

Floor Stand Zipperclave® Reactors

500ml & 1000ml - ID = 3.00" (76mm)
2000ml & 4000ml - ID = 5.00" (127mm)

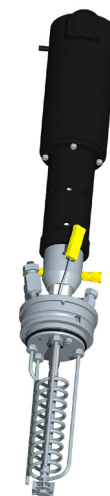


Principle of Operation:

The Parker Autoclave Engineers' ZipperClave® Reactor has been designed to provide the researcher with a reliable quick-opening closure. The main seal of the reactor is an O-ring available in many different materials. The 500 ml, and 1000 ml share the same cover design as well as the 2,000 ml and 4,000 ml units are identical in design except for the depth of the reactor. Many combinations of standard components are available. The cover of the unit remains fixed in the stand to permit opening of the vessel without disassembling any process connections. The body is easily removed and drops away from the cover.

General Specifications:

Maximum Allowable Working Pressure: (MAWP)
2,200 psi @ 450°F (151 Bar @ 232°C) Note
Maximum Recommended Operating Pressure:
1,900 psi @ 350°F (131 Bar @ 176°C)
Material of Construction:
316 Stainless Steel
Hastelloy® C

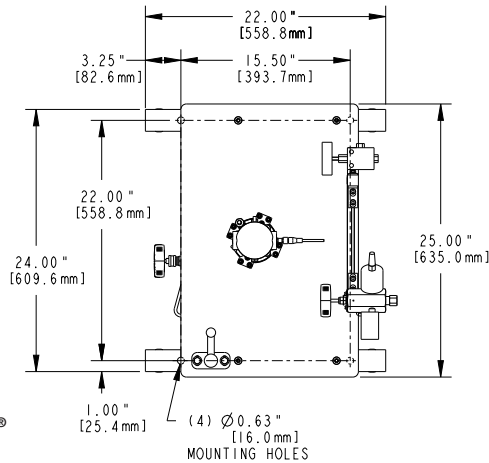


1000 ml Zipperclave® Reactor
Internals

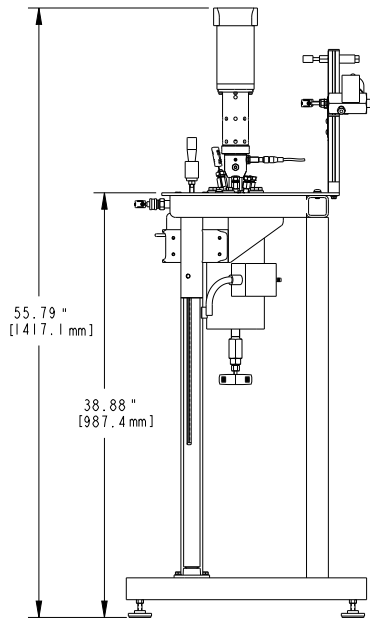
Standard/Optional Unit Features:

- Electric heater with over-temperature thermocouple and easy body removal
- Floor stand with swing-away body lift
- Process thermocouple (Type K)
- Process Cooling Coil
- Liquid sample tube with valve
- Gas inlet valve
- Vent valve with pressure gauge/transducer and safety rupture disc (0-3000 PSI gauge, 0-5000 PSI, 24VDC, 4-20mA pressure transducer)
- F437FB (.195" ID) Charging Port (see Charging Port Option if needed)
- Optional: Mini flush valve
- Optional: CE mark
- Optional: 500/1000, and 2000/4000 ml companion volumes with common closure geometry
- Optional: Elastomer seal for lower temperature operation
- Optional: i2Mag in-line MagneDrive with 1/3 hp motor speed sensor with Dispersimax impeller

Drawing Details:



1000ml Zipperclave®



Ordering Information:

Part Number Example	PH-Z	400	SS	—	MM	NS	—	XP
Category		1	2		3	4		5

Example: PH-Z400SS-MMNS-XP

Description: 4000 ml Zipperclave® Reactor, 316 Stainless Steel, With Drive, No Code Requirement with Explosion Proof Option

1 - Vessel Volume Code	
050	500 ml
100	1000 ml
200	2000 ml
400	4000 ml

2 - Vessel Material Code	
SS	316 Stainless Steel
HC	Hastelloy® C

3 - Mixer Code	
NS	No Mixer (port plugged)
MM	In-Line Magnedrive Mixer (w/Dispersimax Impeller - pg. 31)

4 - Pressure Code Requirement (unit voltage)	
NS	None (240 VAC)
CE	CE Mark (240 VAC)
NE	Export with CRN (240 VAC)

5 - Explosion Proof (option)	
XP	Explosion proof with slip-on jacket and air motor

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

Note The user should be aware that the 450°F (232°C) vessel temperature rating is the maximum mean wall temperature of the vessel, as defined by the ASME B&PV Code. Many variables can affect the thermal capabilities of the vessel. These factors can include, but are not limited to, the use of insulation, whether the process is batch or continuous flow, or even a chemical process itself. These factors may have bearing on heat up rate, maximum process temperature, and the cool down rate of the reactor. These factors should be considered by the user when purchasing a system in order to verify that the equipment will reach desired operating temperature in a reasonable time period. Please consult Parker Autoclave Engineers if assistance is required.

Optional Feature Kits/Spare Parts

(purchased separately but assembled as part of purchased Reactor if required)

- Soft Seat Vessel Closure Seal Kits
- Magnedrive Bearing Option Kits
- Internal Tube Kits
- Process Cooling Component Kits
- Solid or Liquid Catalyst Charging Kit
- Tool Kits (matched to vessel type)
- Flush Valve Kit

For complete description of kit contents please see pages 16-19

Universal Reactor Controller (URC)

We recommend that our Reactors be operated using our URC-II control package. It provides an interface to control and monitor heater & process temperature, Magnedrive speed, and Pressure. See page 41 for information on ordering the URC-II controller.