Report

Advanced Spring Design

Developed for:

GSDS Customer Data Alabama, United States

Description SPC-1177

Developed by:

Matthew Warren Industries 222 E 16th Street

Los Angeles, California 90015, United States

Phone: 800-237-5225

Cylindrical Compression Spring, Round Wire

Part#

SPC-1177

Material

Stainless 302



End Type Closed/Not Ground

Condition Not Preset/Not Peened

Autoadjusted Inactive Coils

Grade	Commercial	Buckling Constraint	s End fixation not known		Coiling Direction Optional	
Wire Dia	meter [in]	0.1480	Arbor Diameter [in]	0.6575	Active Coils	7.000
	. Tol. (+/-) [in]	0.0012	Coil ID [in]	0.7040	Total Coils	9.000
Wire Length [in]		24.2243	Coil Mean Diameter [in]	0.8520	Dead Coils	0.0000
Wire Weight [lb]		0.11919	Coil OD [in]	1.0000	Pitch [in]	0.3009
	•	0.110.0	Coil Dia. Tol. (+/-) [in]	0.0080	Pitch Angle [deg]	6.4132
Minimum Tensile Strength (MTS) [psi]		207486	Shaft OD [in]		Free Length Tol. (+/-) [in] Allowable Solid Length [in]	0.1590
Spring R	ate [lbf/in]	138.5288	Minimum Coil ID [in]	0.6960	Allowable colla Longar []	
Spring Index		5.7568	Expanded Coil OD [in]	ded Coil OD [in] 1.0141	Estimated Cycle Life:	
	Frequency [Hz]	381	Hole Diameter [in]			
Wire Available Yes		Next Smaller Wire Size 0.1470		Next Larger Wire Size 0.1490		

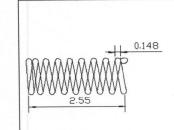
	Free	Minimum Cycle Load	Maximum Cycle Load	Other Load	At Solid	At Buckle
Load [lbf]	0				148.226	
Load Tolerance (+/-) [lbf]	0					
Length [in]	2.5500				1.4800	
Deflection [in]	0				1.0700	
% of Max. Deflection	0				100	
Corrected Stress [psi]	0				125440	
Corrected % of MTS	0				60.5	
Uncorrected Stress [psi]	0				99202	
Uncorrected % of MTS	0				47.8112	
Expanded Coil OD [in]					1.0141	

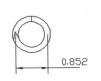
Design Status:

Warning(s):

Design Notes:

FL. TOLERANCE +/- .091" DRAW BAR SPRING





^{1.} Stress at Solid > 35% Safety Limit



CENTURY SPRING CORP.

Part Characteristics

Order Date: 5/24/2012

Quote Number:

65262

Our Reference:
PATRICIA PEREZ

Customer Number: IRW909

PO Number: 370716/371671

Your Part Number

CHARACTERISTICS for part number SPC-1177 - CLASS DB

Attribute Description	Value	Unit	
FINISH	NONE		
TYPE OF HOOKS	DRAWBARS		
MATERIAL	302 SS		
ACTIVE COILS	7	E	
WIRE DIAMETER	.148	A	
OUTSIDE DIAMETER	1	N	
LENGTH OVER BODY	2.55	N	
TOTAL COILS	9	8	
		Α	

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· Please refer to quote number when ordering.

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