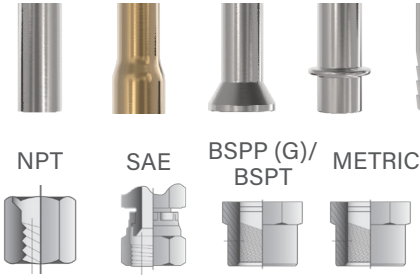


FI / INTERNAL SEALING CONNECTION TOOL

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

CONNECTS TO:

Straight Expanded Flared Beaded Barbed Form End Swaged



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 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



Shaft Extension
Consult factory.



Seal Retainer Nut
Consult factory.



- 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



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

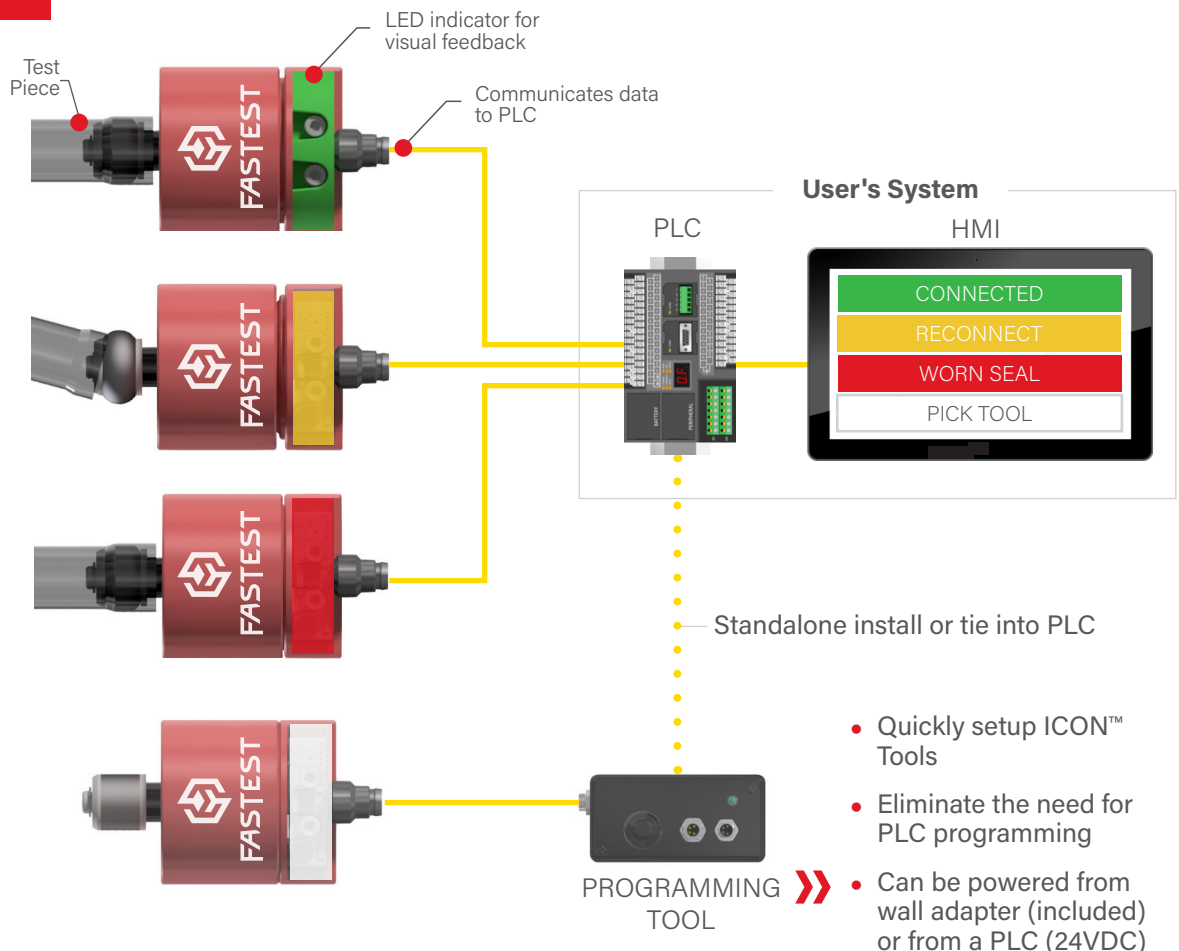
Recognize a connection issue before causing a false failure.

WORN SEAL

Alert when main seals should be replaced.

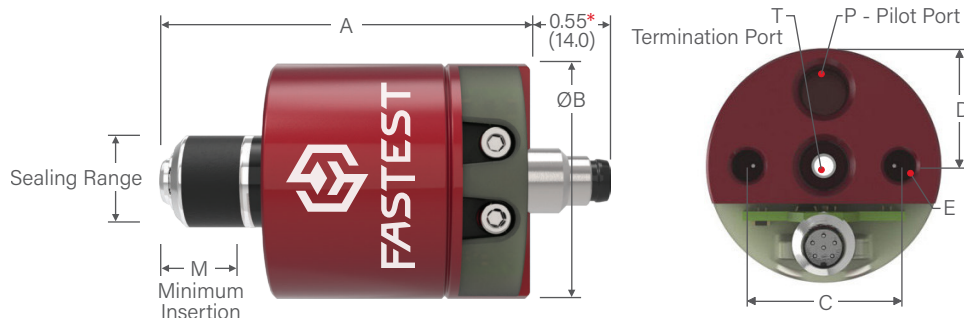
PICK TOOL

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



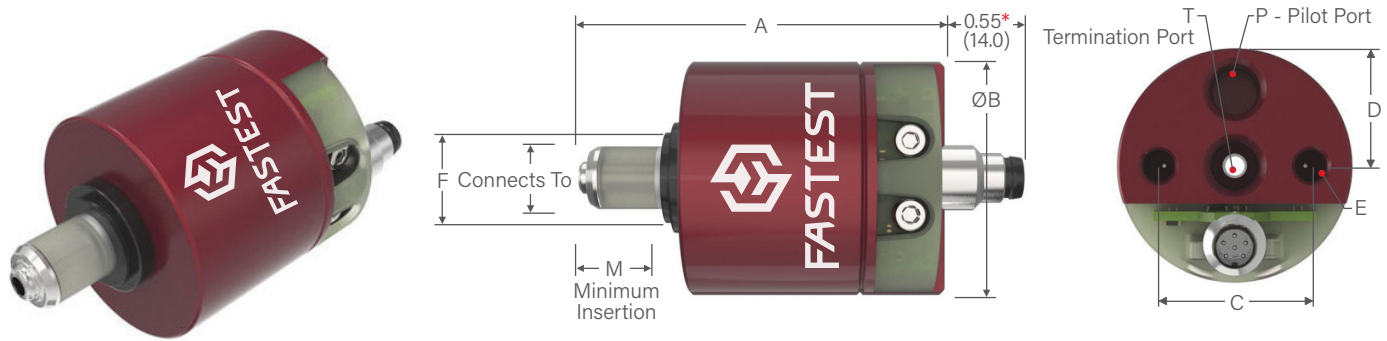
*Dimension only applies to FI with ICON™ Technology
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

Ordering Information (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	0.48	10-32 UNF	
0.330 to 0.394	FIS0101	FI01CV04ANA FI01CV04SSR	FIB0101	FIR01CV04ANA FIR01CV04SSR	(50.3)	(31.7)	(20.3)	(10.2)	UNF	(12.2)		
0.394 to 0.472	FIS111	FI1	FIB111	FIR1	2.44	1.57	1.02	0.51	1/4-28	0.57	1/8 NPT	
0.472 to 0.551	FIS112	FI1CV04ANA	FIB112	FIR1CV04ANA	(62.0)	(39.9)	(25.9)	(12.9)	UNF	(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	0.57	1/8 NPT	
0.709 to 0.787	FIS222	FI2CV04ANA	FIB222	FIR1CV04ANA	(62.0)	(39.9)	(25.9)	(12.9)	UNF	(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	0.71	1/8 NPT	
0.945 to 1.024	FIS332	FI3CV04ANA	FIB332	FIR3CV04ANA	(66.3)	(59.9)	(40.6)	(20.3)	UNF	(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	0.71	1/8 NPT	
1.181 to 1.260	FIS442	FI4CV04ANA	FIB442	FIR3CV04ANA	(66.3)	(59.9)	(40.6)	(20.3)	UNF	(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	1.24	1/8	1/2
1.457 to 1.575	FIS552	FI5CV04ANA	FIB552	FIR6CV04ANA	(93.5)	(88.6)	(58.7)	(29.5)	UNF	(31.5)	NPT	NPT
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	1.24	1/8	1/2
1.850 to 2.008	FIS662	FI6CV04ANA	FIB662	FIR6CV04ANA	(93.5)	(88.6)	(58.7)	(29.5)	UNF	(31.5)	NPT	NPT
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	1.33	1/8	3/4
2.305 to 2.445	FIS772	FI7CV04ANA	FIB772	FIR7CV04ANA	(85.3)	(106.7)	(76.2)	(38.1)	UNF	(33.8)	NPT	NPT
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	1.33	1/8	3/4
2.725 to 2.865	FIS882	FI8CV04ANA	FIB882	FIR7CV04ANA	(85.3)	(106.7)	(76.2)	(38.1)	UNF	(33.8)	NPT	NPT
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 (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 FI01CV04ANA FI01CV04SSR	FIB011/8NPT	FIR01 FIR01CV04ANA FIR01CV04SSR	1.98 (50.3)	1.25 (31.7)	0.80 (20.3)	0.40 (10.2)	10-32 UNF	0.62 (15.7)	0.48 (12.2)	10-32 UNF	
1/4	FIS11/4NPT	FI1 FI1CV04ANA FI1CV04SSR	FIB11/4NPT	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.76 (19.3)	0.57 (14.5)	1/8 NPT	
3/8	FIS23/8NPT	FI2 FI2CV04ANA FI2CV04SSR	FIB23/8NPT	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.88 (22.3)	0.57 (14.5)	1/8 NPT	
1/2	FIS21/2NPT		FIB21/2NPT							1.07 (27.2)			
3/4	FIS33/4NPT	FI3 FI3CV04ANA FI3CV04SSR	FIB33/4NPT	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.26 (32.0)	0.71 (18.0)	1/8 NPT	
1	FIS41NPT	FI4 FI4CV04ANA FI4CV04SSR	FIB41NPT	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.57 (39.9)	0.71 (18.0)	1/8 NPT	
1-1/4	FIS511/4NPT	FI5 FI5CV04ANA FI5CV04SSR	FIB511/4NPT	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	1.88 (47.8)	1.24 (31.5)	1/8 NPT	1/2 NPT
1-1/2	FIS611/2NPT	FI6 FI6CV04ANA FI6CV04SSR	FIB611/2NPT	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	2.13 (54.1)	1.24 (31.5)	1/8 NPT	1/2 NPT
2	FIS72NPT	FI7 FI7CV04ANA FI7CV04SSR	FIB72NPT	FIR7 FIR7CV04ANA FIR7CV04SSR	3.36 (85.3)	4.20 (106.7)	3.00 (76.2)	1.50 (38.1)	1/4-28 UNF	2.75 (69.9)	1.33 (33.8)	1/8 NPT	3/4 NPT
2-1/2	FIS721/2NPT		FIB721/2NPT										

Dimensions: inch (mm)

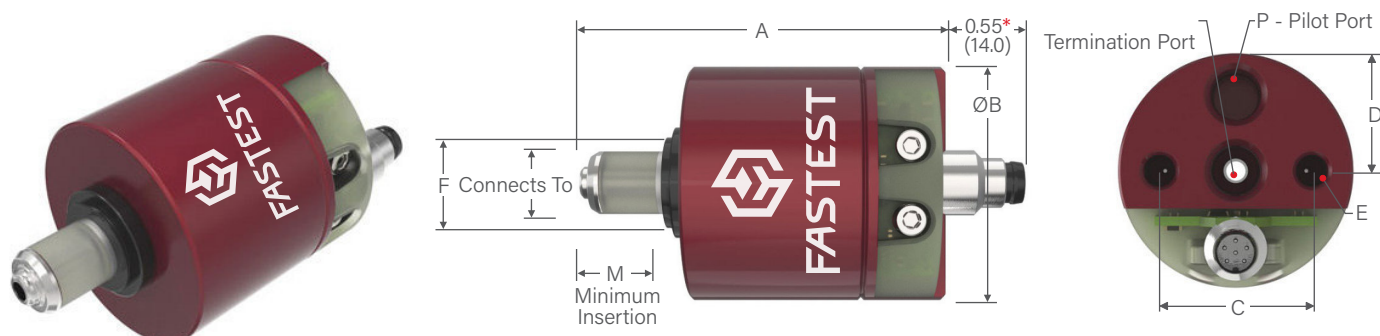
*Includes seals(s) and metal parts for one complete seal set. Urethane seals are standard.

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



DON'T SEE A SOLUTION FOR YOUR APPLICATION? Submit a custom application form and drawing to fastsales@fastestinc.com or to your local distributor.

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 (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 SAE O-Ring Boss Port (ORB) Threads

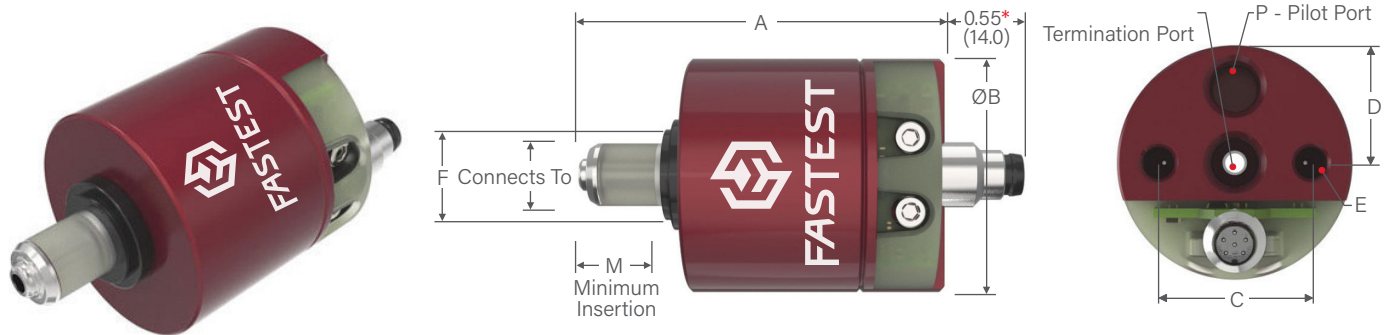
-4 [7/16-20]	FIS014SAE	FI01 FI01CV04ANA FI01CV04SSR	FIB014SAE	FIR01 FIR01CV04ANA FIR01CV04SSR	1.98 (50.3)	1.25 (31.7)	0.80 (20.3)	0.40 (10.2)	10-32 UNF	0.62 (15.7)	0.48 (12.2)	10-32 UNF	
-5 [1/2-20]	FIS15SAE	FI1 FI1CV04ANA FI1CV04SSR	FIB15SAE	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.76 (19.3)	0.57 (14.5)	1/8 NPT	
-6 [9/16-18]	FIS16SAE		FIB16SAE										
-8 [3/4-16]	FIS28SAE	FI2 FI2CV04ANA FI2CV04SSR	FIB27SAE	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.88 (22.3)	0.57 (14.5)	1/8 NPT	
-10 [7/8-14]	FIS310SAE	FI3 FI3CV04ANA FI3CV04SSR	FIB38SAE	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.26 (32.0)	0.71 (18.0)	1/8 NPT	
-12 [1 1/16-12]	FIS212SAE		FIB39SAE										
-14 [1 3/16-12]	FIS416SAE	FI4 FI4CV04ANA FI4CV04SSR	FIB410SAE	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.57 (39.9)	0.71 (18.0)	1/8 NPT	
-16 [1 5/16-12]	FIS416SAE		FIB411SAE										
-20 [1 5/8-12]	FIS520SAE	FI5 FI5CV04ANA FI5CV04SSR	FIB512SAE	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	1.88 (47.8)	1.24 (31.5)	1/8 NPT	1/2 NPT
-24 [1 7/8-12]	FIS624SAE	FI6 FI6CV04ANA FI6CV04SSR	FIS613SAE	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	2.13 (54.1)	1.24 (31.5)	1/8 NPT	1/2 NPT
-32 [2 1/2-12]	FIS732SAE	FI7 FI7CV04ANA FI7CV04SSR	FIB714SAE	FIR7 FIR7CV04ANA FIR7CV04SSR	3.36 (85.3)	4.20 (106.7)	3.00 (76.2)	1.50 (38.1)	1/4-28 UNF	2.75 (69.9)	1.33 (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 (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 FI01CV04ANA FI01CV04SSR	FIB01M10	FIR01 FIR01CV04ANA FIR01CV04SSR	1.98 (50.3)	1.25 (31.7)	0.80 (20.3)	0.40 (10.2)	10-32 UNF	0.62 (15.7)	0.48 (12.2)	10-32 UNF	
M12 x 1.5	FIS1M12	FI1 FI1CV04ANA FI1CV04SSR	FIB1M12	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.76 (19.3)	0.57 (14.5)	1/8 NPT	
M14 x 1.5	FIS1M14		FIS1M14										
M16 x 1.5	FIS2M16	FI2 FI2CV04ANA FI2CV04SSR	FIB1M16	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (25.9)	0.51 (12.9)	1/4-28 UNF	0.88 (22.3)	0.57 (14.5)	1/8 NPT	
M18 x 1.5	FIS2M18		FIB2M18										
M20 x 1.5	FIS2M20		FIB2M20										
M22 x 1.5	FIS2M22		FIB2M22										
M24 x 1.5	FIS3M24	FI3 FI3CV04ANA FI3CV04SSR	FIB3M24	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.26 (32.0)	0.71 (18.0)	1/8 NPT	
M26 x 1.5	FIS3M26		FIB3M26										
M27 x 2	FIS3M27		FIB3M27										
M28 x 1.5	FIS3M28		FIB3M28										
M30 x 1.5	FIS4M30	FI4 FI4CV04ANA FI4CV04SSR	FIB4M30	FIR3 FIR3CV04ANA FIR3CV04SSR	2.61 (66.3)	2.36 (59.9)	1.60 (40.6)	0.80 (20.3)	1/4-28 UNF	1.57 (39.9)	0.71 (18.0)	1/8 NPT	
M33 x 2	FIS4M33		FIB4M33										
M36 x 2	FIS4M36		FIB4M36										
M42 x 2	FIS5M42	FI5 FI5CV04ANA FI5CV04SSR	FIB5M42	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	1.88 (47.8)	1.24 (31.5)	1/8 NPT	1/2 NPT
M48 x 2	FIS6M48	FI6 FI6CV04ANA FI6CV04SSR	FIB6M48	FIR6 FIR6CV04ANA FIR6CV04SSR	3.68 (93.5)	3.49 (88.6)	2.31 (58.7)	1.16 (29.5)	1/4-28 UNF	2.13 (54.1)	1.24 (31.5)	1/8 NPT	1/2 NPT
M60 x 2	FIS7M60	FI7 FI7CV04ANA FI7CV04SSR	FIB7M60	FIR7 FIR7CV04ANA FIR7CV04SSR	3.36 (85.3)	4.20 (106.7)	3.00 (76.2)	1.50 (38.1)	1/4-28 UNF	2.75 (69.9)	1.33 (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: ISO 6149, DIN 3852 Part 1 (ISO 9974)



DON'T SEE A SOLUTION FOR YOUR APPLICATION? Submit a custom application form and drawing to fastsales@fastestinc.com or to your local distributor.