# KILO SCALE
# JACKETED REACTORS

## 75L, 100L & 150L Base Systems

Universal open frame stand design allows for maximum clearance and access to the ports on the head. To allow for scale up, the frame has been designed to be fitted with vessels from 10L to 150L in size. Simply select the stand motor mounting configuration based upon the desired type of motor. Then select the motor and shaft coupling that corresponds with the matching motor mount. Once the stand and motor have been selected complete the system by adding additional accessories to meet your applications requirements.

### Base Jacketed Systems

- Working Temp Range (°C): -60 to 200
- Working Pressure Range (Torr): Atm to 200
- Max Jacket Pressure (PSIG): 8
- Wetted Surfaces: Borosilicate glass, PTFE
- Motor Mounts: Flange Mount

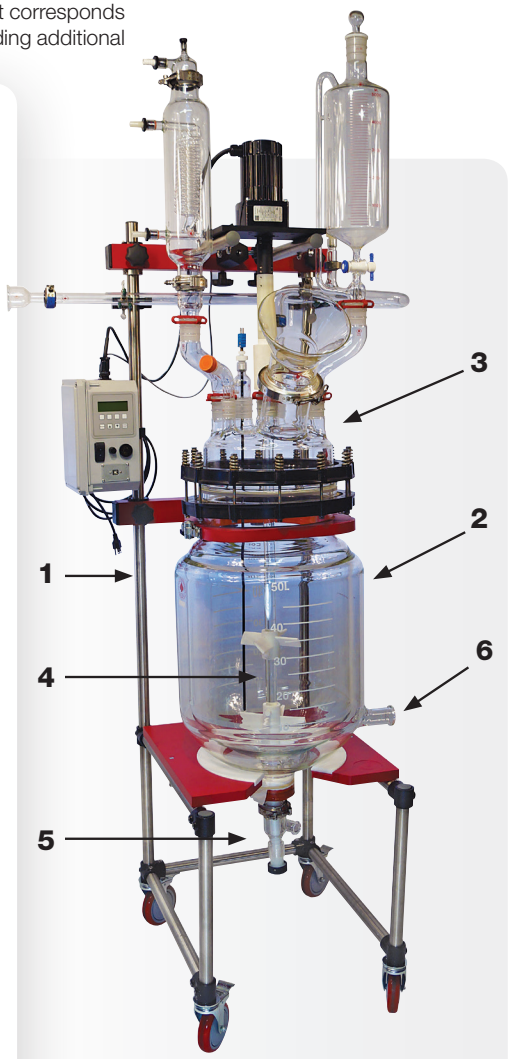
### Select a base system dependent on desired capacity and motor mounting type.

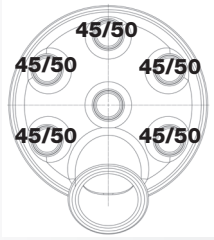
| Capacity (L) | | Dimensions (in) | Base Systems for Flange Mount Motors |
|---|---|---|---|
| 75 | | 27.5 x 24.25 x 96.25 | **12845-13** |
| 100 | | 27.5 x 24.25 x 96.25 | **12845-15** |
| 100 | *(Low Profile)* | 27.5 x 24.25 x 82.25 | **12845-17** |
| 150 | | 27.5 x 24.25 x 96.25 | **12845-19** |

### Base Systems include the following components:

| No. | Description | Qty. | Order Code |
|---|---|---|---|
| 1 | 50-150L Stand w/Mount for 300mm Flange Mount Motors | 1 | **12842-08** |
| | 100L Stand w/Mount for 400mm Flange Mount Motors | | **12842-10** |
| | 50-150L Stand w/Mount for 400mm Flange Mount Motors | | **12842-12** |
| 2 | 75L Jacketed Flask | 1 | **12850-12** |
| | 100L Jacketed Flask | | **12850-14** |
| | 100L Jacketed Flask (Low Profile) | | **12850-15** |
| | 150L Jacketed Flask | | **12850-16** |
| 3 | 300mm, 7 Neck Head | 1 | **6530-46** |
| | 400mm, 7 Neck Head | | **6530-75** |
| | 300mm PTFE Flat Gasket | 1 | **6525-51** |
| | 400mm PTFE Flat Gasket | | **6525-53** |
| | 300mm KF Flat Flange Clamp | 1 | **6525-30** |
| | 400mm KF Flat Flange Clamp | | **6525-33** |
| | 100mm Glass Cap | 1 | **15312-33** |
| | 100mm CAPFE O-Ring | 1 | **7855-880** |
| | 100mm Quick-release Clamp | 1 | **6517-25** |
| 4 | 28mm PTFE Ace-Thred Bearing | 1 | **8067-105** |
| | 28mm Glass Stirring Shaft, 51in. Length (Low-Profile) | 1 | **8080-16** |
| | 28mm Glass Stirring Shaft, 75in. Length (150L) | | **8080-29** |
| | 28mm Glass Stirring Shaft, 63in. Length (100L) | | **8080-30** |
| | 28mm Shaft Collar | 1 | **8127-28** |
| | 28mm Shaft Coupling | 1 | **8126-28** |
| | 8in. O.D. Anchor Style Agitator w/Receptacle | 1 | **8101-38** |
| | 6in O.D. 45° Agitator | 2 | **8093-35** |
| 5 | Flush Seal Drain Valve w/CAPFE O-Ring and Pin | 1 | **6482-20** |
| | 2in. Beaded Pipe Coupling | 1 | **8856-11** |
| 6 | 1 1/2in. Beaded Pipe Coupling | 2 | **8856-09** |

*(Beaded Pipe Couplings Supplied But Not Adapters)*




*Head Port Configuration*


www.aceglass.com

*1430 Northwest Boulevard*
*Vineland, NJ 08360*

*sales@aceglass.com*
P: (800) 223-4524
F: (800) 543-6752

ACE GLASS INCORPORATED

# 75L, 100L & 150L
# Motors and Couplings

## Flange Mounted, *Air Motors*

For hazardous working environments air motors offer an economical solution over explosion proof or ATEX rated motors. Relative speed setting is performed by adjusting a needle valve located on the inlet side of the air motor. When using air motors always use air motors with a filter/regulator/lubricator.

| Speed Range (RPM) | Max Torque (in-lbs) | Order Code |
|---|---|---|
| 1.5 Hp Motor | | |
| 300-3000 | 100 | 13370-10 |
| Filter/Regulator Lubricator | | 13372-45 |

approved.

## Flange Mounted, *Hazardous Duty Motor and Control*[1]

Hazardous duty AC inverter duty motor and controller1 for use on pilot plant reactor systems. A user friendly control allows for basic start/stop and variable speed control. RPM is displayed on a large 6 digit LED display. Modbus-RTU built in communications. AC Inverter duty motors provide constant torque and power with a variable speed output.

- HP: 1/2
- 5:1 Right Angle Gear Reducer
- Speed Range (RPM): 0 - 350
- Max Torque (in-lbs): 50
- Class I, Div I Group D
- Class II, Div II, Groups F & G
- Controller Voltage Inputs:
  115 to 240VAC, 1PH, 50/60Hz
  240 to 480VAC, 3 PH, 50/60Hz

| Description | Order Code |
|---|---|
| Hazmat Series Digital Motor/Controller | 13555-50 |

*1 Controller is not hazardous duty rated.*

## Flange Mounted, *Brushless Motor and Control*

Pilot plant motor and controller for use on reactor systems up to 200 liter. The controller displays rpm, torque and features a digital, timer with shut-down capability. The *3/8 hp* brushless DC motor is compact, lightweight and yet capable of *35 in-lbs of continuous torque from 30 - 500 rpm*. Rpm readings are kept precise thru closed loop feedback. Optional software available for data acquisition. Controller is available in either 120v 60Hz or 240v 50/60Hz.

| 120VAC | 240VAC |
|---|---|
| BLDC Motor Controller | |
| 13553-02 | 13553-04 |
| BLDC Controller, 24VDC | |
| 13553-20 | 13553-20 |

*More Motor Options Available. Visit the Ace Glass Website or contact your local sales representative.*

www.aceglass.com

*1430 Northwest Boulevard*
*Vineland, NJ 08360*

*sales@aceglass.com*
P: (800) 223-4524
F: (800) 543-6752

© 2017 Ace Glass, Inc. All rights reserved. 12/13/2016 F1016