FASTEST®

ZER⬤MAX™

Zero Leak Access Port System for Refrigerant Systems using Process Tubes

fastestinc.com/zeromax

ENVIRONMENTALLY SUSTAINABLE · REFRIGERANT PROCESSING ·

FASTEST®

Global Leader in Industrial Sealing Connection Technology

HVAC-R | Vehicle Systems | Compressed Gas | Medical Life Science | Aerospace

At FasTest, our mission is to reduce our customer's manufacturing costs, improve safety and lower the environmental impact from refrigerant emissions.

As an industry leader of Sealing and Connection Technologies, FasTest offers standard products for most ports/threads/tubes, and a dedicated team of Custom Design Experts to engineer optimized solutions for demanding applications. Connect fast, seal reliably, test safely.

BROAD OFFERING	INTELLIGENT TOOLS	APPLICATION EXPERTS	GLOBAL SUPPORT	SUPERIOR QUALITY
Extensive standard and Custom Engineered Solutions.	Sensing & data generation tools that support process automation.	Optimized solutions, tailored to your unique needs.	Global distribution network provides local, responsive support.	ISO 9001 Certified; Robust tools improve the quality of your product.

HVAC-R OEM ACCESS PORT SYSTEMS

ZEROMAX™
Easy Access for Small Systems using Processing "Stub" Tubes

PORTMAX™
Rapid Evacuation of Large Capacity Systems

COREMAX®
Faster Processing of Systems Using Schrader Type Valves

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

+

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

- 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
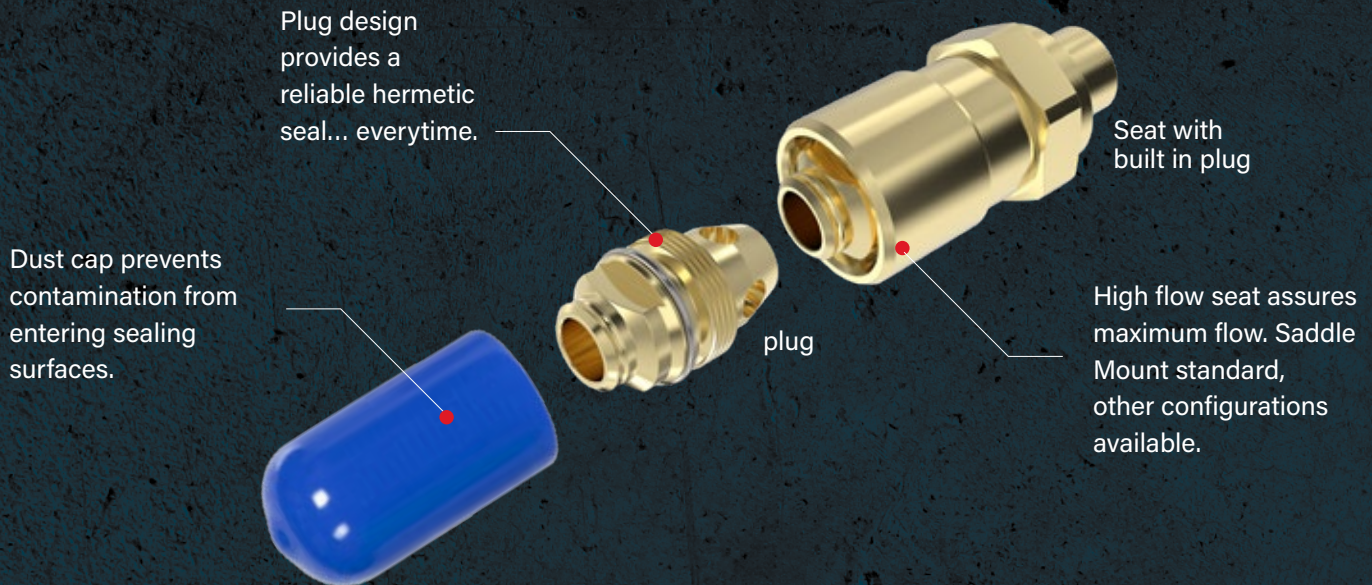

PTAC/VTAC & HEAT PUMPS

COMMERCIAL SELF-CONTAINED DISPLAY UNITS

HIGH-END REFRIGERATORS

FASTEST

Zero Refrigerant Emissions Maximum Accessibility

Plug design provides a reliable hermetic seal... everytime.

Seat with built in plug

Dust cap prevents contamination from entering sealing surfaces.

plug

High flow seat assures maximum flow. Saddle Mount standard, other configurations available.

Leak/Proof Test

Quick Filling
Pressurize & empty system quickly.

Evacuation

Fast Evacuation
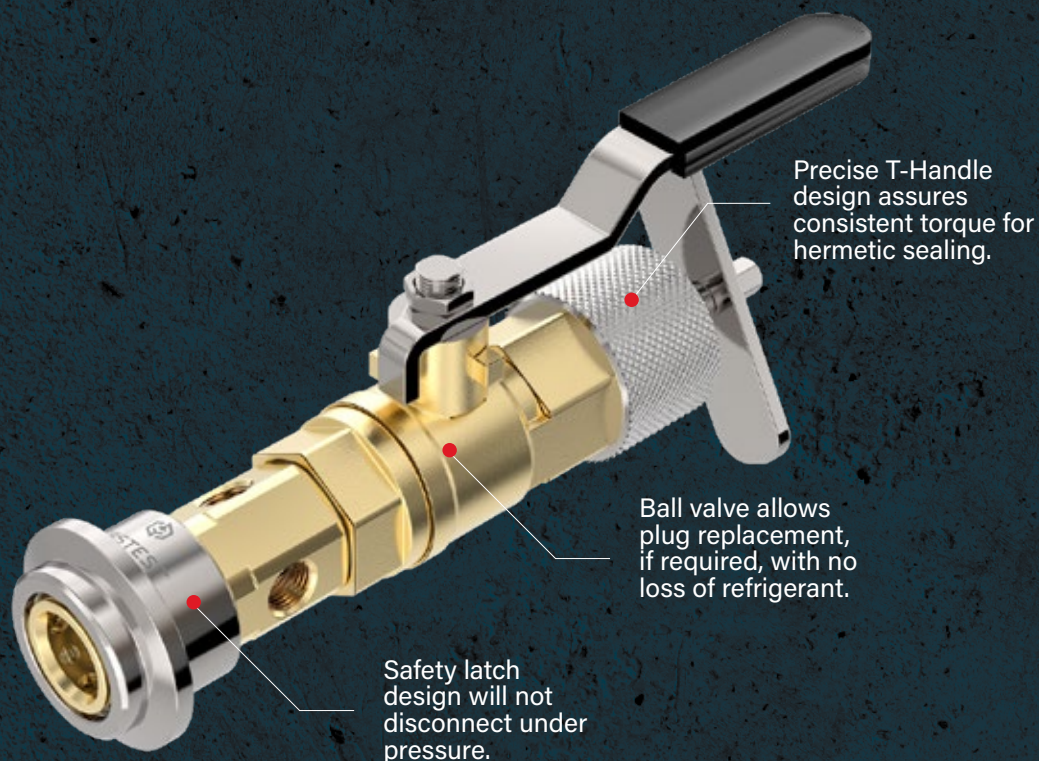Flow path yields maximum flow.

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 reclaim, leak test, evacuation, charge and replace a ZeroMax™ Access Port Plug.

Precise T-Handle design assures consistent torque for hermetic sealing.

Ball valve allows plug replacement, if required, with no loss of refrigerant.

Safety latch design will not disconnect under pressure.

All-In-One Tool

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

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ZEROMAX™ Access Port

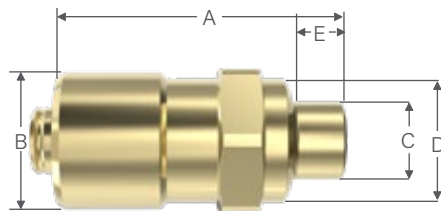Compact Access Port System for Efficient Processing and Hermetic Sealing.

Dust Cap

Plug

Seat with built in Plug

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 standard, others available
Pressure Rating	700 psig (48.3 bar)
Leak Rating	Not measurable, hermetic
Flow Diameter	Ø.2" (5mm) nominal
Flow Rate	5.0 scfm (8.0 Nm3/hr)
Material	Brass, PVC Dust Cap
Tightening Torque	3 ft-lbs (4 N-m)

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

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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"	CMC04A0	0.89 (22.6)	0.54 (13.7)	0.25 (6.4) MIN HOLE	0.37 (9.5)	0.12 (3.1)
Thread Mount	Contact Factory		Contact Factory				
Stub Tube	Contact Factory		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).

ZeroMax™ Plug | Mates with ZeroMax™ Seat

Part Number
CMC04C Plug + Retaining Ring assembly

ZeroMax™ Dust Cap

Part Number
SC07CAP2

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	Ø.2" (5mm) nominal
Flow Rate*	9.0 scfm (14.5 Nm^3/hr) vacuum, 17.0 scfm (Nm^3/hr) @ 80 psid
Dimensions	1.5" (38 mm) Ø x 1.5" (38 mm) long
Material	Stainless Steel

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

Traveler
PN: CMPT40

APPLICATION

Ball latching connector with an internal valve. Traveler "Travels" down assembly line with Seat through the Charging process 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 to torque Plug into Seat.

SPECIFICATIONS

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

Seat with Traveler (CMPT40) & MBV (CMPT20) or RQD (CMPT30).

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^3/hr) under vacuum, 11.0 scfm (17.7 Nm^3/hr) @ 80 psid
Dimensions	1.9" (48 mm) Ø x 1.5" (86 mm) long
Material	Stainless Steel

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

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. Activate refrigerant reclaim system prior to disconnecting RQD tool from Traveler to prevent refrigerant escape to at atmosphere. CMPT30 (vents to atmosphere) CMPT31 (vents to 1/8 female NPT thread reclaim 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^3/hr) under vacuum, 11.0 scfm (17.7 Nm^3/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

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

ZeroMax™ Service/Rework Tool

Service/Rework Tool
PN: CMPT50

APPLICATION

Ball valve repair tool allows for removal and replacement of the Plug without loss of system pressure.

- Ball valve shut-off to isolate system.

- Locks at pressure and cannot be removed.

SPECIFICATIONS

Pressure Rating	600 psig (43 bar)
Flow Diameter	Does not contain a flow port directly but does have 1/8 NPT ports for reclaim
Flow Rate	N/A
Dimensions	1.5" (38 mm) Ø x 5.5" (140 mm) long
Material	Stainless Steel, Brass, Aluminum

FASTEST

EVACUATION CART
Optimized for ZEROMAX™

Reducing evacuation time requires both a high flow Access Port/Connector system AND a properly designed evacuation system... a TOTAL SOLUTION. FasTest's new turn-key Evacuation Cart is optimized for the ZeroMax System - the fastest evacuation possible, at the lowest cost.

Large diameter, high conductance hoses.

High visibility Andon Light Tower indicates process status.

An optimized system of matched components that will result in the fastest evacuation time possible.

Mobility for easy maneuverability around large refrigeration packages with large, industrial grade lockable casters.

EVAC MAX™
by FASTEST

- Real time evacuation tracking & data capture for use in quality, control and performance validation.

- Self diagnostic capability to verify proper operation, e.g., no leaks.

- Data analysis capability facilitating ongoing process improvement, reduced takt time, improved evacuation quality and lower total processing cost.

- Automated operation, automatic shut-off, isolation, decay test, etc.

A turn-key system, from FasTest with a warranty and factory support.

FASTEST GLOBAL DISTRIBUTION NETWORK

Interested in Learning More? Have Questions?

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