

Series Number:

# 4560

Type:  
**Mini**

Stand:  
**Bench Top**

Mounting Style:  
**Moveable or  
Fixed Head**

Vessel Sizes, mL:  
**100 - 600**

Standard Temperature  
MAWP Rating, psi (bar):  
**3000 (207)**

High Temperature (HT)  
MAWP Rating, psi (bar):  
**2000 (138)**

Standard Maximum  
Operating Temp., °C:  
**225 w/ FKM O-ring  
300 w/ FFKM O-ring  
350 w/ PTFE Flat Gasket**

High Temperature (HT)  
Maximum Operating  
Temperature, °C:  
**500 w/ FG Flat Gasket**

## Series 4560 Mini Reactors, 100-600 mL

**These are the most popular of all Parr Stirred Reactors.** Although they are called “Mini” reactors, they offer a range of sizes large enough to work with significant sample sizes, yet small enough to be handled with ease.

They are offered in both fixed head and moveable vessel styles and are available with an FKM O-ring seal for operating temperatures to 225 °C, an FFKM O-ring for temperatures to 300 °C, or with a flat, PTFE gasket for operating temperatures to 350 °C.

Choosing the high temperature option (HT) boosts the maximum temperature to 500 °C, but reduces the MAWP to 2000 psi (138 bar). Standard Mini reactors can be converted to high temperature reactors (500 °C max temperature and 2000 psi MAWP) by changing the head assembly (contains cone connections, high temperature valves, and graphoil gasket) replacing the heater with a ceramic fiber heater and replacing the split-ring. Contact Parr Instrument Company for details.



**4566 Bench Top Mini Reactor, 300 mL, Fixed Head, Drop-Band Split-Ring, and a 4848 Controller shown with optional Expansion Modules.**

Although internal and external space is limited in these small vessels, gas entrainment impellers, catalyst baskets, condensers and other options are available. All reactors in this series can also be easily converted from one size to another by simply substituting a longer or shorter cylinder with the corresponding internal fittings and heaters.

The support system for these Mini Reactors is designed specifically to provide stability at stirring speeds up to 1700 rpm, in a compact mounting small enough to fit into a laboratory hood. The support system can also be adapted to accept any of the smaller vessels from the 4590 Micro Reactor Series.

**4560 Reactor Vessels from left to right, 300 mL, 100 mL, 450 mL, 160 mL, and 600 mL.**



## 4560

Series 4560 Pressure Reactor System Specifications											
Shaded bar indicates specifications that change within series.											
Model Number	4561	4562	4563	4564	4565	4566	4567	4568	4566B	4566C	
Approximate Volume, mL	300	450	600	160	100	300	450	600	160	100	
Maximum Pressure (MAWP)	3000 psi (207 bar, 200 bar for CE orders)										
HT Max. Pressure (MAWP)	2000 psi (138 bar)										
<b>Maximum Temperature</b>											
with FKM O-ring	225 °C										
with FFKM O-ring	300 °C										
with PTFE Flat Gasket	350 °C										
with Flexible Graphite Flat Gasket (HT)	500 °C			N/A		500 °C			N/A		
<b>Reactor Details</b>											
Mounting Style	Moveable					Fixed Head					
Stand Type	Bench Top										
Closure	Split-Ring (6 Compression Bolts for Flat Gasket, no Compression Bolts for O-ring)										
Valve Connections	1/8" NPT Male										
Magnetic Stirrer, Model No.	A1120HC6										
Maximum Torque	16 Inch-Pounds										
Impeller(s), 4-Blade, 1.38" dia.	1	1	2	1	1	1	1	2	1	1	
Stirrer Motor	1/8 hp variable speed										
Pressure Gage, Size	3.5 inches										
Range, Standard Temperature	0-3000 psi (207 bar)										
Range, High Temperature	0-2000 psi (138 bar)										
Temperature Measurement	Fixed Thermocouple (Thermowell for special alloys)										
Cooling Coil	Included			Not Included			Included			Not Included	
Style	Single Loop (Optional Serpentine Style)										
Bottom Drain Valve, optional	1/4" NPT (Not available on HT Models)										
<b>Heater Style</b>	Mantle			Clamp-on			Mantle			Clamp-on	
Heater Power, Watts	510	590	780	525			510	590	780	525	
Heater Style w/ HT Option	Ceramic Fiber			N/A			Ceramic Fiber			N/A	
Heater Power, Watts	800	800	1100	N/A			800	800	1100	N/A	
<b>Electrical Supply</b>											
Volts, AC	115 / 230										
Maximum Load, amps, 115 / 230	7 / 4 (10 / 5 High Temperature)										
<b>Cylinder Dimensions</b>											
I.D x Depth, inches	2.5 x 4.0	2.5 x 6.0	2.5 x 8.0	2.5 x 2.0	2.1 x 2.0	2.5 x 4.0	2.5 x 6.0	2.5 x 8.0	2.5 x 2.0	2.1 x 2.0	
Vessel Assembly Weight, pounds	17	21	21	17	18	18	21	22	18	19	
Weight of Cylinder, pounds	3.7	4.9	6.2	2.4	3.3	3.7	4.9	6.2	2.4	3.3	
<b>Reactor Dimensions</b>											
Width x Depth w/o Controller, inches	12 x 18										
Height, inches	28	32	36	28	28	28	32	36	28	28	
Weight, pounds	60	63	66	60	60	62	65	68	60	60	
<b>Spare Parts Kit</b>	4569M (4569HT for High Temperature)										
Other options available. See Ordering Guide, visit <a href="http://www.parrinst.com">www.parrinst.com</a> , or call for more information. Weights and dimensions are estimated from the base model. Final weights and dimensions will vary based on options selected.											