VOLUMETRIC RATE OF FLOW

Litre/Second L/s	Litre/Minute L/m	Cubic Metre/Hour m3/hr	Cubic Foot/Hour ft3/hr	Cubic Foot/Minute ft3/min	UK Gallon/Minute UK gpm	US Gallon/Minute gpm	US Barrel/Day BPD
1	60	3.6001	127.136	2.1189	13.1986	15.8508	543.456
0.0167	1	0.0600	2.1189	0.3532	0.22	0.2642	9.0576
0.2778	16.6666	1	35.3147	0.5886	3.6662	4.4029	150.956
0.0079	0.4719	0.0283	1	0.0167	0.1038	0.1247	4.2746
0.4719	28.136	1.699	60	1	6.2288	7.4805	256.475
0.0758	4.546	0.2728	9.6326	0.1605	1	1.0201	41.1754
0.0631	3.7853	0.2271	8.0208	0.1337	0.8327	1	34.2857
0.0018	0.1104	0.0066	0.2339	0.0039	0.0243	0.0292	1

MASS RATE OF FLOW

Kilogram/Second kg/s	Kilogram/Hour kg/hr	Pound/Hour lb/hr	Ton/Hour UK t/hr	Tonne/Day t/day
1	3600	7936.64	3.54314	86.4
0.000278	1	2.2046	0.000984	0.024
0.000126	0.4536	1	0.000446	0.0109
0.2822	1016.05	2240	1	24.3852
0.0116	41.6667	91.8592	0.04101	1

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Unit & Conversion Factor Table

ATMOSPHERES - atm (Standard at sea-level pressure)

x	101.325	=	Kilopascals (kPa) absolute
x	14.696	=	Pounds force per square inch absolute (psia)
x	76.00	=	Centimetres of mercury (cmHg) at 0 oC
x	29.92	=	Inches of mercury (inHg) at 0 oC
x	33.96	=	Feet of water (ftH2O) at 68 oF
x	1.01325	=	Bars (bar) absolute
x	1.0332	=	Kilograms-force per square centimetre absolute
x	1.0581	=	Tons-force per square foot (ton/ft2) absolute
x	760	=	Torr (torr) (= mmHg at 0oC)

BARRELS, LIQUID, US - bbl

x	0.11924	=	Cubic metres (m3)
x	31.5	=	U.S. gallons (US gal) liquid

BARS - bar

x	100	=	Kilopascals (kPa)
x	14.504	=	Pounds-force per square inch (psi)
x	33.52	=	Feet of water (ftH2O) at 68 oF
x	29.53	=	Inches of mercury (inHg) at 0 oC
x	1.0197	=	Kilograms-force per square centimetre (kg/cm2)
x	0.98692	=	Atmospheres (atm) sea-level standard
x	1.0443	=	Tons-force per square foot (ton/ft2)
x	750.06	=	Torr (torr) (= mmHg at 0oC)

CENTIMETRES - cm

x	0.3937	=	Inches (in)

CUBIC CENTIMETRES - cm3

x	3.5315 x 10-5	=	Cubic feet (ft3)
x	6.1024 x 10-2	=	Cubic inches (in3)
x	1.308 x 10-6	=	Cubic yards (yd3)
x	2.642 x 10-4	=	U.S. Gallons (U.S. gal)
x	2.200 x 10-4	=	Imperial Gallons (imp gal)
x	1.000 x 10-3	=	Litres (l)

CUBIC FEET - ft3

x	0.02832	=	Cubic metres (m3)
x	2.832x 104	=	Cubic centimetres (cm3)
x	1728	=	Cubic inches (in3)
x	0.03704	=	Cubic yards (yd3)
x	7.481	=	U.S. Gallons (U.S. gal)
x	6.229	=	Imperial Gallons (imp gal)
x	28.32	=	Litres (l)

CUBIC FEET PER MINUTE - cfm

x	472.0	=	Cubic centimetres per second (cm3/s)
x	1.699	=	Cubic metres per hour (m3/h)
x	0.4720	=	Litres per second (l/s)
x	0.1247	=	U.S. gallons per second (U.S.gps)
x	62.30	=	Pounds of water per minute (lbH2O/min) at 68 oF

CUBIC FEET PER SECOND - cfs

x	0.02832	=	Cubic metres per second (m3/s)
x	1.699	=	Cubic metres per minute (m3/min)
x	448.8	=	U.S. gallons per minute (U.S. gpm)
x	0.6463	=	Million U.S. gallons per day (U.S.gpd)

CUBIC METRES - m3

x	1000	=	Litres (l)
x	35.315	=	Cubic feet (ft3)
x	61.024x103	=	Cubic inches (in3)
x	1.308	=	Cubic yards (yd3)
x	264.2	=	U.S. Gallons (U.S. gal)
x	220.0	=	Imperial Gallons (imp gal)

CUBIC METRES PER HOUR- m3/h

x	0.2778	=	Litres per second (l/s)
x	2.778 x 10-4	=	Cubic metres per second (m3/s)
x	4.403	=	U.S. gallon per minute (U.S.gpm)

CUBIC METRES PER SECOND- m3/s

x	3600	=	Cubic metres per hour (m3/h)
x	15.85 x 103	=	U.S. gallon per minute (U.S.gpm)

GALLONS, U.S. - U.S. gal

x	3785.4	=	Cubic centimetres (cm3)
x	3.7854	=	Litres (l)
x	3.7854 x 103	=	Cubic metres (m3)
x	231	=	Cubic inches (in3)
x	0.13368	=	Cubic feet (ft3)
x	4.951 x 103	=	Cubic yards (yd3)
x	0.8327	=	Imperial Gallons (imp.gal)
x	8.328	=	Pounds of water at 60oF in air
x	8.337	=	Pounds of water at 60oF in vacuo

GALLONS, IMPERIAL - imp gal

x	4546	=	Cubic centimetres (cm3)
x	4.546	=	Litres (l)
x	4.546 x 10-3	=	Cubic metres (m3)
x	0.16054	=	Cubic feet (ft3)
x	5.946 x 10-3	=	Cubic yards (yd3)
x	1.20094	=	U.S. Gallons (U.S. gal)
x	10.000	=	Pounds of water at 62oF in air

KILOGRAMS.FORCE PER SQUARE CENTIMETRE - kg/cm2

x	98.0700	=	Kilopascals (kPa)
x	0.9807	=	Bars (bar)
x	32.870	=	Feet of water (ftH2O) at 68oF
x	28.96	=	Inches of mercury (inHg) at 0oC
x	2048	=	Pounds. force per square foot (lb/ft2)
x	14.223	=	Pounds. force per square inch (psi)
x	0.9678	=	Standard atmospheres

KILOPASCALS - kPa

x	x 103	=	Pascals (Pa) or newtons per square metre (N/m2)
x	0.1450	=	Pounds.force per square inch (psi)
x	0.010197	=	Kilograms.force per square centimetre (kg/cm2)
x	0.2953	=	Inches of mercury (inHg) at 32oF
x	0.3351	=	Feet of water (ftH2O) at 68oF

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Unit & Conversion Factor Table

LITRES - l

x	1000	=	Cubic centimetres (cm3)
x	0.035315	=	Cubic feet (ft3)
x	61.024	=	Cubic inches (in3)
x	1.308 x 10-3	=	Cubic yards (yd3)
x	0.2642	=	U.S. Gallons (U.S. gal)
x	0.2200	=	Imperial gallons (imp gal)

LITRES PER MINUTE - l/min

x	0.01667	=	Litres per second (l/s)
x	5.885 x 10-4	=	Cubic feet per second (cfs)
x	4.403 x 10-3	=	U.S. gallons per second (U.S.gal/s)
x	3.666 x 10-3	=	Imperial gallons per second (imp gal/s)

LITRES PER SECOND - l/s

x	10-3	=	Cubic metres per second (m3/s)
x	3.600	=	Cubic metres per hour (m3/h)
x	60	=	Litres per minute (l/min)
x	15.85	=	U.S. Gallons per minute (U.S. gpm)
x	13.20	=	Imperial gallons per minute (imp gpm)

MEGAPASCALS - Mpa

x	'106	=	Pascals (Pa) or newtons per square metre (N/m2)
x	'103	=	Kilopascals (kPa)
x	145.0	=	Pounds.force per square inch (psi)
x	0.1020	=	Kilograms.force per square millimetre (kgf.mm2)

NEWTONS - N

x	0.10197	=	Kilograms.force (kgf)
x	0.2248	=	Pounds.force (lbf)

PASCALS - Pa

x	1	=	Newtons per square metre (N/m2)
x	1.450 x 10-4	=	Pounds.force per square inch (psi)
x	1.0197 x 10-5	=	Kilograms.force per square centimetre (kg/cm2)
x	10-3	=	Kilopascals (kPa)

POUNDS-MASS OF WATER AT 60OF

x	453.98	=	Cubic centimetres (cm3)
x	0.45398	=	Litres (l)
x	0.01603	=	Cubic feet (ft3)
x	27.70	=	Cubic inches (in3)
x	0.1199	=	U.S. Gallons (U.S. gal)

POUNDS OF WATER PER MINUTE AT 60OF

x	7.576	=	Cubic centimetres per second (cm3/ s)
x	2.675 x 10-4	=	Cubic feet per second(cfs)

POUNDS PER CUBIC FOOT - lb/ft3

x	16.018	=	Kilograms per cubic metre (kg/m3)
x	0.016018	=	Grams per cubic centimetre (g/cm3)
x	5.787 x 10-4	=	Pounds per cubic inch (lb/in3)

POUNDS.FORCE PER FOOT - lbf/ft

x	14.59	=	Newtons per metre (N/m)
x	1.488	=	Kilograms.force per metre (kgf/m)
x	14.88	=	Grams.force per centimetre (gf/cm)

POUNDS.FORCE PER SQUARE FOOT - lbf/ft2

x	47.88	=	Pascals (Pa)
x	0.01605	=	Feet of water (ftH2O) at 68oF
x	4.882 x 10-4	=	Kilograms.force per square centimetre (kg/cm2)
x	6.944 x 10-3	=	Pounds.force per square inch (psi)

STANDARD CUBIC FEET PER MINUTE - scfm (at 14.696 psia and 60F)

x	0.4474	=	Litres per second (l/s) at standard conditions (760 mmHg and 0oC)
x	1.608	=	Cubic metres per hour (m3/h) at standard conditions (760 mmHg and 0oC)

TONNES.FORCE - tf metric ton-force

x	980.7	=	Newtons (N)

TONS MASS - tonm long

x	1016	=	Kilograms (kg)
x	2240	=	Pounds (lb) av.
x	1.1200	=	Tons (ton) short

TONNES - t metric ton, millier

x	1000	=	Kilograms (kg)
x	2204.6	=	Pounds (lb)

TONNES.FORCE - tf metric ton-force

x	980.7	=	Newtons (N)

TONS - ton short

x	907.2	=	Kilograms (kg)
x	0.9072	=	Tonnes (t)
x	2000	=	Pounds (lb) av.
x	32000	=	Ounces (oz) av.
x	2430.6	=	Pounds (lb) troy
x	0.8929	=	Tons (ton) long

TONS OF WATER PER 24 HOURS AT 60OF

x	0.03789	=	Cubic metres per hour (m3/h)
x	83.33	=	Pounds of water per hour (lb/hH2O) at 60oF
x	0.1668	=	U.S. gallons per minute (U.S.gpm)
x	1.338	=	Cubic feet per hour (cfh) KILOPASCALS - kPa
x	x 103	=	Pascals (Pa) or newtons per square metre (N/m2)
x	0.1450	=	Pounds.force per square inch (psi)
x	0.010197	=	Kilograms.force per square centimetre (kg/cm2)
x	0.2953	=	Inches of mercury (inHg) at 32oF
x	0.3351	=	Feet of water (ftH2O) at 68oF

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