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HOSE/CPLG. SELECTION
GLOBALSPIRAL COUPLINGS
PCS COUPLINGS
GLOBALSPIRAL HIGH PRESSURE COUPLINGS
STAINLESS STEEL
PCM COUPLINGS
MEGACRIMP COUPLINGS
STAINLESS STEEL BRAID
POWER CRIMP COUPLINGS
FIELD ATTACHABLE G1 & G2 COUPLINGS
AIR BRAKE COPPER TUBING
SURELOK
HOSE CUTTERS & TOOLS
COMPRESSION AIR BRAKE
AIR BRAKE HOSE ASSEMBLIES
AIR BRAKE FOR RUBBER HOSE
FIELD ATTACHABLE C5 COUPLINGS
LOCK-ON HOSE
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Pressure Conversions

Metric to PSI

(1 kPa = .145 psi)

Kilo Pascals (kPa)	Mega Pascals (MPa)	Bar (Bar)	Pounds per Square Inch (psi)
100	0.1	1	14.5
200	0.2	2	29.0
300	0.3	3	43.5
400	0.4	4	58.0
500	0.5	5	72.5
600	0.6	6	87.0
700	0.7	7	101.5
800	0.8	8	116.0
900	0.9	9	130.5
1,000	1.0	10	145.0
2,000	2.0	20	290.1
3,000	3.0	30	435.1
4,000	4.0	40	580.2
5,000	5.0	50	725.2
6,000	6.0	60	870.2
7,000	7.0	70	1,015.3
8,000	8.0	80	1,160.3
9,000	9.0	90	1,305.3
10,000	10	100	1,450
20,000	20	200	2,901
30,000	30	300	4,351
40,000	40	400	5,802
50,000	50	500	7,252
60,000	60	600	8,702
70,000	70	700	10,153
80,000	80	800	11,603
90,000	90	900	13,053
100,000	100	1000	14,504
200,000	200	2000	29,008
300,000	300	3000	43,511

PSI to Metric

(1 psi = 6.89 kPa)

Pounds per Square Inch (psi)	Kilo Pascals (kPa)	Mega Pascals (MPa)	Bar (Bar)
10	68.9	0.07	0.7
20	137.9	0.14	1.4
30	206.8	0.21	2.1
40	275.8	0.28	2.8
50	344.7	0.34	3.4
60	413.7	0.41	4.1
70	482.6	0.48	4.8
80	551.6	0.55	5.5
90	620.5	0.62	6.2
100	689	0.7	6.9
200	1,379	1.4	13.8
300	2,068	2.1	20.7
400	2,758	2.8	27.6
500	3,447	3.4	34.5
600	4,137	4.1	41.4
700	4,826	4.8	48.3
800	5,516	5.5	55.2
900	6,205	6.2	62.1
1,000	6,895	6.9	68.9
2,000	13,790	13.8	137.9
3,000	20,684	20.7	206.8
4,000	27,579	27.6	275.8
5,000	34,474	34.5	344.7
6,000	41,369	41.4	413.7
7,000	48,263	48.3	482.6
8,000	55,158	55.2	551.6
9,000	62,053	62.1	620.5
10,000	68,948	68.9	689
20,000	137,895	137.9	1,379
30,000	206,843	206.8	2,068
40,000	275,790	275.8	2,758

Examples

(A) Convert 3,429 psi to the equivalent pressure in Bar.

	3,000 psi	=	206.8	Bar
+	400 psi	=	27.6	Bar
+	20 psi	=	1.4	Bar
+	9 psi	=	.62	Bar
	3429 psi	=	236.42	Bar

(B) Convert 3,429 psi to the equivalent pressure in MPa.

	3,000 psi	=	20.680	MPa
+	400 psi	=	2.760	MPa
+	20 psi	=	.140	MPa
+	9 psi	=	.062	MPa
	3,429 psi	=	23.642	MPa

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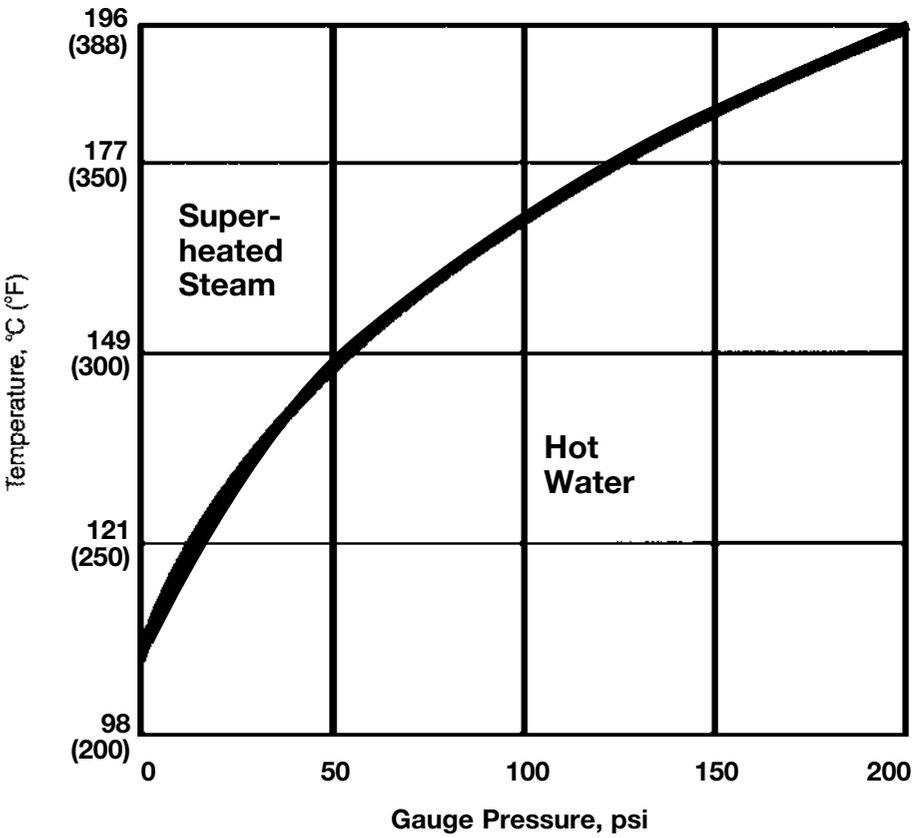
Steam Conditions

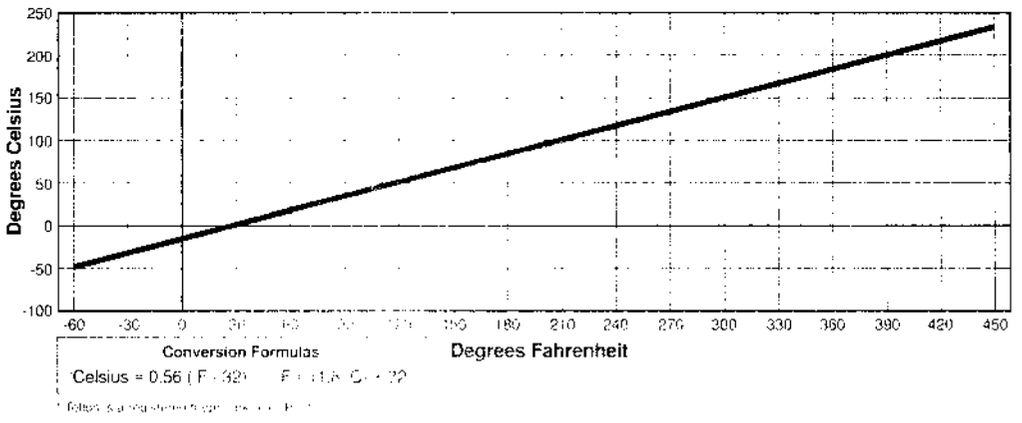
The chart below shows steam conditions. The heavy black line is the boiling point of water at various gauge pressures. Any point on the line represents saturated steam. Any point below the line represents Hot Water and any point above the line represents Superheated Steam.

Caution: 198°C (388°F) at 200 psi is the maximum recommended steam condition for Gates C14 hose.

Caution: Considering the potential for electrostatic discharge, Gates C14CT "conductive" hose is recommended.



Fahrenheit-Celsius Conversion



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Fahrenheit-Celsius Conversion

Look up a temperature reading in the middle column (shaded). If it's in degrees Centigrade, read the Fahrenheit equivalent in the right-hand column. If it's in degrees Fahrenheit, read the Centigrade equivalent In the left-hand column.

C	F\C	F
-68	-90	-130
-62	-80	-112
-57	-70	-94
-51	-60	-76
-46	-50	-58
-40	-40	-40
-34	-30	-22
-29	-20	-4
-23	-10	14
-17.8	0	32
-17.2	1	33.8
-16.7	2	35.6
-16.1	3	37.4
-15.6	4	39.2
-15.0	5	41.0
-14.4	6	42.8
-13.9	7	44.6
-13.3	8	46.4
-12.8	9	48.2
-12.2	10	50.0
-11.7	11	51.8
-11.1	12	53.6
-10.6	13	55.4
-10.0	14	57.2
-9.4	15	59.0
-8.9	16	60.8
-8.3	17	62.6
-7.8	18	64.4
-7.2	19	66.2
-6.7	20	68.0
-6.1	21	69.8
-5.6	22	71.6
-5.0	23	73.4
-4.4	24	75.2
-3.9	25	77.0
-3.3	26	78.8
-2.8	27	80.6
-2.2	28	82.4
-1.7	29	84.2
-1.1	30	86.0
-.6	31	87.8
0	32	89.6
.6	33	91.4
1.1	34	93.2
1.7	35	95.0
2.2	36	96.8
2.8	37	98.6
3.3	38	100.4
3.9	39	102.2
4.4	40	104.0
5.0	41	105.8
5.6	42	107.6
6.1	43	109.4
6.7	44	111.2
7.2	45	113.0
7.8	46	114.8
8.3	47	116.6
8.9	48	118.4
9.4	49	120.2
10.0	50	122.0
10.6	51	123.8
11.1	52	125.6
11.7	53	127.4
12.2	54	129.2
12.8	55	131.0
13.3	56	132.8
13.9	57	134.6
14.4	58	136.4
15.0	59	138.2
15.6	60	140.0
16.1	61	141.8
16.7	62	143.6
17.2	63	145.4
17.8	64	147.2
18.3	65	149.0
18.9	66	150.8
19.4	67	152.6
20.0	68	154.4
20.6	69	156.2
21.1	70	158.0
21.7	71	159.8
22.2	72	161.6
22.8	73	163.4
23.3	74	165.2
23.9	75	167.0
24.4	76	168.8
25.0	77	170.6
25.6	78	172.4
26.1	79	174.2
26.7	80	176.0
27.2	81	177.8
27.8	82	179.6
28.3	83	181.6
28.9	84	183.2
29.4	85	185.0
30.0	86	186.8
30.6	87	188.6
31.1	88	190.4
31.7	89	192.2
32.2	90	194.0
32.8	91	195.8
33.3	92	197.6
33.9	93	199.4
34.4	94	201.2
35.0	95	203.0
35.6	96	204.8
36.1	97	206.6
36.7	98	208.4
37.2	99	210.2
37.8	100	212.0
43	110	230
49	120	248
54	130	266
60	140	284
66	150	302
71	160	320
77	170	338
82	180	356
88	190	374
93	200	392
99	210	410
100	212	413.6
104	220	428
110	230	446
116	240	464
121	250	482
127	260	500
132	270	518
138	280	536
143	290	554
149	300	572
154	310	590
160	320	608
166	330	626
170	338	640
171	340	644
177	350	662
182	360	680
186	366	691
188	370	698
193	380	716
198	388	730
199	390	734
204	400	752
208	406	763
210	410	770
216	420	788
221	430	806
227	440	824
232	450	842

Decimal and Millimeter Equivalents of Fractions

Inches		
Fractions	Decimals	Millimeters
1/64	.015625	.397
1/32	.03125	.794
3/64	.046875	1.191
1/16	.0625	1.588
5/64	.078125	1.984
3/32	.09375	2.381
7/64	.109375	2.778
1/8	.125	3.175
9/64	.140625	3.572
5/32	.15625	3.969
11/64	.171875	4.366
3/16	.1875	4.763
13/64	.203125	5.159
7/32	.21875	5.556
15/64	.234375	5.953
1/4	.250	6.350
17/64	.265625	6.747
9/32	.28125	7.144
19/64	.296875	7.541
5/16	.3125	7.938

Inches		
Fractions	Decimals	Millimeters
23/64	.359375	9.128
3/8	.375	9.525
25/64	.390625	9.922
13/32	.40625	10.319
27/64	.421875	10.716
7/16	.4375	11.113
29/64	.453125	11.509
15/32	.46875	11.906
31/64	.484375	12.303
1/2	.500	12.700
33/64	.515625	13.097
17/32	.53125	13.494
35/64	.546875	13.891
9/16	.5625	14.288
37/64	.578125	14.684
19/32	.59375	15.081
39/64	.609375	15.478
5/8	.625	15.875
41/64	.640625	16.272
21/32	.65625	16.669

Inches		
Fractions	Decimals	Millimeters
11/16	.6875	17.463
45/64	.703125	17.859
23/32	.71875	18.256
47/64	.734375	18.653
3/4	.750	19.050
49/64	.765625	19.447
25/32	.78125	19.844
51/64	.796875	20.241
13/16	.8125	20.638
53/64	.828125	21.034
27/32	.84375	21.431
55/64	.859375	21.828
7/8	.875	22.225
57/64	.890625	22.622
29/32	.90625	23.019
59/64	.921875	23.416
15/16	.9375	23.813
61/64	.953125	24.209
31/32	.96875	24.606
63/64	.984375	25.003
1	1.000	25.400

Metric (SI) — U.S. Units for Fluid Power Use

(The following conversions are based on information taken from ASTM, American Society for Testing and Materials, Handbook E380-72.)

Quantity	Customary U.S. Unit	SI Unit	Conversion from U.S. to SI Units	Conversion from SI to U.S. Units
Area	Square Inch (in^2)	Square Metre (m^2)	(in^2) x (6.4516 x 10 -4) = (m^2)	(m^2) x 1550.003 = (in^2)
Force	Pound (lb_f)	Newton (N)	(lb_f) x 4.4482 = (N)	(N) x (2.2481 x10^{-1}) = (lb_f)
Frequency	Cycles/Second (cps)	Hertz (H_z)	1 (cps) = 1(H_z)	1(H_z) = 1(cps)
Length	Inch (in)	Metre (m)	(in) x (2.540 x 10^{-2}) = (m)	(m) x 39.370 = (in)
Mass	Pound (lb_m)	Kilogram (kg)	(lb_m) x .4536 = (kg)	(kg) x 2.2046 = (lb_m)
Power	Electric Horsepower (HP)	Watt (W)	(HP) x (7.460 x 10^2) = (W)	(W) x (1.3405 x 10^{-3}) = (HP)
Pressure	Pounds/Sq In (psi)	Newtons/Sq Metre (N/m^2)	(psi) x (6.8948 x 103) = (N/m^2)	(N/m^2) x (1.4504 x 10^{-4}) = (psi)
			(Non-Preferred Conversions)	
	(psi)	Mega Pascal (MPa)	(psi)/145 = MPa	(MPa) x 145 = (psi)
	(psi)	Bar (Bar)	psi/14.5 = Bar	(Bar) x (1.4504 x 10^1) = (psi)
	(Bar)	(N/m^2)	(Bar) x 100,000 = (N/m^2)	(N/m^2) x (1.00 x 10^{-5}) = (Bar)
Temperature	Degrees Fahrenheit (°F)	Degrees Celsius (°C)	(°Celsius) = 0.556(°F-32)	(1.8°C) + 32 = °F
Torque	Pound-Inch (lb_f-in)	Newton-Metres (N-m)	(lb_f-in) x (1.1298 x 10^{-1}) = (N-m)	(N-m) x 8.8507 = (lb_f-in)
Volume	US Gallon (Gal)	Cubic Metre (m^3)	(Gal) x (3.7854 x 10^{-3}) = (m^3)	(m^3) x (2.6417 x 10^2) = (Gal)
			(Non-Preferred Conversions)	
		Litre (l)	(Gal) x 3.7854 = (l)	(l) x (2.6417 x 10^{-1}) = (Gal)
Work	Foot-Pound (ft-lb_f)	Joule (J)	(ft-lb_f) x 1.3558 = (J)	(J) x (7.3756 x 10^{-1}) = (ft-lb_f)