

# 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.

## Helpful Hint ...

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.



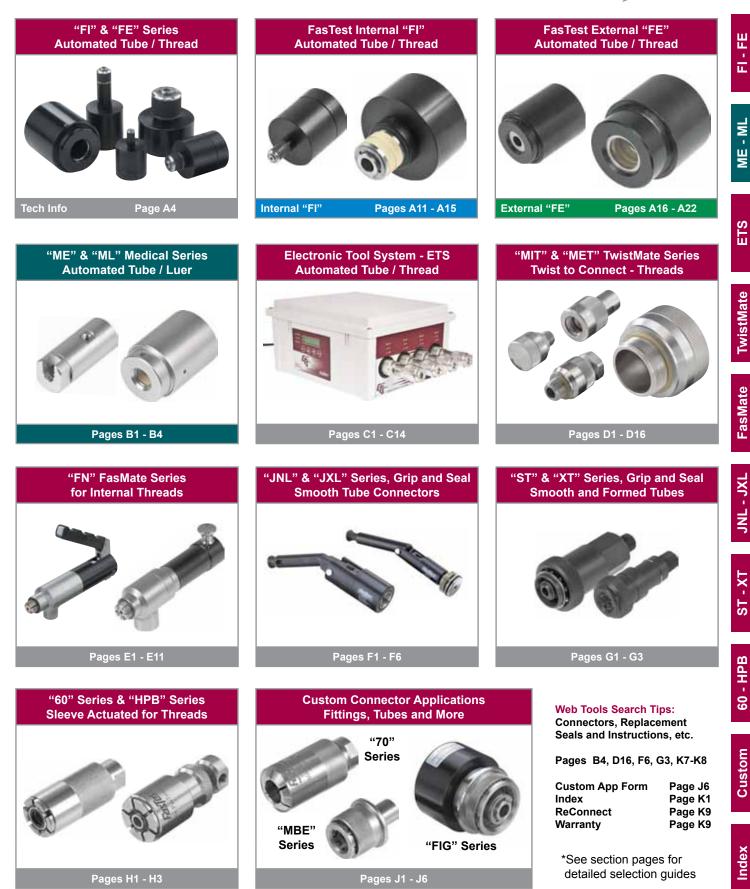












## **"60 and HPB Series" - Sleeve Actuated Connectors**



## **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

## "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** 

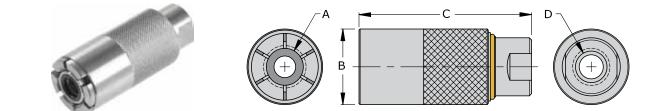


## **For External Threads**

# **"60 and HPB Series" - Sleeve Actuated Connectors**



## 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<br>PSI | Housing<br>Material | Seal<br>Material | Main Seals<br>Package (5) |           |        |
|-------------|----------|-------|-------|----------|--------------|---------------------|------------------|---------------------------|-----------|--------|
| 60G-1T02    | 1/8" NPT | 0.99" | 2.95" | 1/8" NPT |              |                     |                  | S1105-B70                 |           |        |
| 60G-1T04    | 1/4" NPT | 1.19" |       | 1/4" NPT |              |                     |                  | S1109-B70                 |           |        |
| 60G-1T06    | 3/8" NPT | 4.00" | 3.15" |          | 3/8" NPT     | Vacuum              | Stainless        | Dune N                    | S1111-B70 |        |
| 60G-1T08    | 1/2" NPT | 1.38" |       | 3.15"    | 3.15"        | 3.15"               |                  | to 750                    | Steel     | Buna N |
| 60G-1T12    | 3/4" NPT | 1.58" |       | 1/2" NPT |              |                     |                  | Consult                   |           |        |
| 60G-1T16    | 1" NPT   | 1.97" | 3.54" | 3/4" NPT | 1            |                     |                  | 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<br>PSI | Housing<br>Material | Seal<br>Material | Main Seals<br>Package (5) |           |
|-------------|-----------------|-------|-------------------------|-----------|--------------|---------------------|------------------|---------------------------|-----------|
| 60G-049     | -4 (7/16-20)    | 0.99" | 2.95"<br>3.15"<br>3.54" | 1/8" NPT  | Г            |                     |                  | S1010-B70                 |           |
| 60G-069     | -6 (9/16-18)    | 1.19" |                         | 2.95      | 1/4" NPT     |                     |                  |                           | S1012-B70 |
| 60G-089     | -8 (3/4-16)     | 1.58" |                         | 1/2" NPT  | Vacuum       | Stainless           | Dung N           | S1014-B70                 |           |
| 60G-109     | -10 (7/8-14)    | 1.78" |                         | 0 5 4 "   | 3/4" NPT     | to 750              | Steel            | Buna N                    | S1016-B70 |
| 60G-129     | -12 (1 1/16-12) | 1.70  |                         | 3/4 INF I |              |                     |                  | 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<br>PSI     | Housing<br>Material | Seal<br>Material | Main Seals<br>Package (5) |
|-------------|-----------------|-------|-------|------------|------------------|---------------------|------------------|---------------------------|
| 60G-A04     | -4 (7/16-20)    | 0.99" | 2.95" | 1/8" NPT   |                  |                     |                  | S2060-0246B70             |
| 60G-A06     | -6 (5/8-18)     | 4.00" | 3.15" | 3/8" NPT   | Vacuum<br>to 750 |                     | Buna N           | S1012-B70                 |
| 60G-A08     | -8 (3/4-16)     | 1.38" |       |            |                  | Stainless<br>Steel  |                  | S1015-B70                 |
| 60G-A10     | -10 (7/8-14)    | 1.78" |       | " 3/4" NPT |                  |                     |                  | S1015-B70                 |
| 60G-A12     | -12 (1 1/16-14) |       | 0.547 |            |                  |                     |                  | S1117-B70                 |
| 60G-A14     | -14 (1 1/4-12)  |       | 3.54" |            |                  |                     |                  |                           |
| 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.

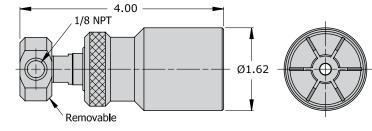
Examples: 60G-xxx⊻ = FKM (Viton) 60G-xxxE = EPDM

# "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<br>Port | Rated<br>PSI      | Housing<br>Material | Seal<br>Material | Repair<br>Kit | Main Seals<br>Package (5) |
|-------------|-------------|---------------------|-------------------|---------------------|------------------|---------------|---------------------------|
| HPB-041021  | 1/4" NPT    | 1/8" NPT            | Vacuum<br>to 5000 |                     | Buna N           | HPBR          | S1008-B70                 |
| HPB-061021  | 3/8" NPT    |                     |                   | Stainless<br>Steel  |                  |               | S1011-B70                 |
| HPB-081021  | 1/2" NPT    |                     |                   |                     |                  |               | S1013-B70                 |

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

| Part Number | Connects to   | Termination<br>Port | Rated<br>PSI               | Housing<br>Material | Seal<br>Material | Repair<br>Kit | Main Seals<br>Package (5) |
|-------------|---------------|---------------------|----------------------------|---------------------|------------------|---------------|---------------------------|
| HPB-049021  | - 4 (7/16-20) | 1/8" NPT            | 1/8" NPT Vacuum<br>to 5000 | Stainless<br>Steel  | Buna N           | HPBR          | S2070-0270B70             |
| HPB-069021  | - 6 (9/16-18) |                     |                            |                     |                  |               | S1012-B70                 |
| HPB-089021  | - 8 (3/4-16)  |                     |                            |                     |                  |               | S1015-B70                 |

## For Compression Fittings - Swagelok® or Equivalent

| Part Number | Connects to    | Termination<br>Port | Rated<br>PSI      | Housing<br>Material | Seal<br>Material | Repair<br>Kit | Main Seals<br>Package (5) |
|-------------|----------------|---------------------|-------------------|---------------------|------------------|---------------|---------------------------|
| HPB-CF04021 | 1/4" (7/16-20) | 1/8" NPT            |                   |                     |                  | HPBR          | S1008-B70                 |
| HPB-CF06021 | 3/8" (9/16-20) |                     | Vacuum<br>to 5000 | Stainless<br>Steel  | Buna N           |               | S1011-B70                 |
| HPB-CF08021 | 1/2" (3/4-20)  |                     | 10 0000           | 0.001               |                  |               | S1013-B70                 |

## For Compression Fittings - Ferulok® or Equivalent

| Part Number  | Connects to    | Termination<br>Port | Rated<br>PSI      | Housing<br>Material | Seal<br>Material | Repair<br>Kit | Main Seals<br>Package (5) |
|--------------|----------------|---------------------|-------------------|---------------------|------------------|---------------|---------------------------|
| HPB-CF04021F | 1/4" (7/16-20) | 1/8" NPT            |                   |                     |                  | HPBR          | S1008-B70                 |
| HPB-CF06021F | 3/8" (9/16-18) |                     | Vacuum<br>to 5000 | Stainless<br>Steel  | Buna N           |               | S1011-B70                 |
| HPB-CF08021F | 1/2" (3/4-16)  |                     | 10 0000           | Oleci               |                  |               | 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

60 - HPB



#### **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.

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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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#### **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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