



FASTEST[®]



COREMAX[®]

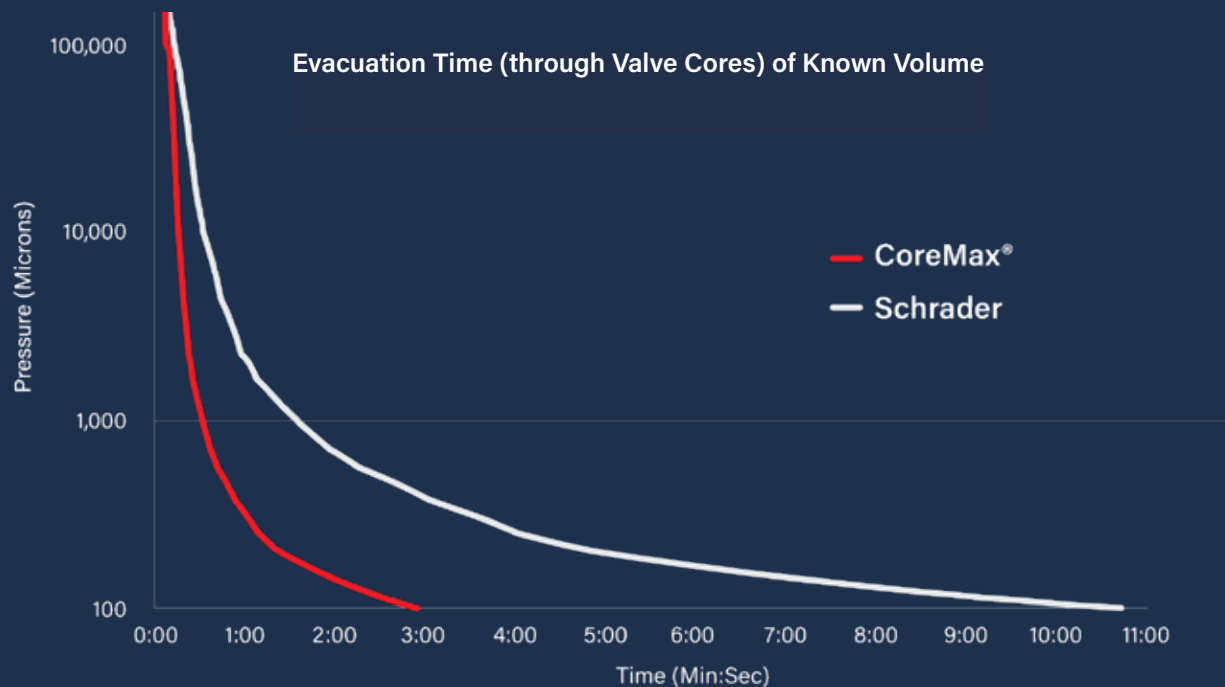
**High Flow Access Valve System
for Rapid Evacuation of HVAC-R
Systems using Schrader Valves**

fastestinc.com/CoreMax





The CoreMax® System eliminates process tubes and Schrader valves resulting in dramatically faster evacuation times, improved quality, greater throughput, less rework and maintenance costs.



Proven Productivity Improvement

- Highest flow capacity
- Improve takt time
- Easy-to-use production tooling system
- Increase first pass yield

Reduces Total Processing Cost

- Dramatically faster evacuation
- Fewer processing tools required
- Fewer connections per unit processed
- Less tool maintenance

Highest Quality

- Reliable leak-free valve for dramatically improved sealing
- Six Sigma (6σ) quality level
- ISO 9001:2015 certified

FASTER PROCESSING OF SYSTEMS USING SCHRADER TYPE VALVES



**UNITARY AC
PACKAGES &
HEAT PUMPS**



**SELF CONTAINED
DISPLAY CASES**



**REFRIGERATED
AIR HANDLER /
CONDENSING
UNITS**

Faster Processing
Superior Sealing

COMMERCIAL ICE MAKERS



POOL HEAT PUMPS



ANYWHERE A RESTRICTIVE & LEAK PRONE SCHRADER VALVE IS USED



COREMAX[®] SYSTEM

The CoreMax Access Valve & Seat System provides up to five times greater processing flow than common Schrader valves and has dramatically improved sealing performance. Plus, it provides easy and reliable system accessibility compared to stub tubes and leak prone "Line Piercing Saddle Valves".

High Flow Access Valve



Processing Tools



COREMAX[®] SYSTEM

- An entire processing solution for HVAC-R applications that has millions of units installed globally
- Provides increased efficiencies and throughput, resulting in reduced total processing cost
- Maximum flow area results in high conductance during evacuation process
- Proven family of tools specifically designed for manufacturing and service that reduce plant tooling costs by up to 15%
- Accessibility while providing a hermetic metal to metal seal
- Ergonomic tools reduce operator fatigue and overall manufacturing costs
- Reduce rework from leaking Schrader valves by up to 99%
- The SAE 1/4" 45° flare (7/16-20 thread) is compatible with standard refrigeration tooling, hoses, and swivel fittings
- Use with FasTest's EvacMax[™] Evacuation Cart to optimize evacuation

Industry's Fastest Evacuation System

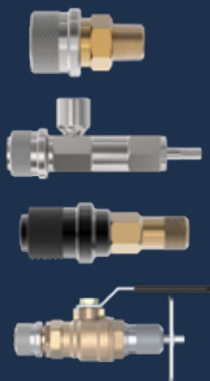
**High Flow
Access Valve**



**Processing
Tools**



Evacuation Cart

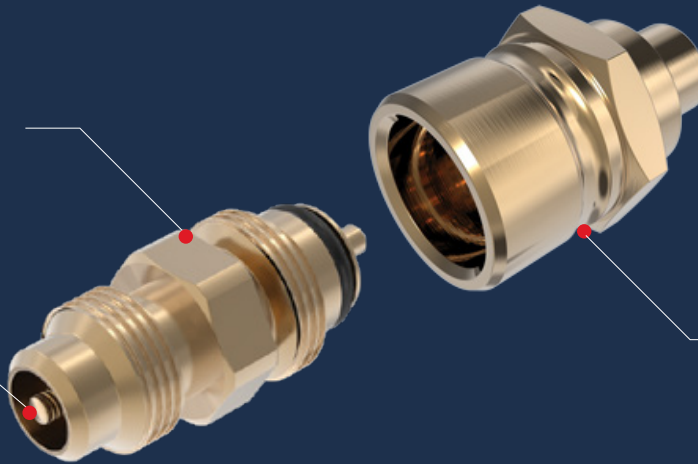


The Refrigeration Industry's Highest Flow Access Valve

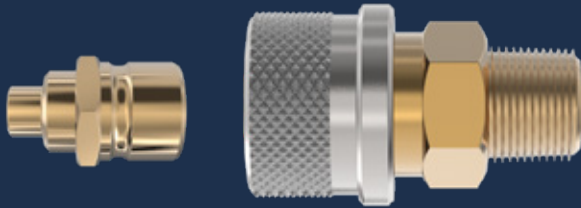
Large Core design results in higher flow and reliable sealing... every time.

Safe automatic shut-off valve prevents accidental refrigerant discharge.

High flow seat assures maximum flow, available in Saddle Mount & threaded configurations for easy installation.



Leak/Proof Test



Quick Filling

Pressurize & empty system quickly through large flow path.

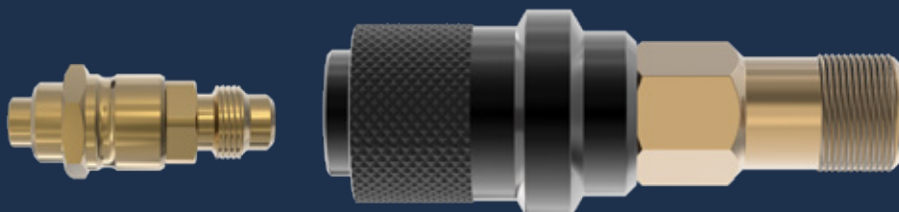
Evacuation



Fast Evacuation

Unobstructed flow path yields maximum flow.

Charge



Safe Charging

Charge Tool latch will not accidentally disconnect when under pressure.

FIELD SERVICE TOOLS

For Installation and Service Technicians

Gain access to the refrigerant system for servicing. Designed to provide installation & service technicians with tools that can be used to perform multiple tasks - refrigerant recovery, leak test, evacuation, charge and replace a CoreMax® Access Valve Core.

SnapMate™ Service Tool

- Leak Test
- Evacuate
- Charge

Connects to both
CoreMax® and
Schrader valve
SAE 45° ¼"
Flare fittings

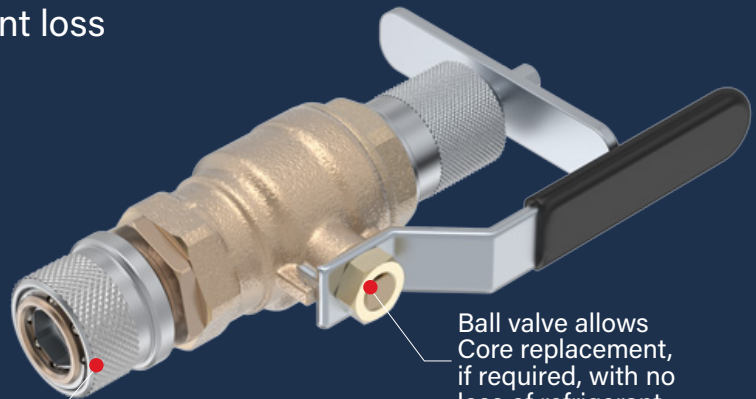


Core Removal Tool

- Replace Core with minimal refrigerant loss

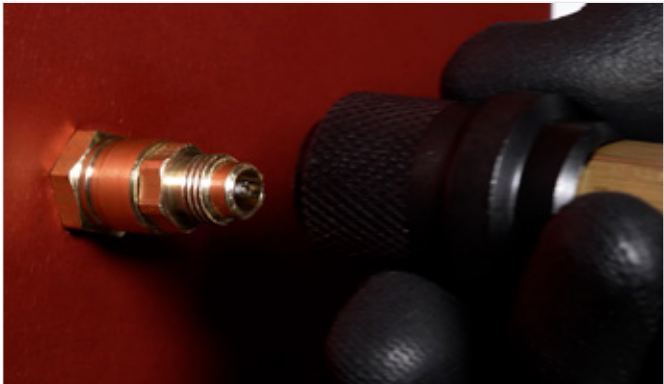
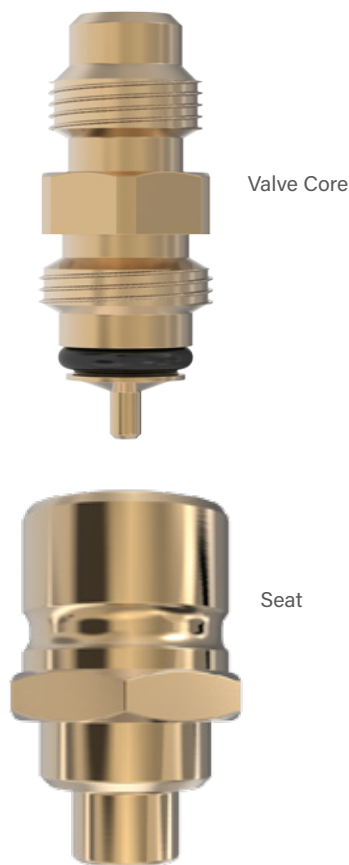
Ergonomic ball
latch for easy
connection and
will not release
when system is
under pressure.

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



CoreMax[®] / HIGH FLOW Access Valve

Access Valve System for Maximum Flow & Faster Processing.

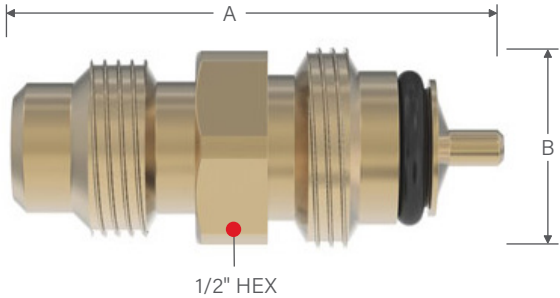


- 1 Specifically designed for refrigeration applications maximizing flow and robust sealing technology
- 2 The CoreMax[®] Core utilizes one elastomeric seal to seal both the valve and the joint between the Core and the Seat - metal-to-metal seal between the Core and Seat to ensure a complete seal
- 3 The Core pin position is manufactured to exact tolerances for constant sealing and maximum valve opening for the highest flow available - conforms to ARI standard 720 for pin height
- 4 CoreMax[®] has a SAE 45° 1/4" flare (7/16-20 thread) which is the industry standard for access valves, allowing use of standard service tools

SPECIFICATIONS

Seat Styles	Stub Tube, Saddle Mount, Panel Mount, NPT
Pressure Rating	10 millitorr (micron) vacuum to 750 psi (51.7 bar)
Leak Rating	less than 0.018 oz/yr of R-410A
Flow Diameter	Valve Core: Ø 0.21" (5.3mm) nominal (must use OEM SnapMate™ Tool - PN: SCP062H) Seat: Ø 0.31" (7.9mm) nominal seat size dependent (must use Core Insertion Tool - PN: SCFT10)
Flow Rate*	Vacuum: 4.9 SCFM (7.9 Nm ³ /hr) (using use OEM SnapMate™ Tool - PN: SCP062H) Pressure: up to 35 SCFM (56.4 Nm ³ /hr) (using use Core Insertion Tool - PN: SCFT10)
Material	Brass, Neoprene [®]
Tightening Torque	8 ft-lbs (11 N-m) (Valve into Seat Torque) Note: FasTest recommends using SCFTM01 Manual Torque Wrench or SCFTP05/SCFTP06 Electric Torque Wrenches

*Flow rate indicated is through the valve core using the OEM SnapMate connector. Processing/flowing through the Seat only using the Core Insertion Tool will provide significantly more flow capacity.



Ordering Information		Dimensions	
Part Number		A	B
CoreMax® Valve Mates with CoreMax® Seat for Complete Access Valve			
SCCA07H		1.30 (33.0)	.5 (12.7)

Dimensions: inch (mm)

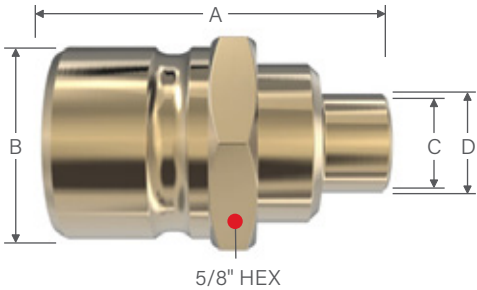
Stub Tube & Saddle Mount



Panel Mount



NPT



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

CoreMax® Seats | Multiple Styles for User's Application

Stub Tube	1/4	SCH0730A01	1.00 (25.4)	0.59 (17.5)	0.26 (6.6)	0.31 (7.9)	1.26 (32.0)
	5/16	SCH0730A02			.32 (8.1)	.37 (9.4)	
	3/8	SCH0730A03			0.38 (9.7)	0.43 (10.9)	
Saddle Mount	Hole Ø = .375" Min	SCH0730B02	0.92 (23.4)		0.28 (.71)	0.37 (9.4)	1.33 (33.8)
	Hole Ø = .225" Min	SCH0730B03			0.17 (4.3)	0.22 (5.6)	
	Hole Ø = .250" Min	SCH0730B04			0.18 (4.6)	0.25 (6.4)	
Panel Mount	5/16 Tube	SCH0730C03	1.29 (32.8)		0.26 (6.6)	0.35 (8.9)	
	3/8 Tube	SCH0730C04			0.38 (9.7)	0.44 (11.2)	
NPT	1/4	SCH0730E01	1.15 (29.2)		0.31 (7.9)	-----	

Dimensions: inch (mm)

* Installed length is CoreMax® Valve and CoreMax® Seat torqued together.



CoreMax® RQD / HVAC-R EXTERNAL SEALING CONNECTION TOOL

Connection tool to easily connect to CoreMax Access Port

CONNECTS TO:

CoreMax Access Port Seat, with or without CoreMax Valve installed



- 1** Sleeve latches RQD to CoreMax Access Port Seat before pressure is applied (by lifting handle) thus eliminating the high force to connect of a pressurized OEM SnapMate connector
- 2** Safety Latch feature prevents accidental disconnection when under pressure
- 3** Lever handle opens/closes valves to charge system. When closing, residual pressure is safely directed away from operator or can be recovered (see 6) in refrigerant applications
- 4** Ergonomic action eliminates repetitive twisting motion & possible operator injuries
- 5** Minimal maintenance required, main Seals are easy to replace.
- 6** Recovery Port versions support Zero Emission Processing
See pg.3 for more information on Zero Emission Processing

Part Number	Shut-Off Valve	Vents To
KA04CMAT		Atmosphere
KA04CMCH		Reclaim Port
KA04CMEV		Reclaim Port

SPECIFICATIONS

Pressure Rating	Operating Temperatures	Materials of Construction
Vacuum to 750 psi (52 bar)	-40°F to +250°F (-40°C to +121°C)	Stainless Steel/ Plastic Handle (Black Acetal)
Termination Port	Recovery Port	Seal Material*
3/8 NPT	1/8 NPT	Neoprene®

* Additional seal material types available, consult factory.

ACTUATION METHOD

Sleeve / Lever Handle: CoreMax RQD eliminates high force to connect under pressure!
Easy sleeve latch action is ergonomic and eliminates repetitive twisting and turning. Cam over lever handle easily opens valves, even when under pressure.

- 1 - Slide latch forward to connect to CoreMax Access Port Seat
- 2 - Lift handle to open valves
- 3 - Return handle to in-line position to close valves and vent (options to either vent to atmosphere or to recovery for Zero Emission Processing)

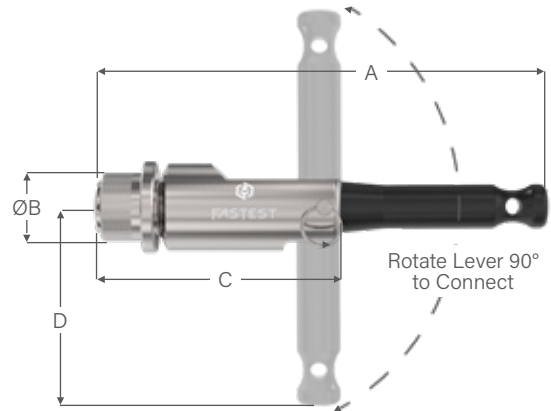
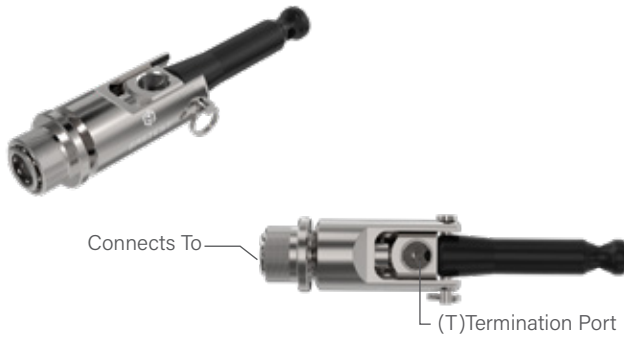
ICON™ TECHNOLOGY

Consult Factory

ACCESSORIES

Visit fastestinc.com

CoreMax[®] RQD / HVAC-R EXTERNAL SEALING CONNECTION TOOL

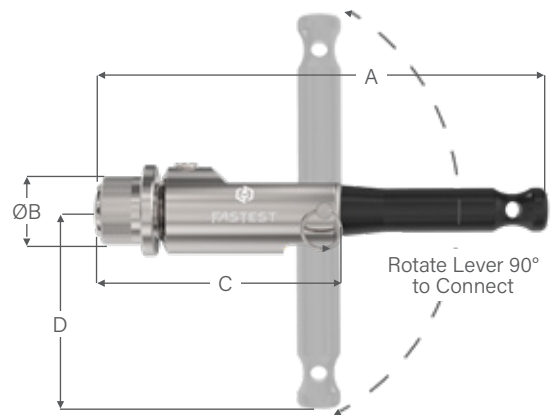
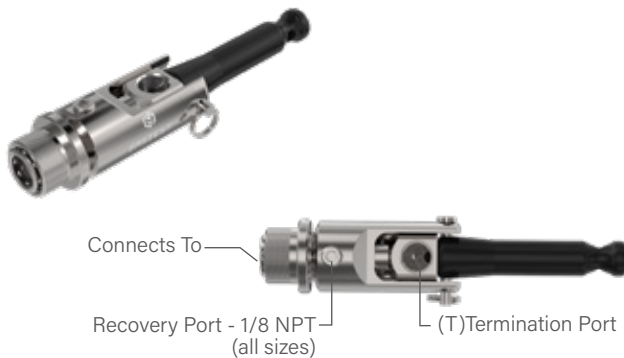


RQD (vent to atmosphere)

Ordering Information				Dimensions				
Connects To	Part	Replacement	Rebuild	A	B	C	D	T

RQD | Lever Action Style for CoreMax Access Ports

CoreMax RQD Tool w/Shut-Off Valve, Vent to Atmosphere	KA04CMAT	S20700334H70	RKA04CMAT	7.22 (183.4)	1.46 (37.1)	3.92 (99.6)	3.55 (90.2)	3/8 NPT
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RQD (with recovery port) See pg.3 for more information on Zero Emission Processing

Ordering Information				Dimensions				
Connects To	Part	Replacement	Rebuild	A	B	C	D	T

RQD | Lever Action Style for CoreMax Access Ports

CoreMax RQD Tool w/Shut-Off Valve, Vent to Recovery Port	KA04CMEV	S1016H70	RKA04CMEV	7.22 (183.4)	1.46 (37.1)	3.92 (99.6)	3.55 (90.2)	3/8 NPT
CoreMax RQD Tool NO Shut-Off Valve, Vent to Recovery Port	KA04CMCH	S1016H70	RKA04CMCH	7.22 (183.4)	1.46 (37.1)	3.92 (99.6)	3.55 (90.2)	3/8 NPT

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.

PROCESSING TOOLS

MBE Leak Test Tool

PN: SCM062W



APPLICATION

High flow connection tool with no flow restriction. Used to maximize flow through the seat.

- Ergonomic ball & sleeve action.
- Pressure interlock system will not disconnect under pressure.
- 3/8 NPT media port.
- Typically used in Leak/Burst Test Station.

SPECIFICATIONS

Pressure	10 millitorr (micron) vacuum to 700 psi (48.2 bar)
Flow	Ø 0.31" (7.9mm) nominal, Seat size dependent
Flow Rate	Pressure: 35+ SCFM (56.2 Nm³/hr), Seat size & pressure dependent.
Dimensions	2.00" (50.8mm) long x Ø 1.22" (31mm)
Material	Stainless steel, Brass, Neoprene*

OEM SnapMate Tool

PN: SCP062H



APPLICATION

Internal valve opens automatically upon connection and closes upon disconnection and has internal actuation pin to open CoreMax® Valve. Designed for OEM processing.

- Ergonomic push/pull sleeve action.
- Connector is internally valved that seals flow when disconnected.
- 3/8 NPT media port.
- Typically used in Evacuation and/or Charging Stations.

SPECIFICATIONS

Pressure	10 millitorr (micron) vacuum to 700 psi (48.2 bar)
Flow Diameter	Ø 0.21" (5.6mm) nominal
Flow Rate	Vacuum: 4.9 SCFM (7.9 Nm³/hr), Pressure: up to 30 SCFM (48.0 Nm³/hr), Seat size & pressure dependent.
Dimensions	3.4" (86.4mm) long x Ø 1.25" (31.8mm)
Material	Black Oxide steel, Brass, Neoprene*

MBE Leak Test Tool

PN: SCM062W0161Y



APPLICATION

High flow connection tool with no flow restriction. Used to maximize flow through the seat.

- Ball valve isolates the system.
- Pressure interlock system will not disconnect under pressure.
- 3/8 NPT media port.
- Typically used in Leak/Burst Test Station.

SPECIFICATIONS

Pressure	10 millitorr (micron) vacuum to 700 psi (48.2 bar)
Flow	Ø 0.31" (7.9mm) nominal, Seat size dependent
Flow Rate	Pressure: 35+ SCFM (56.2 Nm³/hr), Seat size & pressure dependent.
Dimensions	2.00" (50.8mm) long x Ø 1.22" (31mm)
Material	Stainless steel, Brass, Neoprene*

Valve Core Insertion Tool

PN: SCFT10

Use SCFTM01 Torque Wrench with 1/4" socket (CMFT375250DS) to tighten Valve Core into Seat.



APPLICATION

For high flow evac processing through the Seat only. Insert core after processing.

- Ergonomic ball & sleeve action.
- 3/8 NPT media port.
- Use as alternate to SCP06H at Evacuation for faster evacuation rate.

SPECIFICATIONS

Pressure	10 millitorr (micron) vacuum to 700 psi (48.2 bar)
Flow Diameter	Ø 0.31" (12.7mm) nominal, Seat size dependent
Flow Rate	Vacuum: up to 12.5 SCFM (7.9 Nm³/hr), Pressure: up to 35+ SCFM (56.2 Nm³/hr), Seat size & pressure dependent.
Dimensions	4.68" (119mm) long x Ø 1.22" (31mm)
Material	Stainless steel, Neoprene*

SERVICING TOOLS

SnapMate™ Service Tool

PN: SCTA07H

1/4" Hex, SCFTM01 Torque Wrench,
CMFT375250DS Socket



APPLICATION

Internally valved for refrigerant containment upon disconnection.

- Collet design locks securely into CoreMax® and common Schrader® valves with 1/4" 45° Flare with 7/16-20 thread
- 90° termination port for best ergonomics of small connection tool
- 3/8 NPT media port.

SPECIFICATIONS

Pressure	vacuum to 625 psi (43 bar)
Flow Diameter	Ø 0.21" (5.6mm) nominal
Flow Rate	Vacuum: 4.5 SCFM (7.2 Nm³/hr), Pressure: up to 26 SCFM (41.8 Nm³/hr), Seat size & pressure dependent.
Dimensions	0.93" (23.6) long x 1.94 (49.3)
Material	Stainless Steel, Brass

Removal/Replace Tool

PN: SCFT20A



APPLICATION

For removing and replacing CoreMax core when the system is under pressure. Twist out core, slide shaft back, close ball valve and remove back cap to access the core.

- Ergonomic ball & sleeve action.
- Shaft moves in and out to remove/insert core.

SPECIFICATIONS

Pressure	vacuum to 600 psi (41.4 bar)
Flow Diameter	N/A
Flow Rate	N/A
Dimensions	5.75" (146mm) long x Ø 1.55" (39.4mm) [Does not include Handle]
Material	Stainless steel, Brass, Steel, Teflon, Aluminum, Neoprene*

CoreMax® Torque Tools



Pistol Grip Electric Torque Gun Kit

PN: SCFTP0620

Pistol Grip Gun Only (SCFTP06)

NOTE: Kits include – Includes Gun, 2 Batteries (20V, 5 Ah), Charger, Drive Head & Programming



In-Line Electric Torque Gun Kit

PN: SCFTP0520

In-Line Gun Only (SCFTP05)

- 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 8 lb-ft (10.9 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

In-Line Electric Torque Gun Pre-programmed to CoreMax specifications of <200RPM and 8ft-lbs (10.9 N-m) torque

Note: Always apply counter-torque to Access Port Seat hex to prevent imparting stress to braze joint when torquing Plug and Dust Cap.

Torque Wrench Accessories

Torque Gun Type	Charger	Battery	Drive Head Assembly	Internal socket	Socket adapter
Pistol SCFTP06 (Includes, Gun (No Battery or Drive Head) & Programming)	 SCFTP05C	 SCFTP05B (Includes 1 Battery (20V, 5 Ah))	 SCFTP16	 5544A63 (3/8 Drive x 1/2" Deep Socket)	 SCFTP61 (1/4 Hex by 1/4 Drive)
In-Line SCFTP05 (Includes, Gun (No Battery or Drive Head) & Programming)			 SCFTP15		

Manual Torque Wrench



PN: SCFTM01

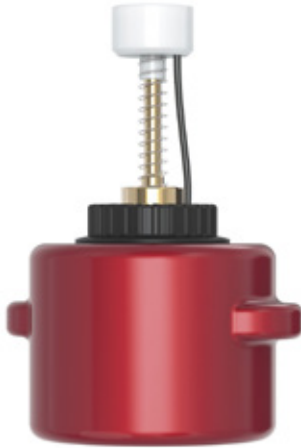
- Break away torque wrench pre-set to proper torque of 8ft-lbs (10.9 N-m)
- Manually twist wrench to pre-set torque



3/8" Drive x 1/4" Socket
CMFT375312DS

CoreMax® Accessories & Rebuild Kits

Oiler



PN: SCL321

- Custom nest to oil CoreMax core with overflow containment
- Reservoir has check valve to keep small amount of oil available for lubrication
- Oil containment keeps contaminants away and minimizes oil exposure to atmosphere
- Pump to fill reservoir

Core Valve Load Tool



PN: SCFTL10

- Use to properly install valve core (SCCA07H) into Core Insertion Tool (SCFT10) or Core Valve Removal Tool (SCFT20A) prior to making processing connection.

Rebuild Kits

Part Number	Rebuild Kits
SCPR50	2022 SnapMate OEM Rebuild Kit (components for 25 connectors)
SCPR10	Pre-2022 SnapMate OEM Rebuild Kit (components for 25 connectors)
SCRA07H	SnapMate Service Tool rebuild, 50 main and 25 internal seals
SCFTR10	Core Insertion Repair, 10 Repairs
SCFTR20A	Core Removal Repair, 1 Repair

Bulk Seals

Part Number	Bulk Seals
SCPB10	SnapMate OEM, 50 Main Seals
SCBA07H	SnapMate Service Tool, 50 Main Seals
SCFTB	MBE, Core Insertion, Core Removal, 20 Main Seals