

## Cone Closure Tubing Reactors

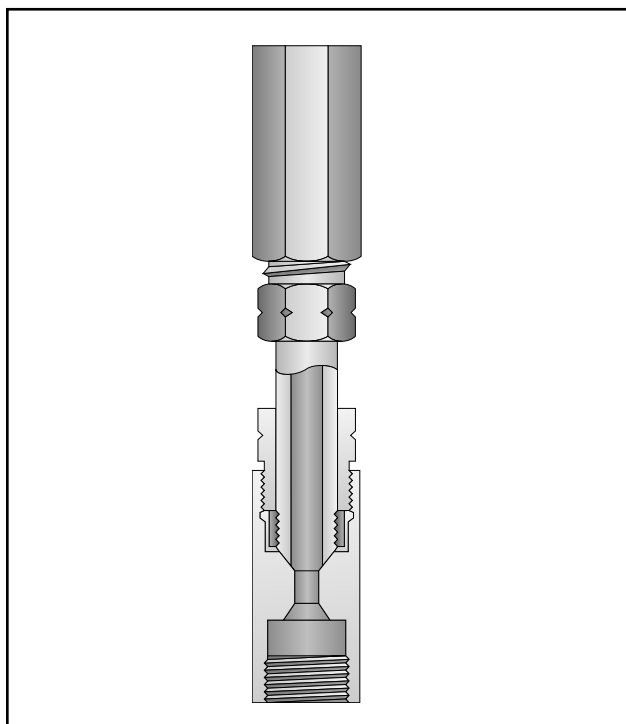
### At a Glance

Volumes:	1.81 ml - 5.43 ml
*MROP:	Up to 60,000 psi @ RT
Material of Construction:	316 SS

\*Maximum Recommended Operating Pressure

### Principle of Operation

Autoclave Engineers offers a 3/16" I.D. series of convenient, versatile and economical micro-reactors. Each are assembled from standard, readily available AE High Pressure tubing nipples and connection components. Applicable to many low-volume laboratory reaction studies, they provide the proven reliability of AE coned-and-threaded connections.



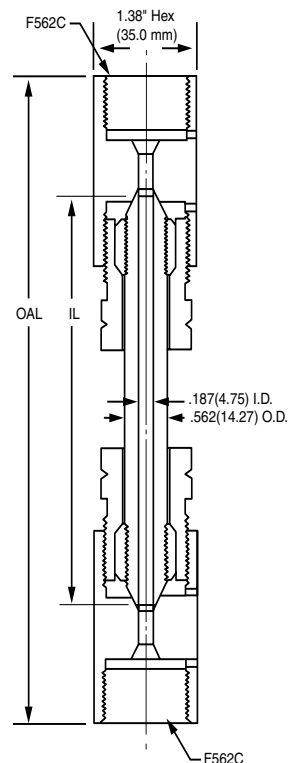
### Series CC \_\_\_ SS60 Tubing Reactors

- Type 316 SS tubing body with Type 316 SS couplings collars and glands.
- Accepts standard 9/16" (14.3 mm) AE High Pressure Connection Components
- Includes plug and gland on each end. (Not shown)
- Rated per ANSI / ASME B31.3

### Specifications and Order Numbers

Complete Assembly	CC.181SS60		CC.271SS60		CC.362SS60		CC.452SS60		CC.543SS60	
Nominal Capacity	1.81 ml		2.71 ml		3.62 ml		4.52 ml		5.43 ml	
Dimensions: Inches	IL	OAL	IL	OAL	IL	OAL	IL	OAL	IL	OAL
	4.00	6.75	6.00	8.75	8.00	10.75	10.00	12.75	12.00	14.75
	(102)	(171)	(152)	(222)	(203)	(273)	(254)	(324)	(305)	(375)

Temperature	Maximum Operating Pressure
-20 to 100° F (-29° - 38° C)	60,000 psi (4137 bar)
200° F (93° C)	56,800 psi (3916 bar)
400° F (204° C)	51,650 psi (3561 bar)
600° F (316° C)	51,000 psi (3516 bar)
800° F (427° C)	48,450 psi (3340 bar)



## Cone Closure Tubing Reactors

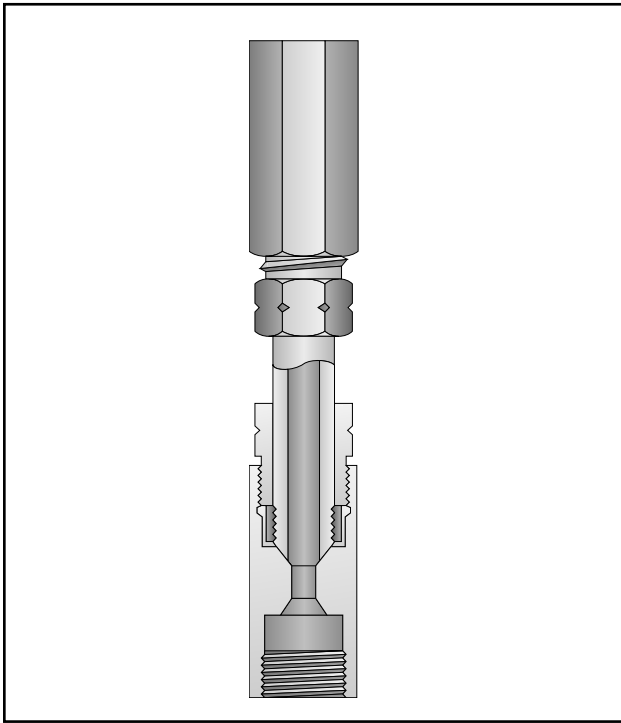
**At a Glance**

Volumes: 5.03 ml - 15.1 ml  
 \*MROP: Up to 20,000 psi @ RT  
 Material of Construction: 316 SS

\*Maximum Recommended Operating Pressure

### Principle of Operation

Autoclave Engineers offers a 5/16" I.D. series of convenient, versatile and economical micro-reactors. Each are assembled from standard, readily available AE SlimLine Medium Pressure tubing nipples and connection components. Applicable to many low-volume laboratory reaction studies, they provide the proven reliability of AE coned-and-threaded connections.



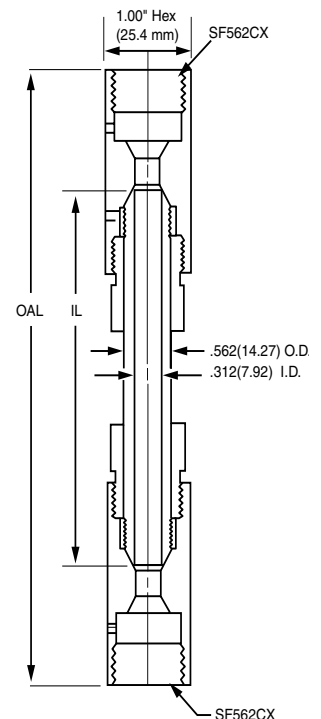
### Series CC \_\_\_ SS20 Tubing Reactors

- Type 316 SS tubing body with Type 316 SS couplings collars and glands.
- Accepts standard 9/16" (14.3 mm) AE SlimLine connections.
- Includes plug and gland on each end.
- Rated per ANSI/ASME B31.3

### Specifications and Order Numbers

Complete Assembly	CC.503SS20		CC.754SS20		CC1.01SS20		CC1.25SS20		CC1.51SS20	
Nominal Capacity	5.03 ml		7.54 ml		10.1 ml		12.5 ml		15.1 ml	
Dimensions: Inches	IL	OAL	IL	OAL	IL	OAL	IL	OAL	IL	OAL
	4.00	6.50	6.00	8.50	8.00	10.50	10.00	12.50	12.00	14.50
	(102)	(165)	(152)	(216)	(203)	(267)	(254)	(318)	(305)	(368)

Temperature	Maximum Operating Pressure
-20 to 100° F (-29 - 38° C)	20,000 psi (1379 bar)
200° F (93° C)	18,950 psi (1306 bar)
400° F (204° C)	17,200 psi (1185 bar)
600° F (316° C)	17,000 psi (1172 bar)
800° F (427° C)	16,150 psi (1113 bar)



## Cone Closure Tubing Reactors

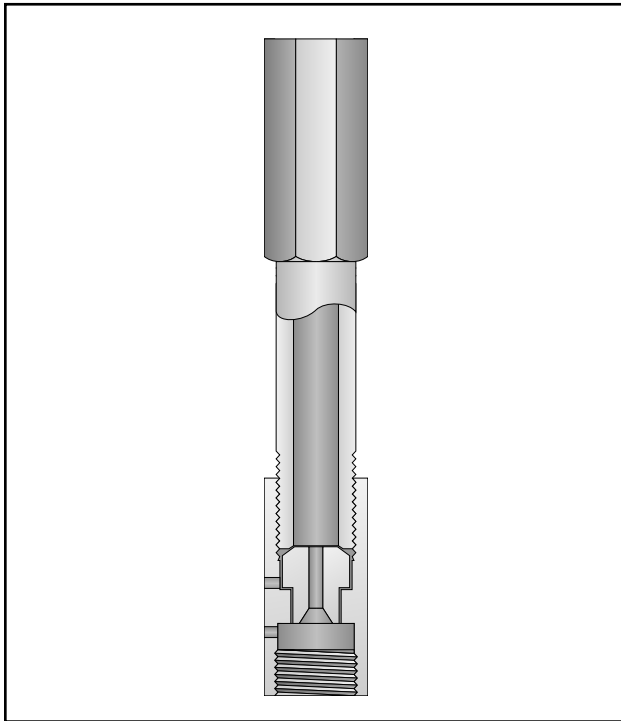
### At a Glance

Volumes:	9.85 ml - 45.5 ml
*MROP:	Up to 20,000 psi @ RT
Material of Construction:	316 SS

\*Maximum Recommended Operating Pressure

### Principle of Operation

Autoclave Engineers offers a 7/16" I.D. series of convenient, versatile and economical micro-reactors. Each are assembled from custom manufactured tubing, nipples and standard connection components. Applicable to many low-volume laboratory reaction studies, they provide the proven reliability of AE coned-and-threaded connections.



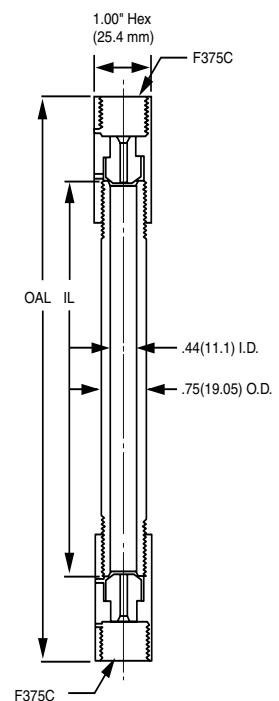
### Series CC \_\_\_ SS20 Tubing Reactors

- Type 316 SS tubing body, couplings and covers.
- Accepts standard 3/8" (9.53 mm) AE High Pressure connections.
- Includes plug and gland on each end.
- Rated per ANSI/ASME B31.3

### Specifications and Order Numbers

Complete Assembly	CC.985SS20		CC1.96SS20		CC2.94SS20		CC3.92SS20		CC4.55SS20	
Nominal Capacity	9.85 ml		19.6 ml		29.4 ml		39.2 ml		45.5 ml	
Dimensions: Inches	IL	OAL	IL	OAL	IL	OAL	IL	OAL	IL	OAL
	3.88	6.56	7.88	10.56	11.88	14.56	15.88	18.56	18.38	21.06
	(986)	(167)	(200)	(268)	(302)	(370)	(403)	(471)	(467)	(535)

Temperature	Maximum Operating Pressure
-20 to 100° F (-29° - 38° C)	20,000 psi (1379 bar)
200° F (93° C)	20,000 psi (1379 bar)
400° F (204° C)	19,250 psi (1327 bar)
600° F (316° C)	18,200 psi (1254 bar)
800° F (427° C)	16,800 psi (1158 bar)



## Ordering Guide

CC Cone Closure	.503 Capacity in ml x 10	SS Stainless Steel (316) XX - other materials available (consult factory)	20 Operating Pressure in psi (bar) @ room temperature
	.181 - 1.81 ml		
	.271 - 2.71 ml		20 - 20,000 (1379)
	.362 - 3.62 ml		
	.452 - 4.52 ml		60 - 60,000 (4138)
	.503 - 5.03 ml		
	.543 - 5.43 ml		
	.754 - 7.54 ml		
	1.01 - 10.1 ml		
	1.25 - 12.5 ml		
	1.51 - 15.1 ml		
	.985 - 9.85 ml		
	1.96 - 19.6 ml		
	2.94 - 29.4 ml		
	3.92 - 39.2 ml		
	4.55 - 45.5 ml		

## Supporting Information

Controls: (See Instrumentation Selection of this catalog) (IN-SG)  
Valves, Fittings & Tubing: (See VFT Catalog)

## Features & Other Available Options

- Connections can be adapted to different sizes
- Other materials of construction available
- Furnaces
- Special lengths up to 22' available
- Contact factory to discuss your special requirements

**Autoclave Engineers** 

Division of Snap-tite, Inc.

8325 Hessinger Road  
Erie, Pennsylvania 16509-4679 USA  
PH: 814-860-5700 FAX: 814-860-5811  
e-mail: [aeclave\\_sales@snap-tite.com](mailto:aeclave_sales@snap-tite.com)  
[www.autoclaveengineers.com](http://www.autoclaveengineers.com)

**ISO-9001:2000 Certified**

06-0001SE-0700



### ! WARNING !

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE.

*This document and other information from Snap-tite, Inc., its subsidiaries and authorized distributors, provides product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operation conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.*

*The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Snap-tite, Inc. and its subsidiaries at any time without notice.*

Bulletin PV - CC