

Series Number:

4530

Type:
General Purpose

Stand:
Floor Stand or Cart

Mounting Style:
Moveable or Fixed Head

Vessel Sizes, mL:
**1000-2000 Standard
970-1900 HP**

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**

High Pressure (HP)
MAWP Rating, psi (bar):
2900 (200)

Maximum Operating
Temperature, °C, at
High Pressure (HP):
350 @ 2900 psi

Series 4530 Floor Stand Reactors, 1 & 2 L

Series 4530 1 & 2 L Floor Stand Reactors can be moved, modified to fit your needs, and configured for polymer studies. They are also available in high pressure versions.

- **Reactors configured for high torque applications.** The reactors in this series are mounted on a sturdy floor stand which will accommodate larger stirrer drive motors and stronger power trains that are generally not available for the bench top models. With these options it is possible to provide the high torque and low stirring speeds required for work with polymers, slurries, and other mixtures with viscosity of 1 million centipoise and more. These mountings are also better suited for the installation of a drain valve in the cylinder bottom for convenient removal of the reaction mixture while it is still hot.
- **Reactors requiring extensive modifications.** Floor stand mountings provide a good base for reactor modifications and for the addition of accessories, such as: condensers, packed columns, special motors, custom heaters, jacketed vessels, automatic valves or regulators, and many other fittings. Both fixed head and moveable vessel designs are available. An optional pneumatic lift is available for fixed head models
- **Reactors that need to be moved.** These reactors are designed for use in an area where a bench top is not available. Users who wish to move the reactor to storage when not in use, will appreciate the moveable cart design of the Series 4531 and 4532. 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.
- **HP versions.** These reactors are also available in a HP (High Pressure) version up to 2900 psi (200 bar) at 350 °C.

4534 Floor Stand Reactor, 2000 mL, Fixed Head, with Heavy-Duty Footless Mag Drive, Serpentine Cooling Coil, optional Solids Charging Device, Cylinder equipped with Welded Jacket, and Bottom Drain Valve.



4530

Series 4530 Pressure Reactor System Specifications						
Shaded bar indicates specifications that change within series.						
Model Number	4531	4532	4533	4534	4535	4536
Approximate Volume, mL	1000	2000	1000	2000	1000	2000
Approximate Volume for HP Models, mL	970	1900	970	1900	970	1900
Maximum Pressure (MAWP)	1900 psi (131 bar)					
Maximum Pressure for HP (MAWP)	2900 psi (200 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		Moveable		
Stand Type	Moveable Cart	Floor Stand		Floor Stand		
Closure	Split-Ring (6 Compression Bolts for Flat Gasket, No Compression Bolts for O-ring)					
High Pressure Closure	Split-Ring (12 Compression Bolts for Flat Gasket, No Compression Bolts for O-ring)					
Valve Connections	1/8" Male NPT					
Magnetic Stirrer, Model No.	A1120HC General Purpose or A2140HC Footless					
Maximum Torque	16 Inch-Pounds					
Impeller(s), 6-Blade	2 (2.28" dia. / HP: 2.00" dia.)					
Stirrer Motor	1/4 hp Variable Speed					
Pressure Gage, Size	4.5 inches					
Range	Standard: 0-2000 psi (138 bar) / HP: 0-3000 psi (207 bar)					
Temperature Measurement	Thermowell					
Cooling Coil (optional)	Serpentine					
Bottom Drain Valve (BDV) (optional)						
Standard Pressure (1900 psi)	3/8" NPT					
High Pressure (2900 psi)	1/4" NPT					
Lift Mechanism (optional)	N/A	Pneumatic Lift		N/A		
Heater Style						
Calrod						
Heater Power, Watts	1300	1000 / 1500	1500 / 2000	1000 / 1500	1500 / 2000	
Electrical Supply						
Volts, AC	115 / 230					
Maximum Load, amps, 115 / 230	12 / 9					
Cylinder Dimensions						
I.D. x Depth, inches	4.0 x 5.4	4.0 x 10.5	4.0 x 5.4	4.0 x 10.5	4.0 x 5.4	4.0 x 10.5
I.D. x Depth, inches for HP	3.75 x 5.4	3.75 x 10.5	3.75 x 5.4	3.75 x 10.5	3.75 x 5.4	3.75 x 10.5
Vessel Assembly Weight, pounds	30	35	33	38	30	36
Vessel Assembly Weight for HP, pounds	35	43	36	44	35	43
Cylinder Weight, pounds	8.9	13.7	8.9	13.7	8.9	13.7
Cylinder Weight for HP, pounds	11.3	18.4	11.3	18.4	11.3	18.4
Reactor/Stand Dimensions						
Width x Depth w/o Controller, inches	35 x 18		21 x 28		21 x 28	
Height, inches	50		63		63	
Weight, pounds	200	215	225	240	225	240
Spare Parts Kit	4539M (General Purpose)					
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.						