

# FI / INTERNAL SEALING CONNECTION TOOL

Pneumatic sealing connection tool for internal sealing in automated and semi-automated processes.

## CONNECTS TO:



- 1** Automated processes and high-volume production testing including pick and place and delicate robotic handling applications
- 2** Capable of sealing conventional and unique sealing surfaces including smooth, porous, out of round, and threaded
- 3** Quick change seal sets to accommodate multiple sizes of tubing and easy field maintenance
- 4** Available with Shaft Extensions for accessibility to seal remote ports or multiple ports with close center to center distances - consult factory for further information

## SPECIFICATIONS

| Pressure Rating                                      | Pilot Pressure                                 | Operating Temperatures  |
|--|--|---|
| Vacuum to 120 psi (8.3 bar)                          | 60 to 120 psi (4.1 to 8.3 bar)                 | 0°F to +200°F (-17°C to +93°C)  |
| Termination Port                                     | Materials of Construction                      | Seal Material*  |
| Female 10-32 UNF, M5 x 0.8, NPT/BSPP (G): 1/8 to 3/4 | Anodized Aluminum, Stainless Steel, Potted PCA | Standard: Neoprene®, Urethane<br>Optional: FKM, Buna-N, EPDM, FDA White Neoprene® |

\* Additional seal material types available, consult factory.  
\*\* Operating Temp: 32°F-100°F (0°C-38°C) for ICON™.

- i** Sealing connection tool and test part should be rigidly fixtured to prevent separation when under pressure (fixture not required for vacuum applications).

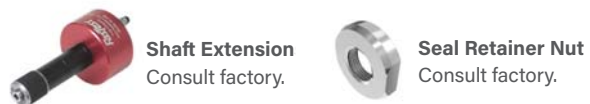
## ACTUATION METHOD

**Pneumatic:** Pilot pressure applied to seals with no metal contact and uniform seal movement seals inside tubes and pipes with no marring.

## ICON™ TECHNOLOGY

- SURE SEAL™
- SEAL LIFE™

**ACCESSORIES** FOR DETAILS, VISIT [FASTESTINC.COM](http://FASTESTINC.COM)





# ICON™

## INTELLIGENT CONNECTION TECHNOLOGY

FasTest's ICON™ adds sensing capabilities to our mechanical Sealing Connection Tools. ICON™ Tools include instant LED visual feedback and data output to improve sealing connection accuracy, maximize production efficiency, and optimize maintenance.

### ICON™ features:



#### SURE SEAL™

Instant LED feedback verifies a good connection prior to starting a test.



#### SEAL LIFE™

Alert when the main seal is at end of life and must be replaced.

### How To Add ICON™ to FI

| Signal Output                       | Part Number Suffix | Example     |
|-------------------------------------|--------------------|-------------|
| FI without ICON™                    | None               | FI01        |
| FI with ICON™: Analog Output Signal | CV04ANA            | FI01CV04ANA |
| FI with ICON™: Solid State Relay    | CV04SSR            | FI01CV04SSR |

### System Overview:

**CONNECTED**

Green indication of a good connection.

**RECONNECT**

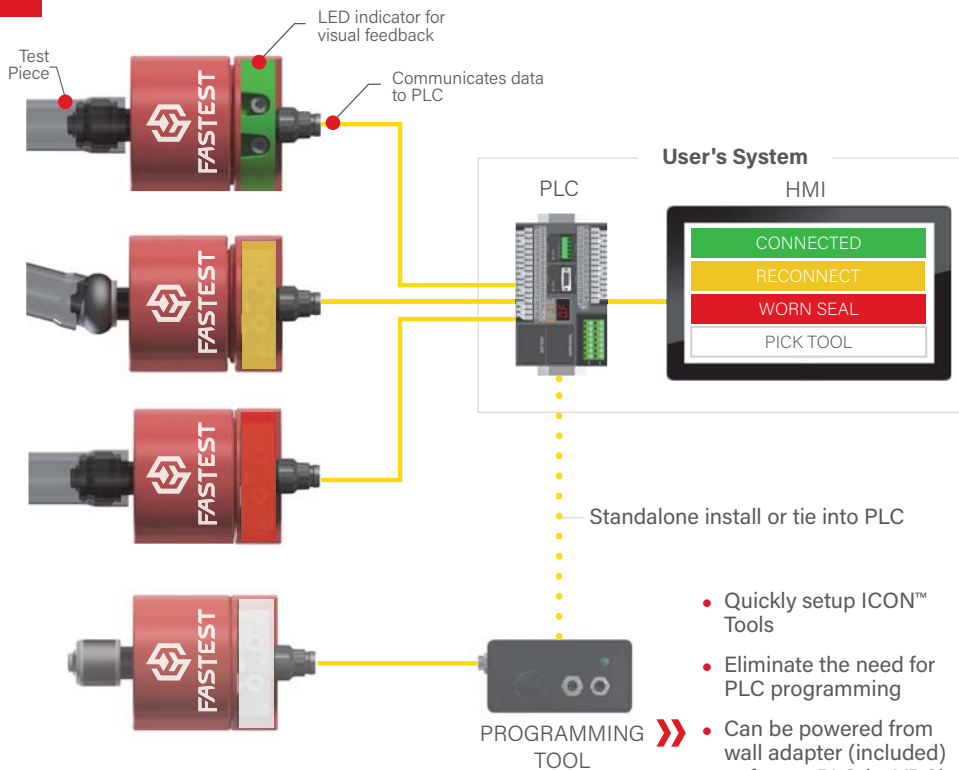
Recognize a connection issue before causing a false failure.

**WORN SEAL**

Alert when main seals should be replaced.

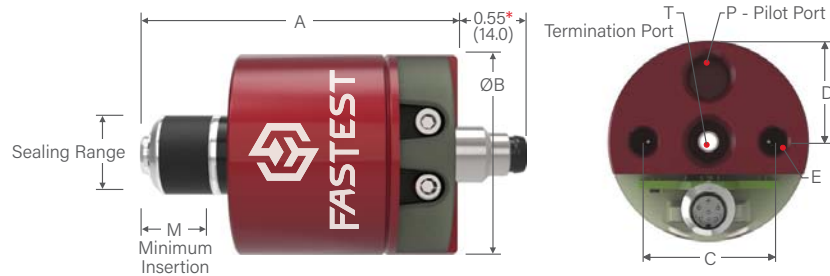
**PICK TOOL**

Controllable LED signals operator to use specific tool.



NOTE: Solid State Relay and Analog output options available.

# FI / INTERNAL SEALING CONNECTION TOOL / STRAIGHT TUBES & BORES



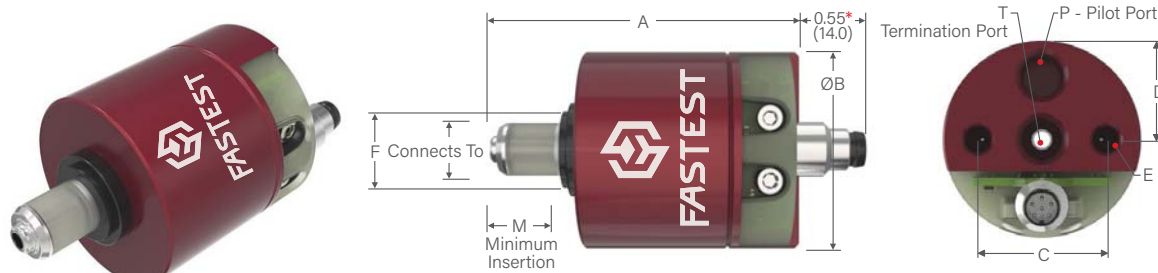
\*Dimension only applies to FI with ICON™ Technology  
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

| Ordering Information<br>(Complete Connector = Main Seal Set + Base Part Number) |                |                            |                            |                              | Dimensions |         |        |        |            |        |           |         |
|---|----------------|----------------------------|----------------------------|------------------------------|------------|---------|--------|--------|------------|--------|-----------|---------|
| Sealing Range   | Main Seal Set* | Base Part Number           | Replacement Seals Pack (5) | Rebuild Kit                  | A          | B       | C      | D      | E          | M      | P         | T       |
| 0.310 to 0.330  | FIS010300      | FI01                       | FIB010300                  | FIR01                        | 1.98       | 1.25    | 0.80   | 0.40   | 10-32 UNF  | 0.48   | 10-32 UNF |         |
| 0.330 to 0.394  | FIS0101        | FI01CV04ANA<br>FI01CV04SSR | FIB0101                    | FIR01CV04ANA<br>FIR01CV04SSR | (50.3)     | (31.7)  | (20.3) | (10.2) |            | (12.2) |           |         |
| 0.394 to 0.472  | FIS111         | FI1                        | FIB111                     | FIR1                         | 2.44       | 1.57    | 1.02   | 0.51   | 1/4-28 UNF | 0.57   | 1/8 NPT   |         |
| 0.472 to 0.551  | FIS112         | FI1CV04ANA                 | FIB112                     | FIR1CV04ANA                  | (62.0)     | (39.9)  | (25.9) | (12.9) |            | (14.5) |           |         |
| 0.551 to 0.630  | FIS113         | FI1CV04SSR                 | FIB113                     | FIR1CV04SSR                  |            |         |        |        |            |        |           |         |
| 0.630 to 0.709  | FIS221         | FI2                        | FIB221                     | FIR1                         | 2.44       | 1.57    | 1.02   | 0.51   | 1/4-28 UNF | 0.57   | 1/8 NPT   |         |
| 0.709 to 0.787  | FIS222         | FI2CV04ANA                 | FIB222                     | FIR1CV04ANA                  | (62.0)     | (39.9)  | (25.9) | (12.9) |            | (14.5) |           |         |
| 0.787 to 0.866  | FIS223         | FI2CV04SSR                 | FIB223                     | FIR1CV04SSR                  |            |         |        |        |            |        |           |         |
| 0.866 to 0.945  | FIS331         | FI3                        | FIB331                     | FIR3                         | 2.61       | 2.36    | 1.60   | 0.80   | 1/4-28 UNF | 0.71   | 1/8 NPT   |         |
| 0.945 to 1.024  | FIS332         | FI3CV04ANA                 | FIB332                     | FIR3CV04ANA                  | (66.3)     | (59.9)  | (40.6) | (20.3) |            | (18.0) |           |         |
| 1.024 to 1.102  | FIS333         | FI3CV04SSR                 | FIB333                     | FIR3CV04SSR                  |            |         |        |        |            |        |           |         |
| 1.102 to 1.181  | FIS441         | FI4                        | FIB441                     | FIR3                         | 2.61       | 2.36    | 1.60   | 0.80   | 1/4-28 UNF | 0.71   | 1/8 NPT   |         |
| 1.181 to 1.260  | FIS442         | FI4CV04ANA                 | FIB442                     | FIR3CV04ANA                  | (66.3)     | (59.9)  | (40.6) | (20.3) |            | (18.0) |           |         |
| 1.260 to 1.339  | FIS443         | FI4CV04SSR                 | FIB443                     | FIR3CV04SSR                  |            |         |        |        |            |        |           |         |
| 1.339 to 1.457  | FIS551         | FI5                        | FIB551                     | FIR6                         | 3.68       | 3.49    | 2.31   | 1.16   | 1/4-28 UNF | 1.24   | 1/8 NPT   | 1/2 NPT |
| 1.457 to 1.575  | FIS552         | FI5CV04ANA                 | FIB552                     | FIR6CV04ANA                  | (93.5)     | (88.6)  | (58.7) | (29.5) |            | (31.5) |           |         |
| 1.575 to 1.693  | FIS553         | FI5CV04SSR                 | FIB553                     | FIR6CV04SSR                  |            |         |        |        |            |        |           |         |
| 1.693 to 1.850  | FIS661         | FI6                        | FIB661                     | FIR6                         | 3.68       | 3.49    | 2.31   | 1.16   | 1/4-28 UNF | 1.24   | 1/8 NPT   | 1/2 NPT |
| 1.850 to 2.008  | FIS662         | FI6CV04ANA                 | FIB662                     | FIR6CV04ANA                  | (93.5)     | (88.6)  | (58.7) | (29.5) |            | (31.5) |           |         |
| 2.008 to 2.165  | FIS663         | FI6CV04SSR                 | FIB663                     | FIR6CV04SSR                  |            |         |        |        |            |        |           |         |
| 2.165 to 2.305  | FIS771         | FI7                        | FIB771                     | FIR7                         | 3.36       | 4.20    | 3.00   | 1.50   | 1/4-28 UNF | 1.33   | 1/8 NPT   | 3/4 NPT |
| 2.305 to 2.445  | FIS772         | FI7CV04ANA                 | FIB772                     | FIR7CV04ANA                  | (85.3)     | (106.7) | (76.2) | (38.1) |            | (33.8) |           |         |
| 2.445 to 2.585  | FIS773         | FI7CV04SSR                 | FIB773                     | FIR7CV04SSR                  |            |         |        |        |            |        |           |         |
| 2.585 to 2.725  | FIS881         | FI8                        | FIB881                     | FIR7                         | 3.36       | 4.20    | 3.00   | 1.50   | 1/4-28 UNF | 1.33   | 1/8 NPT   | 3/4 NPT |
| 2.725 to 2.865  | FIS882         | FI8CV04ANA                 | FIB882                     | FIR7CV04ANA                  | (85.3)     | (106.7) | (76.2) | (38.1) |            | (33.8) |           |         |
| 2.865 to 3.005  | FIS883         | FI8CV04SSR                 | FIB883                     | FIR7CV04SSR                  |            |         |        |        |            |        |           |         |

Dimensions: inch (mm).

\*Includes seals(s) and metal parts for one complete seal set. Neoprene® seals are standard.  
For Urethane seals, add "UR" suffix to Main Seal Set Part Number. Example: FIS010300UR

# FI / INTERNAL SEALING CONNECTION TOOL / NPT, BSPP (G), & BSPT THREADS



\*Dimension only applies to FI with ICON™ Technology (Base Part Numbers that include "CV04ANA" or "CV04SSR").

| Ordering Information<br>(Complete Connector = Main Seal Set + Base Part Number) |                |                  |                            |             | Dimensions |   |   |   |   |   |   |   |   |
|---|----------------|------------------|----------------------------|-------------|------------|---|---|---|---|---|---|---|---|
| Connects To   | Main Seal Set* | Base Part Number | Replacement Seals Pack (5) | Rebuild Kit | A          | B | C | D | E | F | M | P | T |

FI | Connectors for NPT, BSPP (G), and BSPT Threads

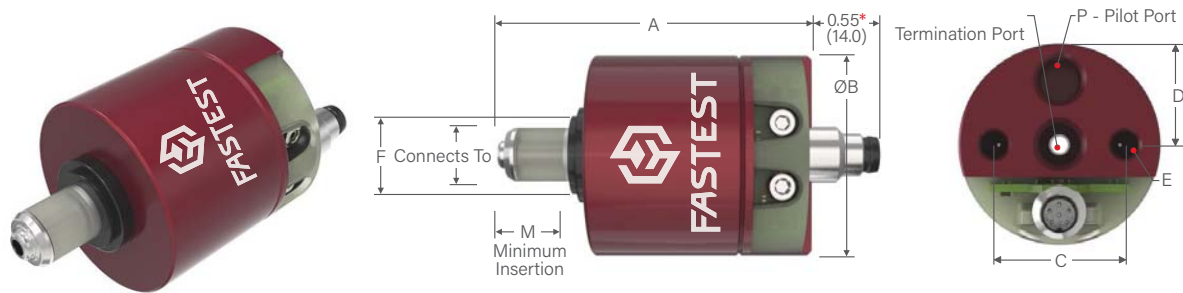
|       |             |                                    |             |                                       |                |                 |                |                |               |                |                |            |            |
|-------|-------------|------------------------------------|-------------|---------------------------------------|----------------|-----------------|----------------|----------------|---------------|----------------|----------------|------------|------------|
| 1/8   | FIS011/8NPT | FI01<br>FI01CV04ANA<br>FI01CV04SSR | FIB011/8NPT | FIR01<br>FIR01CV04ANA<br>FIR01CV04SSR | 1.98<br>(50.3) | 1.25<br>(31.7)  | 0.80<br>(20.3) | 0.40<br>(10.2) | 10-32<br>UNF  | 0.62<br>(15.7) | 0.48<br>(12.2) | 10-32 UNF  |            |
| 1/4   | FIS11/4NPT  | FI1<br>FI1CV04ANA<br>FI1CV04SSR    | FIB11/4NPT  | FIR1<br>FIR1CV04ANA<br>FIR1CV04SSR    | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28<br>UNF | 0.76<br>(19.3) | 0.57<br>(14.5) | 1/8 NPT    |            |
| 3/8   | FIS23/8NPT  | FI2<br>FI2CV04ANA<br>FI2CV04SSR    | FIB23/8NPT  | FIR1<br>FIR1CV04ANA<br>FIR1CV04SSR    | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28<br>UNF | 0.88<br>(22.3) | 0.57<br>(14.5) | 1/8 NPT    |            |
| 1/2   | FIS21/2NPT  |                                    | FIB21/2NPT  |                                       |                |                 |                |                |               | 1.07<br>(27.2) |                |            |            |
| 3/4   | FIS33/4NPT  | FI3<br>FI3CV04ANA<br>FI3CV04SSR    | FIB33/4NPT  | FIR3<br>FIR3CV04ANA<br>FIR3CV04SSR    | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28<br>UNF | 1.26<br>(32.0) | 0.71<br>(18.0) | 1/8 NPT    |            |
| 1     | FIS41NPT    | FI4<br>FI4CV04ANA<br>FI4CV04SSR    | FIB41NPT    | FIR3<br>FIR3CV04ANA<br>FIR3CV04SSR    | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28<br>UNF | 1.57<br>(39.9) | 0.71<br>(18.0) | 1/8 NPT    |            |
| 1-1/4 | FIS511/4NPT | FI5<br>FI5CV04ANA<br>FI5CV04SSR    | FIB511/4NPT | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28<br>UNF | 1.88<br>(47.8) | 1.24<br>(31.5) | 1/8<br>NPT | 1/2<br>NPT |
| 1-1/2 | FIS611/2NPT | FI6<br>FI6CV04ANA<br>FI6CV04SSR    | FIB611/2NPT | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28<br>UNF | 2.13<br>(54.1) | 1.24<br>(31.5) | 1/8<br>NPT | 1/2<br>NPT |
| 2     | FIS72NPT    | FI7<br>FI7CV04ANA<br>FI7CV04SSR    | FIB72NPT    | FIR7<br>FIR7CV04ANA<br>FIR7CV04SSR    | 3.36<br>(85.3) | 4.20<br>(106.7) | 3.00<br>(76.2) | 1.50<br>(38.1) | 1/4-28<br>UNF | 2.75<br>(69.9) | 1.33<br>(33.8) | 1/8<br>NPT | 3/4<br>NPT |
| 2-1/2 | FIS721/2NPT |                                    | FIB721/2NPT |                                       |                |                 |                |                |               |                |                |            |            |

Dimensions: inch (mm)

\*Includes seals(s) and metal parts for one complete seal set. Urethane seals are standard.

**Port Specifications:** NPT per SAE J476a; BSPP (G) per ISO 228; BSPT per ISO 7, JIS B8363 and B2351

# FI / INTERNAL SEALING CONNECTION TOOL / SAE O-RING BOSS PORT THREADS



\*Dimension only applies to FI with ICON™ Technology  
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

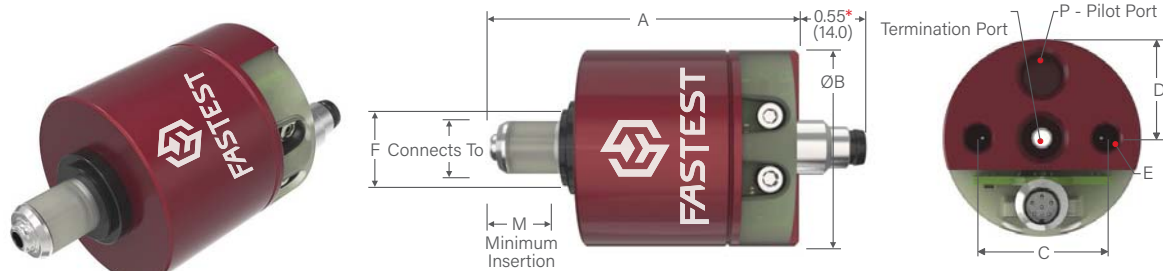
| Ordering Information<br>(Complete Connector = Main Seal Set + Base Part Number) |                |                                    |                            |                                       | Dimensions     |                 |                |                |            |                |                |           |         |
|---|----------------|------------------------------------|----------------------------|---------------------------------------|----------------|-----------------|----------------|----------------|------------|----------------|----------------|-----------|---------|
| Connects To   | Main Seal Set* | Base Part Number                   | Replacement Seals Pack (5) | Repair Kit                            | A              | B               | C              | D              | E          | F              | M              | P         | T       |
| -4 [7/16-20]  | FIS014SAE      | FI01<br>FI01CV04ANA<br>FI01CV04SSR | FIB014SAE                  | FIR01<br>FIR01CV04ANA<br>FIR01CV04SSR | 1.98<br>(50.3) | 1.25<br>(31.7)  | 0.80<br>(20.3) | 0.40<br>(10.2) | 10-32 UNF  | 0.62<br>(15.7) | 0.48<br>(12.2) | 10-32 UNF |         |
| -5 [1/2-20]   | FIS15SAE       | FI1<br>FI1CV04ANA                  | FIB15SAE                   | FIR1<br>FIR1CV04ANA                   | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28 UNF | 0.76<br>(19.3) | 0.57<br>(14.5) | 1/8 NPT   |         |
| -6 [9/16-18]  | FIS16SAE       | FI1CV04SSR                         | FIB16SAE                   | FIR1CV04SSR                           |                |                 |                |                |            |                |                |           |         |
| -8 [3/4-16]   | FIS28SAE       | FI2<br>FI2CV04ANA<br>FI2CV04SSR    | FIB28SAE                   | FIR1<br>FIR1CV04ANA<br>FIR1CV04SSR    | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28 UNF | 0.88<br>(22.3) | 0.57<br>(14.5) | 1/8 NPT   |         |
| -10 [7/8-14]  | FIS310SAE      | FI3<br>FI3CV04ANA                  | FIB310SAE                  | FIR3<br>FIR3CV04ANA                   | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28 UNF | 1.26<br>(32.0) | 0.71<br>(18.0) | 1/8 NPT   |         |
| -12 [1 1/16-12]   | FIS212SAE      | FI3CV04SSR                         | FIB212SAE                  | FIR3CV04SSR                           |                |                 |                |                |            |                |                |           |         |
| -14 [1 3/16-12]   | FIS416SAE      | FI4<br>FI4CV04ANA                  | FIB416SAE                  | FIR3<br>FIR3CV04ANA                   | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28 UNF | 1.57<br>(39.9) | 0.71<br>(18.0) | 1/8 NPT   |         |
| -16 [1 5/16-12]   | FIS416SAE      | FI4CV04SSR                         | FIB416SAE                  | FIR3CV04SSR                           |                |                 |                |                |            |                |                |           |         |
| -20 [1 5/8-12]  | FIS520SAE      | FI5<br>FI5CV04ANA<br>FI5CV04SSR    | FIB520SAE                  | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28 UNF | 1.88<br>(47.8) | 1.24<br>(31.5) | 1/8 NPT   | 1/2 NPT |
| -24 [1 7/8-12]  | FIS624SAE      | FI6<br>FI6CV04ANA<br>FI6CV04SSR    | FIS624SAE                  | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28 UNF | 2.13<br>(54.1) | 1.24<br>(31.5) | 1/8 NPT   | 1/2 NPT |
| -32 [2 1/2-12]  | FIS732SAE      | FI7<br>FI7CV04ANA<br>FI7CV04SSR    | FIB732SAE                  | FIR7<br>FIR7CV04ANA<br>FIR7CV04SSR    | 3.36<br>(85.3) | 4.20<br>(106.7) | 3.00<br>(76.2) | 1.50<br>(38.1) | 1/4-28 UNF | 2.75<br>(69.9) | 1.33<br>(33.8) | 1/8 NPT   | 3/4 NPT |

Dimensions: inch (mm)

\*Includes seals(s) and metal parts for one complete seal set. Urethane seals are standard.

**Port Specifications:** SAE J1926 or ISO 11926

# FI / INTERNAL SEALING CONNECTION TOOL / METRIC ISO O-RING PORT THREADS



\*Dimension only applies to FI with ICON™ Technology  
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

| Ordering Information<br>(Complete Connector = Main Seal Set + Base Part Number) |                |                  |                            |            | Dimensions |   |   |   |   |   |   |   |   |
|---|----------------|------------------|----------------------------|------------|------------|---|---|---|---|---|---|---|---|
| Connects To   | Main Seal Set* | Base Part Number | Replacement Seals Pack (5) | Repair Kit | A          | B | C | D | E | F | M | P | T |

FI | Connectors for Metric ISO O-Ring Port Threads

|           |          |                                    |          |                                       |                |                 |                |                |               |                |                |            |            |
|-----------|----------|------------------------------------|----------|---------------------------------------|----------------|-----------------|----------------|----------------|---------------|----------------|----------------|------------|------------|
| M10 x 1.0 | FIS01M10 | FI01<br>FI01CV04ANA<br>FI01CV04SSR | FIB01M10 | FIR01<br>FIR01CV04ANA<br>FIR01CV04SSR | 1.98<br>(50.3) | 1.25<br>(31.7)  | 0.80<br>(20.3) | 0.40<br>(10.2) | 10-32<br>UNF  | 0.62<br>(15.7) | 0.48<br>(12.2) | 10-32 UNF  |            |
| M12 x 1.5 | FIS1M12  | F1                                 | FIB1M12  | FIR1                                  | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28<br>UNF | 0.76<br>(19.3) | 0.57<br>(14.5) | 1/8 NPT    |            |
| M14 x 1.5 | FIS1M14  | FI1CV04ANA<br>FI1CV04SSR           | FIBM14   | FIR1CV04ANA<br>FIR1CV04SSR            |                |                 |                |                |               |                |                |            |            |
| M16 x 1.5 | FIS2M16  | F2                                 | FIB1M16  | FIR1                                  |                |                 |                |                |               |                |                |            |            |
| M18 x 1.5 | FIS2M18  | FI2CV04ANA                         | FIB2M18  | FIR1CV04ANA                           | 2.44<br>(62.0) | 1.57<br>(39.9)  | 1.02<br>(25.9) | 0.51<br>(12.9) | 1/4-28<br>UNF | 0.88<br>(22.3) | 0.57<br>(14.5) | 1/8 NPT    |            |
| M20 x 1.5 | FIS2M20  | FI2CV04SSR                         | FIB2M20  | FIR1CV04SSR                           |                |                 |                |                |               |                |                |            |            |
| M22 x 1.5 | FIS2M22  | F2                                 | FIB2M22  | FIR1                                  |                |                 |                |                |               |                |                |            |            |
| M24 x 1.5 | FIS3M24  | F3                                 | FIB3M24  | FIR3                                  |                |                 |                |                |               |                |                |            |            |
| M26 x 1.5 | FIS3M26  | FI3CV04ANA                         | FIB3M26  | FIR3CV04ANA                           | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28<br>UNF | 1.26<br>(32.0) | 0.71<br>(18.0) | 1/8 NPT    |            |
| M27 x 2   | FIS3M27  | FI3CV04SSR                         | FIB3M27  | FIR3CV04SSR                           |                |                 |                |                |               |                |                |            |            |
| M28 x 1.5 | FIS3M28  | F3                                 | FIB3M28  | FIR3                                  |                |                 |                |                |               |                |                |            |            |
| M30 x 1.5 | FIS4M30  | F4                                 | FIB4M30  | FIR3                                  |                |                 |                |                |               |                |                |            |            |
| M33 x 2   | FIS4M33  | FI4CV04ANA                         | FIB4M33  | FIR3CV04ANA                           | 2.61<br>(66.3) | 2.36<br>(59.9)  | 1.60<br>(40.6) | 0.80<br>(20.3) | 1/4-28<br>UNF | 1.57<br>(39.9) | 0.71<br>(18.0) | 1/8 NPT    |            |
| M36 x 2   | FIS4M36  | FI4CV04SSR                         | FIB4M36  | FIR3CV04SSR                           |                |                 |                |                |               |                |                |            |            |
| M42 x 2   | FIS5M42  | FI5<br>FI5CV04ANA<br>FI5CV04SSR    | FIB5M42  | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28<br>UNF | 1.88<br>(47.8) | 1.24<br>(31.5) | 1/8<br>NPT | 1/2<br>NPT |
| M48 x 2   | FIS6M48  | FI6<br>FI6CV04ANA<br>FI6CV04SSR    | FIB6M48  | FIR6<br>FIR6CV04ANA<br>FIR6CV04SSR    | 3.68<br>(93.5) | 3.49<br>(88.6)  | 2.31<br>(58.7) | 1.16<br>(29.5) | 1/4-28<br>UNF | 2.13<br>(54.1) | 1.24<br>(31.5) | 1/8<br>NPT | 1/2<br>NPT |
| M60 x 2   | FIS7M60  | FI7<br>FI7CV04ANA<br>FI7CV04SSR    | FIB7M60  | FIR7<br>FIR7CV04ANA<br>FIR7CV04SSR    | 3.36<br>(85.3) | 4.20<br>(106.7) | 3.00<br>(76.2) | 1.50<br>(38.1) | 1/4-28<br>UNF | 2.75<br>(69.9) | 1.33<br>(33.8) | 1/8<br>NPT | 3/4<br>NPT |

Dimensions: inch (mm)

\*Includes seals(s) and metal parts for one complete seal set. Urethane seals are standard.

**Port Specifications:** ISO 6149, DIN 3852 Part 1 (ISO 9974)