



**FASTEST**<sup>®</sup>



# ZEROMAX<sup>™</sup>

Zero Leak Access Port System  
for Refrigerant Systems using  
Process Tubes

[fastestinc.com/zeromax](http://fastestinc.com/zeromax)



# ZEROMAX™ SYSTEM

The NEW ZeroMax™ System is specifically designed to eliminate the need for Process "Stub" Tubes, while adding easy access without sacrificing hermetic metal-to-metal sealing. ZeroMax™ has the capability for near zero emission processing and field servicing, and is compatible with both current and next generation refrigerants.

## High Flow Access Port



Core Plug & Seat are shipped preassembled at factory



## Processing Tools



- Safer processing of flammable (A2L & A3) refrigerants
- Cost reducing elimination of Process/Stub Tubes and the pinch & weld operation
- Accessibility while providing a hermitic metal to metal seal
- Eliminate leak-prone "Piercing Valves" to access system

- Increased product quality
- Complete Processing Tool System is easy to use and optimizes manufacturing efficiency
- Zero refrigerant emissions when processing
- Use with FasTest Evacuation Cart to optimize evacuation

## Industry's Fastest Evacuation System

High Flow Access Port



Processing Tools



Evacuation Cart



# SPLIT SYSTEMS



# HERMETIC REFRIGERATION COMPRESSORS



# ANYWHERE A PROCESS "STUB" TUBE IS USED



# SMALL CAPACITY REFRIGERATION SYSTEMS



**PTAC/VTAC & HEAT PUMPS**



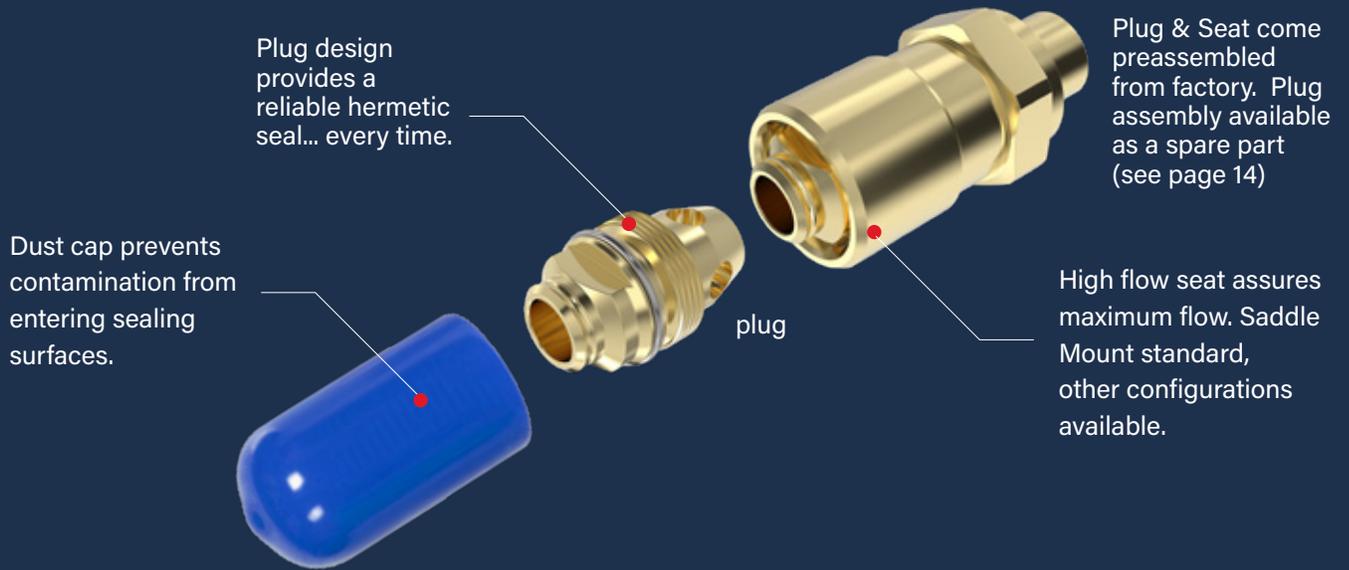
**COMMERCIAL SELF-CONTAINED DISPLAY UNITS**



**HIGH-END REFRIGERATORS**

# Zero Refrigerant Emissions

## Maximum Accessibility



### Leak/Proof Test



#### Quick Filling

Pressurize & empty system quickly.

### Evacuation



#### Fast Evacuation

Flow path yields maximum flow.

### Charge



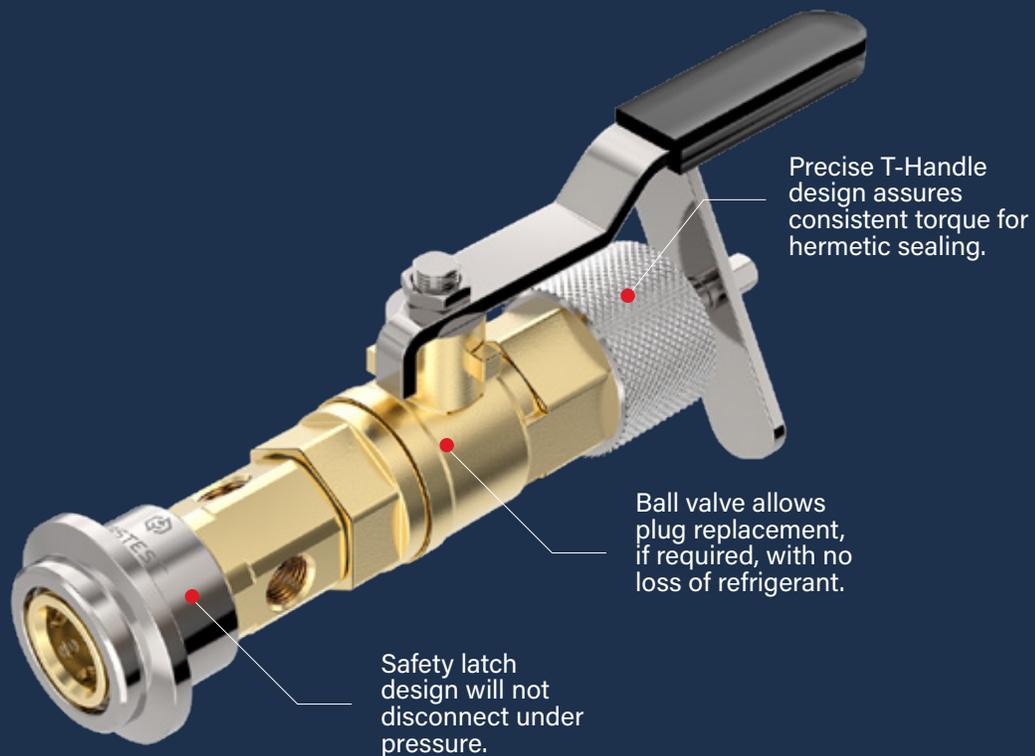
#### Safe Charging

Charge Tool latch will not accidentally disconnect when under pressure.

# FIELD SERVICE TOOL

## All-In-One Tool for Installation and Service Technicians

Gain access to the refrigerant system for servicing. Designed to provide installation & service technicians with a single tool that can be used to perform multiple tasks - refrigerant recovery, leak test, evacuation, charge and replace a ZeroMax™ Access Port Plug.



## All-In-One Tool

- Recover Refrigerant
- Perform Leak Test
- Evacuate System
- Charge System
- Replace Access Port Plug

# ZEROMAX™ Access Port

Compact Access Port System for Efficient Processing and Hermetic Sealing.



Plug & Seat come preassembled from factory. Plug assembly available as a spare part (see page 15)



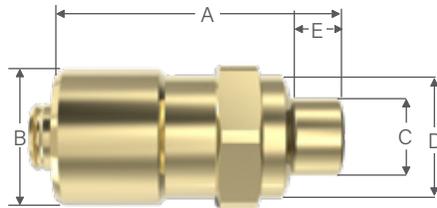
- 1 Patent pending Seat & Plug design.
- 2 Metal to metal hermetic sealing - no elastomers
- 3 Non-restrictive flow path
- 4 Multiple Seat mounting options

## SPECIFICATIONS

Seat Styles	Saddle Mount/Stub Tube standard, others available (Contact Factory)
Pressure Rating	750 psig (51.7 bar)
Leak Rating	Not measurable, hermetic
Flow Diameter	Ø.2" (5 mm) nominal
Flow Rate	5.0 scfm (8.0 Nm <sup>3</sup> /hr)
Material	Brass, PVC Dust Cap
Tightening Torque	4 ft-lbs (.45 N-m)

\* Seat Only, No Plug with MBE Tool (CMPT10) connected.

# ZeroMax™ Access Port



Ordering Information			Dimensions				
Style	Size	Part Number	A*	B	C**	D	E

## ZeroMax™ Seats | Multiple Styles for User's Application

Saddle Mount/ Stub Tube Combination	1/4" OD Tube/ 5/16" Hole	CMC04A01	0.89 (22.6)	0.54 (13.7)	0.312 (7.92) Min Hole for Saddle Mount Installation	0.37 (9.5)	0.12 (3.1)
Thread Mount	Contact Factory		Contact Factory				
Stub Tube	CMC04A01 (See ** NOTE)		Contact Factory				
Panel Mount	Contact Factory		Contact Factory				

## Dimensions: inch (mm)

\*NOTE: Add 0.05" (1.2) to dimension "A" when dust cap is added (Full Assembly).

\*\*NOTE: CMC04A01 Seat can also be used in a Process/Stub Tube application and will slip onto a standard .250 ( 6.35) tube."



## ZeroMax™ Plug | Mates with ZeroMax™ Seat

Part Number
CMC04C Plug + Retaining Ring assembly



## ZeroMax™ Dust Cap

Part Number
SCH07CAP2

# ZeroMax™ Processing Tools

## MBE Leak Test Tool

PN: CMPT10



### APPLICATION

Ball latching connector, valveless design to maximize flow. Connect to Seat at Leak Test station to pressurize and relieve testing gas.

- Ergonomic ball & sleeve action.
- Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

### SPECIFICATIONS

Pressure Rating	750 psig (51.7 bar)
Flow Diameter	17.0 SCFM = 27.3 Nm <sup>3</sup> /hr
Flow Rate	9.0 scfm (14.5 Nm <sup>3</sup> /hr) vacuum, 17.0 scfm ( Nm <sup>3</sup> /hr) @ 80 psid
Dimensions	1.5" (38 mm) Ø x 1.5" (38 mm) long
Material	Stainless Steel, Neoprene

Main Seal for CMPT10, 40 & 50 Tools (2 per Tool, Qty 10) PN: S1015N70

## Traveler

PN: CMPT40

SCFTM03 Torque Wrench, CMFT375531DS Socket



### APPLICATION

Ball latching connector with an internal valve that will hold vacuum or charge when disconnected from processing tool. It "travels" down the assembly line with seat from evacuation, to charge to run stations after which it is used to torque plug into seat and then removed from seat.

- Ergonomic ball & sleeve action. Safety Latch system will not disconnect under pressure.
- Use Traveler hex (17/32") to torque Plug into Seat (4 ft-lbs/5.4 N-m).

### SPECIFICATIONS

Pressure Rating	750 psig (51.7 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.5 scfm (8.9 Nm <sup>3</sup> /hr) under vacuum, 11.0 scfm (17.7 Nm <sup>3</sup> /hr) @ 80 psid
Dimensions	1.5" (38 mm) Ø x 2.4" (61 mm) long
Material	Stainless Steel, Neoprene

Seat with Traveler (CMPT40) & MBV (CMPT20) or RQD (CMPT30).  
Traveler Tool, External Body Seal (Qty 5) - PN: S1018N70

## MBV Evacuation Tool

PN: CMPT20



### APPLICATION

Ball latching connector with internal valve instantly seals vacuum when disconnected. Connect to Traveler at Evacuation station to evacuate system.

- Ergonomic ball & sleeve action.
- Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

### SPECIFICATIONS

Pressure Rating	20 micron (0.02 torr) to 750 psig (51.7 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate*	5.5 scfm (8.9 Nm <sup>3</sup> /hr) under vacuum, 11.0 scfm (17.7 Nm <sup>3</sup> /hr) @ 80 psid
Dimensions	1.9" (48 mm) Ø x 1.5" (86 mm) long
Material	Stainless Steel, Neoprene

\* Seat with Traveler (CMPT40) & MBV (CMPT20).

MBV Evacuation Tool, Rebuild Kit (Qty 1) - PN: CMPTR20

## RQD

PN: CMPT30/CMPT31



### APPLICATION

Ball latching connector with a lever operated internal valve allows easy connection to Traveler. Connect at charge station to fill refrigerant into system. If using CMPT31, must use a control valve on recovery port and activate refrigerant recovery system prior to disconnecting RQD tool from Traveler to prevent refrigerant escape to atmosphere. CMPT30 (vents to atmosphere) CMPT31 (vents to 1/8 female NPT thread recovery port).

- Ergonomic ball & sleeve Action. Safety Latch system will not disconnect under pressure.
- ¼ NPT media port.

### SPECIFICATIONS

Pressure Rating	750 psig (51.7 bar)
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate*	5.5 scfm (8.9 Nm <sup>3</sup> /hr) under vacuum, 11.0 scfm (17.7 Nm <sup>3</sup> /hr) @ 80 psid
Dimensions	1.95" (50 mm) Ø x 1.5" (119 mm) long (plus handle 7.68" (195 mm))
Material	Stainless Steel, Brass, Aluminum, Neoprene

\* Seat with Traveler (CMPT40) & RQD (CMPT30).

RQD Evacuation Tool, Rebuild Kit (Qty 1)- PN: CMPTR30  
RQD Charge Tool (With Recovery Port), Rebuild Kit (Qty 1) - PN: CMPTR31

# ZeroMax™ Service/Rework Tool

## Service/Rework Tool

PN: CMPT50

1/4" Hex, SCFTM03 Torque Wrench,  
CMFT375250DS Socket

### APPLICATION

Ball valve repair tool allows for removal and replacement of the Plug without loss of system pressure. Also use to recovery, evacuate or charge system.

- Ball valve shut-off to isolate system when changing Plug.
- 1/8 FNPT ports allow processing (Recovery, evacuation or charge) using Tool.
- Safety Lock Sleeve prevents disconnect when under pressure.



### SPECIFICATIONS

Pressure Rating	600 psig (43 bar)
Flow Diameter	Does not contain a flow port directly but does have 1/8 NPT ports for recovery
Flow Rate	No flow if 1/8 NPT ports are plugged, or 9.0 scfm (14.5 nm <sup>3</sup> /hr) vacuum, 17.0 scfm (27.3 nm <sup>3</sup> /hr) @ 80 psid if using 1/8 NPT ports
Dimensions	1.5" (38 mm) Ø x 5.5" (140 mm) long
Material	Stainless Steel, Brass, Aluminum, Neoprene

ZeroMax Service Tool, Rebuild Kit - PN: CMPTR50

# ZeroMax® Torque Tools

## Pistol Grip Torque Gun (Gun only, no Drive Head)

PN: SCFTP07



Image shown with Drive Head installed

- Light weight and ergonomic design to reduce torque reaction resulting in reduced fatigue & injury
- Programmable - easy adjustment on site via USB port using ICS software 'pre-programmed to 4 lb-ft (5.4 N-m) at 200 RPM
- Long battery life with LED "Fuel Gauge", 20V, 5 Ah lithium ion battery offers long lasting life with quick recharging



Electric Torque Gun Drive Head  
SCFTP17

Gun Drive Head only, includes 5544A63

## Manual Torque Wrench

PN: SCFTM03



- Break away torque wrench pre-set to proper torque of 4ft-lbs (5.4 N-m)
- Manually twist wrench to pre-set torque



3/8" Drive x 17/32" Socket  
CMFT375531DS

For SCFTM03 Torque Wrench,  
Use on CMPT40



3/8" Drive x 1/4" Socket  
CMFT375250DS

For SCFTM03 Torque Wrench,  
Use on CMPT50



Electric Torque Gun Charger  
PN: SCFTP0C



Electric Torque Gun Battery  
PN: SCFTP05B

Electric Torque Wrench KIT (Gun, Head, 2 Batteries & Charger) PN: SCFTP0720