

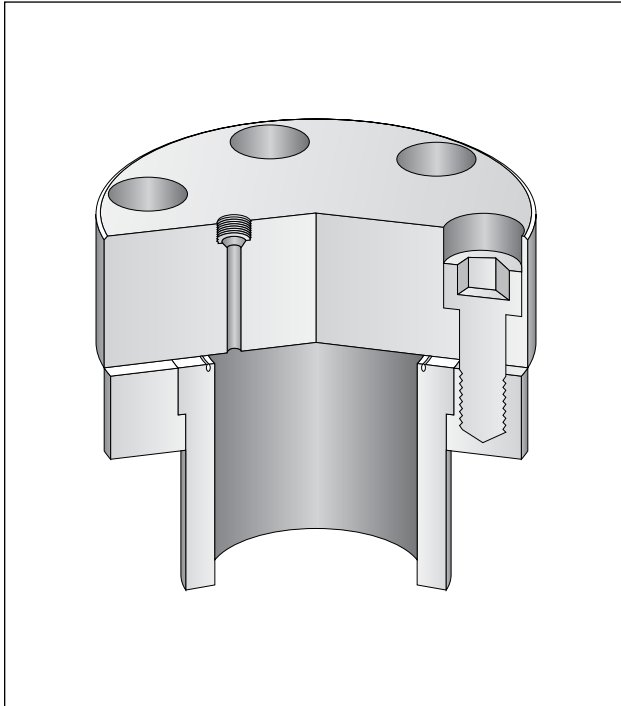
## EZE-Seal Pressure Vessels

### At a Glance

Volumes: 60 ml to 1000 ml  
 MAWP: 1,100 psi @ 850 °F (76 bar @ 454 °C)  
 or  
 3,300 psi @ 850 °F (228 bar @ 454 °C)  
 Material of Construction: 316 Stainless Steel

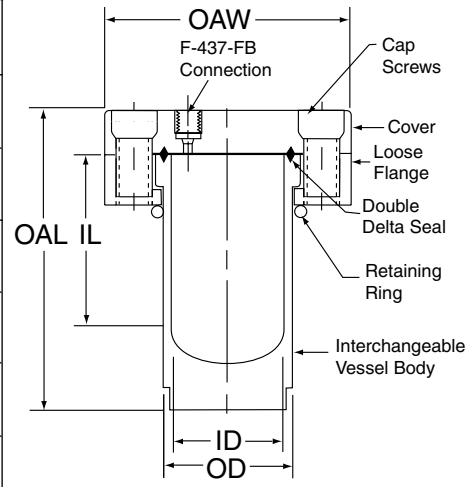
### Principle of Operation

The Autoclave Engineers' EZE-Seal design consists of a two piece, loose flange designed for ease of assembly and flexibility. The design features a unique, reusable Double Delta metal-to-metal seal, designed to permit easy closing of the vessel assembly because of substantially reduced torque requirements. The seal ring is silver plated, providing a layer of lubrication between sealing surfaces and allowing for cost effective multiple resealings. O-rings can be used as an alternative to the metal seal for lower temperatures and where reactant properties permit.



### Specifications and Part Numbers

Model Drawing#	† MAWP @850 °F (454 °C)	Nominal Capacity	Dimensions-inches (mm)				
			ID	OD	IL	OAL	OAW
DD006SS01 30A-5293	1100	60 ml	1.00 (25)	2.06 (52)	2.77 (71)	5.44 (138)	3.94 (100)
DD013SS01 30A-5282	1100	135 ml	1.81 (46)	2.06 (52)	2.75 (70)	5.44 (138)	3.94 (100)
DD030SS01 30A-5283	1100	300 ml	1.81 (46)	2.06 (52)	6.69 (170)	9.31 (237)	3.94 (100)
DD006SS03 30A-5294	3300	60 ml	1.00 (25)	2.31 (59)	2.77 (71)	5.65 (144)	4.19 (106)
DD013SS03 30A-5284	3300	135 ml	1.81 (46)	2.31 (59)	2.75 (70)	5.65 (144)	4.19 (106)
DD030SS03 30A-5285	3300	300 ml	1.81 (46)	2.31 (58)	6.69 (170)	9.50 (241)	4.19 (106)
DD050SS03 30A-5288	3300	500 ml	3.00 (76)	3.78 (96)	4.38 (111)	8.19 (208)	6.18 (157)
DD100SS03 30A-5289	3300	1000 ml	3.00 (76)	3.78 (96)	8.72 (222)	12.31 (313)	6.18 (157)



\* Note: 60 ml body is spiral grooved for use with optional external cooling coil.  
 † Maximum operating pressure is 10% lower than MAWP.

**Vessel Interchangeability:** 60 ml, 135 ml, and 300 ml bodies rated for 1,100 psi (76 bar) are interchangeable.  
 60 ml, 135 ml, and 300 ml bodies rated for 3,300 psi (228 bar) are interchangeable.  
 500 ml and 1000 ml bodies are interchangeable.

## MAWP vs. Temperature Ratings

Model	Nominal Capacity	°F °C	-20 to 100° (-29 to 37.8°)	200° (93°)	300° (148°)	400° (204°)	500° (260°)	600° (315°)	650° (343°)	700° (371°)	750° (398°)	800° (426°)	850° (454°)	900° (482°)	950° (510°)	1000° (537°)	1050° (565°)	1100° (593°)
DD006SS01 DD013SS01 DD030SS01	60 ml 135 ml 300 ml	psi (bar)	1175 (81)	1175 (81)	1150 (79)	1150 (79)	1125 (78)	1075 (74)	1050 (72)	1025 (71)	1025 (71)	1000 (69)	1000 (69)	925 (64)	750 (52)	600 (41)	425 (29)	275 (19)
DD006SS03 DD013SS03 DD030SS05 DD050SS03 DD100SS03	60 ml 135 ml 300 ml 500 ml 1000 ml	psi (bar)	3250 (224)	3250 (224)	3250 (224)	3175 (219)	3175 (219)	3175 (219)	3175 (219)	3100 (214)	3075 (212)	3025 (209)	3000 (207)	2800 (193)	2300 (159)	1800 (124)	1275 (88)	625 (43)

## Optional O-Ring Chart

Material	Max Temp °F (°C)
Buna N	250° (121°)
EPR	300° (149°)
Silicone	400° (204°)
*Viton®	450° (232°)
PTFE Encapsulated *Viton®	450° (232°)
*Kalrez®	500° (260°)

\* Products are registered trademarks of Dupont Dow Elastomers.

## Model Ordering Code

<b>DD</b>	<b>006</b>	<b>SS</b>	<b>01</b>
DD	Capacity in ml	Material of Construction	Pressure psi (bar)
EZE-Seal	60 ml 135 ml 300 ml 500 ml 1000 ml	SS - Stainless Steel (316) HC - Hastelloy® C276 IN - Inconel 600	01 - 1000 (76) 03 - 3000 (207)

\* Hastelloy® is a registered trademark of Haynes International, Inc.

## Features & Other Available Options

- Connection can be adapted to different sizes
- Multiple connections
- Other materials of construction
- Bodies are interchangeable as stated above
- Heaters and furnaces
- Stands (bench or floor style)
- Cooling internal and external

## Supporting Information

MagneDrives®: (See Agitation section of this catalog)(AG-SG)  
 Controls: (See Instrumentation section of this catalog)(IN-SG)  
 Complete Systems: (See Stirred Reactor Systems section of this catalog) (SR-SG)  
 Valves, Fittings & Tubing: (See VFT Catalog)

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Bulletin PV -EZE