# 4570/80

High Temperature / **High Pressure** 

Stand:

Bench Top, Floor Stand or Cart

Mounting Style:

Moveable or Fixed Head

Vessel Sizes, mL: 250-5500

Standard Pressure MAWP Rating, psi (bar): 4570: 5000 (345)

4580: 3000 (207)

Maximum Operating Temperature, °C:

500 w/FG Flat Gasket

### Series 4570/80 HP/HT Reactors, 250-5500 mL

Parr offers a number of different reactors in the 4570 and 4580 Series in a variety of sizes and with different mountings for operating pressures to 5000 psi (345 bar) and temperatures to 500 °C.

#### 4571 - 4572 Reactors

These are 1000 and 1800 mL moveable head reactors mounted in moveable carts.

#### 4577 - 4578 Reactors

These are 1000 and 1800 mL fixed head reactors mounted on a floor stand with pneumatic lift.

#### 4575 - 4576A Reactors

These are 500 and 250 mL bench top reactors with 5000 psi (345 bar) and 500 °C ratings. They are available as either moveable or fixed head vessels.

#### 4581 - 4582 Reactors

These 1 gallon (3.75 L) and 1.5 gallon (5.5 L) reactors are designed for 3000 psi (207 bar) maximum pressure with a 500 °C maximum working temperature and mounted on moveable carts.

#### 4583 - 4584 Reactors

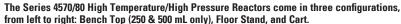
These are 1 gallon (3.75 L) and 1.5 gallon (5.5 L) fixed head reactors mounted on floor stands with pneumatic lift.

All of these reactors have been designed with suitable valves, fittings and modifications

to the vessel itself to operate at the higher temperature and pressure ratings.

Flat, flexible graphite (FG) gaskets are used for temperatures in the higher range to 500 °C. These can be replaced with PTFE gaskets for procedures in which the temperature will not exceed 350 °C.







Model 4578 High Temperature/High Pressure Reactor, Floor Stand, 1800 mL, Fixed Head, with Heater and Pneumatic Lift.

## 4570/80

Shaded bar indicates specifications that change	within series.						
Model No. – Moveable Vessel	4571	4572	4581	4582	4575B	4576B	
Model No. – Fixed Head	4577	4578	4583	4584	4575A	4576A	
Approximate Volume, mL	1000	1800	3750	5500	500	250	
Maximum Pressure, MAWP	5000 psi (345 bar)		3000 psi (207 bar, 200 bar for CE orders)		5000 psi (345 bar)		
Maximum Temperature							
with Flexible Graphite Flat Gasket			50	0 °C			
Reactor Details							
Stand Type	Cart / Flo	Cart / Floor Stand		Cart / Floor Stand		Bench Top	
Closure (Compression Bolts)		Split-Ring (12 Compression Bolts for Flat Gasket)		Split-Ring (16 Compression Bolts for Flat Gasket)		Split-Ring (8 Compression Bol for Flat Gasket)	
Valve Connections		1/4" NPT Female					
Magnetic Stirrer, Model No.	A1120HC		A1180HC		A1120HC		
Maximum Torque	16 Inch-Pounds		60 Inch-Pounds		16 Inch-Pounds		
Impeller(s), 6-Blade (4-blade)	2 (2" dia.)		2 (3.5" dia.)		2 (.81" / 1.38" dia.)		
Stirrer Motor, Variable Speed	1/4	1/4 hp 1/2 hp		1/8 hp			
Pressure Gage, Size	4.5 inches						
Range	0-5000 psi (345 bar)		0-3000 psi (207 bar)		0-5000 psi (345 bar)		
Temperature Measurement	Thermowell						
Cooling Coil	Included						
Style	Serpentine		Serpentine		Single Loop		
Bottom Drain Valve	1" NPS (Floor stand supports only)						
Heater Style	Calrod: Fixed Head, Ceramic: Removeable						
Heater Power, Watts	28	2800 2800		1800	1400		
Electrical Supply							
Volts, AC	230		230		115 / 230		
Maximum Load, amps, 115 / 230	15		15		9 / 15		
Cylinder Dimensions							
Inside Diameter, inches	3.75 x 6.2	3.75 x 10.5	5.5 x 9.7	5.5 x 15.1	2.5 x 6.6	2.5 x 3.2	
Moveable Vessel Assembly Weight, pounds	83	100	124	143	44	38	
Fixed Vessel Assembly Weight, pounds	92	109	136	155	44	38	
Cylinder Weight, pounds	36	52	53	72	15	9	
Reactor Dimensions							
Moveable Width x Depth x Height, in.	Cart: 35	Cart: 35 x 18 x 50		Cart: 35 x 18 x 50		Bench Top: 17 x 24 x 42	
Fixed Width x Depth x Height, in.	Floor Stand	Floor Stand: 20 x 31 x 75		Floor Stand: 20 x 31 x 75			
Moveable Weight, pounds	245	265	325	355	125	120	
Fixed Weight, pounds	265	285	345	375	127	122	
Spare Parts Kit	457	79M	458	89M	457	'9M	

Other options available. See Ordering Guide, visit <u>www.parrinst.com</u>, or call for more information. Weights and dimensions are estimated from the base model. Final <u>weights and dimensions</u> will vary based on options selected.