

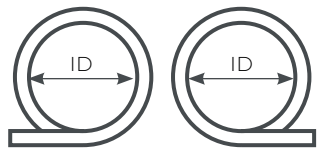
How to Measure Torsion Springs in 4 Steps

1. Wind (left-hand vs. right-hand)

2. Wire Size

LENGTH OF 10 COILS	LENGTH OF 20 COILS	WIRE SIZE	LENGTH OF 10 COILS	LENGTH OF 20 COILS	WIRE SIZE
1-1/4"	2-1/2"	.125	3-1/16"	6-1/8"	.3065
1-3/8"	2-3/4"	.135	3-1/8"	6-1/4"	.3125
1-7/16"	2-7/8"	.142	3-3/16"	6-3/8"	.3195
1-1/2"	3"	.1483	3-5/16"	6-5/8"	.331
1-9/16"	3-1/8"	.1562	3-7/16"	6-7/8"	.3437
1-5/8"	3-1/4"	.162	3-5/8"	7-1/4"	.3625
1-11/16"	3-3/8"	.170	3-3/4"	7-1/2"	.375
1-3/4"	3-1/2"	.177	3-15/16"	7-7/8"	.3938
1-7/8"	3-3/4"	.1875	4-1/16"	8-1/8"	.4062
1-15/16"	3-7/8"	.192	4-7/32"	8-7/16"	.4218
2-1/16"	4-1/8"	.207	4-5/16"	8-5/8"	.4305
2-3/16"	4-3/8"	.2187	4-3/8"	8-3/4"	.4375
2-1/4"	4-1/2"	.2253	4-17/32"	9-1/16"	.4531
2-5/16"	4-5/8"	.2343	4-5/8"	9-1/4"	.4615
2-7/16"	4-7/8"	.2437	4-11/16"	9-3/8"	.4687
2-1/2"	5"	.250	4-7/8"	9-3/4"	.490
2-5/8"	5-1/4"	.2625	5"	10"	.500
2-3/4"	5-1/2"	.273	5-5/16"	10-5/8"	.5312
2-13/16"	5-5/8"	.283	5-5/8"	11-1/4"	.5625
2-7/8"	5-3/4"	.289	6-1/4"	12-1/2"	.625
2-15/16"	5-7/8"	.295			

3. Inside Diameter (ID)



1" to 10" Inside Diameters

4. Length

Formulas

- Number of Coils × Wire Size = Spring Length
- OD – (2x Wire Size) = ID
- Number of Turns × Wire Size = Amount of Spring Growth
- Spring Length in Inches / Number of Coils = Wire Size
- Total IPPT of Door's Spring / Cable Drum Multiplier = Door Weight
- (Door Weight × Hi Moment Arm) / Number of Turns = Required IPPT
- Door Height / 2 = Stretch of Extension Spring

Technical Support

Our team of experts is available to help answer any questions you may have when it comes to garage door springs. If you need assistance with engineering a spring to fit your application, we are happy to take care of this.

idcspring.com

Phone: 763.786.5627 / 888.899.7945

Fax: 763.786.5901 / 888.330.6033



Minnesota (Corporate Office)

9385 Holly Street Northwest
Coon Rapids, Minnesota 55433

Arizona

219 South Mulberry
Mesa, Arizona 85202

Ohio

9200 Country Club Drive
Piqua, Ohio 45356



Spring Material Types

Oil Tempered

- Wire Diameters .136 – .625
- All oil tempered springs are available cut-to-length or bulk snakes (120", 144", 168", or 192")

Oil-tempered springs deliver strength and durability that is absolutely necessary when creating a garage door. There are few better options when you need springs to support heavy equipment.

Despite their many benefits, oil-tempered wire springs remain an affordable choice.

Galvanized

- Wire Diameters .148 – .625
- IDs from .050" – 10.5"
- All galvanized springs are available cut-to-length or bulk snakes (120", 144", 168", or 192")

Galvanized springs provide an aesthetically appealing look to your garage build. They also come with great durability and the zinc within the galvanized coating allows the spring to remain rust free.

Black Coated

- Wire Diameters .136 – .625
- All black coated springs are available cut-to-length or bulk snakes (120", 144", 168", or 192")

Black coated springs fight off rust and also hold their tension extremely well allowing your door to operate in balance for a longer lifespan of the spring.



Square Wire

- Dimensions available .312 – .437
- All square wire springs are available cut-to-length or bulk snakes (120", 144", 168", or 192")

Square wire is great for heavy commercial doors where duplex springs or standard torsion, duplex assemblies or dual-shaft assemblies are not an option. Square wire provides the strength to lift and lower those heavy doors.

Spring Construct Types

Mini Warehouse

Torsion

Extension

Holmes One-Piece

Understanding Part Numbers

Part numbers for one-piece door springs use these codes to indicate End Types, Wire Size, Spring Length and whether a Connector is included.

PART NUMBER	END TYPE	WIRE SIZE	LENGTH	CONNECTOR INCLUDED
P928C	P	9	28"	C
SL728C	SL	7	28"	C
C328C	C	3	28"	C

Weight Chart for E900 Hardware Sets

Use this handy chart to determine the correct type and quantity of springs based on the weight of the door.

DOOR WEIGHT (LBS.)	END TYPE	WIRE SIZE
Up to 75	2	P928C
90 to 150	2	P728C
105 to 175	2	P528C
125 to 250	2	P328C
150 to 300	4	P728C
200 to 350	4	P528C

Obsolete with Replacement

SPRING TYPE	SPRING LENGTH	SPRING WIRE	REPLACE WITH
P715.S	15.5	0.177	NONE
P726	28	0.177	NONE
SL528	28	0.207	P528
SL530	30	0.207	P530
SL532	32	0.207	P532
SLR729L	29	0.177	SL729L*
SLR730L	30	0.177	SL730L*
SLR730S	30	0.177	SL730*
SLR730Y	30	0.177	SL730L*

* Special Order

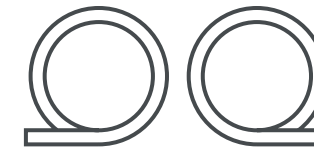
Balance King

This is an add-on to a typical garage door/spring set up. The Balance King is something we have designed and engineered in-house. The purpose of the Balance King is to balance out carriage style and commercial doors that are oversized and have heavy top sections.



Winding Types

Left-hand wound vs. Right-hand wound



Spring End Types

One-Piece Ends



Plug (P)



Spring Latch (SL)



Clip (C)

Extension Spring Ends



Single Open Loop



Double Loops



Clip Ends (Std. on .207 wire & larger)



Metal Strap With Hole for Bolt

Torsion Spring Ends



Standard Torsion Spring End



Overhead Ends Up 2" ID



Wagner End 2-1/2" ID



Mini Warehouse End Various ID's



Ends In McKee & Various ID's



Crawford T-Spring End 3-25/32" ID



Crawford End 1-19/32" & 2-25/32" ID



Barcol End 1-13/16" ID



Rolling Steel Long End Various ID's



Rolling Steel Loops Various ID's