

Bearings And Housings Matching Table

Matching Table

Housing \ Bearing	UC	UK	NA	SA	SB	
	P	UCP	UKP	NAP	SAP	SBP
	F	UCF	UKF	NAF	SAF	SBF
	FL	UCFL	UKFL	NAFL	SAFL	SBFL
	T	UCT	UKT	NAT	SAT	SBT
	FC	UCFC	UKFC	NAFC	SAFC	SBFC
	PH	UCPH	UKPH	NAPH	SAPH	SBPH
	PA	UCPA	UKPA	NAPA	SAPA	SBPA
	HA	UCHA	UKHA	NAHA		
	FB	UCFB	UKFB	NAFB		
	FA	UCFA	UKFA	NAFA		
	C	UCC	UKC	NAC	SAC	SBC
	LP				SALP	SBLP
	FL				SALF	SBLF
	PP				SAPP	SBPP
	PF				SAPF	SBPF
	PFL				SAPFL	SBPFL

CONVERSION GUIDE

CONVERSION FORMULAE

LENGTH

To convert

mill-inches into micrometres	Multiply by 25.4
inches into millimetres	25.4
inches into centimetres	2.54
inches into metres	0.0254
feet into millimetres	304.8
feet into centimetres	30.48
feet into metres	0.3048
yards into metres	0.9144
fathoms into metres	1.8288
chains into metres	20.1168
furlongs into metres	201.168
miles, statute into kilometres	201.168
miles, nautical into kilometres	1.852

VOLUME & CAPACITY

To convert

cubic inches into cubic centimetres	Multiply by 16.387064
cubic inches into litres	0.016387
cubic feet into cubic metres	0.0283168
cubic feet into litres	28.316847
cubic yards into cubic metres	0.7645549
UK pints into litres	0.5682613
UK quarts into litres	1.1365225
UK gallons into litres	4.54609
UK gallons into cubic metres	0.0045461
UK fluid ounces into cubic centimetres	28.413063

AREA

To convert

square inches into square millimetres	Multiply by 645.16
square inches into square centimetres	6.4516
square feet into square centimetres	929.0304
square feet into square metres	0.092903
square yards into square metres	0.836127
square yards into acres	0.083613
acres into square metres	4046.8564
acres into hectares	0.4046856
square miles into square kilometres	2.589988

MASS

To convert

grains into milligrams	Multiply by 64.79891
grains into metric carats	0.323995
grains into grams	0.064799
pennyweights into grams	1.555174
ounces into grams	28.349523
ounces troy into grams	31.103477
ounces into kilograms	0.0283495
pounds into kilograms	0.4535924
stones into kilograms	6.3502932
hundredweights into kilograms	50.802345
tons into kilograms	1016.0469
tons into metric tonnes	1.01605
tahils into grams	37.799
kati into kilograms	0.60479

POWER

To convert Multiply by

foot pounds-force per second into watts	1.35582
horsepower into watts	745.7
foot pounds-force per second into kilowatts	0.001356
horsepower into kilowatts	0.7457
horsepower into metric horsepower	1.01387

VELOCITY

To convert

feet per second into centimetres per second	Multiply by 30.48
feet per second into metres per second	0.3048
miles per hour into kilometres per hour	1.609344

FORCE

To convert

pounds force into newtons	Multiply by 4.44822
poundals into newtons	0.138255

TEMPERATURE

To convert from degrees

Fahrenheit to Centigrade:

MOTORING CONVERSIONS

These Conversion charts indicate relative values. They are intended only as a guide and should not be used to calculate higher values where more than three decimal places would be needed.

FUEL CONSUMPTION

L/100km	=	mile/gal	=	mile/gal	=	L/100km
6.0	=	47.06	=	10	=	28.248
7.0	=	40.34	=	12	=	23.540
8.0	=	35.30	=	14	=	20.177
8.5	=	33.22	=	16	=	17.655
9.0	=	31.38	=	18	=	15.693
9.5	=	29.73	=	20	=	14.124
10.0	=	28.24	=	22	=	12.840
10.5	=	26.90	=	24	=	11.710
11.0	=	25.67	=	26	=	10.864
11.5	=	24.56	=	28	=	10.088
12.0	=	23.53	=	30	=	9.416
12.5	=	22.59	=	32	=	8.827
13.0	=	21.72	=	34	=	8.308
13.5	=	20.92	=	36	=	7.846
14.0	=	20.17	=	38	=	7.433
14.5	=	19.48	=	40	=	7.062
15.0	=	18.83	=	42	=	6.726
16.0	=	17.65	=	43	=	6.561
17.0	=	16.61	=	44	=	6.420
18.0	=	15.69	=	45	=	6.279
19.0	=	14.86	=	46	=	6.137
20.0	=	14.12	=	47	=	5.996
21.0	=	13.44	=	48	=	5.855
22.0	=	12.83	=	49	=	5.713
23.0	=	12.27	=	50	=	5.572

TYRE PRESSURE

lbf/in ²	=	kPa	=	kPa	=	lbf/in ²
25	=	172.36	=	155	=	22.48
26	=	179.26	=	160	=	23.20
27	=	186.16	=	165	=	23.93
28	=	193.05	=	170	=	24.66
29	=	199.95	=	175	=	25.38
30	=	206.84	=	180	=	26.11
31	=	213.74	=	185	=	26.83
32	=	220.63	=	190	=	27.56
33	=	227.53	=	195	=	28.28
34	=	234.42	=	200	=	29.00
35	=	241.31	=	205	=	29.73

SPEED

km/h	=	mile/h	=	mile/h	=	km/h
5.00	=	3.12	=	10	=	16
10.00	=	6.25	=	15	=	24
15.00	=	9.37	=	20	=	32
20.00	=	12.50	=	25	=	40
25.00	=	15.62	=	30	=	48
30.00	=	18.75	=	35	=	56
35.00	=	21.87	=	40	=	64
40.00	=	25.00	=	45	=	72
45.00	=	28.12	=	50	=	80
50.00	=	31.25	=	55	=	88
55.00	=	34.37	=	60	=	96
60.00	=	37.50	=	65	=	104
65.00	=	40.62	=	70	=	112
70.00	=	43.75	=	75	=	120
75.00	=	46.87	=	80	=	128
80.00	=	50.00	=	85	=	136
85.00	=	53.12	=	90	=	144
90.00	=	56.25	=	95	=	152
95.00	=	59.37	=	100	=	160
100.00	=	62.50	=	105	=	168
105.00	=	65.62	=	110	=	176
110.00	=	68.75	=	115	=	184
115.00	=	71.87	=	120	=	192
120.00	=	75.00	=	125	=	200
130.00	=	81.25	=	130	=	208
140.00	=	87.50	=	135	=	216
150.00	=	93.75	=	140	=	224

$$(X^{\circ}\text{F} - 32) \times \frac{5}{9} = Y^{\circ}\text{C}$$

$$(Y^{\circ}\text{C} \times \frac{9}{5}) + 32 = X^{\circ}\text{F}$$

IMPERIAL SYSTEM

LENGTH

1000 milli-inches	= 1 inch
12 inches	= 1 foot
3 feet	= 1 yard
5.5 yards	= 1 rod
220 yards	= 1 furlong
40 rods	= 1 furlong
5280 feet	= 1 mile
1760 yards	= 1 mile
8 furlongs	= 1 mile
3 miles	= 1 league
25 links	= 1 rod
100 links	= 1 chain
66 feet	= 1 chain
22 yards	= 1 chain
4 rods	= 1 chain

LENGTH (NAUTICAL)

6 feet	= 1 fathom
100 fathoms (approx)	= 1 cable length
10 cable lengths	= 1 nautical mile

AREA

144 sq ins	= 1 sq foot
9 sq feet	= 1 sq yard
30.25 sq	= 1 sq rod
484 sq yds	= 1 sq chain
1210 sq yds	= 1 rood
4840 sq yds	= 1 acre
160 sq rods	= 1 acre
640 acres	= 1 sq mile

AVOIRDUPOIS WEIGHT

437.5 grains	= 1 ounce
16 drams	= 1 ounce
7000 grains	= 1 pound
256 drams	= 1 pound
16 ounces	= 1 pound
14 pounds	= 1 stone
2 stones	= 1 quarter
100 pounds	= 1 cwt
112 pounds	= 1 cwt
4 quarters	= 1 cwt
35840 ounces	= 1 ton
2240 pounds	= 1 ton
20 cwts	= 1 ton

APOTHECARIES' WEIGHT

20 grains	= 1 scruple
3 scruples	= 1 dram
8 drams	= 1 ounce
12 ounces	= 1 pound

Ounce and pound are the same as in Troy Weight.

TROY WEIGHT

24 grains	= 1 pwt
20 pwt	= 1 ounce
12 ounces	= 1 pound
<i>Used for weighting gold, silver and jewels.</i>	

VOLUME

1728 cu ins	= 1 cu foot
46656 cu ins	= 1 cu yard
27 cu ins	= 1 cu yard

CAPACITY

8 fluid drams	= 1 fluid ounce
5 fluid ounces	= 1 gill
20 fluid ounces	= 1 pint
4 gills	= 1 pint
40 fluid ounces	= 1 quart
2 pints	= 1 quart
160 fluid ounces	= 1 gallon
8 pints	= 1 gallon
4 quarts	= 1 gallon
2 gallons	= 1 peck
4 pecks	= 1 bushel
8 gallons	= 1 bushel
64 gallons	= 1 quarter
31 1/2 gallons	= 1 barrel
2 barrels	= 1 hogshead

MARINERS' MEASURE

6 feet	= 1 fathom
120 fathoms	= 1 cable length
7 1/2 cable	= 1 mile
lengths	
5,280.2 feet	= 1 statute mile
6,080.2 feet	= 1 nautical mile

SURVEYORS' MEASURE

7.92 inches	= 1 link
25 links	= 1 rod
4 rods	= 1 chain
10 sq chains	= 1 acre
or 160 sq rods	
640 acres	= 1 square mile
36 sq miles	= 1 township
(6 miles sq)	

METRIC SYSTEM

LENGTH

1000 picometres	= 1 nanometre
1000 nanometres	= 1 micrometre
1000 micrometres	= 1 millimetre
10 millimetres	= 1 centimetre
100 millimetres	= 1 decimetre
10 centimetres	= 1 decimetre
1000 millimetres	= 1 metre
100 millimetres	= 1 metre
10 decimetres	= 1 metre
100 metres	= 1 hectometre
1000 metres	= 1 kilometre
1852 nautical metres	= 1 international nautical mile

AREA

100 sq millimetres	= 1 sq centimetre
100 sq centimetres	= 1 sq decimetre
10 000 sq centimetres	= 1 sq metre
100 sq decimetres	= 1 sq metre
10 000 sq metres	= 1 hectare
100 hectares	= 1 sq kilometre

MASS

1000 micrograms	= 1 milligram
200 milligrams	= 1 metric carat
1000 milligrams	= 1 gram
5 metric carats	= 1 gram
1000 grams	= 1 kilogram
1000 kilograms	= 1 megagram
1000 tonnes	= 1 tonne

ENERGY (WORK & HEAT)

1000 millijoules	= 1 joule
1000 joules	= 1 kilojoule
1000 kilojoules	= 1 megajoule
3.6 megajoules	= 1 kilowatt hour
1000 megajoules	= 1 gigajoule
1000 gigajoules	= 1 terajoule

TIME

1000 nanoseconds	= 1 microsecond
1000 microseconds	= 1 millisecond
1000 milliseconds	= 1 second
1000 seconds	= 1 kilosecond

VELOCITY

3.6 kilometres	= 1 metre per second
3600 kilometres	= 1 kilometre per second

ELECTRICITY & MAGNETISM

1000 picoamperes	= 1 nanoampere
1000 nanoamperes	= 1 microampere
1000 microamperes	= 1 milliampere
1000 milliamperes	= 1 ampere
1000 amperes	= 1 kiloampere
1000 milliloulombs	= 1 coulomb
1000 coulombs	= 1 kilocoulomb
1000 microvolts	= 1 millivolt
1000 millivolts	= 1 volt
1000 volts	= 1 kilovolt
1000 kilovolts	= 1 megavolt
1000 microhmhs	= 1 milliohm
1000 milliohmhs	= 1 ohm
1000 ohms	= 1 kilohm
1000 kilohms	= 1 megohm
1000 megohmhs	= 1 gigohm
1000 millisiemens	= 1 siemen
1000 millihenrys	= 1 henry
1000 milliteslas	= 1 tesla

POWER

1000 microwatts	= 1 milliwatt
1000 milliwatts	= 1 watt
1000 watts	= 1 kilowatt
1000 kilowatts	= 1 megawatt
1000 megawatts	= 1 gigawatt
1000 gigawatts	= 1 terawatt

VOLUME & CAPACITY

1000 cu millimetres	= 1 cu millimetre
1000 centimetres	= 1 cu decimetre
1000 cu decimetres	= 1 cu metre
1 millilitre	= 1 centimetre
10 millilitres	= 1 centilitre
10 centilitres	= 1 decilitre
1000 millilitres	= 1 litre
100 centilitres	= 1 litre
100 litres	= 1 hectolitre
1000 litres	= 1 kilolitre
10 hectolitres	= 1 cu metre

PRESSURE AND STRESS

1000 micropascals	= 1 millipascal
1000 millipascals	= 1 pascal
100 pascals	= 1 millibar
1000 pascals	= 1 kilopascal
10 millibars	= 1 kilopascal
1000 kilopascals	= 1 megapascal
1000 megapascals	= 1 gigapascal

DENSITY & CONCENTRATION

1 gram per cu metre	= 1 milligram per cu decimetre
1000 milligrams per cu decimetre	= 1 gram per cu decimetre
1000 milligrams per cu metre	= 1 kilogram per cu metre
1000 kilograms per metre	= 1 tonne per cu metre
1000 kilograms per cu decimetre	= 1 kilogram per cu decimetre

FORCE

1000 micronewtons	= 1 micronewton
1000 millinewtons	= 1 newton
1000 newtons	= 1 kilonewton
1000 kilonewtons	= 1 meganewton



Conversion Table

Inch ~ mm

inch										
Fraction	Decimal	0"	1"	2"	3"	4"	5"	6"	7"	8"
	.0		25.4	50.8	76.2	101.6	127	152.4	177.8	203.2
1/64	.015625	0.3969	25.7969	51.1969	75.5969	101.9969	127.3969	152.7969	178.1969	203.5969
1/32	.03125	0.7838	26.3908	51.7808	76.9808	102.3808	127.7808	153.1808	178.5808	204.3808
3/64	.046875	1.1906	26.5906	51.9906	77.3906	102.7906	128.1906	153.5906	178.9906	204.3906
1/16	.0625	1.5875	26.9875	52.3875	77.7875	103.1875	128.5875	153.9875	179.3875	204.7875
5/64	.078125	1.9844	27.3844	52.7844	78.1844	103.5844	128.9844	154.3844	179.7844	205.1844
3/32	.09375	2.3813	27.7813	53.1812	78.5812	103.9812	129.3812	154.7812	180.1812	205.5812
7/64	.109375	2.7781	28.1781	53.5781	78.9781	104.3781	129.7781	155.1781	180.5781	205.9781
1/8	.125	3.175	28.575	53.975	79.375	104.775	130.175	155.575	180.975	206.375
9/64	.140625	3.5719	28.9719	54.3719	79.7719	105.1719	130.5719	155.9719	181.3719	206.7719
5/32	.15625	3.9688	29.3688	54.7688	80.1688	105.9688	130.9688	156.3688	181.7688	207.1688
11/64	.171875	4.3656	29.7656	55.1656	80.5656	106.9566	131.3656	156.7656	182.1656	207.5656
3/16	.1875	4.7625	30.1625	55.5625	80.9625	106.3625	131.7625	157.1625	182.5625	207.9625
13/64	.203125	5.1594	30.5594	55.9594	81.3594	106.7594	132.1594	157.5594	182.9594	208.3594
7/32	.21875	5.5562	30.9562	56.3562	81.7562	107.1562	132.5562	157.9562	183.3562	208.7562
15/64	.234375	5.9531	31.3531	56.7531	82.1531	107.5531	132.9531	158.3531	183.7531	209.1531
1/4	.250000	6.3500	31.7500	57.1500	82.5500	107.9500	133.3500	158.7500	184.1500	209.5500
17/64	.265625	6.7469	32.1469	57.5469	82.9469	108.3469	133.7469	159.1469	184.5469	209.9469
9/32	.28125	7.1438	32.5438	57.9438	83.3438	108.7438	134.1438	159.5438	184.9438	210.3438
19/64	.296875	7.5406	32.9406	58.3406	83.7406	109.1406	134.5406	159.9406	185.3406	210.7406
5/16	.3125	7.9375	33.3375	58.7375	84.1375	109.5375	134.9375	160.3375	185.7375	211.1375
21/64	.328125	8.3344	33.7344	59.1344	84.5344	109.9344	135.3344	160.7344	186.1344	211.5344
11/32	.34375	8.7312	34.1312	59.5312	84.9312	110.3312	135.7312	161.1312	186.5312	211.9312
23/64	.359375	9.1281	34.5281	59.9281	85.3281	110.7281	136.1281	161.5281	186.9281	212.3281
3/8	.375	9.525	34.925	60.325	85.725	111.125	136.525	161.925	187.325	212.725
25/64	.390625	9.9219	35.3219	60.7219	86.1219	111.5219	136.9219	162.3219	187.7219	213.1219
13/32	.40625	10.3188	35.7188	61.1188	86.5188	111.9188	137.3188	162.7188	188.1188	213.5188
27/64	.421875	10.7156	36.1151	61.5156	86.9156	112.3156	137.7156	163.1156	188.5156	213.9156
7/16	.4375	11.125	36.5125	61.9125	87.3125	112.7125	138.125	163.5125	188.9125	214.3125
29/64	.453125	11.5094	36.9094	62.3094	87.7094	113.1094	138.5094	163.9094	189.3094	214.7094
15/32	.46875	11.9062	37.3062	62.7062	88.1062	113.5062	139.3031	164.3062	189.7062	215.1062
31/64	.484375	12.3031	37.7031	63.1031	88.5031	113.9031	139.7	164.7031	190.1031	215.5031
1/2	.5	12.7	38.1	63.5	88.9	114.3	139.7	165.1	190.5	215.9
33/64	.515625	13.0969	38.4969	63.8969	89.2969	114.6969	140.0969	165.4969	190.8969	216.2969
17/32	.53125	13.4838	38.8938	64.2938	89.6938	115.0939	140.4938	165.8938	191.2938	216.6938
35/64	.546875	13.8906	39.2906	64.6906	90.0906	115.4906	140.8906	166.2906	191.6906	217.0906
9/16	.5625	14.2875	39.6875	65.0875	90.4875	115.8875	141.2975	166.6875	192.0875	217.4875
37/64	.578125	14.6844	40.844	65.4844	90.8844	116.2844	141.6844	167.0844	192.4844	217.8844
19/32	.59375	15.0812	40.4812	65.8812	91.2812	116.6812	142.0812	167.4812	192.8812	218.2812
39/64	.609375	15.4781	40.8781	66.2781	91.6781	117.0781	142.4781	167.8781	193.2781	218.6781
5/8	.625	15.875	41.275	66.6750	92.075	117.475	142.875	168.275	193.675	219.075
41/64	.640625	16.2719	41.6719	67.0719	92.4719	117.8719	143.2719	168.6719	194.0719	219.4719
21/32	.65625	16.6688	42.0688	67.4688	92.8688	118.2688	143.6688	169.0688	194.4688	220.0688
43/64	.671875	17.0656	42.4656	67.8656	93.2656	118.6656	144.0656	169.4656	194.8656	220.4656
11/16	.6875	17.4625	42.8625	68.2625	93.6625	119.0625	144.4625	169.8625	195.2625	220.6625
45/64	.703125	17.8594	43.2594	68.6594	94.0594	119.4594	144.8594	170.2594	195.6594	221.0594
23/32	.71875	18.2562	43.6562	69.0562	94.4562	119.8562	145.2562	170.6562	196.0562	221.4562
47/64	.734375	18.6531	44.0531	69.4531	94.8531	120.2531	145.6531	171.0531	196.4531	221.8531
3/4	.75	19.05	44.45	69.85	95.25	120.65	146.0500	171.45	196.85	222.25
49/64	.765625	19.4469	44.8469	70.2469	95.6469	121.0469	146.4469	171.8469	197.2469	222.6469
25/32	.78125	19.8438	45.2338	70.6438	96.0438	121.4438	146.8438	172.4438	198.6438	223.0438
51/64	.796875	20.2406	45.6406	71.0406	96.4406	121.8406	147.2406	172.8406	198.0406	223.4406
13/16	.8125	20.6375	46.0375	71.4375	96.8375	122.2375	147.6375	173.0375	198.4375	223.8375
53/64	.828125	21.0344	46.4344	71.8344	97.2344	122.6344	148.0344	173.4344	198.8344	224.2344
27/32	.84375	21.4312	46.8312	72.2312	97.6312	123.0312	148.4312	173.8312	199.2312	224.6312
55/64	.859375	21.8281	47.2281	72.6281	98.0281	123.4281	148.8281	174.2281	199.6281	225.0281
7/8	.875	22.225	47.625	73.025	98.425	123.825	149.225	174.625	200.025	225.425
57/64	.890625	22.6219	48.0219	73.4219	98.8219	124.2219	149.6219	175.0219	200.4219	225.8219
29/32	.90625	23.0188	48.4188	73.8188	99.2188	124.6188	150.0188	175.4188	200.8188	226.2188
59/64	.921875	23.4156	48.8156	74.2156	99.6156	125.0156	150.4156	176.8156	201.2156	226.6156
15/16	.9375	23.8125	49.2125	74.6125	100.0125	125.4125	150.8125	176.2125	201.6125	227.0125
61/64	.953125	24.2094	49.6094	75.0094	100.4094	125.8094	151.2094	176.6094	202.0094	227.4094
53/32	.96875	24.6062	50.0062	75.4062	100.8062	126.2062	151.6062	177.0062	202.4062	227.8062
63/64	.984375	25.0031	50.4031	75.8031	101.2031	126.6031	152.0031	177.4031	202.8031	228.2031