 x 1.5	3/8" BSPP	4000 (275)
MIT-188065	M18 x 1.5	3/8" BSPP	4000 (275)
MIT-228085	M22 x 1.5	1/2" BSPP	4000 (275)
Metric, Non-Swiv	rel		, ,
MIT-108021X	M10 x 1.0	1/8" NPT	5000 (345)
MIT-128041X	M12 x 1.5	1/4" NPT	5000 (345)
MIT-148041X	M14 x 1.5	1/4" NPT	5000 (345)
MIT-168061X	M16 x 1.5	3/8" NPT	4000 (275)
MIT-188061X	M18 x 1.5	3/8" NPT	4000 (275)
MIT-228081X	M22 x 1.5	1/2" NPT	4000 (275)
Metric, Plug	<u>-</u> 2 7 110		.000 (=.0)
MIT-108P	M10 x 1.0	n/a	5000 (345)
MIT-128P	M12 x 1.5	n/a	5000 (345)
MIT-148P	M14 x 1.5	n/a	5000 (345)
MIT-168P	M16 x 1.5	n/a	4000 (275)
MIT-188P	M18 x 1.5	n/a	4000 (275)
MIT-228P	M10 x 1.5 M22 x 1.5	n/a	4000 (275)
IVII 1-220F	IVIZZ X 1.U	11/4	+000 (273)

Notes:

Phone: (972) 931-8666

MIT swivel styles allow one end of the connector to spin while terminated to a pressure source which makes connections easier and faster; MIT non-swivel styles do not have this feature.

See part number key or website for additional connector details.



MIT Connectors for Internal (Female) Threads

Part Number	Connection Profile	Termination Profile	Rated psi (bar)
BSPP, Swivel			
MIT-026021	1/8" BSPP	1/8" NPT	5000 (345)
MIT-026025	1/8" BSPP	1/8" BSPP	5000 (345)
MIT-046021	1/4" BSPP	1/8" NPT	5000 (345)
MIT-046041	1/4" BSPP	1/4" NPT	5000 (345)
MIT-046045	1/4" BSPP	1/4" BSPP	5000 (345)
MIT-066021	3/8" BSPP	1/8" NPT	4000 (275)
MIT-066061	3/8" BSPP	3/8" NPT	4000 (275)
MIT-066065	3/8" BSPP	3/8" BSPP	4000 (275)
MIT-086021	1/2" BSPP	1/8" NPT	4000 (275)
MIT-086081	1/2" BSPP	1/2" NPT	4000 (275)
MIT-086085	1/2" BSPP	1/2" BSPP	4000 (275)
MIT-126125	3/4" BSPP	3/4" BSPP	4000 (275)
MIT-166165	1" BSPP	1" BSPP	4000 (275)
BSPP, Non-Swiv	rel		
MIT-026025X	1/8" BSPP	1/8" BSPP	5000 (345)
MIT-046045X	1/4" BSPP	1/4" BSPP	5000 (345)
MIT-066065X	3/8" BSPP	3/8" BSPP	4000 (275)
MIT-086085X	1/2" BSPP	1/2" BSPP	4000 (275)
MIT-126121X	3/4" BSPP	3/4" NPT	4000 (275)
MIT-126125X	3/4" BSPP	3/4" BSPP	4000 (275)
MIT-166161X	1" BSPP	1" NPT	4000 (275)
MIT-166165X	1" BSPP	1" BSPP	4000 (275)
BSPP, Plug			
MIT-026P	1/8" BSPP	n/a	5000 (345)
MIT-046P	1/4" BSPP	n/a	5000 (345)
MIT-066P	3/8" BSPP	n/a	4000 (275)
MIT-086P	1/2" BSPP	n/a	4000 (275)
MIT-126P	3/4" BSPP	n/a	4000 (275)
MIT-166P	1" BSPP	n/a	4000 (275)

Part Number	Connection Profile	Termination Profile	Rated psi (bar)
BSPT, Swivel			
MIT-026T021	1/8" BSPT	1/8" NPT	5000 (345)
MIT-026T025	1/8" BSPT	1/8" BSPP	5000 (345)
MIT-046T021	1/4" BSPT	1/8" NPT	5000 (345)
MIT-046T041	1/4" BSPT	1/4" NPT	5000 (345)
MIT-046T045	1/4" BSPT	1/4" BSPP	5000 (345)
MIT-066T021	3/8" BSPT	1/8" NPT	4000 (275)
MIT-066T061	3/8" BSPT	3/8" NPT	4000 (275)
MIT-066T065	3/8" BSPT	3/8" BSPP	4000 (275)
MIT-086T021	1/2" BSPT	1/8" NPT	4000 (275)
MIT-086T081	1/2" BSPT	1/2" NPT	4000 (275)
MIT-086T085	1/2" BSPT	1/2" BSPP	4000 (275)
MIT-126T125	3/4" BSPT	3/4" BSPP	4000 (275)
MIT-166T165	1" BSPT	1" BSPP	4000 (275)
BSPT, Non-Swi	vel		
MIT-026T025X	1/8" BSPT	1/8" BSPP	5000 (345)
MIT-046T045X	1/4" BSPT	1/4" BSPP	5000 (345)
MIT-066T065X	3/8" BSPT	3/8" BSPP	4000 (275)
MIT-086T085X	1/2" BSPT	1/2" BSPP	4000 (275)
MIT-126T121X	3/4" BSPT	3/4" NPT	4000 (275)
MIT-126T125X	3/4" BSPT	3/4" BSPP	4000 (275)
MIT-166T161X	1" BSPT	1" NPT	4000 (275)
MIT-166T165X	1" BSPT	1" BSPP	4000 (275)
BSPT, Plug			
MIT-026TP	1/8" BSPT	n/a	5000 (345)
MIT-046TP	1/4" BSPT	n/a	5000 (345)
MIT-066TP	3/8" BSPT	n/a	4000 (275)
MIT-086TP	1/2" BSPT	n/a	4000 (275)
MIT-126TP	3/4" BSPT	n/a	4000 (275)
MIT-166TP	1" BSPT	n/a	4000 (275)

Notes:

MIT swivel styles allow one end of the connector to spin while terminated to a pressure source which makes connections easier and faster; MIT non-swivel styles do not have this feature.

See part number key or website for additional connector details.



MET Connectors for External (Male) Threads

Port Number	Connection	Termination	Rated
Part Number	Profile	Profile	psi (bar)
NPT, Swivel			
MET-021021	1/8" NPT	1/8" NPT	5000 (345)
MET-021022	1/8" NPT	1/8" NPT*	5000 (345)
METH-021022	1/8" NPT	1/8" NPT*	10,000 (689)
MET-041021	1/4" NPT	1/8" NPT	5000 (345)
MET-041042	1/4" NPT	1/4" NPT*	5000 (345)
METH-041042	1/4" NPT	1/4" NPT*	8000 (551)
MET-061021	3/8" NPT	1/8" NPT	4000 (275)
MET-061062	3/8" NPT	3/8" NPT*	4000 (275)
METH-061062	3/8" NPT	3/8" NPT*	8000 (551)
MET-081021	1/2" NPT	1/8" NPT	4000 (275)
MET-081082	1/2" NPT	1/2" NPT*	4000 (275)
METH-081082	1/2" NPT	1/2" NPT*	6000 (413)
MET-121122	3/4" NPT	3/4" NPT*	4000 (275)
METH-121122	3/4" NPT	3/4" NPT*	5000 (379)
MET-161162	1" NPT	1" NPT*	4000 (275)
METH-161162	1" NPT	1" NPT*	5000 (345)
MET-201202	1-1/4" NPT	1-1/4" NPT*	2500 (172)
MET-241161	1-1/2" NPT	1" NPT	1000 (68)
MET-321161	2" NPT	1" NPT	750 (31)
MET-401161	2-1/2" NPT	1" NPT	500 (34)
MET-481161	3" NPT	1" NPT	500 (34)
NPT, Swivel for T	hin Walled P	ipes †	
MET-041042-PT	1/4" NPT	1/4" NPT*	750 (31)
MET-061062-PT	3/8" NPT	3/8" NPT*	750 (31)
MET-081082-PT	1/2" NPT	1/2" NPT*	750 (31)
MET-121122-PT	3/4" NPT	3/4" NPT*	750 (31)
MET-161162-PT	1" NPT	1" NPT*	750 (31)
MET-201202-PT	1-1/4" NPT	1-1/4" NPT*	750 (31)
MET-241161 ^{††}	1-1/2" NPT	1" NPT	750 (31)
MET-321161	2" NPT	1" NPT	750 (31)
MET-401161	2-1/2" NPT	1" NPT	500 (34)
MET-481161	3" NPT	1" NPT	500 (34)
NPT, Cap			
MET-021C	1/8" NPT	n/a	5000 (345)
MET-041C	1/4" NPT	n/a	5000 (345)
MET-061C	3/8" NPT	n/a	4000 (275)
MET-081C	1/2" NPT	n/a	4000 (275)

Part Number	Connection	Termination	Rated
	Profile	Profile	psi (bar)
SAE 37° Flare, Swit	ı		l
MET-049021	-4 (7/16-20)	1/8" NPT	10,000 (689)
METH-049040	-4 (7/16-20)	-4 (7/16-20)*	10,000 (689)
MET-069021	-6 (9/16-18)	1/8" NPT	10,000 (689)
METH-069060	-6 (9/16-18)	-6 (9/16-18)*	10,000 (689)
MET-089021	-8 (3/4-16)	1/8" NPT	10,000 (689)
METH-089080	-8 (3/4-16)	-8 (3/4-16)*	10,000 (689)
METH-109100	-10 (7/8-14)	-10 (7/8-14)*	10,000 (689)
METH-129120	-12 (1 1/16-12)	-12 (1 1/16-12)*	10,000 (689)
MET-169120	-16 (1 5/16-12)	-12 (1 1/16-12)*	1000 (68)
MET-209160	-20 (1 5/8-12)	-16 (1 5/16-12)*	1000 (68)
MET-249200	-24 (1 7/8-12)	-20 (1 5/8-12)*	750 (31)
MET-329240	-32 (2 1/2-12)	-24 (1 7/8-12)*	750 (31)
SAE 45° Flare, Swit	/el		
MET-04A042B	-4 (7/16-20)	1/4" NPT*	5000 (345)
MET-06A062N	-6 (5/8-18)	3/8" NPT*	5000 (345)
MET-08A082N	-8 (3/4-16)	1/2" NPT*	4000 (275)
MET-10A082N	-10 (7/8-14)	1/2" NPT*	4000 (275)
MET-12A122N	-12 (1 16-14)	3/4" NPT*	4000 (275)
MIL Spec 18997, S	wivel		
MET-06-18997-021	9/16-18 UNF	1/8" NPT	4000 (275)
BSPP, Swivel		•	
MET-025021	1/8" BSPP	1/8" NPT	5000 (345)
MET-025022	1/8" BSPP	1/8" NPT*	5000 (345)
MET-025025	1/8" BSPP	1/8" BSPP	5000 (345)
MET-045021	1/4" BSPP	1/8" NPT	5000 (345)
MET-045042	1/4" BSPP	1/4" NPT*	5000 (345)
MET-045045	1/4" BSPP	1/4" BSPP	5000 (345)
MET-065021	3/8" BSPP	1/8" NPT	4000 (275)
MET-065062	3/8" BSPP	3/8" NPT*	4000 (275)
MET-065065	3/8" BSPP	3/8" BSPP	4000 (275)
MET-085021	1/2" BSPP	1/8" NPT	4000 (275)
MET-085082	1/2" BSPP	1/2" NPT*	4000 (275)
MET-085085	1/2" BSPP	1/2" BSPP	4000 (275)
BSPP, Cap			
MET-025C	1/8" BSPP	n/a	5000 (345)
MET-045C	1/4" BSPP	n/a	5000 (345)
MET-065C	3/8" BPPP	n/a	4000 (275)
MET-085C	1/2" BPPP	n/a	4000 (275)

Note

See part number key or website for additional connector details.

^{*} Designates male threads.

[†] Connectors for Schedule 40 pipe.

^{††} Connector pressure rating reduced from 1000 to 750 psi for thin walled (Schedule 40) threaded pipe applications.



MET Connectors for External (Male) Threads

Part Number	Connection Profile	Termination Profile	Rated psi (bar)
BSPT, Swivel			
MET-025T021	1/8" BSPT	1/8" NPT	5000 (345)
MET-025T022	1/8" BSPT	1/8" NPT*	5000 (345)
MET-025T025	1/8" BSPT	1/8" BSPP	5000 (345)
MET-045T021	1/4" BSPT	1/8" NPT	5000 (345)
MET-045T042	1/4" BSPT	1/4" NPT*	5000 (345)
MET-045T045	1/4" BSPT	1/4" BSPP	5000 (345)
MET-065T021	3/8" BSPT	1/8" NPT	4000 (275)
MET-065T062	3/8" BSPT	3/8" NPT*	4000 (275)
MET-065T065	3/8" BSPT	3/8" BSPP	4000 (275)
MET-085T021	1/2" BSPT	1/8" NPT	4000 (275)
MET-085T082	1/2" BSPT	1/2" NPT*	4000 (275)
MET-085T085	1/2" BSPT	1/2" BSPP	4000 (275)
BSPT, Cap			
MET-025TC	1/8" BSPT	n/a	5000 (345)
MET-045TC	1/4" BSPT	n/a	5000 (345)
MET-065TC	3/8" BSPT	n/a	4000 (275)
MET-085TC	1/2" BSPT	n/a	4000 (275)
Swagelok®, Com	pression Fitting	s, Swivel	
MET-CF04021	1/4" (7/16-20)	1/8" NPT	5000 (345)
MET-CF06021	3/8" (9/16-20)	1/8" NPT	4000 (275)
MET-CF08021	1/2" (3/4-20)	1/8" NPT	4000 (275)
Swagelok®, Com	pression Fitting	s, Cap	
MET-CF04C	1/4" (7/16-20)	n/a	5000 (345)
MET-CF06C	3/8" (9/16-20)	n/a	4000 (275)
MET-CF08C	1/2" (3/4-20)	n/a	4000 (275)
Ferulok®, Compr	ression Fittings,	Swivel	
MET-CF04021F	1/4" (7/16-20)	1/8" NPT	5000 (345)
MET-CF06021F	3/8" (9/16-18)	1/8" NPT	4000 (275)
MET-CF08021F	1/2" (3/4-16)	1/8" NPT	4000 (275)
Ferulok®, Compr	ession Fittings,	Сар	
MET-CF04CF	1/4" (7/16-20)	n/a	5000 (345)
MET-CF06CF	3/8" (9/16-18)	n/a	4000 (275)
MET-CF08CF	1/2" (3/4-16)	n/a	4000 (275)
SAE 37° Flare, Bench Step, Swivel			
MET-069040	-6 (9/16-18)	-4 (7/16-20)*	5000 (345)
MET-089060	-8 (3/4-16)	-6 (9/16-18)*	4000 (275)
MET-109080	-10 (7/8-14)	-8 (3/4-16)*	4000 (275)
MET-129100	-12 (1 1/16-12)	-10 (7/8-14)*	4000 (275)
MET-169120	-16 (1 5/16-12)	-12 (1 1/16-12)*	1000 (68)
MET-209160	-20 (1 5/8-12)	-16 (1 5/16-12)*	1000 (68)
MET-249200	-24 (1 7/8-12)	-20 (1 5/8-12)*	750 (31)
MET-329240	-32 (2 1/2-12)	-24 (1 7/8-12)*	750 (31)

Transition Adapters



Part Number	Connection Profile	Termination Profile	Rated psi (bar)
NPT, Transition			por (bar)
MI022-ME021	1/8" NPT	1/8" NPT	5000 (345)
MI022-ME041	1/8" NPT	1/4" NPT	5000 (345)
MI022-ME041	1/8" NPT	3/8" NPT	4000 (275)
MI022-ME081	1/8" NPT	1/2" NPT	4000 (275)
MI042-ME021	1/4" NPT	1/8" NPT	5000 (345)
MI042-ME041	1/4" NPT	1/4" NPT	5000 (345)
MI042-ME061	1/4" NPT	3/8" NPT	4000 (275)
MI042-MF081	1/4" NPT	1/2" NPT	4000 (275)
BSPP, Transition			1000 (270)
MI026-MF025	1/8" BSPP	1/8" BSPP	5000 (345)
MI026-ME045	1/8" BSPP	1/4" BSPP	5000 (345)
MI026-MF065	1/8" BSPP	3/8" BSPP	4000 (275)
MI026-MF085	1/8" BSPP	1/2" BSPP	4000 (275)
MI046-ME025	1/4" BSPP	1/8" BSPP	5000 (345)
MI046-ME045	1/4" BSPP	1/4" BSPP	5000 (345)
MI046-ME065	1/4" BSPP	3/8" BSPP	4000 (275)
MI046-ME085	1/4" BSPP	1/2" BSPP	4000 (275)
BSPT, Transition	n Adapters, Sv	vivels	,
MI026T-ME025T	1/8" BSPT	1/8" BSPT	5000 (345)
MI026T-ME045T	1/8" BSPT	1/4" BSPT	5000 (345)
MI026T-ME065T	1/8" BSPT	3/8" BSPT	4000 (275)
MI026T-ME085T	1/8" BSPT	1/2" BSPT	4000 (275)
MI046T-ME025T	1/4" BSPT	1/8" BSPT	5000 (345)
MI046T-ME045T	1/4" BSPT	1/4" BSPT	5000 (345)
MI046T-ME065T	1/4" BSPT	3/8" BSPT	4000 (275)
MI046T-ME085T	1/4" BSPT	1/2" BSPT	4000 (275)

Note:

See part number key or website for additional connector details.

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^{*}Designates male threads.

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