

Extension Spring

Part# PE80010000-26.5-MW-38.00

Wire Diameter: 0.800 mm

Outer Diameter: 10.000 mm

Inside Diameter: 8.400 mm

Active Coils: 26.500

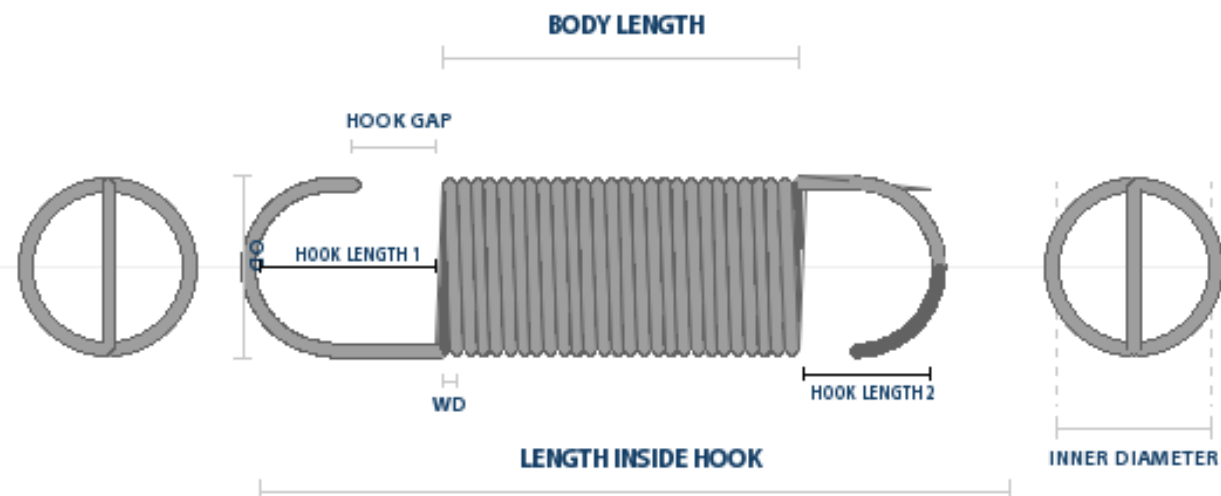
Total Coils: 26.500

Hook Type: Extended Hooks

Length Inside Hook: 38.000 mm

Hook Length 1: 8 mm

Hook Length 2: 8 mm



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Date Drawn: 07 / 25 / 2012

Material: Music Wire ASTM A228

Part Name:

Drawn by:

Approved by:

Part # PE80010000-26.5-MW-38.00

Revision #:




Finish:

Drawing #:

Tolerances:

Scale: 2.55

Answers

Loads & Rates		1.445 N @ 38.000 Loaded Height	
Maximum load possible, Fmax:	20.776 mm	3.711 N @ 49.524 Loaded Height	
Maximum load possible Considering Hook Stress, FmaxHS:	16.631 N	5.977 N @ 61.048 Loaded Height	
Spring constant (or Spring rate), k:	0.197 N	8.243 N @ 72.571 Loaded Height	
Initial Tension, Tensioninit:	1.445 N/mm	10.508 N @ 84.095 Loaded Height	
Safe Travel		12.774 N @ 95.619 Loaded Height	
Maximum Safe Travel, Travelmax:	98.316	15.040 N @ 107.143 Loaded Height	
Maximum Safe Travel Considering Hook Stress, TravelmaxHS:	77.238	17.306 N @ 118.666 Loaded Height	
Physical Dimensions		19.571 N @ 130.190 Loaded Height	
Diameter of spring wire, d:	0.800 mm	21.837 N @ 141.714 Loaded Height	
Outer diameter of spring, Douter:	10.000 mm	24.103 N @ 153.238 Loaded Height	
Inner diameter of spring, Dinner:	8.400 mm		
Mean diameter of spring, Dmean:	9.200 mm	Max. Load Possible Considering Hook Stress:	16.631 N
Length Inside Hook (Free length) , Lfree:	38.000 mm		
Number of active coils, na:	26.500 mm		
Body length, Lbody:	22.000 mm		
Hook length 1:	8.000 mm		
Hook length 2:	8.000 mm		
Total Hook Length:	16.000 mm		
Type of Hooks:	extended hooks		
Spring index, C:	11.500		
Material type			
Material type:	Music Wire ASTM A228		
Weights & Measures			
Weight of one spring, M:	0.003201 Kg		
Weight of one thousand springs, M:	3.201206 Kg		
Length of wire required to make one spring, Lwire:	809.739 mm		
Stress Factors			
Material shear modulus, G:	79,241,245,136.187 Pa		
Maximum shear stress possible, tmax:	1,069.377 Pa		
Wahl correction factor, W:	1.125		
Suggested Part Number			
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