

The Catalog of Synonymous Dimensions

By R. Hanush

Part A: alphabetical listing

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
a-1 time	time	time	(1,0,0)	<i>t</i>	second	CRC F78
abbe number	proportion	number	(0,0,0)	<i>n</i>	unity	CRC F73
absolute activity	exponential	number	(0,0,0)	<i>n</i>	unity	AIP 45; CRC F291
absolute density	density	density	(0,-3,1)	<i>m / d³</i>	kilogram per cu meter	CRC F73
absolute gravity	density	density	(0,-3,1)	<i>m / d³</i>	kilogram per cu meter	CRC F73
absolute humidity	density	density	(0,-3,1)	<i>m / d³</i>	kilogram per cu meter	CRC F73
absolute pressure	pressure	pressure	(-2,-1,1)	<i>m / d t²</i>	pascal	CRC F73, F119
absolute specific gravity	proportion	number	(0,0,0)	<i>n</i>	unity	CRC F73
absolute temperature	temperature	energy	(-2,2,1)	<i>m d² / t²</i>	kelvin	CRC F73

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
absolute viscosity	dynamic viscosity	dynamic viscosity	(-1,-1,1)	$m / d t$	pascal second	CRC F38
absorbance unit	transmission	number	(0,0,0)	n		RR
absorbed dose	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	CRC F101, F134, F283, F314, F360
absorbed dose rate	absorbed dose rate	specific power	(-3,2,0)	d^2 / t^3	gray per second	CR F360; Sz 59, 687
absorptance	proportion	number	(0,0,0)	n	unity	AIP 44; CRC F73, E210
absorption coefficient	proportion	number	(0,0,0)	n	unity	CRC F73
absorption cross-section (1)	cross section	area	(0,2,0)	d^2	sq meter	CRC F73
absorption cross-section (2)	proportion	number	(0,0,0)	n	unity	CRC F73
absorption factor	proportion	number	(0,0,0)	n	unity	AIP 44; CRC F73
acceleration	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	AIP 38; CRC F283, F363; M 1-18, 3-52; MH 2416
acceptor ionization energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41; CRC F74
acceptor number density	number density	volume concentration	(0,-3,0)	n / d^3	acceptors per cu meter	AIP 39
acetone number	proportion	number	(0,0,0)	n	unity	CRC F74
acoustic absorption coefficient	proportion	number	(0,0,0)	n	unity	CRC F73
acoustic impedance	acoustic impedance	acoustic impedance	(-1,-4,1)	$m / d^4 t$	pascal second per cu meter	efunda.com; owenscorning.com; phys.unsw.edu.au
acoustic ohm	acoustic impedance	acoustic impedance	(-1,-4,1)	$m / d^4 t$	pascal second per cu meter	efunda.com; owenscorning.com; RR
acoustic pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 39

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acoustic velocity	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F75
acre	area	area	(0,2,0)	d^2	sq meter	CRC F346; M 1-16; MH 2417
acre foot	volume	volume	(0,3,0)	d^3	cu meter	CRC F346; RR
action	work time	angular momentum	(-1,2,1)	$m d^2 / t$	joule second	CRC F75
action integral	work time	angular momentum	(-1,2,1)	$m d^2 / t$	joule second	AIP 42
activation energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F363
active mass	density	density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC F75
activity (1)	proportion	number	(0,0,0)	n	unity	CRC F100
activity (2)	radioactivity	frequency	(-1,0,0)	n / t	becquerel	AIP 40; CRC F134, F283, F314, F360; M 1-18
activity coefficient	proportion	number	(0,0,0)	n	unity	AIP 38
admiralty mile	distance	distance	(0,1,0)	d	meter	RR
admittance	admittance	conductance	(-1,-2,1)	$m / d^2 t$	siemens	M 15-3; Sz 58, 680
aeon	time	time	(1,0,0)	t	second	RR
agate line	distance	distance	(0,1,0)	d	meter	RR
air watt	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
albedo	proportion	number	(0,0,0)	n		CRC F75
ale gallon	volume	volume	(0,3,0)	d^3	cu meter	RR
alen	distance	distance	(0,1,0)	d	meter	RR
alfven number	proportion	number	(0,0,0)	n	unity	CRC F76
alfven speed	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F76
almude	volume	volume	(0,3,0)	d^3	cu meter	RR
alqueire (1)	area	area	(0,2,0)	d^2	sq meter	RR
alqueire (2)	volume	volume	(0,3,0)	d^3	cu meter	RR
amagat density	volume concentration	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	RR
amagat volume	molar volume	volume	(0,3,0)	d^3	cu meter per mole	RR
amber	volume	volume	(0,3,0)	d^3	cu meter	RR

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amount of substance	quantity	number	(0,0,0)	n	mole	AIP 39; CRC F282, F311; M 1-18; MH 2415
ampere	electric current	electric current	(-2,0,1)	m / t^2	ampere	CRC F282; M 1-18; RR
ampere hour	electric charge	electric charge	(-1,0,1)	m / t	coulomb	CRC F76, F346
ampere-turn	magnetomotive force	electric current	(-2,0,1)	m / t^2	ampere- turn	CRC F346; RR
amphora	volume	volume	(0,3,0)	d^3	cu meter	RR
amu	mass	mass	(0,0,1)	m	kilogram	AIP 39; CRC F285; RR
anchor	volume	volume	(0,3,0)	d^3	cu meter	RR
angle	plane angle	number	(0,0,0)	n	radian	CRC F313
angstrom	distance	distance	(0,1,0)	d	meter	CRC F284, F315, F346; RR
angular acceleration	angular acceleration	angular acceleration	(-2,0,0)	n / t^2	radian per sq second	AIP 44; CRC F77; M 1-18, 3-52; MH 2416
angular density	mass per plane angle	mass	(0,0,1)	m	kilogram per radian	
angular displacement	plane angle	number	(0,0,0)	n	radian	CRC F77
angular frequency	frequency	frequency	(-1,0,0)	n / t	per second	AIP 46
angular inertia	angular inertia	angular inertia	(0,2,1)	$m d^2$	kilogram sq meter	CRC F77
angular jerk	angular jerk	angular jerk	(-3,0,0)	n / t^3	radian per cu second	Sz 57, 694
angular momentum	angular momentum	angular momentum	(-1,2,1)	$m d^2 / t$	joule second	AIP 42; CRC F77; M 3-52
angular velocity	angular velocity	frequency	(-1,0,0)	n / t	radian per second	CRC F77, F283, F364; M 1-18, 3-52; MH 2416
angular wave number		wave number	(0,-1,0)	n / d	per meter	AIP 38
angular wave vector		wave number	(0,-1,0)	n / d	per meter	AIP 39
aperture ratio	proportion	number	(0,0,0)	n	unity	CRC F78

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apostilb	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	CRC F346; RR
apparent power	power	power	(-3,2,1)	$m d^2 / t^3$	watt	M 15-3 CRC F346; M 1-19;
are	area	area	(0,2,0)	d^2	sq meter	RR
area	area	area	(0,2,0)	d^2	sq meter kilogram per sq meter	AIP 40; CRC F77, F283, F363; M 1-18, 3-52; MH 2416 Sz 57, 672
area density	area density	capacitance	(0,-2,1)	m / d^2	sq meters per second	Wikipedia
areal velocity	area per unit time	voltage	(-1,2,0)	d^2 / t	meter	RR
arpent (1)	distance	distance	(0,1,0)	d	sq meter	RR
arpent (2)	area	area	(0,2,0)	d^2	kilogram	RR
arroba	mass	mass	(0,0,1)	m	meter	RR
arshin	distance	distance	(0,1,0)	d	cu meter	RR
artaba	volume	volume	(0,3,0)	d^3	kilogram	RR
artel	mass	mass	(0,0,1)	m	kilogram	M 1-17
assay ton	mass	mass	(0,0,1)	m	meter	CRC F78, F346; RR
astronomical unit	distance	distance	(0,1,0)	d	second	CRC F78
astronomical year	time	time	(1,0,0)	t	angular acceleration	RR
atmo-meter	atmo-meter	angular acceleration	(-2,0,0)	n / t^2	pressure	CRC F78, F284, F346; MH 2421; RR
atmosphere	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
atom	time	time	(1,0,0)	t	second	RR
atomic attenuation coefficient	atomic attenuation	area	(0,2,0)	d^2	sq meter	AIP 45; Sz 59
atomic energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F79
atomic heat capacity	proportion	number	(0,0,0)	n	unity	CRC F79
atomic mass	mass	mass	(0,0,1)	m	kilogram	AIP 39; RR
atomic number	quantity	number	(0,0,0)	n	mole	AIP 44; RR

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atomic stopping power	atomic stopping power	atomic stopping power	(-2,4,1)	$m d^4 / t^2$	joule sq meter	AIP 43
atomic volume	molar volume	volume	(0,3,0)	d^3	cu meter per mole	CRC B209
attenuation factor		wave number	(0,-1,0)	n / d	per meter	AIP 44
aught		wave number	(0,-1,0)	n / d		RR
aume	volume	volume	(0,3,0)	d^3	cu meter	RR
awg	quantity per distance	wave number	(0,-1,0)	n / d	?	RR
azimuth	plane angle	number	(0,0,0)	n	radian	CRC F80
b.i.d.		frequency	(-1,0,0)	n / t	hertz	RR
bag (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F346; RR
bag (2)	mass	mass	(0,0,1)	m	kilogram	RR
baht	mass	mass	(0,0,1)	m	kilogram	RR
baker's dozen	quantity	number	(0,0,0)	n	unity	RR
bale (1)	mass	mass	(0,0,1)	m	kilogram	RR
bale (2)	quantity	number	(0,0,0)	n	unity	RR
ball	proportion	number	(0,0,0)	n	unity	RR
balling		density	(0,-3,1)	m / d^3	kilogram per cu meter	RR
balthazar	volume	volume	(0,3,0)	d^3	cu meter	RR
bar	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F80, F284, F315, F346; MH 2421
bar liter	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
barge	volume	volume	(0,3,0)	d^3	cu meter	RR
barleycorn	distance	distance	(0,1,0)	d	meter	CRC F346; RR
barn	cross section	area	(0,2,0)	d^2	sq meter	CRC F80, F284, F315, F346; M 1-19
barrel (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F346; RR
barrel (2)	mass	mass	(0,0,1)	m	kilogram	RR
barrel of oil equivalent	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR

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barrer	gas permeability	resistivity	(1,3,-1)	$d^3 t / m$		RR
barrique	volume	volume	(0,3,0)	d^3	cu meter	RR
barye	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F80, F346; RR
basis weight	distance	distance	(0,1,0)	d	meter	RR
baud		frequency	(-1,0,0)	n / t	hertz	RR
beat	time	time	(1,0,0)	t	second	CRC F80; RR
beat frequency	frequency	frequency	(-1,0,0)	n / t	hertz	CRC F80
beats per minute (bpm)	frequency	frequency	(-1,0,0)	n / t	hertz	RR
becquerel	radioactivity	frequency	(-1,0,0)	n / t	becquerel	CRC F81, F134, F283, F314, F346, F360; Sz 54, 667
bee space	distance	distance	(0,1,0)	d	meter	RR
bel	exponential	number	(0,0,0)	n	decibel	CRC F81; RR
bell	time	time	(1,0,0)	t	second	RR
bending moment	torque	energy	(-2,2,1)	$m d^2 / t^2$	meter newton	AIP 42
biennium	time	time	(1,0,0)	t	second	RR
bigha	area	area	(0,2,0)	d^2	sq meter	RR
billet	distance	distance	(0,1,0)	d	meter	RR
billiard	quantity	number	(0,0,0)	n	unity	RR
bind	quantity	number	(0,0,0)	n	unity	RR
biot	electric current	electric current	(-2,0,1)	m / t^2	ampere	CRC F346; RR
bit	quantity	number	(0,0,0)	n	unity	RR
bits per second		frequency	(-1,0,0)	n / t	hertz	RR
blink	time	time	(1,0,0)	t	second	RR
block	distance	distance	(0,1,0)	d	meter	RR
blondel	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter kilogram	RR
blood alcohol concentration		density	(0,-3,1)	m / d^3	per cu meter	RR
blood unit	volume	volume	(0,3,0)	d^3	cu meter	RR
board foot	volume	volume	(0,3,0)	d^3	cu meter	CRC F346; M 1-17; RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
body mass index		capacitance	(0,-2,1)	m / d^2	kilogram per sq meter	RR
boiling point	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC B211, B455, D187, F64
boll	volume	volume	(0,3,0)	d^3	cu meter	RR
bolt (1)	distance	distance	(0,1,0)	d	meter	CRC F346; RR
bolt (2)	area	area	(0,2,0)	d^2	sq meter	RR
bond energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F82
bond length	distance	distance	(0,1,0)	d	meter	CRC F82
bone-dry unit (bdu)	volume	volume	(0,3,0)	d^3	cu meter	RR
bore	distance	distance	(0,1,0)	d	meter	RR
bottle	volume	volume	(0,3,0)	d^3	cu meter	RR
bougie	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela acceleratio n per	RR Ref. 53
bounce	Change in acceleration	jerk	(-3,1,0)	d / t^3	second	
bovate	area	area	(0,2,0)	d^2	sq meter	RR
box	area	area	(0,2,0)	d^2	sq meter	RR
bps		frequency	(-1,0,0)	n / t	hertz	RR
bra size	distance	distance	(0,1,0)	d	meter	
braccio	distance	distance	(0,1,0)	d	meter	RR
bragg angle	plane angle	number	(0,0,0)	n	radian	AIP 45
braza	distance	distance	(0,1,0)	d	meter	RR
breadth	distance	distance	(0,1,0)	d	meter	AIP 38; RR
breve	time	time	(1,0,0)	t	second	RR
brewster		permeability	(2,1,-1)	$d t^2 / m$	sq meter per newton	RR
brightness	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	CRC F83; RR
bril [log scale]	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	RR
brinell hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR

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btu	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F83, F285, F346; MH 2422; RR
bucket	volume	volume	(0,3,0)	d^3	cu meter cu meter per cu meter	CRC F347; RR
bulk expansion coefficient		thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	kelvin	CRC F364
bulk modulus	volume elasticity	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 42; CRC B214, F64, F84, F363; Sz 302, 596, 599
bulk strain	strain	number	(0,0,0)	n	unity	CRC F318
bunder	area	area	(0,2,0)	d^2	sq meter	RR
bundle (1)	distance	distance	(0,1,0)	d	meter	RR
bundle (2)	quantity	number	(0,0,0)	n	unity	RR
b-unit	proportion	number	(0,0,0)	n	unity	CRC F121
burger's vector		distance	(0,1,0)	d	meter	AIP 38 CRC F347; M 1-16;
bushel (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
bushel (2)	mass	mass	(0,0,1)	m	kilogram	RR
butcher	volume	volume	(0,3,0)	d^3	cu meter	RR
butt	volume	volume	(0,3,0)	d^3	cu meter	CRC F347; RR
button measure	distance	distance	(0,1,0)	d	meter	RR
byte	quantity	number	(0,0,0)	n	unity	RR
caballeria	area	area	(0,2,0)	d^2	sq meter	RR CRC F347; M 1-16;
cable length	distance	distance	(0,1,0)	d	meter	RR
caliber (1)	distance	distance	(0,1,0)	d	meter	CRC F347; RR
caliber (2)	proportion	number	(0,0,0)	n	unity	RR
caliper	distance	distance	(0,1,0)	d	meter	RR
callipic cycle	time	time	(1,0,0)	t	second	RR
calorie	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F84, F285, F347; MH 2422; RR
candela	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	CRC F84, F282, F347; M 1-18; MH 2415

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emitted luminous candlepower	power	power	(-3,2,1)	$m d^2 / t^3$	candela	CRC E210; RR
candy	mass	mass	(0,0,1)	m	kilogram	RR
canna	distance	distance	(0,1,0)	d	meter	RR
cantar	mass	mass	(0,0,1)	m	kilogram	RR
canvas	distance	distance	(0,1,0)	d	meter	RR
capacitance	capacitance	capacitance	(0,-2,1)	m / d^2	farad	AIP 41; AQ 28; CRC F84, F134, F283, F313; M 1-18, 15-3; MH 2415
capacitive reactance	<i>i</i> resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	M 15-3
cape foot	distance	distance	(0,1,0)	d	meter	RR
cape rood	distance	distance	(0,1,0)	d	meter	RR
carat	mass	mass	(0,0,1)	m	kilogram	CRC F347; M 1-17; RR
carcel	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	RR
carga	mass	mass	(0,0,1)	m	kilogram	RR
carreau	area	area	(0,2,0)	d^2	sq meter	RR
carrier susceptibility	proportion	number	(0,0,0)	n		CRC F377
carton	volume	volume	(0,3,0)	d^3	cu meter	RR
carucate	area	area	(0,2,0)	d^2	sq meter	RR
case	quantity	number	(0,0,0)	n	unity	RR
castellation	plane angle	number	(0,0,0)	n	radian	RR
catty	mass	mass	(0,0,1)	m	kilogram	RR
cawney	area	area	(0,2,0)	d^2	sq meter	RR
cc	volume	volume	(0,3,0)	d^3	cu meter	RR
celsius heat unit	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
cental	mass	mass	(0,0,1)	m	kilogram	CRC F347; M 1-17; RR
centimeter of mercury	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F348; RR
centimeter of water	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F348; RR
centner	mass	mass	(0,0,1)	m	kilogram	RR
century	time	time	(1,0,0)	t	second	RR

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cfm	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
cfu		mass concentration	(0,0,-1)	n / m		RR CRC F348; M 1-16;
chain	distance	distance	(0,1,0)	d	meter	RR
chaldron (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
chaldron (2)	mass	mass	(0,0,1)	m	kilogram	RR
champer	proportion	number	(0,0,0)	n	unity	CRC F73
characteristic impedance	sound impedance	conductance	(-1,-2,1)	$m / d^2 t$	newton second per cu meter	siengpielaudio.com, wordiq.com
characteristic rotational temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 46
characteristic vibrational temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 46
charge of particle	electric charge	electric charge	(-1,0,1)	m / t	coulomb	CRC F329
charka	volume	volume	(0,3,0)	d^3	cu meter	RR
chemical affinity		energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	AIP 40
chemical potential	potential energy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	AIP 45
ch'ih	distance	distance	(0,1,0)	d	meter	RR
choppin	volume	volume	(0,3,0)	d^3	cu meter	RR
cicero	distance	distance	(0,1,0)	d	meter	RR
circle	plane angle	number	(0,0,0)	n	radian	RR; table27 p112
circular inch	area	area	(0,2,0)	d^2	sq meter	CRC F348; M 1-16; RR
circular mil	area	area	(0,2,0)	d^2	sq meter	CRC F85, F348; M 1- 16; RR
circumference	plane angle	number	(0,0,0)	n	radian	CRC F348; M 1-17
city block	distance	distance	(0,1,0)	d	meter	RR
clausius	proportion	number	(0,0,0)	n	joule per kelvin	RR
click	distance	distance	(0,1,0)	d	meter	RR

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clo	insulation efficiency	insulation efficiency	(1,2,0)	$d^2 t$	sq meter kelvin per watt	CRC F348; RR
clove	mass	mass	(0,0,1)	m	kilogram	RR
clusec	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
coefficient of tension	pressure increase	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	per kelvin	CRC F86
coffee measure	volume	volume	(0,3,0)	d^3	cu meter	RR
coffeespoon	volume	volume	(0,3,0)	d^3	cu meter	RR
coherence length	distance	distance	(0,1,0)	d	meter	AIP 45; CRC F86
collision number	collision rate density	volume activity	(-1,-3,0)	$n / d^3 t$	collisions per cu meter second	CRC F290
collision stopping power	specific stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter kilogram	NIST
collothun	volume	volume	(0,3,0)	d^3	cu meter	RR
color temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	RR
column inch	area	area	(0,2,0)	d^2	sq meter	RR
combining weight	mass per valence	mass	(0,0,1)	m	kilogram	CRC F86
commercial acre	area	area	(0,2,0)	d^2	sq meter	RR
compensation point	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC F87
compliance tensor	compressibility	permeability	(2,1,-1)	$d t^2 / m$	sq meter per newton	AIP 40
compressibility	compressibility	permeability	(2,1,-1)	$d t^2 / m$	sq meter per newton	AIP 45; CRC E110, F12, F86, F87; Sz 676
compressive strength	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F64
compton wavelength	distance	distance	(0,1,0)	d	meter	AIP 45; CRC F87
concentration (1)	mass concentration	density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC F363, F365, F378
concentration (2)	proportion	number	(0,0,0)	n	unity	CRC F363, F365, F378

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
concentration (2)	molar concentration	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	AIP 38; CRC F87, F283; Sz 684
condosity	molar weight concentration	density	(0,-3,1)	m / d^3	kilogram mole per cu meter	CRC D271
conductance	conductance	conductance	(-1,-2,1)	$m / d^2 t$	siemens	AIP 41; AQ 28; CRC F87, F134, F283, F313; M 1-18, 15-3
conductivity	volume conductivity	conductivity	(-1,-3,1)	$m / d^3 t$	siemens per meter	AIP 44; CRC E63, F87, F364; M 15-3; Sz 58
congus	volume	volume	(0,3,0)	d^3	cu meter	RR
coomb	volume	volume	(0,3,0)	d^3	cu meter	RR
cord	volume	volume	(0,3,0)	d^3	cu meter	CRC F348; M 1-16; RR
coriolis acceleration	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	
coulomb	electric charge	electric charge	(-1,0,1)	m / t	coulomb	CRC F88, F134, F283, F348; M 1-18; MH 2415
covada	distance	distance	(0,1,0)	d	meter	RR
cover	area	area	(0,2,0)	d^2	sq meter	RR
covido	distance	distance	(0,1,0)	d	meter	RR
cps		frequency	(-1,0,0)	n / t	hertz	RR
crackle	change in snap	crackle	(-5,1,0)	d / t^5	snap per second	Ref. 53
cran	volume	volume	(0,3,0)	d^3	cu meter	RR
crannock	volume	volume	(0,3,0)	d^3	cu meter	RR
crith	mass	mass	(0,0,1)	m	kilogram	RR
cross section	cross section	area	(0,2,0)	d^2	sq meter	AIP 46; CRC F284
crotchet	time	time	(1,0,0)	t	second	RR
crumb	quantity	number	(0,0,0)	n	unity	RR
cuadra (1)	distance	distance	(0,1,0)	d	meter	RR
cuadra (2)	area	area	(0,2,0)	d^2	sq meter	RR
cuartillo	volume	volume	(0,3,0)	d^3	cu meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
cubic expansion coefficient		thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	per kelvin	AIP 44
cubic foot	volume	volume	(0,3,0)	d^3	cu meter	CRC F348; RR
cubic inch	volume	volume	(0,3,0)	d^3	cu meter	CRC F348; RR
cubic meter	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; RR
cubic yard	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; RR
cubit	distance	distance	(0,1,0)	d	meter	CRC F349; RR
cuerda (1)	distance	distance	(0,1,0)	d	meter	RR
cuerda (2)	area	area	(0,2,0)	d^2	sq meter	RR
cuerda (3)	volume	volume	(0,3,0)	d^3	cu meter	RR
cumec	volume flow	volume flow	(-1,3,0)	d^3 / t	per second	RR
cunit	volume	volume	(0,3,0)	d^3	cu meter	RR
cup	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; RR
curie	radioactivity	frequency	(-1,0,0)	n / t	becquerel	CRC F284, F315, F349, F360; RR
curie temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 43
current density		pressure gradient	(-2,-2,1)	$m / d^2 t^2$	ampere per sq meter	CRC F303, F364
cusec	volume flow	volume flow	(-1,3,0)	d^3 / t	per second	RR
cut	distance	distance	(0,1,0)	d	meter	RR
dalton	mass	mass	(0,0,1)	m	kilogram	CRC F89; RR
damping coefficient		frequency	(-1,0,0)	n / t	per second	AIP 44
dan	mass	mass	(0,0,1)	m	kilogram	RR
darcy	hydrodynamic permeability	area	(0,2,0)	d^2	sq meter	CRC F349, F364; RR
dash	volume	volume	(0,3,0)	d^3	cu meter	RR
data mile	distance	distance	(0,1,0)	d	meter	RR
day	time	time	(1,0,0)	t	second	CRC F89, F284, F349
deadweight ton	mass	mass	(0,0,1)	m	kilogram	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
debroglie wavelength	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F89
debye	electric dipole moment	momentum	(-1,1,1)	<i>m d / t</i>	coulomb meter	CRC E59, F285; RR
debye angular frequency	frequency	frequency	(-1,0,0)	<i>n / t</i>	per second	AIP 46
debye length	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F89
debye temperature	temperature	energy	(-2,2,1)	<i>m d² / t²</i>	kelvin	AIP 46
decade	time	time	(1,0,0)	<i>t</i>	second	RR
decay constant		frequency	(-1,0,0)	<i>n / t</i>	per second	AIP 45
decay time	time	time	(1,0,0)	<i>t</i>	second	RR
decibel	exponential	number	(0,0,0)	<i>n</i>	decibel	CRC F89, F349; M 12-136; RR
declination	plane angle	number	(0,0,0)	<i>n</i>	radian	CRC F90
degree	plane angle	number	(0,0,0)	<i>n</i>	radian	CRC F90, F284, F349; M 1-17
degree API	relative density	number	(0,0,0)	<i>n</i>	unity	M 1-29; RR
degree balling	proportion	number	(0,0,0)	<i>n</i>	unity	RR
degree baume	relative density	number	(0,0,0)	<i>n</i>	unity	CRC F3, F80; M 1- 29; RR
degree brix	proportion	number	(0,0,0)	<i>n</i>	unity	RR
degree celsius	temperature	energy	(-2,2,1)	<i>m d² / t²</i>	kelvin	AIP 44; CRC F134, F283; MH 2423
degree centigrade	temperature	energy	(-2,2,1)	<i>m d² / t²</i>	kelvin	CRC F85, F349; RR
degree day	temperature time	angular momentum	(-1,2,1)	<i>m d² / t</i>	kelvin second	RR
degree fahrenheit	temperature	energy	(-2,2,1)	<i>m d² / t²</i>	kelvin	CRC F349; MH 2423; RR
degree kmw	proportion	number	(0,0,0)	<i>n</i>	unity	RR
degree macmichael	dynamic viscosity	dynamic viscosity	(-1,-1,1)	<i>m / d t</i>	pascal second	RR
degree oeschle	proportion	number	(0,0,0)	<i>n</i>	unity	RR
degree plato	proportion	number	(0,0,0)	<i>n</i>	unity	RR
degree quevenne	relative density	number	(0,0,0)	<i>n</i>	unity	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
degree rankine	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC F121, F285, F349; MH 2423; RR
degree reamur	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	RR
degree twaddle	relative density	number	(0,0,0)	n	unity	CRC F3; RR
demal	volume concentration	volume concentration	(0,-3,0)	n / d^3		RR
demisemiquaver	time	time	(1,0,0)	t	second	RR
denaro	mass	mass	(0,0,1)	m	kilogram	RR
denier (1)	mass	mass	(0,0,1)	m	kilogram	RR
denier (2)	linear density	linear density	(0,-1,1)	m / d	kilogram per meter	CRC F349; RR
density	density	density	(0,-3,1)	m / d^3	kilogram per cu meter	AIP 45; CRC E44, F66, F90, F283, F302, F364; M 1-18, 3-52; MH 2416
density gradient	density gradient	density gradient	(0,-4,1)	m / d^4	kilogram per cu meter meter	CRC F364
density of states	density of states	density of states	(2,-5,-1)	$t^2 / d^5 m$	per cu meter joule	AIP 43
density of vibrational modes	vibrational mode density	temporal density	(1,-3,0)	t / d^3	second per cu meter	AIP 43
dessiatina	area	area	(0,2,0)	d^2	sq meter	RR
dhur	area	area	(0,2,0)	d^2	sq meter	RR
diameter	distance	distance	(0,1,0)	d	meter	AIP 38; CRC F363
diamond	distance	distance	(0,1,0)	d	meter	RR
dielectric polarization	electric dipole moment per volume	conductance	(-1,-2,1)	$m / d^2 t$	coulomb meter per cu meter	CRC F91
dielectric strength	dielectric strength	velocity	(-1,1,0)	d / t	volt per meter	CRC F91
dielectric susceptibility		density	(0,-3,1)	m / d^3		CRC F377
diffraction efficiency	proportion	number	(0,0,0)	n	unity	CRC F91

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
diffusion coefficient	diffusion rate	voltage	(-1,2,0)	d^2 / t	sq meter per second	AIP 41; CRC F49, F50, F91, F283, F363; MH 2416
diffusion tortuosity		number	(0,0,0)	n		CRC F364
diffusivity	diffusion rate	voltage	(-1,2,0)	d^2 / t	sq meter per second	CRC F49, F50, F51, F91, F363
digit	distance	distance	(0,1,0)	d	meter	RR
dimensional concentration	concentration	density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC F363, F365, F378
diopter		wave number	(0,-1,0)	n / d		RR
dip	plane angle	number	(0,0,0)	n	radian	CRC F91
diraa	distance	distance	(0,1,0)	d	meter	RR
disintegration constant		frequency	(-1,0,0)	n / t	per second	AIP 45
disintegration energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 43
dispersion coefficient		voltage	(-1,2,0)	d^2 / t		CRC F377
displacement	distance	distance	(0,1,0)	d	meter	CRC F92
displacement vector	distance	distance	(0,1,0)	d	meter	AIP 40
distance	distance	distance	(0,1,0)	d	meter	AIP 38; CRC F363
djerib	area	area	(0,2,0)	d^2	sq meter	RR
dog watch	time	time	(1,0,0)	t	second	RR
dog year	time	time	(1,0,0)	t	second	RR
donor ionization energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41
donor number density		volume concentration	(0,-3,0)	n / d^3	per cu meter	AIP 39
dose equivalent	dose equivalent	specific energy	(-2,2,0)	d^2 / t^2	sievert	CRC F314, F360
dose equivalent rate	dose equivalent rate	specific power	(-3,2,0)	d^2 / t^3	sievert per second	CRC F360; Sz 687
double	volume	volume	(0,3,0)	d^3	cu meter	RR
double magnum	volume	volume	(0,3,0)	d^3	cu meter	RR
dozen	quantity	number	(0,0,0)	n	unity	RR
dpi		wave number	(0,-1,0)	n / d		RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
drachm	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; M 1-16; RR
drachma	mass	mass	(0,0,1)	m	kilogram	RR
dram (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; M 1-16; RR
dram (2)	mass	mass	(0,0,1)	m	kilogram	CRC F349; M 1-17; RR
drap	mass	mass	(0,0,1)	m	kilogram	RR
drex	linear density	linear density	(0,-1,1)	m/d	kilogram per meter	RR
drill size	distance	distance	(0,1,0)	d	meter	RR
drink	volume	volume	(0,3,0)	d^3	cu meter	RR
drop	volume	volume	(0,3,0)	d^3	cu meter	RR
drum	volume	volume	(0,3,0)	d^3	cu meter	RR
dunum	area	area	(0,2,0)	d^2	sq meter	RR
duration	time	time	(1,0,0)	t	second	
durometer	hardness	pressure	(-2,-1,1)	m/dt^2	pascal	RR
dynamic height	potential energy per mass	specific energy	(-2,2,0)	d^2/t^2	joule per kilogram	CRC F92
dynamic meter	potential energy per mass	specific energy	(-2,2,0)	d^2/t^2	joule per kilogram	CRC F92
dynamic pressure	pressure	pressure	(-2,-1,1)	m/dt^2	pascal	CRC F93
dynamic slip resistance		pressure	(-2,-1,1)	m/dt^2		CRC F378
dynamic viscosity	dynamic viscosity	dynamic viscosity	(-1,-1,1)	m/dt	pascal second	CRC F10, F283, F364; M 1-18, 3-52; MH 2416; Sz 57, 673
dyne	force	force	(-2,1,1)	md/t^2	newton	CRC F284, F349; MH 2420
earth-rate unit	angular velocity	frequency	(-1,0,0)	n/t	radian per second	RR
eddy mass diffusivity		voltage	(-1,2,0)	d^2/t		CRC F364
eddy viscosity	kinematic viscosity	voltage	(-1,2,0)	d^2/t	sq meter per second	CRC F93, F378
effective mass	mass	mass	(0,0,1)	m	kilogram	AIP 39

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
effective neutron cycle time	time	time	(1,0,0)	t	second	CRC F93
effective radiation	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC F93
einstein temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 46
einstein unit	molar energy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	RR
el	distance	distance	(0,1,0)	d	meter	RR
elastic limit	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F93
elastic modulus	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC B214, F93, F363; M 3-52
elasticity tensor		pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 38
electric charge	electric charge	electric charge	(-1,0,1)	m / t	coulomb	AIP 39; CRC F134, F283, F313; MH 2415
electric charge density	volume charge density	conductivity	(-1,-3,1)	$m / d^3 t$	coulomb per cu meter	AIP 45; CRC F377
electric current	electric current	electric current	(-2,0,1)	m / t^2	ampere	AIP 41; CRC F282, F313, F360; M 1-18, 15-3
electric current density		pressure gradient	(-2,-2,1)	$m / d^2 t^2$	ampere per sq meter	AIP 38
electric dipole moment	electric dipole moment	momentum	(-1,1,1)	$m d / t$	coulomb meter	AIP 39; AQ 28; CRC E59, F91, F285; Sz 58, 680
electric dipole potential	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	AQ 28; Sz 58, 680
electric displacement	charge per area	voltage	(-1,2,0)	d^2 / t	coulomb per sq meter	AIP 41
electric field	electric field	velocity	(-1,1,0)	d / t	newton per coulomb	AIP 41
electric field intensity	electric field	velocity	(-1,1,0)	d / t	newton per coulomb	CRC F94
electric field strength	electric field	velocity	(-1,1,0)	d / t	newton per coulomb	CRC F283; M 1-18; MH 2416; Sz 58, 677

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
electric flux	electric charge	electric charge	(-1,0,1)	m / t	coulomb	AIP 47; AQ 28; Sz 58, 680
electric flux density	conductance	conductance	(-1,-2,1)	$m / d^2 t$	coulomb per sq meter	AQ 28; Sz 58, 680
electric polarizability	electric polarizability	mass	(0,0,1)	m	coulomb sq meter per volt	AIP 44
electric polarization		conductance	(-1,-2,1)	$m / d^2 t$	coulomb per sq meter	AIP 43
electric potential	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	AIP 43; CRC F134, F283, F313, F360; M 1-18; MH 2415
electric resistance	resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	CRC F134, F283, F313; M 1-18; MH 2416
electric susceptibility	proportion	number	(0,0,0)	n	unity	AIP 46 wikipedia
electrochemical equivalent	mass per electric charge	time	(1,0,0)	t	kilogram per coulomb	CRC F94
electrolytic conductivity		conductivity	(-1,-3,1)	$m / d^3 t$	siemens per meter	AIP 45
electromagnetic energy density	energy density	pressure	(-2,-1,1)	$m / d t^2$	joule per cu meter	AIP 40
electromagnetic moment		energy	(-2,2,1)	$m d^2 / t^2$		Sz 58
electromagnetic momentum density	poynting vector per c squared	conductance	(-1,-2,1)	$m / d^2 t$		AIP 77
electromotive force	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	AIP 41; AQ 28; CRC F94, F134, F313; M 1-18, 15-3
electron affinity	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC E65, F95
electron emission		pressure gradient	(-2,-2,1)	$m / d^2 t^2$	ampere per sq meter	CRC E407
electron number density		volume concentration	(0,-3,0)	n / d^3	per cu meter	AIP 39

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
electron quadrupole moment		area	(0,2,0)	d^2	sq meter	CRC E82
electronic stopping power	specific stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter kilogram	NIST
electronvolt	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F285, F349, F360; RR
ell	distance	distance	(0,1,0)	d	meter	CRC F349; RR
elle	distance	distance	(0,1,0)	d	meter	RR
elongation	proportion	number	(0,0,0)	n	unity	CRC F95
em	distance	distance	(0,1,0)	d	meter	RR
emissivity	proportion	number	(0,0,0)	n	unity	AIP 44; CRC E209, F95
emittance (1)	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC F95
emittance (2)	proportion	number	(0,0,0)	n	unity	CRC F95
en	distance	distance	(0,1,0)	d	meter	RR
energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41; CRC F134, F283, F313; M 1-18, 3-52
energy density	energy density	pressure	(-2,-1,1)	$m / d t^2$	joule per cu meter	periodic table
energy fluence rate	energy per area second	radiance	(-3,0,1)	m / t^3	watt per sq meter	AIP 46; Sz 59, 686
energy flux density	energy per area second	radiance	(-3,0,1)	m / t^3	watt per sq meter	Sz 59, 686
energy gap	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41
engler degree	kinematic viscosity	voltage	(-1,2,0)	d^2 / t	sq meter per second	RR
enthalpy (1)	specific enthalpy	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC D173, E25, F10
enthalpy (2)	enthalpy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC F65
enthalpy (3)	enthalpy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41; Sz 57, 676
entropy	proportion	number	(0,0,0)	n	joule per kelvin	AIP 43; CRC F65; M 1-18; Sz 57, 674
eon	time	time	(1,0,0)	t	second	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
eotvos unit		acceleration	(-2,1,0)	d / t^2	meter per sq second	RR
ephah	volume	volume	(0,3,0)	d^3	cu meter	RR
epoch	time	time	(1,0,0)	t	second	RR
equilibrium constant	proportion	number	(0,0,0)	n	unity	AIP 42
equivalent conductivity	conductivity per density	frequency	(-1,0,0)	n / t	cu meter siemens per meter kilogram	CRC F87
equivalent weight	mass per valence	mass	(0,0,1)	m	kilogram	CRC F96
erg	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F284, F349; RR
erlang	time	time	(1,0,0)	t	second	RR
escape velocity	velocity	velocity	(-1,1,0)	d / t	meter per second	CRC F96
estadio	distance	distance	(0,1,0)	d	meter	RR
etto	mass	mass	(0,0,1)	m	kilogram	RR
evaporation	evaporation	conductance	(-1,-2,1)	$m / d^2 t$	kilogram per sq meter second	CRC E407
exchange integral		energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 42
excitance	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC F97
exposure	exposure	frequency	(-1,0,0)	n / t	coulomb per kilogram	AIP 44; CRC F316, F360
extinction cross section	cross section	area	(0,2,0)	d^2	sq meter	CRC F97, F123
face cord	volume	volume	(0,3,0)	d^3	cu meter	RR
faden	distance	distance	(0,1,0)	d	meter	RR
faggot	volume	volume	(0,3,0)	d^3	cu meter	RR
fall (1)	distance	distance	(0,1,0)	d	meter	RR
fall (2)	area	area	(0,2,0)	d^2	sq meter	RR
fanega (1)	area	area	(0,2,0)	d^2	sq meter	RR
fanega (2)	volume	volume	(0,3,0)	d^3	cu meter	RR
farad	capacitance	capacitance	(0,-2,1)	m / d^2	farad	CRC F134, F283, F313; M 1-18; MH 2415;

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
faraday	molar electric charge	electric charge	(-1,0,1)	m / t	coulomb per mole	CRC F98; M 1-21; RR table27 p115
farthingdale	area	area	(0,2,0)	d^2	sq meter	RR
fathom	distance	distance	(0,1,0)	d	meter	CRC F349; M 1-16; MH 2417
fatt	volume	volume	(0,3,0)	d^3	cu meter	RR
feddan	area	area	(0,2,0)	d^2	sq meter	RR
fermi	distance	distance	(0,1,0)	d	meter	CRC F98, F315, F349; M 1-21
fermi energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41
fifth	volume	volume	(0,3,0)	d^3	cu meter	RR
filette	volume	volume	(0,3,0)	d^3	cu meter	RR
fine structure separation		wave number	(0,-1,0)	n / d	per meter	CRC E65
finger	distance	distance	(0,1,0)	d	meter	RR
firkin (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F349; RR
firkin (2)	mass	mass	(0,0,1)	m	kilogram	RR
firlot	volume	volume	(0,3,0)	d^3	cu meter	RR
first hyper-polarizability	first hyper-polarizability	first hyper-polarizability	(1,-1,1)	$m t / d$	cu coulomb cu meter per sq joule	efunda.com
first hyper-susceptibility	first hyper-susceptibility	inverse velocity	(1,-1,0)	t / d	coulomb meter per joule	efunda.com
fist (1)	distance	distance	(0,1,0)	d	meter	RR
fist (2)	plane angle	number	(0,0,0)	n	radian	RR
fit		frequency	(-1,0,0)	n / t	hertz	RR
flagon	volume	volume	(0,3,0)	d^3	cu meter	RR
flask (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
flask (2)	mass	mass	(0,0,1)	m	kilogram	RR
flat	plane angle	number	(0,0,0)	n	radian	RR
floor	distance	distance	(0,1,0)	d	meter	RR
flops		frequency	(-1,0,0)	n / t	hertz	RR
flow resistance		force	(-2,1,1)	$m d / t^2$		CRC F363
fluence	particle fluence	fuel efficiency	(0,-2,0)	n / d^2	per sq meter	CRC F360; Sz 59, 688

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
fluence rate	particle fluence rate	heat transfer coefficient	(-1,-2,0)	$n / d^2 t$	per sq meter second	AIP 46; CRC F360; Sz 59, 688
fluid head	distance	distance	(0,1,0)	d	meter	CRC F363
fluidity	fluidity	fluidity	(1,1,-1)	$d t / m$	per pascal second	CRC F98
flux density	particle fluence rate	heat transfer coefficient	(-1,-2,0)	$n / d^2 t$	per sq meter second	AIP 46; Sz 59, 688
fod	distance	distance	(0,1,0)	d	meter	RR
foot	distance	distance	(0,1,0)	d	meter	CRC F349; M 1-16; MH 2417
foot of water	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F350
foot-candle	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC E210, F99, F104, F350; M 1-21
foot-lambert	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	CRC E210, F99, F350; M 1-22
foot-pound	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	MH 2422; RR; table27 p116
foot-poundal	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	CRC F350; M 1-22; MH 2422;
foot-pound-force	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	M 1-22
force	force	force	(-2,1,1)	$m d / t^2$	newton	AIP 41; CRC F134, F283, F313, F363; M 1-18, 3-52; MH 2415
fortnight	time	time	(1,0,0)	t	second	RR
fot	distance	distance	(0,1,0)	d	meter	RR
fother	mass	mass	(0,0,1)	m	kilogram	RR
fotmal	mass	mass	(0,0,1)	m	kilogram	RR
fpm	speed	velocity	(-1,1,0)	d / t	meter per second	RR
fps	speed	velocity	(-1,1,0)	d / t	meter per second	RR
frail	mass	mass	(0,0,1)	m	kilogram	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
franklin	electric charge	electric charge	(-1,0,1)	m / t	coulomb	CRC F350; RR
f-ratio	proportion	number	(0,0,0)	n	unity	CRC F78
free energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41
free-wave	proportion	number	(0,0,0)	n	unity	CRC F73
freight ton	volume	volume	(0,3,0)	d^3	cu meter	RR
french	distance	distance	(0,1,0)	d	meter	RR
frequency	frequency	frequency	(-1,0,0)	n / t	hertz	AIP 38; CRC F134, F283, F313, F363; M 1-18, 3-52; MH 2416
friction coefficient	proportion	number	(0,0,0)	n	unity	CRC F16, F100
frigorie	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
fuder	volume	volume	(0,3,0)	d^3	cu meter	RR
fugacity	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F100, F291
funt	mass	mass	(0,0,1)	m	kilogram	RR
furlong	distance	distance	(0,1,0)	d	meter	CRC F350; M 1-16; RR
fuss	distance	distance	(0,1,0)	d	meter	RR
g	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	CRC F363; Sz 57, 673
gal	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	CRC F100, F339, F350; M 1-22
gallon	volume	volume	(0,3,0)	d^3	cu meter	CRC F350; M 1-16; MH 2418
galopin	volume	volume	(0,3,0)	d^3	cu meter	RR
gamma (1)	mass	mass	(0,0,1)	m	kilogram	CRC F350; Sz 61
gamma (2)	magnetic flux density	number	(0,0,0)	n	tesla	CRC F350; M 1-22; RR
garnets	volume	volume	(0,3,0)	d^3	cu meter	RR
gauge (1)	distance	distance	(0,1,0)	d	meter	RR
gauge (2)		wave number	(0,-1,0)	n / d		RR
gauge pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F119
gauss	magnetic flux density	number	(0,0,0)	n	tesla	CRC F100, F284, F340, F350; M 1-22
gear inch	distance	distance	(0,1,0)	d	meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
gee	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	RR
geepound	mass	mass	(0,0,1)	m	kilogram	CRC F350; RR
generation	time	time	(1,0,0)	t	second	RR
geographical mile	distance	distance	(0,1,0)	d	meter	RR
geopotential height	potential energy per mass	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F100
geopotential meter	potential energy per mass	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F101
g-factor	proportion	number	(0,0,0)	n	unity	AIP 38
gilbert	magnetomotive force	electric current	(-2,0,1)	m / t^2	ampere- turn	CRC F101, F340, F350 CRC F350; M 1-16;
gill	volume	volume	(0,3,0)	d^3	cu meter	RR
glass (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
glass (2)	time	time	(1,0,0)	t	second	RR
glean	quantity	number	(0,0,0)	n	unity	RR
go	volume	volume	(0,3,0)	d^3	cu meter	RR
goad	distance	distance	(0,1,0)	d	meter	RR
gon	plane angle	number	(0,0,0)	n	radian	CRC F350; RR
gpf	volume	volume	(0,3,0)	d^3	cu meter	RR
gpm	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
gps	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
grad	plane angle	number	(0,0,0)	n	radian	RR
grade	plane angle	number	(0,0,0)	n	radian	M 1-22; RR
grain	mass	mass	(0,0,1)	m	kilogram	CRC F350; M 1-17; MH 2419
gram	mass	mass	(0,0,1)	m	kilogram	CRC F101, F351; MH 2419; RR
gran	mass	mass	(0,0,1)	m	kilogram	RR
grano	mass	mass	(0,0,1)	m	kilogram	RR
grav	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
gray	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	CRC F101, F134, F283, F314, F351, F360
gross	quantity	number	(0,0,0)	n	unity	RR
growler	volume	volume	(0,3,0)	d^3	cu meter	RR
growth rate	rate	frequency	(-1,0,0)	n / t	per second	AIP 44
gunter's chain	distance	distance	(0,1,0)	d	meter	M 1-16; RR
gutenberg	distance	distance	(0,1,0)	d	meter	RR
gyromagnetic ratio	magneton per angular momentum	frequency	(-1,0,0)	n / t	per second tesla	AIP 44
hacienda	area	area	(0,2,0)	d^2	sq meter	RR
hair's breadth	distance	distance	(0,1,0)	d	meter	RR
half-life	time	time	(1,0,0)	t	second cu meter	AIP 43; CRC B227, F102; RR
hall coefficient	volume per charge	resistivity	(1,3,-1)	$d^3 t / m$	per coulomb	AIP 40
hand	distance	distance	(0,1,0)	d	meter	CRC F351; M 1-16; RR
handle	volume	volume	(0,3,0)	d^3	cu meter	RR
hank	distance	distance	(0,1,0)	d	meter	RR
hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal kilogram per sq meter	CRC E106; RR
hardness (2)		capacitance	(0,-2,1)	m / d^2	meter	CRC D38
hartree	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F219; RR
hat size	distance	distance	(0,1,0)	d	meter	RR
head	potential energy per mass	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F366
heat	heat	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F102; MH 2415
heat capacity (1)	heat capacity	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC D174
heat capacity (2)	heat capacity	number	(0,0,0)	n	joule per kelvin	AIP 41; CRC F102; Sz 57, 674

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
heat capacity (3)	specific heat capacity	mass concentration	(0,0,-1)	n / m	joule per kilogram kelvin	CRC F363
heat capacity (4)	molar heat capacity	number	(0,0,0)	n	joule per mole kelvin	CRC B211, D176
heat content	heat content	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC D174
heat effect	heat	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F102
heat equivalent	specific energy	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F102
heat flow rate	heat flow rate	power	(-3,2,1)	$m d^2 / t^3$	watt	CRC F320
heat flux	heat flow rate	power	(-3,2,1)	$m d^2 / t^3$	watt	CRC F363; Sz 57, 677
heat flux density	heat power density	radiance	(-3,0,1)	m / t^3	joule per sq meter second	CRC F363, 366; Sz 677
heat of vaporization	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F363
heat source power	heat source power	heat source power	(-3,-1,1)	$m / d t^3$	watt per cu meter	CRC F366
heat transfer coefficient	heat transfer coefficient	heat transfer coefficient	(-1,-2,0)	$n / d^2 t$	watt per sq meter kelvin	AIP 38; CRC F116, F363; Sz 57, 675
hectare	area	area	(0,2,0)	d^2	sq meter	CRC F351; MH 2417; RR
heer	distance	distance	(0,1,0)	d	meter	RR
hefner	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	CRC F110, F351; RR
height	distance	distance	(0,1,0)	d	meter	AIP 38; CRC F363
helek	time	time	(1,0,0)	t	second	RR
hemina	volume	volume	(0,3,0)	d^3	cu meter	RR
hemisphere	solid angle	number	(0,0,0)	n	steradian	RR
henry	inductance	inductance	(2,2,-1)	$d^2 t^2 / m$	henry	CRC F103, F134, F283, F313; M 1-18; MH 2416
hertz	frequency	frequency	(-1,0,0)	n / t	hertz	CRC F103, F134, F283; M 1-18; MH 2416
hide	area	area	(0,2,0)	d^2	sq meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
hogshead	volume	volume	(0,3,0)	d^3	cu meter	CRC F351; RR
hole number density		volume concentration	(0,-3,0)	n / d^3	per cu meter	AIP 39
homestead	area	area	(0,2,0)	d^2	sq meter	RR
homogenous nucleation limit	superheat limit	volume activity	(-1,-3,0)	$n / d^3 t$	nuclei per cu meter second	CRC C721
horsepower	power	power	(-3,2,1)	$m d^2 / t^3$	watt	CRC F103, F351; MH 2422; RR
hour	time	time	(1,0,0)	t	second	CRC F284, F351; RR
house	plane angle	number	(0,0,0)	n	radian	RR
hu	volume	volume	(0,3,0)	d^3	cu meter	RR
hubble	distance	distance	(0,1,0)	d	meter	RR
humid heat		mass concentration	(0,0,-1)	n / m		CRC F363
humidity	density	density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC F103
hundredweight	mass	mass	(0,0,1)	m	kilogram	CRC F351; M 1-17; MH 2419
hydrodynamic permeability	hydrodynamic permeability	area	(0,2,0)	d^2	sq meter	(efunda.com)
hydrogen equivalent	proportion	number	(0,0,0)	n	per mole	CRC F103
hydrogen ion concentration	molarity	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	CRC F103
hydrostatic pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F104
hyl	mass	mass	(0,0,1)	m	kilogram	RR
hysteresis loss	hysteresis loss	pressure	(-2,-1,1)	$m / d t^2$	joule per cu meter	CRC E128
iacs	conductivity	conductivity	(-1,-3,1)	$m / d^3 t$	siemens per meter	RR
illuminance	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	AIP 41; CRC E210, F104, F134, F283, F314, F341; M 1-18

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
illumination	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC E210, F104; MH 2416
immi	volume	volume	(0,3,0)	d^3	cu meter	RR
impact pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F104
impedance	impedance	resistance	(1,2,-1)	$d^2 t / m$	ohm	CRC F104; M 15-3; Sz 58, 679
imperial	volume	volume	(0,3,0)	d^3	cu meter	RR
imperial gallon	volume	volume	(0,3,0)	d^3	cu meter	RR
impulse	momentum	momentum	(-1,1,1)	$m d / t$	newton second	AIP 42; M 3-52; Sz 57, 673
inch	distance	distance	(0,1,0)	d	meter	CRC F284, F351; M 1-16; MH 2417
inch of mercury	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F351; RR
inch of water	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal newton meter	CRC F351; RR
inch pound	torque	energy	(-2,2,1)	$m d^2 / t^2$	meter	RR
index of refraction	proportion	number	(0,0,0)	n	unity	CRC F105
inductance	inductance	inductance	(2,2,-1)	$d^2 t^2 / m$	henry	AQ 28; CRC F134, F283, F313; M 1-18; MH 2416
inductive reactance	<i>i</i> resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	M 15-3
inertia	mass	mass	(0,0,1)	m	kilogram	CRC F105
insulation efficiency	insulation efficiency	insulation efficiency	(1,2,0)	$d^2 t$	kelvin per watt	periodic table
intensity	intensity	radiance	(-3,0,1)	m / t^3		Sz 669 (indirect)
intensity of magnetization	magnetic flux density	number	(0,0,0)	n	tesla	AQ 28; CRC F105
intensity of radiation	wave power density	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC F105

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
international candle	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	CRC F106
intrinsic number density		volume concentration	(0,-3,0)	n / d^3	per cu meter	AIP 39
inverse velocity	inverse velocity	inverse velocity	(1,-1,0)	t / d	seconds per meter	N/A
iodine number	proportion	number	(0,0,0)	n	unity	CRC F106
ion number density		volume concentration	(0,-3,0)	n / d^3		Sz 59, 686
ion size	distance	distance	(0,1,0)	d	meter	CRC F106
ionic charge number	quantity	number	(0,0,0)	n	unity	AIP 40
ionic radius	distance	distance	(0,1,0)	d	meter	CRC F106
ionization potential	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC E80, E87, F106
ips	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F352; RR
irish acre	area	area	(0,2,0)	d^2	sq meter	RR
irish mile	distance	distance	(0,1,0)	d	meter	RR
iron	distance	distance	(0,1,0)	d	meter	RR
irradiance	received wave energy	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC E209, F107; Sz 58, 681
jag	volume	volume	(0,3,0)	d^3	cu meter	RR
jansky	radio signal flux density	electric current	(-2,0,1)	m / t^2	joule per sq meter	RR
jar	capacitance	capacitance	(0,-2,1)	m / d^2	farad	RR
jerk	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleratio n per second	Refs. 47, 51-54
jeroboam	volume	volume	(0,3,0)	d^3	cu meter	RR
jersey foot	distance	distance	(0,1,0)	d	meter	RR
jiffy	time	time	(1,0,0)	t	second	RR
jigger	volume	volume	(0,3,0)	d^3	cu meter	RR
jin	mass	mass	(0,0,1)	m	kilogram	RR
jitro	area	area	(0,2,0)	d^2	sq meter	RR
jo	area	area	(0,2,0)	d^2	sq meter	RR
joch	area	area	(0,2,0)	d^2	sq meter	RR
jolt	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleratio n per second	Ref. 53

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
joule	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F107, F134, F283, F313, F352; M 1-18, 3-52; MH 2415, 2422
jounce	change in jerk	snap	(-4,1,0)	d / t^4	jerk per second	Ref. 53
journal	area	area	(0,2,0)	d^2	sq meter	RR
juchert	area	area	(0,2,0)	d^2	sq meter	RR
jug	volume	volume	(0,3,0)	d^3	cu meter	RR
jupiter	mass	mass	(0,0,1)	m	kilogram	RR
jutro	area	area	(0,2,0)	d^2	sq meter	RR
kairi	distance	distance	(0,1,0)	d	meter	RR
kanal	area	area	(0,2,0)	d^2	sq meter	RR
kappland	area	area	(0,2,0)	d^2	sq meter	RR
karat	proportion	number	(0,0,0)	n	unity	RR
kati	mass	mass	(0,0,1)	m	kilogram	RR
katta	area	area	(0,2,0)	d^2	sq meter	RR
kayser		wave number	(0,-1,0)	n / d	[reciprocal centimeter]	M 1-22; RR
kcmill	area	area	(0,2,0)	d^2	sq meter	RR
keddah	volume	volume	(0,3,0)	d^3	cu meter	RR
keel	mass	mass	(0,0,1)	m	kilogram	RR
keg (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
keg (2)	mass	mass	(0,0,1)	m	kilogram	RR
kelvin	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC F108, F282, F352; M 1-18; MH 2415
ken	distance	distance	(0,1,0)	d	meter	RR
kerat	distance	distance	(0,1,0)	d	meter	RR
kerma	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	AIP 42; CRC F134, F360
kerma rate	absorbed dose rate	specific power	(-3,2,0)	d^2 / t^3	gray per second	CRC F360
kilderkin	volume	volume	(0,3,0)	d^3	cu meter	CRC F352; RR
kilogram	mass	mass	(0,0,1)	m	kilogram	CRC F108, F282, F352; M 1-18; MH 2415
kin	mass	mass	(0,0,1)	m	kilogram	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
kinematic viscosity	kinematic viscosity	viscosity	(-1,2,0)	d^2 / t	sq meter per second	AIP 45; CRC F37, F108, F283, F339; M 1-18, 3-52; MH 2416; Sz 57, 673
kinetic energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41; CRC F108
kip	force	force	(-2,1,1)	$m d / t^2$	newton	table27 p120
klafter (1)	distance	distance	(0,1,0)	d	meter	RR
klafter (2)	volume	volume	(0,3,0)	d^3	cu meter	RR
knoop hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
knot	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F108, F353; M 1-16; RR
koddi	volume	volume	(0,3,0)	d^3	cu meter	RR
koku	volume	volume	(0,3,0)	d^3	cu meter	RR
kommerzlast	mass	mass	(0,0,1)	m	kilogram	RR
koyan	mass	mass	(0,0,1)	m	kilogram	RR
kph	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F352; RR
krina	volume	volume	(0,3,0)	d^3	cu meter	RR
ksi	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
kulmet	volume	volume	(0,3,0)	d^3	cu meter	RR
kwan	mass	mass	(0,0,1)	m	kilogram	RR
kyu	distance	distance	(0,1,0)	d	meter	RR
labor	area	area	(0,2,0)	d^2	sq meter	RR
lambda	volume	volume	(0,3,0)	d^3	cu meter	RR
lambert	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	CRC E210, F108, F353; M 1-23; RR
lanac	area	area	(0,2,0)	d^2	sq meter	RR
land mile	distance	distance	(0,1,0)	d	meter	CRC F126
langley	heat transmission	electric current	(-2,0,1)	m / t^2	joule per sq meter	CRC F109, F353; M 1-23; RR
lap	distance	distance	(0,1,0)	d	meter	RR
larmor circular frequency	frequency	frequency	(-1,0,0)	n / t	per second	AIP 46
last (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F353; RR
last (2)	mass	mass	(0,0,1)	m	kilogram	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
latent heat of phase change		specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F363, F364, F377
latent heat of vaporization	heat	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F109
lattice energy	molar energy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC D101, F109
lattice plane spacing		distance	(0,1,0)	d	meter	AIP 38
lattice vector	distance	distance	(0,1,0)	d	meter	AIP 43
lea	distance	distance	(0,1,0)	d	meter	RR
league	distance	distance	(0,1,0)	d	meter	CRC F353; M 1-16; RR
leap	distance	distance	(0,1,0)	d	meter	RR
legoa	distance	distance	(0,1,0)	d	meter	RR
legua (1)	distance	distance	(0,1,0)	d	meter	RR
legua (2)	area	area	(0,2,0)	d^2	sq meter	RR
length	distance	distance	(0,1,0)	d	meter	AIP 39; CRC F109, F282, F363; M 1-18, 3-52; MH 2415
level width		energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 46
li	distance	distance	(0,1,0)	d	meter	RR
liang	mass	mass	(0,0,1)	m	kilogram	RR
libra	mass	mass	(0,0,1)	m	kilogram	RR
lieue	distance	distance	(0,1,0)	d	meter	RR
light second	distance	distance	(0,1,0)	d	meter	RR
light year	distance	distance	(0,1,0)	d	meter	CRC F109, F353; RR
ligne	distance	distance	(0,1,0)	d	meter	RR
ligula	volume	volume	(0,3,0)	d^3	cu meter	RR
limit of superheat		volume activity	(-1,-3,0)	$n / d^3 t$	cu meter nuclei per cu meter second	CRC C721
line (1)	distance	distance	(0,1,0)	d	meter	CRC F353; RR
line (2)	magnetic flux	area	(0,2,0)	d^2	weber	CRC F353; RR
lineal energy	linear energy density	force	(-2,1,1)	$m d / t^2$	joule per meter	CRC F360
linear absorption coefficient	proportion	number	(0,0,0)	n	unity	CRC F73

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
linear acceleration	acceleration	acceleration	(-2,1,0)	d / t^2	meter per sq second	periodic table
linear attenuation coefficient (1)		wave number	(0,-1,0)	n / d	per meter	AIP 45
linear attenuation coefficient (2)	exponential	number	(0,0,0)	n	unity	CRC F73; Sz 59, 686
linear density	linear density	linear density	(0,-1,1)	m / d	kilogram per meter	periodic table
linear energy transfer	energy transfer	force	(-2,1,1)	$m d / t^2$	joule per meter	CRC F360
linear jerk	linear jerk	jerk	(-3,1,0)	d / t^3	meter per cu second	Sz 57, 694, Refs. 47, 51-54
linear number density	linear number density	wave number	(0,-1,0)	n / d		periodic table entry
linear stopping power	linear stopping power	force	(-2,1,1)	$m d / t^2$	joule per meter	AIP 43
linear strain	strain	number	(0,0,0)	n	unity	AIP 38
linear thermal expansion coefficient	linear thermal expansion	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$		CRC F128; Sz 57, 676
linear velocity	velocity	velocity	(-1,1,0)	d / t	meter per second	periodic table
link	distance	distance	(0,1,0)	d	meter	CRC F353; M 1-16; RR
lippie	volume	volume	(0,3,0)	d^3	cu meter	RR
liter	volume	volume	(0,3,0)	d^3	cu meter	CRC F284, F353; MH 2418; RR
liter-atmosphere	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F353; RR
liter-bar	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F353
livre	mass	mass	(0,0,1)	m	kilogram	RR
load	volume	volume	(0,3,0)	d^3	cu meter	RR
london penetration depth		distance	(0,1,0)	d	meter	AIP 45
long ton	mass	mass	(0,0,1)	m	kilogram	M 1-17; RR
lorenz coefficient	lorenz coefficient	lorenz coefficient	(2,0,-2)	t^2 / m^2	sq volt per sq kelvin	AIP 42

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
loss angle	plane angle	number	(0,0,0)	n	radian	AIP 44
lot	mass	mass	(0,0,1)	m	kilogram	RR
loudness level	acoustic loudness	number	(0,0,0)	n	decibel	AIP 42
lpf	volume flow	volume flow	(-1,3,0)	d³ / t	cu meter per second	RR
lug	distance	distance	(0,1,0)	d	meter	RR
lumberg	luminous energy	energy	(-2,2,1)	m d² / t²	lumen second	RR
lumen	received luminous power	power	(-3,2,1)	m d² / t³	lumen	CRC E210, F110, F134, F283, F314, F353; M 1-18; MH 2416
luminance	emitted luminous power density	radiance	(-3,0,1)	m / t³	candela per sq meter	CRC E207, E210, F110, F283, F341; M 1-18; MH 2416
luminous density	energy density	pressure	(-2,-1,1)	m / d t²	lumen second per cu meter	CRC E210
luminous efficacy	proportion	number	(0,0,0)	n	lumen per watt	AIP 42; CRC E210
luminous efficiency	proportion	number	(0,0,0)	n	unity	CRC E210
luminous emittance	received luminous power density	radiance	(-3,0,1)	m / t³	lux	CRC E210, F97
luminous energy	luminous energy	energy	(-2,2,1)	m d² / t²	lumen second	CRC E210
luminous excitance	received luminous power density	radiance	(-3,0,1)	m / t³	lux	CRC E210, F97
luminous flux	received luminous power	power	(-3,2,1)	m d² / t³	lumen	AIP 47; CRC E210, F110, F134, F283, F314; M 1-18; MH 2416

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
luminous flux density	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC E210
luminous intensity	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	AIP 41; CRC E210, F110, F282; M 1-18; MH 2415
lusec	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
lustrum	time	time	(1,0,0)	t	second	RR
lux	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC E210, F104, F134, F283, F314, F353; M 1-18; MH 2416
mach number	proportion	number	(0,0,0)	n	unity	CRC F110; RR
macroscopic cross section		distance	(0,1,0)	d	meter	AIP 47
magnetic dipole moment	magnetic moment	energy	(-2,2,1)	$m d^2 / t^2$	joule per tesla	AIP 39; CRC B228; Sz 58, 678
magnetic field	magnetic field strength	pressure	(-2,-1,1)	$m / d t^2$	ampere-turn per meter	AQ 28
magnetic field intensity	magnetic field strength	pressure	(-2,-1,1)	$m / d t^2$	ampere-turn per meter	CRC F111; M 15-4; Sz 678
magnetic field strength	magnetic field strength	pressure	(-2,-1,1)	$m / d t^2$	ampere-turn per meter	AIP 41; CRC F283; M 1-18; MH 2416; Sz 58, 678
magnetic flux	magnetic flux	area	(0,2,0)	d^2	weber	AQ 28; CRC F111, F134, F283, F313; M 1-18, 15-4; MH 2416
magnetic flux density	magnetic flux density	number	(0,0,0)	n	tesla	AIP 41; AQ 28; CRC F134, F283, F313; M 1-18, 15-4; MH 2416

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
magnetic induction	magnetic flux density	number	(0,0,0)	n	tesla	AQ 28; CRC F111
magnetic moment	magnetic moment	energy	(-2,2,1)	$m d^2 / t^2$	joule per tesla	CRC E82, F111, F115
magnetic permeability	magnetic permeability	permeability	(2,1,-1)	$d t^2 / m$	henry per meter	CRC F111, F364
magnetic permeance	magnetic permeance	inductance	(2,2,-1)	$d^2 t^2 / m$	henry	Sz 58, 679
magnetic polarization		number	(0,0,0)	n	unity	Sz 58
magnetic pole	magnetic flux	area	(0,2,0)	d^2	weber	CRC F111
magnetic pole strength	magnetic flux	area	(0,2,0)	d^2	weber	AQ 28
magnetic potential difference	magnetomotive force	electric current	(-2,0,1)	m / t^2	ampere-turn	AIP 43; CRC F111; M 1-18; Sz 58
magnetic quantum number	proportion	number	(0,0,0)	n	unity	AIP 39
magnetic susceptibility	proportion	number	(0,0,0)	n	unity	AIP 46 wikipedia
magnetic susceptibility	magnetic permeability	permeability	(2,1,-1)	$d t^2 / m$	henry per meter	CRC F127
magnetic vector potential	linear magnetic flux density	distance	(0,1,0)	d	weber per meter	AIP 41; Sz 58
magnetization	magnetic field strength	pressure	(-2,-1,1)	$m / d t^2$	ampere-turn per meter	AIP 42
magnetomotive force	magnetomotive force	electric current	(-2,0,1)	m / t^2	ampere-turn	AIP 41; AQ 28; CRC F111; M 15-4; Sz 58, 679
magneton	magnetic moment	energy	(-2,2,1)	$m d^2 / t^2$	joule per tesla	CRC B228, E82, F111, F115
magnifying power	proportion	number	(0,0,0)	n	unity	CRC F112
magnum	volume	volume	(0,3,0)	d^3	cu meter	RR
mahnd	mass	mass	(0,0,1)	m	kilogram	RR
man hour	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
manpower	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
manzana	area	area	(0,2,0)	d^2	sq meter	RR
marathon	distance	distance	(0,1,0)	d	meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
mark	mass	mass	(0,0,1)	<i>m</i>	kilogram	RR
mark twain	distance	distance	(0,1,0)	<i>d</i>	meter	RR
marla	area	area	(0,2,0)	<i>d</i>²	sq meter	RR
mas	plane angle	number	(0,0,0)	<i>n</i>	radian	RR
masha	mass	mass	(0,0,1)	<i>m</i>	kilogram	RR
mass	mass	mass	(0,0,1)	<i>m</i>	kilogram	AIP 39; CRC F112, F282; M 1-18, 3-52; MH 2415
mass attenuation coefficient	mass attenuation	specific area	(0,2,-1)	<i>d</i>² / <i>m</i>	sq meter per kilogram	AIP 45; CRC F360; Sz 59
mass capacity	mass capacity	specific volume	(0,3,-1)	<i>d</i>³ / <i>m</i>	cu meter per kilogram	CRC F363, F365
mass conductivity	conductivity per density	frequency	(-1,0,0)	<i>n</i> / <i>t</i>	siemens per meter kilogram	CRC F87
mass decrement	binding energy	mass	(0,0,1)	<i>m</i>	kilogram	CRC F112
mass defect	binding energy	mass	(0,0,1)	<i>m</i>	kilogram kilogram	CRC F112
mass density	density	density	(0,-3,1)	<i>m</i> / <i>d</i>³	per cu meter	AIP 45
mass energy absorption coefficient		specific area	(0,2,-1)	<i>d</i>² / <i>m</i>		CRC F360
mass energy transfer coefficient		specific area	(0,2,-1)	<i>d</i>² / <i>m</i>		CRC F360
mass flow	mass flow	electric charge	(-1,0,1)	<i>m</i> / <i>t</i>	kilogram per second	AIP 39; CRC F363, F365, F379; M 3-52
mass flux	mass flow	electric charge	(-1,0,1)	<i>m</i> / <i>t</i>	kilogram per second	CRC F363, F365, F379
mass flux density		conductance	(-1,-2,1)	<i>m</i> / <i>d</i>² <i>t</i>		CRC F363, F365, F379
mass fraction	proportion	number	(0,0,0)	<i>n</i>	unity	AIP 40; Sz 685
mass number	quantity	number	(0,0,0)	<i>n</i>	unity	AIP 40; CRC F112

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
mass radiation concentration	specific activity	specific activity	(-1,0,-1)	$n / t m$	becquerel per kilogram	periodic table entry
mass stopping power	mass stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter kilogram	CRC F360
mass transfer coefficient		velocity	(-1,1,0)	d / t		CRC F363, F379
mass transfer potential		density	(0,-3,1)	m / d^3		CRC F364
mass velocity		conductance	(-1,-2,1)	$m / d^2 t$		CRC F363
material permeance maund	material permeance mass	inverse velocity mass	(1,-1,0) (0,0,1)	t / d m	kilogram per pascal second sq meter kilogram	Sz 57, 679 RR
maxwell	magnetic flux	area	(0,2,0)	d^2	weber	CRC F112, F284, F340, F353
mean free path	distance	distance	(0,1,0)	d	meter	AIP 39; CRC F364; Sz 59, 687
mean life	time	time	(1,0,0)	t	second	AIP 46
measurement ton	volume	volume	(0,3,0)	d^3	cu meter	RR
mechanical impedance		electric charge	(-1,0,1)	m / t		Sz 58, 683
med	energy per area	electric current	(-2,0,1)	m / t^2	joule per sq meter	RR
megapascal	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F353; RR
meile	distance	distance	(0,1,0)	d	meter	RR
melchoir	volume	volume	(0,3,0)	d^3	cu meter	RR
melting point	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC B210, B455, C31, C671
mesh		wave number	(0,-1,0)	n / d		RR
met		radiance	(-3,0,1)	m / t^3		RR
meter	distance	distance	(0,1,0)	d	meter	CRC F112, F282, F353; M 1-18; MH 2415

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
meter-atmosphere	atmo-meter	angular acceleration	(-2,0,0)	n / t^2		RR
meter-candle	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC F354
meter-lambert	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	RR
methuselah	volume	volume	(0,3,0)	d^3	cu meter	RR
metonic cycle	time	time	(1,0,0)	t	second	RR
mho	conductance	conductance	(-1,-2,1)	$m / d^2 t$	siemens	CRC F113, F313, F354
mickey	distance	distance	(0,1,0)	d	meter	RR
micron	distance	distance	(0,1,0)	d	meter	CRC F113, F354; RR
middy	volume	volume	(0,3,0)	d^3	cu meter	RR
miglio	distance	distance	(0,1,0)	d	meter	RR
mil (1)	distance	distance	(0,1,0)	d	meter	CRC F354; RR
mil (2)	plane angle	number	(0,0,0)	n	radian	RR
mile	distance	distance	(0,1,0)	d	meter	CRC F354; M1-16; MH 2417
milha	distance	distance	(0,1,0)	d	meter	RR
millenium	time	time	(1,0,0)	t	second	RR
milliard	volume	volume	(0,3,0)	d^3	cu meter	RR
millimeter of mercury	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F285, F354; RR
millimeter of water	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F354; RR
mina	mass	mass	(0,0,1)	m	kilogram	RR
miner's inch	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	M 1-16; RR table27 p124
minim (1)	time	time	(1,0,0)	t	second	M 1-16; RR
minim (2)	volume	volume	(0,3,0)	d^3	cu meter	CRC F354; RR
minute (1)	plane angle	number	(0,0,0)	n	radian	CRC F113, F284, F354; M 1-17; RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
minute (2)	time	time	(1,0,0)	t	second	CRC F284, F354; RR
minutum	time	time	(1,0,0)	t	second	RR
minyan	quantity	number	(0,0,0)	n	unity	RR
mired	reciprocal kelvin	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	per kelvin	RR
mkono	distance	distance	(0,1,0)	d	meter sq meter per volt second	RR CRC E110, E114
mobility	proportion	number	(0,0,0)	n	unity	AIP 38
mobility ratio	proportion	number	(0,0,0)	n		CRC F113, F363; M 3-52; Sz 676
modulus of elasticity	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F64, F94
modulus of rigidity	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	Sz 57, 676
modulus of shear	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC E106; RR CRC F363
mohs	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	
moisture content	proportion	number	(0,0,0)	n	unity	
molality	mass concentration	mass concentration	(0,0,-1)	n / m	mole per kilogram	AIP 39; CRC F113; Sz 59, 684
molar energy	molar energy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC F302; Sz 59, 684
molar entropy	proportion	number	(0,0,0)	n	unity	CRC F283; Sz 59, 684
molar fraction	proportion	number	(0,0,0)	n	unity	AIP 40
molar heat capacity	proportion	number	(0,0,0)	n	joule per mole kelvin	CRC F102, F283, F302; Sz 59, 684
molar heat of dilution	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC D121
molar heat of formation	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC E110, F64
molar heat of fusion	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC B211, C666, C671, F65, F70
molar heat of sublimation	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC B211
molar heat of transformation	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC B211

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
molar heat of transition	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC D46
molar heat of vaporization	molar heat	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC F65, F70
molar mass	molar mass	mass	(0,0,1)	m	kilogram per mole	AIP 42; CRC F302; Sz 59, 683
molar ratio	proportion	number	(0,0,0)	n	unity	AIP 40
molar volume	molar volume	volume	(0,3,0)	d^3	cu meter per mole	CRC F113, F302; Sz 59, 684
molarity	volume concentration	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	CRC F113; RR
mole	quantity	number	(0,0,0)	n	mole	CRC F113, F282; M 1-18; MH 2415
mole fraction	proportion	number	(0,0,0)	n	unity	CRC F113, F379; Sz 685
molecular conductivity	molar conductivity	electric charge	(-1,0,1)	m / t	cu meter siemens per meter mole	CRC F87
molecular energy	molar energy	energy	(-2,2,1)	$m d^2 / t^2$	joule per mole	CRC D50
molecular weight	mass	mass	(0,0,1)	m	kilogram	CRC F113
moment	time	time	(1,0,0)	t	second	RR
moment of couple	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	AIP 43; CRC F88
moment of force	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	CRC F113; M 3-4; Sz 57
moment of inertia	angular inertia	angular inertia	(0,2,1)	$m d^2$	kilogram sq meter	AIP 41; CRC F114; M 3-52; Sz 57, 673
moment of momentum	angular momentum	angular momentum	(-1,2,1)	$m d^2 / t$	joule second	CRC F77; Sz 57, 674
moment of section	moment of section	moment of section	(0,4,0)	d^4	sq sq meter	M 1-21; MH 2421
momentum	momentum	momentum	(-1,1,1)	$m d / t$	newton second	AIP 39; CRC F114; M 3-52; Sz 57, 673
momme (1)	mass	mass	(0,0,1)	m	kilogram	RR
momme (2)		capacitance	(0,-2,1)	m / d^2	kilogram per sq meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
monochromatic emissive power	proportion	number	(0,0,0)	n	unity	CRC F114
month	time	time	(1,0,0)	t	second	CRC F354; RR
morgen	area	area	(0,2,0)	d²	sq meter	RR
mpg	miles per gallon	fuel efficiency	(0,-2,0)	n / d²	meter per cu meter	CRC F354; RR
mph	speed	velocity	(-1,1,0)	d / t	meter per second	CRC F354; RR
mu	area	area	(0,2,0)	d²	sq meter	RR
mud	volume	volume	(0,3,0)	d³	cu meter	RR
mug	mass	mass	(0,0,1)	m	kilogram	RR
m-unit	proportion	number	(0,0,0)	n	unity	CRC F121
mutchkin	volume	volume	(0,3,0)	d³	cu meter	RR
mutual inductance	inductance	inductance	(2,2,-1)	d² t² / m	henry	AIP 42; M 15-3
nail	distance	distance	(0,1,0)	d	meter	CRC F354; RR
nautical mile	distance	distance	(0,1,0)	d	meter	M1-16; RR; Sz 60, 689
nebuchadnezzar	volume	volume	(0,3,0)	d³	cu meter	RR
neck	distance	distance	(0,1,0)	d	meter	RR
neel temperature	temperature	energy	(-2,2,1)	m d² / t²	kelvin	AIP 43; CRC F114
neper	acoustic loudness	number	(0,0,0)	n	decibel	CRC F354; RR
neutron number	quantity	number	(0,0,0)	n	unity	AIP 42; CRC F114
newton	force	force	(-2,1,1)	m d / t²	newton	CRC F114, F134, F283, F313, F354; M1-18, 3-52; MH 2415
ngarn	area	area	(0,2,0)	d²	sq meter	RR
niacin equivalent (NE)	mass	mass	(0,0,1)	m	kilogram	RR
nibble	quantity	number	(0,0,0)	n	unity	RR
nip	volume	volume	(0,3,0)	d³	cu meter	RR
nit	emitted luminous power density	radiance	(-3,0,1)	m / t³	candela per sq meter	CRC E210, F355; RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
noggin	volume	volume	(0,3,0)	d^3	cu meter	CRC F355; RR
nook	area	area	(0,2,0)	d^2	sq meter	RR
normal	volume concentration	volume concentration	(0,-3,0)	n / d^3	(mole per mole)per cu meter	CRC F115; RR
normal cubic meter	mass	mass	(0,0,1)	m	kilogram	RR
normal stress	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 46
nose	distance	distance	(0,1,0)	d	meter	RR
note	time	time	(1,0,0)	t	second	RR
nox	received luminous power density	radiance	(-3,0,1)	m / t^3	lux	CRC F355; RR
nuclear mass	mass	mass	(0,0,1)	m	kilogram	AIP 39
nuclear spin quantum number	proportion	number	(0,0,0)	n	unity	AIP 42
nuclear stopping power	specific stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter kilogram	NIST
nucleon number	quantity	number	(0,0,0)	n	unity	AIP 40; CRC F115
number	quantity	number	(0,0,0)	n	unity	SP
number density of particles		volume concentration	(0,-3,0)	n / d^3	per cu meter	AIP 39
numerical aperture	proportion	number	(0,0,0)	n	unity	CRC F115
n-unit	proportion	number	(0,0,0)	n	unity	CRC F121
nusselt number	proportion	number	(0,0,0)	n	unity	CRC F115
obol	mass	mass	(0,0,1)	m	kilogram	RR
octant (1)	plane angle	number	(0,0,0)	n	radian	RR
octant (2)	solid angle	number	(0,0,0)	n	steradian	RR
octarius	volume	volume	(0,3,0)	d^3	cu meter	RR
octavillo	volume	volume	(0,3,0)	d^3	cu meter	RR
octennium	time	time	(1,0,0)	t	second	RR
oersted	magnetic field strength	pressure	(-2,-1,1)	$m / d t^2$	ampere- turn per meter	CRC F111, F115, F284, F340, F355; M 1-23

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
ohm	resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	CRC F116, F134, F283, F313; M 1-18
oitavo	volume	volume	(0,3,0)	d^3	cu meter	RR
oke	mass	mass	(0,0,1)	m	kilogram	RR
olympiad	time	time	(1,0,0)	t	second	RR
omer	volume	volume	(0,3,0)	d^3	cu meter	RR
omn.bih		frequency	(-1,0,0)	n / t	hertz	RR
omn.hor		frequency	(-1,0,0)	n / t	hertz	RR
ons	mass	mass	(0,0,1)	m	kilogram	RR
orbital angular momentum quantum number	proportion	number	(0,0,0)	n	unity	AIP 39
order of reflection	quantity	number	(0,0,0)	n	unity	AIP 39
osmolal	mass concentration	mass concentration	(0,0,-1)	n / m	mole per kilogram	RR
osmolality	specific pressure	specific pressure	(-2,-1,0)	$n / d t^2$	pascal per kilogram	CRC D271
osmolar	volume concentration	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	RR
osmole	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal kilogram	RR
osmosity	molar weight concentration	density	(0,-3,1)	m / d^3	mole per cu meter	CRC D271
osmotic coefficient	exponential	number	(0,0,0)	n	unity	CRC F294
osmotic pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 46
ostent	time	time	(1,0,0)	t	second	RR
ounce (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F355; M 1-16; RR
ounce (2)	mass	mass	(0,0,1)	m	kilogram kilogram	CRC F355; M 1-17; MH 2419
ounce weight		density	(0,-3,1)	m / d^3	per cu meter	RR
overpotential	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	CRC F117
oxgang	area	area	(0,2,0)	d^2	sq meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
pace	distance	distance	(0,1,0)	d	meter	CRC F355; RR
packen	mass	mass	(0,0,1)	m	kilogram	RR
packing fraction	proportion	number	(0,0,0)	n	unity	CRC F117
palm	distance	distance	(0,1,0)	d	meter	CRC F355; RR
parallax	plane angle	number	(0,0,0)	n	radian	CRC F117
parasang	distance	distance	(0,1,0)	d	meter	RR
parsec	distance	distance	(0,1,0)	d	meter	CRC F117, F355; M 1-23; RR
partial pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F117, F291, F292
particle displacement	distance	distance	(0,1,0)	d	meter	AIP 45
particle fluence	particles per area	fuel efficiency	(0,-2,0)	n / d^2		CRC F360; Sz 59, 688
particle fluence rate	particles per area second	heat transfer coefficient	(-1,-2,0)	$n / d^2 t$		AIP 46; CRC F360; Sz 59, 688
particle flux density	particles per area second	heat transfer coefficient	(-1,-2,0)	$n / d^2 t$		AIP 46; Sz 59, 688
pascal	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F117, F134, F283, F313, F355, F360; M 1-18; MH 2416
pascal-second	dynamic viscosity	dynamic viscosity	(-1,-1,1)	$m / d t$	pascal second	CRC F355; RR
path length	distance	distance	(0,1,0)	d	meter	AIP 40
pearl grain	mass	mass	(0,0,1)	m	kilogram	RR
peck	volume	volume	(0,3,0)	d^3	cu meter	CRC F355; M 1-16; RR
peltier coefficient		voltage	(-1,2,0)	d^2 / t	volt	AIP 46
pencil hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
pennyweight	mass	mass	(0,0,1)	m	kilogram	CRC F355; M 1-17; RR
pentad	time	time	(1,0,0)	t	second	RR
percent by volume	proportion	number	(0,0,0)	n	unity	RR
percent by weight	proportion	number	(0,0,0)	n	unity	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
perch (1)	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F355; M 1-16; RR
perch (2)	volume	volume	(0,3,0)	<i>d</i>³	cu meter	M 1-16; RR
period	time	time	(1,0,0)	<i>t</i>	second	AIP 43; CRC F118; M 15-3
perm	mechanical permeability	inverse velocity	(1,-1,0)	<i>t / d</i>	kilogram per pascal second sq meter	M 1-23; RR
permeability (1)	magnetic permeability	permeability	(2,1,-1)	<i>d</i>² / <i>m</i>	henry per meter	AIP 45; CRC F215; M 15-4; Sz 58, 681
permeability (2)	hydrodynamic permeability	area	(0,2,0)	<i>d</i>²	sq meter	CRC F349, F364; RR
permeability (3)	mechanical permeability	inverse velocity	(1,-1,0)	<i>t / d</i>	kilogram per pascal second sq meter	(efunda.com)
permeance (1)	magnetic permeance	inductance	(2,2,-1)	<i>d</i>² <i>t</i>² / <i>m</i>	henry kilogram per pascal second meter	AQ 28; M 15-4
permeance (2)	mechanical permeance	time	(1,0,0)	<i>t</i>	second meter	(efunda.com)
perm-inch	mechanical permeance	time	(1,0,0)	<i>t</i>	kilogram per pascal second meter	M 1-23; RR
permittivity	permittivity	density	(0,-3,1)	<i>m / d</i>³	farad per meter	AIP 44; CRC F215; M 15-3; Sz 58, 678
pes	distance	distance	(0,1,0)	<i>d</i>	meter	RR
pfund	mass	mass	(0,0,1)	<i>m</i>	kilogram	RR
pH	exponential	number	(0,0,0)	<i>n</i>	unity	RR
phase angle	plane angle	number	(0,0,0)	<i>n</i>	radian	CRC F118
phase difference	plane angle	number	(0,0,0)	<i>n</i>	radian	AIP 46
phot	received luminous power density	radiance	(-3,0,1)	<i>m / t</i>³	lux	CRC E210, F104, F118, F341, F355; M 1-23
pica	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F355; M 1-23; RR
picolo	volume	volume	(0,3,0)	<i>d</i>³	cu meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
pied	distance	distance	(0,1,0)	<i>d</i>	meter	RR
piede	distance	distance	(0,1,0)	<i>d</i>	meter	RR
pieze	pressure	pressure	(-2,-1,1)	<i>m / d t²</i>	pascal	RR
pik	distance	distance	(0,1,0)	<i>d</i>	meter	RR
pin	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
pinch	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
ping	area	area	(0,2,0)	<i>d²</i>	sq meter	RR
pint	volume	volume	(0,3,0)	<i>d³</i>	cu meter	CRC F355; M 1-16; RR
pipa	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
pipe	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
plane angle	plane angle	number	(0,0,0)	<i>n</i>	radian	AIP 44; CRC F283, F313; M 1-18
plank	angular momentum	angular momentum	(-1,2,1)	<i>m d² / t</i>	joule second	RR
plank length	distance	distance	(0,1,0)	<i>d</i>	meter	RR
plank mass	mass	mass	(0,0,1)	<i>m</i>	kilogram	RR
plank time	time	time	(1,0,0)	<i>t</i>	second	RR
plasma unit	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
point (1)	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F356; M 1-24; RR
point (2)	plane angle	number	(0,0,0)	<i>n</i>	radian	RR
point (3)	mass	mass	(0,0,1)	<i>m</i>	kilogram	RR
point (4)	relative density	number	(0,0,0)	<i>n</i>	unity	RR
point (5)	time	time	(1,0,0)	<i>t</i>	second	RR
poise	dynamic viscosity	dynamic viscosity	(-1,-1,1)	<i>m / d t</i>	pascal second	CRC F37, F38, F118, F284, F339, F356; M 1-24; MH 2423
poisson ratio	proportion	number	(0,0,0)	<i>n</i>	unity	AIP 45; CRC F64
polarizability	polarizability	volume	(0,3,0)	<i>d³</i>	cu meter coulomb per sq meter	CRC E70, E72, E74
polarization	polarization	conductance	(-1,-2,1)	<i>m / d² t</i>	meter	AIP 43; AQ 28
polarization vector	proportion	number	(0,0,0)	<i>n</i>	unity	AIP 38

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
pole	distance	distance	(0,1,0)	d	meter	CRC F356; M 1-16; RR
pole strength	pole strength	force	(-2,1,1)	$m d / t^2$	ampere- turn meter	M 15-4
polegada	distance	distance	(0,1,0)	d	meter	RR
pollex	distance	distance	(0,1,0)	d	meter	RR
poncelet	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
pond	force	force	(-2,1,1)	$m d / t^2$	newton	CRC F356; MH 2420; RR
pony	volume	volume	(0,3,0)	d^3	cu meter	RR
pood	mass	mass	(0,0,1)	m	kilogram	RR
pop	change in crackle	pop	(-6,1,0)	d / t^6	crackle per second	Ref. 53
population	quantity	number	(0,0,0)	n	unity	CRC F119
porosity (1)		number	(0,0,0)	n		CRC F363
porosity (2)	permeability	inverse velocity	(1,-1,0)	t / d		RR
position vector	distance	distance	(0,1,0)	d	meter	AIP 40
pot	volume	volume	(0,3,0)	d^3	cu meter	RR
potential difference	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	AIP 43; CRC F134, F313
potential energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 41
pottle	volume	volume	(0,3,0)	d^3	cu meter	CRC F356; RR
pouce	distance	distance	(0,1,0)	d	meter	RR
poumar	linear density	linear density	(0,-1,1)	m / d	kilogram per meter	RR
pound	mass	mass	(0,0,1)	m	kilogram	CRC F284, F356; M 1-17; MH 2420
poundal	force	force	(-2,1,1)	$m d / t^2$	newton	M 1-24; MH 2420; RR
power	power	power	(-3,2,1)	$m d^2 / t^3$	watt	AIP 43; CRC F119, F134, F283, F313, F360, F364; M 1-18, 3-52; MH 2415
poynting vector	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	AIP 77
ppm	proportion	number	(0,0,0)	n	unity	CRC F355; RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 39; CRC F119, F134, F283, F313, F360, F363; M 1-18, 3-52; MH 2416
pressure drop		dynamic viscosity	(-1,-1,1)	$m / d t$		CRC F366
pressure gradient	pressure gradient	pressure gradient	(-2,-2,1)	$m / d^2 t^2$	pascal per meter	CRC F366
principal quantum number	proportion	number	(0,0,0)	n	unity	AIP 39
propagation vector		wave number	(0,-1,0)	n / d	per meter	AIP 39
proton number	quantity	number	(0,0,0)	n	unity	CRC F323
psi	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F356; RR
psig	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
pu	distance	distance	(0,1,0)	d	meter	RR
pulgada	distance	distance	(0,1,0)	d	meter	RR
pulse	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleration per second	Ref. 53
puncheon	volume	volume	(0,3,0)	d^3	cu meter	CRC F356; RR
pund	mass	mass	(0,0,1)	m	kilogram	RR
pyong	area	area	(0,2,0)	d^2	sq meter	RR
pyron	heat flow	radiance	(-3,0,1)	m / t^3	joule per sq meter	CRC F120; RR
q.d		frequency	(-1,0,0)	n / t	second	RR
q.h		frequency	(-1,0,0)	n / t	hertz	RR
q.l.d.		frequency	(-1,0,0)	n / t	hertz	RR
qian	mass	mass	(0,0,1)	m	hertz	RR
qintar	mass	mass	(0,0,1)	m	kilogram	RR
quad	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
quadrant	plane angle	number	(0,0,0)	n		CRC F356; M 1-17;
quadrennium	time	time	(1,0,0)	t	radian	RR
quadropole moment	atomic symmetry	angular momentum	(-1,2,1)	$m d^2 / t$	second	RR
quantity of electricity	electric charge	electric charge	(-1,0,1)	m / t	coulomb sq meter	AIP 43
						AIP 43; CRC F134, F215, F283, F313; M 1-18, 15-3

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
quantity of heat	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 43; CRC F134, F315; M 1-18
quantity of light	luminous energy	energy	(-2,2,1)	$m d^2 / t^2$	lumen second	AIP 43; CRC E210
quantity of magnetism	magnetic flux	area	(0,2,0)	d^2	weber	CRC F111
quantum	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F120; RR CRC F356; M 1-16;
quart	volume	volume	(0,3,0)	d^3	cu meter	RR
quarter (1)	plane angle	number	(0,0,0)	n	radian	RR
quarter (2)	area	area	(0,2,0)	d^2	sq meter	"land Measurements" pamph
quarter (3)	volume	volume	(0,3,0)	d^3	cu meter	CRC F357; RR CRC F357; M 1-17;
quarter (4)	mass	mass	(0,0,1)	m	kilogram	RR
quarter (5)	time	time	(1,0,0)	t	second	RR
quartern	mass	mass	(0,0,1)	m	kilogram	RR
quartern-loaf	mass	mass	(0,0,1)	m	kilogram	RR
quarto	volume	volume	(0,3,0)	d^3	cu meter	RR
quaver	time	time	(1,0,0)	t	second	RR
quinquennium	time	time	(1,0,0)	t	second	RR
quintal	mass	mass	(0,0,1)	m	kilogram	CRC F357; RR
q-unit	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
rad	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	CRC F120, F284, F357, F360, F361; M 1-24; RR; Sz 62, 692
radian	plane angle	number	(0,0,0)	n	radian	CRC F120, F283, F357; M 1-18; RR
radian per second	angular velocity	frequency	(-1,0,0)	n / t	radian per second	RR
radiance	power per area and solid angle	radiance	(-3,0,1)	m / t^3	watt per sq meter steradian	CRC E209; Sz 58, 681
radiant density	energy density	pressure	(-2,-1,1)	$m / d t^2$	joule per cu meter	CRC E209

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
radiant emittance	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC E209
radiant energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC E209; Sz 58, 681
radiant energy fluence rate	fluence rate	radiance	(-3,0,1)	m / t^3	watt per sq meter	AIP 46
radiant excitance	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC E209, F97
radiant exposure		electric current	(-2,0,1)	m / t^2		Sz 59, 687
radiant flux	power	power	(-3,2,1)	$m d^2 / t^3$	watt	CRC E209, F134; Sz 58, 681
radiant flux density	power per area	radiance	(-3,0,1)	m / t^3	watt per sq meter	CRC E209
radiant intensity	power per solid angle	power	(-3,2,1)	$m d^2 / t^3$	watt per steradian	CRC E209; M 1-18
radiant power	power	power	(-3,2,1)	$m d^2 / t^3$	watt	Sz 58, 681
radiation chemical yield		thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	mole per joule	CRC F360
radiation dose	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	periodic table
radiation dose equivalent	dose equivalent	specific energy	(-2,2,0)	d^2 / t^2	sievert	CRC F124
radiation dose rate	absorbed dose rate	specific power	(-3,2,0)	d^2 / t^3	gray per second	periodic table
radiativestopping power	specific stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter kilogram	NIST
radioactivity	radioactivity	frequency	(-1,0,0)	n / t	becquerel	? AIP 40; CRC F134, F283, F314, F360; M 1-18
radiocarbon year	time	time	(1,0,0)	t	second	RR
radius	distance	distance	(0,1,0)	d	meter	AIP 40
radius of gyration	distance	distance	(0,1,0)	d	meter	CRC F121
rai	area	area	(0,2,0)	d^2	sq meter	RR
range	distance	distance	(0,1,0)	d	meter	AIP 43
rate	rate	frequency	(-1,0,0)	n / t	hertz	
rate of shear	rate	frequency	(-1,0,0)	n / t		CRC F364
rate-of-strain tensor invariant		angular acceleration	(-2,0,0)	n / t^2		CRC F378

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
rayl	sound impedance	conductance	(-1,-2,1)	$m / d^2 t$	newton second per cu meter	efunda.com; lp2cd.com; RR; sizes.com
rayleigh	emitted photon density	fuel efficiency	(0,-2,0)	n / d^2	per sq meter	RR
rayleigh number	proportion	number	(0,0,0)	n	unity	CRC F121
reactance	<i>i</i> resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	Sz 58, 678
reaction energy	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 43
reaction rate	reaction rate	conductivity	(-1,-3,1)	$m / d^3 t$	kilogram per cu meter second	CRC F363, F366, F379
reaction rate constant		velocity	(-1,1,0)	d / t		CRC F366, F379
reactive power	<i>i</i> power	power	(-3,2,1)	$m d^2 / t^3$	var	M 15-3; RR
ream	quantity	number	(0,0,0)	n	unity	RR
Reaumur	temperature	energy	(-2,2,1)	$m d^2 / t^2$	Kelvin	Joe Bond's Master System
rebah	mass	mass	(0,0,1)	m	kilogram	RR
reciprocal kelvin	reciprocal kelvin	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	per kelvin	RR
reciprocal lattice vector		wave number	(0,-1,0)	n / d	per meter	AIP 41
reciprocal meter		wave number	(0,-1,0)	n / d	reciprocal meter	M 1-18
recombination coefficient	recombination	volume flow	(-1,3,0)	d^3 / t	cu meter per second	AIP 44
redshift	proportion	number	(0,0,0)	n	unity	RR
reduced mass	mass	mass	(0,0,1)	m	kilogram	AIP 39
reduction potential		voltage	(-1,2,0)	d^2 / t	volt	CRC D159
redwood second	kinematic viscosity	voltage	(-1,2,0)	d^2 / t	sq meter per second	CRC F38
reflectance	proportion	number	(0,0,0)	n	unity	CRC E210
reflection coefficient	proportion	number	(0,0,0)	n	unity	CRC F121
reflectivity	proportion	number	(0,0,0)	n	unity	CRC F121
refractive index	proportion	number	(0,0,0)	n	unity	AIP 39; CRC F105
refractivity	proportion	number	(0,0,0)	n	unity	CRC F105, F121

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
register ton	volume	volume	(0,3,0)	d^3	cu meter	CRC F357; M 1-17; RR
rehoboam	volume	volume	(0,3,0)	d^3	cu meter	RR
relative activity	proportion	number	(0,0,0)	n	unity	CRC F292
relative atomic mass	proportion	number	(0,0,0)	n	unity	AIP 40
relative chemical activity	proportion	number	(0,0,0)	n	unity	AIP 37
relative density	proportion	number	(0,0,0)	n	unity	AIP 38
relative elongation	proportion	number	(0,0,0)	n	unity	CRC F317
relative humidity	proportion	number	(0,0,0)	n	unity	CRC F122
relative molar mass	proportion	number	(0,0,0)	n	unity	AIP 42
relative molecular mass	proportion	number	(0,0,0)	n	unity	AIP 42
relative permeability	proportion	number	(0,0,0)	n	unity	AIP 45
relative permittivity	proportion	number	(0,0,0)	n	unity	AIP 42
relative stopping power	proportion	number	(0,0,0)	n	unity	(amershamhealth.co m)
relaxation time	time	time	(1,0,0)	t	second	AIP 46; CRC F364
reluctance	reluctance	pressure gradient	(-2,-2,1)	$m / d^2 t^2$	reciprocal henry	AQ 28; CRC F122; M 15-4; Sz 58, 679
reluctivity	distance per inductance	pressure	(-2,-1,1)	$m / d t^2$	meter per henry	CRC F122; M 15-4
rem	dose equivalent	specific energy	(-2,2,0)	d^2 / t^2	sievert	CRC F122, F123, F357, F360, F361; M 1-24; Sz 62, 692
rep	absorbed dose	specific energy	(-2,2,0)	d^2 / t^2	gray	CRC F123; RR
resistance	resistance	resistance	(1,2,-1)	$d^2 t / m$	ohm	AQ 28; CRC F122, F313; M 15-3
resistivity	resistivity	resistivity	(1,3,-1)	$d^3 t / m$	ohm meter	CRC B206, E95, F122; M 15-3; Sz 58, 678

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
revolution	plane angle	number	(0,0,0)	n	radian	CRC F357; RR
reyn	dynamic viscosity	dynamic viscosity	(-1,-1,1)	<i>m / d t</i>	pascal second	CRC F39, F357; RR
rhe	fluidity	fluidity	(1,1,-1)	<i>d t / m</i>	per pascal second	CRC F98, F357; M 1- 24; RR
rheinfuss	distance	distance	(0,1,0)	<i>d</i>	meter	RR
ri	distance	distance	(0,1,0)	<i>d</i>	meter	RR
rick	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
ridge	distance	distance	(0,1,0)	<i>d</i>	meter	RR
riga last	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
right angle	plane angle	number	(0,0,0)	n	radian	CRC F357; RR
rigidity coefficient		dynamic viscosity	(-1,-1,1)	<i>m / d t</i>		CRC F364
ring size	distance	distance	(0,1,0)	<i>d</i>	meter	RR
rockwell hardness	hardness	pressure	(-2,-1,1)	<i>m / d t²</i>	pascal	RR
rod	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F357; M 1-16; MH 2417
roede	distance	distance	(0,1,0)	<i>d</i>	meter	RR
roentgen	exposure	frequency	(-1,0,0)	<i>n / t</i>	coulomb per kilogram	CRC F123, F284, F357, F360; M 1-24; Sz 62, 692
rood (1)	distance	distance	(0,1,0)	<i>d</i>	meter	RR
rood (2)	area	area	(0,2,0)	<i>d²</i>	sq meter	CRC F357; RR
rope	distance	distance	(0,1,0)	<i>d</i>	meter	CRC F357; RR
rotary power	plane angle per distance	wave number	(0,-1,0)	<i>n / d</i>	radian per meter	CRC E424, F123
rotation rate		frequency	(-1,0,0)	<i>n / t</i>		CRC F363
rotational quantum number	proportion	number	(0,0,0)	n	unity	AIP 42
round	time	time	(1,0,0)	<i>t</i>	second	RR
rpm	angular velocity	frequency	(-1,0,0)	<i>n / t</i>	hertz	CRC F357; RR
rundlet	volume	volume	(0,3,0)	<i>d³</i>	cu meter	RR
rute	distance	distance	(0,1,0)	<i>d</i>	meter	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
rutherford	wavenumber	wave number	(0,-1,0)	n / d		RR
sabine	proportion	number	(0,0,0)	n	unity	CRC F73
sack (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
sack (2)	mass	mass	(0,0,1)	m	kilogram	RR
sagene	distance	distance	(0,1,0)	d	meter	RR
					kilogram per sq meter	
sailmaker ounce	area density	capacitance	(0,-2,1)	m / d^2	meter	RR
salmanazar	volume	volume	(0,3,0)	d^3	cu meter	RR
saltspoon	volume	volume	(0,3,0)	d^3	cu meter	RR
sao	area	area	(0,2,0)	d^2	sq meter	RR
saros	time	time	(1,0,0)	t	second	RR
	kinematic viscosity	voltage	(-1,2,0)	d^2 / t	sq meter per second	CRC F38; RR
saybolt second	distance	distance	(0,1,0)	d	meter	CRC F123
scale height	plane angle	number	(0,0,0)	n	radian	AIP 45
scattering angle						
scattering cross section	cross section	area	(0,2,0)	d^2	sq meter	CRC F97, F123
					cu meter per second	
sccm	volume flow	volume flow	(-1,3,0)	d^3 / t	per second	RR
schepel	volume	volume	(0,3,0)	d^3	cu meter	RR
schooner	volume	volume	(0,3,0)	d^3	cu meter	RR
schoppen	volume	volume	(0,3,0)	d^3	cu meter	RR
schtuff	volume	volume	(0,3,0)	d^3	cu meter	RR
score	quantity	number	(0,0,0)	n	unity	RR
scruple (1)	volume	volume	(0,3,0)	d^3	cu meter	CRC F357
						CRC F357; M 1-17;
scruple (2)	mass	mass	(0,0,1)	m	kilogram	RR
se	area	area	(0,2,0)	d^2	sq meter	RR
seah	volume	volume	(0,3,0)	d^3	cu meter	RR
seam	volume	volume	(0,3,0)	d^3	cu meter	CRC F357; RR
season	time	time	(1,0,0)	t	second	RR
second (1)	plane angle	number	(0,0,0)	n	radian	CRC F124, F284, F357; RR
second (2)	time	time	(1,0,0)	t	second	CRC F123, F282; M 1-18; MH 2415
second acceleration	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleratio n per second	Ref. 51

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
second hyper-polarizability	second hyper-susceptibility	second hyper-susceptibility	(3,-3,-1)	$t^3 / d^3 m$	coulomb meter per sq joule	efunda.com
second moment of area	moment of section	moment of section	(0,4,0)	d^4	sq sq meter	Sz 57, 675
section	area	area	(0,2,0)	d^2	sq meter	M 1-16, 1-24; RR
section modulus	section modulus	volume	(0,3,0)	d^3	cu meter	M 1-22; MH 2421
sed	UV radiation dose	electric current	(-2,0,1)	m / t^2	joule per sq meter	RR
seebeck coefficient		thermoelectric power	(1,0,-1)	t / m	volt per kelvin	AIP 43
seer (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
seer (2)	mass	mass	(0,0,1)	m	kilogram	RR
seidel	volume	volume	(0,3,0)	d^3	cu meter	RR
self-inductance	inductance	inductance	(2,2,-1)	$d^2 t^2 / m$	henry	AIP 42
sennight	time	time	(1,0,0)	t	second	RR
sester	volume	volume	(0,3,0)	d^3	cu meter	RR
seven	volume	volume	(0,3,0)	d^3	cu meter	RR
sextarius	volume	volume	(0,3,0)	d^3	cu meter	RR
shackle	distance	distance	(0,1,0)	d	meter	RR
shaftment	distance	distance	(0,1,0)	d	meter	RR
shake	time	time	(1,0,0)	t	second	RR
shaku (1)	distance	distance	(0,1,0)	d	meter	RR
shaku (2)	area	area	(0,2,0)	d^2	sq meter	RR
shaku (3)	volume	volume	(0,3,0)	d^3	cu meter	RR
sheaf	volume	volume	(0,3,0)	d^3	cu meter	RR
shear modulus	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 41
shear strain	strain	number	(0,0,0)	n	unity	AIP 44
shear strength	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F124
shear stress	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 46; CRC F364; M 3-52
shed	area	area	(0,2,0)	d^2	sq meter	RR
shekel	mass	mass	(0,0,1)	m	kilogram	RR
sheng	volume	volume	(0,3,0)	d^3	cu meter	RR
shetland	volume	volume	(0,3,0)	d^3	cu meter	RR
shift	time	time	(1,0,0)	t	second	RR
sho	volume	volume	(0,3,0)	d^3	cu meter	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
shock	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleration per second	Ref. 53
shoe size	distance	distance	(0,1,0)	d	meter	RR
shore hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
short ton	mass	mass	(0,0,1)	m	kilogram	M 1-17; RR
shot (1)	distance	distance	(0,1,0)	d	meter	RR
shot (2)	volume	volume	(0,3,0)	d^3	cu meter	RR
shovel	volume	volume	(0,3,0)	d^3	cu meter	RR
shower unit	distance	distance	(0,1,0)	d	meter	RR
siegbahn	distance	distance	(0,1,0)	d	meter	AQ 21; RR
siemens	conductance	conductance	(-1,-2,1)	$m / d^2 t$	siemens	CRC F134, F283, F313, F357; M 1-18; RR
sieve		wave number	(0,-1,0)	n / d		RR
sievert	dose equivalent	specific energy	(-2,2,0)	d^2 / t^2	sievert	CRC F124, F314; RR
sitio	area	area	(0,2,0)	d^2	sq meter	RR
skein	distance	distance	(0,1,0)	d	meter	RR
skjeppe	volume	volume	(0,3,0)	d^3	cu meter	RR
skot	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	RR
slinch	mass	mass	(0,0,1)	m	kilogram	RR
slpm	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
slug	mass	mass	(0,0,1)	m	kilogram	CRC F357; M 3-52; MH 2420
smidgen	volume	volume	(0,3,0)	d^3	cu meter	RR
smite	volume	volume	(0,3,0)	d^3	cu meter	RR
smoot	distance	distance	(0,1,0)	d	meter	RR
snail	mass	mass	(0,0,1)	m	kilogram	RR
snap	change in jerk	snap	(-4,1,0)	d / t^4	jerk per second	Ref. 53
snit	volume	volume	(0,3,0)	d^3	cu meter	RR
sol	time	time	(1,0,0)	t	second	RR
solar neutrino unit		frequency	(-1,0,0)	n / t	hertz	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
solid angle	solid angle	number	(0,0,0)	n	steradian	AIP 46; CRC F125, F283, F313; M 1-18
solid angular density	mass per solid angle	mass	(0,0,1)	m	kilogram per steradian	
solubility (1)	solubility	specific volume	(0,3,-1)	d^3 / m	cu meter per kilogram	CRC B457
solubility (2)	solubility	density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC B68
solubility (3)	proportion	number	(0,0,0)	n	unity	CRC C707
solubility (4)	solubility	volume concentration	(0,-3,0)	n / d^3	mole per cu meter	CRC D274
sotka	area	area	(0,2,0)	d^2	sq meter	RR
sound energy flux		power	(-3,2,1)	$m d^2 / t^3$		Sz 58, 683
sound impedance	sound impedance	conductance	(-1,-2,1)	$m / d^2 t$	newton second per cu meter	wordiq.com
sound intensity	sound intensity	radiance	(-3,0,1)	m / t^3	watt per sq meter	M 12-136; Sz 58, 683
sound power	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR; Sz 58, 683
sound power level	logarithmic	number	(0,0,0)	n	decibel	AIP 42
sound pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	Sz 58, 682
sound pressure level	exponential	number	(0,0,0)	n	decibel	AIP 42; M 12-136; Sz 58, 682
span	distance	distance	(0,1,0)	d	meter	CRC F357; M 1-16; RR
spasm	change in jerk	snap	(-4,1,0)	d / t^4	jerk per second	Ref. 53
spat (1)	distance	distance	(0,1,0)	d	meter	RR
spat (2)	solid angle	number	(0,0,0)	n	steradian	RR
spatial displacement	distance	distance	(0,1,0)	d	meter	CRC F320
specific acoustic impedance	sound impedance	conductance	(-1,-2,1)	$m / d^2 t$	newton second per cu meter	efunda.com; lp2cd.com; phys.unsw.edu.au; sizes.com

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
specific activity	specific activity	specific activity	(-1,0,-1)	$n / t m$	becquerel per kilogram	AIP 37
specific angular momentum	area per unit time	voltage	(-1,2,0)	d^2 / t	sq meters per second	Wikipedia
specific conductance	conductivity	conductivity	(-1,-3,1)	$m / d^3 t$	siemens per meter	CRC D271, F125
specific energy	specific energy	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	AIP 38; CRC F134, F302, F360; Sz 57, 672
specific enthalpy	specific enthalpy	specific energy mass	(-2,2,0)	d^2 / t^2	joule per kilogram	Sz 57, 677
specific entropy	per mass	concentration	(0,0,-1)	n / m	per kilogram	Sz 57, 674
specific gravity	relative density	number	(0,0,0)	n	unity	CRC F125, F364
specific heat (1)	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC F64
specific heat (2)	proportion	number	(0,0,0)	n	unity	CRC F125
specific heat (3)	specific heat	mass concentration	(0,0,-1)	n / m	joule per kilogram kelvin	CRC D174, D180, D181, E106, F10, F363
specific heat capacity	specific heat capacity	mass concentration	(0,0,-1)	n / m	joule per kilogram kelvin	AIP 38; CRC B205, E16, F64, F102, F302; M 1-18
specific heat of electricity		thermoelectric power	(1,0,-1)	t / m	joules per coulomb kelvin	CRC F129
specific heat of fusion	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC B455, C666, C671, D187
specific heat of vaporization	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram	CRC B455, F64
specific inductive capacity	proportion	number	(0,0,0)	n	unity	CRC F126
specific mass content	proportion	number	(0,0,0)	n	unity	CRC F363

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
specific molar heat capacity	specific heat	mass concentration	(0,0,-1)	n / m	joule per kilogram mole kelvin	CRC D175, F363
specific molar heat of combustion	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram mole	CRC D282
specific molar heat of formation	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram mole	CRC D282
specific molar heat of transition	specific heat	specific energy	(-2,2,0)	d^2 / t^2	joule per kilogram mole	CRC D43
specific rotation (1)	polarization rotation	specific area	(0,2,-1)	d^2 / m	radian specific-volume per meter	CRC C705, F126
specific rotation (2)	plane angle per distance	wave number	(0,-1,0)	n / d	radian per meter	CRC E424
specific vapor capacity		permeability	(2,1,-1)	$d t^2 / m$		CRC F363
specific volume	specific volume	specific volume	(0,3,-1)	d^3 / m	cu meter per kilogram	CRC F126, F302; M 3-52
specific weight		pressure gradient	(-2,-2,1)	$m / d^2 t^2$	newton per cu meter	M 3-52
speed	speed	velocity	(-1,1,0)	d / t	meter per second	AIP 38; CRC F126
sphere	solid angle	number	(0,0,0)	n	steradian	CRC F357; RR
spin	angular momentum	angular momentum	(-1,2,1)	$m d^2 / t$	joule second	CRC B228, F126; RR
spin quantum number	proportion	number	(0,0,0)	n	unity	AIP 40
spindle	distance	distance	(0,1,0)	d	meter	RR
splash	volume	volume	(0,3,0)	d^3	cu meter	RR
split	volume	volume	(0,3,0)	d^3	cu meter	RR
spontaneous-ignition temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	CRC F126
spoonful	volume	volume	(0,3,0)	d^3	cu meter	RR
sprite	change in jerk	snap	(-4,1,0)	d / t^4	jerk per second	Ref. 53
square	area	area	(0,2,0)	d^2	sq meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
square chain	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square degree	solid angle	number	(0,0,0)	n	steradian	CRC F357; RR
square foot	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square inch	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square link	area	area	(0,2,0)	d^2	sq meter	CRC F357
square meter	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square mile	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square perch	area	area	(0,2,0)	d^2	sq meter	M 1-16; RR
square rod	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
square yard	area	area	(0,2,0)	d^2	sq meter	CRC F357; RR
stack	volume	volume	(0,3,0)	d^3	cu meter	RR
stadium	distance	distance	(0,1,0)	d	meter	RR
stagnation pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F126
standard	volume	volume	(0,3,0)	d^3	cu meter	CRC F358; RR
standard entropy	proportion	number	(0,0,0)	n	joule per mole kelvin	CRC B211
stang	area	area	(0,2,0)	d^2	sq meter	RR
stapp	acceleration seconds	velocity	(-1,1,0)	d / t	meter per second	RR
static pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F126
statute mile	distance	distance	(0,1,0)	d	meter	CRC F126
stein	volume	volume	(0,3,0)	d^3	cu meter	RR
step	distance	distance	(0,1,0)	d	meter	RR
steradian	solid angle	number	(0,0,0)	n	steradian	CRC F126, F283, F313, F358; M 1-18
stere	volume	volume	(0,3,0)	d^3	cu meter	CRC F358; M 1-24; Sz 61, 690
sthene	force	force	(-2,1,1)	$m d / t^2$	newton	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
stilb	emitted luminous power density	radiance	(-3,0,1)	m / t^3	candela per sq meter	CRC E210, F341, F358; M 1-24; RR
stimp	distance	distance	(0,1,0)	d	meter	RR
stoichiometric number of substance	quantity	number	(0,0,0)	n	unity	AIP 45
stoke	kinematic viscosity	voltage	(-1,2,0)	d^2 / t	sq meter per second	CRC F37, F38, F126, F284, F339, F358; M 1-24; MH 2423
stone	mass	mass	(0,0,1)	m	kilogram	CRC F358; M 1-17; RR
stopping cross section	stopping cross section	stopping cross section	(-2,3,1)	$m d^3 / t^2$	joule sq meter per meter	cea.com
stopping power	stopping power	force	(-2,1,1)	$m d / t^2$	joule per meter	AIP 43
story	distance	distance	(0,1,0)	d	meter	RR
strain	strain	number	(0,0,0)	n	unity	CRC F127
strain tensor	proportion	number	(0,0,0)	n	unity	AIP 44
streck	plane angle	number	(0,0,0)	n	radian	RR
stremma	area	area	(0,2,0)	d^2	sq meter	RR
stress	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F127, F134, F283; M 1-18
stress tensor		number	(0,0,0)	n	unity	AIP 46
stride	distance	distance	(0,1,0)	d	meter	RR
strike	volume	volume	(0,3,0)	d^3	cu meter	RR
strob	angular velocity	frequency	(-1,0,0)	n / t	radian per second	RR
strontium unit	specific activity	specific activity	(-1,0,-1)	$n / t m$	becquerel per kilogram	RR
stubbie	volume	volume	(0,3,0)	d^3	cu meter	RR
stunde	time	time	(1,0,0)	t	second	RR
sun	mass	mass	(0,0,1)	m	kilogram	RR
super-acceleration	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleratio n per second	Ref. 53

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
superconductor critical field strength	current per distance	pressure	(-2,-1,1)	$m / d t^2$	ampere per meter	AIP 41
superconductor critical transition temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 43
superconductor energy gap	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 46
surface charge density	surface charge density	conductance	(-1,-2,1)	$m / d^2 t$	coulomb per sq meter	AIP 46; CRC F127, F303; Sz 58, 677
surface concentration	surface concentration	capacitance	(0,-2,1)	m / d^2	kilogram per sq meter	CRC F365
surface current density	surface current density	pressure gradient	(-2,-2,1)	$m / d^2 t^2$	ampere per sq meter	Sz 58, 677
surface diffusivity		force	(-2,1,1)	$m d / t^2$		CRC F364
surface emissivity		number	(0,0,0)	n		CRC F363
surface magnetic density	magnetic flux density	number	(0,0,0)	n	tesla	CRC F127
surface tension	surface tension	electric current	(-2,0,1)	m / t^2	newton per meter	AIP 44; CRC B214, F33, F34, F64, F127, F364; M 3-52; MH 2416; Sz 57, 675
surface viscosity		electric charge	(-1,0,1)	m / t		CRC F365, F378
surge (1)	Change in acceleration	jerk	(-3,1,0)	d / t^3	acceleration per second	Ref. 53
surge (2)	change in jerk	snap	(-4,1,0)	d / t^4	jerk per second	Ref. 53
susceptance	<i>i</i> conductance	conductance	(-1,-2,1)	$m / d^2 t$	siemens	AIP 41; M 15-3; Sz 58, 680
sverdrup	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
swing	time	time	(1,0,0)	t	second	RR
t.i.d.		frequency	(-1,0,0)	n / t	hertz	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
tablespoon	volume	volume	(0,3,0)	d^3	cu meter	CRC F358; RR
tael	mass	mass	(0,0,1)	m	kilogram	RR
talbot	luminous	energy	(-2,2,1)	$m d^2 / t^2$	lumen	AQ 25; CRC E210;
	energy				second	RR
talent	mass	mass	(0,0,1)	m	kilogram	RR
tan (1)	area	area	(0,2,0)	d^2	sq meter	RR
tan (2)	mass	mass	(0,0,1)	m	kilogram	RR
tarea	area	area	(0,2,0)	d^2	sq meter	RR
tatami	area	area	(0,2,0)	d^2	sq meter	RR
tce	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
teacup	volume	volume	(0,3,0)	d^3	cu meter	RR
teaspoon	volume	volume	(0,3,0)	d^3	cu meter	CRC F358; RR
temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 40; CRC F127, F282; M 1-18; MH 2415
temperature conductivity	diffusion rate	voltage	(-1,2,0)	d^2 / t		CRC F363, F377
temporal displacement	time	time	(1,0,0)	t	second	CRC F320
tensile strength	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC B214
tension	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	webster's
tertian	volume	volume	(0,3,0)	d^3	cu meter	RR
tesla	magnetic flux density	number	(0,0,0)	n	tesla	CRC F134, F283, F358; M 1-18; MH 2416
					kilogram per meter	CRC F358; Sz 60, 689
tex	linear density	linear density	(0,-1,1)	m / d		
therm	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	CRC F358; RR
thermal capacity	per mass	mass concentration	(0,0,-1)	n / m	per kilogram	CRC D173, F102, F128

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
thermal conductivity	thermal conductivity	thermal conductivity	(-1,-1,0)	$n / d t$	watt per meter kelvin	AIP 45; CRC B213, B456, D186, D187, E2, E3, E4, E5, E7, E10, E11, E12, E13, E16, E25, E32, E34, E106, F10, F61, F63, F64, F65, F364, F377; M 1-18; MH 2416; Sz 57, 675
thermal diffusion coefficient	diffusion rate	voltage	(-1,2,0)	d^2 / t	sq meter per second	AIP 41
thermal diffusion factor		number	(0,0,0)	n	unity	AIP 44
thermal diffusion ratio	proportion	number	(0,0,0)	n	unity	AIP 38
thermal diffusivity	diffusion rate	voltage	(-1,2,0)	d^2 / t		AIP 37; CRC F363, F377
thermal expansion coefficient	thermal expansion coefficient	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$	per kelvin	CRC B213, E106, F64, F128
thermal ohm	thermal resistance	time	(1,0,0)	t	kelvin per watt	RR
thermal resistance	thermal resistance	time	(1,0,0)	t	kelvin per watt	AIP 43
thermal resistivity	thermal resistivity	thermal resistivity	(1,1,0)	$d t$	sq meter kelvin second per joule meter	Sz 57, 675
thermie	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
thermionic current density	surface ion emission	density gradient	(0,-4,1)	m / d^4	ampere per sq meter	CRC F128
thermodynamic energy	heat	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 43
thermoelectric power	thermoelectric power	thermoelectric power	(1,0,-1)	t / m	volt per kelvin	CRC F128; [need confirming source]
thermoelectromotive force	power per current	voltage	(-1,2,0)	d^2 / t	volt	AIP 41
thermogradient coefficient		thermal expansion	(2,-2,-1)	$t^2 / d^2 m$		CRC F364
thickness	distance	distance	(0,1,0)	d	meter	AIP 38
thimbleful	volume	volume	(0,3,0)	d^3	cu meter	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
thou	distance	distance	(0,1,0)	d	meter	CRC F358; RR
thrive	volume	volume	(0,3,0)	d^3	cu meter	RR
thread	distance	distance	(0,1,0)	d	meter	RR
thumb	distance	distance	(0,1,0)	d	meter	RR
tical	mass	mass	(0,0,1)	m	kilogram	RR
tick	time	time	(1,0,0)	t	second	RR
tier	volume	volume	(0,3,0)	d^3	cu meter	RR
tierce	volume	volume	(0,3,0)	d^3	cu meter	RR
timber	quantity	number	(0,0,0)	n	unity	RR
time	time	time	(1,0,0)	t	second	AIP 40; CRC F129, F282, F310, F363; M 1-18, 3-52; MH 2415; Sz 46
time constant	time	time	(1,0,0)	t	second	M 15-3
tin	volume	volume	(0,3,0)	d^3	cu meter	RR
to	volume	volume	(0,3,0)	d^3	cu meter	RR
tod	mass	mass	(0,0,1)	m	kilogram	RR
toe	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	RR
tog	insulation efficiency	insulation efficiency	(1,2,0)	$d^2 t$	sq meter kelvin per watt	RR
toise	distance	distance	(0,1,0)	d	meter	RR, S&H 73
tola	mass	mass	(0,0,1)	m	kilogram	RR
ton (1)	volume	volume	(0,3,0)	d^3	cu meter	M 1-24; RR
ton (2)	mass	mass	(0,0,1)	m	kilogram	CRC F358; M 1-24; MH 2420
ton (3)	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	M 1-24; RR
ton (4)	power	power	(-3,2,1)	$m d^2 / t^3$	watt	RR
tonelada	mass	mass	(0,0,1)	m	kilogram	RR
tonne	mass	mass	(0,0,1)	m	kilogram	CRC F113, F284, F358; MH 2420; RR
tonneau	mass	mass	(0,0,1)	m	kilogram	RR
torque	torque	energy	(-2,2,1)	$m d^2 / t^2$	newton meter	AIP 42; CRC F113, F379; M 3-52

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
torr	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F129, F285, F315, F358, F360
tot	volume	volume	(0,3,0)	d^3	cu meter	RR
total angular momentum quantum number	proportion	number	(0,0,0)	n	unity	AIP 38
total stopping power	specific stopping power	mass stopping power	(-2,4,0)	d^4 / t^2	joule per meter	NIST
tour	time	time	(1,0,0)	t	second	RR
tovar	mass	mass	(0,0,1)	m	kilogram	RR
township	area	area	(0,2,0)	d^2	sq meter	CRC F358; M 1-24; RR
transmissibility	proportion	number	(0,0,0)	n	unity	CRC E422
transmittance	proportion	number	(0,0,0)	n	unity	CRC E210
transport diffusion coefficient	transport diffusion	transport diffusion	(1,-1,-1)	$t / d m$	mole per pascal sq meter	Sz 59, 685
tray	volume	volume	(0,3,0)	d^3	cu meter	RR
triennium	time	time	(1,0,0)	t	second	RR
trimester	time	time	(1,0,0)	t	second	RR
troland	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	RR
tropical year	time	time	(1,0,0)	t	second	CRC F78, F129
trug	volume	volume	(0,3,0)	d^3	cu meter	RR
truss	mass	mass	(0,0,1)	m	kilogram	RR
tsubo	area	area	(0,2,0)	d^2	sq meter	RR
t'sun	distance	distance	(0,1,0)	d	meter	RR
tu	distance	distance	(0,1,0)	d	meter	RR
tub (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
tub (2)	mass	mass	(0,0,1)	m	kilogram	RR
tumbler	volume	volume	(0,3,0)	d^3	cu meter	RR
tun	volume	volume	(0,3,0)	d^3	cu meter	RR
tunnland	area	area	(0,2,0)	d^2	sq meter	RR
turn	plane angle	number	(0,0,0)	n	radian	RR
twain	distance	distance	(0,1,0)	d	meter	RR
twelvemonth	time	time	(1,0,0)	t	second	RR
twip	distance	distance	(0,1,0)	d	meter	RR

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
typp	specific length	specific length	(0,1,-1)	d / m	meter per kilogram	RR
uncia	mass	mass	(0,0,1)	m	kilogram	RR
unit magnetic pole		force	(-2,1,1)	$m d / t^2$	newton	M 15-4
unit pole	magnetic flux	area	(0,2,0)	d^2	weber	CRC F358; M 1-24, 15-4
unit-area acoustic impedance	sound impedance	conductance	(-1,-2,1)	$m / d^2 t$	newton second per cu meter	lp2cd.com
unze	mass	mass	(0,0,1)	m	kilogram	RR
urna	volume	volume	(0,3,0)	d^3	cu meter	RR
vac	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	RR
vagon	mass	mass	(0,0,1)	m	kilogram	RR
vapor capacity		permeability	(2,1,-1)	$d t^2 / m$		CRC F365
vapor expansion intensity	vapor expansion intensity	vapor expansion intensity	(2,-5,0)	t^2 / d^5	kilogram per cu meter kelvin	CRC F379
vapor pressure	pressure	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC B455, F130
var	i power	power	(-3,2,1)	$m d^2 / t^3$	var	M 15-3; RR
vara	distance	distance	(0,1,0)	d	meter	M 1-16; RR
vdc	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	RR
vedro	volume	volume	(0,3,0)	d^3	cu meter	RR
velocity	velocity	velocity	(-1,1,0)	d / t	meter per second	AIP 38; CRC E44, F131, F283; M 1-18, 3-52; MH 2416
velocity gradient	velocity per meter	frequency	(-1,0,0)	n / t	meter per second	CRC F379
verge	distance	distance	(0,1,0)	d	meter	RR
vergee	area	area	(0,2,0)	d^2	sq meter	RR
vershok	distance	distance	(0,1,0)	d	meter	RR
versta	distance	distance	(0,1,0)	d	meter	RR
vibrational quantum number	proportion	number	(0,0,0)	n	unity	AIP 40

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
vicker's hardness	hardness	pressure	(-2,-1,1)	$m / d t^2$	pascal	RR
viertel	volume	volume	(0,3,0)	d^3	cu meter	RR
violle	emitted luminous power	power	(-3,2,1)	$m d^2 / t^3$	candela	RR
virgate	area	area	(0,2,0)	d^2	sq meter	RR
viscosity	dynamic viscosity	dynamic viscosity	(-1,-1,1)	$m / d t$	pascal second	CRC F37, F61, F63, F65, F131; M 1-18, 3- 52; RR
visibility	proportion	number	(0,0,0)	n	unity	CRC F131
viss	mass	mass	(0,0,1)	m	kilogram	RR
voidage		number	(0,0,0)	n		CRC F363
voltage	electric potential difference	voltage	(-1,2,0)	d^2 / t	volt	CRC F131, F134, F283, F313, F360, F364; M 1-18; MH 2415
volume	volume	volume	(0,3,0)	d^3	cu meter	AIP 40; CRC F132, F283, F363; M 1-18, 3-52; MH 2416
volume charge density	volume charge density	conductivity	(-1,-3,1)	$m / d^3 t$	coulomb per cu meter	Sz 58, 677
volume conductivity	volume conductivity	conductivity	(-1,-3,1)	$m / d^3 t$	siemens per meter	CRC F87
volume flow	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	CRC F363; M 3-52
volume fraction	proportion	number	(0,0,0)	n	unity	AIP 46; Sz 685
volume magnetic suscepibility	proportion	number	(0,0,0)	n	unity	AIP 46 wikipedia
volume radiation concentration	volume activity	volume activity	(-1,-3,0)	$n / d^3 t$	becquerel per liter sq meter per cu meter	periodic table
volumetric cooling area		wave number	(0,-1,0)	n / d		CRC F363

Catalog of Synonymous Dimensions: alphabetical listing

Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
volumetric thermal expansion coefficient	volumetric thermal expansion	thermal expansion	(2,-2,-1)	$t^2 / d^2 m$		CRC F128; Sz 57, 676
volumetric unit	volume	volume	(0,3,0)	d^3	cu meter	RR
vorticity tensor invariant		angular acceleration	(-2,0,0)	n / t^2		CRC F378
wah	distance	distance	(0,1,0)	d	meter	RR
watch	time	time	(1,0,0)	t	second	RR
water inch	volume flow	volume flow	(-1,3,0)	d^3 / t	cu meter per second	RR
watt	power	power	(-3,2,1)	$m d^2 / t^3$	watt	CRC F134, F283, F313, F358, F360; M 1-18, 3-52; MH 2415, 2422
wave number	wave number	wave number	(0,-1,0)	n / d	per meter	AIP 46; CRC F132; M 1-18; Sz 57, 675, 681
wave vector		wave number	(0,-1,0)	n / d	per meter	AIP 46
wavelength	distance	distance	(0,1,0)	d	meter	AIP 45; CRC F132; RR
weber	magnetic flux	area	(0,2,0)	d^2	weber	CRC F132, F134, F283, F313, F358; M 1-18; MH 2416
week	time	time	(1,0,0)	t	second	CRC F359; RR
weight	force	force	(-2,1,1)	$m d / t^2$	newton	AIP 44; CRC F112, F132
weiss temperature	temperature	energy	(-2,2,1)	$m d^2 / t^2$	kelvin	AIP 46
werst	distance	distance	(0,1,0)	d	meter	RR
wey (1)	volume	volume	(0,3,0)	d^3	cu meter	RR
wey (2)	mass	mass	(0,0,1)	m	kilogram	RR
width	distance	distance	(0,1,0)	d	meter	CRC F316 (indirect ref)
wineglass	volume	volume	(0,3,0)	d^3	cu meter	RR

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Measurement	Description	Fundamental Quantity	SP Dimensions	SP Expression	SI Units	References
work	energy	energy	(-2,2,1)	$m d^2 / t^2$	joule	AIP 44; CRC F132, F134; M 1-18, 3-52; MH 2415
working level	volume activity	volume activity	(-1,-3,0)	$n / d^3 t$	becquerel per liter	RR
x-ray density		density	(0,-3,1)	m / d^3	kilogram per cu meter	CRC D38
x-unit	distance	distance	(0,1,0)	d	meter	CRC F132, F359; RR
yard (1)	distance	distance	(0,1,0)	d	meter	CRC F359; M 1-16; MH 2417
yard (2)	area	area	(0,2,0)	d^2	sq meter	RR
yard (3)	volume	volume	(0,3,0)	d^3	cu meter	RR
yard of ale	volume	volume	(0,3,0)	d^3	cu meter	RR
year	time	time	(1,0,0)	t	second	CRC F359; RR
yield		number	(0,0,0)	n		
yield strength	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F133, F134
yield stress	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	CRC F364
young's modulus	stress	pressure	(-2,-1,1)	$m / d t^2$	pascal	AIP 41; CRC F64; Sz 57, 676
z	distance	distance	(0,1,0)	d	meter	RR
zak	volume	volume	(0,3,0)	d^3	cu meter	RR
zentner	mass	mass	(0,0,1)	m	kilogram	RR
zoll	distance	distance	(0,1,0)	d	meter	RR

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