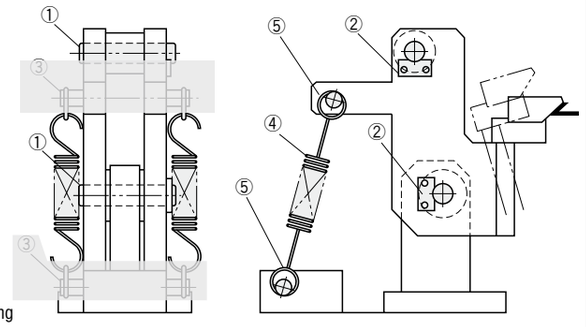
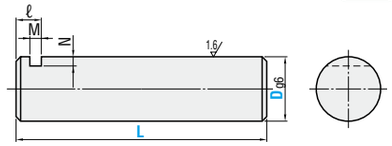
■Use these products for standardizing hemming dies.

①Hinge pin
②Hinge pin key
③Tension spring pin
④Tension spring
⑤Ring for tension spring



Hinge pins

CLKGH RoHS



M S45C
H 55HRC～
(Induction hardened)

D_{g6}		ℓ	M	N	Catalog No. Type	D_{g6}	L 1mm increments	Base unit price 1～9 pieces
25	−0.007 −0.020	10	5	4	CLKGH	25	50～150	Quotation
							151～300	
30						30	50～150	
							151～300	
35	−0.009 −0.025			5		35	80～150	
							151～300	
							301～400	
40						40	80～150	
							151～300	
							301～400	
45						45	100～150	
							151～300	
							301～500	
50						50	100～150	
							151～300	
							301～500	

Order — Catalog No. — L
CLKGH 30 — 157

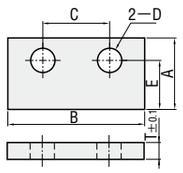
Price: Quotation

Days to Ship: Quotation

Hinge pin keys

RoHS

HK

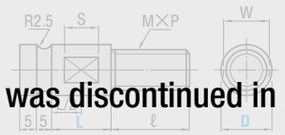


M SS400

Tension spring pins

RoHS

SSPO



WSPO

M S45C
S Black oxide (Fe_3O_4)

This product was discontinued in 2017.

Catalog No. : SSPO WSPO

A	B	C	D	E	T	Catalog No. Type	Catalog No. No.	Base unit price 1～19 pieces
20	35	18	6.5	13	4.5	HK	7	Quotation
25	40	20		15			8	

S	W	M×P	ℓ	Catalog No. Type	D	L	Base unit price 1～19 pieces
8	14	12×1.75	24	SSPO	16	12 15 18	Quotation
	17	16×2.0	32		20		
10	22	20×2.5	40		25		
8	14	12×1.75	24	WSPO	16	25 30	
	17	16×2.0	32		20	25 30 35	
10	22	20×2.5	40		25	35 45	

Order — Catalog No.
HK 7

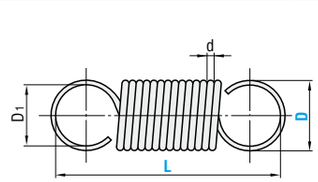
Price: Quotation

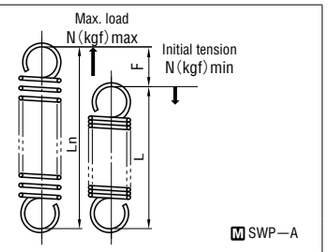
Days to Ship: Quotation

Tension springs

RoHS

AWL
AWM
AWH
AWB





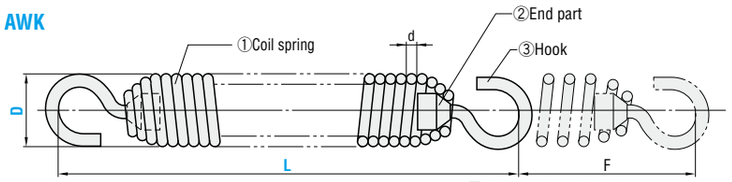
Maximum load N{kgf} max. ±10%

M SWP—A

Tension springs

RoHS

AWK

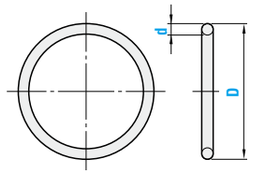


M ① Coil spring SWP—A
② End part S45C
③ Hook part SWP—A (wire diameter ϕ 6)

Tension spring rings

RoHS

BSR



M SS400
S Black oxide (Fe_3O_4)

■Tension springs

D_1	d	Spring constant N/mm {kgf/mm}	F max.	Maximum load N{kgf}	Initial tension N{kgf}	Catalog No. Type D—L	Base unit price 1～19 pieces
21 (±0.4)	2	0.95 {0.097}	55.22	61.98 {6.32}	9.22 {0.94}	AWL25 — 68	Quotation
		0.60 {0.061}	87.94			83	
		0.39 {0.040}	132.93			105	
		0.25 {0.026}	210.64			143	
		0.16 {0.016}	333.34			203	
26.8 (±0.5)	2.6	1.30 {0.133}	64.94	101.40 {10.34}	16.57 {1.69}	AWL32 — 86.1	
		0.82 {0.084}	103.42			106.5	
		0.54 {0.055}	156.33			135.5	
		0.34 {0.035}	247.72			184.9	
		0.22 {0.022}	392.02			262.9	
19.8 (±0.4)	2.6	2.95 {0.301}	35.10	132.39 {13.50}	28.73 {2.93}	AWM25 — 72.1	
		1.86 {0.190}	55.90			92.5	
		1.23 {0.125}	84.50			121.5	
		0.77 {0.079}	133.90			170.9	
		0.49 {0.050}	211.90			248.9	
25.6 (±0.5)	3.2	3.19 {0.325}	45.50	184.66 {18.83}	39.42 {4.02}	AWM32 — 91.2	
		2.00 {0.204}	72.46			116.8	
		1.32 {0.135}	109.53			152.0	
		0.83 {0.085}	173.56			212.8	
		0.53 {0.054}	274.66			308.8	

D_1	d	Spring constant N/mm {kgf/mm}	F max.	Maximum load N{kgf}	Initial tension N{kgf}	Catalog No. Type D—L	Base unit price 1～19 pieces
18.6 (±0.4)	3.2	7.37 {0.752}	23.76	242.22 {24.70}	67.08 {6.84}	AWH25 — 77.2	Quotation
		4.63 {0.472}	37.84			102.8	
		3.06 {0.312}	57.20			138.0	
		1.93 {0.197}	90.64			198.8	
		1.22 {0.124}	143.44			294.8	
24 (±0.5)	4	8.48 {0.865}	29.97	353.53 {36.05}	99.44 {10.14}	AWH32 — 98	
		5.33 {0.543}	47.73			130	
		3.52 {0.359}	72.15			174	
		2.23 {0.227}	114.33			250	
		1.40 {0.143}	180.93			370	
17 (±0.4)	4	20.00 {2.040}	15.26	466.99 {47.62}	161.91 {16.51}	AWB25 — 84	
		12.55 {1.280}	24.30			116	
		8.31 {0.847}	36.73			160	
		5.25 {0.535}	58.20			236	
		3.31 {0.338}	92.10			356	

● Load {kgf}=Load {N} × 0.101972
The initial tension values are provided only for reference.

kgf=N×0.101972

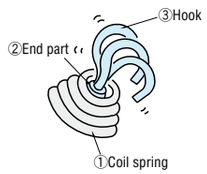
Wire diameter d	Spring constant N/mm {kgf/mm}	F=L×23% Fmm	F=L×23% N Load {kgf}	F=L×25% Fmm	F=L×25% N Load {kgf}	Initial tension N Load {kgf}	Identifying color	Catalog No. Type D—L	Base unit price 1～19 pieces
5.0	12.55 {1.28}	42.1	703.1 {71.7}	45.7	748.3 {76.3}	174.8 {17.84}	Brown	AWK 34—183	Quotation
	10.91 {1.11}	45.5	671.2 {68.3}	49.5	714.8 {72.8}		Red	198	
	10.04 {1.03}	47.8	654.7 {67.1}	52.0	696.9 {71.4}		Black	208	
	9.30 {0.95}	50.1	640.7 {65.4}	54.5	681.6 {69.6}		Yellow	218	
	8.66 {0.88}	52.4	628.6 {64.0}	57.0	668.4 {68.0}		Light blue	228	
Operating count		1,000,000		500,000					

■Tension spring rings

Catalog No. Type	Catalog No. d	D	Base unit price 1～19 pieces
BSR	4	34	Quotation
		40	
	5	40	

Order — Catalog No.
AWL25—105
AWK34—183
BSR4—40

■Features
Because the hook ③ and the coil spring ① are separate parts, this product is more resistant to fatigue fracture caused by axial rotation and uneven load.
The coil spring ① and the end part ② are in linear contact, providing high durability.



Days to Ship: Quotation

Price: Quotation

COMPONENTS FOR AUTOMOTIVE DIES