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.















H-18

Custom

























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





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.



the threaded collets





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.

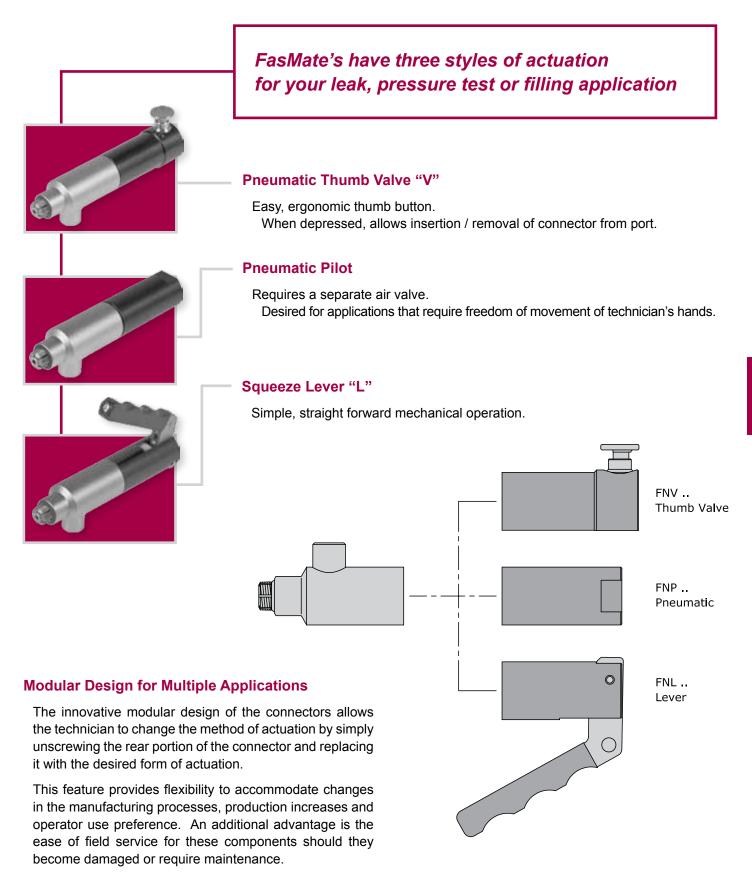
Made in the USA

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

Engineering & Technical Support

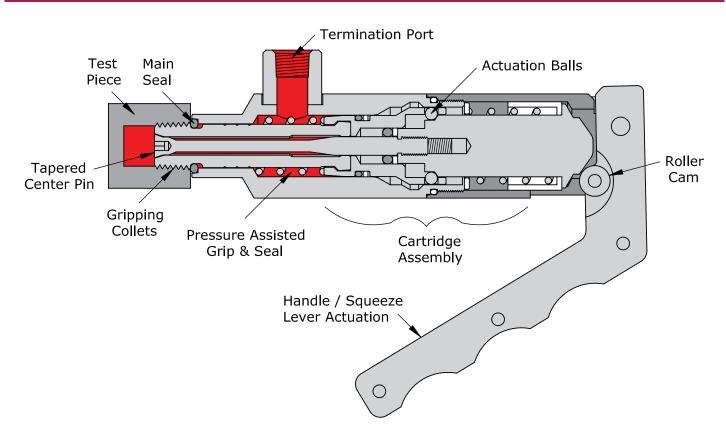
FasTest has full engineering and manufacturing capability to provide special accommodations to meet specific applications. Our Sales Engineers are available to review your requirements.







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

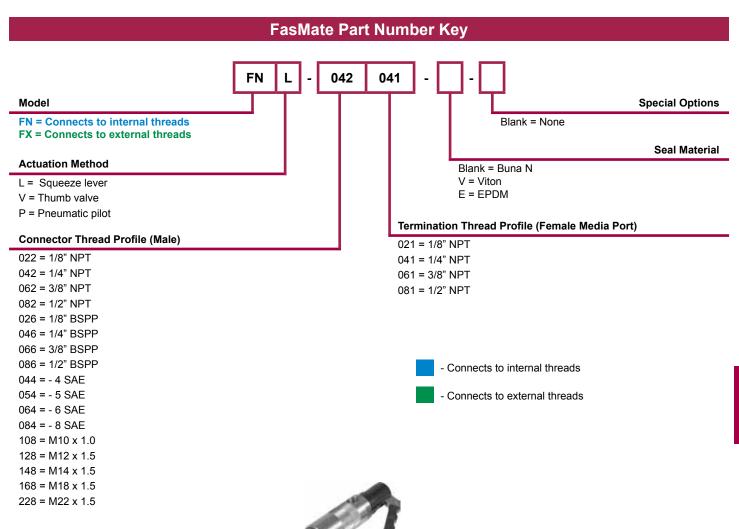
The **FasMate** FN family of products use an innovative collapsing collet with tapered center pin that together locks the connector to the port. As pressure increases, it becomes difficult to impossible to accidentally or inadvertently disconnect from the port*. The expanding collets and pressure assisted 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 Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-022021	1/8" NPT		1/8" NPT	0.60"	BS1		Buna N	RFN022021	S1108-B70
FNL-042041	1/4" NPT	Vacuum to 5000	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN042041	S21250327-B60
FNL-062061	3/8" NPT		3/8" NPT	0.90"	BS3			RFN062061	S1112-B70
FNL-082081	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		Buna N	RFN044021	S1109-B70
FNL-054041	-5 (1/2-20)	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN054041	S21250327-B60
FNL-064041	-6 (9/16-18)	to 5000	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

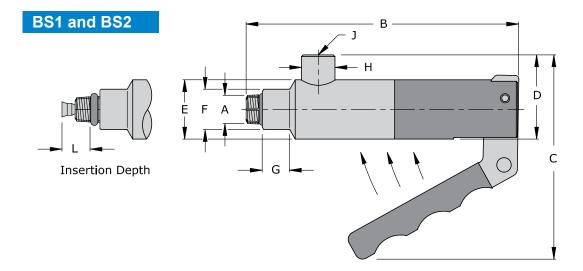
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-026021	1/8" BSPP		1/8" NPT	0.60"	BS1		Buna N	RFN026021	S1108-B70
FNL-046041	1/4" BSPP	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN046041	S21250327-B60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

Lever Actuated - ISO O-Ring Metric Threads

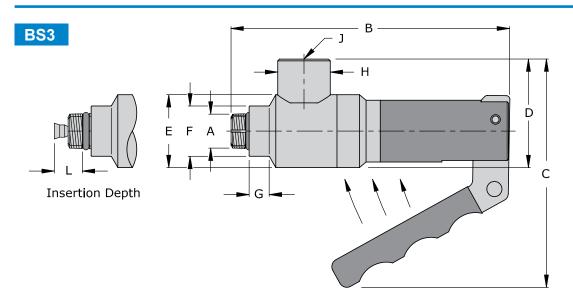
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNL-108021	M10x1.0		1/8" NPT	0.60"	BS1		Buna N	RFN108021	S1108-B70
FNL-128041	M12x1.5		1/4" NPT	0.75"	BS2	Aluminum &		RFN128041	S21250327-B60
FNL-148041	M14x1.5	Vacuum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

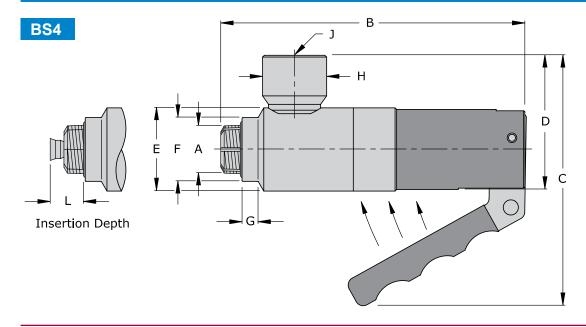




Dim	BS1	BS2			
Α	See Cor	nects to			
В	4.80"	5.00"			
С	3.70"	4.00"			
D	1.50"	1.70"			
E	1.06"	1.06"			
F	0.65"	0.72"			
G	0.50"	0.50"			
Н	0.60"	0.75"			
J	1/8" NPT	1/4" NPT			
L	0.55"	0.67"			



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		Buna N	RFN022021	S1108-B70
FNV-042041	1/4" NPT	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN042041	S21250327-B60
FNV-062061	3/8" NPT	to 5000	3/8" NPT	0.90"	BS3			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		Buna N	RFN044021	S1109-B70
FNV-054041	-5 (1/2-20)	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN054041	S21250327-B60
FNV-064041	-6 (9/16-18)	to 5000	1/4" NPT	0.75"	BS3			RFN064041	S1111-B70
FNV-084061	-8 (3/4-16)		3/8" NPT	0.90"	BS4			RFN084061	S1207-B70

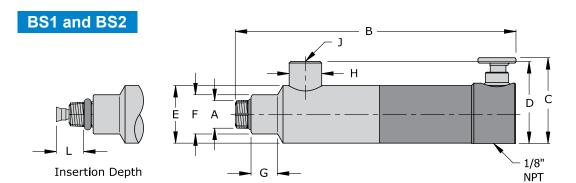
Thumb Valve Actuated - BSPP Threads

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		Buna N	RFN026021	S1108-B70
FNV-046041	1/4" BSPP	Vacuum	1/4" NPT	0.75"	BS2	Aluminum & Stainless Steel		RFN046041	S21250327-B60
FNV-066061	3/8" BSPP	to 5000	3/8" NPT	0.90"	BS3			RFN066061	S1112-B70
FNV-086081	1/2" BSPP		1/2" NPT	1.10"	BS4			RFN086081	S1208-B70

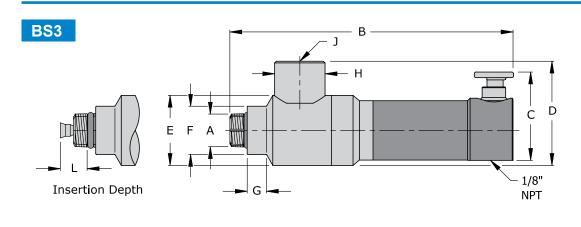
Thumb Valve Actuated - ISO O-Ring Metric Threads

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 &	Buna N	RFN148041	S21250327-B60
FNV-168061	M16x1.5	to 5000	3/8" NPT	0.90"	BS3	Stainless Steel		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

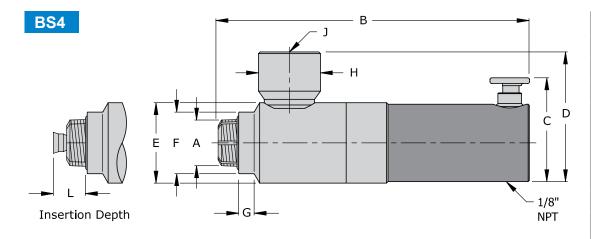




Dim	BS1	BS2			
Α	See Cor	nects to			
В	5.13"	5.21"			
С	1.58"	1.58"			
D	1.50"	1.70"			
E	1.06"	1.06"			
F	0.65"	0.72"			
G	0.50"	0.50"			
Н	0.60"	0.75"			
J	1/8" NPT	1/4" NPT			
L	0.55"	0.67"			



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

Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNP-022021	1/8" NPT	Vacuum to 5000	1/8" NPT	0.60"	BS1		Buna N	RFN022021	S1108-B70
FNP-042041	1/4" NPT		1/4" NPT	0.75"	BS2	Aluminum &		RFN042041	S21250327-B60
FNP-062061	3/8" NPT		3/8" NPT	0.90"	BS3	Stainless Steel		RFN062061	S1112-B70
FNP-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)	Vacuum to 5000	1/8" NPT	0.60"	BS1		Buna N	RFN044021	S1109-B70
FNP-054041	-5 (1/2-20)		1/4" NPT	0.75"	BS2	Aluminum &		RFN054041	S21250327-B60
FNP-064041	-6 (9/16-18)		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

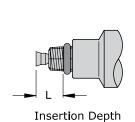
Part Number	Connects to	Rated PSI	Term Thread	Term Diameter	Body Size	Housing Material	Seal Material	Repair Kit	Main Seals Package (5)
FNP-026021	1/8" BSPP	Vacuum to 5000	1/8" NPT	0.60"	BS1		Buna N	RFN026021	S1108-B70
FNP-046041	1/4" BSPP		1/4" NPT	0.75"	BS2	Aluminum &		RFN046041	S21250327-B60
FNP-066061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

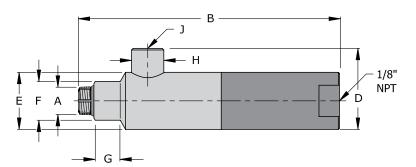
Pneumatic Actuated - ISO O-Ring Metric Threads

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	Vacuum to 5000	1/8" NPT	0.60"	BS1		Buna N	RFN108021	S1108-B70
FNP-128041	M12x1.5		1/4" NPT	0.75"	BS2			RFN128041	S21250327-B60
FNP-148041	M14x1.5		1/4" NPT	0.75"	BS2	Aluminum &		RFN148041	S21250327-B60
FNP-168061	M16x1.5		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

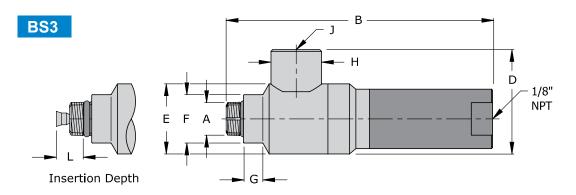




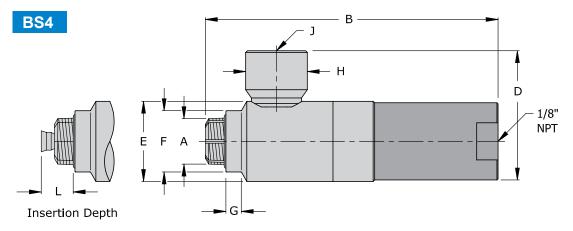




Dim	BS1	BS2
Α	See Cor	nects to
В	4.90"	5.00"
С	N/A	N/A
D	1.50"	1.70"
E	1.06"	1.06"
F	0.65"	0.72"
G	0.50"	0.50"
Н	0.60"	0.75"
J	1/8" NPT	1/4" NPT
L	0.55"	0.67"



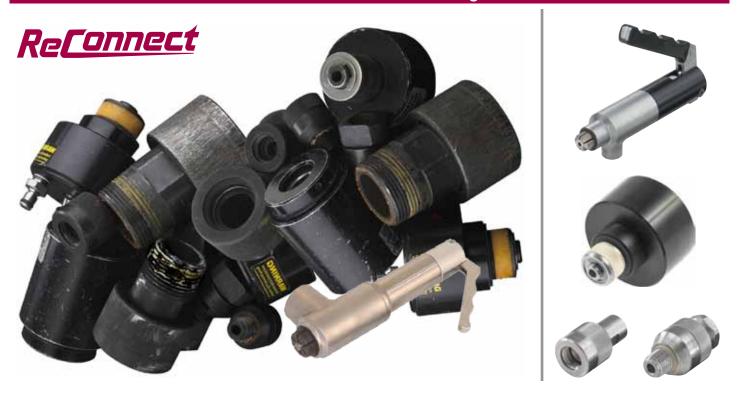
Dim	BS3				
Α	See Connects to				
В	4.80"				
С	N/A				
D	1.86"				
E	1.25"				
F	0.86"				
G	0.35"				
Н	See Term Diameter				
J	See Term Thread				
L	0.67"				



Dim	BS4				
Α	See Connects to				
В	5.34"				
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"				



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

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 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.

FasTest Inc. does not warrant the suitability of the product for any particular application. Determining product application suitability is solely the customer's responsibility. FasTest Inc. is not liable for consequential or other damages including, but not limited to, loss, damage, personal injury, or any other expense directly or indirectly arising from the use of or inability to use its products either separately or in combination with other products.

ALL OTHER WARRANTIES EXPRESS OR IMPLIED, WHETHER ORAL, WRITTEN OR IN ANY OTHER FORM, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

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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Notifications and Copyright

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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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