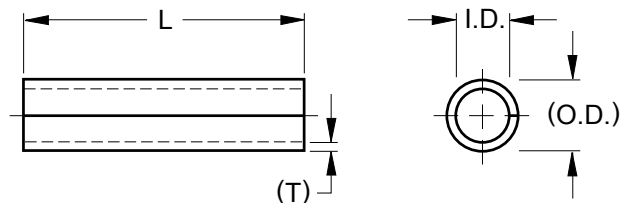




Spacers Series SP150 - Metric

INSPECTION METHODS

I.D. - Go and No Go Plug Gauges
Length - Calipers



DIMENSIONAL DATA

NOMINAL SIZE ➤			3	4	5	6	8	10	12	14	16
SP150 HEAVY WALL	I.D.	MIN.	3.1	4.1	5.1	6.1	8.1	10.1	12.15	14.2	16.15
		MAX.	3.3	4.35	5.4	6.4	8.6	10.6	13	15.1	17.1
	WALL THICKNESS REF.		0.7	1.1	1.2	1.5	1.7	2	2.2	2.4	2.6
	O.D. REF. ONLY		4.6	6.42	7.65	9.25	11.75	14.35	16.97	19.5	21.82

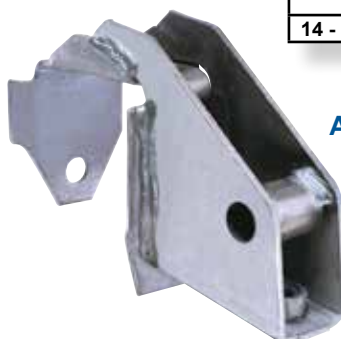
AVAILABLE LENGTHS

NOMINAL SIZE			3	4	5	6	8	10	12	14	16
LENGTH	4										
	5										
	6			*	*						
	8			*	*	*					
	10			*	*	*	*				
	12			*	*	*	*				
	14			*	*	*	*				
	16			*	*	*	*				
	18										
	20			*	*	*	*				
	22										
	25			*	*	*	*				
	28			*	*	*	*				
	30										
	35										
	40										
	45										
	50										
	55										
	60										
	65										
	70										
	75										
	80										
	85										
	90										
	95										
	100										

- * Generally stocked size
- All dimensions apply prior to the application of any supplemental finish
- Shorter, longer and intermediate lengths are available upon request
- Custom diameters will be evaluated upon request

LENGTH TOLERANCES

NOMINAL SIZE	NOMINAL LENGTH	LENGTH TOLERANCE
3 - 6	$L \leq 40$	± 0.20
	$40 < L \leq 100$	± 0.30
8 - 12	$L \leq 50$	± 0.40
	$50 < L \leq 100$	± 0.50
14 - 16	$L \leq 100$	± 0.50



AUTOMOTIVE CHASSIS FRAME BRACKET

Reinforces hollow rectangular frame. Spacer is welded to bracket that fits into frame.

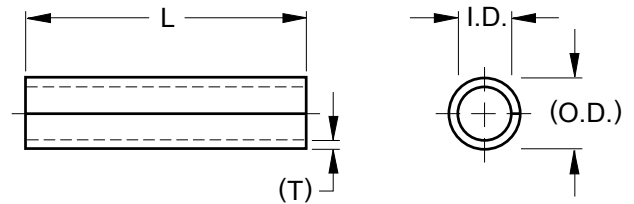
To Order: SPCR Size x Length Material Finish Series
Example: SPCR 8 x 20 FK SP150



Spacers Series SP150 - Inch

INSPECTION METHODS

I.D. - Go and No Go Plug Gauges
Length - Calipers



DIMENSIONAL DATA

NOMINAL SIZE ➤			#4	#6	#8	#10	.250 1/4	.312 5/16	.375 3/8	.437 7/16	.500 1/2	.625 5/8	.750 3/4
SP150 HEAVY WALL	I.D.	MIN.	.116	.142	.168	.194	.254	.318	.381	.445	.508	.632	.758
		MAX.	.124	.152	.180	.206	.268	.338	.401	.475	.538	.672	.798
	WALL THICKNESS REF.		.027	.036	.042	.048	.058	.067	.078	.087	.094	.102	.110
	O.D. REF. ONLY		.174	.219	.258	.296	.377	.462	.547	.638	.711	.856	.998

AVAILABLE LENGTHS

NOMINAL SIZE			#4	#6	#8	#10	.250 1/4	.312 5/16	.375 3/8	.437 7/16	.500 1/2	.625 5/8	.750 3/4
LENGTH	.187	3/16											
	.250	1/4											
	.312	5/16				*	*	*					
	.375	3/8				*	*	*	*				
	.437	7/16				*	*	*	*				
	.500	1/2				*	*	*	*		*		
	.562	9/16											
	.625	5/8				*	*	*	*		*	*	
	.687	11/16											
	.750	3/4				*	*	*	*		*	*	
	.812	13/16											
	.875	7/8				*	*	*	*		*	*	
	.937	15/16											
	1.000	1				*	*	*	*		*	*	
	1.125	1-1/8				*	*	*	*		*	*	
	1.250	1-1/4				*	*	*	*		*	*	
	1.375	1-3/8											
	1.500	1-1/2				*	*	*	*		*	*	
	1.625	1-5/8											
	1.750	1-3/4											
	1.875	1-7/8											
	2.000	2											
	2.250	2-1/4											
	2.500	2-1/2											
	2.750	2-3/4											
	3.000	3											
	3.250	3-1/4											
	3.500	3-1/2											
	3.750	3-3/4											
	4.000	4											

* Generally stocked size

- All dimensions apply prior to the application of any supplemental finish
- Shorter, longer and intermediate lengths are available upon request
- Custom diameters will be evaluated upon request

LENGTH TOLERANCES

NOMINAL SIZE	NOMINAL LENGTH	LENGTH TOLERANCE
#4 - .250	$L \leq 1.500$	$\pm .008$
	$1.500 < L \leq 4.000$	$\pm .012$
.312 - .437	$L \leq 2.000$	$\pm .015$
	$2.000 < L \leq 4.000$	$\pm .020$
.500 - .875	$L \leq 4.000$	$\pm .020$

SCISSOR JACK

To Order: SPCR Size x Length Material Finish Series
Example: SPCR .312 x 1.250 FK SP150

Eight Spacers (welded into place) are used as distance bushings and reinforcements in the pivot joints.





Please refer to www.SPIROL.com for current specifications and standard product offerings.

SPIROL Application Engineers will review your application needs and work with you to recommend the optimum solution. One way to start the process is to visit our **Optimal Application Engineering** portal at **SPIROL.com**.

Technical Centers

Americas

SPIROL International Corporation
30 Rock Avenue
Danielson, Connecticut 06239 U.S.A.
Tel. +1 860 774 8571
Fax. +1 860 774 2048

SPIROL Shim Division
321 Remington Road
Stow, Ohio 44224 U.S.A.
Tel. +1 330 920 3655
Fax. +1 330 920 3659

SPIROL Canada
3103 St. Etienne Boulevard
Windsor, Ontario N8W 5B1 Canada
Tel. +1 519 974 3334
Fax. +1 519 974 6550

SPIROL Mexico
Avenida Avante #250
Parque Industrial Avante Apodaca
Apodaca, N.L. 66607 Mexico
Tel. +52 81 8385 4390
Fax. +52 81 8385 4391

SPIROL Brazil
Rua Mafalda Barnabé Soliane, 134
Comercial Vitória Martini, Distrito Industrial
CEP 13347-610, Indaiatuba, SP, Brazil
Tel. +55 19 3936 2701
Fax. +55 19 3936 7121

Europe

SPIROL France
Cité de l'Automobile ZAC Croix Blandin
18 Rue Léna Bernstein
51100 Reims, France
Tel. +33 3 26 36 31 42
Fax. +33 3 26 09 19 76

SPIROL United Kingdom
17 Princewood Road
Corby, Northants
NN17 4ET United Kingdom
Tel. +44 1536 444800
Fax. +44 1536 203415

SPIROL Germany
Ottostr. 4
80333 Munich, Germany
Tel. +49 89 4 111 905 71
Fax. +49 89 4 111 905 72

SPIROL Spain
08940 Cornellà de Llobregat
Barcelona, Spain
Tel. +34 93 193 05 32
Fax. +34 93 193 25 43

SPIROL Czech Republic
Sokola Tümy 743/16
Ostrava-Mariánské Hory 70900
Czech Republic
Tel/Fax. +420 417 537 979

SPIROL Poland
ul. Solec 38 lok. 10
00-394, Warszawa, Poland
Tel. +48 71 399 44 55

Asia Pacific

SPIROL Asia Headquarters
1st Floor, Building 22, Plot D9, District D
No. 122 HeDan Road
Wai Gao Qiao Free Trade Zone
Shanghai, China 200131
Tel. +86 21 5046 1451
Fax. +86 21 5046 1540

SPIROL Korea
160-5 Seokchon-Dong
Songpa-gu, Seoul, 138-844, Korea
Tel. +86 (0) 21 5046-1451
Fax. +86 (0) 21 5046-1540

e-mail: info@spirol.com