

The True Leader in Press Mold Die Spring SAMSOL



C E R T I F I C A T E

DQS GmbH

Deutsche Gesellschaft zur Zertifizierung von Managementsystemen

hereby certifies that the company



Samsol Precision Co., Ltd.

#853-2, Geumgok-ri, Jinjeop-eup
Namyangju-si, Gyeonggi-do
Korea

for the scope

Production and after-sales service of springs
for industrial use and automobile suspensions

has implemented and maintains a

Quality Management System.

An audit, documented in a report, has verified that this
quality management system fulfills the requirements
of the following standard:

DIN EN ISO 9001 : 2000

December 2000 edition

This certificate is valid until 2011-05-26

Certificate Registration No.: 292251 QM

Frankfurt am Main, Berlin 2008-05-27

Ass. iur. M. Drechsel
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SAMSOL 金型スプリング

適用範囲

SAMSOLの金型スプリングは プレス金型とし 設計・製作され、必要特性をカタログにて自由に選べられます。

特徴

SAMSOLの金型スプリングは独自のワイヤリング工程で長さの变形と表面の損傷がないし、すべての製品をいつでも顧客に供給できます。
また、SAMSOLのスプリングは 世界唯一に製品の側にLot No. を 使用し管理しております。

種類

SAMSOLの金型スプリングは軽小荷重、軽荷重、中荷重、重荷重、極重荷重等 9種類に分けておりまして、顧客が分かりやすく各々の色に区分しております。

種類	記号	色
Lightest Load	S F	Yellow
Light Load	S L	Blue
Medium Load	S M	Red
Heavy Load	S H	Green
Ultra Heavy Load	S B	Brown
Hyper Heavy Load	S G	Gray
Super High Deflection	S U	Sky
High Deflection	S R	White
Middle Deflection	S Y	Purple

材料

SAMSOLの金型スプリングは POSCOの SAE 9254 素材を使用し、高応力、高速振幅、耐熱性に耐えられる設計されております。

製造

SAMSOLの金型スプリングは全ての工程を厳しい品質基準にて生産供給しております。また、ユーザの立場から疲労及びストレスに強いから安心して使えます。

Lot No.の意味

- ① SAMSOLのロゴ
- ② 外径-自由長
- ③ 変形量(30万回基準)
- ④ 製造日付

	60-125	 400	E25SH
①	②	③	④

(Certificate of Patent No. : 10-085139, 10-0835564)

SAMSOL 金型彈簧

適用範囲

SAMSOLの金型彈簧規格は以压制金模子設計 制作の產品、顧客所需要的特性可以在本手册内选使用、另外、本产品适用于一般所有的机械中、使用后会发挥卓越的性能。

特征

SAMSOLの金型彈簧是以独有的专利方式- 配线工程的精细组织、长度绝对没有变形和表面损伤、任何时候都可以供应给顾客所有的产品。
三率的彈簧是世界上唯一的在产品侧面使用 Lot No.而管理的。

种类

SAMSOLの金型彈簧分为轻少荷重、轻荷重、中荷重、重荷重、极重荷重 9种类型、为了使顾客可以、很容易的判别、使用而分别以不同的颜色区别开来。

種類	型号	顏色
轻少荷重	S F	黃色
轻荷重	S L	藍色
中荷重	S M	紅色
重荷重	S H	綠色
极重荷重	S B	褐色
超重荷重	S G	灰色
极超变形	S U	空色
高变形	S R	白色
中变形	S Y	紫色

材料

SAMSOL金型彈簧使用 POSCO 和 SAE 9254 原材料、为使产品具有高应力、高速振幅、耐熱性而进行了特殊的设计。

制造

SAMSOL金型彈簧的所有工程都经过严格规定的品质标准而进行生产。另外、从用户的立场着想、解除疲劳和压力效果非常优秀、您可以尽管放心的使用。

Lot 符号的意义

- ① SAMSOL的标志
- ② 外径-自由长
- ③ 变形量(以30万次为标准)
- ④ 制造日期

	60-125	 400	E25SH
①	②	③	④

(Certificate of Patent No. : 10-085139, 10-0835564)

Square-angled coils for molds

Patented : No, 108543

Specifications



	Type	Type	Color	Outer diameter		Free length		Available Max.Bend	Load N (kgf)	
				min.	max.	min.	max.		min.	max.
coil spring	SF	SL	Yellow	φ 6 (φ 3)	φ 70	10	500	40% (1)	58.8 (6)	2255.5 (230)
								50% (0.3)	78.5 (8)	2824.3 (288)
	SF	SL	Blue	φ 6 (φ 3)	φ 70	10	500	32% (1)	78.5 (8)	3814.4 (389)
								40% (0.3)	98.1 (10)	4766.0 (486)
	SM	SH	Red	φ 6 (φ 3)	φ 70	10	350	25.6% (1)	107.9 (11)	5638.8 (525)
								32% (0.3)	137.3 (14)	7060.8 (720)
	SM	SH	Green	φ 6 (φ 3)	φ 70	10	350	19.2% (1)	166.7 (17)	8472.9 (864)
								2.4% (0.3)	205.9 (21)	10591.2 (1080)
	SB	SG	Brown	φ 6 (φ 3)	φ 70	10	350	16% (1)	255.0 (26)	11297.3 (1152)
								20% (0.3)	323.6 (33)	14121.6 (1440)
	SU	SR	Gray	φ 10 (φ 5)	φ 50	15	300	16% (1)	392.3 (40)	10101.2 (1030)
								20% (0.3)	490.4 (50)	12626.5 (1288)
coil spring	SU	SR	Sky	φ 10.5	φ 43	15	300	50% (1)	56.84 (5.8)	490 (50)
								60% (0.3)	68.4 (7)	588 (60)
	SR	SY	White	φ 10.5	φ 46	15	300	50% (1)	127.5 (13)	3579.4 (110)
								55% (0.3)	140.2 (14.3)	1078.7 (120.5)
	SY		Purple	φ 10.5	φ 46	15	300	50% (1)	78.4 (8)	1068.2 (109)
								60% (0.3)	98 (10)	1332.8 (136)

한국산(SAMSOL)의 코일을 각 코일 스프링은 모든공정을 엄정한 품질 기준으로 생산
공급하고 있습니다.
특히 독자적 특허 방식인 와이어드 코일의 치밀한 조직으로 길이의 변형과 표면 손상이
없으며 피로 및 스트레스에 극히 우수합니다.

사이즈: mm(인치)로 SF, SL, SM, SH, SB, SG, SU, SR, SY 9종의 #준 규격

■ 주문사항: 주문 사양의 제작도 반영합니다.

SAMSOL社の金型用コイルスプリングはすべての工程を厳正な品質基準を守
っております。特に 独自の設計方式であるワイヤリング工程で長さ 変形と表
面損傷がありません。

サイズ: mm 寸法で SF, SL, SM, SH, SB, SG, SU, SR, SY タイプがあります。

■ オーダーベース 製作可能

We, SAMSOL guarantee quality standard in accordance with our
specification listed in the related patent such as the strict tolerance
internationally required in the actual use, especially, we put the
strong point on diminishing its fatigue and stress in use through
stringent quality control on every process in the manufacturing of
the spring.

We also accept any order by customer's specification

한국산(SAMSOL)의 코일을 모든공정을 엄정한 품질 기준으로 생산
공급하고 있습니다. 특히 독자적 특허 방식인 와이어드 코일의 치밀한 조직으로 길이의 변형과 표면 손상이
없으며 피로 및 스트레스에 극히 우수합니다.

사이즈: mm 寸法で SF, SL, SM, SH, SB, SG, SU, SR, SY 9種類規格

■ 注文仕様: 仕様書に準拠して製作します。

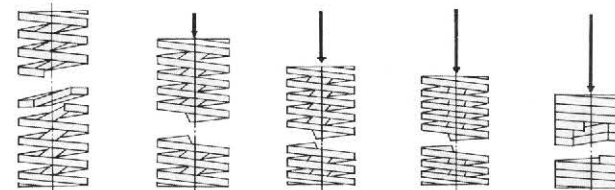
PRESS SPRING

삼솔금형스프링

■ 금형스프링 사용횟수와 압축비 관계 (Relationship between working times of spring and description rate)

사용횟수 Working Times	100만회(자유정%) 1 million (% of free length)	50만회(자유정%) 0.5 million (% of free length)	30만회(자유정%) 0.3 million (% of free length)	최대변형률(자유정%) Max Description (% of free length)	색 별 Color
輕少荷重 Lightest Load	40.0%	45.0%	50.0%	Approx. 58.0%	황색 (Yellow)
輕荷重 Light Load	32.0%	38.0%	40.0%	Approx. 48.0%	청색 (Blue)
中荷重 Medium Load	25.6%	28.8%	32.0%	Approx. 38.0%	적색 (Red)
重荷重 Heavy Load	19.2%	21.6%	24.0%	Approx. 28.0%	녹색 (Green)
超重荷重 Super Load	16.0%	18.0%	20.0%	Approx. 24.0%	갈색(Brown)
超超重荷重 Hyper Heavy Load	16.0%	18.0%	20.0%	Approx. 24.0%	회색(Gray)
極超變形形 Super High Deflection	50%	55%	60%	Approx. 70%	하늘색(Sky)
高變形形 High Deflection	40%	45%	50%	Approx. 60%	흰색(White)
中變形形 Middle Deflection	40%	45%	50%	Approx. 60%	보라색(Purple)

※최대 변형률은 참고치입니다.

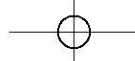


사용불가(Out of Service)

■ 금형스프링 허용공차 (Tolerance of Metal Mold Spring)

외경 외경 Outer Dia.	내경 내경 Inner Dia.	자유장 자유장 Free Length		하중 하중 Load kgf	권방향 권방향 Coil Direction
		50mm 이하 below 50mm	55mm 이상 over 55mm		
+ 0mm - 0.7mm	+ 0.7mm - 0.1mm	±0.5mm	±1%	±10%	오른쪽 right





輕荷重
경하중
LIGHT LOAD

SL

하중 荷重 $\pm 10\%$
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 $\pm 0.5\text{m/m}$
55m/m 以上 $\pm 1\%$

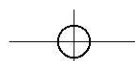
呼稱 호 칭 Model	外形 외경(mm) Outer Dia.	내경 내경(mm) Inner Dia.	자유장 자유장(mm) Free length	定數 정수(kgf/mm) spring constant	30万 (0.3million) 변형량 변형량(mm) Deflection	50万 (0.5 million) 변형량 변형량(mm) Deflection	100万 (1 million) 변형량 변형량(mm) Deflection
SL 6×15			15	1.33	8.0	5.4	4.8
20			20	1.00	8.0	7.2	6.4
25			25	0.80	10.0	9.0	8.0
30			30	0.67	12.0	10.8	9.6
35			35	0.57	14.0	12.6	11.2
40			40	0.50	16.0	14.4	12.8
45			45	0.44	18.0	16.2	14.4
50			50	0.40	20.0	18.0	16.0
55			55	0.36	22.0	19.8	17.6
60			60	0.33	24.0	21.6	19.2
65			65	0.31	26.0	23.4	20.8
70			70	0.29	28.0	25.2	22.4
SL 8×10			10	2.50	4.0	3.6	3.2
15			15	1.67	6.0	5.4	4.8
20			20	1.25	8.0	7.2	6.4
25			25	1.00	10.0	9.0	8.0
30			30	0.83	12.0	10.8	9.6
35			35	0.71	14.0	12.6	11.2
40			40	0.63	16.0	14.4	12.8
45			45	0.56	18.0	16.2	14.4
50			50	0.50	20.0	18.0	16.0
55			55	0.46	22.0	19.8	17.6
60			60	0.42	24.0	21.6	19.2
65			65	0.38	26.0	23.4	20.8
70			70	0.36	28.0	25.2	22.4
75			75	0.33	30.0	27.0	24.0
80			80	0.31	32.0	28.8	25.6
90			90	0.28	36.0	32.4	28.8
SL 10×10			10	3.61	4.0	3.6	3.2
15			15	2.41	6.0	5.4	4.8
20			20	1.81	8.0	7.2	6.4
25			25	1.45	10.0	9.0	8.0
30			30	1.21	12.0	10.8	9.6
35			35	1.03	14.0	12.6	11.2
40			40	0.90	16.0	14.4	12.8
45			45	0.80	18.0	16.2	14.4
50			50	0.73	20.0	18.0	16.0
55			55	0.66	22.0	19.8	17.6
60			60	0.60	24.0	21.6	19.2
65			65	0.55	26.0	23.4	20.8
70			70	0.51	28.0	25.2	22.4
75			75	0.48	30.0	27.0	24.0
80			80	0.45	32.0	28.8	25.6
90			90	0.40	36.0	32.4	28.8
100			100	0.36	40.0	36.0	32.0

輕荷重
경하중
LIGHT LOAD

SL

하중 荷重 $\pm 10\%$
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 $\pm 0.5\text{m/m}$
55m/m 以上 $\pm 1\%$

呼稱 호 칭 Model	外形 외경(mm) Outer Dia.	내경 내경(mm) Inner Dia.	자유장 자유장(mm) Free length	定數 정수(kgf/mm) spring constant	30万 (0.3million) 변형량 변형량(mm) Deflection	50万 (0.5 million) 변형량 변형량(mm) Deflection	100万 (1 million) 변형량 변형량(mm) Deflection
SL 12×20			20	2.63	8.0	7.2	6.4
25			25	2.10	10.0	9.0	8.0
30			30	1.75	12.0	10.8	9.6
35			35	1.50	14.0	12.6	11.2
40			40	1.32	16.0	14.4	12.8
45			45	1.17	18.0	16.2	14.4
50			50	1.05	20.0	18.0	16.0
55			55	0.96	22.0	19.8	17.6
60			60	0.88	24.0	21.6	19.2
65			65	0.81	26.0	23.4	20.8
70			70	0.75	28.0	25.2	22.4
75			75	0.70	30.0	27.0	24.0
80			80	0.66	32.0	28.8	25.6
90			90	0.58	36.0	32.4	28.8
100			100	0.53	40.0	36.0	32.0
SL 14×20			20	3.47	8.0	7.2	6.4
25			25	2.80	10.0	9.0	8.0
30			30	2.34	12.0	10.8	9.6
35			35	2.00	14.0	12.6	11.2
40			40	1.75	16.0	14.4	12.8
45			45	1.56	18.0	16.2	14.4
50			50	1.40	20.0	18.0	16.0
55			55	1.27	22.0	19.8	17.6
60			60	1.17	24.0	21.6	19.2
65			65	1.08	26.0	23.4	20.8
70			70	1.00	28.0	25.2	22.4
75			75	0.93	30.0	27.0	24.0
80			80	0.87	32.0	28.8	25.6
90			90	0.77	36.0	32.4	28.8
100			100	0.70	40.0	36.0	32.0
125			125	0.56	50.0	45.0	40.0
SL 16×20			20	4.44	8.0	7.2	6.4
25			25	3.50	10.0	9.0	8.0
30			30	2.92	12.0	10.8	9.6
35			35	2.50	14.0	12.6	11.2
40			40	2.19	16.0	14.4	12.8
45			45	1.95	18.0	16.2	14.4
50			50	1.75	20.0	18.0	16.0
55			55	1.60	22.0	19.8	17.6
60			60	1.46	24.0	21.6	19.2
65			65	1.35	26.0	23.4	20.8
70			70	1.25	28.0	25.2	22.4
75			75	1.17	30.0	27.0	24.0
80			80	1.10	32.0	28.8	25.6
90			90	0.98	36.0	32.4	28.8
100			100	0.88	40.0	36.0	32.0
125			125	0.70	50.0	45.0	40.0





輕荷重
경하중
LIGHT LOAD

SL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ± 1%

呼稱 호 상 Model	외경 Outer Dia.	내경 Inner Dia.	자유장 Free length	정수 spring constant	30만 (0.3million) 변형량 Deflection	하중 Load	50만 (0.5 million) 변형량 Deflection	하중 Load	100만 (1 million) 변형량 Deflection	하중 Load
SL 35×35	35	17.5	35	11.78	14.0	165	12.6	149	11.2	132
40			40	10.31	16.0		14.4		12.8	
45			45	9.17	18.0		16.2		14.4	
50			50	8.25	20.0		18.0		16.0	
55			55	7.50	22.0		19.8		17.6	
60			60	6.87	24.0		21.6		19.2	
65			65	6.35	26.0		23.4		20.8	
70			70	5.89	28.01		25.2		22.4	
75			75	5.50	30.0		27.0		24.0	
80			80	5.15	32.0		28.8		25.6	
90			90	4.58	36.0		32.4		28.8	
100			100	4.12	40.0		36.0		32.0	
125			125	3.30	50.0		45.0		40.0	
150			150	2.75	60.0		54.0		48.0	
175			175	2.35	70.0		63.0		56.0	
200			200	2.06	80.0		72.0		64.0	
SL 40×40	40	20	40	13.50	16.0	216	14.4	194	12.8	173
45			45	12.00	18.0		16.2		14.4	
50			50	10.80	20.0		18.0		16.0	
55			55	9.82	22.0		19.8		17.6	
60			60	9.00	24.0		21.6		19.2	
65			65	8.31	26.0		23.4		20.8	
70			70	7.71	28.0		25.2		22.4	
75			75	7.20	30.0		27.0		24.0	
80			80	6.75	32.0		28.8		25.6	
90			90	6.00	36.0		32.4		28.8	
100			100	5.40	40.0		36.0		32.0	
125			125	4.32	50.0		45.0		40.0	
150			150	3.60	60.0		54.0		48.0	
175			175	3.08	70.0		63.0		56.0	
200			200	2.70	80.0		72.0		64.0	
SL 50×50	50	25	50	16.89	20.0	398	18.0	304	16.0	270
55			55	15.35	22.0		19.8		17.6	
60			60	14.08	24.0		21.6		19.2	
65			65	12.99	26.0		23.4		20.8	
70			70	12.07	28.0		25.2		22.4	
75			75	11.26	30.0		27.0		24.0	
80			80	10.56	32.0		28.8		25.6	
90			90	9.98	36.0		32.4		28.8	
100			100	8.45	40.0		36.0		32.0	
125			125	6.76	50.0		45.0		40.0	
150			150	5.63	60.0		54.0		48.0	
175			175	4.82	70.0		63.0		56.0	
200			200	4.22	80.0		72.0		64.0	
225			225	3.75	90.0		81.0		72.0	
250			250	3.38	100.0		90.0		80.0	

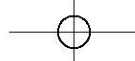
輕荷重
경하중
LIGHT LOAD

SL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ± 1%

呼稱 호 상 Model	외경 Outer Dia.	내경 Inner Dia.	자유장 Free length	정수 spring constant	30만 (0.3million) 변형량 Deflection	하중 Load	50만 (0.5 million) 변형량 Deflection	하중 Load	100만 (1 million) 변형량 Deflection	하중 Load
SL 60×60	60	30	60	20.25	24.0	486	21.6	437	19.2	389
70			70	17.35	28.0		25.2		22.4	
80			80	15.18	32.0		28.8		25.6	
90			90	13.50	36.0		32.4		28.8	
100			100	12.15	40.0		36.0		32.0	
125			125	9.72	50.0		45.0		40.0	
150			150	8.10	60.0		54.0		48.0	
175			175	6.94	70.0		63.0		56.0	
200			200	6.07	80.0		72.0		64.0	
225			225	5.40	90.0		81.0		72.0	
250			250	4.86	100.0		90.0		80.0	
275			275	4.42	110.0		99.0		88.0	
300			300	4.05	120.0		108.0		96.0	
350			350	3.47	140.0		126.0		112.0	
400			400	3.04	160.0		144.0		128.0	
SL 70×70	70	38.5	70	21.79	28.0	610	25.2	549	22.4	488
80			80	19.08	32.0		28.8		25.6	
90			90	16.94	36.0		32.4		28.8	
100			100	15.25	40.0		36.0		32.0	
125			125	12.20	50.0		45.0		40.0	
150			150	10.17	60.0		54.0		48.0	
175			175	8.71	70.0		63.0		56.0	
200			200	7.62	80.0		72.0		64.0	
225			225	6.78	90.0		81.0		72.0	
250			250	6.10	100.0		90.0		80.0	
275			275	5.55	110.0		99.0		88.0	
300			300	5.08	120.0		108.0		96.0	
350			350	4.36	140.0		126.0		112.0	





輕荷重
경하중
LIGHT LOAD

SL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ± 1%

呼稱 호 상 Model	外径 Outer Dia.	内径 Inner Dia.	自由長 Free length	定數 spring constant	30万 (0.3million) 変形量 Deflection	荷重 하중(kgf)	50万 (0.5 million) 変形量 Deflection	荷重 하중(kgf)	100万 (1 million) 変形量 Deflection	荷重 하중(kgf)
SL 18×20	18	9	20	5.42	8.0	43	7.2	39	6.4	34
25			25	4.30	10.0		9.0		8.0	
30			30	3.58	12.0		10.8		9.6	
35			35	3.07	14.0		12.6		11.2	
40			40	2.69	16.0		14.4		12.8	
45			45	2.39	18.0		16.2		14.4	
50			50	2.15	20.0		18.0		16.0	
55			55	1.96	22.0		19.8		17.6	
60			60	1.79	24.0		21.6		19.2	
65			65	1.66	26.0		23.4		20.8	
70			70	1.54	28.0		25.2		22.4	
75			75	1.44	30.0		27.0		24.0	
80			80	1.35	32.0		28.8		25.6	
90			90	1.20	36.0		32.4		28.8	
100			100	1.07	40.0		36.0		32.0	
125			125	0.86	50.0		45.0		40.0	
SL 20×20	20	10	20	6.81	8.0	54	7.2	49	6.4	43
25			25	5.40	10.0		9.0		8.0	
30			30	4.50	12.0		10.8		9.6	
35			35	3.86	14.0		12.6		11.2	
40			40	3.38	16.0		14.4		12.8	
45			45	3.00	18.0		16.2		14.4	
50			50	2.70	20.0		18.0		16.0	
55			55	2.45	22.0		19.8		17.6	
60			60	2.25	24.0		21.6		19.2	
65			65	2.08	26.0		23.4		20.8	
70			70	1.93	28.0		25.2		22.4	
75			75	1.80	30.0		27.0		24.0	
80			80	1.69	32.0		28.8		25.6	
90			90	1.50	36.0		32.4		28.8	
100			100	1.35	40.0		36.0		32.0	
125			125	1.08	50.0		45.0		40.0	
150			150	0.90	60.0		54.0		48.0	
175			175	0.77	70.0		63.0		56.0	
SL 22×25	22	11	25	6.70	10.0	67	9.0	60	8.0	54
30			30	5.60	12.0		10.8		9.6	
35			35	4.80	14.0		12.6		11.2	
40			40	4.20	16.0		14.4		12.8	
45			45	3.72	18.0		16.2		14.4	
50			50	3.35	20.0		18.0		16.0	
55			55	3.05	22.0		19.8		17.6	
60			60	2.80	24.0		21.6		19.2	
65			65	2.58	26.0		23.4		20.8	
70			70	2.40	28.0		25.2		22.4	
75			75	2.23	30.0		27.0		24.0	
80			80	2.10	32.0		28.8		25.6	
90			90	1.86	36.0		32.4		28.8	
100			100	1.68	40.0		36.0		32.0	
125			125	1.34	50.0		45.0		40.0	
150			150	1.12	60.0		54.0		48.0	
175			175	0.96	70.0		63.0		56.0	

▲ SAMSOL 60 125 △ 40.0 E2SSH
Logo Size Deflection Date

輕荷重
경하중
LIGHT LOAD

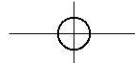
SL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ± 1%

呼稱 호 상 Model	外径 Outer Dia.	内径 Inner Dia.	自由長 Free length	定數 spring constant	30万 (0.3million) 変形量 Deflection	荷重 하중(kgf)	50万 (0.5 million) 変形量 Deflection	荷重 하중(kgf)	100万 (1 million) 変形量 Deflection	荷重 하중(kgf)
SL 25×25	25	12.5	25	8.40	10.0	84	9.0	76	8.0	67
30			30	7.00	12.0		10.8		9.6	
35			35	6.00	14.0		12.6		11.2	
40			40	5.25	16.0		14.4		12.8	
45			45	4.67	18.0		16.2		14.4	
50			50	4.20	20.0		18.0		16.0	
55			55	3.82	22.0		19.8		17.6	
60			60	3.50	24.0		21.6		19.2	
65			65	3.23	26.0		23.4		20.8	
70			70	3.00	28.0		25.2		22.4	
75			75	2.80	30.0		27.0		24.0	
80			80	2.63	32.0		28.8		25.6	
90			90	2.33	36.0		32.4		28.8	
100			100	2.10	40.0		36.0		32.0	
125			125	1.68	50.0		45.0		40.0	
150			150	1.40	60.0		54.0		48.0	
175			175	1.20	70.0		63.0		56.0	
SL 27×25	27	13.5	25	10.00	10.0	100	9.0	90	8.0	80
30			30	8.33	12.0		10.8		9.6	
35			35	7.14	14.0		12.6		11.2	
40			40	6.25	16.0		14.4		12.8	
45			45	5.56	18.0		16.2		14.4	
50			50	5.00	20.0		18.0		16.0	
55			55	4.55	22.0		19.8		17.6	
60			60	4.17	24.0		21.6		19.2	
65			65	3.85	26.0		23.4		20.8	
70			70	3.57	28.0		25.2		22.4	
75			75	3.33	30.0		27.0		24.0	
80			80	3.13	32.0		28.8		25.6	
90			90	2.78	36.0		32.4		28.8	
100			100	2.50	40.0		36.0		32.0	
125			125	2.00	50.0		45.0		40.0	
150			150	1.67	60.0		54.0		48.0	
175			175	1.43	70.0		63.0		56.0	
200			200	1.25	80.0		72.0		64.0	
SL 30×25	30	15	25	12.11	10.0	121	9.0	109	8.0	97
30			30	10.08	12.0		10.8		9.6	
35			35	8.65	14.0		12.6		11.2	
40			40	7.66	16.0		14.4		12.8	
45			45	6.73	18.0		16.2		14.4	
50			50	6.05	20.0		18.0		16.0	
55			55	5.50	22.0		19.8		17.6	
60			60	5.04	24.0		21.6		19.2	
65			65	4.65	26.0		23.4		20.8	
70			70	4.32	28.0		25.2		22.4	
75			75	4.03	30.0		27.0		24.0	
80			80	3.78	32.0		28.8		25.6	
90			90	3.36	36.0		32.4		28.8	
100			100	3.02	40.0		36.0		32.0	
125			125	2.42	50.0		45.0		40.0	
150			150	2.01	60.0		54.0		48.0	
175			175	1.72	70.0		63.0		56.0	
200			200	1.51	80.0		72.0		64.0	

▲ SAMSOL 60 125 △ 40.0 E2SSH
Logo Size Deflection Date

SAMSOL DIE SPRINGS 25



Special 輕荷重
Special 경하중
Special LIGHT LOAD

SSL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ±1%

呼稱 호 상 Model	외경 외경(mm) Outer Dia.	내경 내경(mm) Inner Dia.	자유장 자유장(mm) Free length	定數 정수(kg/mm) spring constant	30萬 (0.3million) 변형량 변형량(mm) Deflection	50萬 (0.5 million) 변형량 변형량(mm) Deflection	100萬 (1 million) 변형량 변형량(mm) Deflection
SSL 20×25			25	5.40	10.0	9.0	8.0
30			30	4.50	12.0	10.8	9.6
35			35	3.86	14.0	12.6	11.2
40			40	3.38	16.0	14.4	12.8
45			45	3.00	18.0	16.2	14.4
50			50	2.70	20.0	18.0	16.0
55			55	2.45	22.0	19.8	17.6
60	20	10	60	2.25	24.0	21.6	19.2
65			65	2.06	26.0	23.4	20.8
70			70	1.93	28.0	25.2	22.4
75			75	1.80	30.0	27.0	24.0
80			80	1.69	32.0	28.8	25.0
90			90	1.50	36.0	32.4	28.8
100			100	1.35	40.0	36.0	32.0
125			125	1.08	50.0	45.0	40.0
SSL 25×25			25	6.70	10.0	9.0	8.0
30			30	5.58	12.0	10.8	9.6
35			35	4.79	14.0	12.6	11.2
40			40	4.19	16.0	14.4	12.8
45			45	3.72	18.0	16.2	14.4
50			50	3.35	20.0	18.0	16.0
55			55	3.05	22.0	19.8	17.6
60	25	12.5	60	2.79	24.0	21.6	19.2
65			65	2.58	26.0	23.4	20.8
70			70	2.39	28.0	25.2	22.4
75			75	2.23	30.0	27.0	24.0
80			80	2.09	32.0	28.8	25.0
90			90	1.86	36.0	32.4	28.8
100			100	1.68	40.0	36.0	32.0
125			125	1.34	50.0	45.0	40.0
150			150	1.12	60.0	54.0	48.0
SSL 30×25			25	10.00	10.0	9.0	8.0
30			30	8.33	12.0	10.8	9.6
35			35	7.14	14.0	12.6	11.2
40			40	6.25	16.0	14.4	12.8
45			45	5.56	18.0	16.2	14.4
50			50	5.00	20.0	18.0	16.0
55			55	4.55	22.0	19.8	17.6
60	30	16	60	4.17	24.0	21.6	19.2
65			65	3.85	26.0	23.4	20.8
70			70	3.57	28.0	25.2	22.4
75			75	3.33	30.0	27.0	24.0
80			80	3.13	32.0	28.8	25.0
90			90	2.78	36.0	32.4	28.8
100			100	2.50	40.0	36.0	32.0
125			125	2.00	50.0	45.0	40.0
150			150	1.67	60.0	54.0	48.0
175			175	1.43	70.0	63.0	56.0

Special 輕荷重
Special 경하중
Special LIGHT LOAD

SSL

하중 荷重 ±10%
직각도 直角度 2° 以下
자유장 自由長 50m/m 以下 ±0.5m/m
55m/m 以上 ±1%

呼稱 호 상 Model	외경 외경(mm) Outer Dia.	내경 내경(mm) Inner Dia.	자유장 자유장(mm) Free length	定數 정수(kg/mm) spring constant	30萬 (0.3million) 변형량 변형량(mm) Deflection	50萬 (0.5 million) 변형량 변형량(mm) Deflection	100萬 (1 million) 변형량 변형량(mm) Deflection
SSL 35×40			40	6.88	16.0	14.4	12.8
45			45	6.11	18.0	16.2	14.4
50			50	5.50	20.0	18.0	16.0
55			55	5.00	22.0	19.8	17.6
60			60	4.58	24.0	21.6	19.2
65			65	4.23	26.0	23.4	20.8
70			70	3.93	28.0	25.2	22.4
75	35	21	75	3.67	30.0	27.0	24.0
80			80	3.44	32.0	28.8	25.6
90			90	3.06	36.0	32.4	28.8
100			100	2.75	40.0	36.0	32.0
125			125	2.20	50.0	45.0	40.0
150			150	1.83	60.0	54.0	48.0
175			175	1.57	70.0	63.0	56.0
200			200	1.38	80.0	72.0	64.0
SSL 40×50			50	7.85	20.0	18.0	16.0
60			60	6.54	24.0	21.6	19.2
70			70	5.61	28.0	25.2	22.4
80			80	4.91	32.0	28.8	25.6
90			90	4.36	36.0	32.4	28.8
100	40	25.7	100	3.93	40.0	36.0	32.0
125			125	3.14	50.0	40.0	40.0
150			150	2.62	60.0	54.0	48.0
175			175	2.24	70.0	63.0	56.0
200			200	1.96	80.0	72.0	64.0
250			250	1.57	100.0	90.0	80.0
SSL 50×60			60	6.13	24.0	21.6	19.2
70			70	5.25	28.0	25.2	22.4
80			80	4.59	32.0	28.8	25.6
90			90	4.08	36.0	32.4	28.8
100			100	3.68	40.0	36.0	32.0
125	50	31	125	2.94	50.0	45.0	40.0
150			150	2.45	60.0	54.0	48.0
175			175	2.10	70.0	63.0	56.0
200			200	1.84	80.0	72.0	64.0
250			250	1.47	100.0	90.0	80.0
300			300	1.23	120.0	108.0	96.0
SSL 60×90			90	7.64	36.0	32.4	28.8
100			100	6.88	40.0	36.0	32.0
125			125	5.50	50.0	45.0	40.0
150	60	36	150	4.58	60.0	54.0	48.0
175			175	3.93	70.0	63.0	56.0
200			200	3.44	80.0	72.0	64.0
250			250	2.75	100.0	90.0	80.0
300			300	2.29	120.0	108.0	96.0