



DICFASTENERS

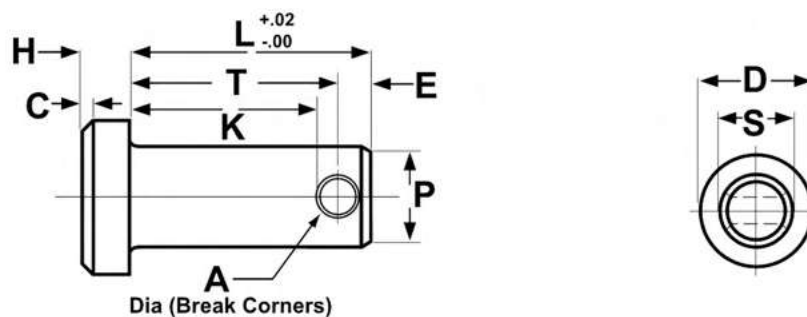
A Brand by Dedicated Impex Co.

INDUSTRIAL PINS

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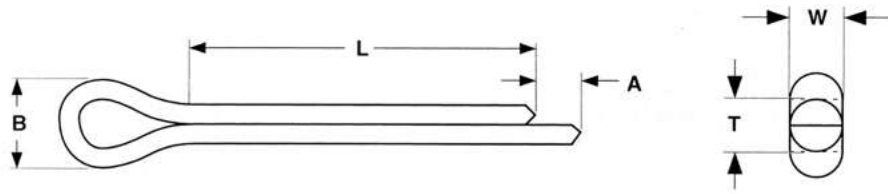


CLEVIS PINS



CLEVIS PINS																	ASME B18.8.1
Nominal Size	S		D		H		C	A		P		L	T		E	K	Recommended Cotter Pin Nominal Size
	Shank Diameter		Head Diameter		Head Height		Head Chamfer	Hole Diameter		Point Diameter		Pin Length	Head to Center of Hole		End to Center Ref	Head to Edge of Hole Ref	
	Max	Min	Max	Min	Max	Min	± 0.01	Max	Min	Max	Min	Basic	Max	Min	Basic	Min	
3/16	0.186	0.181	0.32	0.30	0.07	0.05	0.02	0.088	0.073	0.15	0.14	0.58	0.504	0.484	0.09	0.440	1/16
1/4	0.248	0.243	0.38	0.36	0.10	0.08	0.03	0.088	0.073	0.21	0.20	0.77	0.692	0.672	0.09	0.628	1/16
5/16	0.311	0.306	0.44	0.42	0.10	0.08	0.03	0.119	0.104	0.26	0.25	0.94	0.832	0.812	0.12	0.752	3/32
3/8	0.373	0.368	0.51	0.49	0.13	0.11	0.03	0.119	0.104	0.33	0.32	1.06	0.958	0.938	0.12	0.878	3/32
7/16	0.436	0.431	0.57	0.55	0.16	0.14	0.04	0.119	0.104	0.39	0.38	1.19	1.082	1.062	0.12	1.002	3/32
1/2	0.496	0.491	0.63	0.61	0.16	0.14	0.04	0.151	0.136	0.44	0.43	1.36	1.223	1.203	0.15	1.127	1/8
5/8	0.621	0.616	0.82	0.80	0.21	0.19	0.06	0.151	0.136	0.56	0.55	1.61	1.473	1.453	0.15	1.377	1/8
3/4	0.746	0.741	0.94	0.92	0.26	0.24	0.07	0.182	0.167	0.68	0.67	1.91	1.739	1.719	0.18	1.628	5/32
7/8	0.871	0.866	1.04	1.02	0.32	0.30	0.09	0.182	0.167	0.80	0.79	2.16	1.989	1.969	0.18	1.878	5/32
1	0.996	0.991	1.19	1.17	0.35	0.33	0.10	0.182	0.167	0.93	0.92	2.41	2.239	2.219	0.18	2.128	5/32

COTTER PINS



Nominal Size	Basic Pin Diameter	T		W		B	A	Gage Hole Diameter (± 0.001)
		Total Shank Diameter		Wire Width		Head Diameter	Extended Prong Length	
		Max	Min	Max	Min	Min	Min	
1/16	0.062	0.060	0.056	0.060	0.044	0.12	0.03	0.078
3/32	0.094	0.090	0.086	0.090	0.069	0.19	0.04	0.109
1/8	0.125	0.120	0.116	0.120	0.093	0.25	0.06	0.141
5/32	0.156	0.150	0.146	0.150	0.116	0.31	0.07	0.172
3/16	0.188	0.176	0.172	0.176	0.137	0.38	0.09	0.203
7/32	0.219	0.207	0.202	0.207	0.161	0.44	0.10	0.234
1/4	0.250	0.225	0.220	0.225	0.176	0.50	0.11	0.266
5/16	0.312	0.280	0.275	0.280	0.220	0.62	0.14	0.312
3/8	0.375	0.335	0.329	0.335	0.263	0.75	0.16	0.375
1/2	0.500	0.473	0.467	0.473	0.373	1.00	0.23	0.500

DOWEL PINS

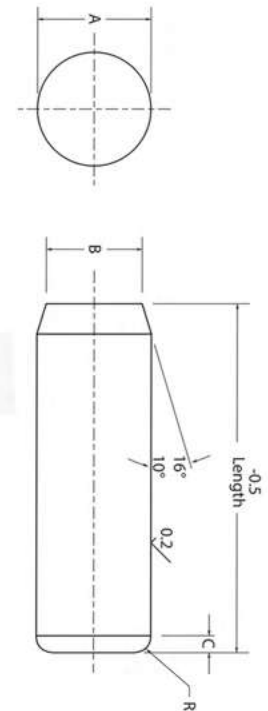
Product Dimensions

Size nom	Pin diameter A		Point diameter B		Crown height C	Crown radius R
	max	min	max	min	max	min
3	3.008	3.003	2.9	2.6	0.8	0.3
4	4.009	4.004	3.9	3.6	0.9	0.4
5	5.009	5.004	4.9	4.6	1.0	0.4
6	6.010	6.004	5.8	5.4	1.1	0.4
8	8.012	8.006	7.8	7.4	1.3	0.5
10	10.012	10.006	9.8	9.4	1.4	0.6
12	12.013	12.007	11.8	11.4	1.6	0.6
16	16.013	16.007	15.8	15.3	1.8	0.8
20	20.014	20.008	19.8	19.3	2.0	0.8
25	25.014	25.008	24.8	24.3	2.3	1.0



Application Data

Nominal Size	calculated single shear strength		Recommended hole size	
	kN	lbs	max	min
3	7.4	1,670	3.000	2.987
4	13.2	2,965	4.000	3.987
5	20.6	4,635	5.000	4.987
6	29.7	6,650	6.000	5.987
8	52.5	11,850	8.000	7.987
10	82.5	18,550	10.000	9.987
12	119.0	26,700	12.000	11.985
16	211.0	47,450	16.000	15.985
20	330.0	74,000	20.000	19.983
25	515.0	116,000	25.000	24.983



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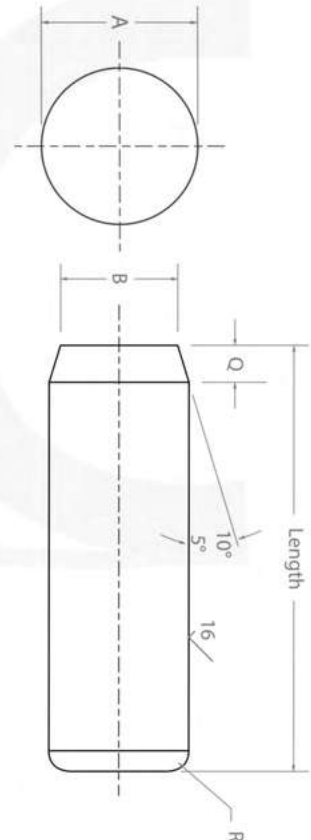
Product Dimensions

Size nom	Pin diameter A		Point diameter B	Q		Crown radius R min
	.0002 over nom. max	min		max	min	
1/16	.0628	.0626	0.056	0.056	0.019	0.010
3/32	.0941	.0939	0.084	0.074	0.028	0.026
1/8	.1253	.1251	0.116	0.070	0.026	0.043
5/32	.1565	.1563	0.147	0.071	0.026	0.043
3/16	.1878	.1876	0.178	0.073	0.027	0.043
1/4	.2503	.2501	0.237	0.093	0.037	0.058
5/16	.3128	.3126	0.298	0.102	0.041	0.058
3/8	.3753	.3751	0.359	0.110	0.046	0.073
7/16	.4378	.4376	0.417	0.136	0.058	0.089
1/2	.5003	.5001	0.480	0.133	0.057	0.104
9/16	.5628	.5626	0.542	0.136	0.058	0.120
5/8	.6253	.6251	0.605	0.133	0.057	0.120
3/4	.7503	.7501	0.725	0.161	0.071	0.120
7/8	.8753	.8751	0.850	0.161	0.071	0.120
1	1.0003	1.0001	0.975	0.161	0.071	0.120



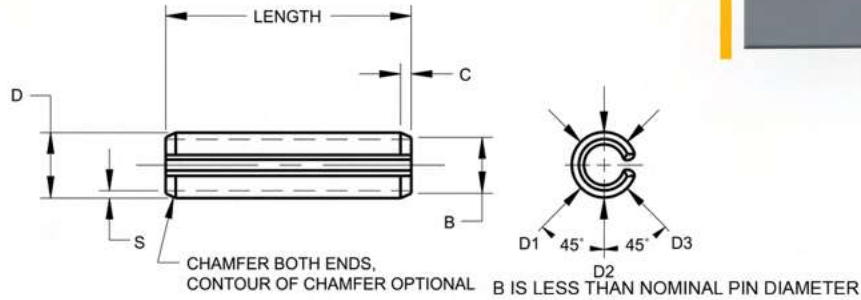
Shear Strength & Recommended Hole Size

Nominal Size	calculated single shear strength (pounds)	Recommended hole size (.0002 over nom.)	
		max	min
1/16	465	.0625	.0620
3/32	1,035	.0937	.0932
1/8	1,845	.1250	.1245
5/32	2,880	.1562	.1557
3/16	4,140	.1875	.1870
1/4	7,370	.2500	.2495
5/16	11,500	.3125	.3120
3/8	16,580	.3750	.3745
7/16	22,540	.4375	.4370
1/2	29,460	.5000	.4995
9/16	37,270	.5625	.5620
5/8	46,020	.6250	.6245
3/4	66,270	.7500	.7495
7/8	90,190	.8750	.8745
1	117,810	1.0000	.9995



SPRING PINS

ISO 8752



SPECIFICATIONS in mm

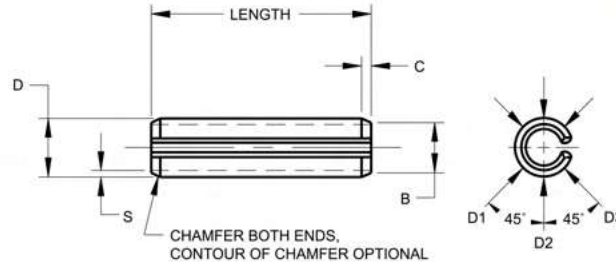
Nominal Pin Diameter	Pin Diameter D		Chamfer Length C	Wall Thickness S	Recommended Hole Size		Double Shear Strength Carbon & Martensitic S.S.
	Min. ¹	Max. ²	Nominal	Nominal	Min.	Max.	Minimum kN
1.5	1.7	1.8	0.25	0.3	1.5	1.60	1.58
2	2.3	2.4	0.35	0.4	2.0	2.10	2.82
2.5	2.8	2.9	0.40	0.5	2.5	2.60	4.38
3	3.3	3.5	0.50	0.6	3.0	3.10	6.32
3.5	3.8	4.0	0.60	0.75	3.5	3.62	9.09
4	4.4	4.6	0.65	0.8	4.0	4.12	11.24
4.5*	4.9	5.1	0.80	1.0	4.5	4.62	15.36
5	5.4	5.6	0.90	1.0	5.0	5.12	17.54
6	6.4	6.7	1.20	1.2	6.0	6.12	26.04
8	8.5	8.8	2.00	1.5	8.0	8.15	42.76
10	10.5	10.8	2.00	2.0	10.0	10.15	70.16
12	12.5	12.8	2.00	2.5	12.0	12.18	104.1
14*	14.5	14.8	2.00	3.0	14.0	14.18	144.7 ³
16	16.5	16.8	2.00	3.0	16.0	16.18	171.0 ³
18*	18.5	18.9	2.00	3.5	18.0	18.18	222.5 ³
20	20.5	20.9	3.00	4.0	20.0	20.21	280.6 ³

STANDARD LENGTHS

Length	Nominal Diameter															
	1.5	2	2.5	3	3.5	4	4.5*	5	6	8	10	12	14*	16	18*	20
4																
5																
6																
8																
10																
12																
14																
16																
18																
20																
22																
24																
26																
28																
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32																
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45																
50																
55																
60																
65																
70																
75																
80																
85																
90																
95																
100																

Nominal Pin Length	Length Tolerance
Length Tolerance — ISO 8752	
4 to 10 mm	± 0.25 mm
12 to 50 mm	± 0.50 mm
55 to 100 mm	± 0.75 mm
Length Tolerance — DIN 1481 (Ref.)	
4 to 10 mm	+ 0.5 mm
12 to 50 mm	+ 1.0 mm
55 to 100 mm	+ 1.5 mm





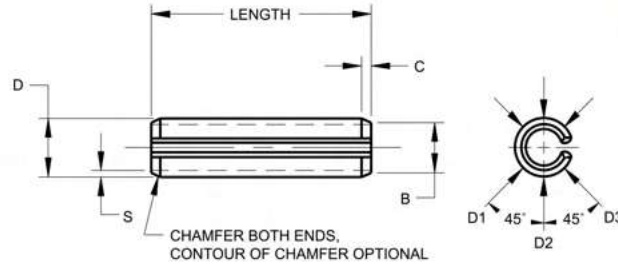
SPECIFICATIONS in mm

Nominal Pin Diameter	Pin Diameter D		Chamfer Diameter B	Chamfer Length C		Wall Thickness S	Recommended Hole Size		Minimum Double Shear Strength	
	Min. ¹	Max. ²	Max.	Min.	Max.	Nominal	Min.	Max.	Carbon & Martensitic S.S.	Austenitic S.S.
	kN									
1.5	1.58	1.66	1.4	0.15	0.7	0.35	1.5	1.56	1.8	1.0
2	2.10	2.19	1.9	0.2	0.8	0.45	2.0	2.07	3.5	2.0
2.5	2.62	2.72	2.4	0.2	0.9	0.55	2.5	2.58	5.5	3.2
3	3.14	3.25	2.9	0.2	1.0	0.65	3.0	3.10	7.8	4.5
4	4.16	4.30	3.9	0.3	1.2	0.8	4.0	4.12	12.3	7.2
5	5.17	5.33	4.8	0.3	1.4	1.0	5.0	5.12	19.6	11.4
6	6.18	6.36	5.8	0.4	1.6	1.2	6.0	6.12	28.5	16.6
8	8.22	8.45	7.8	0.4	2.0	1.6	8.0	8.15	48.8	28.4
10	10.25	10.51	9.7	0.5	2.4	2.0	10.0	10.15	79.1	46.1
12	12.28	12.55	11.7	0.6	2.8	2.5	12.0	12.18	111.6 ³	60.7
14†*	14.30	14.60	13.7	0.8	2.8	3.0	14.0	14.18	170.0 ⁴	—
16†	16.32	16.65	15.6	1.0	3.0	3.0	16.0	16.18	190.0 ⁴	—
18†*	18.35	18.71	17.6	1.2	3.2	3.5	18.0	18.18	250.0 ⁴	—
20†	20.40	20.80	19.5	1.4	3.4	4.0	20.0	20.21	320.0 ⁴	—

STANDARD METRIC SIZES

Length	Nominal Diameter													
	1.5	2	2.5	3	4	5	6	8	10	12	14†*	16†	18†*	20†
4														
5														
6														
8														
10														
12														
14														
16														
18														
20														
22														
24														
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45														
50														
55														
60														
65														
70														
75														
80														
85														
90														
95														
100														

Nominal Pin Length	Length Tolerance
Up to 24 mm, incl.	±0.40 mm
Over 24 to 50 mm	±0.50 mm
Over 50 to 75 mm	±0.60 mm
Over 75 mm	±0.75 mm



SPECIFICATIONS in inches

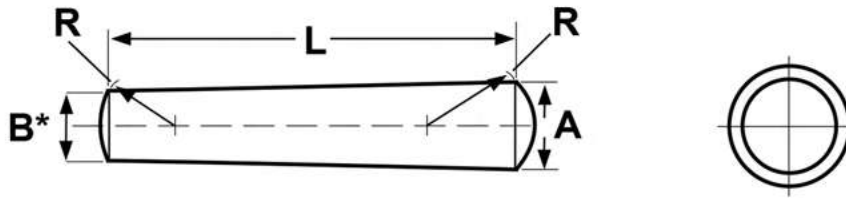
Nominal Pin Diameter	Pin Diameter		Chamfer Diameter B	Chamfer Length C		Wall Thickness S	Recommended Hole Size		Minimum Double Shear Strength				
	D			Min.	Max.		Min.	Max.	Carbon & Martensitic S.S.		Austenitic S.S.		
	Min. ¹	Max. ²	Max.			Nom.			Min.	Max.	Lbs.	kN	Lbs.
1/16	.062	.066	.069	.059	.007	.028	.012	.062	.065	430	2.00	250	1.10
5/64	.078	.083	.086	.075	.008	.032	.018	.078	.081	800	3.56	460	2.05
3/32	.094	.099	.103	.091	.008	.038	.022	.094	.097	1150	5.12	670	2.98
1/8	.125	.131	.135	.122	.008	.044	.028	.125	.129	1875	8.34	1090	4.85
5/32	.156	.162	.167	.151	.010	.048	.032	.156	.160	2750	12.23	1600	7.12
3/16	.187	.194	.199	.182	.011	.055	.040	.187	.192	4150	18.46	2425	10.79
7/32	.219	.226	.232	.214	.011	.065	.048	.219	.224	5850	26.02	3400	15.12
1/4	.250	.258	.264	.245	.012	.065	.048	.250	.256	7050	31.36	4100	18.24
5/16	.312	.321	.330	.306	.014	.080	.062	.312	.318	10800	48.04	6300	28.02
3/8	.375	.385	.395	.368	.016	.095	.077	.375	.382	16300	72.50	9500	42.25
7/16	.437	.448	.459	.430	.017	.095	.077	.437	.445	19800	88.08	11500	51.16
1/2	.500	.513	.524	.485	.025	.110	.094	.500	.510	27100	120.55	15800	70.28
5/8 ³	.625	.640	.653	.608	.030	.125	.118	.625	.637	42500	189.06	—	—
3/4 ³	.750	.768	.784	.730	.045	.150	.145	.750	.764	62500	278.02	—	—

STANDARD SIZES

Length	Nominal Diameter													
	1/16	5/64	3/32	1/8	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	5/8*	3/4*
3/16														
1/4														
5/16														
3/8														
7/16														
1/2														
9/16														
5/8														
11/16														
3/4														
13/16														
7/8														
15/16														
1														
1-1/8														
1-1/4														
1-3/8														
1-1/2														
1-5/8														
1-3/4														
1-7/8														
2														
2-1/4														
2-1/2														
2-3/4														
3														
3-1/4														
3-1/2														
3-3/4														
4														

Nominal Pin Length	Length Tolerance
Up to 1", incl.	±0.015
Over 1" to 2", incl.	±0.020
Over 2" to 3", incl.	±0.025
Over 3" to 4", incl.	±0.030
Over 4"	±0.035

TAPER PINS



*B = Nominal Diameter - (Length x .02083)

Pin Size Number and Basic Pin Diameter		A				R	
		Major Diameter (Large End)				End Crown Radius	
		Commercial Class		Precision Class			
		Max	Min	Max	Min	Max	Min
7/0	0.0625	0.0638	0.0618	0.0635	0.0625	0.072	0.052
6/0	0.0780	0.0793	0.0773	0.0790	0.0780	0.088	0.068
5/0	0.0940	0.0953	0.0933	0.0950	0.0940	0.104	0.084
4/0	0.1090	0.1103	0.1083	0.1100	0.1090	0.119	0.099
3/0	0.1250	0.1263	0.1243	0.1260	0.1250	0.135	0.115
2/0	0.1410	0.1423	0.1403	0.1420	0.1410	0.151	0.131
0	0.1560	0.1573	0.1553	0.1570	0.1560	0.166	0.146
1	0.1720	0.1733	0.1713	0.1730	0.1720	0.182	0.162
2	0.1930	0.1943	0.1923	0.1940	0.1930	0.203	0.183
3	0.2190	0.2203	0.2183	0.2200	0.2190	0.229	0.209
4	0.2500	0.2513	0.2493	0.2510	0.2500	0.260	0.240
5	0.2890	0.2903	0.2883	0.2900	0.2890	0.299	0.279
6	0.3410	0.3423	0.3403	0.3420	0.3410	0.351	0.331
7	0.4090	0.4103	0.4083	0.4100	0.4090	0.419	0.399
8	0.4920	0.4933	0.4913	0.4930	0.4920	0.502	0.482
9	0.5910	0.5923	0.5903	0.5920	0.5910	0.601	0.581
10	0.7060	0.7073	0.7053	0.7070	0.7060	0.716	0.696
11	0.8600	0.8613	0.8593	0.870	0.850
12	1.0320	1.0333	1.0313	1.042	1.022
13	1.2410	1.2423	1.2403	1.251	1.231
14	1.5230	1.5243	1.5223	1.533	1.513

ASME B18.8.2-2000

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DICFASTENERS

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