1 atmosphere	=	14.696 lb per square inch 2116 lb per square foot 33.94 ft water at 62 F 30.01 in. mercury at 62 F 29.921 in. mercury at 32 F
1 in. water at 62 F (in vacuo)	=	0.03609 lb per square inch 0.5774 oz per square inch 5.197 lb per square foot
1 ft. water at 62 F (in vacuo)	=	0.4330 lb per square inch 62.37 lb per square foot
1 in. mercury at 62 F (in vacuo)	=	0.4897 lb per square inch 7.835 oz per square inch 1.131 ft water at 62 F 13.57 in. water at 62 F
1 in. mercury at 32 F (in vacuo)	=	0.49115 lb per square inch

Metric Units

1 cm	= 0.3937 in. = 0.0328 ft
1 in.	= 2.540 cm
1 m	= 3.281 ft
1 ft	= 0.3048 m
1 sq cm	= 0.1550 sq in.
1 sq in.	= 6.452 sq cm
1 sq m	= 10.76 sq ft
1 sq ft	= 0.09290 sq m
1 cu cm	= 0.06102 cu in.
1 cu in.	= 16.39 cu cm
1 cu m	= 35.31 cu ft
1 cu ft	= 0.02832 cu m
1 liter	= 1000 cu cm = 0.2642 gal
1 kg	= 2.205 lb (avdp)
1 lb	= 0.4536 kg
1 metric ton	= 2205 lb (avdp)
1 gram	= 0.002205 lb (avdp)
1 kilometer per hour	= 0.6214 mph
1 gram per square centimeter	= 0.02905 in. mercury at 62 F 0.3942 in. water at 62 F
1 kg per sq cm (metric atmosphere)	= 14.22 lb per square inch
1 gram per cubic centimeter	= 0.03613 lb per cubic inch 62.43 lb per cubic foot
1 dyne	= 0.00007233 poundals
1 absolute joule	= 10,000,000 ergs 0.7376 ft-lb
1 Int. joule	= 0.7378 ft-lb
1 metric horsepower	= 75 kg-m per second 0.986 hp (U. S.)
1 I.T. kilocalorie per kilogram	= 1.8 Btu per pound
1 I.T. calorie per square centimeter	= 3.687 Btu per square foot
1 I.T. calorie per (second) (square centimeter) for a temperature gradient of 1 C deg per centimeter	= 2903 BTU per (hour) (square foot) for a temperature gradient of 1 F deg per inch of thickness.

GRAPHICAL SYMBOLS FOR DRAWINGS[6]

Graphical Symbols for Drawings

Piping

HEATING

1. High Pressure Steam
2. Medium Pressure Steam
3. Low Pressure Steam
4. High Pressure Return
5. Medium Pressure Return
6. Low Pressure Return
7. Boiler Blow Off
8. Condensate or Vacuum Pump Discharge
9. Feedwater Pump Discharge
10. Make-Up Water
11. Air Relief Line
12. Fuel Oil Flow
13. Fuel Oil Return
14. Fuel Oil Tank Vent
15. Compressed Air
16. Hot Water Heating Supply
17. Hot Water Heating Return

AIR CONDITIONING

18. Refrigerant Discharge
19. Refrigerant Suction
20. Condenser Water Flow
21. Condenser Water Return
22. Circulating Chilled or Hot Water Flow
23. Circulating Chilled or Hot Water Return
24. Make-Up Water
25. Humidification Line
26. Drain
27. Brine Supply
28. Brine Return

PLUMBING

29. Soil, Waste or Leader (Above Grade)
30. Soil, Waste or Leader (Below Grade)
31. Vent
32. Cold Water
33. Hot Water
34. Hot Water Return
35. Fire Line
36. Gas
37. Acid Waste
38. Drinking Water Flow
39. Drinking Water Return
40. Vacuum Cleaning
41. Compressed Air

SPRINKLERS

42. Main Supplies
43. Branch and Head
44. Drain

[6] Extracted from: American Standard Graphical Symbols for Pipe Fittings, Valves, and Piping (*ASA* Z32.2.3-1949) and American Standard Graphical Symbols for Heating, Ventilating, and Air Conditioning (*ASA* Z32.2.4-1949) with the permission of the publisher, *The American Society of Mechanical Engineers*, 29 West 39th St., New York 18, N. Y.