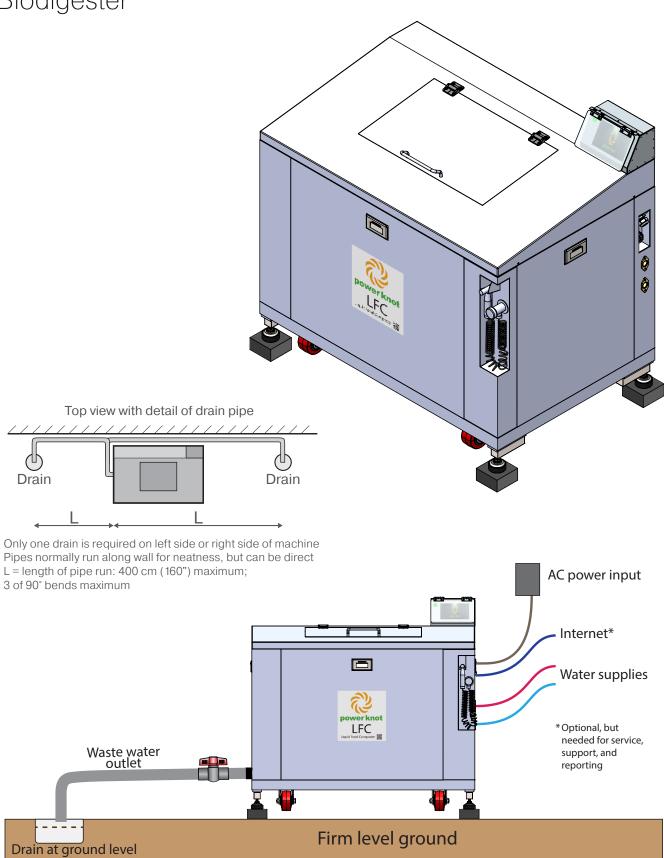
LFC-100

power knot

Biodigester



LFC-100

Installation Requirements

Nominal capacity per day

100 kg (220 lb) of waste food

Construction

All stainless steel (chassis, side panels, drum, shaft, arms, paddles, and load cells). Chassis is mirror finish (EN 10088-2 specification 2P)

Operating environment

Indoors or covered patio

Must not be exposed to rain, snow, or sunshine

Ingress protection

IP54 – splash proof and dust proof

Ambient operating temperature

4°C~38°C (39°F~100°F)

Operating altitude

1000 m (3300 ft)

Floor surface flatness required

 $\pm 15 \text{ mm } (0.6")$

Weight when empty

240 kg (529 lb)

Moving and positioning

Machine is rolled into place with casters

Machine is raised once in position and supported by feet and rubber pads

Weight when full

390 kg (860 lb) maximum

Load per pad

130 kg (287 lb) maximum

Pressure per pad

128 kPa (18 psi), maximum

Space required around machine

Left side: 20 cm (8") minimum, 33 cm (13") ideal. 100 cm (39") is required for servicing

Right side: 15 cm (6") minimum, 60 cm (24") preferred. 125 cm (50") is required for servicing

Back: 2 cm (1")

Front: 60 cm (24") minimum

Water inlets

Filters: use external filters to remove particles and hardness

Fitting: DN15 (1/2") female

Typically use flexible hose pipes to allow machine to move freely. Install valves to disconnect water for servicing and backflow prevention devices if required

Pressure: 275 to 550 kPa (40 to 80 psi, 2.8 to 5.6 kg/cm²)

Flow rate: 20 litre per minute (5 gpm) max. @ 450 kPa (65 psi, 4.5 kg/cm²)

Drum water: 35°C~50°C (95°F~120°F)

Washout water: 15°C~75°C

(60°F~165°F)

Use external mixing valves, heaters, pressure reducers, and bladder tanks to meet the above requirements as needed

Water input per day

300 litre (79 gallon) typical

Water outlet

Typically use flexible coupling on output to permit machine to move freely

Install stop valve on outlet pipe (used for commissioning)

Slope pipe down by about 1 in 45 (1.3°)

Drair

Type: Must exit to sewer (not storm drain); grease trap is required in most jurisdictions

Size: 65 mm (21/2") minimum

Total water output per day

400 litre (106 gallon), typical

Flow rate of waste water out

21 l/min (5.4 gpm), maximum 0.3 l/min (0.1 gpm), typical average

AC supply

120 V, 60 Hz (100 V to 130 V) Single phase + PE

Circuit breaker: 15 A Fitted with NEMA 5-15 plug

or

230 V, 50 Hz (220 V to 240 V)

Single phase + PE Circuit breaker: 15 A

Plug installed by local distributor

AC power cord

Length of cable on machine: 180 cm (6')

Can wire directly (without a plug and socket). Outlet must be accessible by operator and have a safety disconnect

Maximum power

850 W

Energy per day

5.7 kWh typical

User interface

22 mm 3-color LED

5" touchscreen with 65k colors

Ethernet

RJ45, 100 baseT DHCP or fixed IP address

Connect to Internet with direct cable, Wi-Fi client, or GSM modem

Automatically connects to LFC Cloud for remote support, reporting, and monitoring (included in purchase price)

Powerzyme

(Microorganisms and enzymes)
1 litre, included with initial purchase

Powerchips

(Medium for microorganisms)
100 litre, included with initial purchase

Operating lifetime

Expected to be 15 to 25 years

Warranty

3 years on all parts and components

Safety

Certified to UL430 (waste disposal machines)

CAN/CSA-C22.2 No. 60335-1:11

EN 60335-1:2010+AMD1:2013 (general safety)

CAN/CSA-C22.2 No. 60335-2-16:16

EN 60335-2-16:2002+A1:2008+A2:2011 (waste food disposers)

EMC

EN 61000-6-3:2007+A1:2011

EN 61000-6-1:2007

EN 61000-3-2:2006+A1:2008+A2:2009

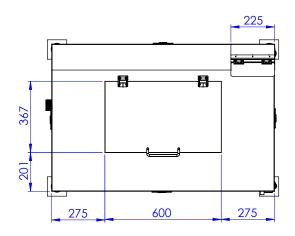
EN 61000-3-3:2013

RoHS

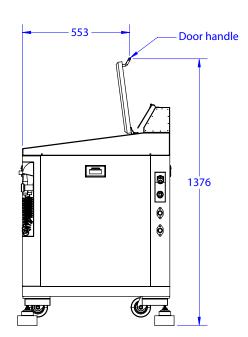
Compliant for EU and China



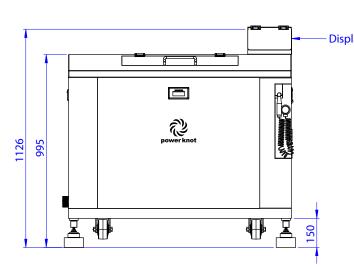




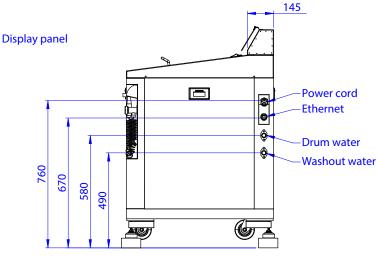
Top



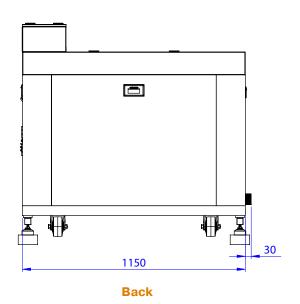
Right with door fully open



Front



Right

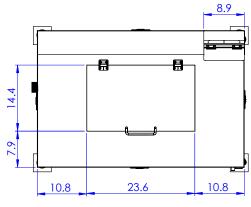


Water output 1.5" male JIS(BSPT)

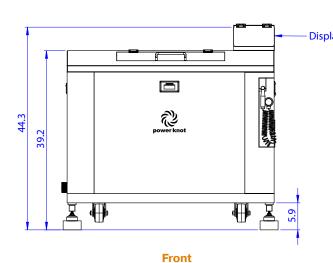
Left

LFC-100

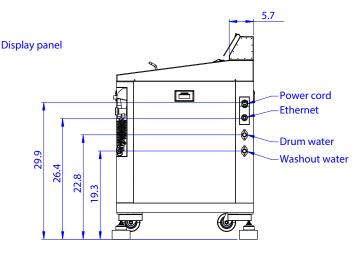
Dimensions in inches ±0.1" (derived from mm)







Top



Right

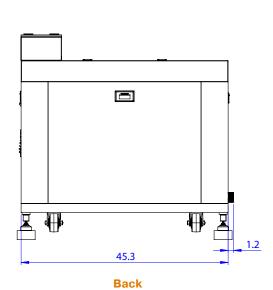
-21.8

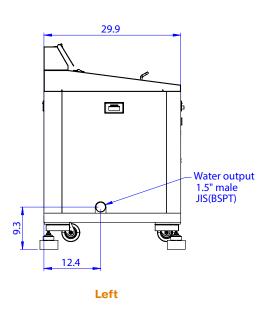
8

0

Door handle

54.2







 $\textbf{Power Knot LLC} \hspace{0.1cm} |\hspace{0.1cm} 2290 \hspace{0.1cm} \text{Ringwood Avenue} \hspace{0.1cm} |\hspace{0.1cm} \text{San Jose, CA 95131 USA} \hspace{0.1cm} |\hspace{0.1cm} +1-408-889-8433 \hspace{0.1cm} |\hspace{0.1cm} \text{info@powerknot.com} \hspace{0.1cm} |\hspace{0.1cm} \text{www.powerknot.com} \hspace{0.1cm} |\hspace{0$