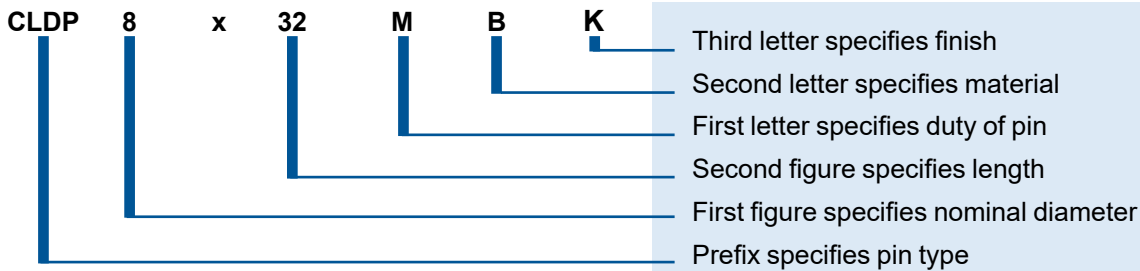




PIN DUTIES	MATERIAL	FINISHES
<b>M</b> Standard	<b>B</b> High Carbon Steel	<b>K</b> Plain, Oiled
<b>H</b> Heavy	<b>C</b> Chrome Stainless Steel	<b>T</b> Electroplated Zinc
<b>L</b> Light	<b>D</b> Nickel Stainless Steel	
	<b>W</b> Alloy Steel	

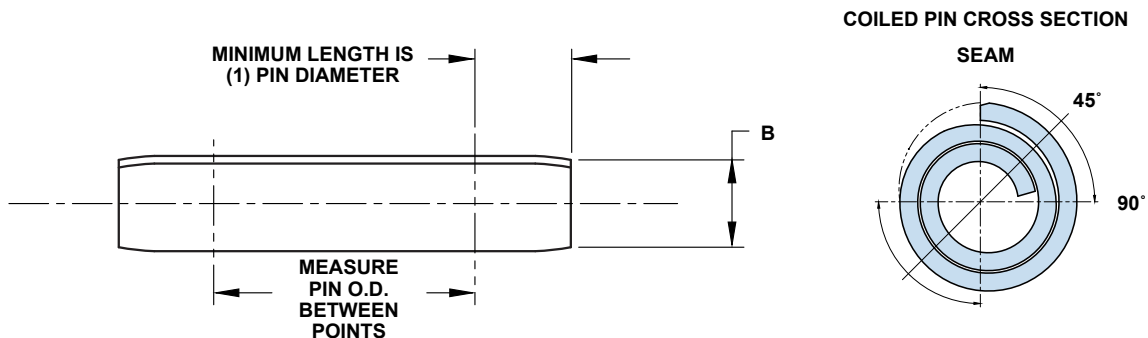
### Identification Code

Coiled Pin 8mm diameter x 32mm length standard duty/carbon steel/plain finish



### How to Measure the Diameter of a Coiled Spring Pin

The outside diameter of a Coiled Pin is to be measured with a micrometer from the seam (0° point) through the 90° point. Diameter is to be measured a minimum of one pin diameter in length from the end of the pin.

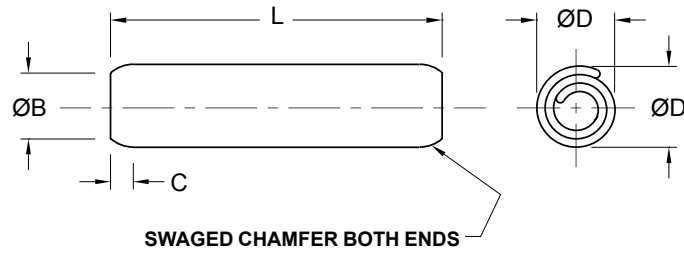


### NOTES

- Standard specifications apply except where otherwise specified.
- All dimensions apply prior to plating.
- Electroplated zinc is not available for pins greater than or equal to 8mm and .312" nominal diameter.
- The standard finish for stainless steel pins is plain. Passivated pins are available at an additional cost.
- Special sizes, duties, materials and finishes, including oil-free pins, are available upon request.



# STANDARD DUTY COILED PINS – METRIC ISO 8750 • ASME B18.8.3M



NOMINAL DIAMETER		0.8	1	1.2	1.5	2	2.5	3	3.5	4	5	6	8	10	12	16	20
DIAMETER ØD	MAX.	0.91	1.15	1.35	1.73	2.25	2.78	3.30	3.84	4.40	5.50	6.50	8.63	10.80	12.85	17.00	21.10
	MIN.	0.85	1.05	1.25	1.62	2.13	2.65	3.15	3.67	4.20	5.25	6.25	8.30	10.35	12.40	16.45	20.40
CHAMFER	B DIA. MAX.	0.75	0.95	1.15	1.40	1.90	2.40	2.90	3.40	3.90	4.85	5.85	7.80	9.75	11.70	15.60	19.60
	C LENGTH REF.	0.30	0.30	0.40	0.50	0.70	0.70	0.90	1.00	1.10	1.30	1.50	2.00	2.50	3.00	4.00	4.50
RECOMMENDED HOLE SIZE	MAX.	0.84	1.04	1.24	1.60	2.10	2.60	3.10	3.62	4.12	5.12	6.15	8.15	10.15	12.18	16.18	20.21
	MIN.	0.80	1.00	1.20	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	8.00	10.00	12.00	16.00	20.00

Note: All dimensions apply prior to plating.

## MINIMUM DOUBLE SHEAR STRENGTH kN

NOMINAL DIAMETER		0.8	1	1.2	1.5	2	2.5	3	3.5	4	5	6	8	10	12	16	20
CARBON ALLOY STEEL		0.40	0.60	0.90	1.45	2.50	3.90	5.50	7.50	9.60	15	22	39	62	89	155	250
CHROME STAINLESS																	
NICKEL STAINLESS		0.30	0.45	0.65	1.05	1.90	2.90	4.20	5.70	7.60	11.50	16.80	30	48	67	—	—

Note: Shear tests performed in accordance ASME B18.8.3M and ISO 8749.

## STANDARD LENGTHS

NOMINAL DIAMETER		0.8	1	1.2	1.5	2	2.5	3	3.5	4	5	6	8	10	12	16	20
4																	
5		*	*	*	*												
6		*	*	*	*	*											
8		*	*	*	*	*	*										
10		*	*	*	*	*	*	*									
12		*	*	*	*	*	*	*	*								
14					*	*	*	*	*	*							
16					*	*	*	*	*	*	*						
18					*	*	*	*	*	*	*	*					
20					*	*	*	*	*	*	*	*	*				
22					*	*	*	*	*	*	*	*	*	*			
24					*	*	*	*	*	*	*	*	*	*	*		
26					*	*	*	*	*	*	*	*	*	*	*	*	
28					*	*	*	*	*	*	*	*	*	*	*	*	*
30					*	*	*	*	*	*	*	*	*	*	*	*	*
32					*	*	*	*	*	*	*	*	*	*	*	*	*
35					*	*	*	*	*	*	*	*	*	*	*	*	*
40					*	*	*	*	*	*	*	*	*	*	*	*	*
45					*	*	*	*	*	*	*	*	*	*	*	*	*
50					*	*	*	*	*	*	*	*	*	*	*	*	*
55					*	*	*	*	*	*	*	*	*	*	*	*	*
60					*	*	*	*	*	*	*	*	*	*	*	*	*
65					*	*	*	*	*	*	*	*	*	*	*	*	*
70					*	*	*	*	*	*	*	*	*	*	*	*	*
75					*	*	*	*	*	*	*	*	*	*	*	*	*
80					*	*	*	*	*	*	*	*	*	*	*	*	*
85					*	*	*	*	*	*	*	*	*	*	*	*	*
90					*	*	*	*	*	*	*	*	*	*	*	*	*
95					*	*	*	*	*	*	*	*	*	*	*	*	*
100					*	*	*	*	*	*	*	*	*	*	*	*	*

Interchangeable mm and Inch Pins

mm Diameter	Inch Diameter
0.8	.031 1/32
1.0	.039
1.2	.047 3/64
2.0	.078 5/64
4.0	.156 5/32
8.0	.312 5/16
16.0	.625 5/8

Nominal Pin Length	Length Tolerance	
Nominal Pin Size	ø0.8 - 10	ø12 - 20
L ≤ 10	±0.25	N/A
10 < L ≤ 50	±0.5	±0.5
50 < L	±0.75	±0.75

Pin Straightness Tolerance <sup>1</sup>			Gage Length ±0.15
Gage Hole Diameter			
Specified Maximum Pin Diameter Plus:			
Nominal Pin Length	Min.	Max.	
L ≤ 24	0.18	0.2	25
24 < L ≤ 50	0.3	0.34	50
50 < L	0.42	0.48	75

Only available in stainless steel
  Available in high carbon and stainless steels
  Only available in alloy steel

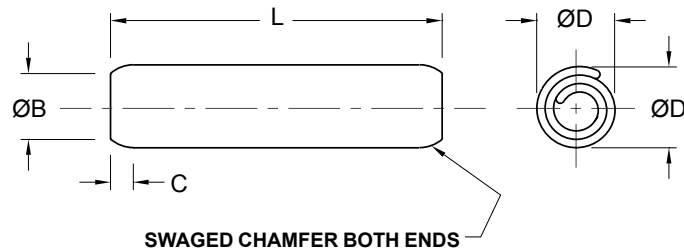
\* Generally stocked size

<sup>1</sup> Pin must fall through the gage by its own weight.

*Special sizes, duties, materials and finishes, including oil-free pins, are available upon request.*



# STANDARD DUTY COILED PINS – INCH ASME B18.8.2



NOMINAL DIAMETER	.031	.039	.047	.052	.062	.078	.094	.109	.125	.156	.187	.219	.250	.312	.375	.437	.500	.625	.750		
DIAMETER ØD	1/32		3/64		1/16	5/64	3/32	7/64	1/8	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	5/8	3/4		
CHAMFER	B DIA.	MAX.	.029	.037	.045	.050	.059	.075	.091	.106	.121	.152	.182	.214	.243	.304	.366	.427	.488	.613	.738
	C LENGTH	REF.	.024	.024	.024	.024	.028	.032	.038	.038	.044	.048	.055	.065	.065	.080	.095	.095	.110	.125	.150
RECOMMENDED HOLE SIZE	MAX.	.032	.040	.048	.053	.065	.081	.097	.112	.129	.160	.192	.224	.256	.319	.383	.446	.510	.635	.760	
	MIN.	.031	.039	.047	.052	.062	.078	.094	.109	.125	.156	.187	.219	.250	.312	.375	.437	.500	.625	.750	

Note: All dimensions apply prior to plating.

## MINIMUM DOUBLE SHEAR STRENGTH LBS.

NOMINAL DIAMETER	.031	.039	.047	.052	.062	.078	.094	.109	.125	.156	.187	.219	.250	.312	.375	.437	.500	.625	.750	
CARBON ALLOY STEEL	90	135	190	250	330	550	775	1,050	1,400	2,200	3,150	4,200	5,500	8,700	12,600	17,000	22,500	35,000	50,000	
CHROME STAINLESS																				
NICKEL STAINLESS	65	100	145	190	265	425	600	825	1,100	1,700	2,400	3,300	4,300	6,700	9,600	13,300	17,500	—	—	

Note: Shear tests performed in accordance with ASME B18.8.2.

## STANDARD LENGTHS

NOMINAL DIAMETER	.031	.039	.047	.052	.062	.078	.094	.109	.125	.156	.187	.219	.250	.312	.375	.437	.500	.625	.750
.125 1/8	*		*																
.187 3/16	*		*		*														
.250 1/4	*		*		*	*													
.312 5/16	*		*		*	*	*												
.375 3/8	*		*		*	*	*		*										
.437 7/16	*		*		*	*	*		*	*									
.500 1/2	*		*		*	*	*		*	*	*								
.562 9/16					*	*	*		*	*	*								
.625 5/8					*	*	*		*	*	*								
.687 11/16																			
.750 3/4							*	*	*	*	*		*						
.812 13/16																			
.875 7/8								*	*	*	*		*						
.937 15/16																			
1.000 1								*	*	*	*		*	*					
1.125 1-1/8																			
1.250 1-1/4									*	*	*		*	*	*				
1.375 1-3/8																			
1.500 1-1/2										*	*		*	*	*		*		
1.625 1-5/8										*	*		*	*	*		*		
1.750 1-3/4										*	*		*	*	*		*		
1.875 1-7/8																			
2.000 2										*	*		*	*	*		*	*	*
2.250 2-1/4													*	*	*		*	*	*
2.500 2-1/2													*	*	*		*	*	*
2.750 2-3/4													*	*	*		*	*	*
3.000 3													*	*	*		*	*	*
3.250 3-1/4														*	*		*	*	*
3.500 3-1/2														*	*		*	*	*
3.750 3-3/4																	*	*	*
4.000 4																	*	*	*

**Interchangeable Inch and mm Pins**

Inch Diameter	mm Diameter
.031 1/32	0.8
.039	1.0
.047 3/64	1.2
.078 5/64	2.0
.156 5/32	4.0
.312 5/16	8.0
.625 5/8	16.0

Nominal Pin Length	Length Tolerance
Nominal Pin Size	ø1/32 - 3/8      ø7/16 - 3/4
L ≤ 2.000	± .010      ± .025
2.000 < L ≤ 3.000	± .015      ± .025
3.000 < L	± .025      ± .025

Nominal Pin Length	Pin Straightness Tolerance <sup>1</sup>	Gage Length ±0.005
L ≤ 1.000	.007	1.000
1.000 < L ≤ 2.000	.010	2.000
2.000 < L	.013	3.000

Only available in stainless steel    Available in high carbon and stainless steels    Only available in alloy steel

\* Generally stocked size

<sup>1</sup> Pin must fall through a hole gauge in length equal to the next one-inch increment over the pin length with a hole equal to the maximum specified pin diameter plus the straightness tolerance by its own weight.

Special sizes, duties, materials and finishes, including oil-free pins, are available upon request.

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Coiled Spring Pins



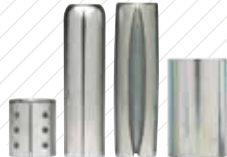
Slotted Spring Pins



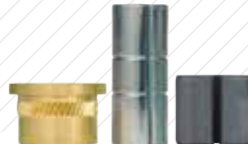
Solid Pins



Alignment Dowels /  
Bushings



Spacers & Rolled  
Tubular Components



Compression  
Limiters



Threaded Inserts  
for Plastics



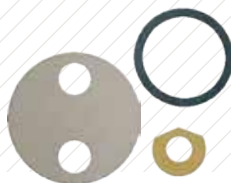
Railroad Nuts



Disc Springs



Precision Shims &  
Thin Metal Stampings



Precision Washers



Parts Feeding  
Technology



Pin Installation  
Technology



Insert Installation  
Technology



Compression Limiter  
Installation Technology

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