

Series Number:

4550

Type:
General Purpose

Stand:
Floor Stand or Cart

Mounting Style:
Moveable or Fixed Head

Vessel Sizes, Gallons (Liters):
1 (3.75) and 2 (7.99)

Standard Pressure
MAWP Rating, psi (bar):
1900 (131)

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

Series 4550 Floor Stand Reactors, 1 & 2 Gallon

These 4550 Reactors extend the size range of the 4530 Series

to 1 and 2 gallon (3.75 and 7.99 liter) sizes, providing excellent options for pilot plant studies.

These reactors are available with an FKM O-ring seal for operating temperatures to 225 °C, and FFKM O-ring for temperatures to 300 °C, or with a flat, PTFE gasket for operating temperatures up to 350 °C maximum.

Both fixed head and moveable head designs are available. The moveable head, Model 4551 and 4552, cart reactors are designed so that they can be opened or closed conveniently without removing the cylinder from the heater and without auxiliary handling equipment. The split-ring sections can be moved into place from the sides, and the compression bolts can be tightened with the vessel in place in its heater. The fixed head versions, Model 4553 and 4554, allow the head (and the connections made to it) to remain in place while the cylinder and heater are lowered with the aid of the included pneumatic lift system.

The 1 gallon size is usually recommended for high viscosity polymer studies. An optional bottom drain valve may be added for convenient product recovery. As with the smaller floor stand models, these larger, self-contained systems can be equipped with a variety of attachments, such as condensers, solids charging ports, bottom drain valves, special motors, custom heaters, jacketed vessels and automatic valves and regulators. Because of the higher wattage heaters for these reactors, all models in the 4550 Series require a 230 volt power supply.



Model 4554 Floor Stand Reactor, Two Gallon, Fixed Head, Pneumatic Lift, Hinged Split-Rings, opened to show Internal Fittings and Serpentine Cooling Coil, with 4848 Reactor Controller shown with optional Expansion Modules.

4550

Series 4550 Pressure Reactor System Specifications				
Shaded bar indicates specifications that change within series.				
Model Number	4551	4552	4553	4554
Approximate Volume, Gallon (Liter)	1 (3.75)	2 (7.99)	1 (3.75)	2 (7.99)
Maximum Pressure (MAWP)	1900 psi (131 bar)			
Maximum Temperature				
with FKM O-ring	225 °C			
with FFKM O-ring	300 °C			
with PTFE Flat Gasket	350 °C			
Reactor Details				
Mounting Style	Moveable		Fixed Head	
Stand type	Moveable Cart		Floor Stand	
Closure	Split-Ring (10 Compression Bolts for Flat Gasket, No Compression Bolts for O-ring)			
Valve Connections	1/4" NPT Male			
Magnetic Stirrer, Model No.	A1180HC General Purpose or A2160HC Footless			
Maximum Torque	60 Inch-Pounds			
Impeller(s), 6-Blades	2 (3.85" dia.)			
Stirrer Motor	1/2 hp variable speed			
Pressure Gage, Size	4.5 inches			
Range	0-2000 psi (138 bar)			
Temperature Measurement	Thermowell			
Cooling Coil (optional)	Serpentine			
Bottom Drain Valve (BDV) (optional)	3/8" NPT			
Lift Mechanism (optional)	N/A		Pneumatic	
Heater Style	Calrod			
Heater Power, Watts	2250	2700	2250	2700
Electrical Supply				
Volts, AC	230			
Maximum Load, amps, 230	13	15	13	15
Cylinder Dimensions				
I.D. x Depth, inches	6.0 x 8.6	6.0 x 17.2	6.0 x 8.6	6.0 x 17.2
Vessel Assembly Weight, pounds	96	116	111	131
Cylinder Weight, pounds	33	52	33	52
Reactor/Stand Dimensions				
Width x Depth w/o Controller, inches	35 x 18		20 x 31	
Height, inches	50		75	
Weight, pounds	265	295	315	345
Spare Parts Kit	4559M			
Other options available. See Ordering Guide, visit www.parrinst.com , or call for more information. Weights and dimensions are estimated from the base model. Final weights and dimensions will vary based on options selected.				