



**ERGO
ROBOTIC
SOLUTIONS**

SkyHook WPI



STANDARD FEATURES AND EQUIPMENT

CHASSIS

- Counterbalanced fixed boom assembly
- Primary counterweight chassis mounted
- Comes with 1 secondary counterweight
- Built in battery chargers with linear rate control, 110 volt, 60 Hz. single phase
- Electrical circuit breakers

VACUUM

- Redundant vacuum pumps, non-lubricated positive displacement, automatic start-stop control
- Vacuum frame accepts variety of cup sizes, fully adjustable
- Vacuum cartridges include bi-directional coil spring loaded mounts
- Includes 4 standard 20" x 12" rectangular suction cups, 550 lbs. lift per cup in shear at 100% safety factor

HYDRAULICS

- All hydraulic functions are proportionally controlled, with valves for each boom or manipulator function

CONTROL

- 6 direction manipulator motions
- Adjustable cantilever to 48"

CONSOLE

- Controls on unit include
 - Battery isolation switch
 - Battery master switch
 - Hour meter
 - Vacuum gauge
 - Hydraulic power On/Off switch
 - Battery charge gauge
- Wireless remote includes
 - Multi function controls for all manipulator end effector functions
 - Vacuum and release switches
 - Emergency stop

SAFETY

- Strobe light operates with master battery switch
- Low vacuum level alarm, audible horn
- Safety vacuum check valves
- Console-mounted two button safety vacuum release valve



ErgoRobotic.com

518-796-2179

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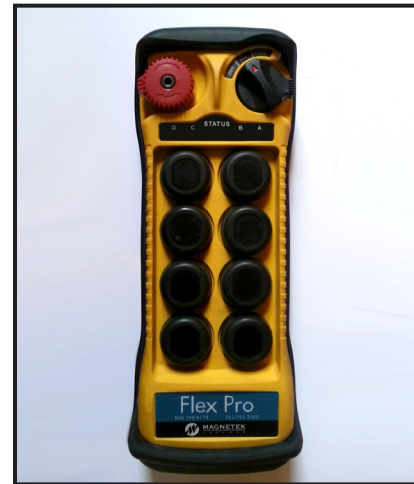


SKYHOOK WPI DIMENSIONS

SkyHook WPI Characteristic	Specification
Lift Capacity	2800 lbs.
Closed Chassis Length	115"
Width	32"
Unladen Weight	1,600 lbs.
Secondary Counter Weights	450 lbs. each

COUNTERWEIGHTS VS. LOADS

Counter weights	Max. Load @ Pick Point 48" from load	Max. Load @ Pick Point 36" from load
0	1100 lbs.	1400 lbs.
1	1850 lbs.	2800 lbs.
2	2700 lbs.	3800 lbs.



POWERED MANIPULATION FUNCTIONS

Control	Assembly	Direction	Viewed from
1	Counterbalance	In / Out	Side Elevation
2	Under hook Connection	Up / Down	Side Elevation
3	Horizontal to Vertical Tilt	Tilt Up / Down	Side Elevation
4	Manipulator - vacuum cup frame	Rotate - CW and CCW 180°	Front Elevation

- All hydraulic controls use a variable orifice proportional valve.
- The hydraulic circuits are equipped with check and counterbalance valves to prevent leak down and droop under load.
- Actuation is proportional and linear in response to control inputs.

