

# Torsion Spring

Part# PT200756007-13-MW-LH

Wire Diameter: 2.007 mm

Outer Diameter: 56.007 mm

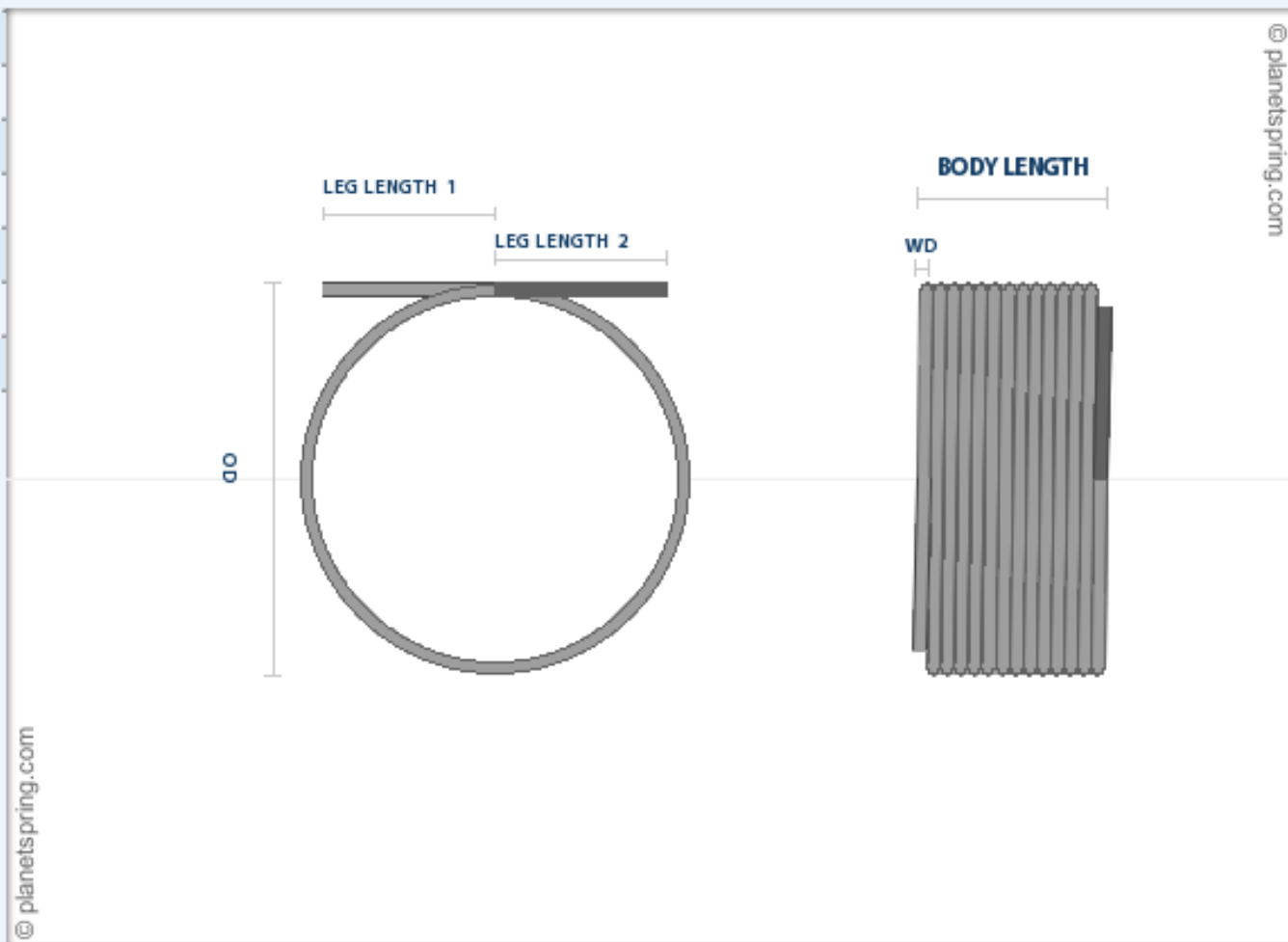
Inside Diameter: 51.994 mm

Leg Length 1: 25.400 mm

Leg Length 2: 25.400 mm

Total Coils: 13.000

Direction of Wind: Left Hand



© planet-spring.com










© planet-spring.com

	Date Drawn: 07 / 26 / 2012	Material: Music Wire ASTM A228
Part Name:	Drawn by:	Approved by:
Part # PT200756007-13-MW-LH	Revision #:	Finish:
Drawing #:	Tolerances:	Scale: 1.07

## Answers

Loads & Rates	
Maximum torque possible, Torquemax :	1,274.186881 N
Rate per degree :	1.229607091
Spring constant (or Spring rate) per 360 degrees, k360 degrees	442.65855 N-mm per 360 degrees
Safe Travel	
Maximum safe travel, Travelmax:	1,036.255313 degrees
Physical Dimensions	
Diameter of spring wire, d:	2.007 mm
Outer diameter of spring, Douter:	56.007 mm
Inner diameter of spring, Dinner:	51.994 mm
Mean diameter of spring, Dmean:	54.000 mm
Body length, Lbody:	28.098 mm
Length of leg 1:	25.400 mm
Length of leg 2:	25.400 mm
Total leg length:	50.800 mm
Direction of wind:	Left hand
Spring index, C:	26.906
Material type	
Material type:	Music Wire ASTM A228
Weights & Measures	
Weight of one spring, M	0.056138 Kg
Weight of one thousand springs, M:	56.138470 Kg
Length of wire required to make one spring, Lwire:	2,256.198 mm
Stress Factors	
Material shear modulus, G:	80,483.548 Pa
Maximum shear stress possible, tmax:	22,796.153 Pa
Wahl correction factor, W:	1.052
Suggested Part Number	
Suggested part number:	PT200756007-13-MW-LH
Others	
Number of active coils, na:	13.000

## Possible Loads

159.273360 N @ 129.531914 Loaded Height	
318.546720 N @ 259.063828 Loaded Height	
477.820080 N @ 388.595742 Loaded Height	
637.093440 N @ 518.127656 Loaded Height	
796.366800 N @ 647.659570 Loaded Height	
955.640160 N @ 777.191485 Loaded Height	
1,114.913521 N @ 906.723399 Loaded Height	
1,274.186881 N @ 1,036.255313 Loaded Height	
1,433.460241 N @ 1,165.787227 Loaded Height	
Max. Torque Possible:	1,274.186881 N