

PFEIFER INDUSTRIES, LLC.

2180 Corporate Lane, Suite 104 ~ Naperville, IL 60563 USA

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8mm PITCH - STD

Pitch Diameter (PD) Calculation

$$PD = (\text{Pitch} \times \text{Number of Teeth}) / \pi$$

Variables:

Pitch 8 mm
 Number of teeth 22 Teeth
 Pi (π) 3.14159265 Pi

Result:

PD (Pitch Diameter) = 2.206 inches

Outside Diameter (O.D.) Calculation

$$O.D. = [(\text{Pitch} \times \text{Number of Teeth}) / \pi] - (2 \times \text{Distance from belt pitch line to belt tooth bottom})$$

Variables:

Pitch 8 mm
 Number of teeth 22 Teeth
 Pi (π) 3.14159265 Pi
 Distance from belt pitch line to belt tooth bottom 0.0270 inches

Result:

O.D. (Outside Diameter) 2.152 inches

Number of Teeth	Inches (in)		Metric (mm)	
	Pitch Diameter (PD)	Outside Diameter (O.D.)	Pitch Diameter (PD)	Outside Diameter (O.D.)
14	1.404	1.350	35.651	34.28
15	1.504	1.450	38.197	36.83
16	1.604	1.550	40.744	39.37
17	1.704	1.650	43.290	41.92
18	1.805	1.751	45.84	44.46
19	1.905	1.851	48.38	47.01
20	2.005	1.951	50.93	49.56
21	2.105	2.051	53.48	52.10
22	2.206	2.152	56.02	54.65
23	2.306	2.252	58.57	57.20
24	2.406	2.352	61.12	59.74
25	2.506	2.452	63.66	62.29
26	2.607	2.553	66.21	64.84
27	2.707	2.653	68.75	67.38
28	2.807	2.753	71.30	69.93
29	2.907	2.853	73.85	72.48
30	3.008	2.954	76.39	75.02
31	3.108	3.054	78.94	77.57
32	3.208	3.154	81.49	80.12
33	3.308	3.254	84.03	82.66
34	3.409	3.355	86.58	85.21
35	3.509	3.455	89.13	87.75
36	3.609	3.555	91.67	90.30
37	3.709	3.655	94.22	92.85
38	3.810	3.756	96.77	95.39
39	3.910	3.856	99.31	97.94
40	4.010	3.956	101.86	100.49
41	4.110	4.056	104.41	103.03
42	4.211	4.157	106.95	105.58
43	4.311	4.257	109.50	108.13
44	4.411	4.357	112.05	110.67
45	4.511	4.457	114.59	113.22
46	4.612	4.558	117.14	115.77
47	4.712	4.658	119.68	118.31
48	4.812	4.758	122.23	120.86
49	4.912	4.858	124.78	123.41

Number of Teeth	Inches (in)		Metric (mm)	
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50	5.013	4.959	127.32	125.95
51	5.113	5.059	129.87	128.50
52	5.213	5.159	132.42	131.04
53	5.313	5.259	134.96	133.59
54	5.414	5.360	137.51	136.14
55	5.514	5.460	140.06	138.68
56	5.614	5.560	142.60	141.23
57	5.715	5.661	145.15	143.78
58	5.815	5.761	147.70	146.32
59	5.915	5.861	150.24	148.87
60	6.015	5.961	152.79	151.42
61	6.116	6.062	155.34	153.96
62	6.216	6.162	157.88	156.51
63	6.316	6.262	160.43	159.06
64	6.416	6.362	162.97	161.60
65	6.517	6.463	165.52	164.15
66	6.617	6.563	168.07	166.70
67	6.717	6.663	170.61	169.24
68	6.817	6.763	173.16	171.79
69	6.918	6.864	175.71	174.34
70	7.018	6.964	178.25	176.88
71	7.118	7.064	180.80	179.43
72	7.218	7.164	183.35	181.97
73	7.319	7.265	185.89	184.52
74	7.419	7.365	188.44	187.07
75	7.519	7.465	190.99	189.61
76	7.619	7.565	193.53	192.16
77	7.720	7.666	196.08	194.71
78	7.820	7.766	198.63	197.25
79	7.920	7.866	201.17	199.80
80	8.020	7.966	203.72	202.35
81	8.121	8.067	206.26	204.89
82	8.221	8.167	208.81	207.44
83	8.321	8.267	211.36	209.99
84	8.421	8.367	213.90	212.53
85	8.522	8.468	216.45	215.08

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O.D. (Outside Diameter) **2.152** inches

Number of Teeth	Inches (in)		Metric (mm)	
	Pitch Diameter (PD)	Outside Diameter (O.D.)	Pitch Diameter (PD)	Outside Diameter (O.D.)
86	8.622	8.568	219.00	217.63
87	8.722	8.668	221.54	220.17
88	8.822	8.768	224.09	222.72
89	8.923	8.869	226.64	225.26
90	9.023	8.969	229.18	227.81
91	9.123	9.069	231.73	230.36
92	9.223	9.169	234.28	232.90
93	9.324	9.270	236.82	235.45
94	9.424	9.370	239.37	238.00
95	9.524	9.470	241.92	240.54
96	9.624	9.570	244.46	243.09
97	9.725	9.671	247.01	245.64
98	9.825	9.771	249.55	248.18
99	9.925	9.871	252.10	250.73
100	10.025	9.971	254.65	253.28
101	10.126	10.072	257.19	255.82
102	10.226	10.172	259.74	258.37
103	10.326	10.272	262.29	260.92
104	10.426	10.372	264.83	263.46
105	10.527	10.473	267.38	266.01
106	10.627	10.573	269.93	268.55
107	10.727	10.673	272.47	271.10
108	10.828	10.773	275.02	273.65
109	10.928	10.874	277.57	276.19
110	11.028	10.974	280.11	278.74
111	11.128	11.074	282.66	281.29
112	11.229	11.175	285.21	283.83
113	11.329	11.275	287.75	286.38
114	11.429	11.375	290.30	288.93
115	11.529	11.475	292.85	291.47
116	11.630	11.576	295.39	294.02
117	11.730	11.676	297.94	296.57
118	11.830	11.776	300.48	299.11
119	11.930	11.876	303.03	301.66
120	12.031	11.977	305.58	304.21
121	12.131	12.077	308.12	306.75

Number of Teeth	Inches (in)		Metric (mm)	
	Pitch Diameter (PD)	Outside Diameter (O.D.)	Pitch Diameter (PD)	Outside Diameter (O.D.)
122	12.231	12.177	310.67	309.30
123	12.331	12.277	313.22	311.84
124	12.432	12.378	315.76	314.39
125	12.532	12.478	318.31	316.94
126	12.632	12.578	320.86	319.48
127	12.732	12.678	323.40	322.03
128	12.833	12.779	325.95	324.58
129	12.933	12.879	328.50	327.12
130	13.033	12.979	331.04	329.67
131	13.133	13.079	333.59	332.22
132	13.234	13.180	336.14	334.76
133	13.334	13.280	338.68	337.31
134	13.434	13.380	341.23	339.86
135	13.534	13.480	343.77	342.40
136	13.635	13.581	346.32	344.95
137	13.735	13.681	348.87	347.50
138	13.835	13.781	351.41	350.04
139	13.935	13.881	353.96	352.59
140	14.036	13.982	356.51	355.14
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