



INTERNAL CONNECTIONS



 **FASTEST**

 **FASTEST**

ZN™ / INTERNAL SEALING CONNECTION TOOL

Manual sealing connection tool for tubes and bores with broad tolerance and low pressures (<50 psi (3.4 bar)).

CONNECTS TO:

Straight Expanded Flared Beaded Barbed Formed Swaged



SPECIFICATIONS

Pressure Rating	Operating Temperatures	Materials of Construction
Vacuum to 50 psi (3.5 bar)	0°F to +200°F (-17°C to +93°C)	Anodized Aluminum, Stainless Steel, Acetal (POM)
Termination Port		Seal Material*
1/8 NPT to 3/8 NPT		Main seal: Neoprene® Internal seal: Buna-N

* Additional seal material types available, consult factory.

ACTUATION METHOD

Lever Handle: Two way actuation handle is simple and ergonomic for production applications

ICON™ TECHNOLOGY

Consult Factory

ACCESSORIES



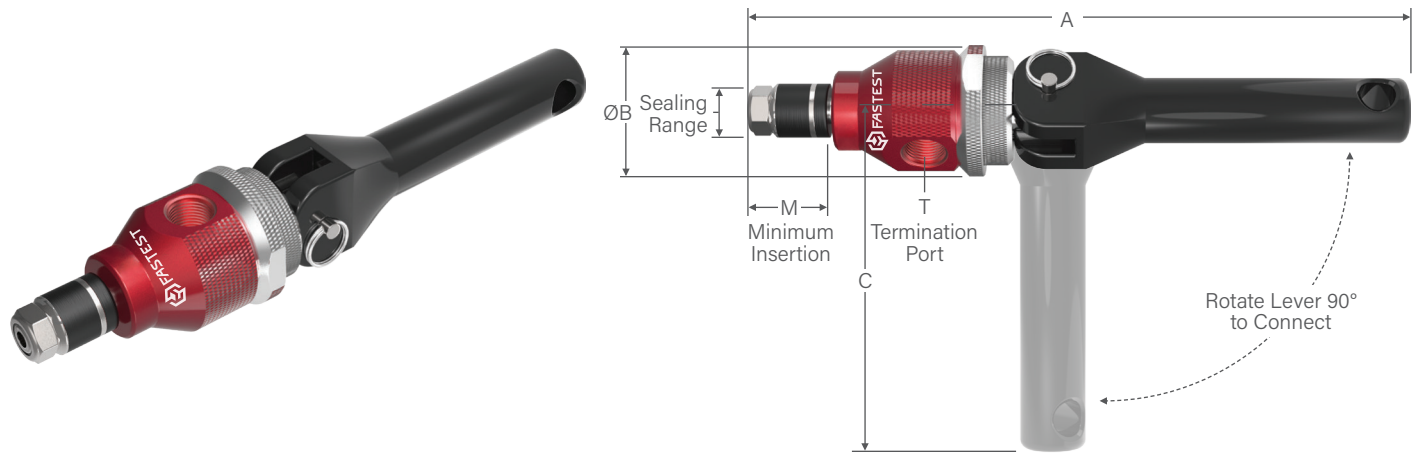
Safety Cable

- Additional safety feature in case of accidental blowoff.



- 1 Lockable collar to keep sealing pressure constant, handle hole for safety cable as needed
- 2 Adjustment ring to accommodate the widest sealing range in the industry; set preload and maximize seal life
- 3 High flow design can be quickly adapted for plug style applications
- 4 Quick change seal sets to accommodate multiple sizes of tubing and easy field maintenance

ZN / INTERNAL SEALING CONNECTION TOOL



Ordering Information			Dimensions				
Sealing Range	Part Number	Replacement Seals Bulk Pack (5)	A	B	C	M	T
0.38 to 0.39 (9.5 to 10.0)	ZN101	ZNB10360	7.30 (185.4)	1.20 (30.5)	4.09 (103.9)	0.57 (14.5)	1/8 NPT
0.39 to 0.47 (10.0 to 12.0)	ZN111	ZNB111					
0.47 to 0.55 (12.0 to 14.0)	ZN112	ZNB112					
0.55 to 0.63 (14.0 to 16.0)	ZN113	ZNB113					
0.63 to 0.71 (16.0 to 18.0)	ZN221	ZNB221	7.50 (190.5)	1.50 (38.1)	4.09 (103.9)	0.78 (19.8)	1/4 NPT
0.71 to 0.79 (18.0 to 20.0)	ZN222	ZNB222					
0.79 to 0.87 (20.0 to 22.0)	ZN223	ZNB223					
0.87 to 0.95 (22.0 to 24.0)	ZN331	ZNB331	8.13 (206.6)	1.50 (38.1)	4.09 (103.9)	1.20 (30.5)	1/4 NPT
0.95 to 1.02 (24.0 to 26.0)	ZN332	ZNB332					
1.02 to 1.10 (26.0 to 28.0)	ZN333	ZNB333					
1.10 to 1.18 (28.0 to 30.0)	ZN441	ZNB441	8.18 (207.8)	1.63 (41.4)	4.09 (103.9)	1.25 (31.8)	3/8 NPT
1.18 to 1.26 (30.0 to 32.0)	ZN442	ZNB442					
1.26 to 1.34 (32.0 to 34.0)	ZN443	ZNB443					

Dimensions: inch (mm)



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

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

CONNECTS TO:

Straight Expanded Flared Beaded Barbed Form End Swaged



- 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 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.



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

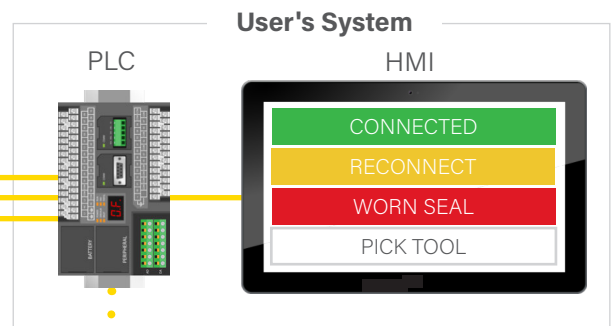
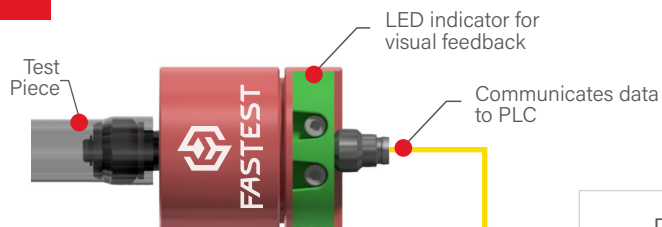
Recognize a connection issue before causing a false failure.

WORN SEAL

Alert when main seals should be replaced.

PICK TOOL

Controllable LED signals operator to use specific tool.



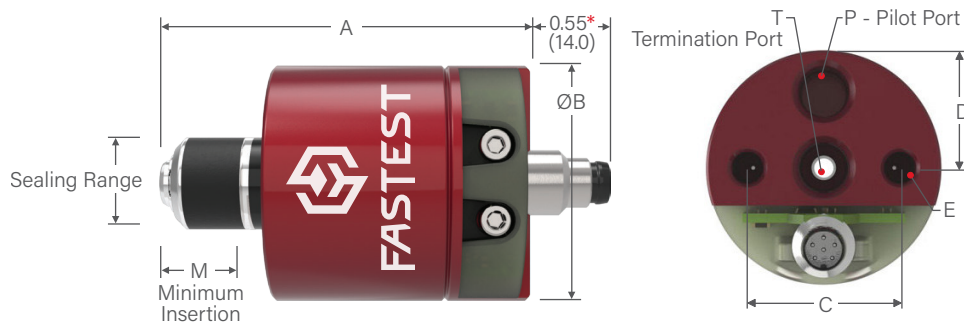
Standalone install or tie into PLC



- Quickly setup ICON™ Tools
- Eliminate the need for PLC programming
- Can be powered from wall adapter (included) or from a PLC (24VDC)

NOTE: Solid State Relay and Analog output options available.

FI / INTERNAL SEALING CONNECTION TOOL / STRAIGHT TUBES & BORES



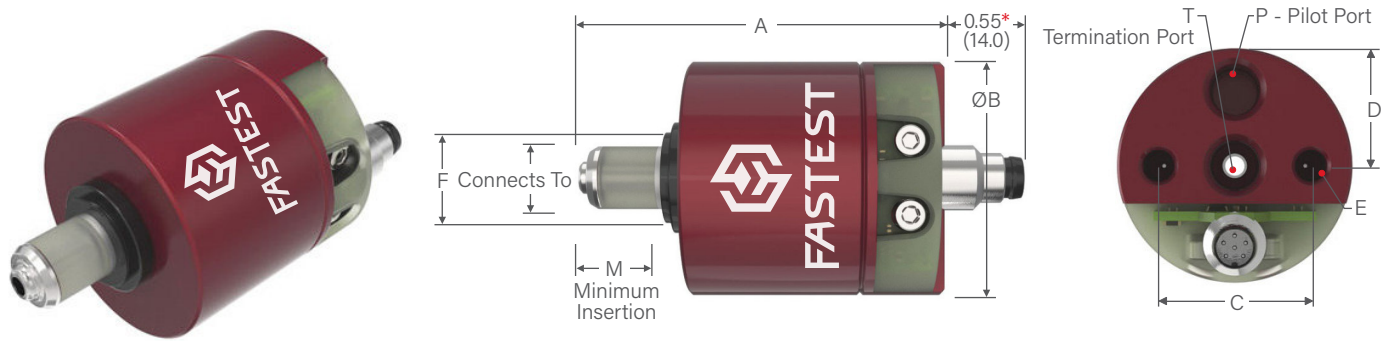
*Dimension only applies to FI with ICON™ Technology
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

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)

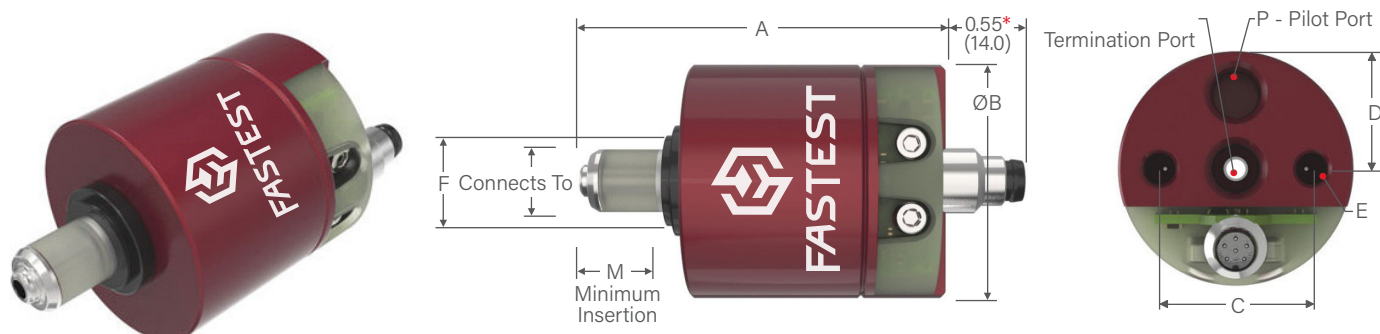
*Includes seals(s) and metal parts for one complete seal set. Urethane seals are standard.

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

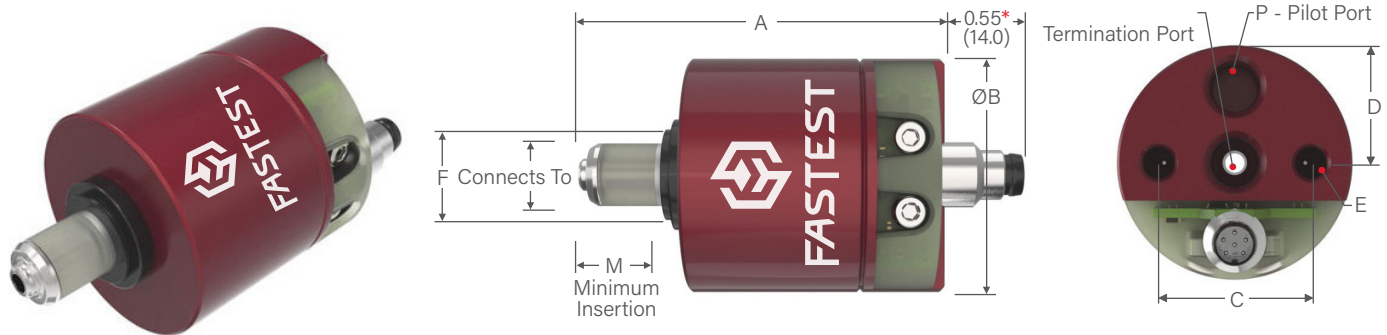
-4 [7/16-20]	FIS014SAE	FI01 FI01CV04ANA FI01CV04SSR	FIB014SAE	FIR01 FIR01CV04ANA FIR01CV04SSR	1.98 (50.3)	1.25 (31.7)	0.80 (20.3)	0.40 (10.2)	10-32 UNF	0.62 (15.7)	0.48 (12.2)	10-32 UNF	
-5 [1/2-20]	FIS15SAE	FI1 FI1CV04ANA FI1CV04SSR	FIB15SAE	FIR1 FIR1CV04ANA FIR1CV04SSR	2.44 (62.0)	1.57 (39.9)	1.02 (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)

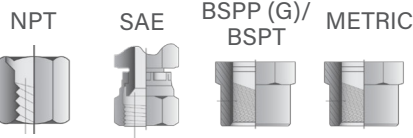


DON'T SEE A SOLUTION FOR YOUR APPLICATION? Submit a custom application form and drawing to fastsales@fastestinc.com or to your local distributor.

ZGN / INTERNAL SEALING CONNECTION TOOL

Wide tolerance grip and seal connection tool for multiple sizes / types - fits any internal thread.

CONNECTS TO:



ZGNL

ZGNP



SPECIFICATIONS

Pressure Rating	Pilot Pressure	Operating Temperatures
ZGNL: Vacuum to 120 psi (8.3 bar)	N/A	-40°F to +250°F (-40°C to +121°C)
ZGNP: Vacuum to 300 psi (20.7 bar)	60 psi (4.1 bar) minimum	
Termination Port	Materials of Construction	Seal Material*
1/8 NPT, 1/4 NPT	Anodized Aluminum, Stainless Steel, Handles PVC Dipped	Standard: Buna-N

*Additional seal material types available, consult factory.

- 1 Pressure assisted sealing and gripping of threaded port to safely grip under pressure
- 2 Patented design allows for each tool to connect to multiple thread sizes / styles
- 3 Self aligning sleeve for repeatable / reliable connections, even with miss-alignment
- 4 Compact size fits into tight spaces and tightly spaced bores
- 5 Pneumatic operation can be used for automated testing or end of arm grip and hold - lever operation for manual applications

ACTUATION METHOD

ZGNL Lever Handles: Lever operation for manual applications.
ZGNP Pneumatic: Pneumatic operation can be used for automated testing or end of arm grip and hold.

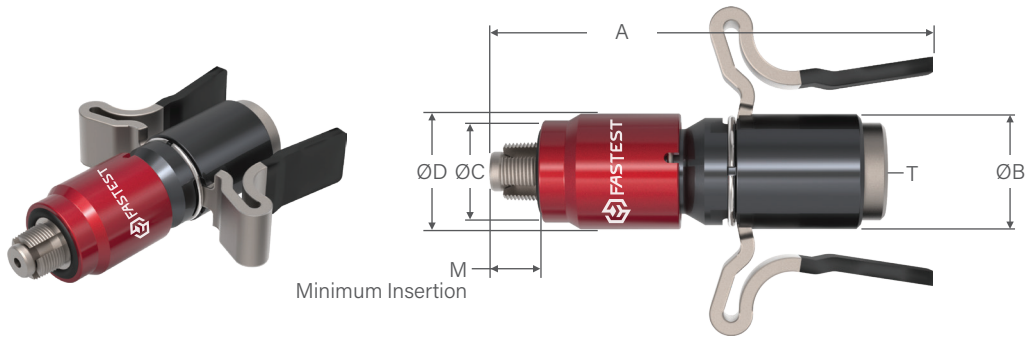
ICON™ TECHNOLOGY

Consult Factory

ACCESSORIES

Visit fastestinc.com

ZGNL / MANUAL INTERNAL SEALING CONNECTION TOOL



Ordering Information				Dimensions						
Connects To	Part Number	Main Seal Set	Rebuild Kit	A	B	C	D	Thread Minor Ø Range	M	T

ZGNL | Wide Tolerance Manual Sealing Connection Tool for Internal Threads

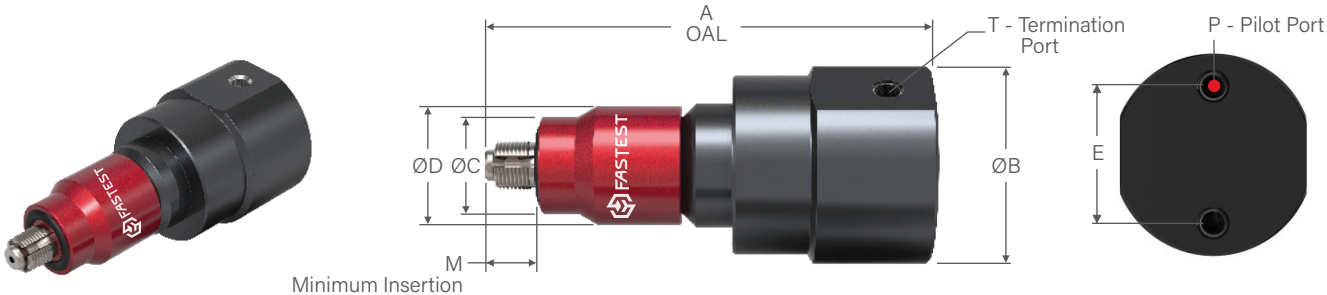
1/8 NPT 3/8-24 SAE 1/8 BSPP (G) 1/8 BSPT M10x1.0 M10x1.25 M10x1.5	ZGNL1	S1110B60	RZGNL1	3.25 (82.6)	0.88 (22.4)	0.64 (16.3)	0.78 (19.8)	0.34 to 0.36 (8.5 to 9.1)	0.32 (8.1)	1/8 NPT
7/16-20 UNF	ZGNL1A	S21030391B70	RZGNL1			0.67 (17.0)		0.38 to 0.40 (9.7 to 10.2)		
1/4 NPT 1/4 BSPP (G) 1/4 BSPT M14x1.5 1/2-20 SAE 9/16-18 SAE	ZGNL2	S1112B60	RZGNL2	3.34 (82.8)	0.87 (22.1)	0.77 (19.6)	0.87 (22.1)	0.45 to 0.50 (11.4 to 12.7)	0.40 (10.2)	1/8 NPT
M12x1.0 M12x1.5	ZGNL2A	S21030456B70	RZGNL2			0.74 (18.8)		0.42 to 0.44 (10.7 to 11.2)		
3/8 NPT 3/8 BSPP (G) 3/8 BSPT	ZGNL3	S1114B60	RZGNL3	3.61 (91.7)	1.12 (22.4)	0.90 (22.9)	0.99 (25.1)	0.59 to 0.61 (15.0 to 15.5)	0.45 (11.4)	1/4 NPT
M16x1.5 5/8-24 SAE	ZGNL3A	S1114B60	RZGNL3					0.56 to .58 (14.2 to 14.7)		
1/2 NPT 1/2 BSPP (G) 1/2 BSPT M20x1.5	ZGNL4	S1116B60	RZGNL4	3.62 (91.9)	1.32 (33.5)	1.06 (26.9)	1.22 (31.0)	0.71 to 0.74 (18.0 to 18.8)	0.50 (12.7)	1/4 NPT
M18x1.5	ZGNL4A	S1115B60	RZGNL4			1.03 (26.2)		0.65 to 0.67 (16.5 to 17.0)		
3/4-16 SAE	ZGNL4B	S1116B60	RZGNL4			1.06 (26.9)		0.68 to 0.71 (17.3 to 18.0)		

Dimensions: inch (mm)



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

ZGNP / PNEUMATIC INTERNAL SEALING CONNECTION TOOL



Ordering Information				Dimensions								
Connects To	Part Number	Main Seal Set	Rebuild Kit	A	B	C	D	E	Thread Minor Ø Range	M	P	T

ZGNP | Wide Tolerance Pneumatic Sealing Connection Tool for Automated Testing of Internal Threads

1/8 NPT 3/8-24 SAE 1/8 BSPP (G) 1/8 BSPT M10x1.0 M10x1.25 M10x1.5	ZGNP1	S1110B60	RZGNP1	2.92 (74.2)	1.30 (33.0)	0.64 (16.3)	0.78 (19.8)	0.88 (22.4)	0.34 to 0.36 (8.5 to 9.1)	0.32 (8.1)	10-32 UNF	1/8 NPT
7/16-20 SAE	ZGNP1A	S21030391B70	RZGNP1			0.67 (17.0)			0.38 to 0.40 (9.7 to 10.2)			
1/4 NPT 1/4 BSPP (G) 1/4 BSPT M14x1.5 1/2-20 SAE 9/16-18 SAE	ZGNP2	S1112B60	RZGNP2	3.08 (78.2)	1.30 (33.0)	0.77 (19.6)	0.87 (22.1)	0.88 (22.4)	0.45 to 0.50 (11.4 to 12.7)	0.40 (10.2)	10-32 UNF	1/8 NPT
M12x1.0 M12x1.5	ZGNP2A	S21030456B70	RZGNP2			0.74 (18.8)			0.42 to 0.44 (10.7 to 11.2)			
3/8 NPT 3/8 BSPP (G) 3/8 BSPT	ZGNP3	S1114B60	RZGNP3	3.52 (89.4)	1.75 (44.5)	0.90 (22.9)	0.99 (25.1)	1.13 (28.7)	0.59 to 0.61 (15.0 to 15.5)	0.45 (11.4)	1/8 NPT	1/4 NPT
M16x1.5 5/8-24 SAE	ZGNP3A	S1114B60	RZGNP3			0.90 (22.9)			0.56 to .58 (14.2 to 14.7)			
1/2 NPT 1/2 BSPP (G) 1/2 BSPT M20x1.5	ZGNP4	S1116B60	RZGNP4	3.60 (91.4)	1.75 (44.5)	1.06 (26.9)	1.22 (31.0)	1.13 (28.7)	0.71 to 0.74 (18.0 to 18.8)	0.50 (12.7)	1/8 NPT	1/4 NPT
M18x1.5	ZGNP4A	S1115B60	RZGNP4			1.03 (26.2)			Contact Factory			
3/4-16 SAE	ZGNP4B	S1116B60	RZGNP4			1.06 (26.9)			Contact Factory			

Dimensions: inch (mm)

Product Comparison Guide



Product Comparison Guide	TwistMate® (MIT)	ZGN™ (ZGNL / ZGNP)	FasMate® (FNL / FNP / FNV)
Low Pressure < 300 psi (20.7 bar)		✓	
Low Volume Production < 100 units/day	✓		
Difficult Interference		✓	
High Pressure and High Volume > 500 units/day			✓
Prevent False Failures or High First Pass Yield			✓

JNL / INTERNAL SEALING CONNECTION TOOL

Manual lever actuated internal grip and seal connection tool for straight tubes / bores.

CONNECTS TO:

Straight



SPECIFICATIONS

Pressure Rating*	Operating Temperatures	Materials of Construction
JNL0 / JNL1: 10 mtorr (micron) to 1000 psi (68.9 bar)	-40°F to +250°F (-40°C to +121°C)	Aluminum Stainless Steel Acetal (POM) Urethane Collet Retainer
JNL2: 10 mtorr (micron) to 750 psi (51.7 bar)		
Termination Port		Seal Material**
1/8 NPT		Neoprene®

i * 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.

**Additional seal material types available, consult factory.

ACTUATION METHOD

Lever Actuated: Simply flip the ergonomic handle for ease of use

ICON™ TECHNOLOGY

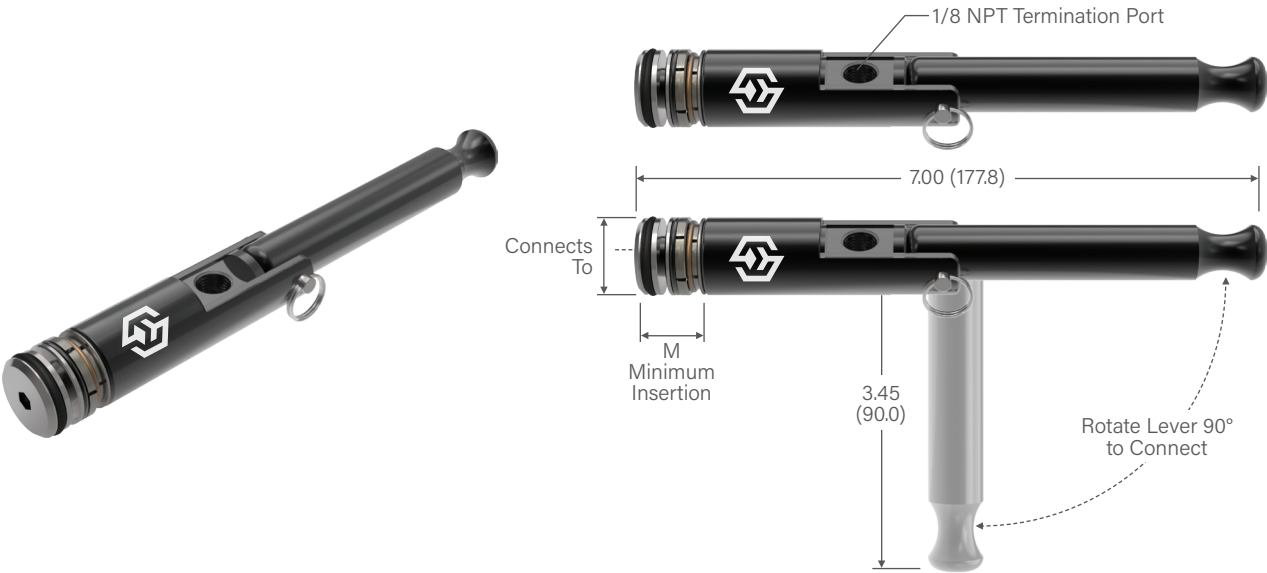
Consult Factory

ACCESSORIES

Visit fastestinc.com

- 1 Pressure assisted sealing and gripping with internal safety lock feature prevents accidental disconnection under pressure if handle is released
- 2 Instant connection for copper, steel, and aluminum tubes commonly used in refrigeration and other industrial applications
- 3 Stainless steel collets provide maximum grip with minimum distortion of the test piece
- 4 Quick and easy seal replacement to minimize down time, maintenance and tool inventory
- 5 Self aligning connector requires no operator adjustment

JNL / INTERNAL SEALING CONNECTION TOOL



Ordering Information			Dimensions
Connects To +0.010/-0.010 (+0.25/-0.25)	Part Number	Replacement Seals Bulk Pack (5)	M

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

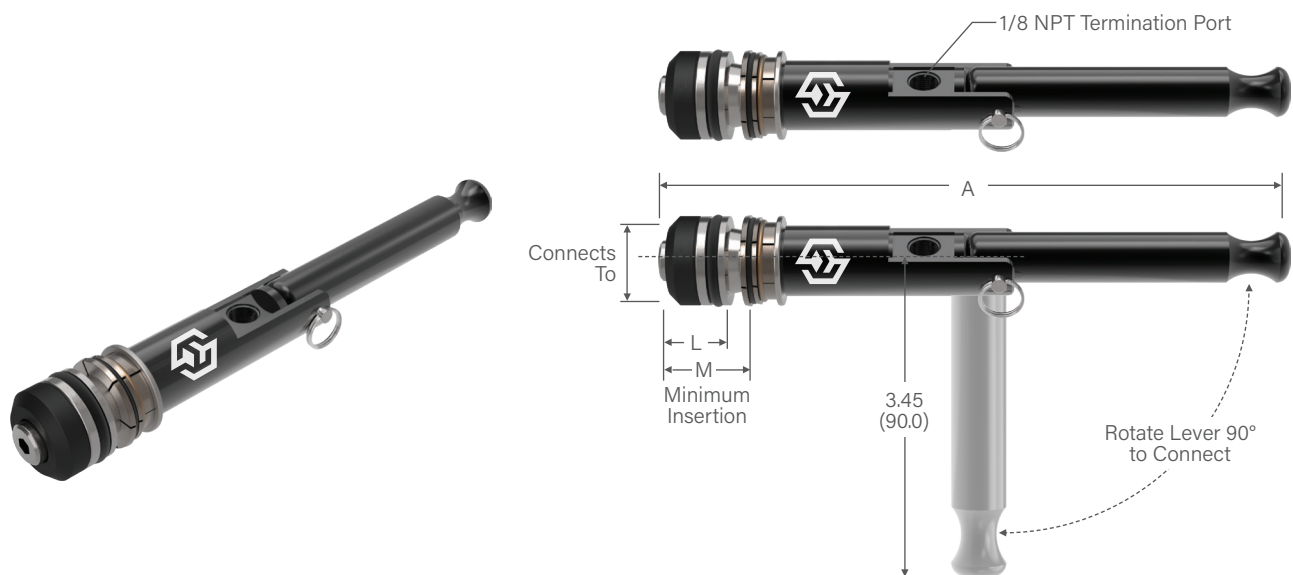
0.375 (9.5)	JNL00375H	SN00375H	0.53 (13.5)
0.500 (12.7)	JNL00500H	SN00500H	
0.590 (15.0)	JNL10590	SN10590	0.63 (16.0)
0.625 (15.9)	JNL10625	SN10625	
0.750 (19.1)	JNL10750	SN10750	
0.785 (19.9)	JNL10785	SN10785	
0.875 (22.2)	JNL10875	SN10875	

Dimensions: inch (mm)

NOTE: JNL sizes available in .005" (.13 mm) increments per customer request. Consult factory.



JNL / INTERNAL SEALING CONNECTION TOOL



Ordering Information			Dimensions		
Connects To +0.030/-0.010 (+0.76/-0.25)	Part Number	Replacement Seals Bulk Pack (5)	A	L	M
JNL2 Lever Actuated Connectors for Internal Tubes / Bores					
1.000 (25.4)	JNL21000	SN21000	7.18 (182.4)	1.31 (33.3)	1.39 (35.4)
1.125 (28.6)	JNL21125	SN21125			
1.250 (31.8)	JNL21250	SN21250	7.30 (185.5)	1.44 (36.6)	1.51 (38.4)
1.375 (34.9)	JNL21375	SN21375	7.84 (199.2)	1.56 (39.7)	2.05 (52.1)
1.500 (38.1)	JNL21500	SN21500	7.91 (201.0)	1.69 (43.0)	2.12 (53.9)
1.625 (41.3)	JNL21625	SN21625	8.09 (205.5)	1.81 (46.0)	2.30 (58.5)

Dimensions: inch (mm)

NOTE: Additional JNL2 sizes available per customer request. Consult factory.

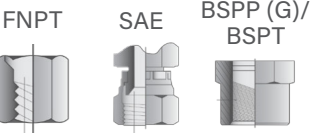
CUSTOM ENGINEERED SOLUTIONS

WE TRANSFORM
STANDARDIZED
TOOLS INTO
TAILOR-
MADE SOLUTIONS
TO FIT YOUR EXACT
REQUIREMENTS.

FN / INTERNAL SEALING CONNECTION TOOL

Internal thread grip and seal tool that uses threaded collets to grip threaded bores for high pressures.

CONNECTS TO:



- 1** Pressure assisted grip and proprietary design locks the connector securely in the port, even when used in dynamic hydraulic applications
- 2** Instant threaded sealing connection up to 5,000 psig without tape, sealant, or wrenches - significantly reduces process time
- 3** Split collet design locks securely and will not damage threaded ports
- 4** Self aligning connector requires no operator adjustment
- 5** Quick and easy seal replacement to minimize down time, maintenance and tool inventory



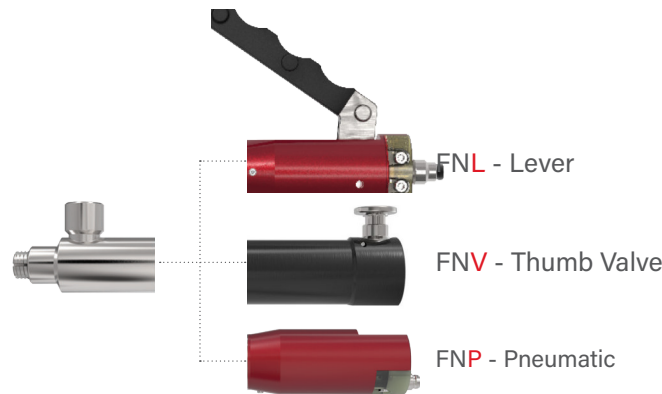
SPECIFICATIONS

Pressure Rating	Operating Temperatures	Materials of Construction
Vacuum to 5000 psi (345 bar)	-40°F to +250°F (-40°C to +121°C)	Anodized Aluminum, Stainless Steel, Potted PCA
Termination Port		Seal Material*
BSPP (G) or FNPT		Buna-N

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

i Side load rating varies depending on size and insertion.

ACTUATION OPTIONS



ICON™ TECHNOLOGY



ACCESSORIES

Visit website: 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.

System Overview:

CONNECTED

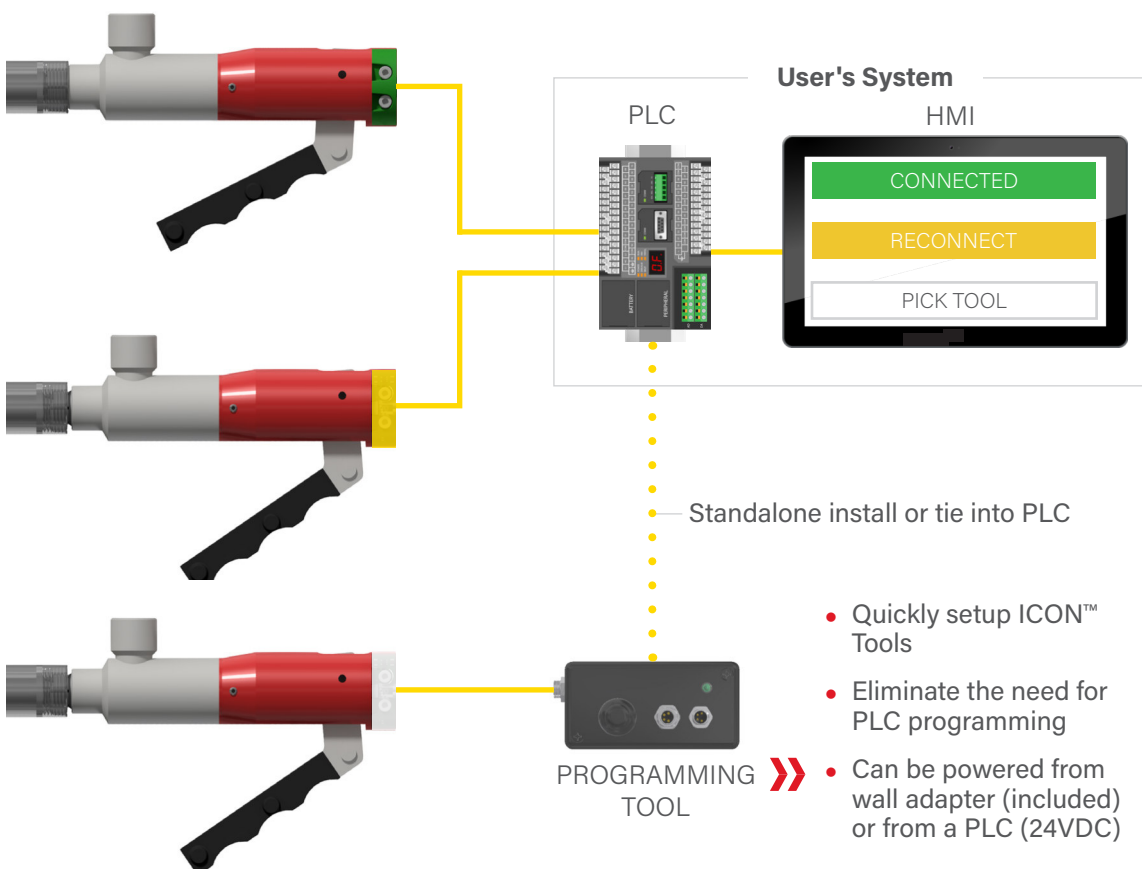
Verify connections are good prior to starting a leak test and provide operators instant positive feedback to simplify training.

RECONNECT

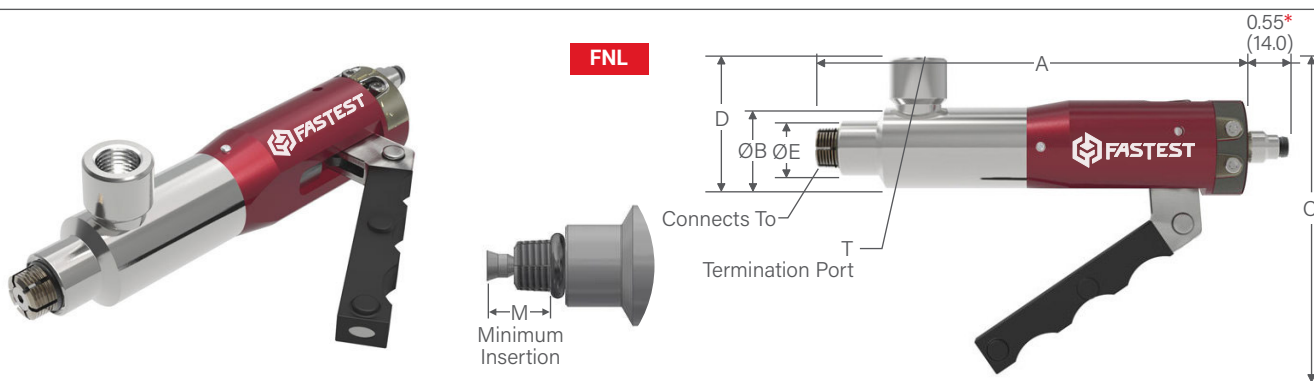
Recognize short connects before hazardous spills occur in functional testing, or prevent wasteful False Positive results in leak testing.

PICK TOOL

Controllable LED signals operator to use specific tool.



FN / INTERNAL CONNECTIONS / NPT



Ordering Information

Connects To	Pressure Rating	FNL Part Number (with Lever)	FNV Part Number (with Thumb Valve)	FNP Part Number (with Pneumatic Pilot)	Replacement Seals Pack (5)	Rebuild Kit	ICON™ Repair Kit (FNL / FNP)
-------------	-----------------	------------------------------	------------------------------------	--	----------------------------	-------------	------------------------------

FasMate® FN | NPT

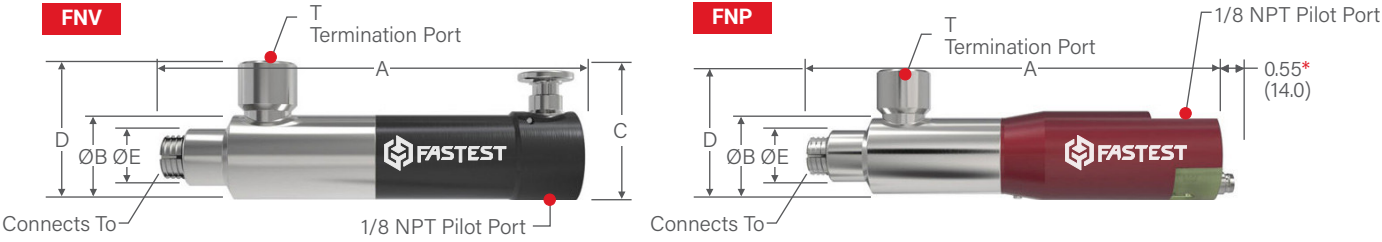
1/8 NPT	5000 (345)	FNL022021[*]	FNV022021	FNP022021[*]	S1108B70	RFN022021	RFNLBG1CV04ANA RFNLBG1CV04SSR
	2500 (172)	FNL022021[*]	FNV022021	FNP022021[*]			
	5000 (345)	FNL022025[*]	FNV022025	FNP022025[*]			
1/4 NPT	5000 (345)	FNL042041[*]	FNV042041	FNP042041[*]	S21250327B60	RFN042041	RFNLBG1CV04ANA RFNLBG1CV04SSR
	2500 (172)	FNL042041[*]	FNV042041	FNP042041[*]			
	5000 (345)	FNL042045[*]	FNV042045	FNP042045[*]			
3/8 NPT	5000 (345)	FNL062061[*]	FNV062061	FNP062061[*]	S1112B70	RFN062061	RFNLBG4CV04ANA RFNLBG4CV04SSR
	2500 (172)	FNL062061[*]	FNV062061	FNP062061[*]			
	5000 (345)	FNL062065[*]	FNV062065	FNP062065[*]			
1/2 NPT	5000 (345)	FNL082081[*]	FNV082081	FNP082081[*]	S1208B70	RFN082081	RFNLBG4CV04ANA RFNLBG4CV04SSR
		FNL082085[*]	FNV082085	FNP082085[*]			
3/4 NPT	3500 (241)	FNL122121[*]	FNV122121	FNP122121[*]	S1315B50	RFNBG5	RFNLBG5CV04ANA RFNLBG5CV04SSR
		FNL122125[*]	FNV122125	FNP122125[*]			

Reduced Thread Connectors [FNxRxxxxxx]; The "R" in the part number indicates a shorter collet length for shallow ports.

Port specifications: NPT per SAE J476 or ANSI B1.20

*How To Add ICON™ to FN

Signal Output	Part Number Suffix	Example
FNL Connector without ICON™	None	FNL022021
FNL with ICON™; Analog Output Signal	CV04ANA	FNL022021 CV04ANA
FNL with ICON™; Solid State Relay	CV04SSR	FNL022021 CV04SSR



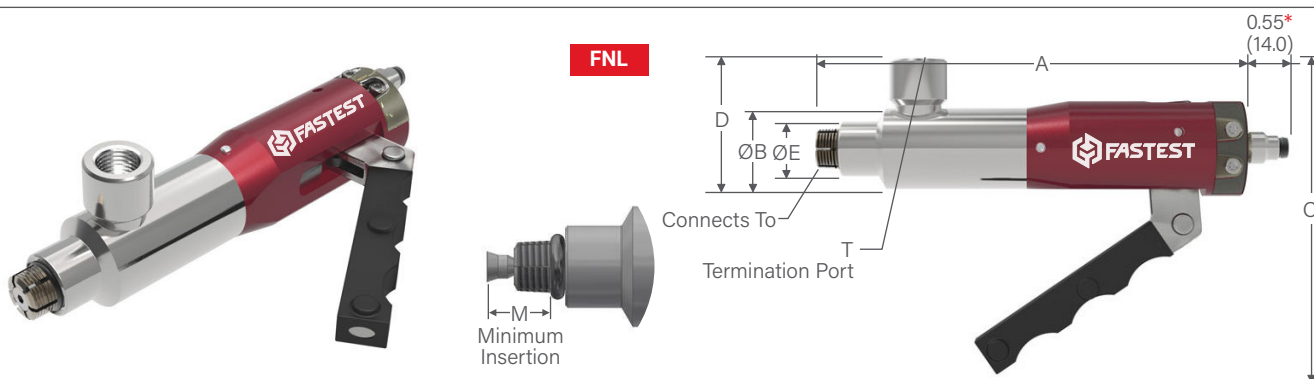
*Dimension only applies to FN with ICON™ Technology
(Base Part Numbers that include "CV04ANA" or "CV04SSR").

Dimensions									
A (FNL)	A (FNV)	A (FNP)	B	C (FNL)	C (FNV)	D	E	M	T
4.80 (121.9)	5.13 (130.3)	4.90 (124.5)	1.06 (26.9)	3.70 (94.0)	1.58 (40.1)	1.50 (38.1)	0.65 (16.5)	0.55 (14.0)	1/8 NPT
								0.30 (7.6)	
								0.55 (14.0)	1/8 BSPP (G)
5.00 (127.0)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	4.00 (101.6)	1.58 (40.1)	1.70 (43.2)	0.72 (18.3)	0.67 (17.0)	1/4 NPT
								0.39 (9.9)	
								0.67 (17.0)	1/4 BSPP (G)
5.00 (127.0)	5.05 (128.3)	4.80 (121.9)	1.25 (31.8)	3.90 (99.1)	1.58 (40.1)	1.86 (47.2)	0.86 (21.8)	0.67 (17.0)	3/8 NPT
								0.47 (11.9)	
								0.67 (17.0)	3/8 BSPP (G)
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.09 (27.7)	0.76 (19.3)	1/2 NPT
									1/2 BSPP (G)
8.17 (207.5)	8.75 (222.2)	8.75 (222.2)	1.78 (45.2)	5.10 (129.5)	2.11 (53.6)	2.93 (74.4)	1.49 (37.8)	0.63 (16.0)	3/4 NPT
									3/4 BSPP (G)

Dimensions: inch (mm)
Pressure Rating: psi (bar)



FN / INTERNAL CONNECTIONS / BSPP (G)/T



Ordering Information

Connects To	Pressure Rating	FNL Part Number (with Lever)	FNV Part Number (with Thumb Valve)	FNP Part Number (with Pneumatic Pilot)	Replacement Seals Pack (5)	Rebuild Kit	ICON™ Repair Kit (FNL / FNP)
-------------	-----------------	------------------------------	------------------------------------	--	----------------------------	-------------	------------------------------

FasMate® FN | BSPP (G)

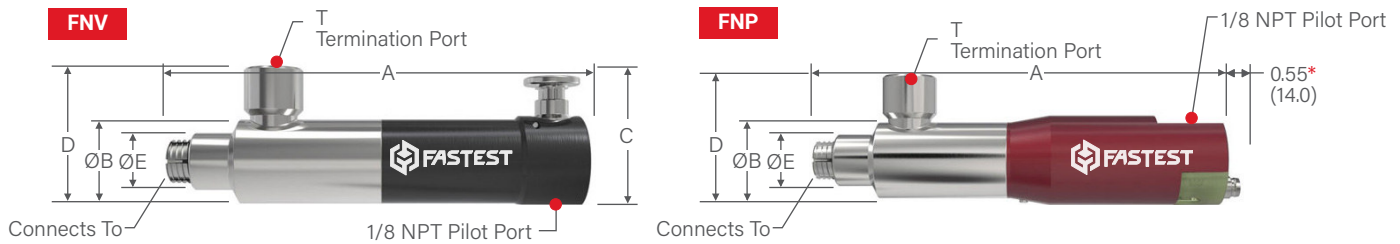
1/8 BSPP (G)	5000 (345)	FNL026021[*]	FNV026021	FNP026021[*]	S1108B70	RFN026021	RFNLBG1CV04ANA RFNLBG1CV04SSR
	2500 (172)	FNLR026021[*]	FNVR026021	FNPR026021[*]			
	5000 (345)	FNL026025[*]	FNV026025	FNP026025[*]			
	2500 (172)	FNLR026025[*]	FNVR026025	FNPR026025[*]			
1/8 BSPT	5000 (345)	FNL026T025[*]	FNV026T025	FNP026T025[*]			
1/4 BSPP (G)	5000 (345)	FNL046041[*]	FNV046041	FNP046041[*]	S21250327B60	RFN046041	
	2500 (172)	FNLR046041[*]	FNVR046041	FNPR046041[*]			
	5000 (345)	FNL046045[*]	FNV046045	FNP046045[*]			
	2500 (172)	FNLR046045[*]	FNVR046045	FNPR046045[*]			
1/4 BSPT	5000 (345)	FNL046T045[*]	FNV046T045	FNP046T045[*]			
3/8 BSPP (G)	5000 (345)	FNL066061[*]	FNV066061	FNP066061[*]	S1112B70	RFN066061	
		FNL066065[*]	FNV066065	FNP066065[*]			
3/8 BSPT		FNL066T065[*]	FNV066T065	FNP066T065[*]			
1/2 BSPP (G)	5000 (345)	FNL086081[*]	FNV086081	FNP086081[*]	S1208B70	RFN086081	
		FNL086085[*]	FNV086085	FNP086085[*]			
1/2 BSPT		FNL086T085[*]	FNV086T085	FNP086T085[*]			
3/4 BSPP (G)	3500 (241)	FNL126121[*]	FNV126121	FNP126121[*]	S1315B50	RFNBG5	
		FNL126125[*]	FNV126125	FNP126125[*]			
3/4 BSPT		FNL126T125[*]	FNV126T125	FNP126T125[*]			

Reduced Thread Connectors [FNxRxxxxxx]; The "R" in the part number indicates a shorter collet length for shallow ports.

Port Specifications: BSPP (G) per ISO 228, BS 2779, DIN 3852 Part 2 Type A and B; BSPT per ISO 7 or BS 21

*How To Add ICON™ to FN

Signal Output	Part Number Suffix	Example
FNL Connector without ICON™	None	FNL022021
FNL with ICON™: Analog Output Signal	CV04ANA	FNL022021 CV04ANA
FNL with ICON™: Solid State Relay	CV04SSR	FNL022021 CV04SSR



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

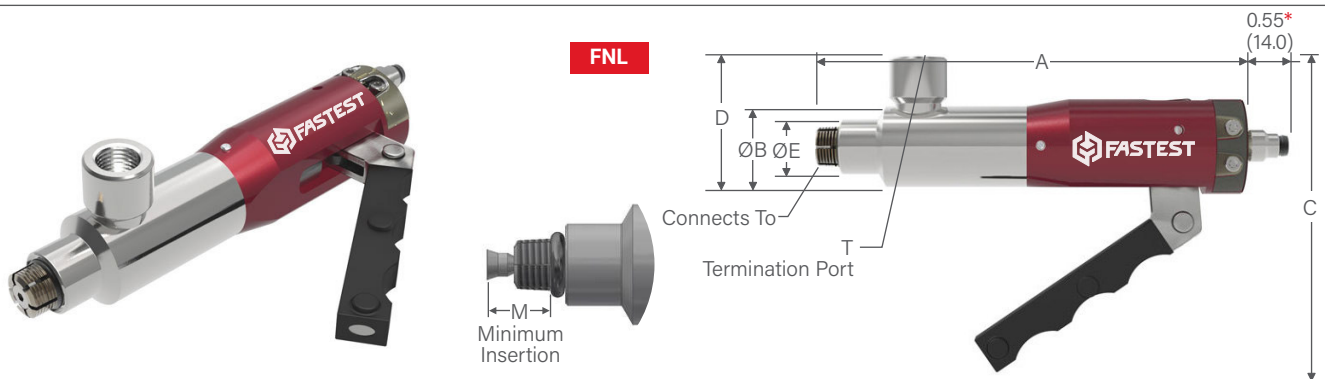
Dimensions									
A (FNL)	A (FNV)	A (FNP)	B	C (FNL)	C (FNV)	D	E	M	T
4.80 (121.9)	5.13 (130.3)	4.90 (124.5)	1.06 (26.9)	3.70 (94)	1.58 (40.1)	1.50 (38.1)	0.65 (16.5)	0.55 (14.0)	1/8 NPT
								0.27 (6.9)	1/8 NPT
								0.55 (14.0)	1/8 BSPP (G)
								0.27 (6.9)	1/8 BSPP (G)
								0.55 (14.0)	1/8 BSPP (G)
5.00 (127)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	4.00 (101.6)	1.58 (40.1)	1.70 (43.2)	0.72 (18.3)	0.67 (17.0)	1/4 NPT
								0.39 (9.9)	1/4 NPT
								0.67 (17.0)	1/4 BSPP (G)
								0.39 (9.9)	1/4 BSPP (G)
								0.67 (17.0)	1/4 BSPP (G)
5.00 (127)	5.05 (128.3)	4.80 (121.9)	1.25 (31.8)	3.90 (99.1)	1.58 (40.1)	1.86 (47.2)	0.86 (21.8)	0.67 (17.0)	3/8 NPT
									3/8 BSPP (G)
									3/8 BSPP (G)
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.09 (27.7)	0.76 (19.3)	1/2 NPT
									1/2 BSPP (G)
									1/2 BSPP (G)
8.17 (207.5)	8.75 (222.2)	8.75 (222.2)	1.78 (45.2)	5.10 (129.5)	2.11 (53.6)	2.93 (74.4)	1.49 (37.8)	0.63 (16.0)	3/4 NPT
									3/4 BSPP (G)
									3/4 BSPP (G)

Dimensions: inch (mm)
Pressure Rating: psi (bar)



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

FN / INTERNAL CONNECTIONS / SAE O-RING



Ordering Information

Connects To	Pressure Rating	FNL Part Number (with Lever)	FNV Part Number (with Thumb Valve)	FNP Part Number (with Pneumatic Pilot)	Replacement Seals Pack (5)	Rebuild Kit	ICON™ Repair Kit (FNL / FNP)
-------------	-----------------	------------------------------	------------------------------------	--	----------------------------	-------------	------------------------------

FasMate® FN | SAE O-Ring

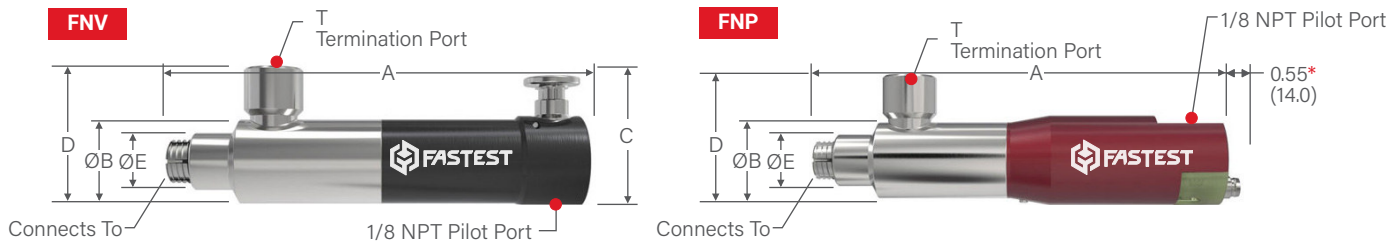
-3 [3/8-24]	2500 (172)	FNLR034021[*]	FNVR034021	FNPR034021[*]	S1108B70	RFN022021	RFNLBG1CV04ANA RFNLBG1CV04SSR
		FNLR034025[*]	FNVR034025	FNPR034025[*]			
-4 [7/16-20]	5000 (345)	FNL044021[*]	FNV044021	FNP044021[*]	S1109B70	RFN044021	
	2500 (172)	FNLR044021[*]	FNVR044021	FNPR044021[*]			
	5000 (345)	FNL044025[*]	FNV044025	FNP044025[*]			
	2500 (172)	FNLR044025[*]	FNVR044025	FNPR044025[*]			
-4 [7/16-24]	2500 (172)	FNLR044K021[*]	FNVR044K021	FNPR044K021[*]			
		FNLR044K025[*]	FNVR044K025	FNPR044K025[*]			
-5 [1/2-20]	5000 (345)	FNL054041[*]	FNV054041	FNP054041[*]	S21250327B60	RFN054041	
	2500 (172)	FNLR054041[*]	FNVR054041	FNPR054041[*]			
	5000 (345)	FNL054045[*]	FNV054045	FNP054045[*]			
	2500 (172)	FNLR054045[*]	FNVR054045	FNPR054045[*]			
-6 [9/16-18]	5000 (345)	FNL064041[*]	FNV064041	FNP064041[*]	S1111B70	RFN064041	
	2500 (172)	FNLR064041[*]	FNVR064041	FNPR064041[*]			
	5000 (345)	FNL064045[*]	FNV064045	FNP064045[*]			
	2500 (172)	FNLR064045[*]	FNVR064045	FNPR064045[*]			
-8 [3/4-16]	5000 (345)	FNL084061[*]	FNV084061	FNP084061[*]	S1207B70	RFN084061	
		FNLR084065[*]	FNV084065	FNP084065[*]			
-10 [7/8-14]	5000 (345)	FNL104081[*]	FNV104081	FNP104081[*]	S2M0401600B70	RFN104081	
		FNL104085[*]	FNV104085	FNP104085[*]			
-12 [1 1/16-12]	3500 (241)	FNL124121[*]	FNV124121	FNP124121[*]	S1315B50	RFNBG5	

Reduced Thread Connectors [FNxRxxxxxx]; The "R" in the part number indicates a shorter collet length for shallow ports.

Port Specifications: SAE O-Ring per SAE J1926 or ISO 11926

*How To Add ICON™ to FN

Signal Output	Part Number Suffix	Example
FNL Connector without ICON™	None	FNL022021
FNL with ICON™: Analog Output Signal	CV04ANA	FNL022021 CV04ANA
FNL with ICON™: Solid State Relay	CV04SSR	FNL022021 CV04SSR



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

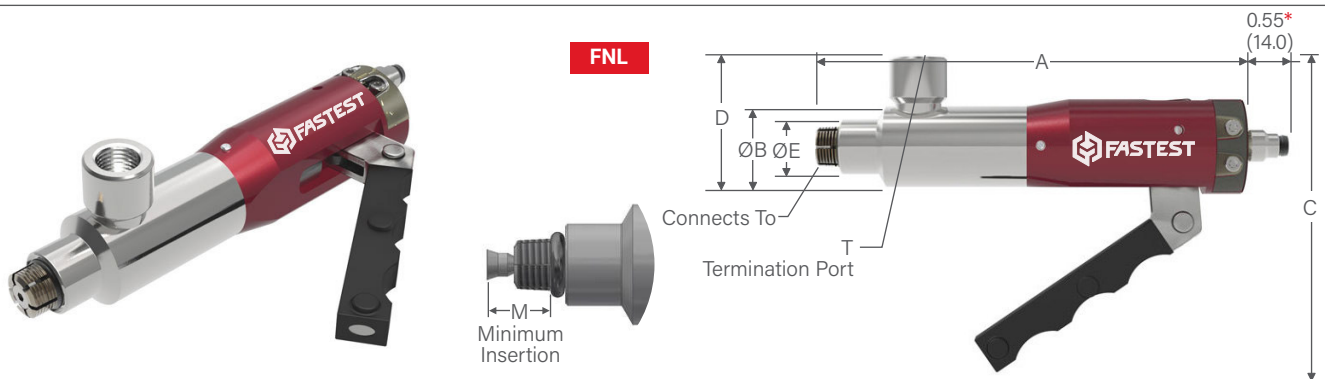
Dimensions									
A (FNL)	A (FNV)	A (FNP)	B	C (FNL)	C (FNV)	D	E	M	T
4.80 (121.9)	5.13 (130.3)	4.90 (124.5)	1.06 (26.9)	3.70 (94.0)	1.58 (40.1)	1.50 (38.1)	0.65 (16.5)	0.30 (7.6)	1/8 NPT
								1/8 BSPP (G)	
4.80 (121.9)	5.13 (130.3)	4.90 (124.5)	1.06 (26.9)	3.70 (94.0)	1.58 (40.1)	1.50 (38.1)	0.65 (16.5)	0.55 (14.0)	1/8 NPT
								0.34 (8.6)	1/8 NPT
								0.55 (14.0)	1/8 BSPP (G)
								0.34 (8.6)	1/8 BSPP (G)
								0.37 (9.4)	1/8 NPT
								1/8 BSPP (G)	
5.00 (127.0)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	4.00 (101.6)	1.58 (40.1)	1.70 (43.2)	0.72 (18.3)	0.67 (17.0)	1/4 NPT
								0.39 (9.9)	
								0.67 (17.0)	1/4 BSPP (G)
								0.39 (9.9)	
5.00 (127.0)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	3.90 (99.1)	1.58 (40.1)	1.86 (47.2)	0.79 (20.1)	0.67 (17.0)	1/4 NPT
								0.41 (10.4)	
								0.67 (17.0)	1/4 BSPP (G)
								0.41 (10.4)	
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.09 (27.7)	0.76 (19.3)	3/8 NPT
								3/8 BSPP (G)	
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.25 (31.8)	0.76 (19.3)	1/2 NPT
								1/2 BSPP (G)	
8.17 (207.5)	8.75 (222.2)	8.75 (222.2)	1.78 (45.2)	5.10 (129.5)	2.11 (53.6)	2.93 (74.4)	1.49 (37.8)	0.63 (16.0)	3/4 NPT

Dimensions: inch (mm)
Pressure Rating: psi (bar)



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

FN / INTERNAL CONNECTIONS / METRIC



Ordering Information

Connects To	Pressure Rating	FNL Part Number (with Lever)	FNV Part Number (with Thumb Valve)	FNP Part Number (with Pneumatic Pilot)	Replacement Seals Pack (5)	Rebuild Kit	ICON™ Repair Kit (FNL / FNP)
-------------	-----------------	------------------------------	------------------------------------	--	----------------------------	-------------	------------------------------

FasMate® FN | ISO O-Ring Metric

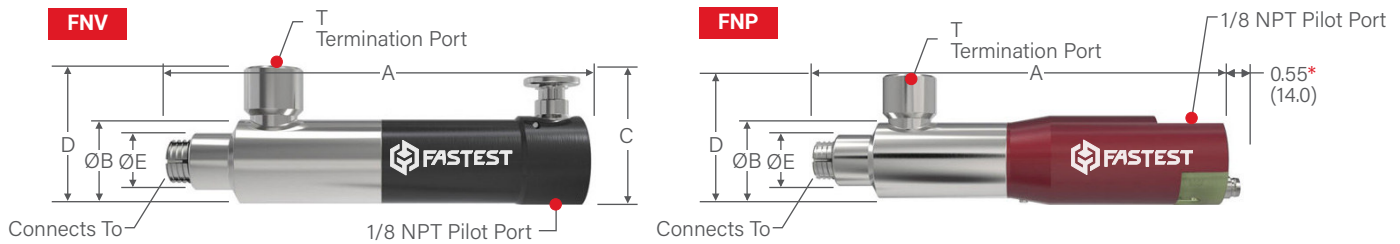
M10 × 1.0	5000 (345)	FNL108021[*]	FNV108021	FNP108021[*]	S1108B70	RFN022021	RFNLBG1CV04ANA RFNLBG1CV04SSR
	2500 (172)	FNLR108021[*]	FNVR108021	FNPR108021[*]			
	5000 (345)	FNL108025[*]	FNV108025	FNP108025[*]			
	2500 (172)	FNLR108025[*]	FNVR108025	FNPR108025[*]			
M10 × 1.25	2500 (172)	FNLR108D021[*]	FNVR108D021	FNPR108D021[*]			
		FNLR108D025[*]	FNVR108D025	FNPR108D025[*]			
M10 × 1.5	2500 (172)	FNLR108E021[*]	FNVR108E021	FNPR108E021[*]			
		FNLR108E025[*]	FNVR108E025	FNPR108E025[*]			
M12 × 1.0	5000 (345)	FNL128021[*]	FNV128021	FNP128021[*]	S21250327B60	RFN042041	
	2500 (172)	FNLR128021[*]	FNVR128021	FNPR128021[*]			
	5000 (345)	FNL128025[*]	FNV128025	FNP128025[*]			
	2500 (172)	FNLR128025[*]	FNVR128025	FNPR128025[*]			
M12 × 1.25	2500 (172)	FNLR128D021[*]	FNVR128D021	FNPR128D021[*]	S1203B60		
		FNLR128D025[*]	FNVR128D025	FNPR128D025[*]			
M12 × 1.5	2500 (172)	FNLR128E021[*]	FNVR128E021	FNPR128E021[*]			
		FNLR128E025[*]	FNVR128E025	FNPR128E025[*]			
M14 × 1.5	5000 (345)	FNL148045[*]	FNV148045	FNP148045[*]	S21250327B60	RFN042041	
	2500 (172)	FNLR148041[*]	FNVR148041	FNPR148041[*]	S1203B60		
	2500 (172)	FNLR148045[*]	FNVR148045	FNPR148045[*]			
M16 × 1.5	5000 (345)	FNL168065[*]	FNV168065	FNP168065[*]	S21200445B70	RFN062061	
	2500 (172)	FNLR168061[*]	FNVR168061	FNPR168061[*]			
	2500 (172)	FNLR168065[*]	FNVR168065	FNPR168065[*]			
M18 × 1.5	5000 (345)	FNL188065[*]	FNV188065	FNP188065[*]	S1206B70	RFN188061	RFNLBG4CV04ANA RFNLBG4CV04SSR
M20 × 1.5	5000 (345)	FNL208065[*]	FNV208065	FNP208065[*]	S21390576B70	RFN208061	
M22 × 1.5	5000 (345)	FNL228085[*]	FNV228085	FNP228085[*]	S1208B70	RHN228081	

Reduced Thread Connectors [FNxRxxxxxx]; The "R" in the part number indicates a shorter collet length for shallow ports.

Port Specifications: BSPP (G) per ISO 228, BS 2779, DIN 3852 Part 2 Type A and B; BSPT per ISO 7 or BS 21

*How To Add ICON™ to FN

Signal Output	Part Number Suffix	Example
FNL Connector without ICON™	None	FNL022021
FNL with ICON™: Analog Output Signal	CV04ANA	FNL022021 CV04ANA
FNL with ICON™: Solid State Relay	CV04SSR	FNL022021 CV04SSR



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

Dimensions									
A (FNL)	A (FNV)	A (FNP)	B	C (FNL)	C (FNV)	D	E	M	T
4.80 (121.9)	5.13 (130.3)	4.90 (124.5)	1.06 (26.9)	3.70 (94.0)	1.58 (40.1)	1.50 (38.1)	0.65 (16.5)	0.55 (14.0)	1/8 NPT
								0.30 (7.6)	
								0.55 (14.0)	1/8 BSPP (G)
								0.30 (7.6)	
								0.32 (8.1)	1/8 NPT
								0.32 (8.1)	1/8 BSPP (G)
5.00 (127.0)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	4.00 (101.6)	1.58 (40.1)	1.70 (43.2)	0.72 (18.3)	0.34 (8.6)	1/8 NPT
								0.34 (8.6)	1/8 BSPP (G)
								0.67 (17.0)	1/8 NPT
								0.38 (9.7)	
								0.67 (17.0)	1/8 BSPP (G)
								0.38 (9.7)	
5.00 (127.0)	5.21 (132.3)	5.00 (127.0)	1.06 (26.9)	4.00 (101.6)	1.58 (40.1)	1.70 (43.2)	0.72 (18.3)	0.38 (9.7)	1/8 NPT
								0.38 (9.7)	1/8 BSPP (G)
								0.40 (10.2)	1/8 NPT
5.00 (127.0)	5.05 (128.3)	4.80 (121.9)	1.25 (31.8)	3.90 (99.1)	1.58 (40.1)	1.86 (47.2)	0.86 (21.8)	0.40 (10.2)	1/8 BSPP (G)
								0.67 (17.0)	1/4 BSPP (G)
								0.43 (10.9)	1/4 NPT
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.00 (25.4)	0.43 (10.9)	1/4 BSPP (G)
								0.67 (17.0)	3/8 BSPP (G)
								0.43 (10.9)	3/8 NPT
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.09 (27.7)	0.43 (10.9)	3/8 BSPP (G)
								0.76 (19.3)	3/8 NPT
								0.76 (19.3)	3/8 BSPP (G)
5.27 (133.9)	5.27 (133.9)	5.34 (135.6)	1.43 (36.3)	4.40 (111.8)	1.85 (47.0)	2.33 (59.2)	1.09 (27.7)	0.76 (19.3)	1/2 BSPP (G)

Dimensions: inch (mm)
Pressure Rating: psi (bar)

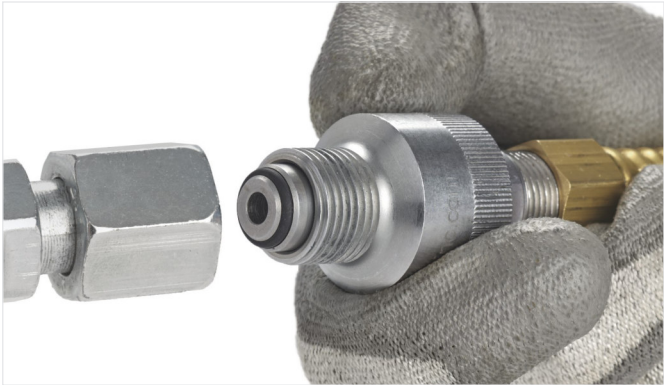
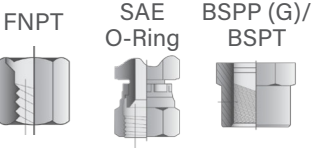


DON'T SEE A SOLUTION FOR YOUR APPLICATION? Submit a custom application form and drawing to fastsales@fastestinc.com or to your local distributor.

MIT / INTERNAL CONNECTIONS

Manual twist sealing connection tool for internal threaded ports.

CONNECTS TO:



SPECIFICATIONS

Pressure Rating	Operating Temperatures	Materials of Construction
Vacuum to 10,000 psi (689 bar)	-40°F to +200°F (-40°C to +93°C)	Stainless Steel
Termination Port		Seal Material*
NPT, SAE 37° Flare		Urethane, Neoprene, or Buna-N

*Additional seal material types available, consult factory.

ACTUATION METHOD

Manual Twist: Finger-tight connection eliminates tape and sealants

ICON™ TECHNOLOGY

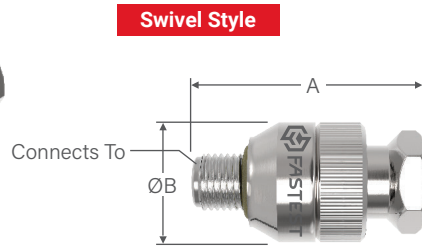
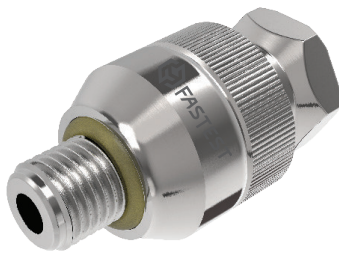
Consult Factory

ACCESSORIES

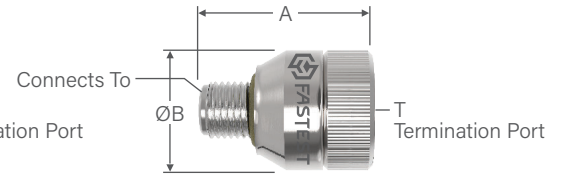
Visit fastestinc.com

- 1 Pressure assisted sealing eliminates leaks and resists movement under pressure
- 2 Leak-tight seal prevents contamination of media and reduces scrap and test damage
- 3 Available in flow or plug versions
- 4 Quick and easy seal replacement to minimize down time, maintenance, and tool inventory

MIT / INTERNAL CONNECTIONS / NPT

Swivel Style
Non-Swivel Style

Non-Swivel Style



Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T
NPT Swivel Style							
1/8 NPT	MIT022021	S1109U70	MITR020	5000 (345)	1.68 (42.7)	0.82 (20.8)	1/8 NPT
1/4 NPT	MIT042041	S1111U70	MITR040		1.88 (42.8)	1.00 (25.4)	1/4 NPT
3/8 NPT	MIT062061	S1113U70	MITR060	4000 (276)	2.09 (53.1)	1.18 (30.0)	3/8 NPT
1/2 NPT	MIT082081	S1209U70	MITR080		2.57 (65.3)	1.36 (34.5)	1/2 NPT
3/4 NPT	MIT122121	S1213U70	MITR120		2.73 (69.3)	1.68 (42.7)	3/4 NPT
1 NPT	MIT162161	S1216U70	MITR160		3.27 (83.1)	2.00 (50.8)	1 NPT
1 ¼ NPT	MIT202201	S1222U70	MITR200	3000 (207)	3.29 (83.6)	2.38 (60.5)	1 ¼ NPT
1 ½ NPT	MIT242241	S1327U70	MITR240		3.73 (94.7)	3.73 (94.7)	1 ½ NPT

NPT Non-Swivel Style							
1/8 NPT	MIT022021X	S1109U70	MITR02	5000 (345)	1.24 (31.5)	0.82 (20.8)	1/8 NPT
1/4 NPT	MIT042041X	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	1/4 NPT
3/8 NPT	MIT062061X	S1113U70	MITR06	4000 (276)	1.48 (37.6)	1.18 (30.0)	3/8 NPT
1/2 NPT	MIT082081X	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	1/2 NPT
3/4 NPT	MIT122121X	S1213U70	MITR12	4000 (276)	1.94 (49.3)	1.68 (42.7)	3/4 NPT
1 NPT	MIT162161X	S1216U70	MITR16		2.07 (52.6)	2.00 (50.8)	1 NPT
1-1/4 NPT	MIT202201X	S1222U70	MITR20	4000 (276)	2.13 (54.1)	2.38 (60.5)	1 ¼ NPT
1-1/2 NPT	MIT242241X	S1327U70	MITR24	3000 (207)	2.40 (61.0)	2.74 (69.6)	1 ½ NPT
2 NPT	MIT322161X	S1331U70	MITR32	2500 (172)	2.68 (68.1)	3.47 (88.1)	1 NPT
2-1/2 NPT	MIT402161X	S1335U70	MITR40	1500 (103)	3.42 (88.9)	3.97 (100.8)	1 NPT
3 NPT	MIT482161X	S1340U70	MITR48	1500 (103)	3.68 (93.5)	4.73 (120.1)	1 NPT
4 NPT	MIT642161X	S1348U70	MITR64	1000 (69)	3.68 (93.5)	5.73 (145.5)	1 NPT

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT022021X**V** = FKM

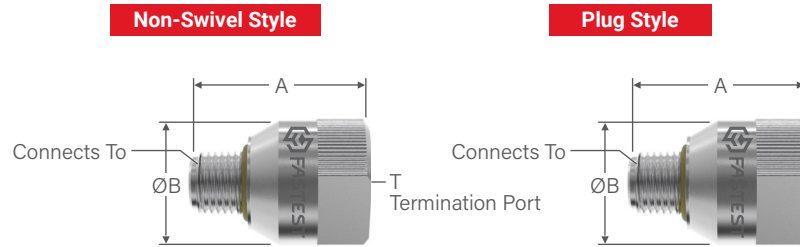
Port Specifications: NPT per SAE J476 or ANSI B1.20



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

MIT / INTERNAL CONNECTIONS / NPT

Non-Swivel Style for High Pressure
Plug Style



Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

NPT | Non-Swivel Style for High Pressure

1/8 NPT	MITH022021X	S1109U70	MITR02	10000 (689)	1.24 (31.5)	0.82 (20.8)	1/8 NPT
1/4 NPT	MITH042041X	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	1/4 NPT
3/8 NPT	MITH062061X	S1113U70	MITR06	10000 (689)	1.48 (37.6)	1.18 (30.0)	3/8 NPT
1/2 NPT	MITH082081X	S1209U70	MITR08	8000 (552)	1.85 (47.0)	1.36 (34.5)	1/2 NPT
3/4 NPT	MITH122121X	S1213U70	MITR12	7500 (517)	1.94 (49.3)	1.68 (42.7)	3/4 NPT
1 NPT	MITH162161X	S1216U70	MITR16	6500 (448)	2.07 (52.6)	2.00 (50.8)	1 NPT

NPT | Plug Style

1/8 NPT	MIT022P	S1109U70	MITR02	5000 (345)	1.24 (31.5)	0.82 (21.8)	N/A (Plug Style No Termination Port)
1/4 NPT	MIT042P	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	
3/8 NPT	MIT062P	S1113U70	MITR06	4000 (276)	1.48 (37.6)	1.18 (30.0)	
1/2 NPT	MIT082P	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	
3/4 NPT	MIT122P	S1213U70	MITR12		1.94 (49.3)	1.68 (42.7)	
1 NPT	MIT162P	S1216U70	MITR16		2.07 (52.6)	2.00 (50.8)	
1 ¼ NPT	MIT202P	S1222U70	MITR20		2.13 (54.1)	2.38 (60.5)	
1 ½ NPT	MIT242P	S1327U70	MITR24	3000 (207)	2.40 (61.0)	2.74 (69.6)	
2 NPT	MIT322P	S1331U70	MITR32	2500 (172)	2.68 (68.1)	3.47 (88.1)	
2 ½" NPT	MIT402P	S1335U70	MITR40	1500 (103)	3.42 (88.9)	3.97 (100.8)	
3 NPT	MIT482P	S1340U70	MITR48		3.68 (93.5)	4.73 (120.1)	
4 NPT	MIT642P	S1348U70	MITR64	1000 (69)	3.68 (93.5)	5.73 (145.5)	

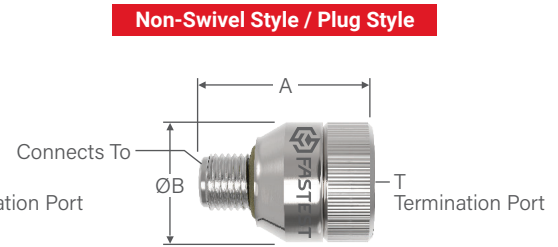
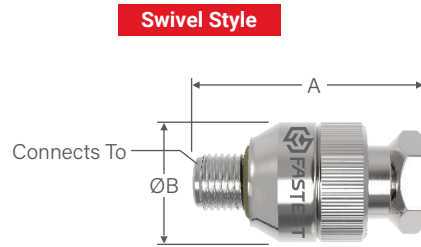
Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MITH022021X**V** = FKM

Port Specifications: NPT per SAE J476 or ANSI B1.20

MIT / INTERNAL CONNECTIONS / BSPP (G)

Swivel Style
Non-Swivel Style
Plug Style



Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T
BSPP (G) Swivel Style							
1/8 BSPP (G)	MIT026021	S1109U70	MITR020	5000 (345)	1.66 (42.2)	0.82 (20.8)	1/8 FNPT
1/4 BSPP (G)	MIT046041	S1111U70	MITR040		1.83 (46.5)	1.00 (25.4)	1/4 FNPT
3/8 BSPP (G)	MIT066061	S1113U70	MITR060	4000 (276)	2.10 (53.4)	1.18 (30.0)	3/8 FNPT
1/2 BSPP (G)	MIT086081	S1209U70	MITR080		2.55 (64.8)	1.36 (34.5)	1/2 FNPT
BSPP (G) Non-Swivel Style							
1/8 BSPP (G)	MIT026021X	S1109U70	MITR02	5000 (345)	1.20 (30.5)	0.82 (20.8)	1/8 FNPT
1/4 BSPP (G)	MIT046041X	S1111U70	MITR04		1.36 (34.5)	1.00 (25.4)	1/4 FNPT
3/8 BSPP (G)	MIT066061X	S1113U70	MITR06	4000 (276)	1.50 (38.1)	1.18 (30.0)	3/8 FNPT
1/2 BSPP (G)	MIT086081X	S1209U70	MITR08		1.83 (46.5)	1.36 (34.5)	1/2 FNPT
3/4 BSPP (G)	MIT126121X	S1213U70	MITR12		1.94 (49.3)	1.68 (42.7)	3/4 FNPT
1 BSPP (G)	MIT166161X	S1216U70	MITR16		2.07 (52.6)	2.07 (52.6)	1 FNPT
BSPP (G) Plug Style							
1/8 BSPP (G)	MIT026P	S1109U70	MITR02	5000 (345)	1.24 (31.5)	0.82 (20.8)	N/A (Plug Style No Termination Port)
1/4 BSPP (G)	MIT046P	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	
3/8 BSPP (G)	MIT066P	S1113U70	MITR06	4000 (276)	1.48 (37.6)	1.18 (30.0)	
1/2 BSPP (G)	MIT086P	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	
3/4 BSPP (G)	MIT126P	S1213U70	MITR12		1.90 (48.3)	1.68 (42.7)	
1 BSPP (G)	MIT166P	S1216U70	MITR16		2.36 (59.9)	2.07 (52.6)	

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT026021**V** = FKM

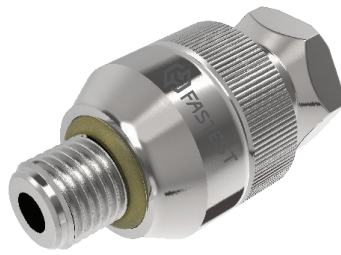
Port Specifications: BSPP (G) per ISO 228 or BS2779



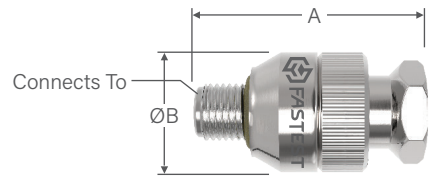
DON'T SEE A SOLUTION FOR YOUR APPLICATION? Submit a custom application form and drawing to fastsales@fastestinc.com or to your local distributor.

MIT / INTERNAL CONNECTIONS / BSPT

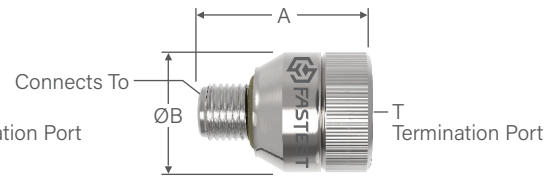
Swivel Style
Non-Swivel Style
Plug Style



Swivel Style



Non-Swivel Style / Plug Style



Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

BSPT | Swivel Style

1/8 BSPT	MIT026T021	S1109U70	MITR020	5000 (345)	1.70 (43.2)	0.82 (20.8)	1/8 FNPT
1/4 BSPT	MIT046T041	S1111U70	MITR040		1.88 (47.8)	1.00 (25.4)	1/4 FNPT
3/8 BSPT	MIT066T061	S1113U70	MITR060	4000 (276)	2.10 (53.4)	1.18 (30.0)	3/8 FNPT
1/2 BSPT	MIT086T081	S1209U70	MITR080		2.88 (64.8)	1.36 (34.5)	1/2 FNPT

BSPT | Non-Swivel Style

1/8 BSPT	MIT026T021X	S1109U70	MITR02	4000 (276)	1.20 (30.5)	0.82 (20.8)	1/8 FNPT
1/4 BSPT	MIT046T041X	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	1/4 FNPT
3/8 BSPT	MIT066T061X	S1113U70	MITR06		1.55 (39.8)	1.18 (30.0)	3/8 FNPT
1/2 BSPT	MIT086T081X	S1209U70	MITR08		1.82 (46.2)	1.36 (34.5)	1/2 FNPT
3/4 BSPT	MIT126T121X	S1213U70	MITR12		2.00 (50.8)	1.68 (42.7)	3/4 FNPT
1 BSPT	MIT166T161X	S1216U70	MITR16		2.26 (57.4)	2.00 (50.8)	1 FNPT

BSPT | Plug Style

1/8 BSPT	MIT026TP	S1109U70	MITR02	5000 (345)	1.20 (30.5)	0.82 (21.8)	N/A (Plug Style No Termination Port)
1/4 BSPT	MIT046TP	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	
3/8 BSPT	MIT066TP	S1113U70	MITR06	4000 (276)	1.50 (38.1)	1.18 (30.0)	
1/2 BSPT	MIT086TP	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	
3/4 BSPT	MIT126TP	S1213U70	MITR12		1.92 (48.8)	1.68 (42.7)	
1 BSPT	MIT166TP	S1216U70	MITR16		2.07 (52.6)	2.00 (50.8)	
1 1/2 BSPT	MIT246TP	S1327U70	MITR24	3000 (207)	2.54 (64.5)	2.74 (69.6)	
2 BSPT	MIT326TP	S1331U70	MITR32	2500 (172)	2.74 (69.6)	3.47 (88.1)	

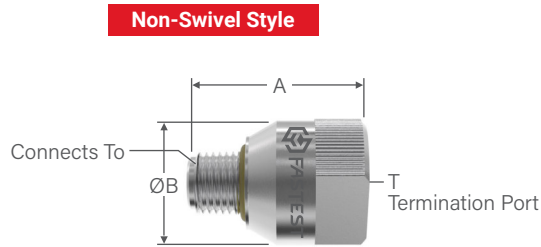
Dimensions: inch (mm)

Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT026T021V = FKM

Port Specifications: BSPT per ISO 7 or BS 21

MIT / INTERNAL CONNECTIONS / SAE ORB

Non-Swivel Style
Non-Swivel Style for High Pressure

Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

SAE ORB | Non-Swivel Style

-3 [3/8-24]	MIT034021X	S1109U70	MITR02	5000 (345)	1.29 (32.8)	0.82 (21.8)	1/8 FNPT
-4 [7/16-20]	MIT044021X				1.29 (32.8)	0.82 (21.8)	1/8 FNPT
-5 [1/2-20]	MIT054041X	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	1/4 FNPT
-6 [9/16-18]	MIT064041X				1.41 (35.8)	1.00 (25.4)	1/4 FNPT
-8 [3/4-16]	MIT084081X	S1209U70	MITR08	4000 (276)	1.85 (47.0)	1.36 (34.5)	1/2 FNPT
-10 [7/8-14]	MIT104081X				1.85 (47.0)	1.36 (34.5)	1/2 FNPT
-12 [1 1/16-12]	MIT124121X	S1213U70	MITR12		1.94 (49.3)	1.68 (42.7)	3/4 FNPT
-14 [1 3/16-12]	MIT144161X	S1216U70	MITR16		2.13 (54.1)	2.00 (50.8)	1 FNPT
-16 [1 5/16-12]	MIT164161X	S1217U70	MITR16		2.13 (54.1)	2.00 (50.8)	1 FNPT
-20 [1 5/8-12]	MIT204201X	S1222U70	MITR20		2.13 (54.1)	2.38 (60.5)	1 1/4 FNPT

SAE ORB | Non-Swivel Style for High Pressure

-4 [7/16-20]	MITH044021X	S1109U70	MITR02	10000 (689)	1.29 (32.8)	0.82 (21.8)	1/8 FNPT
-6 [9/16-18]	MITH064041X	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	1/4 FNPT
-8 [3/4-16]	MITH084081X	S1209U70	MITR08	8000 (552)	1.85 (47.0)	1.36 (34.5)	1/2 FNPT
-10 [7/8-14]	MITH104081X			7500 (517)	1.85 (47.0)	1.36 (34.5)	1/2 FNPT
-12 [1 1/16-12]	MITH124121X	S1213U70	MITR12		1.94 (49.3)	1.68 (42.7)	3/4 FNPT
-14 [1 3/16-12]	MITH144161X	S1216U70	MITR16	7000 (483)	2.13 (54.1)	2.00 (50.8)	1 FNPT
-16 [1 5/16-12]	MITH164161X	S1217U70	MITR16		2.13 (54.1)	2.00 (50.8)	1 FNPT

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT034021X**V** = FKM

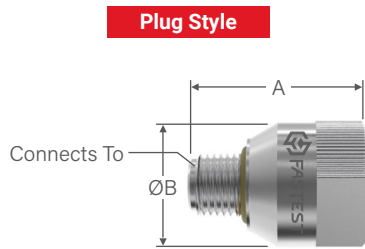
Port Specifications: SAE ORB per SAE J1926 or ISO 11926



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

MIT / INTERNAL CONNECTIONS / SAE ORB

Plug Style



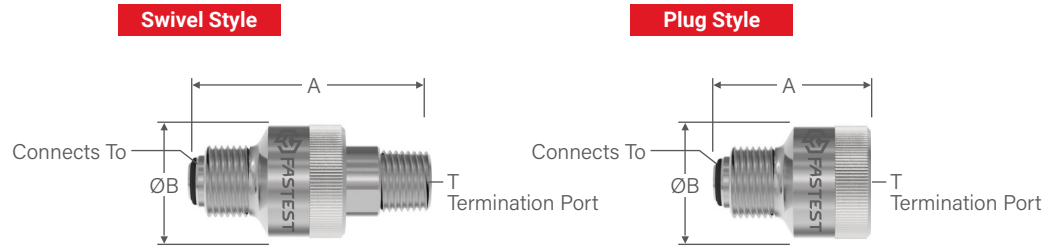
Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T
SAE ORB Plug Style							
-4 [7/16-20]	MIT044P	S1109U70	MITR02	5000 (345)	1.29 (32.8)	0.82 (21.8)	N/A (Plug Style No Termination Port)
-5 [1/2-20]	MIT054P	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	
-6 [9/16-18]	MIT064P	S1111U70	MITR04		1.41 (35.8)	1.00 (25.4)	
-8 [3/4-16]	MIT084P	S1209U70	MITR08	4000 (276)	1.85 (47.0)	1.36 (34.5)	
-10 [7/8-14]	MIT104P	S1209U70	MITR08		1.94 (49.3)	1.68 (42.7)	
-12 [1 1/16-20]	MIT124P	S1213U70	MITR12		1.29 (32.8)	0.82 (21.8)	
-14 [1 3/16-12]	MIT144P	S1216U70	MITR16		2.13 (54.1)	2.00 (50.8)	
-16 [1 5/16-12]	MIT164P	S1217U70	MITR16		2.13 (54.1)	2.00 (50.8)	
-20 [1 5/8-12]	MIT204P	S1222U70	MITR20		2.13 (54.1)	2.38 (60.5)	

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT044P**V** = FKM

Port Specifications: SAE ORB per SAE J1926 or ISO 11926

MIT / INTERNAL CONNECTIONS / SAE 37° FLARE

 Swivel Style
Plug Style


Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

SAE 37° FLARE | Swivel Style

-4 [7/16-20]	MITH040022	S20540158B70	METR02	10000 (689)	2.11 (53.6)	0.80 (20.3)	1/8 NPTF
-6 [9/16-18]	MITH060042	S20640239B70	METR04		2.36 (59.9)	0.97 (24.6)	1/4 NPTF
-8 [3/4-16]	MITH080062	S1012B70	METR06	8000 (552)	2.54 (64.5)	1.18 (30.0)	3/8 NPTF
-10 [7/8-14]	MITH100082	S1013B70	METR08	7500 (517)	2.94 (76.7)	1.38 (35.1)	1/2 NPTF
-12 [1 1/16-12]	MITH120122	S20700583B70	METR12	7500 (517)	3.30 (83.8)	1.72 (43.7)	3/4 NPTF
-16 [1 5/16-12]	MITH160162	S20800796B70	METR16	7000 (483)	3.77 (95.8)	2.13 (54.1)	1 NPTF

SAE 37° FLARE | Plug Style

-4 [7/16-20]	MITH040P	S20540158B70	METR02	10000 (689)	1.42 (36.1)	0.80 (20.3)	N/A (Plug Style No Termination Port)
-6 [9/16-18]	MITH060P	S20640239B70	METR04		1.51 (38.4)	0.97 (24.6)	
-8 [3/4-16]	MITH080P	S1012B70	METR06	8000 (552)	1.65 (41.9)	1.18 (30.0)	
-10 [7/8-14]	MITH100P	S1013B70	METR08	7500 (517)	1.86 (47.2)	1.38 (35.1)	
-12 [1 1/16-12]	MITH120P	S20700583B70	METR12	7500 (517)	2.03 (51.6)	1.72 (43.7)	
-16 [1 5/16-12]	MITH160P	S20800796B70	METR16	7000 (483)	2.29 (58.2)	2.13 (54.1)	

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MITH040022V = FKM

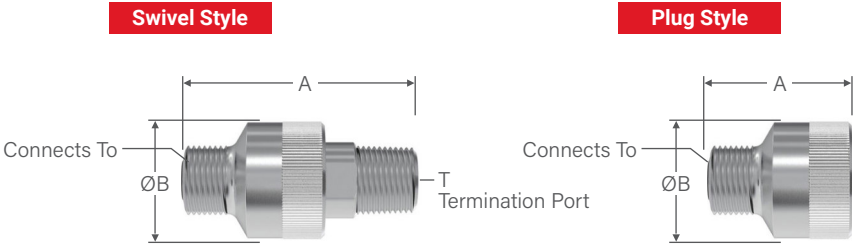
Port Specifications: SAE 37° FLARE per SAE J514



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

MIT / INTERNAL CONNECTIONS / SAE ORFS

Swivel Style
Plug Style



Ordering Information					Dimensions		
Connects To	Part Number*	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

SAE ORFS | Swivel Style

-4 [9/16-18]	MITH04K042	S1008B70	METR04	10000 (689)	2.11 (53.6)	0.80 (20.3)	1/8 MNPT
-6 [11/16-16]	MITH06K062	S20700291B70	METR06		2.36 (59.9)	0.97 (24.6)	1/4 MNPT
-8 [13/16-16]	MITH08K082	S1012B70	METR08	8000 (552)	2.54 (64.5)	1.18 (30.0)	3/8 MNPT
-10 [1-14]	MITH10K122	S1014B70	METR12	7500 (517)	2.94 (76.7)	1.38 (35.1)	1/2 MNPT
-12 [1 3/16-12]	MITH12K122	S1113B70	METR12	7500 (517)	3.30 (83.8)	1.72 (43.7)	3/4 MNPT
-16 [1 7/16-12]	MITH16K162	S1117B70	METR16	7000 (483)	3.77 (95.8)	2.13 (54.1)	1 MNPT

SAE ORFS | Plug Style

-4 [7/16-20]	MITH04KP	S1008B70	METR04	10000 (689)	1.42 (36.1)	0.80 (20.3)	N/A (Plug Style No Termination Port)
-6 [9/16-18]	MITH06KP	S20700291B70	METR06		1.51 (38.4)	0.97 (24.6)	
-8 [3/4-16]	MITH08KP	S1012B70	METR08	8000 (552)	1.65 (41.9)	1.18 (30.0)	
-10 [7/8-14]	MITH10KP	S1014B70	METR12	7500 (517)	1.86 (47.2)	1.38 (35.1)	
-12 [1 1/16-12]	MITH12KP	S1113B70	METR12	7500 (517)	2.03 (51.6)	1.72 (43.7)	
-16 [1 5/16-12]	MITH16KP	S1117B70	METR16	7000 (483)	2.29 (58.2)	2.13 (54.1)	

Dimensions: inch (mm)
Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MITH04K042V = FKM

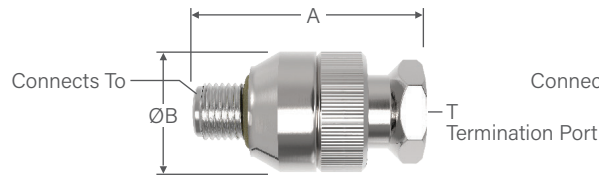
Port Specifications: SAE ORFS per SAE J1453

MIT / INTERNAL CONNECTIONS / ISO O-RING METRIC

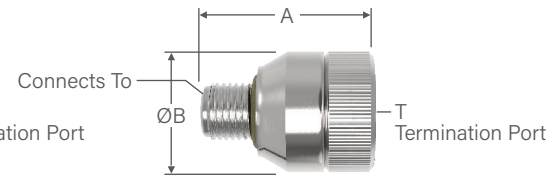
Swivel Style
Non-Swivel Style
Plug Style



Swivel Style



Non-Swivel Style / Plug Style



Ordering Information					Dimensions		
Connects To	Part Number	Replacement Seals Bulk Pack (5)	Rebuild Kit	Pressure Rating	A	B	T

ISO O-Ring Metric | Swivel Style

M10 x 1.0	MIT108021	S1109B70	MITR020	4000 (276)	1.76 (44.7)	0.82 (21.8)	1/8 FNPT
M12 x 1.5	MIT128021	S1110U70	MITR040		1.95 (49.5)	1.00 (25.4)	1/8 FNPT
M14 x 1.5	MIT148041	S1111U70	MITR040		1.84 (46.7)	1.00 (25.4)	1/4 FNPT
M16 x 1.5	MIT168061	S1113U70	MITR060		2.11 (53.6)	1.18 (30.0)	3/8 FNPT
M18 x 1.5	MIT188061	S1114U70	MITR060		2.16 (54.9)	1.18 (30.0)	3/8 FNPT
M20 x 1.5	MIT208081	S1209U70	MITR080		2.57 (65.3)	1.36 (34.5)	1/2 FNPT
M22 x 1.5	MIT228081	S1116U70	MITR080		2.55 (64.8)	1.37 (34.8)	1/2 FNPT

ISO O-Ring Metric | Non-Swivel Style

M10 x 1.0	MIT108021X	S1109U70	MITR02	5000 (345)	1.30 (33.0)	0.82 (21.8)	1/8 FNPT
M12 x 1.5	MIT128041X	S1110U70	MITR04		1.37 (34.8)	1.00 (25.4)	1/4 FNPT
M14 x 1.5	MIT148041X	S1111U70	MITR04		1.37 (34.8)	1.00 (25.4)	1/4 FNPT
M16 x 1.5	MIT168061X	S1113U70	MITR06	4000 (276)	1.50 (38.1)	1.18 (30.0)	3/8 FNPT
M18 x 1.5	MIT188061X	S1114U70	MITR06		1.56 (39.6)	1.18 (30.0)	3/8 FNPT
M20 x 1.5	MIT208081X	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	1/2 FNPT
M22 x 1.5	MIT228081X	S1116U70	MITR08		1.85 (47.0)	1.36 (34.5)	1/2 FNPT

ISO O-Ring Metric | Plug Style

M10 x 1.0	MIT108P	S1109U70	MITR02	5000 (345)	1.29 (32.8)	0.82 (21.8)	N/A (Plug Style No Termination Port)
M12 x 1.5	MIT128P	S1111U70	MITR04		1.37 (34.8)	1.00 (25.4)	
M14 x 1.5	MIT148P	S1113U70	MITR06		1.37 (34.8)	1.00 (25.4)	
M16 x 1.5	MIT168P	S1209U70	MITR08	4000 (276)	1.50 (38.1)	1.18 (30.0)	
M18 x 1.5	MIT188P	S1213U70	MITR12		1.56 (39.6)	1.31 (33.3)	
M20 x 1.5	MIT208P	S1209U70	MITR08		1.85 (47.0)	1.36 (34.5)	
M22 x 1.5	MIT228P	S1216U70	MITR16		1.82 (46.2)	1.37 (34.8)	

Dimensions: inch (mm)

Pressure Rating: psi (bar)

*Optional seal materials include V = FKM, E = EPDM, and B = Buna-N - Example: MIT108021V = FKM

Port Specifications: ISO O-RING METRIC per ISO 6149 or SAE J2244



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