



Advanex Americas, Inc.

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 Cypress
 California
 90630
 USA
 714.995.4519
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 insidesales@advanexusa.com

Fax:
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Input Data		
Spring Details		
Spring Type	Round Wire Compression	
Design Standard	EN 13906-1: 2002	
Tolerance Standard	EN 15800:2008	
Material Information		
Material - ASTM A228 (Music Wire)		
Young's Modulus	206000	MPa
Rigidity Modulus	81500	MPa
Density	0.00000785	kg/mm ³
Unprestressed Range	0-45	%
Prestressed Range	45-56	%
Design Information		
End Type	Closed & Ground	
Dead Coils	2.00	
Tip Thickness	50.00	%
End Fixation		
Wire Diameter	0.900	mm
Outside Diameter	8.20	mm
Total Coils	15.00	
Spring Rate	1.32	N/mm
Free Length	50.80	mm

Calculated Data		
Solid Length	13.50	mm
Solid Length (Max)	13.72	mm
Solid Load	49.30	N
Solid Stress	1257.1	MPa
OD Expansion at solid	0.155	mm
Stress Factor	1.17	
Active Coils	13.00	
Spring Index	8.11	
Helix Angle	9.33	Deg
Buckling Possible	50.80	mm
Buckling Definite	50.80	mm
Spring Pitch	3.77	mm
Inside Diameter	6.40	mm
Mean Coil Dia.	7.30	mm
Outside Diameter	8.20	mm
Wire Length	348.04	mm
Weight	0.00174	kg
Natural Frequency	28265	RPM

Operating Data		
	Operating Positions	
	1	2
Length (mm)		
Load (N)		
Deflection (mm)		
Stress (MPa)	0	0
Stress % Solid	0	0
O.D. Expansion (mm)		



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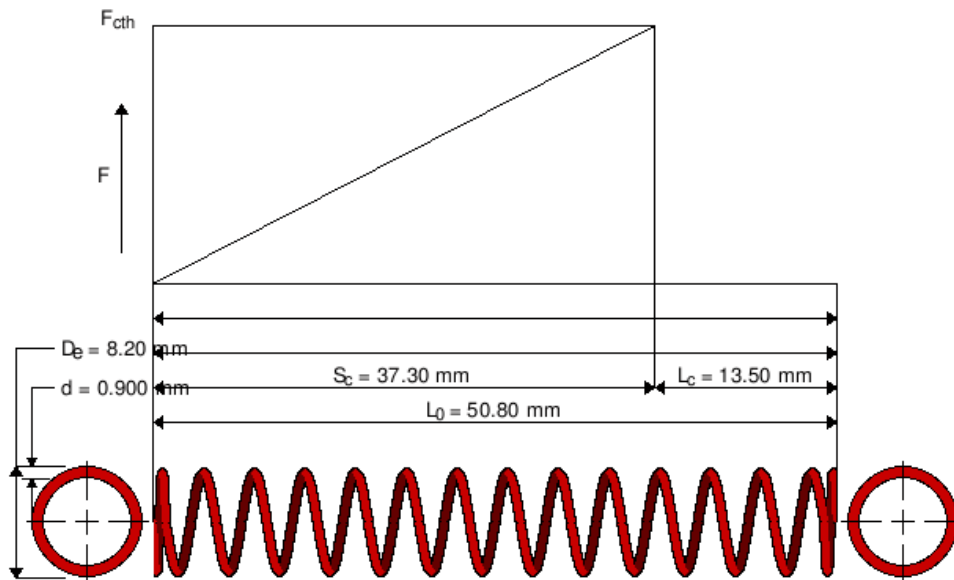
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Spring Tolerances					
EN 15800:2008					
	Value		Grade 1	Grade 2	Grade 3
Free Length	50.80	±	0.757	1.20	1.92
Outside Diameter	8.20	±	0.150	0.300	0.600
Spring Rate	1.32	±			
Squareness			1.60	2.54	4.06
Parallelism			0.123	0.246	0.492
Working Load 1		±	1.00	1.59	2.54
Working Load 2		±	1.00	1.59	2.54

Spring Drawing





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Load / Length Drawing

