



# Other Products

Flask Supports.  
Ultrasonic Cleaners.  
Magnetic Drives.

## General Applications

### Flask Supports

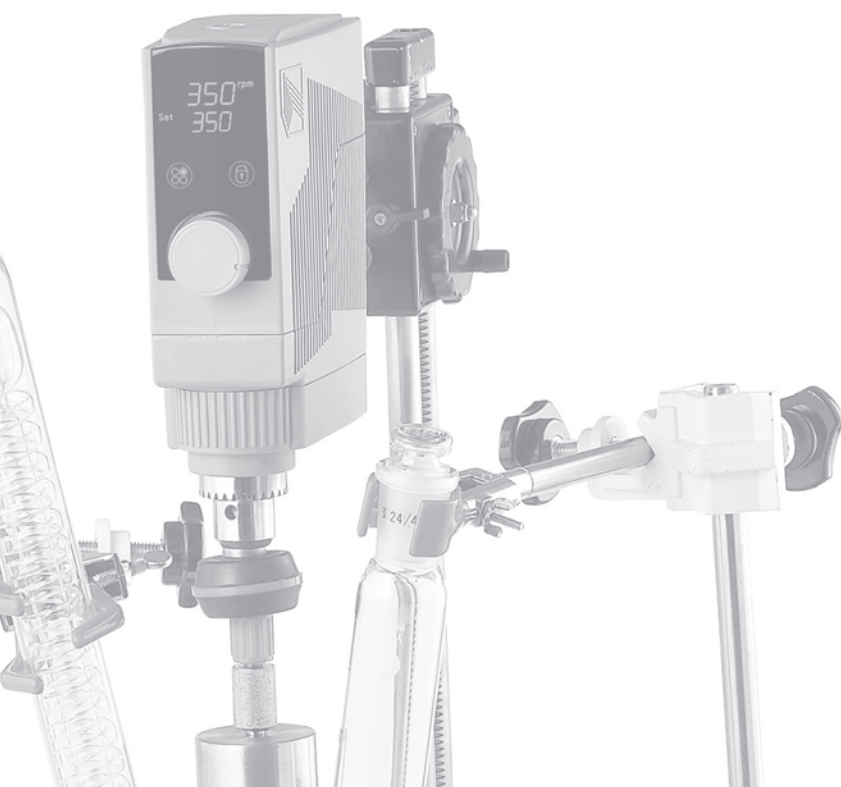
- Concave recessed, secure, and safe multi-volume flask holder.

### Ultrasonic Cleaners

- For cleaning laboratory, medical instruments/industrial micro goods/glasses, jewels.

### Magnetic Drives

- Blends, Biotech, Catalyst preparation, Food products, Fuels, Liquids, Solvents, Lacquers, Multiphase catalytic reactions, Oils, Synthetic materials, Specialty chemicals, Polymers, Plymers, Slurries, Starches, Pulp and paper, Particle synthesis.



# Other Products

## Flask Supports

It's concave recessed, secure, and safe multi-volume flask holder.

Convenient grip for easy carrying

Noticeable name tag for classification

Multi-purpose holder also is able to hold ice.

### Features

- Flask size : 100ml, 250ml, 500ml, 1000ml, 2000ml
- Chemically resistant to various organic solvents.
- Material : PP (Polypropylene)
- Heat Resistance : -30°C ~ +121°C  
-22°F ~ +249.8°F



### Specifications & Ordering Informations

| Model                          | FT 010 13                       | FT 010 34                        | FT 025 12                        | FT 025 23                        |
|--------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Hole Capacity (ml)             | 100                             | 100                              | 250                              | 250                              |
| Hole (Dia, xH) (mm / inch)     | 70×91 / 2.76×3.58               | 70×91 / 2.76×3.58                | 98×122 / 3.86×4.8                | 98×122 / 3.86×4.8                |
| Dimensions (WxDxH) (mm / inch) | 310×100×100<br>/ 12.2×3.94×3.94 | 384×265×98<br>/ 15.12×10.43×3.86 | 280×125×130<br>/ 11.02×4.92×5.12 | 389×239×130<br>/ 15.31×9.41×5.12 |
| Cat. No.                       | AAA23706                        | AAA23701                         | AAA23707                         | AAA23702                         |

| Model                          | FT 050 12                        | FT 100 12                       | FT 200 12                       |
|--------------------------------|----------------------------------|---------------------------------|---------------------------------|
| Capacity (ml)                  | 500                              | 1000                            | 2000                            |
| Hole (Dia, xH) (mm / inch)     | 121×128 / 4.76×5.04              | 148×156 / 5.83×6.14             | 183×188 / 7.2×7.4               |
| Dimensions (WxDxH) (mm / inch) | 360×146×135<br>/ 14.17×5.75×5.31 | 415×192×165<br>/ 16.34×7.56×6.5 | 503×223×199<br>/ 19.8×8.78×7.83 |
| Cat. No.                       | AAA23703                         | AAA23704                        | AAA23705                        |

# Other Products

## Ultrasonic Cleaners



Please visit [JEIOTECH.com](http://JEIOTECH.com)

For further information on Jeio Tech's Ultrasonic Cleaner products  
Information is readily available on our website.



UC-10 included cover and basket



UC-02 / UC-20



US-20 included cover and basket / Basket for UC/US series

# Other Products

## Ultrasonic Cleaners

Aggressive cleaning ability in a variety of sizes!

Industrial B.L.T type ultrasonic transducer (Bolt Clamped Langevin Type Transducer) generates high-frequency sound waves that provide maximum cleaning power. UC/ US-P types are increased the frequency to improve cleaning ability.

### ► Features for UC series (ABS / PBT housing, SUS tank)

- Durable leakproof ABS / PBT housing and cover with 304 stainless steel tanks.
- Maximum heater temperature is 70°C. (only 50°C for UC-02)
- Digital LED display using splash-proof keypads: timer (1 to 99 min), temperature monitor. (UC-02 is only On/Off)
- High-frequency 40 kHz sound waves provide greater cleaning power and increased reliability.
- Multiple frequency on 3 stages for both gentle cleaning and intensive cleaning. (without UC-02)

Included Accessories • Cover • 304 stainless steel wire basket

### ► Specifications & Ordering Informations



| Model                                     |                                           | UC - 02                       | UC - 10 [10P]                | UC - 20 [20P]                 |
|-------------------------------------------|-------------------------------------------|-------------------------------|------------------------------|-------------------------------|
| Bath volume (L / cu ft)                   |                                           | 2.0 / 0.07                    | 10.0 / 0.35                  | 20.0 / 0.70                   |
| Temperature range (°C / °F)               |                                           | Amb. ~ to 50<br>Amb. ~ to 122 | Amb. ~ to 70 / Amb. ~ to 158 |                               |
| Ultrasonic power (W)                      |                                           | 70                            | 200 [300]                    | 400 [600]                     |
| Dimensions                                | Bath internal (WxL, D) (mm / inch)        | 142×132, 104 / 5.6×5.2, 4.1   | 300×240, 150 / 11.8×9.4, 5.9 | 495×292, 150 / 19.5×11.5, 5.9 |
|                                           | Overall (WxLxH) (mm / inch)               | 290×210×200 / 11.4×8.4×7.9    | 490×368×297 / 19.3×14.5×11.7 | 721×451×297 / 28.4×17.8×11.7  |
|                                           | Net weight (kg / lbs)                     | 2.0 / 4.4                     | 11.0 / 24.3                  | 17.0 / 37.5                   |
|                                           | Electrical Requirements (230V, 50 / 60Hz) | 0.3A                          | 0.9A (1.3A)                  | 1.7A (2.2A)                   |
| Cat. No.                                  |                                           | BDH53015                      | BDH53045 (BDH53055)          | BDH53065 (BDH53075)           |
| Electrical Requirements (120V, 50 / 60Hz) |                                           | 0.6A                          | 1.7A (2.5A)                  | 3.3A (4.2A)                   |
| Cat. No.                                  |                                           | BDH53013                      | BDH53043 (BDH53053)          | BDH53063 (BDH53073)           |

### ► Features for US series (Steel housing, SUS tank)

- All parts are made of durable 304 stainless steel tanks, cover and powder coating steel housing.
- Maximum heater temperature is 70°C.
- Digital LED display using splash-proof keypads: timer (1 to 99 min), temperature monitor.
- High-frequency 40 kHz sound waves provide greater cleaning power and increased reliability.
- Multiple frequency on 3 stages for both gentle cleaning and intensive cleaning.

Included Accessories • Cover • 304 stainless steel wire basket

### ► Specifications & Ordering Informations

| Model                                     |                                           | US-05 (05P)                   | US-10 (10P)                  | US-20 (20P)                   |
|-------------------------------------------|-------------------------------------------|-------------------------------|------------------------------|-------------------------------|
| Bath volume (L / cu ft)                   |                                           | 5.7 / 0.20                    | 10.0 / 0.35                  | 20.0 / 0.70                   |
| Temperature range (°C / °F)               |                                           | Amb. ~ to 70 / Amb. w~ to 158 |                              |                               |
| Ultrasonic power (W)                      |                                           | 150 [200]                     | 200 [300]                    | 400 [600]                     |
| Dimensions                                | Bath internal (WxL, D) (mm / inch)        | 300×150, 150 / 11.8×5.9, 5.9  | 300×240, 150 / 11.8×9.4, 5.9 | 495×292, 150 / 19.5×11.5, 5.9 |
|                                           | Overall (WxLxH) (mm / inch)               | 380×236×300 / 15.0×9.3×11.8   | 360×300×300 / 14.2×11.8×11.8 | 565×360×300 / 22.2×14.2×11.8  |
|                                           | Net weight (kg / lbs)                     | 9.0 / 19.8                    | 12.5 / 27.6                  | 19.0 / 41.9                   |
|                                           | Electrical Requirements (230V, 50 / 60Hz) | 0.7A (0.9A)                   | 0.9A (1.3A)                  | 1.7A (2.2A)                   |
| Cat. No.                                  |                                           | BDH53125 (BDH53135)           | BDH53145 (BDH53155)          | BDH53165 (BDH53175)           |
| Electrical Requirements (120V, 50 / 60Hz) |                                           | 1.3A (1.7A)                   | 1.7A (2.5A)                  | 3.3A (4.2A)                   |
| Cat. No.                                  |                                           | BDH53126 (BDH53136)           | BDH53146 (BDH53156)          | BDH53166 (BDH53176)           |

# Other Products

## Magnetic Drives

Magnetic drives are designed for agitating a fully vacuumed flask. Multi-functional easy to replace impeller.



Magnetic Drive

### Feature

- Use of rare-earth elements which is Neodymium (Nd), Samarium (Sm-Co) magnet.
- High-speed rpm, vibration free.
- Specifically designed with permanent magnets which has a dynamic torque rating.
- Small size and powerful rotating magnetic drive is useful both for laboratory and manufacturing applications.



Application of Magnetic Drive

### Specifications

| Model                         |                | MD-T6-24                                               | MD-T6-29    | MD-T6-34    |
|-------------------------------|----------------|--------------------------------------------------------|-------------|-------------|
| Ground joint                  |                | 24 / 40                                                | 29 / 42     | 34 / 45     |
| Material                      | Body / Housing | SUS316L / CR-PLATE                                     |             |             |
|                               | Bushing / Seal | PTFE / Viton                                           |             |             |
| Driving                       | Vacuum         | Max. 1×10 <sup>-4</sup> mmHg                           |             |             |
|                               | Pressure       | Max. 5kg / cm <sup>2</sup>                             |             |             |
|                               | Temp           | Max. 70°C (without cooling), Max. 300°C (with cooling) |             |             |
| Shaft size (Ø, mm)            |                | Ø8                                                     |             |             |
| Cooling in / out size (Ø, mm) |                | Ø3.2                                                   |             |             |
| Dimension (ØxL, mm)           |                | Ø50×200                                                |             |             |
| Weight (kg / lbs)             |                | 1.02 / 2.25                                            | 1.04 / 2.29 | 1.08 / 2.38 |
| Cat. No.                      |                | BEA511001                                              | BEA511002   | BEA511003   |



# Appendix

Lab Companion  
2011 - 12 Product Catalog



# Appendix

## Technical Data

### Chemicals- Periodic Table

group

1

1A

1

1.0079

H

Hydrogen

2

4.0026

He

Helium

3

6.941

Li

Lithium

4

9.0122

Be

Beryllium

5

10.811

B

Boron

6

12.011

C

Carbon

7

14.007

N

Nitrogen

8

15.999

O

Oxygen

9

18.998

F

Fluorine

10

20.180

Ne

Neon

11

22.990

Na

Sodium

12

24.305

Mg

Magnesium

13

26.982

Al

Aluminum

14

28.086

Si

Silicon

15

30.974

P

Phosphorus

16

32.065

S

Sulfur

17

35.453

Cl

Chlorine

18

39.948

Ar

Argon

19

39.098

K

Potassium

20

40.078

Ca

Calcium

21

44.956

Sc

Scandium

22

47.867

Ti

Titanium

23

50.942

V

Vanadium

24

51.996

Cr

Chromium

25

54.938

Mn

Manganese

26

55.845

Fe

Iron

27

58.933

Co

Cobalt

28

58.693

Ni

Nickel

29

63.546

Cu

Copper

30

65.39

Zn

Zinc

31

69.723

Ga

Gallium

32

72.64

Ge

Germanium

33

72.922

As

Arsenic

34

78.96

Se

Selenium

35

79.904

Br

Bromine

36

83.80

Kr

Krypton

37

85.468

Rb

Rubidium

38

87.62

Sr

Strontium

39

88.906

Y

Yttrium

40

91.224

Zr

Zirconium

41

92.906

Nb

Niobium

42

95.94

Mo

Molybdenum

43

98

Tc

Technetium

44

101.07

Ru

Ruthenium

45

102.91

Rh

Rhodium

46

106.42

Pd

Palladium

47

107.87

Ag

Silver

48

112.41

Cd

Cadmium

49

114.82

In

Indium

50

118.71

Sn

Tin

51

121.76

Sb

Antimony

52

127.60

Te

Tellurium

53

126.90

I

Iodine

54

131.29

Xe

Xenon

55

132.91

Cs

Cesium

56

137.33

Ba

Barium

57-71

La-Lu

Lanthanide Series

72

178.49

Hf

Hafnium

73

180.95

Ta

Tantalum

74

183.84

W

Tungsten

75

186.21

Re

Rhenium

76

190.23

Os

Osmium

77

192.22

Ir

Iridium

78

195.08

Pt

Platinum

79

196.97

Au

Gold

80

200.59

Hg

Mercury

81

204.38

Tl

Thallium

82

207.20

Pb

Lead

83

208.98

Bi

Bismuth

84

209

Po

Polonium

85

210

At

Astatine

86

222

Rn

Radon

87

223

Fr

Francium

88

226

Ra

Radium

89-103

Ac-Lr

Actinide Series

104

261

Rf

Rutherfordium

105

262

Db

Dubnium

106

266

Sg

Seaborgium

107

264

Bh

Bohrium

108

277

Hs

Hassium

109

268

Mt

Meitnerium

110

281

Uun

Ununillium

111

272

Uuu

Ununtrium

112

285

Uub

Ununbium

114

289

Uuq

Ununquadium

116

289

Uuh

Ununhexium

118

293

Uuo

Ununoctium

PERIODIC TABLE OF THE ELEMENTS KEY

METAL

ALKALI METAL

ALKALINE EARTH METAL

TRANSITION METAL

LANTHANIDE SERIES

ACTINIDE SERIES

SEMI-METAL

NONMETAL

HALOGEN

NOBLE GAS

STANDARD STATE

He

GAS

Br

LIQUID

Tc

SYNTHETIC

Li

SOLID

SYMBOL

ELEMENT NAME

Boron

18

1A

# Appendix

## Technical Data

## Formulas, Conversions and Engineering Constants

### Conversion Factors

| To Convert To...                                    |                                                        | Multiply...            |                         | By...    |
|-----------------------------------------------------|--------------------------------------------------------|------------------------|-------------------------|----------|
| Atmospheres                                         | (atm)                                                  | Bar                    |                         | 0.9869   |
| Atmospheres                                         | (atm)                                                  | Inches Mercury         | (in Hg)                 | 0.03342  |
| Atmospheres                                         | (atm)                                                  | Pounds/square inch     | (psi)                   | 0.06805  |
| Atmospheres                                         | (atm)                                                  | Torr                   |                         | 0.001316 |
| Bar                                                 |                                                        | Atmospheres            | (atm)                   | 1.0133   |
| Bar                                                 |                                                        | Pounds/square inch     | (psi)                   | 0.06895  |
| British Thermal Units                               | (BTU)                                                  | Joules                 | (J)                     | 0.000948 |
| British Thermal Units                               | (BTU)                                                  | Kilowatt-hours         | (kWh)                   | 3412     |
| British Thermal Units                               | (BTU)                                                  | Watt-hours             | (Wh)                    | 3.412    |
| British Thermal Units/hour                          | (BTU/h)                                                | Kilocalories/hour      | (kcal/h)                | 3.969    |
| British Thermal Units/hour                          | (BTU/h)                                                | watts                  | (W)                     | 3.412    |
| British Thermal Units+inches<br>hour-square foot-°F | $\frac{(BTU \cdot in)}{(h \cdot ft^2 \cdot ^\circ F)}$ | watts/meter-°C         | $(W/m \cdot ^\circ C)$  | 6.933    |
| British Thermal Units/pound                         | (BTU/lb)                                               | Kilojoules/kilogram    | (kJ/kg)                 | 0.4299   |
| British Thermal Units/pound-°F                      | (BTU/lb-°F)                                            | Kilojoules/kilogram-°C | (kJ/Kg-°C)              | 0.2388   |
| Calories                                            | (cal)                                                  | Joules                 | (J)                     | 0.2388   |
| Centimeters                                         | (cm)                                                   | Feet                   | (ft)                    | 30.48    |
| Centimeters                                         | (cm)                                                   | Inches                 | (in)                    | 2.54     |
| Centimeters/second                                  | (cm/s)                                                 | Feet/minute            | (FPM)                   | 0.508    |
| Cubic Centimeters                                   | (cm <sup>3</sup> or cc)                                | Cubic feet             | (ft <sup>3</sup> )      | 28.320   |
| Cubic Centimeters                                   | (cm <sup>3</sup> or cc)                                | Cubic inches           | (in <sup>3</sup> )      | 16.39    |
| Cubic Centimeters                                   | (cm <sup>3</sup> or cc)                                | Milliliters            | (ml)                    | 1.0      |
| Cubic feet                                          | (ft <sup>3</sup> )                                     | Cubic meters           | (m <sup>3</sup> )       | 35.32    |
| Cubic feet                                          | (ft <sup>3</sup> )                                     | Gallons, U.S.          | (gal)                   | 0.1337   |
| Cubic feet                                          | (ft <sup>3</sup> )                                     | Liters                 | (l)                     | 0.03532  |
| Cubic feet/minute                                   | (CFM)                                                  | Cubic meters/hour      | (m <sup>3</sup> /h)     | 0.5885   |
| Cubic feet/minute                                   | (CFM)                                                  | Cubic meters/second    | (m <sup>3</sup> /s)     | 2119     |
| Cubic feet/minute                                   | (CFM)                                                  | Liters/second          | (l/s)                   | 2.119    |
| Cubic inches                                        | (in <sup>3</sup> )                                     | Cubic centimeters      | (cm <sup>3</sup> or cc) | 0.061    |
| Cubic meters                                        | (m <sup>3</sup> )                                      | Gallons, U.S.          | (gal)                   | 0.003785 |
| Cubic meters                                        | (m <sup>3</sup> )                                      | Liters                 | (l)                     | 0.001    |
| Cubic meters                                        | (m <sup>3</sup> )                                      | Cubic feet             | (ft <sup>3</sup> )      | 0.02832  |
| Cubic meters/hour                                   | (m <sup>3</sup> /h)                                    | Cubic feet/minute      | (CFM)                   | 1.699    |
| Cubic meters/hour                                   | (m <sup>3</sup> /h)                                    | Gallons/minute         | (GPM)                   | 0.2271   |
| Cubic meters/second                                 | (m <sup>3</sup> /s)                                    | Cubic feet/minute      | (CFM)                   | 0.000472 |
| Feet                                                | (ft)                                                   | Centimeters            | (cm)                    | 0.03281  |
| Feet                                                | (ft)                                                   | Meters                 | (m)                     | 3.281    |
| Feet/minute                                         | (FPM)                                                  | Centimeters/second     | (cm/s)                  | 1.969    |
| Feet/minute                                         | (FPM)                                                  | Meters/second          | (m/s)                   | 196.9    |
| Gallons, imperial                                   |                                                        | Gallons, U.S.          | (gal)                   | 0.8327   |
| Gallons, U.S.                                       | (gal)                                                  | Cubic feet             | (ft <sup>3</sup> )      | 7.481    |
| Gallons, U.S.                                       | (gal)                                                  | Cubic meters           | (m <sup>3</sup> )       | 264.2    |
| Gallons, U.S.                                       | (gal)                                                  | Gallons, imperial      |                         | 1.201    |
| Gallons, U.S.                                       | (gal)                                                  | Liters                 | (l)                     | 0.2642   |
| Gallons/minute                                      | (gpm)                                                  | Cubic meters/hour      | (m <sup>3</sup> /h)     | 4.403    |
| Gallons/minute                                      | (gpm)                                                  | Liters/second          | (l/s)                   | 15.85    |
| Grams                                               | (g)                                                    | Ounces                 | (oz)                    | 28.35    |
| Grams                                               | (g)                                                    | Pounds                 | (lb)                    | 453.6    |
| Grams/cubic centimeter                              | (g/cm <sup>3</sup> )                                   | Kilograms/cubic meter  | (kg/m <sup>3</sup> )    | 0.001    |
| Grams/cubic centimeter                              | (g/cm <sup>3</sup> )                                   | Pounds/cubic foot      | (lb/ft <sup>3</sup> )   | 0.01602  |
| Grams/cubic centimeter                              | (g/cm <sup>3</sup> )                                   | Pounds/cubic inch      | (lb/in <sup>3</sup> )   | 2768     |
| Inches                                              | (in)                                                   | Centimeters            | (cm)                    | 0.3937   |
| Inches                                              | (in)                                                   | Millimeters            | (mm)                    | 0.03937  |
| Inches Mercury                                      | (in Hg)                                                | Atmospheres            | (atm)                   | 29.92    |
| Inches Mercury                                      | (in Hg)                                                | Torr                   |                         | 25.4     |



# Appendix

## Technical Data

| To Convert To...            |                       | Multiply...                                      |                                  | By...     |
|-----------------------------|-----------------------|--------------------------------------------------|----------------------------------|-----------|
| Joules                      | (J)                   | British Thermal Units                            | (BTU)                            | 1055      |
| Joules                      | (J)                   | Calories                                         | (cal)                            | 4.187     |
| Joules                      | (J)                   | Watt-hours                                       | (WH)                             | 36.00     |
| Joules/second               | (J/s)                 | British Thermal Units/hour                       | (BTU/h)                          | 0.2931    |
| Joules/second               | (J/s)                 | Watts                                            | (W)                              | 1         |
| Kilocalories/hour           | (kcal/h)              | BTU/hour                                         | (BTU/h)                          | 0.252     |
| Kilograms                   | (kg)                  | Pounds                                           | (lb)                             | 0.4536    |
| Kilograms/cubic meter       | (kg/m <sup>3</sup> )  | Grams/cubic centimeter                           | (g/cm <sup>3</sup> )             | 1000      |
| Kilograms/cubic meter       | (kg/m <sup>3</sup> )  | Pounds/cubic foot                                | (lb/ft <sup>3</sup> )            | 16.02     |
| Kilograms/square centimeter | (kg/cm <sup>2</sup> ) | Pounds/square inch                               | (psi)                            | 0.07031   |
| kilojoules                  | (kJ)                  | Watt-hours                                       | (WH)                             | 3.6       |
| Kilojoules/kilogram         | (kJ/kg)               | British Thermal Units/pound                      | (BTU/lb)                         | 2.326     |
| Kilojoules/kilogram-°C      | (kJ/kg-°C)            | British Thermal Units/Pound-°F                   | (BTU/lb-°F)                      | 4.187     |
| Kilometers/hour             | (km/h)                | Miles/hour                                       | (MPH)                            | 1.609     |
| Kilopascals                 | (kPa)                 | Pounds/square inch                               | (psi)                            | 6.895     |
| Kilowatts                   | (kW)                  | British Thermal Units/hour                       | (BTU/h)                          | 0.0002931 |
| Kilowatts                   | (kW)                  | Watts                                            | (W)                              | 0.001     |
| Kilowatt-hours              | (kWH)                 | British Thermal Units                            | (BTU)                            | 0.0002931 |
| Kilowatt-hours              | (kWH)                 | Watt-hours                                       | (WH)                             | 0.001     |
| Liters                      | (l)                   | Cubic Feet                                       | (ft <sup>3</sup> )               | 28.32     |
| Liters                      | (l)                   | Cubic Meters                                     | (m <sup>3</sup> )                | 1000      |
| Liters                      | (l)                   | Gallons, U.S.                                    | (gal)                            | 3.785     |
| Liters/second               | (l/s)                 | Cubic feet/minute                                | (CFM)                            | 0.4719    |
| Liters/second               | (l/s)                 | Gallons/minute                                   | (GPM)                            | 0.06309   |
| Meters                      | (m)                   | Feet                                             | (ft)                             | 0.3048    |
| Meters/second               | (m/s)                 | Feet/minute                                      | (FPM)                            | 0.00508   |
| Miles/hour                  | (MPH)                 | Kilometers/hour                                  | (km/h)                           | 0.6215    |
| Millimeters                 | (mm)                  | Inches                                           | (in)                             | 25.4      |
| Newtons/square meter        | (N/m <sup>2</sup> )   | Pounds/square inch                               | (psi)                            | 6.895     |
| Ounces                      | (oz)                  | Grams                                            | (g)                              | 0.035274  |
| Pounds                      | (lb)                  | Grams                                            | (g)                              | 0.002205  |
| Pounds                      | (lb)                  | Kilograms                                        | (kg)                             | 2.205     |
| Pounds/cubic foot           | (lb/ft <sup>3</sup> ) | Grams/cubic centimeter                           | (g/cm <sup>3</sup> )             | 62.43     |
| Pounds/cubic foot           | (lb/ft <sup>3</sup> ) | Kilograms/cubic meter                            | (kg/m <sup>3</sup> )             | 0.06243   |
| Pounds/cubic inch           | (lb/in <sup>3</sup> ) | Grams/cubic centimeter                           | (g/cm <sup>3</sup> )             | 0.03613   |
| Pounds/square inch          | (psi)                 | Bar                                              |                                  | 14.504    |
| Pounds/square inch          | (psi)                 | Kilograms/square centimeter                      | (kg/cm <sup>2</sup> )            | 14.22     |
| Pounds/square inch          | (psi)                 | Kilopascals                                      | (kPa)                            | 0.145     |
| Pounds/square inch          | (psi)                 | Newtons/square meter                             | (N/m <sup>2</sup> )              | 0.000145  |
| Square centimeters          | (cm <sup>2</sup> )    | square feet                                      | (ft <sup>2</sup> )               | 929       |
| Square centimeters          | (cm <sup>2</sup> )    | Square inches                                    | (in <sup>2</sup> )               | 6.452     |
| Square feet                 | (ft <sup>2</sup> )    | Square centimeters                               | (cm <sup>2</sup> )               | 0.001076  |
| Square feet                 | (ft <sup>2</sup> )    | Square meters                                    | (m <sup>2</sup> )                | 10.76     |
| Square inches               | (in <sup>2</sup> )    | Square centimeters                               | (cm <sup>2</sup> )               | 0.155     |
| Square meters               | (m <sup>2</sup> )     | Square feet                                      | (ft <sup>2</sup> )               | 0.0929    |
| Torr                        |                       | Inches Mercury                                   | (in Hg)                          | 0.03937   |
| Torr                        |                       | Pounds/square inch                               | (psi)                            | 51.71     |
| Watts                       | (W)                   | British Thermal Units/hour                       | (BTU/h)                          | 0.2931    |
| Watts                       | (W)                   | Joules/second                                    | (J/s)                            | 1         |
| Watt-hours                  | (WH)                  | British Thermal Units                            | (BTU)                            | 0.2931    |
| Watt-hours                  | (WH)                  | Joules                                           | (J)                              | 0.0002778 |
| Watt-hours                  | (WH)                  | Kilojoules                                       | (kJ)                             | 0.2778    |
| Watts/meter-°C              | (W/m-°C)              | British Thermal Units inches hour-square foot-°F | (BTU+in) (h-ft <sup>2</sup> -°F) | 0.1442    |
| Watts/square centimeter     | (W/cm <sup>2</sup> )  | Watts/square inch                                | (W/in <sup>2</sup> )             | 0.155     |
| Watts/square inch           | (W/in <sup>2</sup> )  | Watts/square centimeter                          | (W/cm <sup>2</sup> )             | 6.452     |

# Appendix

## Technical Data

### Formulas, Conversions and Engineering Constants

**Volts**

$$\text{Volts} = \sqrt{\text{Watts} \times \text{Ohms}}$$

$$\text{Volts} = \frac{\text{Watts}}{\text{Amperes}}$$

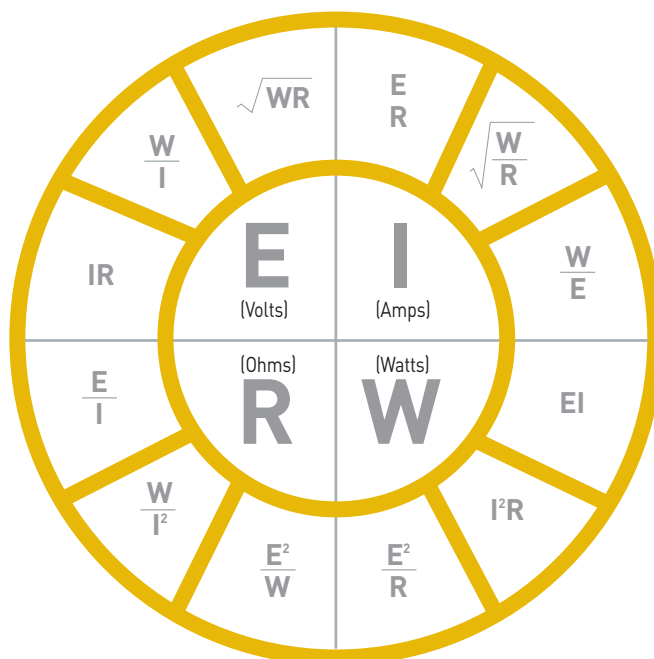
$$\text{Volts} = \text{Amperes} \times \text{Ohms}$$

**Ohms**

$$\text{Ohms} = \frac{\text{Volts}}{\text{Amperes}}$$

$$\text{Ohms} = \frac{\text{Volts}^2}{\text{Watts}}$$

$$\text{Ohms} = \frac{\text{Watts}}{\text{Amperes}^2}$$



**Amperes**

$$\text{Amperes} = \frac{\text{Volts}}{\text{Ohms}}$$

$$\text{Amperes} = \frac{\text{Watts}}{\text{Volts}}$$

$$\text{Amperes} = \sqrt{\frac{\text{Watts}}{\text{Ohms}}}$$

**Watts**

$$\text{Watts} = \frac{\text{Volts}^2}{\text{Ohms}}$$

$$\text{Watts} = \text{Amperes}^2 \times \text{Ohms}$$

$$\text{Watts} = \text{Volts} \times \text{Amperes}$$

Wattage varies directly as ratio of voltages squared.

$$W_2 = W_1 \times \left( \frac{E_2}{E_1} \right)^2$$

$$3 \text{ Phase Amperes} = \frac{\text{Total Watts}}{\text{Volts} \times 1.732}$$

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1) Need to be installed on an universal platform, which is sold separately.