



CÔNG TY TNHH THIẾT BỊ ĐÔNG DƯƠNG

Chuyên Linh Kiện Khuôn Mẫu

CATALOGUE 2021





CÔNG TY TNHH THƯƠNG MẠI THIẾT BỊ ĐÔNG DƯƠNG
DONG DUONG EQUIPMENT TRADING COMPANY LIMITED

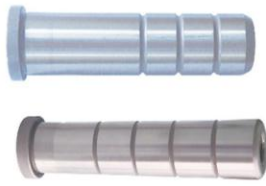
Địa Chỉ: Số 3, Liền Kề 4A KĐT Mỗ Lao, Phường Mỗ Lao, Quận Hà Đông, HN
MST: 0108582106
Tel : (024) 7300 1868
Email: info@thietbidongduong.com
Website: Dongduong-co.vn

LINH KIỆN KHUÔN MẪU ĐÔNG DƯƠNG



Tel: (024) 7300.1868

Trang 31



GPJL

Trang 32



GBAM GBBM

Trang 33



EGB

Trang 34



GBAC GBBC

Trang 35



APD

Trang 36



RP

Trang 37

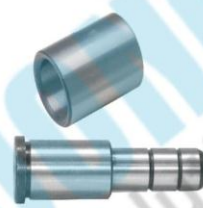


Trang 38



GA GP

Trang 39



GB GBD

Trang 40



GPAT



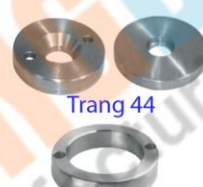
A C B
Trang 41



D
Trang 42



Trang 43



LRA - LRB - LRC
Trang 44



DT Trang 45



PL Trang 46



Trang 47



Trang 48



Trang 49



Trang 50



Trang 51



Trang 52



Trang 53
Trang 56-57



Trang 58
EPj



EPN

Trang 59



45C



Trang 58
EPL



Trang 58
EPK

LINH KIỆN KHUÔN MẪU ĐÔNG DƯƠNG



Trang 60



Trang 61



Trang 62



Trang 63



Trang 64



Trang 65



Trang 66



Trang 67



Trang 68



Trang 70



Trang 73



Trang 76



Trang 76



Trang 77



Trang 78



Trang 78



Trang 79



Trang 79



Trang 80



Trang 80



Trang 82



Trang 81



Tel: (024) 7300.1868

LINH KIỆN KHUÔN MẪU ĐÔNG DƯƠNG

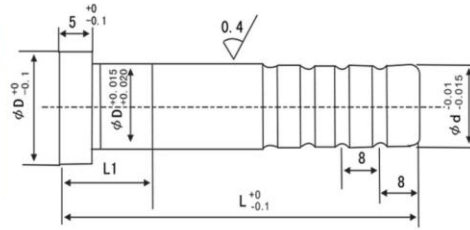
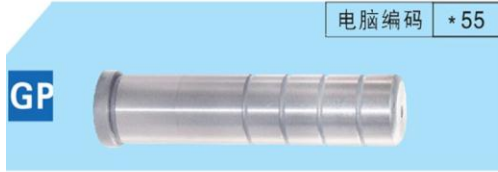


TF TL TM TH TB

Trang 84 - 89 Trang 90 - 95 Trang 96-100 Trang 101 - 106 Trang 107 - 112

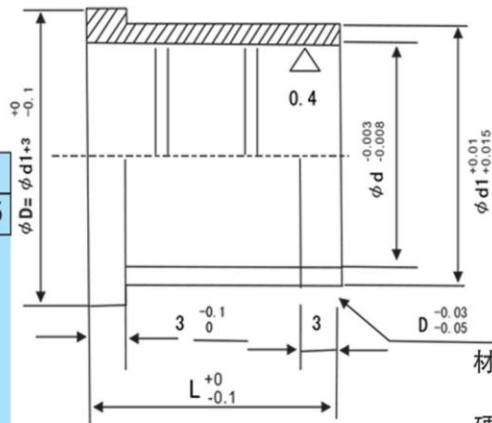
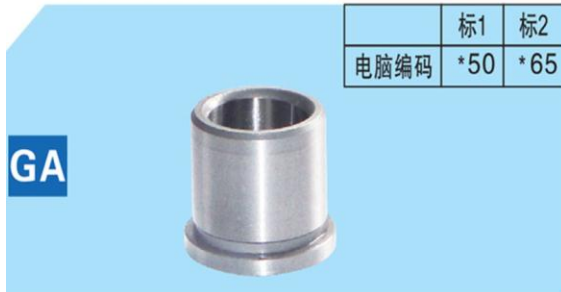
Tel: (024) 7300.1868





材质: 20Cr或40Cr
(渗碳热处理)
硬度: HRC60°-62°

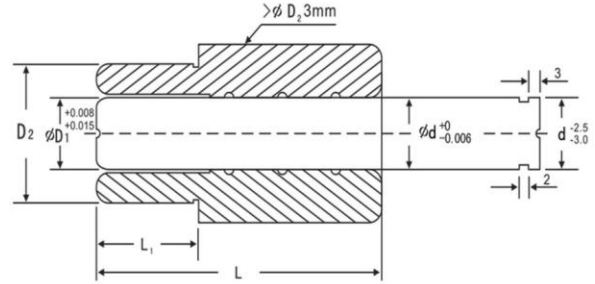
代号	d	D	L1	L																				
				40	45	50	55	60	65	70	75	80	90	100	110	120	130	140	150	160	170	180	190	200
GP	10	12	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	12	14	18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	14	16		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
	16	18		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	18	20		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	20	22		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	25	28		23	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



材质: 20Cr或40Cr
(渗碳热处理)
硬度: HRC60°-62°

代号	d	d1		L										
		标1	标2	15	20	25	30	35	40	45	50	55	60	
GA	10	14	14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	17	18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	14	19	20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	16	22	22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	18	23	24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	20	25	28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	25	32	32	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

(SGP)

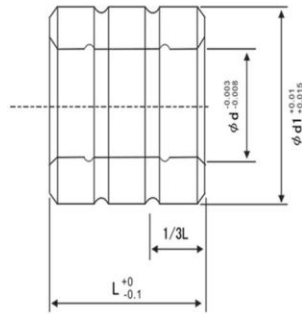
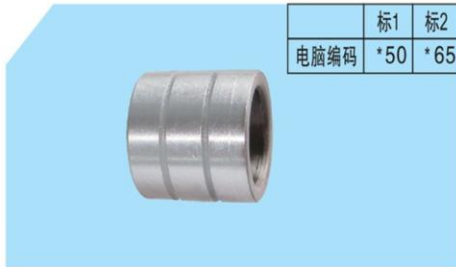


(注：非标可定制)

材质：20Cr或40Cr（渗碳热处理） 硬度：HRC60°-62°

导柱外径 d	16	18	19	20	22	25	28	32	35	38	40	45	50
D2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
L1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
适用机架 (供参考)	1#	2#	2#	3#	3#-4#	5#	5#-6#	6#-7#	7#-8#	8#			

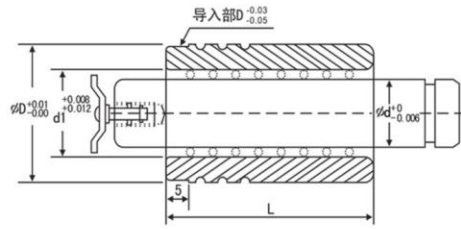
精密GB辅助导套



材质：20Cr或40Cr
(渗碳热处理)
硬度：HRC60°-62°

代号	d	d1		L									
		标1	标2	15	20	25	30	35	40	45	50	55	60
GB	10	14	14	✓	✓	✓	✓	✓	✓				
	12	17	18	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	14	19	20	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	16	22	22	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	18	23	24	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	20	25	28	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	25	32	32	✓	✓	✓	✓	✓	✓	✓	✓	✓	

(SRP)

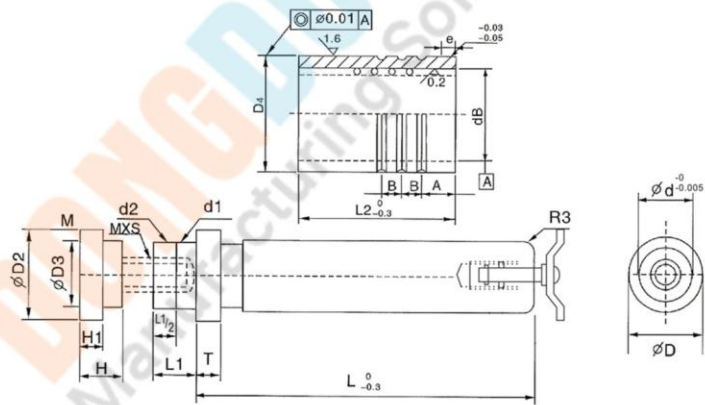


(注: 非标可定制)

材质: SUJ2或40Cr 硬度: HRC62°-64°

d	16	18	19	20	22	25	28	32	38	45	50
d1	22	24	25	26	28	31	36	40	48	55	60
D	32	34	36(37)	37(38)	38(40)	44	48	54	63	74	78
L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

TRP 外导柱组件



材质: SUJ2或40Cr 度: HRC62°-64°

尺寸	d1 公差	d2 公差	D	T	L1	MxS	D2	D3	H	H1	DB		D4		e	L2	B	A
											尺寸	公差	尺寸	紧密型 公差				
19	+0.005 +0.010	-0.03 -0.05	29	5	15	M6x15	28	18.5	14	7	25	-0.018 -0.022	37	-0 -0.008	4	70	6	10
20			29			M8x20	28	19.5			26		37					
22			31			M8x20	30	21.5			28		38(40)					
25			35	8	16	18	35	24.5	31	44(45)								
28			38	10	20	M10x25	36	27.5	16	8	36	-0.020 -0.028	48(50) 54(55)					
32			44		23	M10x25	40	31.5	40	40	54(55)							
38			52	12	27	M12x27	46	37.5	18	10	48	-0.025 -0.030	63(64) 74					
45			59		32	M12x27	53	44.5			55	74						
50			66	15	35	M14x35	58	49.5	20	12	60	-0.035 -0.040	78					
60			76		38		M14x35	68			59.5	70	88					



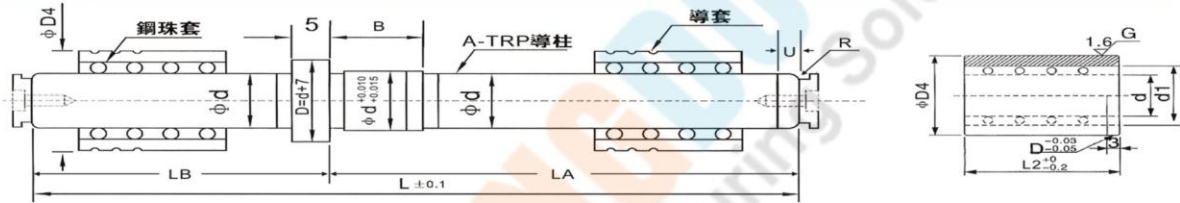
电脑编码

规格	单位	价格	备注
GPφ12x50/55 GA\GBφ12xφ17x17	套	3.0元/套	一支导柱 配 一个导套
GPφ14x45/50/55/60 GA\GBφ14xφ19x17/20	套	3.5元/套	一支导柱 配 一个导套
GPφ16x50/55/60/70 GA\GBφ16xφ22x18/20	套	4.5元/套	一支导柱 配 一个导套



电脑编码 + 60

材质: SUJ2或Gr15 度: HRC62°-64°



d	LA	LB	B	d1	D4	U	R	Mx	L2	L/单价					
										100	110	120	130	140	150
16	70	30~60	10~30	22	28	3	2	M6x25 P1.0	35/40	✓	✓	✓	✓	✓	✓
	80	30~70								✓	✓	✓	✓	✓	✓
	90	40~80								✓	✓	✓	✓	✓	✓
20	80	40~70		26	34	4	3	M8x25 P1.25	35/40	✓	✓	✓	✓	✓	✓
	90	40~70								✓	✓	✓	✓	✓	✓
	100	50~80								✓	✓	✓	✓	✓	✓
25	90	50~70	31	40	4	3	M8x25 P1.25	35/40	✓	✓	✓	✓	✓	✓	
	100	50~80							✓	✓	✓	✓	✓	✓	
	110	60~90							✓	✓	✓	✓	✓	✓	



(活动压盖)



(底座固定压块)

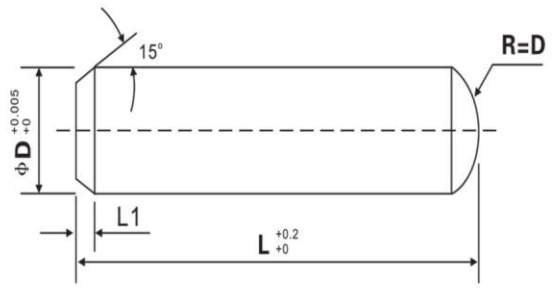


(固定压盖)



(弹簧)

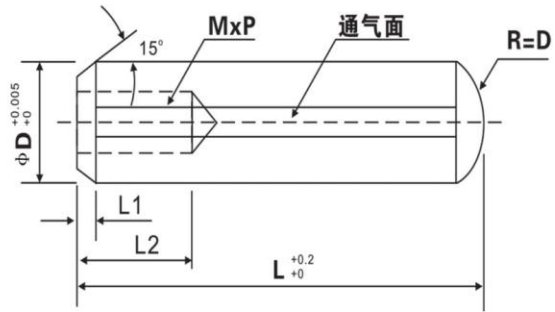
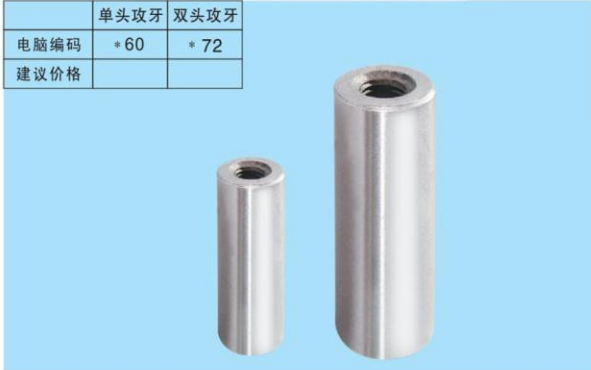
电脑编码	* 60
建议价格	



材质: 20Cr或40Cr (渗碳热处理)
 硬度: HRC58°-62°

直径 L	D								
	D4	D5	D6	D8	D10	D12	D14	D16	D20
	L1=1.0		L1=1.5		L1=2.0		L1=2.5		L1=3.0
20			✓	✓	✓				
25			✓	✓	✓				
30	✓	✓	✓	✓	✓	✓	✓	✓	
35	✓	✓	✓	✓	✓	✓	✓	✓	
40	✓	✓	✓	✓	✓	✓	✓	✓	✓
45	✓	✓	✓	✓	✓	✓	✓	✓	✓
50	✓	✓	✓	✓	✓	✓	✓	✓	✓
55	✓	✓	✓	✓	✓	✓	✓	✓	✓
60	✓	✓	✓	✓	✓	✓	✓	✓	✓
65	✓	✓	✓	✓	✓	✓	✓	✓	✓
70	✓	✓	✓	✓	✓	✓	✓	✓	✓
75	✓	✓	✓	✓	✓	✓	✓	✓	✓
80	✓	✓	✓	✓	✓	✓	✓	✓	✓
90			✓	✓	✓	✓	✓	✓	✓
100			✓	✓	✓	✓	✓	✓	✓
110						✓	✓	✓	✓
120						✓	✓	✓	✓
130						✓	✓	✓	✓
140						✓	✓	✓	✓
150						✓	✓	✓	✓

	单头攻牙	双头攻牙
电脑编码	* 60	* 72
建议价格		



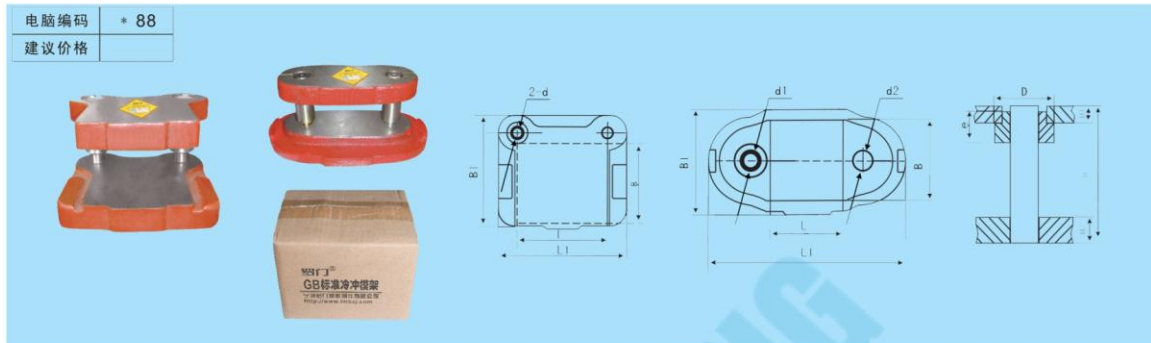
材质: 20Cr或40Cr (渗碳热处理)
硬度: HRC58°-62°

直径 参数 L 价格	D6	D8	D10	D12	D14	D16	D20
	M4x0.7	M5x0.8	M6x1.0		M8x1.25		M10x1.5
	L1=1.5	L1=2.0		L1=2.5		L1=3.0	
	L2=8		L2=10	L2=15			L2=18
20	✓	✓	✓				
25	✓	✓	✓				
30	✓	✓	✓			✓	
35	✓	✓	✓		✓	✓	
40	✓	✓	✓		✓	✓	✓
45	✓	✓	✓		✓	✓	✓
50	✓	✓	✓	✓	✓	✓	✓
55	✓	✓	✓	✓	✓	✓	✓
60	✓	✓	✓	✓	✓	✓	✓
65	✓	✓	✓	✓	✓	✓	✓
70	✓	✓	✓	✓	✓	✓	✓
75	✓	✓	✓	✓	✓	✓	✓
80	✓	✓	✓	✓	✓	✓	✓
90	✓	✓	✓	✓	✓	✓	✓
100	✓	✓	✓	✓	✓	✓	✓
110				✓	✓	✓	✓
120				✓	✓	✓	✓
130				✓	✓	✓	✓
140				✓	✓	✓	✓
150				✓	✓	✓	✓

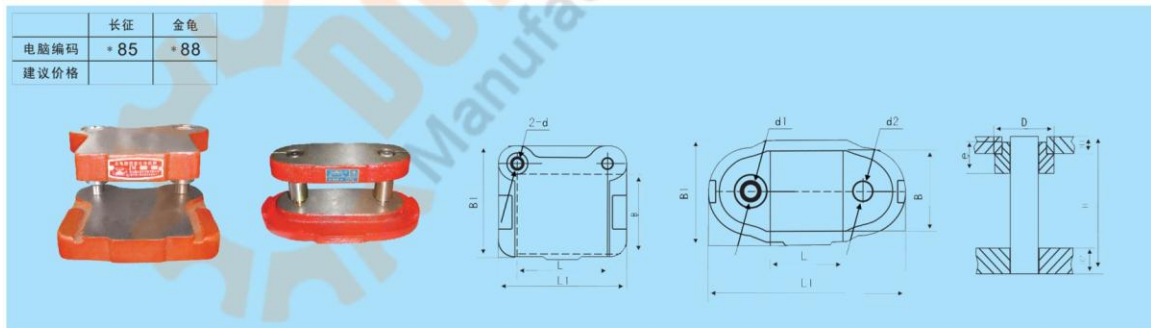


STT	DxdxL	Nhựa	Bạc	Đồng	STT	DxdxL	Nhựa	Bạc	Đồng
1	16x2x30 x35 x40	✓	✓	✓	10	31x4x50 x60 x70 x80 x90 x100	✓	✓	✓
2	16x3x25 x30 x35 x40	✓	✓	✓	11	32x4x50 x60 x70 x80 x90	✓	✓	✓
3	18x3x40 x50 x60	✓	✓	✓	12	35x5x70 x80 x90 x100	✓	✓	✓
4	19x3x40 x50 x60 x70	✓	✓	✓	13	36x5x70 x80 x90 x100	✓	✓	✓
5	20x3x40 x50 x60	✓	✓	✓	14	38x5x50 x60 x70 x80 x90 x100	✓	✓	✓
6	22x3x40 x50 x60 x70	✓	✓	✓	15	40x5x70 x80 x90 x100	✓	✓	✓
7	25x3x40 x50 x60 70 x80	✓	✓	✓	16	45x5x70 x80 x90 x100	✓	✓	✓
8	28x3x50 x60 x70 x80 x90	✓	✓	✓	17	50x5x70 x80 x90 x100	✓	✓	✓
9	28x4x50 x60 x70 x80	✓	✓	✓					

LINH KIỆN KHUÔN MẪU ĐÔNG DƯƠNG

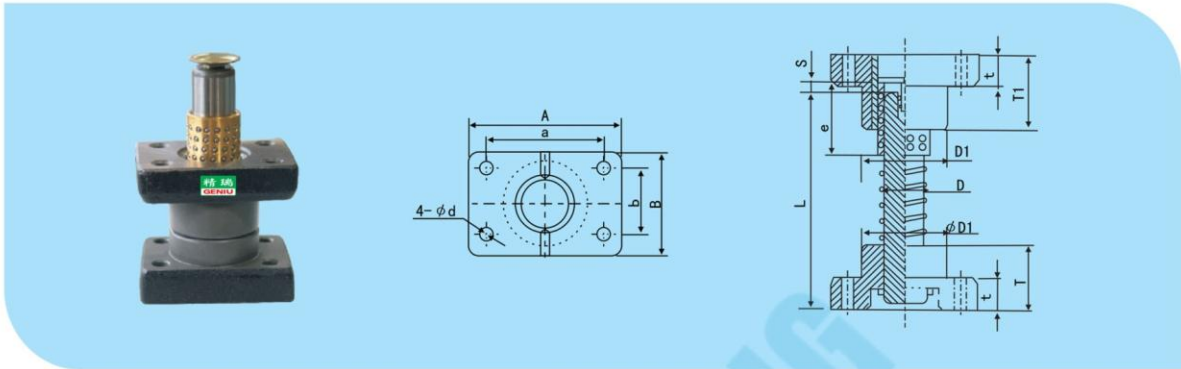


	L X B	H	H1	H2	d	d1	d2	e	D	L1	B1	L1	B1	
1	63X50	100-115	20	25	90	17	17	18	60	27	120	103	188	95
2	80X63	110-130	25	30	100	18	17	18	65	27	146	116	230	119
3	100X80	130-150	25	30	120	23	23	24	65	34	174	145	265	143
4	125X100	140-165	30	35	130	23	23	24	80	34	200	168	306	173
5	140X125	160-190	35	40	150	24	23	24	85	34	226	191	340	199
6	160X140	160-190	35	40	150	31	31	32	85	46	246	211	360	219
7	200X160	180-220	40	45	170	32	31	32	100	46	294	240	415	243
8	250X200	200-240	45	50	190	32	31	32	100	46	340	283	480	283
9	315X250	245-280	50	60	230	38	37	38	125	52	415	348	595	353
10	400X315	245-290	55	65	230	38	37	38	140	52	500	413	705	428



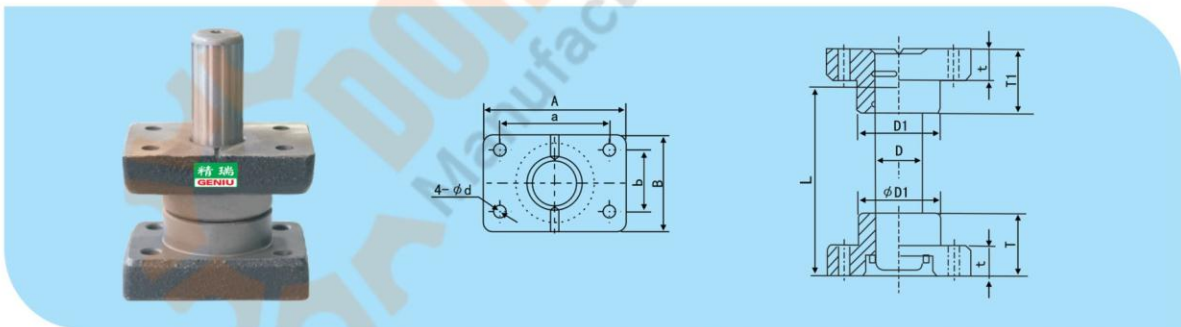
	L X B	H	H1	H2	d	d1	d2	e	D	L1	B1	L1	B1	
1	63X50	100-115	20	25	90	17	17	18	60	27	120	103	188	95
2	80X63	110-130	25	30	100	18	17	18	65	27	146	116	230	119
3	100X80	130-150	25	30	120	23	23	24	65	34	174	145	265	143
4	125X100	140-165	30	35	130	23	23	24	80	34	200	168	306	173
5	140X125	160-190	35	40	150	24	23	24	85	34	226	191	340	199
6	160X140	160-190	35	40	150	31	31	32	85	46	246	211	360	219
7	200X160	180-220	40	45	170	32	31	32	100	46	294	240	415	243
8	250X200	200-240	45	50	190	32	31	32	100	46	340	283	480	283
9	315X250	245-280	50	60	230	38	37	38	125	52	415	348	595	353
10	400X315	245-290	55	65	230	38	37	38	140	52	500	413	705	428

Tel: (024) 7300.1868



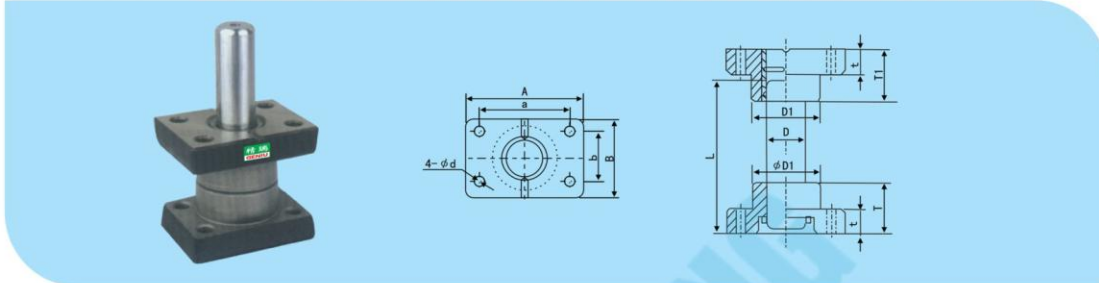
代号	D	A	B	a	b	d	T	T1	t	D1	e	S
TUR	19	74	54	50	36	8.5	35	45	20	44	43	0-16
	25	88	64	62	42	11	40	50	20	54	48	0-19
	31	110	80	78	48	11	45	55	25	66	53	0-19
	38	126	92	90	58	13	60	70	30	78	68	0-26
	45	132	98	96	64	13	65	75	30	84	73	0-28
	50	152	106	110	66	17	75	85	35	92	83	0-33

独立导柱 (TU)



代号	D	A	B	a	b	d	T	T1	t	D1
TU	19	60	40	46	26	6.5	30	30	15	34
	25	74	54	50	36	8.5	35	35	20	44
	31	88	64	62	42	11	40	40	20	54
	38	110	80	78	48	11	45	45	25	66
	45	126	92	90	58	13	60	60	30	78
	50	132	98	96	64	13	65	65	30	84
	60	152	106	110	66	17	75	75	35	92
	80	176	134	122	90	17	95	105	45	116

独立导柱 (TUB)



	D	A	B	a	b	d	T	T1	t	D1
TUB	19	74	54	50	36	8.5	35	35	20	44
	25	88	64	62	42	11	40	40	20	54
	31	110	80	78	48	11	45	45	25	66
	38	126	92	90	58	13	60	60	30	78
	45	132	98	96	64	13	65	65	30	84
	50	152	106	110	66	13	75	75	35	92

价格表

	TU	TUB	TUR
电脑编码	* 60	* 60	* 60

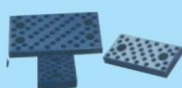
(D)	(L)	TU	TUB	TUR
16/18/19	80-130	✓	✓	✓
	140-160	✓	✓	✓
20	80-110			
	120-130			
	140-160			
22	80-100	✓	✓	
	120-130	✓	✓	
	140-170	✓	✓	
25	100-120	✓	✓	✓
	130-150	✓	✓	✓
	160-200	✓	✓	✓
28	100-130	✓	✓	✓
	140-160	✓	✓	✓
	170-200	✓	✓	✓
31	120-130	✓	✓	✓
	140-180	✓	✓	✓
	190-220	✓	✓	✓
38	150-160	✓	✓	✓
	170-210	✓	✓	✓
	220-250	✓	✓	✓
45	160-180	✓	✓	✓
	190-220	✓	✓	✓
	230-250	✓	✓	✓
50	260-300	✓	✓	✓
	160-180	✓	✓	✓
	190-220	✓	✓	✓
60	230-250	✓	✓	✓
	260-300	✓	✓	✓
	210-220	✓	✓	✓

含油导板

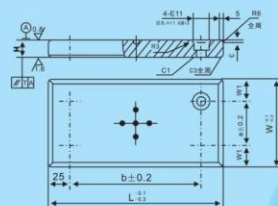
电脑编码 * 65
建议价格



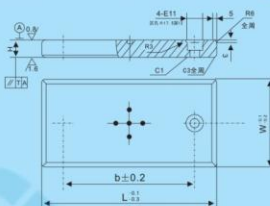
铜导板



铸铁导板



CZA型



CZB型

CZB		
W	L	b
28	75	45
	100	50
	125	75
	150	100
	200	150
38	75	45
	100	50
	125	75
	150	100
48	75	45
	100	50
	125	75
	150	100
58	200	150
	75	45
	100	50
	125	75
	150	100
75	100	50
	75	25
	125	75
	150	100
	200	150

CZA				
W	L	A	b	W1
100	100	50	50	25
	125		75	
	150		100	
	200		150	
	250		200	
125	125	50	75	37.5
	150		100	
	200		150	
150	250	100	200	25
	150		100	
	200		150	
	250		200	
200	300	150	250	25
	200		150	
	250		200	
	300		250	

技术条件:

- 1、零件图上未注公差尺寸的极限偏差按GB/T1804-92执行。
- 2、含油导板上下表面的平行度(T值)按下表执行:

基本尺寸	T	基本尺寸	T	基本尺寸	T
≤63	0.008	>100~160	0.012	>250~400	0.02
>63~100	0.01	>160~250	0.015		

3、含油导板厚度H值 (mm) :

铸铁HT250			
CZA	CZB	CZA I	CZB I
20±0.01		20±0.25	

注: CZA I、CZB I 型的技术参数除H值与CZB、CZB I 不同外, 基余一律分别与CZA、CZB型相同

4、基本材料 (HT250) 性能:

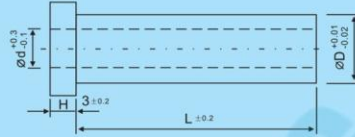
项目	单位	性能
密度	g/cm ³	>7.35
抗拉强度	Mpa	250~350
延伸率	%	12
硬度	HB	160~220
线膨胀系数	10 ⁻⁶ /°C	10
限界温度	°C	400



型号	M2	G03	G11	G12	G19	G20	G20-X	G21	G22	G23
吸力 (kg)	0.5-1.8	4-7.5	5	3	0.5-2	0.2-4	0.2-6	0.5-2.3	1.5-4.5	3.5-7
单价	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
备注										

等高套

长度	20-60	65-100
电脑编码	*25	*30
建议价格		

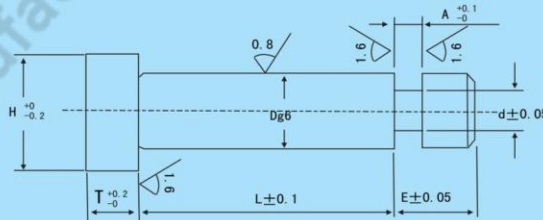


材质: SUJ-2
硬度: HRC55°±2°

d	D	H	L																
			20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
6	9	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	11		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	13		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

浮升梢

电脑编码	*70
建议价格	

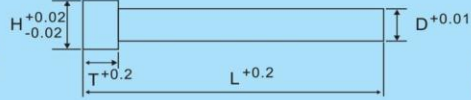


材质: SKD-11
硬度: HRC60°-62°(用SKH-51材料加价一倍)

型号	D	公差 _{g6}	H	T	D	E	A	40L以下	50L	60L	70L
GLS	4	-0.004 -0.012	6	3	2	5	0.5 0.8	✓	X	X	X
	6		8		3.6	7	0.8 1.0 1.5	✓	X	X	X
	8	-0.005 -0.014	10		5	7	1.0 1.6 2.0	✓	X	X	X
	10		13		6	7	1.6 2.0 2.5	✓	✓	X	X
	13	-0.006 -0.017	16		7	7	2.0 2.5 3.5	✓	✓	X	X
	16		19		8	12	2.5 3.6 4.0	✓	✓	✓	X
	20	-0.007 -0.020	23		10	12	3.6 4.0 5.0	✓	✓	✓	✓

SKH-51冲针

电脑编码 *75
建议价格

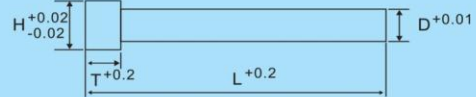


材质: SKH-51
硬度: HRC62°-64°

H	T	长度		60	80	H	T	长度		60	80
		D	单价					D	单价		
1.5	5	0.5-0.9		✓	✓	8.0	5	7.0-7.4		✓	✓
2.0		1.0-1.4		✓	✓	8.5		7.5-7.9		✓	✓
2.5		1.5-1.9		✓	✓	9.0		8.0-8.4		✓	✓
3.0		2.0-2.4		✓	✓	9.5		8.5-8.9		✓	✓
3.5		2.5-2.9		✓	✓	10.0		9.0-9.4		✓	✓
4.0		3.0-3.4		✓	✓	10.5		9.5-9.9		✓	✓
4.5		3.5-3.9		✓	✓	11.0		10.0-10.4		✓	✓
5.0		4.0-4.4		✓	✓	11.5		10.5-10.9		✓	✓
5.5		4.5-4.9		✓	✓	12.0		11.0-11.4		✓	✓
6.0		5.0-5.4		✓	✓	12.5		11.5-11.9		✓	✓
6.5		5.5-5.9		✓	✓	13.0		12.0-12.4		✓	✓
7.0		6.0-6.4		✓	✓	13.5		12.5-12.9		✓	✓
7.5		6.5-6.9		✓	✓	14.0		13.0-13.4		✓	✓

冷打冲棒

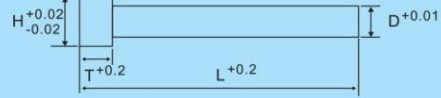
电脑编码 *70



规格	长度 价格	100	200	250
		3.0-4.0		✓
4.1-5.0		✓		
5.1-6.0		✓		
6.1-7.0		✓		
7.1-8.0		✓		
8.1-9.0		✓	✓	
9.1-9.8			✓	
10.1-10.5			✓	
10.6-10.8			✓	
11.1-11.5			✓	
11.6-11.8			✓	
12.0-12.8			✓	✓
13.0-13.8				✓

HSS

	60mm	80mm
电脑编码	* 40	* 45
建议价格		

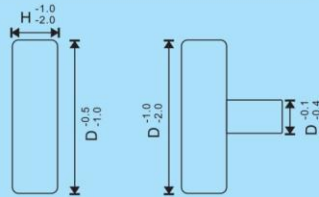
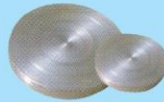
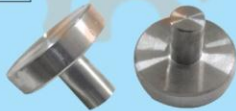


材质: HSS
硬度: HRC60°-62°

规格	长度		规格	长度		规格	长度		
	价格	60mm		80mm	价格		60mm	80mm	价格
0.5		✓		4.1-4.5	✓	✓	11-11.4	✓	✓
0.6		✓		4.6-5	✓	✓	11.5-11.9	✓	✓
0.7-0.9		✓		5.1-5.5	✓	✓	12	✓	✓
1-1.5		✓		5.6-5.9	✓	✓	12.1-12.5	✓	✓
1.6-1.8		✓		6-6.4	✓	✓	12.6-13	✓	✓
1.9-2		✓		6.5-6.9	✓	✓	13.1-13.5	✓	✓
2.4-2.5		✓		7-7.4	✓	✓	13.6-14	✓	✓
2.6-2.8		✓		7.5-7.9	✓	✓	14.5-15	✓	✓
2.9-3		✓		8-8.4	✓	✓	15.5-16	✓	✓
3.1		✓		8.5-8.9	✓	✓	16.5-17	✓	
3.2-3.3		✓		9-9.4	✓	✓	17.5-18	✓	
3.4-3.5		✓		9.5-9.9	✓	✓	18.5-19	✓	
3.6-3.8		✓		10-10.4	✓	✓	19.5-20	✓	
3.9-4		✓		10.5-10.9	✓	✓		✓	

模柄

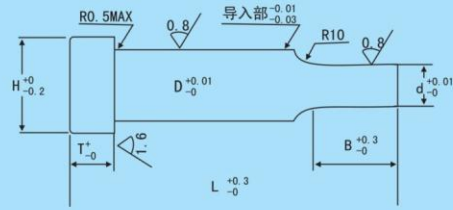
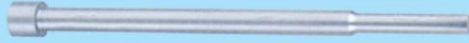
	模柄	圆片
电脑编码	* 85	* 85
建议价格		



DXD1							
25 × (60-120)	30 × (60-150)	38 × (80-160)	40 × (80-250)	50 × (120-250)	60 × (120-250)		
✓							
DXH							
50X8	60X8	70X8	80X8	90X8	100X8	110X8	120X8
✓	✓	✓	✓	✓	✓	✓	✓

电脑编码 * 30	
建议价格	

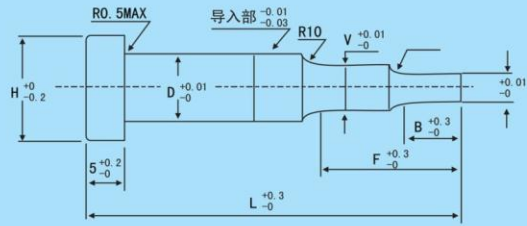
AD



材质: SKD-11
 硬度: HRC60°-62° (用SKH-51材料加价一倍)

H	T	D	d	长度 L							
				B	单价	40、50	60	70	80	90	100
5	3	3	1.0-1.5 1.6-1.9 2.0-2.9	6							
				8	✓	✓	✓	✓			
				10							
6	4	4	1.0-1.5 1.6-1.9 2.0-2.9 3.0-3.9	8							
				9							
				10	✓	✓	✓	✓			
				12							
7	5	5	2.0-2.9 3.0-3.9 4.0-4.9	10							
				12	✓	✓	✓	✓			
				13							
8	5	6	2.0-2.9 3.0-3.9 4.0-4.9 5.0-7.9	10							
				12	✓	✓	✓	✓	✓		
				13	✓	✓	✓	✓	✓	✓	
				15							
10	8	8	3.0-3.9 4.0-4.9 5.0-7.9	12							
				13	✓	✓	✓	✓	✓	✓	
				15							
13	10	10	4.0-4.9 5.0-5.9 6.0-9.9	13							
				15	✓	✓	✓	✓	✓	✓	
				15							
16	13	13	8.0-12.9	15	✓	✓	✓	✓	✓	✓	
19	16	16	10.-15.9	15	✓	✓	✓	✓	✓	✓	
22	19	19	13.0-18.9	15	✓	✓	✓	✓	✓	✓	
24	21	21	15.0-20.9	15	✓	✓	✓	✓	✓	✓	
28	25	25	19.0-24.9	15	✓	✓	✓	✓	✓	✓	

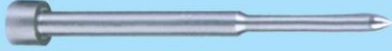
电脑编码	* 30
建议价格	



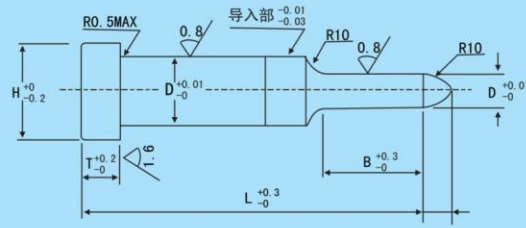
材质: SKD-11
 硬度: HRC60°-62° (用SKH-51材料加价一倍)

订购代号		指定0.01mm单位	指定0.1mm单位	长度 H 单价	L			
代号	D	P			45、50	60	70	80
B-AB	3	0.05~0.99	2.0~10.0	5	✓	✓	✓	✓
		1.00~1.99	2.0~20.0					
		2.00~2.98	2.0~35.0					
	4	0.50~0.99	2.0~10.0	6	✓	✓	✓	✓
		1.00~1.99	2.0~20.0					
		2.00~3.98	2.0~35.0					
	5	1.00~1.99	2.0~20.0	7	✓	✓	✓	✓
		2.00~3.99	2.0~35.0					
	6	1.00~1.99	2.0~20.0	8	✓	✓	✓	✓
		2.00~3.99	2.0~35.0					
		4.00~5.98	2.0~45.0					
	8	1.00~1.99	2.0~20.0	10	✓	✓	✓	✓
		2.00~3.99	2.0~35.0					
		4.00~6.99	2.0~45.0					
		6.00~7.98	2.0~60.0					
	10	1.50~1.99	2.0~20.0	13	✓	✓	✓	✓
		2.00~3.99	2.0~35.0					
		4.00~5.99	2.0~45.0					
		6.00~9.98	2.0~60.0					
	13	3.00~3.99	2.0~35.0	16	✓	✓	✓	✓
4.00~5.99		2.0~45.0						
6.00~12.98		2.0~60.0						
16	5.00~5.98	2.0~45.0	19	✓	✓	✓	✓	
	6.00~15.98	2.0~60.0						
20	6.50~19.98	2.0~60.0	23	✓	✓	✓	✓	
25	9.00~24.98	2.0~60.0	28	✓	✓	✓	✓	

电脑编码 * 30
建议价格

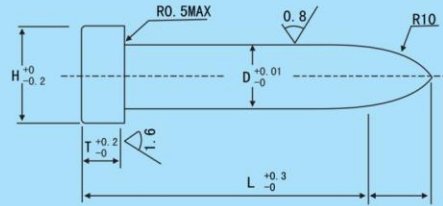


材质: SKD-11
硬度: HRC60°-62° (用SKH-51材料加价一倍)



H	T	D	d	长度		L					
				B	单价	60	70	80	90	100	
5	3	3	1.0-1.99	6							
			2.0-2.97	8	✓	✓	✓	✓	✓	✓	
				10							
6	4	4	2.0-2.99	10	✓	✓	✓	✓	✓	✓	
			3.0-3.97	12							
7	5	5	3.0-3.99	12	✓	✓	✓	✓	✓	✓	
			4.0-4.97	13							
8	6	6	4.0-4.99	13	✓	✓	✓	✓	✓	✓	
			5.0-5.97	15							
10	5	8	6.0-7.97	15	✓	✓	✓	✓	✓		
13		10	8.0-9.97	15	✓	✓	✓	✓	✓		
16		13	8.0-12.97	15	✓	✓	✓	✓	✓		
19		16	10.0-15.97	15	✓	✓	✓	✓	✓		
22		19	13.0-18.97	15	✓	✓	✓	✓	✓		
24		21	19.0-20.97	15	✓	✓	✓	✓	✓		

电脑编码 * 30
建议价格

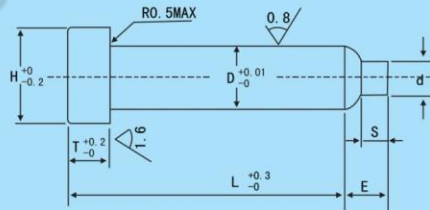


材质: SKD-11
硬度: HRC60° - 62° (用SKH-51材料加价一倍)

TYPE	D	T	长度		L			
			H	单价	40	50	60	70
	2.0-3.0	5	5		✓	✓	✓	✓
	3.1-4.0		6	✓	✓	✓	✓	
	4.1-5.0		7	✓	✓	✓	✓	
	5.1-6.0		8	✓	✓	✓	✓	
	6.1-7.0		9	✓	✓	✓	✓	
	7.1-8.0		10	✓	✓	✓	✓	
	8.1-9.0		11	✓	✓	✓	✓	
	9.1-10.0		13	✓	✓	✓	✓	

HDK

电脑编码 * 30
建议价格



材质: SKD-11
硬度: HRC60° - 62° (用SKH-51材料加价一倍)

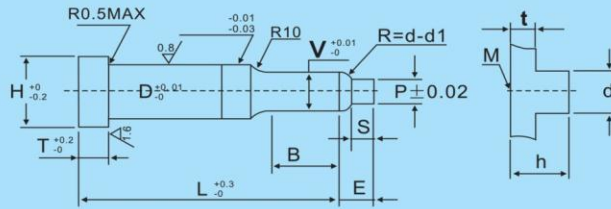
H	D	T	长度		L			
			d	单价	40	50	60	70
6	5	4	2.0-2.9		✓	✓	✓	✓
			3.0-3.2	✓	✓	✓	✓	
7		5	2.0-2.9		✓	✓	✓	✓
			3.0-3.8	✓	✓	✓	✓	
8		6	2.0-2.9		✓	✓	✓	✓
			3.0-3.9	✓	✓	✓	✓	
10		8	4.0-4.3		✓	✓	✓	✓
			5.0-5.4	✓	✓	✓	✓	

ADK

电脑编码 * 30
建议价格



材 质 :SKD-11
MATERIAL :SKD-11
硬 度 :HRC60° ~ 62°
HARDNESS :HRC60° ~ 62°



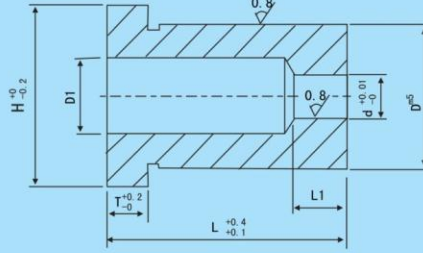
刃口形状			
订购代号	ADK2E	ADK3E	ADK4E

H	订购代号		D	L				指定0.01mm单位	
	代号			40	50	60	70	mim V max	mim P
6	ADK		4	✓	✓	✓	✓	2.00-3.20	1.00
7			5	✓	✓	✓	✓	2.00-3.80	1.20
8			6	✓	✓	✓	✓	2.00-4.30	1.20
10			8	✓	✓	✓	✓	5.00-5.40	1.50

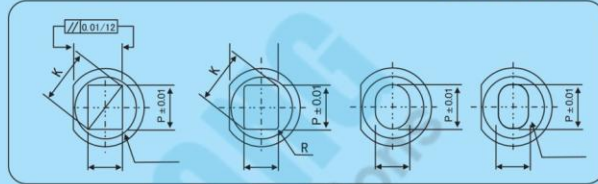
W	V	P	B	S	E	MXP	H,d (spcc)							
							代号	t	0.6	0.8	1.0			
2.6	2.22	1.5	6	2	2.7	M2.6 X0.45	A	d	3.12	3.34	3.72			
	h							1.30	1.47	1.77				
	2.25						B	d	3.15	3.37	3.75			
	2.32							h	1.30	1.50	1.80			
3	2.59	1.9	8	3	3.6 3.7	M3 X0.5	A	d	3.49	3.79	3.99	4.39		
	2.63							h	1.30	1.55	1.75	2.05		
	2.72						B	d	3.53	3.83	4.03	4.43		
	2.76							h	1.35	1.60	1.75	2.07		
4	3.39	2.4	8	3	3.9 4.1	M4 X0.7	A	d	4.29	4.59	4.79	5.07	5.79	
	3.44							h	1.50	1.77	2.00	2.17	2.60	
	3.64						B	d	4.34	4.64	4.84	5.12	5.84	
	3.69							h	1.50	1.77	2.00	2.20	2.65	
5	4.33	2.8	8	4	5.4 5.6	M5 X0.8	C	d	4.45	4.48	5.04	5.32	6.04	
	4.38							h	1.60	1.85	2.07	2.27	2.70	
	4.62						D	d	4.59	4.89	5.09	5.37	6.09	
	4.67							h	1.63	1.90	2.10	2.30	2.78	
							A	d			5.83	6.01	6.57	7.33
							A	h			2.27	2.47	2.85	3.50
							B	d			5.88	6.06	6.62	7.38
							B	h			2.30	2.25	2.90	3.52
							C	d			6.12	6.30	6.86	7.62
							C	h			2.42	2.65	3.00	3.62
							D	d			6.17	6.35	6.91	7.67
							D	h			2.45	2.70	3.05	3.65

电脑编码 * 30
建议价格

MAD



D1=d+0.3~0.5MM



材质: SKD-11
硬度: HRC60°-62° (用SKH-51材料加价一倍)

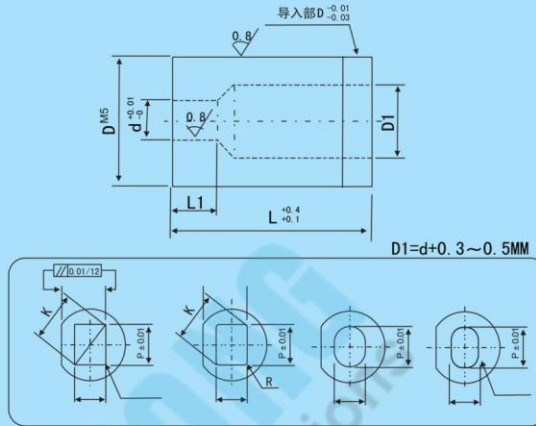
H	T	D ^{m5}		d	长度 L	L				
						单价	20	25	30	40
8	5	6	+0.009 +0.004	1.50-2.50	3	✓	✓	✓	✓	✓
10		8	+0.012 +0.006	1.50-3.50	4	✓	✓	✓	✓	✓
13		10	+0.015 +0.007	2.00-4.50	5	✓	✓	✓	✓	✓
16		13		3.00-6.50		✓	✓	✓	✓	✓
18		16	5.00-8.50	✓		✓	✓	✓	✓	
20		18	+0.017 +0.008	6.00-11.00		✓	✓	✓	✓	✓
22		20		7.00-12.00		✓	✓	✓	✓	✓
24		22	8.00-13.00	✓		✓	✓	✓	✓	
28		25	10.00-16.00	✓		✓	✓	✓	✓	
30		28	+0.020 +0.009	12.00-17.00		✓	✓	✓	✓	✓
32		30		14.00-19.00		✓	✓	✓	✓	✓
34		32	15.00-20.00	✓		✓	✓	✓	✓	

内孔细小尺寸	增加金额
1.40-1.49	✓
1.30-1.39	✓
1.20-1.29	✓
1.10-1.19	✓
1.01-1.09	✓

内孔延长加价	15-15L	16-20L	21-25L
D=6.8	✓	✓	✓
D=10,13,16	✓	✓	✓
D=18,20,22	✓	✓	✓
D=25,28	✓	✓	✓
D=30,32	✓	✓	✓

MBD衬套

电脑编码 * 30
建议价格

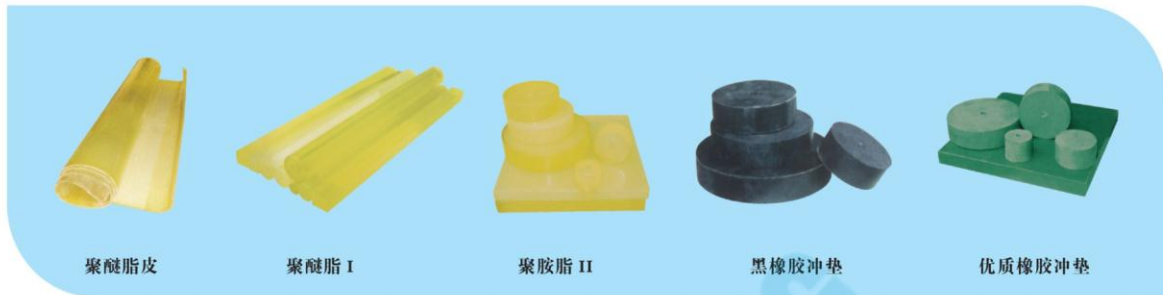


材质: SKD-11
硬度: HRC60°-62° (用SKH-51材料加价一倍)

D ^{m5}	d	长度		L					
		L1	单价	15	20	25	30	40	50
6	+0.009 +0.004	1.50-2.50	3	✓		✓	✓	✓	✓
8	0.0012 +0.006	1.50-3.50	4	✓	✓	✓	✓	✓	✓
10		2.00-4.50		✓	✓	✓	✓	✓	✓
13	+0.015 +0.008	3.00-6.50	5	✓	✓	✓	✓	✓	✓
16		5.00-8.50		✓	✓	✓	✓	✓	✓
18	+0.017 +0.009	6.00-11.00	5	✓	✓	✓	✓	✓	✓
20		7.00-12.00		✓	✓	✓	✓	✓	✓
22		8.00-13.00		✓	✓	✓	✓	✓	✓
25		10.00-16.00		✓	✓	✓	✓	✓	✓
28	+0.020 +0.009	12.00-17.00	5	✓	✓	✓	✓	✓	✓
30		14.00-19.00		✓	✓	✓	✓	✓	✓
32		15.00-20.00		✓	✓	✓	✓	✓	✓

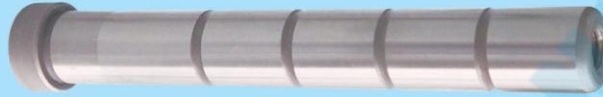
内孔细小尺寸	增加金额
1.40-1.49	✓
1.30-1.39	✓
1.20-1.29	✓
1.10-1.19	✓
1.01-1.09	✓

内孔延长加价	15-15L	16-20L	21-25L
D=6.8	✓	✓	✓
D=10,13,16	✓	✓	✓
D=18,20,22	✓	✓	✓
D=18	✓	✓	✓
D=30,32	✓	✓	✓

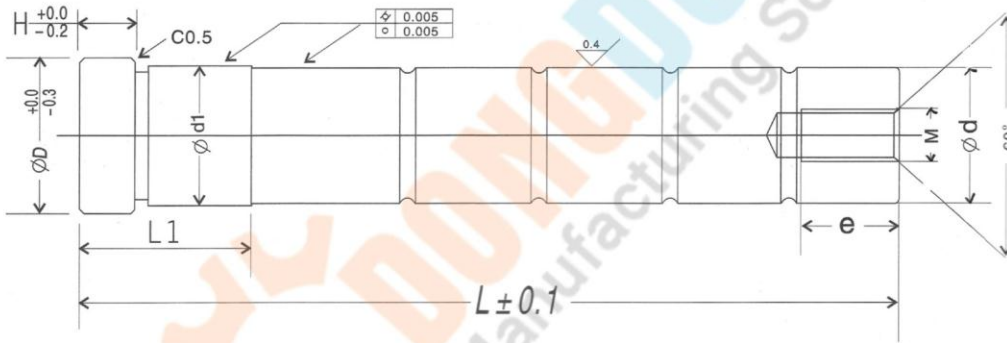


	聚醚脂皮	聚醚脂I	聚醚脂II	黑橡胶	优质橡胶
电脑编码	* 53	* 53	* 65	* 70	* 60
建议价格					

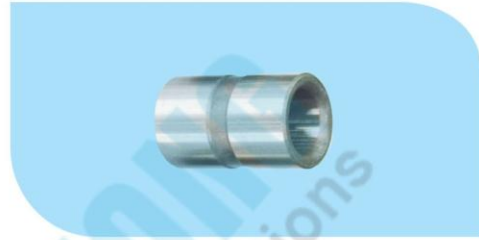
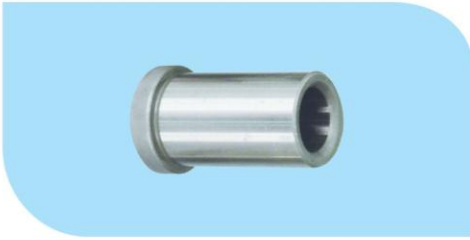
实心圆棒	空心圆棒	圆块	正方形板	长方条
外径 × 长度	外径 × 内径 × 长度	外径 × 厚度	长 × 宽 × 高	长 × 宽 × 高
12×300L	20×08×300L	Φ50×38	300×300×15	500X10(15.20.25.30.
14×300L	22×08×500L	Φ75×38	300×300×20	35.40.45.50)X20.25.
16×300L	22×12×500L	Φ100×38	300×300×25	30.35.40.45.50
18×500L	25×08×500L	Φ125×38	300×300×30	
20×500L	22×12×500L	Φ150×38	300×300×35	
22×500L	30×08×500L	Φ175×38	300×300×40	
25×500L	30×12×500L	Φ200×38	300×300×45	
28×500L	32×08×500L	Φ250×38	300×300×50	
30×500L	32×12×500L	Φ300×38	4000X1000X2	
32×500L	35×08×500L		4000X1000X2.5	
35×500L	35×12×500L		4000X1000X3	
40×500L	40×08×500L		4000X1000X3.5	
45×500L	40×12×500L		4000X1000X4	
50×500L	45×08×500L		4000X1000X5	
60×500L	45×12×500L		4000X1000X6	
70×500L	50×08×500L			
80×500L	50×12×500L			
90×500L				
100×500L				



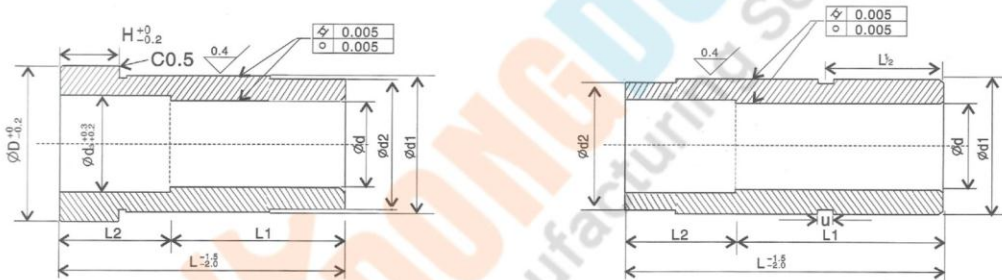
◆ 热处理硬度: HRC60±2度 材质: 20Cr或40Cr (渗碳热处理)



代表尺寸	d		d1		D	L1	M	H	e	攻牙费 (支)				
	寸法	许容差	寸法	许容差										
12	12	-0.015	12	+0.018	17	19	M6	6	15	4				
16	16	-0.025	16	+0.010	20	23	M8		20					
20	20	-0.020 -0.033	20	+0.023 +0.013	25	28	M10	10	25					
25	25		25		30	33	M12		30					
30	30	-0.025 -0.040	30	+0.025 +0.015	35	43	M16	10	35	5				
35	35		35		40	48				6				
40	40		40		45	58				8				
45	45	45	50	58	12		8							
50/55	50/55	-0.040 -0.055	50/55	+0.030 +0.018	56/60	68	M20	15	45	10				
60	60		60		66						68	M20	15	
70	70		70		76					78	M24	15	55	10
80	80		80		86									78
90	90	90	90	+0.035	96	78	M24	15	15					
100	100	100	100	+0.020	106									



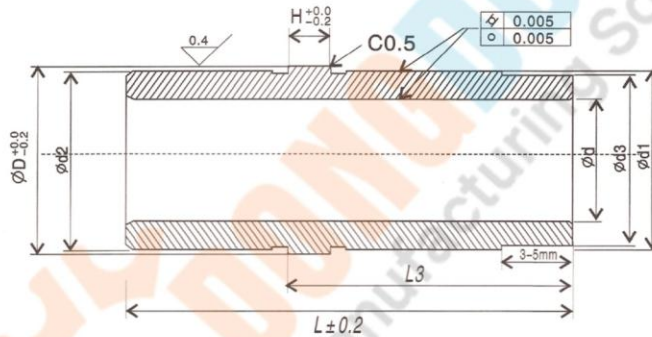
◆ 热处理硬度：HRC60±2度 材质：20Cr或40Cr（渗碳热处理）



代表尺寸	d		d1		d2	d3	D	L1	H	u	
	寸法	许容差	寸法	许容差							
12	12	+0.018	20	+0.020	-0.020 -0.040	13	25	2xd	6	4	
16	16	+0.008	25	+0.010		17	30				
20	20	+0.020 +0.010	30	+0.025 +0.015		21	35	8	6		
25	25		35			42	26			40	
30	30	+0.025 +0.015	48	+0.030 +0.018		31	47	10	8		
35	35					36	53				
40	40					41	60			10	10
45	45					46	65				
50	50	+0.035 +0.020	80	+0.035 +0.020		51	76	12	12		
60	60					61	86				
70	70					71	96				
80	80					81	110				
90	90					91	120				
100	100					101	135				

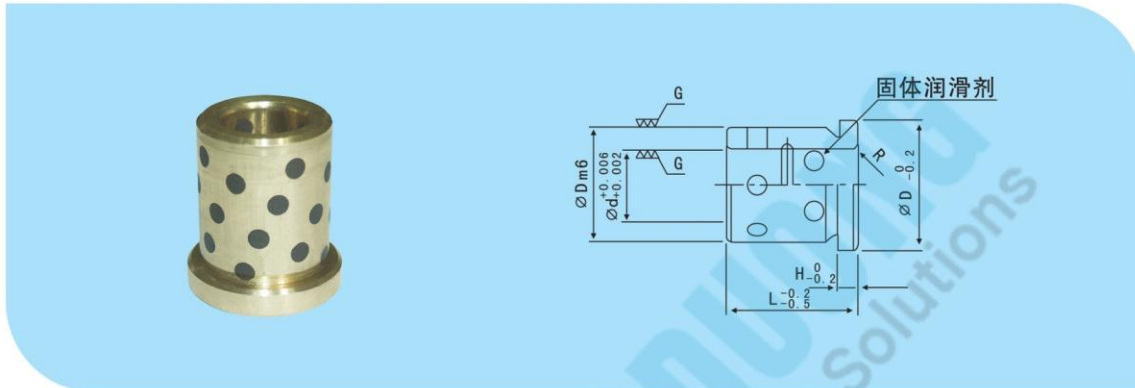


◆ 热处理硬度：HRC60±2度 材质：20Cr或40Cr（渗碳热处理）

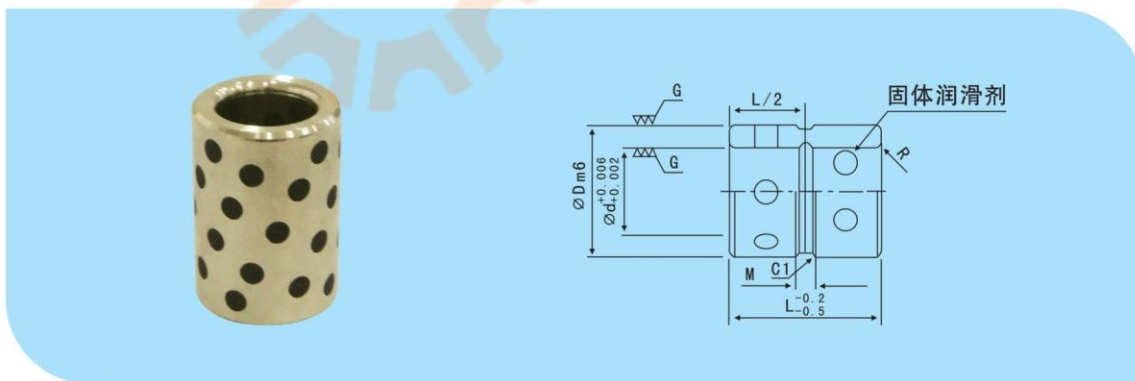


代表尺寸	d		d1		d2	d3	D	H
	寸法	许容差	寸法	许容差				
12	12	+0.02	20	+0.01	-0.02 -0.03	-0.03 -0.05	25	6
16	16	+0.03	25	+0.02			30	
20	20	+0.025 +0.035	30	+0.015 +0.025			35	8
25	25		35				40	
30	30		42				47	10
35	35	48	53					
40	40	55	60					
45	45	60	66					
50	50	+0.03 +0.04	70	+0.02 +0.03			76	
60	60		80				86	15

L	26	28	33	38	43	48	53	58	63	68	73	78
L3	14		19		24		29		34		39	



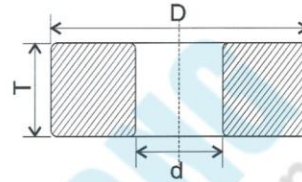
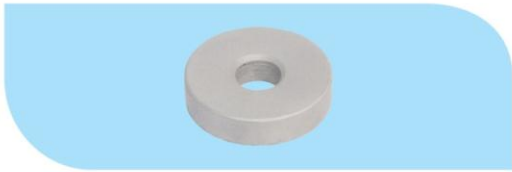
d	D		D1	H	R	L					
						15	20	25	30	35	40
12	20	+0.021 +0.008	25	6	1.5	○	○	○			
16	25		30				○	○			
20	30	+0.025 +0.009	35	8	2		○	○	○	○	○
25	35		40			○	○	○	○	○	
30	42	+0.025 +0.015	47	10	2			○	○	○	○
35	48		53					○	○	○	
40	55		60							○	○



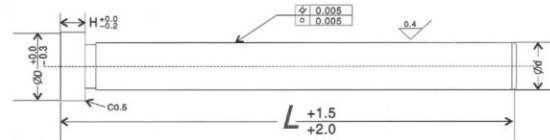
d	D		M	R	L					
					15	20	25	30	35	40
12	20	+0.021 +0.008	3	1.5	○	○	○			
16	25		4		○	○	○	○		
20	30	+0.025 +0.009	5	2	○	○	○	○	○	○
25	35				○	○	○	○	○	



代表尺寸	d		d1		D	H	L1
	寸法	许容差	寸法	许容差			
12	12	-0.015	12	+0.018	17	10	24
16	16	-0.025	16	+0.010	20	12	29
20	20	-0.020	20	+0.023	25	15	39
25	25	-0.033	25	+0.013	30	15	49



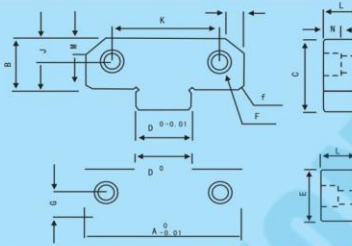
直径	公称	T ± 0.2	D ± 0.2	d ^{+0.20} / _{+0.02}	配用螺丝	价格 (实价)	
12		6	16	6.2	6*16		
16		8	20	8.2	8*25	✓	
20		10	26	10.2	10*30		
25			31	12.2	12*35		
30		14	38	16.2	16*35	✓	
35		43				✓	
40		48					
45		16	53	20.2	20*45	✓	
50			58				✓
60			68				
70		20	78			✓	



◆ 热处理硬度: HRC60 ± 2度 材质: 20Cr或40Cr (渗碳热处理)

代表尺寸	d		D	H	
	寸法	许容差			
8	8	-0.015	13	5	
12	12		-0.027	17	6
15	15			20	
16	16	-0.020	20		
20	20		-0.033	25	
25	25			30	
30	30	-0.025	35	8	
35	35			40	
40	40		-0.040	45	10
50	50		56	12	
60	60		65		

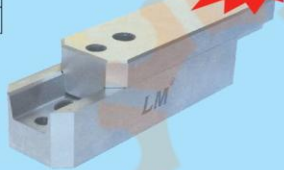
电脑编码 *45
建议价格



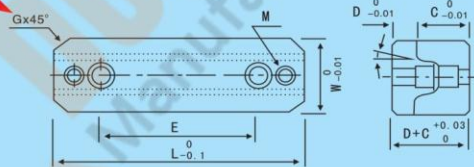
材质: YK30
硬度: HRC56°-60°

型号	A	B	C	D	E	F	f	G	J	K	L	M	N
PL38	38	22	30	12	22	10.5	6.5	7	7	22	13	5	8
PL50	50	21.5	30	17	21.5	10.5	6.5	11	11	34	16	7	8
PL75	75	36	50	25	36	16.5	10.5	18	18	50	19	11	12
PL100	100	45	65	35	45	16.5	10.5	22	22	70	19	14	12
PL125	125	45	65	45	45	16.5	10.5	22	22	84	25	14	12
PL150	150	45	65	50	45	16.5	10.5	23	22	100	25	14	12

电脑编码 *45
建议价格



新近推出

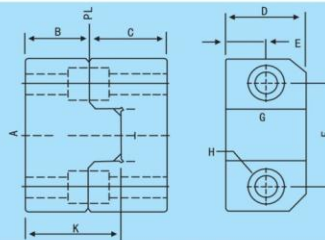
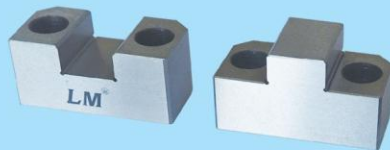


材质: YK30
硬度: HRC56°-60°

型号	W	L	C	D	E	G	M
KY 50	25	50	17.5	8	36	5	M5
KY 75	30	75	22	10	40	5	M6
KY 100	30	100	22	10	60	5	M6
KY 125	35	125	23	13	80	5	M6
KY 150	40	150	25	13	100	5	M8

罗门牌精密定位块组

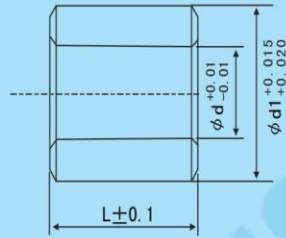
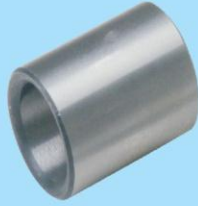
电脑编码 *45
建议价格



材质: YK30
硬度: HRC56°-60°

型号	A	B	C	D	E	F	G	K	T
LM50	50	20	25	25	12.5	34	C5	M6	30
LM75	75	25	30	50	25	52	C8	M8	40

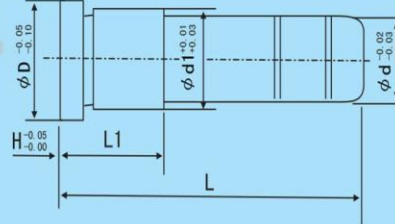
电脑编码 * 55



材质: S45C
硬度: HRC45°-50°

d	d1	L																			
		15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120
10	16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
12	18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
14	20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
16	22		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
16	24		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
18	24		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		
18	26		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		
20	28		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
22	30		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
24	32		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
25	35		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		
30	40		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓

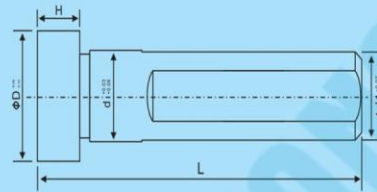
电脑编码 * 63



材质: S45C
硬度: HRC45°-50°

d	d1	D	H	L																	
				40	50	60	70	80	90	100	110	120	130	140	150	160	180	200	220	250	
12	18	22	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
14	20	24	4.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
16	22	25	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
16	24	28	5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
18	24	28	5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
18	26	30	5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
20	28	32	6		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
22	30	34	6		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
24	32	36	6		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
25	35	38	7			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
30	40	44	8			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

电脑编码 * 63

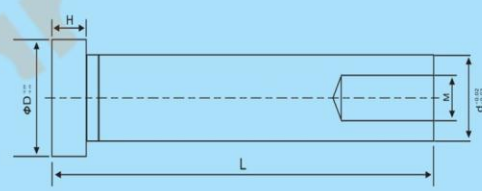


- $\phi 20$ ^{-0.25}/_{-0.30}
- $\phi 25$ ^{-0.35}/_{-0.40}
- $\phi 30$ ^{-0.40}/_{-0.50}
- $\phi 35$ ^{-0.50}/_{-0.60}

材质: S45C
硬度: HRC45°-50°

d	d1	D	H	L																										
				50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	220	250	280	300	300						
10	10	12	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
12	12	14	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓													
14	14	16	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											
16	16	19	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
18	18	20	10		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
20	20	22	11		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
22	22	24	12				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
24	24	20	13					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
25	25	27	14					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
28	28	30	14					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
30	30	32	14					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

电脑编码 * 63

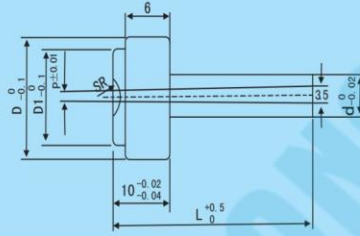


材质: S45C
硬度: HRC45°-50°

d	H	D	W	L																										
				50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	220	240	250	260	280	300					
10	4	13	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
12	4	15	8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
14	5	17	8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
16	5	20	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
18	5	22	10			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
20	5	24	12			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
22	5	26	12			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
24	5	28	12					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
30	6	34	16					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

B型浇口套

电脑编码 * 72

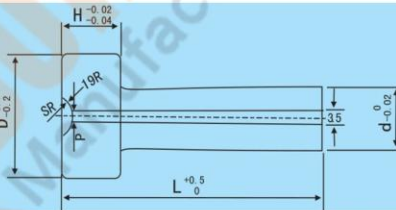


材质: S45C
(用SKD-11材料另行报价)

d	D	d1	H	L																									
				30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150	160	170	180	190	200	
8	35	25	3.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
10				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14						✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	✓
16	40	35	4.5			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	✓		
18						✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
20						✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	✓
							✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓

C型浇口套

电脑编码 * 45

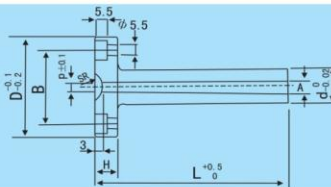


材质: S45C
(用SKD-11材料另行报价)

d	H	D	W	L																								
				30	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150	160	170	180	190	200	
10	30	15	3.2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

A型浇口套

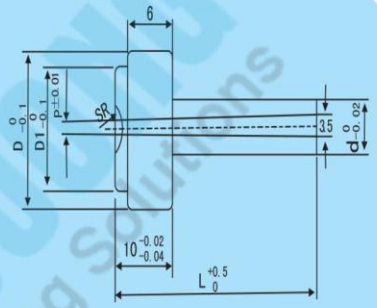
电脑编码 * 66



材质: S45C
(用SKD-11材料另行报价)

d	12	16	20	16	20	25
A°	2°	2°	3°	3°	3°	3°
D	35(50)	35(50)	35(50)	35(50)	35(50)	35(50)
B	25(36)	25(36)	25(36)	25(36)	25(36)	25(36)
H	10	15	20	10	15	20
P	3.0	3.5	4.0	4.5	5.0	5.0

电脑编码 * 80

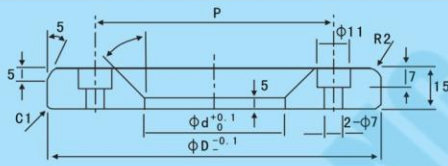


⚠ 本产品每十只为一板，在销售过程中，
可以根据客户需求的数量，用刀具任意裁切！

材质: S45C
硬度: HRC45°±2°
(用SKD-11材料另行报价)

d	L																								
	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150	160	170	180	190	200
8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
14			✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16			✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18					✓		✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20					✓		✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

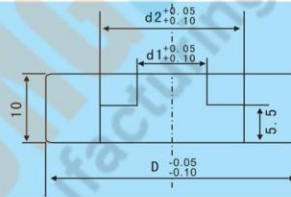
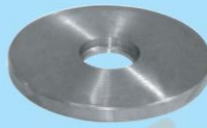
电脑编码 *65
建议价格



材质: S45C

D	d	P
100	30 (35)	70
125	30 (35)	80
150	30 (35)	80

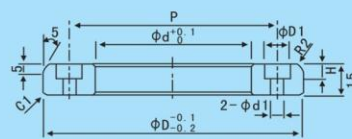
电脑编码 *87
建议价格



材质: S45C

D	d1				d2		注塑机大小
55	25				30		
60	25				30		
80	25	35			30	40	
100	25	35	55		30	40	○
125	25	35	55		30	40	○
150	25	35	55	100	30	40	
160	25	35	55	100	30	40	○
200	25	35	55	100	30	40	○
250	25	35	55	100	30	40	○

电脑编码 *65
建议价格



材质: S45C

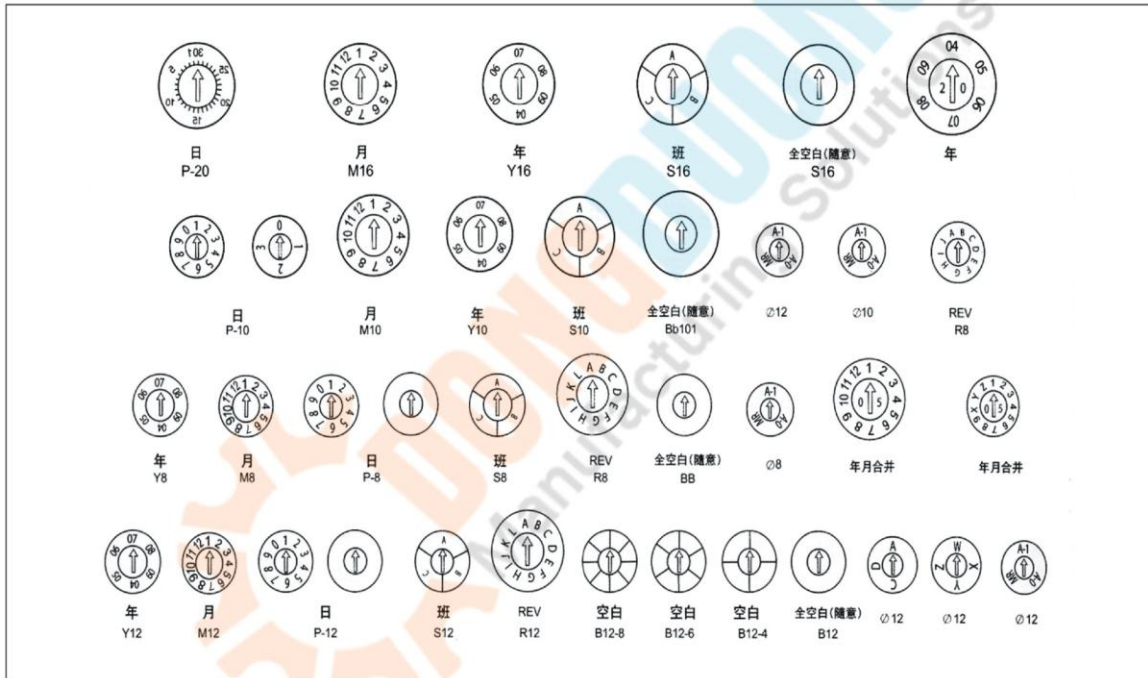
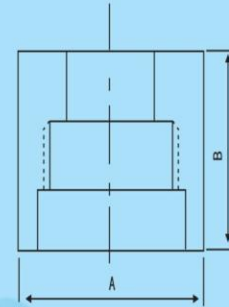
D	d	d1	D1	H	P
100	70	7	11	7	85
125	70,90				105
150	70,90,110	9.5	15	9	130

国产	进口
电脑编码 *40	*30

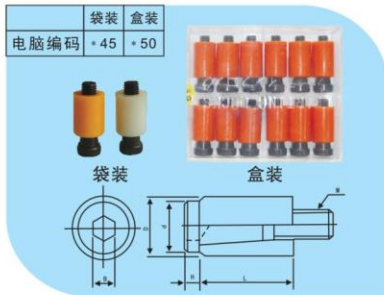
(国产)



(台湾)



规格	20	16	12	10	8	6	5	4
A	$\varnothing 20_{-0.02}^0$	$\varnothing 16_{-0.02}^0$	$\varnothing 12_{-0.02}^0$	$\varnothing 10_{-0.02}^0$	$\varnothing 8_{-0.02}^0$	$\varnothing 6_{-0.02}^0$	$\varnothing 5_{-0.02}^0$	$\varnothing 4_{-0.02}^0$
B	14 ± 0.03	14 ± 0.03	12 ± 0.03	10 ± 0.03	10 ± 0.03	10 ± 0.03	8 ± 0.03	8 ± 0.03

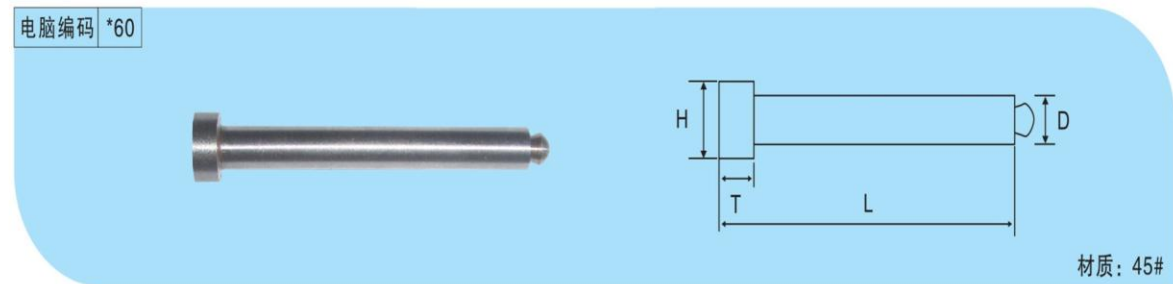


D	M	B	袋装价格	盒装价格	备注
12	M6	5	○	○	
14	M8	6	○	○	
16	M8	6	○	○	
18	M8	6	○	○	
20	M8	6	○	○	
20-A	M10	8	○	○	

分：白 黄 橘三色

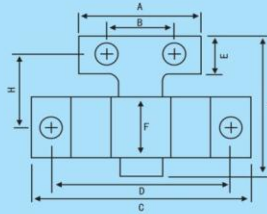
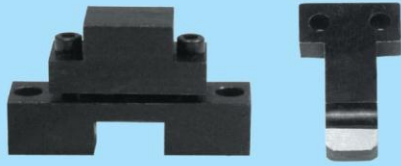


D	M	B	单只价格	盒装价格	备注
10	M5	4	○	○	
12	M6	5	○	○	
13	M6	5	○	○	
16	M8	6	○	○	
20	M10	8	○	○	



H	T	D	L																						
			32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76
8	4	5					✓										✓								
10	4	6					✓										✓								
12	6	8					✓										✓								

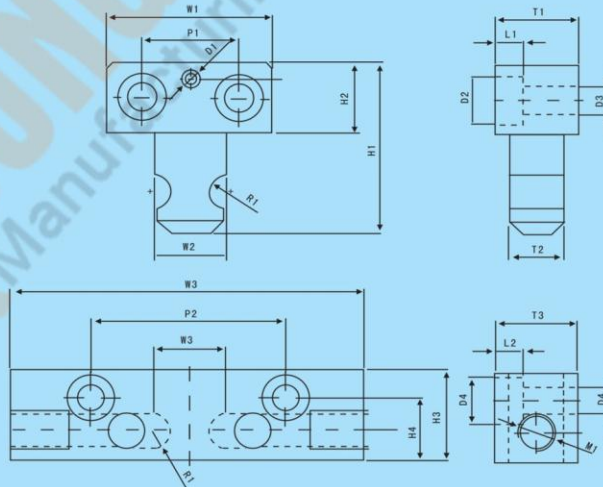
电脑编码 * 60



局部热处理
材质: S45C

型号	A	B	C	D	E	F	H	T	孔⊕	拉模力kg
小短	38	22	76	64	20	20	25	49	M8	✓
小中	39	23	76	64	20	20	44	69	M8	✓
小长	39	24	76	64	20	20	61	89	M8	✓
大短	50	29	108	91	22	30	40	68	M10	✓
大中	50	29	108	91	22	30	57	89	M10	✓
大长	50	29	108	91	22	30	86	118	M10	✓

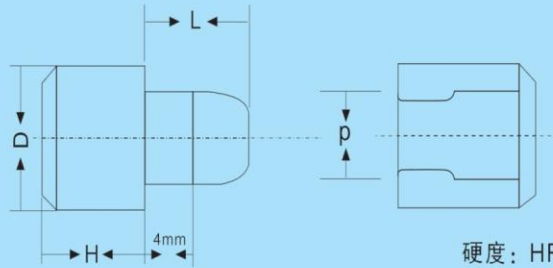
电脑编码 * 80



表面处理: 镀铬
材质: S45C

型号	H1	H2	H3	H4	D1	D2	D3	D4	D5	L1	L2	M1	P1	P2	P3	T1	T2	T3	W1	W2	W3
短	50	20.5	30	22.5	∅6	∅12.5	∅8.5	∅12.5	∅8.5	8	8	M12	25	60	20	22	10	22	45	19	100
中	78	20.5	30	22.5	∅6	∅12.5	∅8.5	∅12.5	∅8.5	8	8	M12	25	60	20	22	10	22	45	19	100
长	90	20.5	30	22.5	∅6	∅12.5	∅8.5	∅12.5	∅8.5	8	8	M12	25	60	20	22	10	22	45	19	100

电脑编码 *60

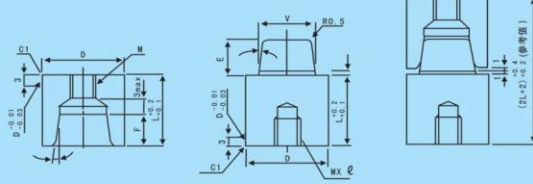


硬度: HRC60 \pm 2°
材质: SUJ2

DxPxHxL
12X8X10X10
12X8X15X15
12X8X15X20
16X10X15X15
16X10X18X11
16X10X18X13
16X10X18X15
16X10X18X17
16X10X18X18
16X10X18X20
16X10X18X25
16X10X18X30
18X12X18X11
18X12X18X13
18X12X18X15
18X12X18X17
18X12X18X18
18X12X18X20
18X12X18X25
18X12X18X30
18X12X18X35
18X12X18X40
18X12X18X50
20X12X18X11
20X12X18X13
20X12X18X15

DxPxHxL
20X12X18X17
20X12X18X18
20X12X18X20
20X12X18X22
20X12X18X25
20X12X18X30
20X12X18X35
20X12X18X40
20X12X18X50
20.5X12X18X11
20.5X12X18X13
20.5X12X18X15
20.5X12X18X17
20.5X12X18X18
20.5X12X18X20
20.5X12X18X25
20.5X12X18X30
21X12X18X11
21X12X18X13
21X12X18X15
21X12X18X17
21X12X18X18
21X12X18X20
21X12X18X25
21X12X18X30

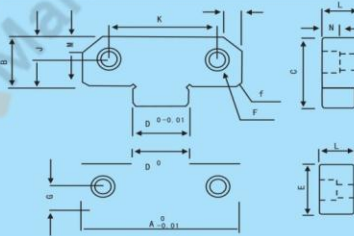
电脑编码 * 45



材质: SUJ2
硬度: HRC60°

	型号(D)	A°	L	V	E	F	MX
浙 标	ZJ-12	5°	14 19 24	8	6	5	M5X10
	ZJ-13		14 19 24	7	6	5	M4X10
	ZJ-14		14 19 24	10	6	5	M5X10
	ZJ-16		14 19 24	10	7	5	M5X10
	ZJ-18		19 24	12	9	7	M8X16
	ZJ-20		19 24	12	9	6	M6X12
	ZJ-25		24	16	11	8	M8X16
	ZJ-30		29	22	15	14	M10X20
	ZJ-32			24	15	14	M10X20
	ZJ-35			34	26	15	14
台 湾	TW-13	5°	14	8.5	6	5	M4X10
	TW-16		14	10	6	5	M5X10
	TW-20		19	13	9	8	M6X12
	TW-25		24	16	12	11	M8X16
	TW-30		29	20	15	14	M10X20
	TW-32		29	20	15	14	M10X20
	TW-35		34	24	18	17	M12X24
	TW-42		39	30	24	23	M12X24

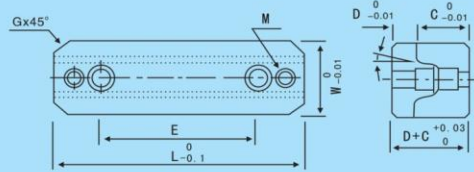
电脑编码 * 60



材质: YK30
硬度: HRC56°-60°

型号	A	B	C	D	E	F	f	G	J	K	L	M	N
PL38	38	22	30	12	22	10.5	6.5	7	7	22	13	5	8
PL50	50	21.5	30	17	21.5	10.5	6.5	11	11	34	16	7	8
PL75	75	36	50	25	36	16.5	10.5	18	18	50	19	11	12
PL100	100	45	65	35	45	16.5	10.5	22	22	70	19	14	12
PL125	125	45	65	45	45	16.5	10.5	22	22	84	25	14	12
PI150	150	45	65	50	45	16.5	10.5	23	22	100	25	14	12

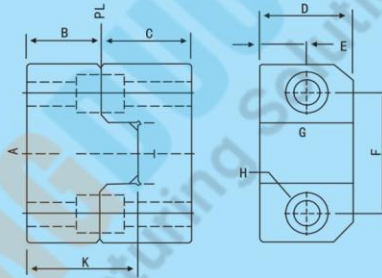
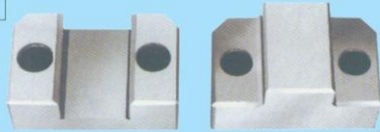
电脑编码 * 60
建议价格



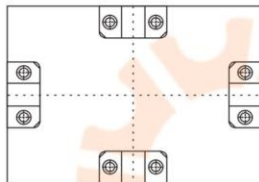
材质: YK30
硬度: HRC56°-60°

型号	W	L	C	D	E	G	M
KY 50	25	50	17.5	8	36	5	M5
KY 75	30	75	22	10	40	5	M6
KY 100	30	100	22	10	60	5	M6
KY 125	35	125	23	13	80	5	M6
KY 150	40	150	25	13	100	5	M8

电脑编码 * 60
建议价格



材质: YK30
硬度: HRC56°-60°



特性说明:

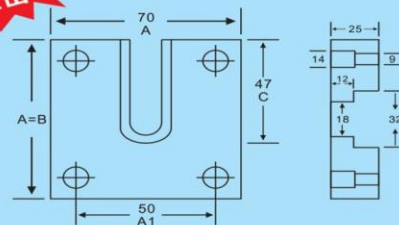
- 1、有效解决侧装式0°定位槽的问题。尤其是对大型模胚更具方便性。
- 2、用于塑件品质，尺寸精度要求特高的塑胶模具。
- 3、材质: SK3 (HRC48°-50°)

型号	A	B	C	D	E	F	G	K	T	
立式0° 50	50	20	25	25	12.5	34	C5	M6	30	17
立式0° 75	75	25	30	50	25	52	C8	M8	40	30

电脑编码 * 80
建议价格



新近推出

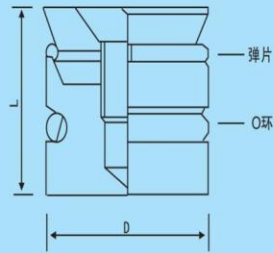


材料: S45C

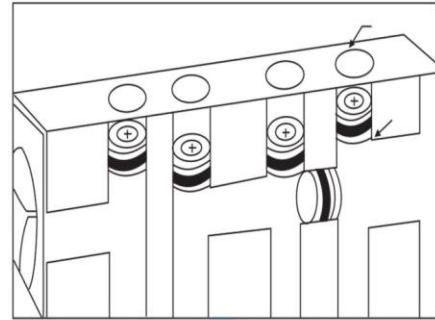
电脑编码 * 50



材质: 黄铜

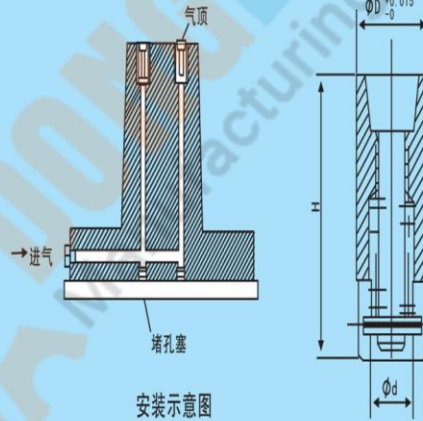


使用例



D	6	8	10	12	14	16	18	20	22	24	25	30
单价	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
包装数量	100只/包	100只/包	100只/包	100只/包	100只/包	50只/包	100只/包	100只/包	100只/包	70只/包	50只/包	40只/包

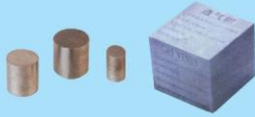
进口 国产
电脑编码 *60 *30



材质: 40cr
硬度: HRC58°-62°

D	6	8	10	12	16	18	20	25	30
H	✓	✓	✓	✓	✓	✓	✓	✓	✓
d	✓	✓	✓	✓	✓	✓	✓	✓	✓

	透气专用金属	铜	发泡模用排气栓
电脑编码	*60	*50	*50



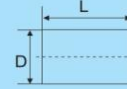
(透气钢)



(铜排气栓)



(发泡模用-圆孔式)



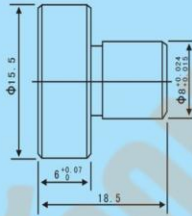
不锈钢--射出模具专用 硬度:RV50 孔径:0.05
铜--中空模具专用 硬度:RV20 孔径:0.35

名称	D	L
透气钢专用金属	6	10
	8	10
	10	12
	12	12
	16	15
	20	15

名称	D	L
铜排气栓	4	10
	5	10
	6	10
	8	10
	10	10
	12	10

名称	D	L
发泡模用排气栓	φ4	6
	φ6	6
	φ8	7
	φ10	7
	φ12	8

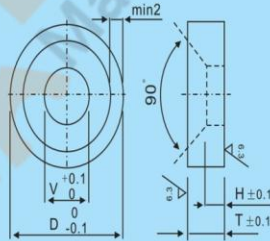
电脑编码 *30



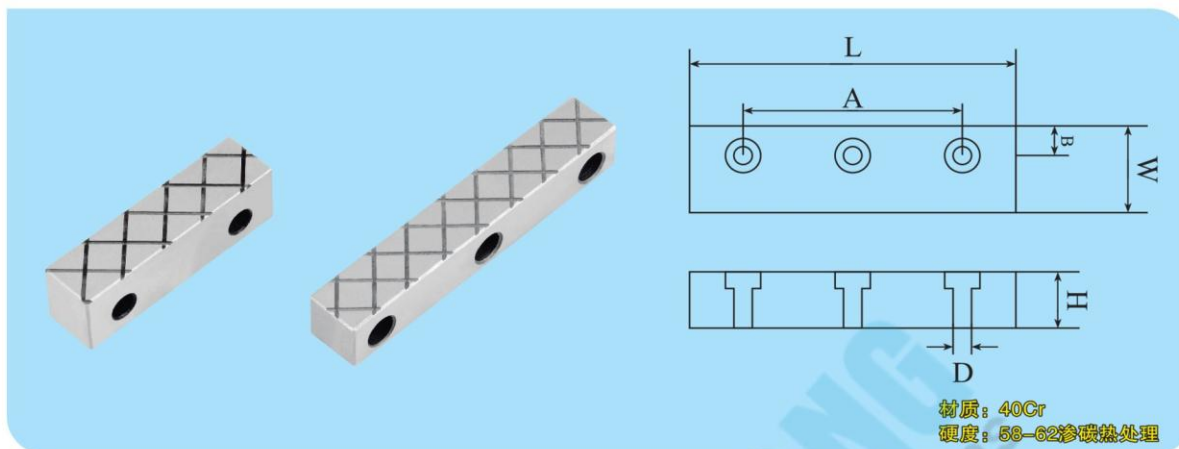
单价 0.5

材质:S45C

电脑编码 *40



规格	φ16		φ18		φ20		φ25		φ30	
DXV	16X5	16X6	18X5	18X6	20X5	20X6	25X5	25X6	30X5	30X6



代号	L	W	H	A	B	D
2010	50	20	10	26	8	7
	55	20	10	31	8	7
	60	20	10	36	8	7
	65	20	10	41	8	7
	70	20	10	46	8	7
	75	20	10	51	8	7
	80	20	10	56	8	7
	85	20	10	61	8	7
	90	20	10	66	8	7
	95	20	10	71	8	7
	100	20	10	76	8	7
	110	20	10	86	8	7
120	20	10	96	8	7	
2012	50	20	12	26	8	7
	55	20	12	31	8	7
	60	20	12	36	8	7
	65	20	12	41	8	7
	70	20	12	46	8	7
	75	20	12	51	8	7
	80	20	12	56	8	7
	85	20	12	61	8	7
	90	20	12	66	8	7
	95	20	12	71	8	7
	100	20	12	76	8	7
	110	20	12	86	8	7
120	20	12	96	8	7	

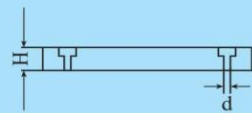
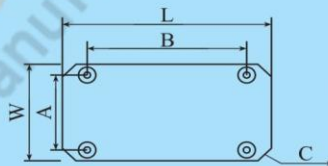
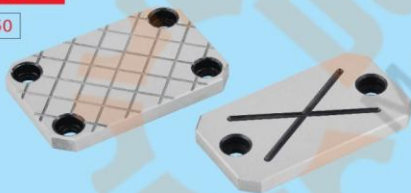
代号	L	W	H	A	B	D
2015	50	20	15	26	8	7
	55	20	15	31	8	7
	60	20	15	36	8	7
	65	20	15	41	8	7
	70	20	15	46	8	7
	75	20	15	51	8	7
	80	20	15	56	8	7
	85	20	15	61	8	7
	90	20	15	66	8	7
	95	20	15	71	8	7
	100	20	15	76	8	7
	110	20	15	86	8	7
120	20	15	96	8	7	
2020	50	20	20	26	8	7
	55	20	20	31	8	7
	60	20	20	36	8	7
	65	20	20	41	8	7
	70	20	20	46	8	7
	75	20	20	51	8	7
	80	20	20	56	8	7
	85	20	20	61	8	7
	90	20	20	66	8	7
	95	20	20	71	8	7
	100	20	20	76	8	7
	110	20	20	86	8	7
	120	20	20	96	8	7
	130	20	20	106	8	7
140	20	20	116	8	7	
150	20	20	126	8	7	
2025	70	20	25	46	8	7
	75	20	25	51	8	7
	80	20	25	56	8	7
	85	20	25	61	8	7
	90	20	25	66	8	7
	95	20	25	71	8	7
	100	20	25	76	8	7
	110	20	25	86	8	7
	120	20	25	96	8	7
	130	20	25	106	8	7
140	20	25	116	8	7	
150	20	25	126	8	7	

代号	L	W	H	A	B	D
2512	70	25	12	40	10	9
	80	25	12	50	10	9
	90	25	12	60	10	9
	100	25	12	70	10	9
	110	25	12	80	10	9
	120	25	12	90	10	9
2515	70	25	15	40	10	9
	75	25	15	45	10	9
	80	25	15	50	10	9
	85	25	15	55	10	9
	90	25	15	60	10	9
	95	25	15	65	10	9
	100	25	15	70	10	9
	110	25	15	80	10	9
	120	25	15	90	10	9
	130	25	15	100	10	9
	140	25	15	110	10	9
	150	25	15	120	10	9
2520	70	25	20	40	10	9
	75	25	20	45	10	9
	80	25	20	50	10	9
	85	25	20	55	10	9
	90	25	20	60	10	9
	95	25	20	65	10	9
	100	25	20	70	10	9
	110	25	20	80	10	9
	120	25	20	90	10	9
	130	25	20	100	10	9
	140	25	20	110	10	9
	150	25	20	120	10	9
2525	70	25	25	40	10	9
	75	25	25	45	10	9
	80	25	25	50	10	9
	85	25	25	55	10	9
	90	25	25	60	10	9
	95	25	25	65	10	9
	100	25	25	70	10	9
	110	25	25	80	10	9
	120	25	25	90	10	9
	130	25	25	100	10	9
	140	25	25	110	10	9
	150	25	25	120	10	9

代号	L	W	H	A	B	D
2530	70	25	30	40	10	9
	75	25	30	45	10	9
	80	25	30	50	10	9
	85	25	30	55	10	9
	90	25	30	60	10	9
	95	25	30	65	10	9
	100	25	30	70	10	9
	110	25	30	80	10	9
	120	25	30	90	10	9
	130	25	30	100	10	9
	140	25	30	110	10	9
	150	25	30	120	10	9
3025	70	30	25	40	10	9
	75	30	25	45	10	9
	80	30	25	50	10	9
	85	30	25	55	10	9
	90	30	25	60	10	9
	95	30	25	65	10	9
	100	30	25	70	10	9
	110	30	25	80	10	9
	120	30	25	90	10	9
	130	30	25	100	10	9
	140	30	25	110	10	9
	150	30	25	120	10	9

罗门牌耐磨块

电脑编码 * 50

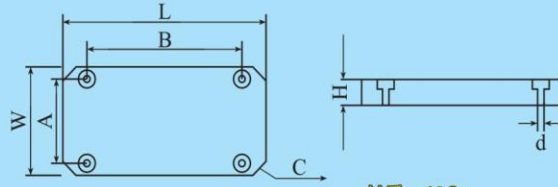
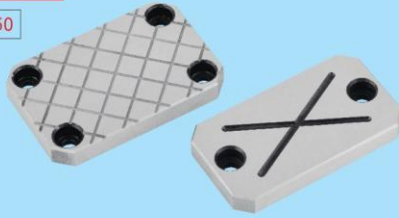


材质: 40Cr
硬度: 58-62渗碳热处理

代号	W	L	H	d	A	B	C	单价	
								H10	H12
W30	30	40	10/12	7		20	6	✓	✓
	30	50	10/12	7		30	6	✓	✓
	30	60	10/12	7		40	6	✓	✓
	30	70	10/12	7		50	6	✓	✓
	30	80	10/12	7		60	6	✓	✓
	30	90	10/12	7		70	6	✓	✓
	30	100	10/12	7		80	6	✓	✓

罗门牌耐磨块

电脑编码 * 50

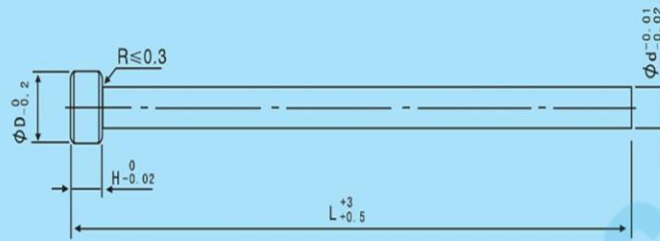


材质: 40Cr
硬度: 58-62渗碳热处理

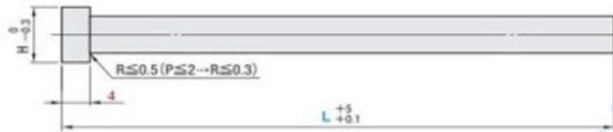
代号	W	L	H	d	A	B	C	单价	
								H10	H12
W40	40	50	10/12	7		30	6	✓	✓
	40	60	10/12	7		40	6	✓	✓
	40	70	10/12	7		50	6	✓	✓
	40	80	10/12	7		60	6	✓	✓
	40	90	10/12	7		70	6	✓	✓
	40	100	10/12	7		80	6	✓	✓
	40	120	10/12	7		100	6	✓	✓
W50	50	50	10/12	7		30	6	✓	✓
	50	60	10/12	7		40	6	✓	✓
	50	70	10/12	7		50	6	✓	✓
	50	80	10/12	7		60	6	✓	✓
	50	90	10/12	7		70	6	✓	✓
	50	120	10/12	7		100	6	✓	✓
W60	60	60	10/12	7		40	8	✓	✓
	60	70	10/12	7		50	8	✓	✓
	60	80	10/12	7	40	60	8	✓	✓
	60	90	10/12	7	40	70	8	✓	✓
	60	100	10/12	7	40	80	8	✓	✓
	60	120	10/12	7	40	100	8	✓	✓
W70	70	70	10/12	7	50	50	8	✓	✓
	70	80	10/12	7	50	60	8	✓	✓
	70	90	10/12	7	50	70	8	✓	✓
	70	100	10/12	7	50	80	8	✓	✓
	70	120	10/12	7	50	100	8	✓	✓
W80	80	80	10/12	7/9	50	50	8	✓	✓
	80	90	10/12	7/9	50	60	8	✓	✓
	80	100	10/12	7/9	50	70	8	✓	✓
	80	120	10/12	7/9	50	90	8	✓	✓
	80	150	10/12	7/9	50	120	8	✓	✓
W90	90	90	10/12	7/9	60	60	8	✓	✓
	90	100	10/12	7/9	60	70	8	✓	✓
	90	120	10/12	7/9	60	90	8	✓	✓
	90	150	10/12	7/9	60	120	8	✓	✓
W100	100	100	10/12	7/9	70	70	8	✓	✓
	100	120	10/12	7/9	70	90	8	✓	✓
	100	150	10/12	7/9	70	120	8	✓	✓
	100	180	10/12	7/9	70	150	8	✓	✓

Tel: (024) 7300.1868

SKD-61



Vật liệu : SKD61
Độ cứng : 52 HRC



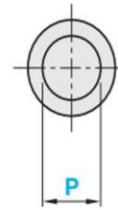
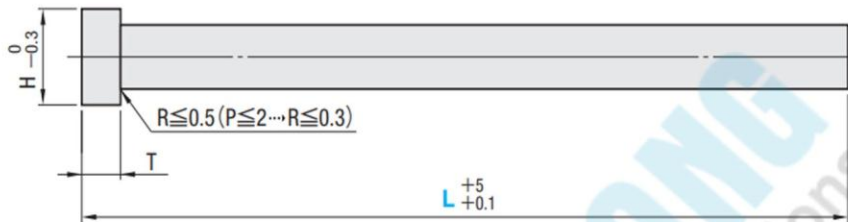
Vật liệu : SKD-61
Độ cứng : 52 HRC

P (0/-0.02)	T	H	L													
			100	150	200	250	300	350	400	450	500	550	600			
1	4 0 -0.02	3	v	v	v	v	v	v								
1.5		3	v	v	v	v	v	v								
2		6	v	v	v	v	v	v	v	v	v					
2.5		6	v	v	v	v	v	v	v	v	v	v				
3		6	v	v	v	v	v	v	v	v	v	v	v			
3.5		7	v	v	v	v	v	v	v	v	v	v	v	v		
4		8	v	v	v	v	v	v	v	v	v	v	v	v	v	
4.5		8	v	v	v	v	v	v	v	v	v	v	v	v	v	v
5		9	v	v	v	v	v	v	v	v	v	v	v	v	v	v
5.5		10	v	v	v	v	v	v	v	v	v	v	v	v	v	v
6		10	v	v	v	v	v	v	v	v	v	v	v	v	v	v
6.5		10	v	v	v	v	v	v	v	v	v	v	v	v	v	v
7		11	v	v	v	v	v	v	v	v	v	v	v	v	v	v
7.5		13	v	v	v	v	v	v	v	v	v	v	v	v	v	v
8		13	v	v	v	v	v	v	v	v	v	v	v	v	v	v
8.5		14	v	v	v	v	v	v	v	v	v	v	v	v	v	v
9	14	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
9.5	15	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
10	15	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
10.5	16	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
11	16	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
11.5	17	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
12	17	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
12.5	18	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
13	18	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
14	19	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
15	21	v	v	v	v	v	v	v	v	v	v	v	v	v	v	
16	21	v	v	v	v	v	v	v	v	v	v	v	v	v	v	

SKD-61



Vật liệu : SKD61
Độ cứng : 52 HRC



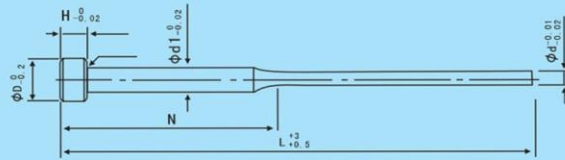
Vật liệu: SKD-61
Độ cứng: 52 HRC

P (0/-0.02)	T	H	L										
			100	150	200	250	300	350	400	450	500	550	600
1	4 $\frac{0}{-0.02}$	3	v	v	v	v	v	v					
1.5		3	v	v	v	v	v	v					
2		6	v	v	v	v	v	v	v	v	v		
2.5		6	v	v	v	v	v	v	v	v	v		
3		6	v	v	v	v	v	v	v	v	v	v	v
3.5		7	v	v	v	v	v	v	v	v	v	v	v
4	6 $\frac{0}{-0.02}$	8	v	v	v	v	v	v	v	v	v	v	v
4.5		8	v	v	v	v	v	v	v	v	v	v	v
5		9	v	v	v	v	v	v	v	v	v	v	v
5.5		10	v	v	v	v	v	v	v	v	v	v	v
6		10	v	v	v	v	v	v	v	v	v	v	v
6.5		10	v	v	v	v	v	v	v	v	v	v	v
7	8 $\frac{0}{-0.02}$	11	v	v	v	v	v	v	v	v	v	v	v
7.5		13	v	v	v	v	v	v	v	v	v	v	v
8		13	v	v	v	v	v	v	v	v	v	v	v
8.5		14	v	v	v	v	v	v	v	v	v	v	v
9		14	v	v	v	v	v	v	v	v	v	v	v
9.5		15	v	v	v	v	v	v	v	v	v	v	v
10		15	v	v	v	v	v	v	v	v	v	v	v
10.5		16	v	v	v	v	v	v	v	v	v	v	v
11		16	v	v	v	v	v	v	v	v	v	v	v
11.5		17	v	v	v	v	v	v	v	v	v	v	v
12		17	v	v	v	v	v	v	v	v	v	v	v
12.5		18	v	v	v	v	v	v	v	v	v	v	v
13	18	v	v	v	v	v	v	v	v	v	v	v	
14	19	v	v	v	v	v	v	v	v	v	v	v	
15	21	v	v	v	v	v	v	v	v	v	v	v	
16	21	v	v	v	v	v	v	v	v	v	v	v	

Tel: (024) 7300.1868

65Mn 托针

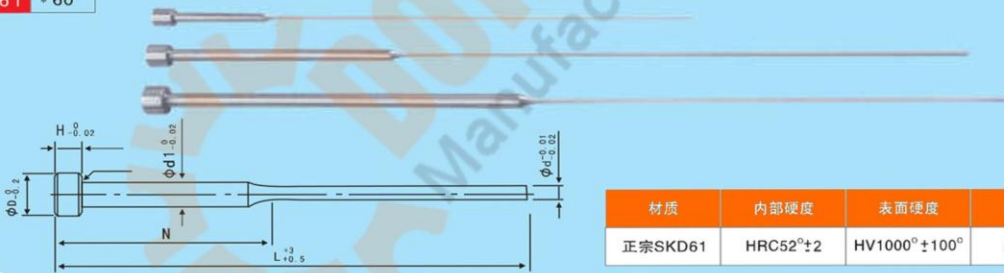
电脑编码 * 50



材质 : SKD61
 硬度 : 50 (+2)

小头直径 ϕd	标准托位长度 N	托位直径 d1	长 度			
			100	125-150	200	250
0.8	N30 N50 N75 N100 N125	2	✓	✓	✓	
1-1.2		2	✓	✓	✓	
0.8		2.5	✓	✓	✓	
1-1.2		2.5	✓	✓	✓	✓
1.5		2.5	✓	✓	✓	✓
0.8		3	✓	✓	✓	✓
1-1.2		3	✓	✓	✓	✓
1.5		3	✓	✓	✓	✓
2		3	✓	✓	✓	✓
2		3.5	✓	✓	✓	✓
2		4	✓	✓	✓	✓
2.5		4	✓	✓	✓	✓

SKD61 * 60

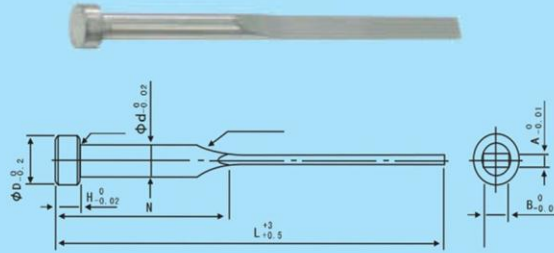


材质	内部硬度	表面硬度	处理方式
正宗SKD61	HRC52°±2	HV1000°±100°	表面氮化

d	d1	D	H	N	L100	L150	L200	L250	L300
0.8	3	6	4	30 50 75 100 125	✓	✓	✓	✓	✓
1.0	3	6	4		✓	✓	✓	✓	✓
1.2	3	6	4		✓	✓	✓	✓	✓
1.5	3	6	4		✓	✓	✓	✓	✓
2.0	3	6	4		✓	✓	✓	✓	✓
2.0	4	8	6		✓	✓	✓	✓	✓
2.5	4	8	6		✓	✓	✓	✓	✓
3.0	4	8	6		✓	✓	✓	✓	✓

65Mn扁顶针

电脑编码 * 60

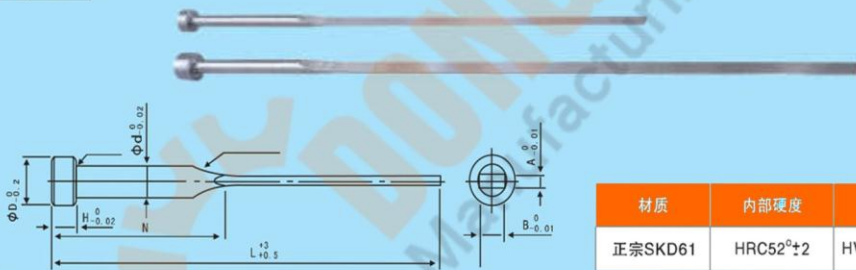


材质: 65Mn
硬度: HRC52 \pm 2°

圆直径 规格	长度 价格	N	AxB	100	125	150	175	200	225	250	275	300
				6.0	40	1.0x5 1.2x5 1.5x5	✓	✓	✓	✓	✓	✓
8.0	55	1.5x7 2.0x7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	70	1.5x8 2.0x8 2.5x8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	85	1.5x10 2.0x10 2.5x10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

SKD61扁顶针

电脑编码 * 70



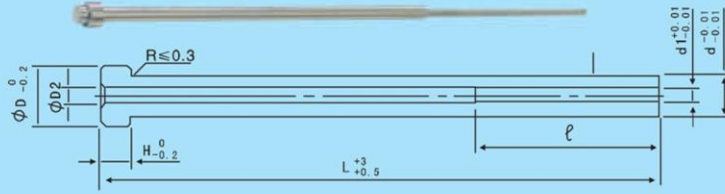
材质	内部硬度	表面硬度	处理方式
正宗SKD61	HRC52 \pm 2	HV1000 \pm 100°	表面氮化

d	D	H	L				
			100	150	200	250	300
4	8	6	✓	✓	✓	✓	✓
5	9	6	✓	✓	✓	✓	✓
6	10	6	✓	✓	✓	✓	✓
7	10	6	✓	✓	✓	✓	✓
8	13	8	✓	✓	✓	✓	✓
10	15	8	✓	✓	✓	✓	✓
12	17	8	✓	✓	✓	✓	✓

司筒价格表

65Mn和SKD61

电脑编码	标准		非标
	65Mn	SKD61	
	*40	*60	*50

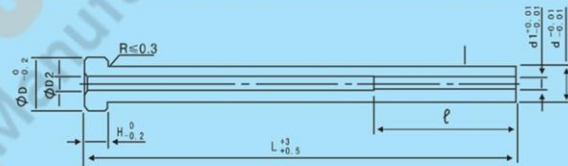


⚠ SKD61为台标头部

	内 孔	杆 径	65Mn(价格/mm)		正宗SKD-61枪钻(价格/mm)	
			单壁>0.8mm	单壁≤0.8mm	单壁>0.8mm	单壁≤0.8mm
标准司筒	1.0-1.4	6mm以内	✓	✓	✓	
	1.5-1.9	8mm以内	✓	✓	✓	
	2.0-4.0	8mm以内	✓	✓	✓	✓
	2.0-4.5	8mm以内	✓	✓	✓	✓
	5.0-6.0	8mm以内	✓	✓	✓	✓
	5.0-8.0	10mm以内	✓	✓		
非标司筒	6.0-8.0	12mm以内	✓	✓	✓	
	1.00-1.49	5以内	✓	✓		
	1.50-6.00	9以内	✓	✓		
	6.01-8.00	12以内	✓	✓		
	8.01-10.00	14以内	✓	✓	✓	
	10.01-12.00	16以内	✓	✓	✓	

罗门牌大司筒价格表

电脑编码 *50



材质: 20Cr
硬度: 58-62° 渗碳热处理

内径d1	外径d	20Cr(元/mm)	SKD-61(元/mm)	内径d1	外径d	20Cr(元/mm)	SKD-61(元/mm)
12.01-13	16	✓	✓	28.01-30	35	✓	✓
13.01-14	18	✓	✓	30.01-32	38	✓	✓
14.01-15	20	✓	✓	32.01-35	40	✓	✓
15.01-16	22	✓	✓	35.01-38	42	✓	✓
16.01-18	24	✓	✓	38.01-40	45	✓	✓
18.01-20	26	✓	✓	40.01-42	48	✓	✓
20.01-23	28	✓	✓	42.01-45	50	✓	✓
23.01-25	30	✓	✓	45.01-48	52	✓	✓
25.01-28	32	✓	✓	48.01-50	55	✓	✓

普通短元柱肖

电脑编码 * 60

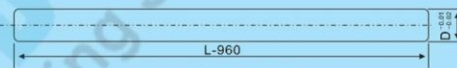


材质: S45C
HRC50±2°

直径	长度		价格								
	30	40	50	60	70	80	90	100			
4	✓	✓	✓	✓	✓	✓					
5	✓	✓	✓	✓	✓	✓					
6	✓	✓	✓	✓	✓	✓	✓	✓		✓	
8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
16		✓	✓	✓	✓	✓	✓	✓	✓	✓	

1米光圆

电脑编码 * 70

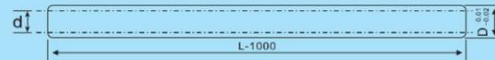


材质: S45C

规格	价格	规格	价格	规格	价格	规格	价格
0.8-2	✓	7.1-8	✓	17	✓	26	✓
2.1-2.5	✓	8.1-9	✓	18	✓	28	✓
2.6-3	✓	9.1-10	✓	19	✓	30	✓
3.1-3.5	✓	10.1-11	✓	20	✓	32	✓
3.6-4	✓	11.1-12	✓	21	✓	35	✓
4.1-4.5	✓	12.1-13	✓	22	✓	38	✓
4.6-5	✓	14	✓	23	✓	40	✓
5.1-6	✓	15	✓	24	✓	45	✓
6.1-7	✓	16	✓	25	✓	50	✓

不锈钢空心管

电脑编码 * 60



材质: 不锈钢

规格 Dxd	价格	规格 Dxd	价格	规格 Dxd	价格	规格 Dxd	价格	规格 Dxd	价格
Φ1.2xΦ0.9	✓	Φ1.5xΦ1.2	✓	Φ1.6xΦ1.3	✓	Φ1.8xΦ1.5	✓	Φ2.0xΦ1.7	✓
								Φ2.5xΦ2.2	✓
								Φ3.0xΦ2.7	✓
								Φ3.6xΦ3.3	✓

普通水嘴

电脑编码 * 65



材质: S45C

规格 长度 单价 (只)	M6	M8	M10	M12	M14	M16	M20
	普通	✓	✓	✓	✓	✓	✓
包装数量	200只/包	200只/包	100只/包	100只/包	100只/包	100只/包	50只/包

加长水嘴

电脑编码 * 55



材质: S45C

规格 长度 单价	M8	M10	M12	M14	M16
	60	✓	✓	✓	✓
70	✓	✓	✓	✓	
80	✓	✓	✓		✓
90	✓	✓	✓		
100	✓	✓	✓	✓	✓
110	✓	✓	✓	✓	✓
120	✓	✓	✓	✓	✓
150	✓	✓	✓	✓	✓
180	✓	✓	✓	✓	✓
200	✓	✓	✓	✓	✓
220		✓	✓		✓
250		✓	✓		✓

快速接头

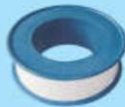
电脑编码 * 55



	M8	M10	M12	M14	M16	M20	1/2-04	1/4-02	1/8-01	3/8-03
Pc8	✓	✓	✓		✓		✓	✓	✓	✓
Pc10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pc12		✓	✓	✓	✓	✓	✓	✓	✓	✓

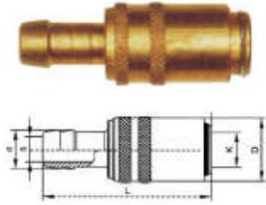
生料带

电脑编码 * 65



规格	价格	包装数量
0.1mmX17mmX4m	✓	

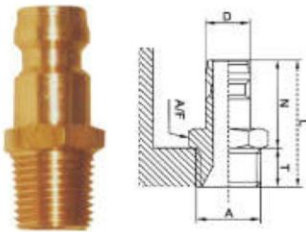
电脑编码 * 80



系列	开放式编号	D	L	d	K	S
101	101-2-0	17.2	52.5	10.0	9.0	6.0
101	101-3-0			11.0		
101	101-4-0			14.0		9.0

德式模具用水嘴

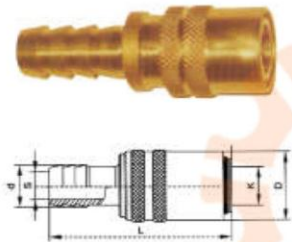
电脑编码 * 80



系列	开放式编号	D	L	N	A	T	A/F
101	101-01BSPT-M	9.0	29.9	17.0	1/8"BSPT	12.0	11.0
101	101-M10*1-M				M10*1		11.0
101	101-M14*1.5-M				M14*1.5		14.0
101	101-02BSPT-M				1/4"BSPT		14.0

美式模具用快速接头

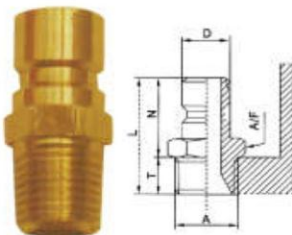
电脑编码 * 80



系列	开放式编号	D	L	d	K	S
301	301-2-0	17.2	49.0	10.0	9.7	6.0
301	301-3-0			11.0		
301	301-4-0			14.0		9.0
401	401-3-0	24.0	55.0	11.0	13.5	6.0
401	401-4-0			14.0		9.0

美式模具用水嘴

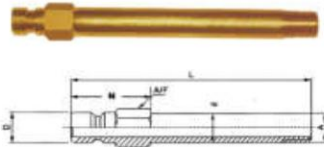
电脑编码 * 80



系列	开放式编号	D	L	N	A	T	A/F
301	301-10PT-M	9.5	24.0	15.0	1/8PT	9.0	11.0
301	301-02PT-M		29.0	17.0	1/4PT		12.0
401	401-01PT-M	13.5	34.0	22.0	1/8PT	12.0	11.0
401	401-02PT-M				1/4PT		14.0
401	401-03PT-M		36.0		3/8PT	14.0	17.0
401	401-04PT-M				1/2PT		21.0

美式模具用水嘴

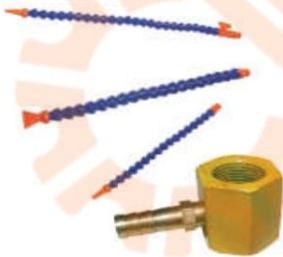
电脑编码 * 80



系列	开放式编号	D	N	A	d	A/F
301	301-01PT-50L	9.5	21.0	1/8PT	10.0	11.0
301	301-01PT-75L					
301	301-01PT-100L					
301	301-01PT-125L					
301	301-01PT-150L	9.5	21.0	1/4PT	13.0	14.0
301	301-02PT-50L					
301	301-02PT-75L					
301	301-02PT-100L					
301	301-02PT-125L	13.5	26.0	1/8PT	10.0	11.0
301	301-02PT-150L					
401	401-01PT-50L					
401	401-01PT-75L					
401	401-01PT-100L	13.5	26.0	1/4PT	13.0	14.0
401	401-01PT-125L					
401	401-01PT-150L					
401	401-02PT-50L					
401	401-02PT-75L	13.5	26.0	1/4PT	13.0	14.0
401	401-02PT-100L					
401	401-02PT-125L					
401	401-02PT-150L					

塑料冷却水管

电脑编码 * 70



型号	单价
1/2X410	✓
1/2X410(开关)	✓
1/4X280	✓
1/4X280(开关)	✓
1/4X410	✓
1/4X410(开关)	✓
1/4X500	✓
3/8X410	✓
3/8X410(开关)	✓
3/8X500	✓
冷却水管磁座 1/4	✓
冷却水管磁座 3/8	✓

耐高温密封带

电脑编码 * 30



直径d

2
2.5
3
3.5
4
5

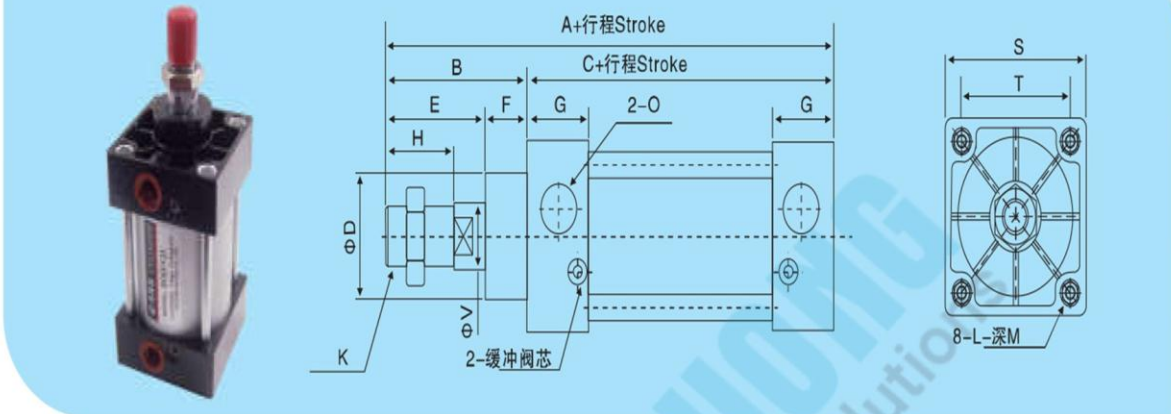
耐高温密封圈

电脑编码 * 20



外径X线径	外径X线径	外径X线径	外径X线径
10x2	16x3	30x3.5	60x2.5
x2.5	18x2.5	32x3	x3
12x2	x3	35x2.5	65x2.5
x2.5	20x2	x3	x3
x3	x2.5	40x2.5	70x2.5
14x2	x3	x3	x3
x2.5	x3.5	x3.5	80x2.5
x3	25x2.5	45x2.5	x3
15x2	x3	x3	100x2.5
x2.5	x3.5	50x2.5	x3
x3	28x3	x3	x3.5
16x2	30x2.5	55x2.5	
x2.5	x3	x3	

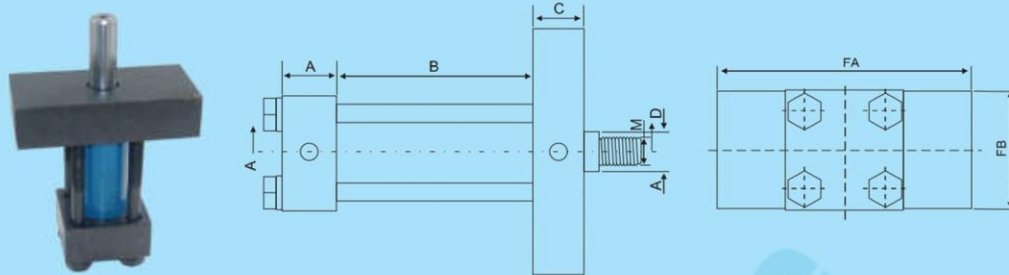
电脑编码 * 40



内径(mm) Bore size	A	A1	A2	B	C	D	E	F	G	H	K	L	O	S	T	V
32	140	187	182	47	93	28	32	15	27.5	22	M10×1.25	M6×1	G1/8	45	33	12
40	142	191	185	49	93	32	34	15	27.5	24	M12×1.25	M6×1	G1/4	50	37	16
50	150	207	196	57	93	38	42	15	27.5	32	M16×1.5	M6×1	G1/4	62	47	20
63	153	210	199	57	96	38	42	15	27.5	32	M16×1.5	M8×1.25	G3/8	75	56	20
80	183	258	243	75	108	47	54	21	33	40	M20×1.5	M10×1.25	G3/8	94	70	25
100	189	264	249	75	114	47	54	21	33	40	M20×1.5	M10×1.25	G1/2	112	84	25
125	242	339	314	96	146	60	64	32	40	54	M27×2	M12	G1/2	145	110	32

油缸

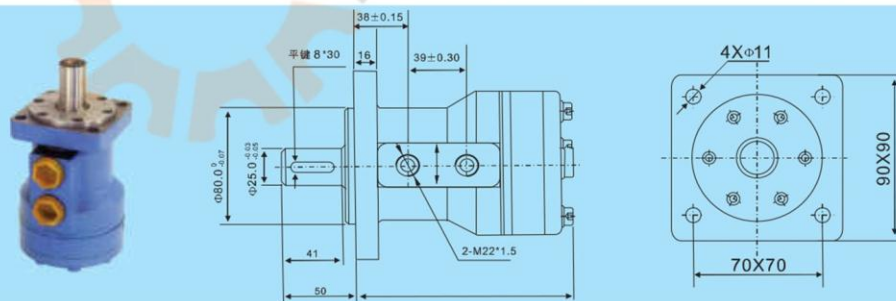
电脑编码 *88



Size Bore	A	B	C	D	FA	FB	M	价格	
								0-50mm (单价)	50mm以上 每加价 元/10mm
∅ 30	30	20+行程	30	18	120	60	12X1.75	✓	✓
∅ 40	32	20+行程	32	20	140	70	16X2.0	✓	✓
				25					
∅ 50	32	20+行程	32	20	160	80	16X2.0	✓	✓
				25					
∅ 60	33	30+行程	33	25	180	90	20X2.5	✓	✓
				30					
∅ 80	35	30+行程	40	30	220	110	24X3.0	✓	✓
				40					
∅ 100	40	30+行程	40	30	265	140	24X3.0	✓	✓
				40					
∅ 110	40	40+行程	45		280	150	30X3.5	✓	✓
∅ 120	40	40+行程	45	40	300	160	30X3.5	✓	✓
				50					

油马达

电脑编码 *70



规格	80	100	125	160	200	250
	✓	✓	✓	✓	✓	✓



电脑编码 * 93



直径 长度	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30
8		✓	✓	✓											
10		✓	✓	✓	✓										
12		✓	✓	✓	✓	✓									
16		✓	✓	✓	✓	✓	✓								
20		✓	✓	✓	✓	✓	✓	✓							
25		✓	✓	✓	✓	✓	✓	✓	✓						
30		✓	✓	✓	✓	✓	✓	✓	✓	✓					
35		✓	✓	✓	✓	✓	✓	✓	✓	✓					
40		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
45		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
50		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
55			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
60			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
65			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
70				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
75				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
80				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
85				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
90				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
95				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
100				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
110				✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
120					✓	✓	✓	✓	✓	✓	✓	✓			✓
130					✓	✓	✓	✓	✓	✓	✓	✓			✓
140					✓	✓	✓	✓	✓	✓	✓	✓			✓
150					✓	✓	✓	✓	✓	✓	✓	✓			✓
160					✓	✓	✓	✓	✓	✓	✓	✓			✓
170					✓	✓	✓	✓	✓	✓	✓	✓			✓
180					✓	✓	✓	✓	✓	✓	✓	✓			✓
190					✓	✓	✓	✓	✓	✓	✓	✓			✓
200					✓	✓	✓	✓	✓	✓	✓	✓			✓

(12.9级)

HEX SOCKET HEAD CAP SCREW

货类: 100001

DIN912公制合金钢12.9级内六角螺丝(杯头)

ALLOY STEEL HEX SOCKET HEAD CAP SCREW DIN912-12.

9



电脑编码 *45

CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M2-0.4			M3-0.5			M5-0.8			M6-1.0			M8-1.25		
020003	3	✓	030035	35	✓	050040	40	✓	060030	30	✓	080014	14	✓
020004	4	✓	030040	40	✓	050045	45	✓	060035	35	✓	080016	16	✓
020005	5	✓	030045	45	✓	050050	50	✓	060040	40	✓	080018	18	✓
020006	6	✓	030050	50	✓	050055	55	✓	060045	45	✓	080020	20	✓
020008	8	✓	M4-0.7			050060	60	✓	060050	50	✓	080022	22	✓
000010	10	✓	040005	5	✓	050065	65	✓	060055	55	✓	080025	25	✓
020012	12	✓	040006	6	✓	050070	70	✓	060060	60	✓	080030	30	✓
020014	14	✓	040008	8	✓	050075	75	✓	060065	65	✓	080035	35	✓
020016	16	✓	040010	10	✓	050080	80	✓	060070	70	✓	080040	40	✓
020018	18	✓	040012	12	✓	050085	85	✓	060075	75	✓	080045	45	✓
020020	20	✓	040014	14	✓	050090	90	✓	060080	80	✓	080050	50	✓
M2.5-0.45			040016	16	✓	050095	95	✓	060085	85	✓	080055	55	✓
025004	4	✓	040018	18	✓	050100	100	✓	060090	90	✓	080060	60	✓
025005	5	✓	040020	20	✓	050105	105	✓	060095	95	✓	080065	65	✓
025006	6	✓	040022	22	✓	050110	110	✓	060100	100	✓	080070	70	✓
025008	8	✓	040025	25	✓	050115	115	✓	060105	105	✓	080075	75	✓
025010	10	✓	040030	30	✓	050120	120	✓	060110	110	✓	080080	80	✓
025012	12	✓	040035	35	✓	050125	125	✓	060115	115	✓	080085	85	✓
025014	14	✓	040040	40	✓	050130	130	✓	060120	120	✓	080090	90	✓
025016	16	✓	040045	45	✓	050135	135	✓	060125	125	✓	080095	95	✓
025018	18	✓	040050	50	✓	050140	140	✓	060130	130	✓	080100	100	✓
025020	20	✓	040055	55	✓	050145	145	✓	060135	135	✓	080105	105	✓
025025	25	✓	040060	60	✓	050150	150	✓	060140	140	✓	080110	110	✓
025030	30	✓	040065	65	✓	050160	160	✓	060145	145	✓	080115	115	✓
M3-0.5			040070	70	✓	050170	170	✓	060150	150	✓	080120	120	✓
030004	4	✓	M5-0.8			050180	180	✓	060160	160	✓	080125	125	✓
030005	5	✓	050006	6	✓	050190	190	✓	060170	170	✓	080130	130	✓
030006	6	✓	050008	8	✓	050200	200	✓	060180	180	✓	080135	135	✓
030008	8	✓	050010	10	✓	M6-1.0			060190	190	✓	080140	140	✓
030010	10	✓	050012	12	✓	060008	8	✓	060200	200	✓	080145	145	✓
030012	12	✓	050014	14	✓	060010	10	✓	060210	210	✓	080150	150	✓
030014	14	✓	050016	16	✓	060012	12	✓	060220	220	✓	080160	160	✓
030016	16	✓	050018	18	✓	060014	14	✓	060230	230	✓	080170	170	✓
030018	18	✓	050020	20	✓	060016	16	✓	060240	240	✓	080180	180	✓
030020	20	✓	050022	22	✓	060018	18	✓	060250	250	✓	080190	190	✓
030022	22	✓	050025	25	✓	060020	20	✓	M8-1.25			080200	200	✓
030025	25	✓	050030	30	✓	060022	22	✓	080010	10	✓	080210	210	✓
030030	30	✓	050035	35	✓	060025	25	✓	080012	12	✓	080220	220	✓

(12.9级)

HEX SOCKET HEAD CAP SCREW

货类 : 100001

DIN912公制合金钢12.9级内六角螺丝(杯头)

ALLOY STEEL HEX SOCKET HEAD CAP SCREW DIN912-12.9

电脑编码 *45



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M16-2.0			M18-2.5			M20-2.5			M20-2.5			M22-2.5		
160230	230	✓	180110	110	✓	200070	70	✓	200480	480	✓	220320	320	✓
160240	240	✓	180120	120	✓	200075	75	✓	200500	500	✓	220330	330	✓
160250	250	✓	180130	130	✓	200080	80	✓	M22-2.5			220340	340	✓
160260	260	✓	180140	140	✓	200085	85	✓	220030	30	✓	220350	350	✓
160270	270	✓	180150	150	✓	200090	90	✓	220035	35	✓	220360	360	✓
160280	280	✓	180160	160	✓	200095	95	✓	220040	40	✓	220370	370	✓
160290	290	✓	180170	170	✓	200100	100	✓	220045	45	✓	220380	380	✓
160300	300	✓	180180	180	✓	200110	110	✓	220050	50	✓	220390	390	✓
160310	310	✓	180190	190	✓	200120	120	✓	220055	55	✓	220400	400	✓
160320	320	✓	180200	200	✓	200130	130	✓	220060	60	✓	M24-3.0		
160330	330	✓	180210	210	✓	200140	140	✓	220065	65	✓	240030	30	✓
160340	340	✓	180220	220	✓	200150	150	✓	220070	70	✓	240035	35	✓
160350	350	✓	180230	230	✓	200160	160	✓	220075	75	✓	240040	40	✓
160360	360	✓	180240	240	✓	200170	170	✓	220080	80	✓	240045	45	✓
160370	370	✓	180250	250	✓	200180	180	✓	220085	85	✓	240050	50	✓
160380	380	✓	180260	260	✓	200190	190	✓	220090	90	✓	240055	55	✓
160390	390	✓	180270	270	✓	200200	200	✓	220095	95	✓	240060	60	✓
160400	400	✓	180280	280	✓	200210	210	✓	220100	100	✓	240065	65	✓
160420	420	✓	180290	290	✓	200220	220	✓	220110	110	✓	240070	70	✓
160450	450	✓	180300	300	✓	200230	230	✓	220120	120	✓	240075	75	✓
160480	480	✓	180310	310	✓	200240	240	✓	220130	130	✓	240080	80	✓
160500	500	✓	180320	320	✓	200250	250	✓	220140	140	✓	240085	85	✓
M18-2.5			180330	330	✓	200260	260	✓	220150	150	✓	240090	90	✓
180025	25	✓	180340	340	✓	200270	270	✓	220160	160	✓	240095	95	✓
180030	30	✓	180350	350	✓	200280	280	✓	220170	170	✓	240100	100	✓
180035	35	✓	180360	360	✓	200290	290	✓	220180	180	✓	240110	110	✓
180040	40	✓	180370	370	✓	200300	300	✓	220190	190	✓	240120	120	✓
180045	45	✓	180380	380	✓	200310	310	✓	220200	200	✓	240130	130	✓
180050	50	✓	180390	390	✓	200320	320	✓	220210	210	✓	240140	140	✓
180055	55	✓	180400	400	✓	200330	330	✓	220220	220	✓	240150	150	✓
180060	60	✓	M20-2.5			200340	340	✓	220230	230	✓	240160	160	✓
180065	65	✓	200030	30	✓	200350	350	✓	220240	240	✓	240170	170	✓
180070	70	✓	200035	35	✓	200360	360	✓	220250	250	✓	240180	180	✓
180075	75	✓	200040	40	✓	200370	370	✓	220260	260	✓	240190	190	✓
180080	80	✓	200045	45	✓	200380	380	✓	220270	270	✓	240200	200	✓
180085	85	✓	200050	50	✓	200390	390	✓	220280	280	✓	240210	210	✓
180090	90	✓	200055	55	✓	200400	400	✓	220290	290	✓	240220	220	✓
180095	95	✓	200060	60	✓	200420	420	✓	220300	300	✓	240230	230	✓
180100	100	✓	200065	65	✓	200450	450	✓	220310	310	✓	240240	240	✓

(12.9级)

HEX SOCKET HEAD CAP SCREW

货类 : 100001

DIN912公制合金钢12.9级内六角螺丝(杯头)

ALLOY STEEL HEX SOCKET HEAD CAP SCREW DIN912-12.9

电脑编码 *45



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M24-3.0			M27-3.0			M30-3.5			M33-3.5			M36-4.0		
240250	250	✓	270160	160	✓	300140	140	✓	330080	80	✓	360060	60	✓
240260	260	✓	270170	170	✓	300150	150	✓	330090	90	✓	360065	65	✓
240270	270	✓	270180	180	✓	300160	160	✓	330100	100	✓	360070	70	✓
240280	280	✓	270190	190	✓	300170	170	✓	330110	110	✓	360075	75	✓
240290	290	✓	270200	200	✓	300180	180	✓	330120	120	✓	360080	80	✓
240300	300	✓	270210	210	✓	300190	190	✓	330130	130	✓	360090	90	✓
240310	310	✓	270220	220	✓	300200	200	✓	330140	140	✓	360100	100	✓
240320	320	✓	270230	230	✓	300210	210	✓	330150	150	✓	360110	110	✓
240330	330	✓	270240	240	✓	300220	220	✓	330160	160	✓	360120	120	✓
240340	340	✓	270250	250	✓	300230	230	✓	330170	170	✓	360130	130	✓
240350	350	✓	270260	260	✓	300240	240	✓	330180	180	✓	360140	140	✓
240360	360	✓	270270	270	✓	300250	250	✓	330190	190	✓	360150	150	✓
240370	370	✓	270280	280	✓	300260	260	✓	330200	200	✓	360160	160	✓
240380	380	✓	270290	290	✓	300270	270	✓	330210	210	✓	360170	170	✓
240390	390	✓	270300	300	✓	300280	280	✓	330220	220	✓	360180	180	✓
240400	400	✓	270310	310	✓	300290	290	✓	330230	230	✓	360190	190	✓
240410	410	✓	270320	320	✓	300300	300	✓	330240	240	✓	360200	200	✓
240420	420	✓	270330	330	✓	300310	310	✓	330250	250	✓	360210	210	✓
240430	430	✓	270340	340	✓	300320	320	✓	330260	260	✓	360220	220	✓
240440	440	✓	270350	350	✓	300330	330	✓	330270	270	✓	360230	230	✓
240450	450	✓	270360	360	✓	300340	340	✓	330280	280	✓	360240	240	✓
240480	480	✓	270370	370	✓	300350	350	✓	330290	290	✓	360250	250	✓
240500	500	✓	270380	380	✓	300360	360	✓	330300	300	✓	360260	260	✓
M27-3.0			270390	390	✓	300370	370	✓	330310	310	✓	360270	270	✓
270050	50	✓	270400	400	✓	300380	380	✓	330320	320	✓	360280	280	✓
270055	55	✓	M30-3.5			300390	390	✓	330330	330	✓	360290	290	✓
270060	60	✓	300050	50	✓	300400	400	✓	330340	340	✓	360300	300	✓
270065	65	✓	300055	55	✓	300420	420	✓	330350	350	✓	360310	310	✓
270070	70	✓	300060	60	✓	300450	450	✓	330360	360	✓	360320	320	✓
270075	75	✓	300065	65	✓	300480	480	✓	330370	370	✓	360330	330	✓
270080	80	✓	300070	70	✓	300500	500	✓	330380	380	✓	360340	340	✓
270090	90	✓	300075	75	✓	M33-3.5			330390	390	✓	360350	350	✓
270100	100	✓	300080	80	✓	330050	50	✓	330400	400	✓	360360	360	✓
270110	110	✓	300090	90	✓	330055	55	✓	330420	420	✓	360370	370	✓
270120	120	✓	300100	100	✓	330060	60	✓	330450	450	✓	360380	380	✓
270130	130	✓	300110	110	✓	330065	65	✓	330480	480	✓	360400	400	✓
270140	140	✓	300120	120	✓	330070	70	✓	330500	500	✓	360420	420	✓
270150	150	✓	300130	130	✓	330075	75	✓	M36-4.0			360450	450	✓

电脑编码 *45



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M36-4.0			M42-4.5			M42-4.5			M48-5.0			M48-5.0		
360480	480	✓	420220	220	✓	420390	390	✓	480180	180	✓	480350	350	✓
360500	500	✓	420230	230	✓	420400	400	✓	480190	190	✓	480360	360	✓
M42-4.5			420240	240	✓	420420	420	✓	480200	200	✓	480370	370	✓
420080	80	✓	420250	250	✓	420450	450	✓	480210	210	✓	480380	380	✓
420090	90	✓	420260	260	✓	420480	480	✓	480220	220	✓	480390	390	✓
420100	100	✓	420270	270	✓	420500	500	✓	480230	230	✓	480400	400	✓
420110	110	✓	420280	280	✓	M48-5.0			480240	240	✓	480420	420	✓
420120	120	✓	420290	290	✓	480080	80	✓	480250	250	✓	480450	450	✓
420130	130	✓	420300	300	✓	480090	90	✓	480260	260	✓	480480	480	✓
420140	140	✓	420310	310	✓	480100	100	✓	480270	270	✓	480500	500	✓
420150	150	✓	420320	320	✓	480110	110	✓	480280	280	✓			
420160	160	✓	420330	330	✓	480120	120	✓	480290	290	✓			
420170	170	✓	420340	340	✓	480130	130	✓	480300	300	✓			
420180	180	✓	420350	350	✓	480140	140	✓	480310	310	✓			
420190	190	✓	420360	360	✓	480150	150	✓	480320	320	✓			
420200	200	✓	420370	370	✓	480160	160	✓	480330	330	✓			
420210	210	✓	420380	380	✓	480170	170	✓	480340	340	✓			

电脑编码 *



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
100000	M10-1.5	✓	200000	M20-1.5	✓	280000	M28-1.5	✓
120000	M12-1.5	✓	220000	M22-1.5	✓	300000	M30-1.5	✓
140000	M14-1.5	✓	240000	M24-1.5	✓	330000	M33-1.5	✓
160000	M16-1.5	✓	260000	M26-1.5	✓			
180000	M18-1.5	✓	270000	M27-1.5	✓			

HEX SOCKET FLAT HEAD CAP SCREW

货类 : 100040

10.9级公制合金钢平头内六角螺丝(平杯)

ALLOY STEEL HEX SOCKET FLAT HEAD SCREW DIN7991

电脑编码 *50



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M3-0.5			M5-0.8			M6-1.0			M8-1.25			M10-1.5		
030010	10	✓	050010	10	✓	060025	25	✓	080045	45	✓	100025	25	✓
030012	12	✓	050012	12	✓	060030	30	✓	080050	50	✓	100030	30	✓
030016	16	✓	050016	16	✓	060045	45	✓	080060	60	✓	100035	35	✓
030020	20	✓	050020	20	✓	M8-1.25			080065	65	✓	100040	40	✓
030025	25	✓	050025	25	✓	080010	10	✓	080070	70	✓	100045	45	✓
M4-0.7			050030	30	✓	080012	12	✓	080075	75	✓	100050	50	✓
040010	10	✓	M6-1.0			080016	16	✓	080080	80	✓			
040012	12	✓	060008	8	✓	080020	20	✓	080090	90	✓			
040016	16	✓	060010	10	✓	080025	25	✓	080100	100	✓			
040020	20	✓	060012	12	✓	080030	30	✓	M10-1.5					
040025	25	✓	060016	16	✓	080035	35	✓	100016	16	✓			
040030	30	✓	060020	20	✓	080040	40	✓	100020	20	✓			

HEX SOCKET BUTTON HEAD SCREW

货类 : 100044

10.9级公制合金钢半圆头内六角螺丝(圆杯)

ALLOY STEEL HEX SOCKET BUTTON HEAD SCREW ISO7380

电脑编码 *70



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M5-0.8			M6-1.0			M8-1.25			M10-1.5			M12-1.75		
050016	16	✓	060050	50	✓	080045	45	✓	100030	30	✓	120020	20	✓
050020	20	✓	060055	55	✓	080050	50	✓	100035	35	✓	120025	25	✓
M6-1.0			060060	60	✓	080055	55	✓	100040	40	✓	120030	30	✓
060010	10	✓	M8-1.25			080060	60	✓	100045	45	✓	120035	35	✓
060012	12	✓	080010	10	✓	080065	65	✓	100050	50	✓	120040	40	✓
060016	16	✓	080012	12	✓	080070	70	✓	100055	55	✓	120045	45	✓
060020	20	✓	080016	16	✓	080075	75	✓	100060	60	✓	120050	50	✓
060025	25	✓	080020	20	✓	080080	80	✓	100065	65	✓	120055	55	✓
060030	30	✓	080025	25	✓	M10-1.5			100070	70	✓	120060	60	✓
060035	35	✓	080030	30	✓	100016	16	✓	100075	75	✓	120065	65	✓
060040	40	✓	080035	35	✓	100020	20	✓	100080	80	✓	120070	70	✓
060045	45	✓	080040	40	✓	100025	25	✓			✓	120075	75	✓

HEX SOCKET FLAT HEAD CAP SCREW

货类 : 100040

10.9级公制合金钢平头内六角螺丝(平杯)

ALLOY STEEL HEX SOCKET FLAT HEAD SCREW DIN7991

电脑编码 *50



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M3-0.5			M5-0.8			M6-1.0			M8-1.25			M10-1.5		
030010	10	✓	050010	10	✓	060025	25	✓	080045	45	✓	100025	25	✓
030012	12	✓	050012	12	✓	060030	30	✓	080050	50	✓	100030	30	✓
030016	16	✓	050016	16	✓	060045	45	✓	080060	60	✓	100035	35	✓
030020	20	✓	050020	20	✓	M8-1.25			080065	65	✓	100040	40	✓
030025	25	✓	050025	25	✓	080010	10	✓	080070	70	✓	100045	45	✓
M4-0.7			050030	30	✓	080012	12	✓	080075	75	✓	100050	50	✓
040010	10	✓	M6-1.0			080016	16	✓	080080	80	✓			
040012	12	✓	060008	8	✓	080020	20	✓	080090	90	✓			
040016	16	✓	060010	10	✓	080025	25	✓	080100	100	✓			
040020	20	✓	060012	12	✓	080030	30	✓	M10-1.5					
040025	25	✓	060016	16	✓	080035	35	✓	100016	16	✓			
040030	30	✓	060020	20	✓	080040	40	✓	100020	20	✓			

HEX SOCKET BUTTON HEAD SCREW

货类 : 100044

10.9级公制合金钢半圆头内六角螺丝(圆杯)

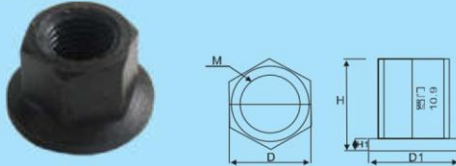
ALLOY STEEL HEX SOCKET BUTTON HEAD SCREW ISO7380

电脑编码 *70



CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS	CODE	SIZE	RMB/1000PCS
M5-0.8			M6-1.0			M8-1.25			M10-1.5			M12-1.75		
050016	16	✓	060050	50	✓	080045	45	✓	100030	30	✓	120020	20	✓
050020	20	✓	060055	55	✓	080050	50	✓	100035	35	✓	120025	25	✓
M6-1.0			060060	60	✓	080055	55	✓	100040	40	✓	120030	30	✓
060010	10	✓	M8-1.25			080060	60	✓	100045	45	✓	120035	35	✓
060012	12	✓	080010	10	✓	080065	65	✓	100050	50	✓	120040	40	✓
060016	16	✓	080012	12	✓	080070	70	✓	100055	55	✓	120045	45	✓
060020	20	✓	080016	16	✓	080075	75	✓	100060	60	✓	120050	50	✓
060025	25	✓	080020	20	✓	080080	80	✓	100065	65	✓	120055	55	✓
060030	30	✓	080025	25	✓	M10-1.5			100070	70	✓	120060	60	✓
060035	35	✓	080030	30	✓	100016	16	✓	100075	75	✓	120065	65	✓
060040	40	✓	080035	35	✓	100020	20	✓	100080	80	✓	120070	70	✓
060045	45	✓	080040	40	✓	100025	25	✓			✓	120075	75	✓

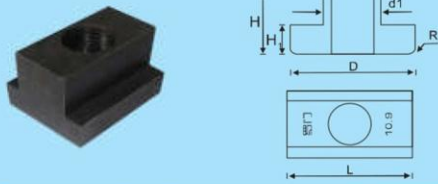
电脑编码 * 55



△ 强烈推荐用户使用该款产品, 更安全、放心, 经久耐用!

规格	D	D ₁	H	H ₁	M	价格
M10	17	23	15	3	10	✓
M12/M ^{1/2"}	21	28	18	4	12	✓
M16/M ^{5/8"}	26	33	25	5	16	✓
M18	32	41	26	5	18	✓
M20/M ^{3/4"}	32	41	26	5	20	✓
M24	36	48	35	8	24	✓

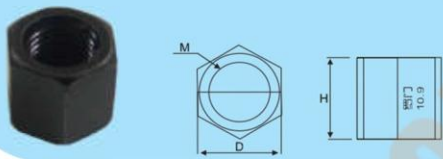
电脑编码 * 55



△ 强烈推荐用户使用该款产品, 更安全、放心, 经久耐用!

	规格	D	d ₁	H	H ₁	R	L	M	价格
T型螺帽	M10	18	12.0	14	7	1	22	10	✓
	M12	22	14.0	16	8	1	26	12	✓
	M16	28	18.0	20	10.5	2	30	16	✓
	M20	36	21.0	27	14	3	40	20	✓
	M24	44	28.0	33	17	3	44	24	✓

电脑编码 * 45



△ 强烈推荐用户使用该款产品, 更安全、放心, 经久耐用!

	规格	D	H	M	价格
加厚螺帽	M10	17	25	10	✓
	M12/M ^{1/2"}	21	30	12	✓
	M16/M ^{5/8"}	26	40	16	✓
	M20/M ^{3/4"}	32	50	20	✓
	M24	36	50	24	✓

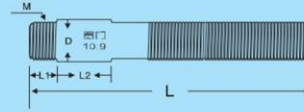
电脑编码 * 77



材质: 40Cr
调质热处理
表面发黑

长度	直径		10-3/8		12-1/2		16-5/8		20-3/4		价格
	长度	直径	长度	直径	长度	直径	长度	直径			
75	✓		✓		✓		✓				
100	✓		✓		✓		✓				
125	✓		✓		✓		✓				
150	✓		✓		✓		✓				
175	✓		✓		✓		✓				
200	✓		✓		✓		✓				
225											
250									✓		
300									✓		

电脑编码 * 55
建议价格

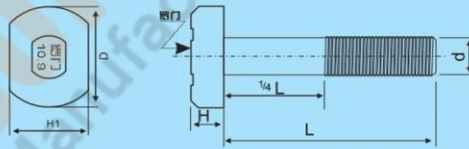


材质: 40Cr
调质热处理
表面发黑

	M12	M14	M16	M18	M20	M24	M30
L1	✓	✓	✓	✓	✓	✓	✓
L2	✓	✓	✓	✓	✓	✓	✓
D	✓	✓	✓	✓	✓	✓	✓

规格 长度	价格	M12	M14	M16	M18	M20	M22	M24	M30
		100	✓		✓				
125	✓			✓					
150	✓			✓		✓		✓	
175				✓		✓		✓	
200				✓		✓		✓	
225								✓	
250						✓		✓	

电脑编码 * 50
建议价格

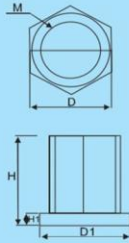


材质: 40Cr
调质热处理
表面发黑

d	D	H	H1	L													
				80	100	125	150	175	200	225	250	275	300	400	500	600	
12	29.5	9	22	✓	✓	✓	✓										
14	34	11	25	✓	✓	✓	✓										
16	38	11	28	✓	✓	✓	✓	✓	✓		✓						
18					✓	✓	✓	✓	✓		✓						
20	45	14	34					✓	✓								
22																	
24	57	16	44				✓	✓	✓		✓		✓				

带垫螺帽

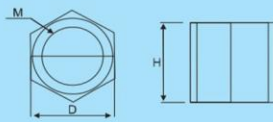
电脑编码 * 50



规格	D	D ₁	H	H ₁	M	价格
M10	17	23	15	3	10	✓
M12/M ^{1/2"}	19	28	18	4	12	✓
M14	22	28	18	4	14	✓
M16/M ^{3/8"}	24	33	24	5	16	✓
M18	27	35	27	5	18	✓
M20/M ^{3/4"}	29	41	30	5	20	✓
M22	31	45	32	6	22	✓
M24/M ^{1"}	36	48	35	8	24	✓
M27	41	50	40	5	27	✓
M30	46	59	31	5	30	✓

普通加厚螺帽

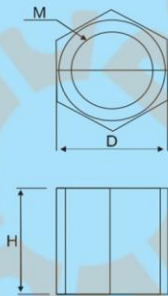
电脑编码 * 60



规格	D	H	M	价格
M10	17	11	10	✓
M12/M ^{1/2"}	19	14	12	✓
M14	22	15	14	✓
M16/M ^{3/8"}	24	17	16	✓
M18	27	20	18	✓
M20/M ^{3/4"}	29	22	20	✓
M22	31	25	22	✓
M24/M ^{1"}	36	26	24	✓

特别加厚螺帽

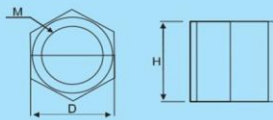
电脑编码 * 60



规格	D	H	M	价格
M10	17	14	10	✓
M12/M ^{1/2"}	19	18	12	✓
M14	22	20	14	✓
M16/M ^{3/8"}	24	23	16	✓
M18	26	25	18	✓
M20/M ^{3/4"}	29	29	20	✓
M22	31	30	22	✓
M24/M ^{1"}	34	30	24	✓
M27	40	26	27	✓
M30	44	32	30	✓
M36	52	38	36	✓

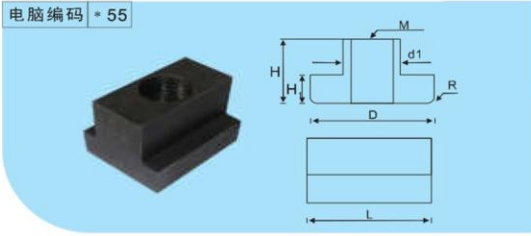
对接螺帽

电脑编码 * 60



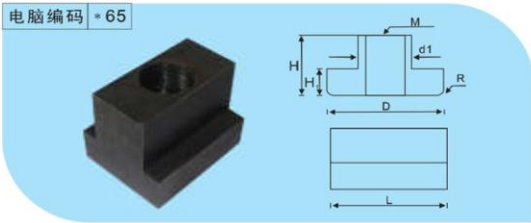
规格	D	H	M	价格
M12/M ^{1/2"}	19	30	12	✓
M14	22	35	14	✓
M16/M ^{3/8"}	24	50	16	✓
M18	27	50	18	✓
M20/M ^{3/4"}	29	60	20	✓
M22	31	60	22	✓
M24/M ^{1"}	36	60	24	✓

电脑编码 * 55



规格	D	d1	H	H ₁	R	L	M	价格
M10	18	12	14	7	1	23	10	✓
M12	22	14	16	8	1	27	12	✓
M14	24	16	18	9	2	27	14	✓
M16	28	18	20	10	2	31	16	✓
M18	32	20	24	12	2	36	18	✓
M20	35	22	28	14	3	40	20	✓
M22	40	25	30	15	3	42	22	✓
M24	44	28	33	17	3	44	24	✓

电脑编码 * 65



规格	D	d1	H	H ₁	R	L	M	价格
M16	30	18.5	28	12	2	36	16	✓
M18	32	20.5	32	13.5	2	40	18	✓
M20	35	22.5	34	14.5	3	42	20	✓
M22	40	25.0	40	15	3	48	22	✓
M24	44	27.5	45	17	3	52	24	✓

电脑编码 * 65



规格	Φ10	Φ12	Φ14	Φ16	Φ18	Φ20	Φ22	Φ24	Φ27	Φ30
普通加厚 外形规格/厚度	29X10X6	29X12X6	35X14X6	35X16X6	35X18X6	40X20X6	44X22X6	46X24X8	55X27X10	55X30X10
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
特别加厚 规格	Φ12	Φ16	Φ16	Φ18	Φ20	Φ20	Φ22	Φ24		
外形规格/厚度	28X12X10	35X16X8	35X16X10	35X18X8	40X20X8	38X20X10	44X22X8	46X24X10		
价格	✓	✓	✓	✓	✓	✓	✓	✓		

电脑编码 * 50



规格	M5x6	M6x8	M8x8	M10x8	M10x10	M12x10	M12x30	M14x16	M16x16	M20x20
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

电脑编码 * 40



规格	M10X1.5	M12X1.5	M14X1.5	M16X1.5	M18X1.5	M20X1.5	M22X1.5	M24X1.5	M27X1.5	M30X1.5	M33X1.5
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

电脑编码 * 45



规格	M3	M4	M5	M6	M8	M10	M12	M14	M16
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓

电脑编码	普通	德标
	*70	*67



规格	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M36	M42	M48	M56	M64
内径 X 外径	18 X 29	20 X 36	25 X 43	27 X 44	27 X 48	29 X 50	32 X 59	32 X 60	43 X 72	52 X 88	52 X 90	57 X 104	68 X 125	87 X 151	97 X 180	97 X 180
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

规格	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27	M30	M36	M42	M48	M56	M64
内径 X 外径	20 X 36	24 X 44	30 X 54	30 X 54	35 X 63	40 X 72	40 X 72	50 X 90	50 X 90	60 X 108	60 X 108	70 X 116	80 X 145	90 X 166	100 X 184	110 X 206
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

电脑编码 * 70



规格	14	16	18	20	22	25	28	30	36	42
价格	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

电脑编码 * 75



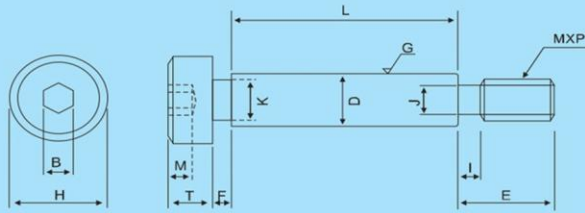
规格	M6	M8	M10	M12	M14	M16
价格	✓	✓	✓	✓	✓	✓
规格	M18	M20	M22	M24	M27	M30
价格	✓	✓	✓	✓	✓	✓

电脑编码 * 70



长度 \ 直径	价格							
	10-3/8	12-1/2	14	16-5/8	18	20-3/4	22	24
75	✓	✓	✓					
100	✓	✓	✓	✓	✓	✓		
125	✓	✓	✓	✓	✓	✓		
150	✓	✓	✓	✓	✓	✓	✓	✓
175	✓	✓	✓	✓	✓	✓	✓	✓
200	✓	✓	✓	✓	✓	✓	✓	✓
225	✓	✓	✓	✓	✓	✓	✓	✓
250	✓	✓	✓	✓	✓	✓	✓	✓
300	✓	✓	✓	✓	✓	✓		

电脑编码 * 32

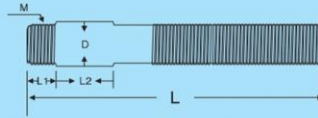


$D_{-0.02}^{-0}$	H	E	T	B	M	K	J	F	I	MXP
6	10	9.75	4.5	3	2.4	5.62	3.7	1.85	2.4	5XP0.8
8	13	11.25	5.5	4	3.3	7.62	4.43	1.85	2.6	6XP1.0
10	16	13.25	7.0	5	4.1	9.62	6.06	1.85	3.0	8XP1.25
12	18	16.25	8.0	6	4.9	11.62	7.72	1.85	3.0	10XP1.5
16	24	18.25	10.0	8	6.2	15.62	9.38	1.85	4.0	12XP1.75
20	30	22.25	14	10	8.8	19.2	12.8	1.85	4.0	16XP2.0

规格	长度 L																												
	16	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150	160	170	180	190	200	
6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											
8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓											
10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

LINH KIỆN KHUÔN MẪU ĐÔNG DƯƠNG

电脑编码 * 55

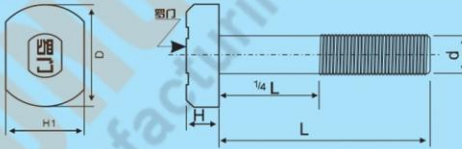


材质: S45
表面发黑

	M12	M14	M16	M18	M20	M24	M30
L1	✓	✓	✓	✓	✓	✓	✓
L2	✓	✓	✓	✓	✓	✓	✓
D	✓	✓	✓	✓	✓	✓	✓

规格 长度	价格	M12	M14	M16	M18	M20	M22	M24	M30
		100	✓	✓	✓				
125	✓	✓	✓	✓	✓	✓	✓		
150	✓	✓	✓	✓	✓	✓	✓		
180	✓	✓	✓	✓	✓	✓	✓		
200			✓	✓	✓	✓	✓	✓	✓
225						✓	✓	✓	✓
250						✓		✓	✓
275								✓	✓
300								✓	✓

电脑编码 * 60



材质: S45C
表面发黑

建议价格

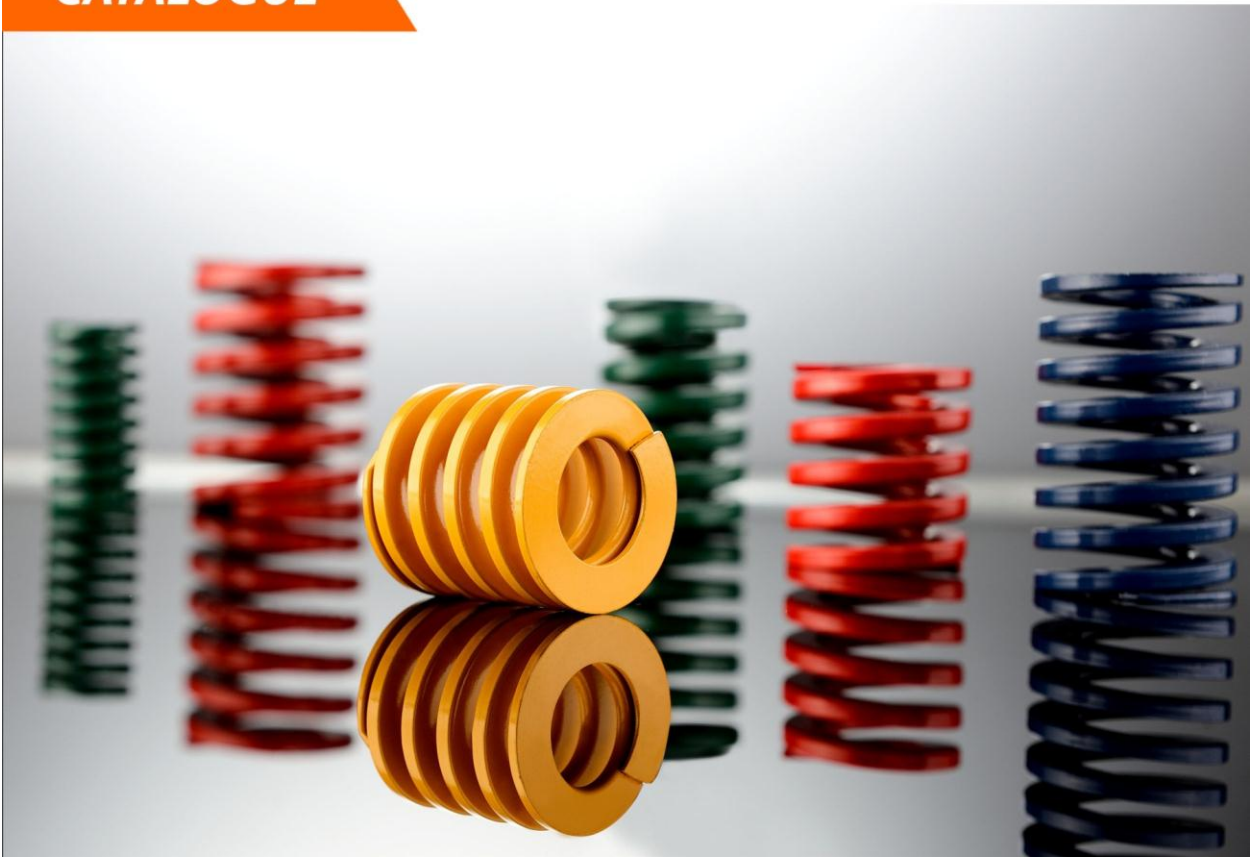
d	D	H	H1	L															
				80	100	125	150	175	200	225	250	275	300	350	400	450	500	600	
10	23	7	18	✓	✓	✓	✓	✓											
12	29.5	9	22	✓	✓	✓	✓	✓	✓	✓	✓	✓							
14	34	11	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	
16	38	11	28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
18	41	12	31	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	
20	45	14	34	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
22	49	14	37	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
24	57	16	44	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
27	65	18	47	✓				✓	✓	✓	✓		✓	✓	✓				
30	75	20	57	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Tel: (024) 7300.1868

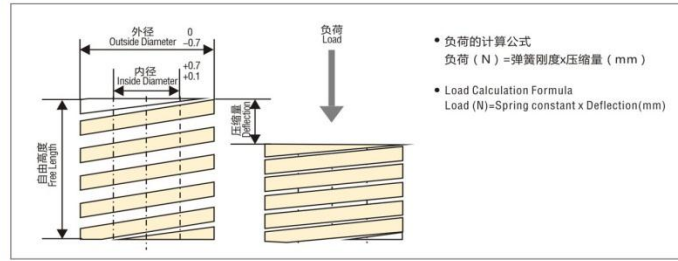


CÔNG TY TNHH THIẾT BỊ ĐÔNG DƯƠNG
Chuyên Linh Kiện Khuôn Mẫu

CATALOGUE



Lightest Load(TF)



材料的性质: SWOSC-V同等
Material: Equivalent to SWOSC-V

型号: 轻小负荷
Type: Lightest Load

涂沫色: 黄色
Color: Yellow

最大压缩量的计算公式
最大压缩量 (mm) = 自由高度 - 密着高度

Maximum Deflection Calculation Formula
Maximum deflection (mm) = Free length - Solid length

MINGLI Spring的公差 Allowable Tolerance of MINGLI Spring

外径 Outside Diameter		内径 Inside Diameter		自由高度 Free Length		负荷 Load	垂直度 Squareness	旋向 Winding Direction
60mm 以下 60mm or less	70mm 以上 70mm or more	33mm 以下 33mm or less	38.5mm 以上 38.5mm or more	50mm 以下 50mm or less	55mm 以上 55mm or more			
+0.0mm -0.7mm	+0.0mm -1.0mm	+0.7mm +0.1mm	-0.0mm +1.0mm	± 0.5mm	± 1%	± 10%	2° 以下 Angle 2° or less	右旋 Right Hand Coil

轻小负荷的弹簧刚度以及使用次数和负荷的关系 Relation of Spring Constant and Using Times to Load (Lightest Load)

自由高度 Free Length	外径 Outside Diameter																压缩量 Deflection (mm)			
	6	8	10	12	14	16	18	20	22	25	27	30	35	40	50	60	70	30万次 300,000 times	50万次 500,000 times	100万次 1,000,000 times
	15	7.85	10.20	13.04	18.34														7.50	6.80
20	5.88	7.65	9.81	13.73	17.65	20.59	25.50	31.38										10.00	9.00	8.00
25	4.71	6.08	7.85	10.98	14.12	16.48	20.40	25.10	31.38	39.23	47.07	56.88						12.50	11.30	10.00
30	3.92	5.10	6.57	9.12	11.77	13.73	17.06	20.89	26.18	32.66	39.23	47.37						15.00	13.50	12.00
35	3.33	4.31	5.59	7.85	10.10	11.77	14.61	17.95	22.46	27.95	33.64	40.50						17.50	15.80	14.00
40	2.94	3.82	4.90	6.86	8.83	10.30	12.75	15.69	19.61	24.52	29.42	35.30	48.05	62.57				20.00	18.00	16.00
45		3.43	4.31	6.08	7.85	9.22	11.38	13.93	17.46	21.77	26.18	31.48	42.76	55.60				22.50	20.30	18.00
50		3.04	3.92	5.49	7.06	8.24	10.20	12.55	15.69	19.61	23.54	28.24	38.44	50.21	78.45			25.00	22.50	20.00
55		2.75	3.53	5.00	6.37	7.55	9.32	11.38	14.32	17.85	21.38	25.79	34.91	45.50	71.29			27.50	24.80	22.00
60		2.55	3.24	4.61	5.88	6.86	8.53	10.49	13.04	16.38	19.61	23.54	31.97	41.78	65.31	94.05		30.00	27.00	24.00
65		2.35	3.04	4.22	5.39	6.37	7.85	9.61	12.06	15.10	18.14	21.77	29.62	38.54	60.31			32.50	29.30	26.00
70		2.16	2.84	3.92	5.00	5.88	7.26	8.92	11.18	14.02	16.77	20.10	27.46	35.79	56.00	80.61	111.80	35.00	31.50	28.00
75		2.06	2.65	3.63	4.71	5.49	6.86	8.34	10.49	13.04	15.69	18.93	25.60	33.34	52.27			37.50	33.80	30.00
80		1.96	2.45	3.43	4.41	5.20	6.37	7.85	9.81	12.26	14.71	17.65	24.03	31.38	49.03	70.51	97.97	40.00	36.00	32.00
90			2.16	3.04	3.92	4.61	5.69	6.96	8.73	10.89	13.04	15.69	21.28	27.85	43.54	62.76	87.08	45.00	40.50	36.00
100				3.53	4.12	5.10	6.28	7.85	9.81	11.77	14.12	19.22	25.10	39.23	56.49	78.35		50.00	45.00	40.00
125					3.33	4.12	5.00	6.28	7.85	9.41	11.28	15.40	20.01	31.38	45.11	62.76		62.50	56.30	50.00
150						4.22	5.20	6.28	7.85	9.41	11.28	15.40	20.01	31.38	45.11	62.76		75.00	67.50	60.00
175								5.20	6.28	7.85	9.41	11.28	15.40	20.01	31.38	45.11	62.76	87.50	78.80	70.00
200									4.90	5.88	7.06	9.61	12.55	19.61	28.24	39.23		100.00	90.00	80.00
225													11.08	17.46	25.10			112.50	101.30	90.00
250														10.00	15.69	22.56	31.38	125.00	112.50	100.00
275														9.12	14.22	20.50		137.50	123.80	110.00
300														8.34	13.04	18.83	26.09	150.00	135.00	120.00
内径 Inside Diameter	3	4	5	6	7	8	9	11	11	13.5	13.5	16	19	22	27.5	33	38.5			

在表中: 弹簧刚度 (N/mm)
Table Ref: Spring Constant(N/mm)

	负荷N (kgf) Load N (kgf)																使用次数 Using Times	压缩量(自由高度%) Deflection(percentage of free length)	
	30万次 300,000 times	59.0 (6)	78.5 (8)	98.1 (10)	137.3 (14)	176.5 (18)	205.9 (21)	255.0 (26)	313.8 (32)	392.3 (40)	490.3 (50)	588.4 (60)	706.1 (72)	961.1 (98)	1255.3 (128)	1961.3 (200)			2824.3 (288)
50万次 500,000 times	53.0 (5.4)	68.6 (7)	88.3 (9)	127.5 (13)	156.9 (16)	186.3 (19)	225.6 (23)	284.4 (29)	353.0 (36)	441.3 (45)	529.6 (54)	637.4 (65)	863.0 (88)	1127.8 (115)	1765.2 (180)	2539.9 (259)	3528.0 (360)		50.0%
100万次 1,000,000 times	47.0 (4.8)	58.8 (6)	78.5 (8)	107.9 (11)	137.3 (14)	166.7 (17)	205.9 (21)	255.0 (26)	313.8 (32)	392.3 (40)	470.7 (48)	568.8 (58)	764.9 (78)	1000.3 (102)	1569.1 (160)	2255.5 (230)	3136.0 (320)		40.0%

轻小负荷(TF) Lightest Load(TF)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ¹⁾	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
20	11	20	31.38	3.20	9.00	10.00	313.80 (32)	9.00	284.40 (29)	8.00	255.00 (26)	YEL	20-20
		25	25.10	2.56	11.30	12.50		11.30		10.00			
		30	20.89	2.13	13.50	15.00		13.50		12.00			
		35	17.95	1.83	15.80	17.50		15.80		14.00			
		40	15.69	1.60	18.0	20.00		18.00		16.00			
		45	13.93	1.42	20.30	22.50		20.30		18.00			
		50	12.55	1.28	22.50	25.00		22.50		20.00			
		55	11.38	1.16	24.80	27.50		24.80		22.00			
		60	10.49	1.07	27.00	30.00		27.00		24.00			
		65	9.61	0.98	29.30	32.50		29.30		26.00			
		70	8.92	0.91	31.50	35.00		31.50		28.00			
		75	8.34	0.85	33.80	37.50		33.80		30.00			
		80	7.85	0.80	36.00	40.00		36.00		32.00			
		90	6.96	0.71	40.50	45.00		40.50		36.00			
		100	6.28	0.64	45.00	50.00		45.00		40.00			
125	5.00	0.51	56.30	62.50	56.30	50.00							
150	4.22	0.43	67.50	75.00	67.50	60.00							
22	11	25	31.38	3.20	11.30	12.50	392.00 (40)	11.30	353.00 (36)	10.00	313.80 (32)	YEL	22-25
		30	26.18	2.67	13.50	15.00		13.50		12.00			
		35	22.46	2.29	15.80	17.50		15.80		14.00			
		40	19.61	2.00	18.00	20.00		18.00		16.00			
		45	17.46	1.78	20.30	22.50		20.30		18.00			
		50	15.69	1.60	22.50	25.00		22.50		20.00			
		55	14.32	1.46	24.80	27.50		24.80		22.00			
		60	13.04	1.33	27.00	30.00		27.00		24.00			
		65	12.06	1.23	29.30	32.50		29.30		26.00			
		70	11.18	1.14	31.50	35.00		31.50		28.00			
		75	10.49	1.07	33.80	37.50		33.80		30.00			
		80	9.81	1.00	36.00	40.00		36.00		32.00			
		90	8.73	0.89	40.50	45.00		40.50		36.00			
		100	7.85	0.80	45.00	50.00		45.00		40.00			
		125	6.28	0.64	56.30	62.50		56.30		50.00			
150	5.20	0.53	67.50	75.00	67.50	60.00							
25	13.5	25	39.23	4.00	11.30	12.50	490.30 (50)	11.30	441.30 (45)	10.00	392.30 (40)	YEL	25-25
		30	32.66	3.33	13.50	15.00		13.50		12.00			
		35	27.95	2.85	15.80	17.50		15.80		14.00			
		40	24.52	2.50	18.00	20.00		18.00		16.00			
		45	21.77	2.22	20.30	22.50		20.30		18.00			
		50	19.61	2.00	22.50	25.00		22.50		20.00			
		55	17.85	1.82	24.80	27.50		24.80		22.00			
		60	16.38	1.67	27.00	30.00		27.00		24.00			
		65	15.10	1.54	29.30	32.50		29.30		26.00			
		70	14.02	1.43	31.50	35.00		31.50		28.00			
		75	13.04	1.33	33.80	37.50		33.80		30.00			
		80	12.26	1.25	36.00	40.00		36.00		32.00			
		90	10.89	1.11	40.50	45.00		40.50		36.00			
		100	9.81	1.00	45.00	50.00		45.00		40.00			
		125	7.85	0.80	56.30	62.50		56.30		50.00			
150	6.57	0.67	67.50	75.00	67.50	60.00							
175	5.59	0.57	78.80	87.50	78.80	70.00							
200	4.90	0.50	90.00	100.00	90.00	80.00							

轻小负荷(TF) Lightest Load(TF)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
14	7	20	17.65	1.80	9.00	10.00	9.00	8.00	YEL	14-20			
		25	14.12	1.44	11.30	12.50	11.30	10.00		25			
		30	11.77	1.20	13.50	15.00	13.50	12.00		30			
		35	10.10	1.03	15.80	17.50	15.80	14.00		35			
		40	8.83	0.90	18.00	20.00	18.00	16.00		40			
		45	7.85	0.80	20.30	22.50	20.30	18.00		45			
		50	7.06	0.72	22.50	25.00	22.50	20.00		50			
		55	6.37	0.65	24.80	27.50	24.80	22.00	137.30		55		
		60	5.88	0.60	27.00	30.00	27.00	24.00	(14)		60		
		65	5.39	0.55	29.30	32.50	29.30	26.00			65		
		70	5.00	0.51	31.50	35.00	31.50	28.00			70		
		75	4.71	0.48	33.80	37.50	33.80	30.00			75		
		80	4.41	0.45	36.00	40.00	36.00	32.00			80		
16	8	20	20.59	2.10	9.00	10.00	9.00	8.00	YEL	16-20			
		25	16.48	1.68	11.30	12.50	11.30	10.00		25			
		30	13.73	1.40	13.50	15.00	13.50	12.00		30			
		35	11.77	1.20	15.80	17.50	15.80	14.00		35			
		40	10.30	1.05	18.00	20.00	18.00	16.00		40			
		45	9.22	0.94	20.30	22.50	20.30	18.00		45			
		50	8.24	0.84	22.50	25.00	22.50	20.00		50			
		55	7.55	0.77	24.80	27.50	24.80	22.00	166.70		55		
		60	6.86	0.70	27.00	30.00	27.00	24.00	(17)		60		
		65	6.37	0.65	29.30	32.50	29.30	26.00			65		
		70	5.88	0.60	31.50	35.00	31.50	28.00			70		
		75	5.49	0.56	33.80	37.50	33.80	30.00			75		
		80	5.20	0.53	36.00	40.00	36.00	32.00			80		
18	9	20	25.50	2.60	9.00	10.00	9.00	8.00	YEL	18-20			
		25	20.40	2.08	11.30	12.50	11.30	10.00		25			
		30	17.06	1.74	13.50	15.00	13.50	12.00		30			
		35	14.61	1.49	15.80	17.50	15.80	14.00		35			
		40	12.75	1.30	18.00	20.00	18.00	16.00		40			
		45	11.38	1.16	20.30	22.50	20.30	18.00		45			
		50	10.20	1.04	22.50	25.00	22.50	20.00		50			
		55	9.32	0.95	24.80	27.50	24.80	22.00	205.90		55		
		60	8.53	0.87	27.00	30.00	27.00	24.00	(21)		60		
		65	7.85	0.80	29.30	32.50	29.30	26.00			65		
		70	7.26	0.74	31.50	35.00	31.50	28.00			70		
		75	6.86	0.70	33.80	37.50	33.80	30.00			75		
		80	6.37	0.65	36.00	40.00	36.00	32.00			80		
90	5.69	0.58	40.50	45.00	40.50	36.00			90				
100	5.10	0.52	45.00	50.00	45.00	40.00			100				
125	4.12	0.42	56.30	62.50	56.30	50.00			125				

轻小负荷(TF) Lightest Load(TF)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ^{±1}	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
20	11	20	31.38	3.20	9.00	10.00	9.00	8.00	YEL	20-20			
		25	25.10	2.56	11.30	12.50	11.30	10.00		25			
		30	20.89	2.13	13.50	15.00	13.50	12.00		30			
		35	17.95	1.83	15.80	17.50	15.80	14.00		35			
		40	15.69	1.60	18.0	20.00	18.00	16.00		40			
		45	13.93	1.42	20.30	22.50	20.30	18.00		45			
		50	12.55	1.28	22.50	25.00	22.50	20.00		50			
		55	11.38	1.16	24.80	27.50	24.80	22.00		55			
		60	10.49	1.07	27.00	30.00	27.00	24.00		60			
		65	9.61	0.98	29.30	32.50	29.30	26.00		65			
		70	8.92	0.91	31.50	35.00	31.50	28.00		70			
		75	8.34	0.85	33.80	37.50	33.80	30.00		75			
		80	7.85	0.80	36.00	40.00	36.00	32.00		80			
		90	6.96	0.71	40.50	45.00	40.50	36.00		90			
		100	6.28	0.64	45.00	50.00	45.00	40.00		100			
125	5.00	0.51	56.30	62.50	56.30	50.00		125					
150	4.22	0.43	67.50	75.00	67.50	60.00		150					
22	11	25	31.38	3.20	11.30	12.50	11.30	10.00	YEL	22-25			
		30	26.18	2.67	13.50	15.00	13.50	12.00		30			
		35	22.46	2.29	15.80	17.50	15.80	14.00		35			
		40	19.61	2.00	18.00	20.00	18.00	16.00		40			
		45	17.46	1.78	20.30	22.50	20.30	18.00		45			
		50	15.69	1.60	22.50	25.00	22.50	20.00		50			
		55	14.32	1.46	24.80	27.50	24.80	22.00		55			
		60	13.04	1.33	27.00	30.00	27.00	24.00		60			
		65	12.06	1.23	29.30	32.50	29.30	26.00		65			
		70	11.18	1.14	31.50	35.00	31.50	28.00		70			
		75	10.49	1.07	33.80	37.50	33.80	30.00		75			
		80	9.81	1.00	36.00	40.00	36.00	32.00		80			
		90	8.73	0.89	40.50	45.00	40.50	36.00		90			
		100	7.85	0.80	45.00	50.00	45.00	40.00		100			
		125	6.28	0.64	56.30	62.50	56.30	50.00		125			
150	5.20	0.53	67.50	75.00	67.50	60.00		150					
25	13.5	25	39.23	4.00	11.30	12.50	11.30	10.00	YEL	25-25			
		30	32.66	3.33	13.50	15.00	13.50	12.00		30			
		35	27.95	2.85	15.80	17.50	15.80	14.00		35			
		40	24.52	2.50	18.00	20.00	18.00	16.00		40			
		45	21.77	2.22	20.30	22.50	20.30	18.00		45			
		50	19.61	2.00	22.50	25.00	22.50	20.00		50			
		55	17.85	1.82	24.80	27.50	24.80	22.00		55			
		60	16.38	1.67	27.00	30.00	27.00	24.00		60			
		65	15.10	1.54	29.30	32.50	29.30	26.00		65			
		70	14.02	1.43	31.50	35.00	31.50	28.00		70			
		75	13.04	1.33	33.80	37.50	33.80	30.00		75			
		80	12.26	1.25	36.00	40.00	36.00	32.00		80			
		90	10.89	1.11	40.50	45.00	40.50	36.00		90			
		100	9.81	1.00	45.00	50.00	45.00	40.00		100			
		125	7.85	0.80	56.30	62.50	56.30	50.00		125			
150	6.57	0.67	67.50	75.00	67.50	60.00		150					
175	5.59	0.57	78.80	87.50	78.80	70.00		175					
200	4.90	0.50	90.00	100.00	90.00	80.00		200					

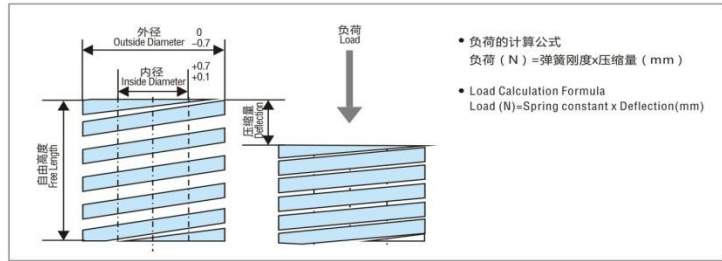
轻小负荷(TF) Lightest Load(TF)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ^(*)	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
27	13.5	25	47.07	4.80	11.30	12.50		11.30		10.0		YEL	27-25
		30	39.23	4.00	13.50	15.00		13.50		12.0			30
		35	33.64	3.43	15.80	17.50		15.80		14.0			35
		40	29.42	3.00	18.00	20.00		18.00		16.0			40
		45	26.18	2.67	20.30	22.50		20.30		18.0			45
		50	23.54	2.40	22.50	25.00		22.50		20.0			50
		55	21.38	2.18	24.80	27.50		24.80		22.0			55
		60	19.61	2.00	27.00	30.00		27.00		24.0			60
		65	18.14	1.85	29.30	32.50	588.40	29.30	529.60	26.0	470.70		65
		70	16.77	1.71	31.50	35.00	(60)	31.50	(54)	28.0	(48)		70
		75	15.69	1.60	33.80	37.50		33.80		30.0			75
		80	14.71	1.50	36.00	40.00		36.00		32.0			80
		90	13.04	1.33	40.50	45.00		40.50		36.0			90
		100	11.77	1.20	45.00	50.00		45.00		40.0			100
		125	9.41	0.96	56.30	62.50		56.30		50.0			125
		150	7.85	0.80	67.50	75.00		67.50		60.0			150
		175	6.77	0.69	78.80	87.50		78.80		70.0			175
200	5.88	0.60	90.00	100.00		90.00		80.0			200		
30	16	25	56.88	5.80	11.30	12.50		11.30		10.0		YEL	30-25
		30	47.37	4.83	13.50	15.00		13.50		12.0			30
		35	40.50	4.13	15.80	17.50		15.80		14.0			35
		40	35.30	3.60	18.00	20.00		18.00		16.0			40
		45	31.48	3.21	20.30	22.50		20.30		18.0			45
		50	28.24	2.88	22.50	25.00		22.50		20.0			50
		55	25.79	2.63	24.80	27.50		24.80		22.0			55
		60	23.54	2.40	27.00	30.00		27.00		24.00			60
		65	21.77	2.22	29.00	32.50	706.10	29.30	637.40	26.00	568.80		65
		70	20.10	2.05	31.50	35.00	(72)	31.50	(65)	28.00	(58)		70
		75	18.93	1.93	33.80	37.50		33.80		30.00			75
		80	17.65	1.80	36.00	40.00		36.00		32.00			80
		90	15.69	1.60	40.50	45.00		40.50		36.00			90
		100	14.12	1.44	45.00	50.00		45.00		40.00			100
		125	11.28	1.15	56.30	62.50		56.30		50.00			125
		150	9.41	0.96	67.50	75.00		67.50		60.00			150
		175	8.04	0.82	78.80	87.50		78.80		70.00			175
200	7.06	0.72	90.00	100.00		90.00		80.00			200		
35	19	40	48.05	4.90	18.00	20.00		18.00		16.00		YEL	35-40
		45	42.76	4.36	20.30	22.50		20.30		18.00			45
		50	38.44	3.92	22.50	25.00		22.50		20.00			50
		55	34.91	3.56	24.80	27.50		24.80		22.00			55
		60	31.97	3.26	27.00	30.00		27.00		24.00			60
		65	29.62	3.02	29.30	32.50		29.30		26.00			65
		70	27.46	2.80	31.50	35.00		31.50		28.00			70
		75	25.60	2.61	33.80	37.50	961.10	33.80	863.00	30.00	764.90		75
		80	24.03	2.45	36.00	40.00	(98)	36.00	(88)	32.00	(78)		80
		90	21.28	2.17	40.50	45.00		40.50		36.00			90
		100	19.22	1.96	45.00	50.00		45.00		40.00			100
		125	15.40	1.57	56.30	62.50		56.30		50.00			125
		150	12.75	1.30	67.50	75.00		67.50		60.00			150
		175	10.98	1.12	78.80	87.50		78.80		70.00			175
		200	9.61	0.98	90.00	100.00		90.00		80.00			200

轻小负荷(TF) Lightest Load(TF)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm*	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
40	22	40	62.57	6.38	18.00	20.00		18.00		16.00		YEL 40-40		
		45	55.60	5.67	20.30	22.50		20.30		18.00		45		
		50	50.21	5.12	22.50	25.00		22.50		20.00		50		
		55	45.50	4.64	24.80	27.50		24.80		22.00		55		
		60	41.78	4.26	27.00	30.00		27.00		24.00		60		
		65	38.54	3.93	29.30	32.50		29.30		26.00		65		
		70	35.79	3.65	31.50	35.00		31.50		28.00		70		
		75	33.34	3.40	33.80	37.50		33.80		30.00		75		
		80	31.38	3.20	36.00	40.00	1255.30	36.00	1127.80	32.00	30.00	1000.30	80	
		90	27.85	2.84	40.50	45.00	(128)	40.50	(115)	36.00	36.00	(102)	90	
		100	25.10	2.56	45.00	50.00		45.00		40.00	40.00		100	
		125	20.01	2.04	56.30	62.50		56.30		50.00	50.00		125	
		150	16.67	1.70	67.50	75.00		67.50		60.00	60.00		150	
		175	14.32	1.46	78.80	87.50		78.80		70.00	70.00		175	
		200	12.55	1.28	90.00	100.00		90.00		80.00	80.00		200	
		225	11.08	1.13	101.00	112.50		101.30		90.00	90.00		225	
		250	10.00	1.02	112.50	125.00		112.50		100.00	100.00		250	
		275	9.12	0.93	124.00	137.50		123.80		110.00	110.00		275	
		300	8.34	0.85	142.20	150.00		135.00		120.00	120.00		300	
		50	27.5	50	78.45	8.00	22.50	25.00		22.50		20.00		YEL 50-50
55	71.29			7.27	24.80	27.50		24.80		22.00		55		
60	65.31			6.66	27.00	30.00		27.00		24.00		60		
65	60.31			6.15	29.30	32.50		29.30		26.00		65		
70	56.00			5.71	31.50	35.00		31.50		28.00		70		
75	52.27			5.33	33.80	37.50		33.80		30.00		75		
80	49.03			5.00	36.00	40.00		36.00		32.00		80		
90	43.54			4.44	40.50	45.00	1961.30	40.50	1765.20	36.00	36.00	1569.10	90	
100	39.23			4.00	45.00	50.00	(200)	45.00	(180)	40.00	40.00	(160)	100	
125	31.38			3.20	56.30	62.50		56.30		50.00	50.00		125	
150	26.09			2.66	67.50	75.00		67.50		60.00	60.00		150	
175	22.36			2.28	78.80	87.50		78.80		70.00	70.00		175	
200	19.61			2.00	90.00	100.00		90.00		80.00	80.00		200	
225	17.46			1.78	101.00	112.50		101.30		90.00	90.00		225	
250	15.69			1.60	112.50	125.00		112.50		100.00	100.00		250	
275	14.22			1.45	124.00	137.50		123.80		110.00	110.00		275	
300	13.04			1.33	135.00	150.00		135.00		120.00	120.00		300	
60	33			60	94.05	9.59	27.00	30.00		27.00		24.00		YEL 60-60
				70	80.61	8.22	31.50	35.00		31.50		28.00		70
				80	70.51	7.19	36.00	40.00		36.00		32.00		80
		90	62.76	6.40	40.50	45.00		40.50		36.00		90		
		100	56.49	5.76	45.00	50.00		45.00		40.00		100		
		125	45.11	4.60	56.30	62.50	2824.30	56.30	2539.90	50.00	50.00	2255.50	125	
		150	37.66	3.84	67.50	75.00	(288)	67.50	(259)	60.00	60.00	(230)	150	
		175	32.26	3.29	78.80	87.50		78.80		70.00	70.00		175	
		200	28.24	2.88	90.00	100.00		90.00		80.00	80.00		200	
		225	25.10	2.56	101.30	112.50		101.30		90.00	90.00		225	
		250	22.56	2.30	112.50	125.00		112.50		100.00	100.00		250	
		275	20.50	2.09	123.80	137.50		123.80		110.00	110.00		275	
		300	18.83	1.92	135.00	150.00		135.00		120.00	120.00		300	
70	38.5	70	111.80	11.40	33.20	35.00		31.50		28.00		YEL 70-70		
		80	97.97	9.99	37.90	40.00		36.00		32.00		80		
		90	87.08	8.88	42.70	45.00		40.50		36.00		90		
		100	78.35	7.99	47.40	50.00		45.00		40.00		100		
		125	62.76	6.40	59.30	62.50	3920.00	56.30	3528.00	50.00	50.00	3136.00	125	
		150	52.27	5.33	71.10	75.00	(400)	67.50	(360)	60.00	60.00	(320)	150	
		175	44.82	4.57	83.00	87.50		78.80		70.00	70.00		175	
		200	39.23	4.00	94.80	100.00		90.00		80.00	80.00		200	
		250	31.38	3.20	118.50	125.00		112.50		100.00	100.00		250	
		300	26.09	2.66	142.20	150.00		135.00		120.00	120.00		300	

轻负荷(TL) Light Load(TL)



• 负荷的计算公式
负荷(N) = 弹簧刚度 × 压缩量 (mm)
• Load Calculation Formula
Load (N) = Spring constant × Deflection (mm)

材料的性质: SWOSC-V同等
Material: Equivalent to SWOSC-V

型号: 轻负荷
Type: Light Load

涂沫色: 蓝色
Color: Blue

最大压缩量的计算公式
最大压缩量 (mm) = 自由高度 - 密着高度

Maximum Deflection Calculation Formula
Maximum deflection (mm) = Free length — Solid length

MINGLI Spring的公差 Allowable Tolerance of MINGLI Spring

外径 Outside Diameter		内径 Inside Diameter		自由高度 Free Length		负荷 Load	垂直度 Squareness	旋向 Winding Direction
60mm 以下 60mm or less	70mm 以上 70mm or more	33mm 以下 33mm or less	38.5mm 以上 38.5mm or more	50mm 以下 50mm or less	55mm 以上 55mm or more			
+0.0mm -0.7mm	+0.0mm -1.0mm	+0.7mm +0.1mm	-0.0mm +1.0mm	± 0.5mm	± 1%	± 10%	2° 以下 Angle 2° or less	右旋 Right Hand Coil

轻小负荷的弹簧刚度以及使用次数和负荷的关系 Relation of Spring Constant and Using Times to Load (Light Load)

自由高度 Free Length	外径 Outside Diameter																压缩量 Deflection (mm)					
	6	8	10	12	14	16	18	20	22	25	27	30	35	40	50	60	70	30万次 300,000 times	50万次 500,000 times	100万次 1,000,000 times		
15	13.04	16.38	22.85	34.32														6.00	5.40	4.80		
20	9.81	12.26	17.75	25.79	34.32	42.95	52.76	66.19										8.00	7.20	6.40		
25	7.85	9.81	14.22	20.59	27.46	34.32	42.17	52.96	65.70	82.38	98.07	118.76						10.00	9.00	8.00		
30	6.57	8.14	11.87	17.16	22.95	28.64	35.11	44.13	54.92	68.65	81.69	98.85						12.00	10.80	9.60		
35	5.59	6.96	10.10	14.71	19.61	24.52	30.11	37.85	47.07	58.84	70.02	84.83						14.00	12.60	11.20		
40	4.90	6.18	8.83	12.94	17.16	21.48	26.38	33.15	41.19	51.48	61.29	74.14	101.11	132.39				16.00	14.40	12.80		
45		5.49	7.85	11.47	15.30	19.12	23.44	29.42	36.48	45.80	54.52	66.00	89.93	117.68				18.00	16.20	14.40		
50		4.90	7.16	10.30	13.73	17.16	21.08	26.48	32.85	41.19	49.03	59.33	80.90	105.91	165.63			20.00	18.00	16.00		
55		4.51	6.47	9.41	12.45	15.69	19.22	24.03	29.91	37.46	44.62	53.94	73.55	96.30	150.53			22.00	19.80	17.60		
60		4.12	5.88	8.63	11.47	14.32	17.55	22.06	27.46	34.32	40.89	49.43	67.37	88.26	138.08	198.58		24.00	21.60	19.20		
65		3.73	5.39	7.94	10.59	13.24	16.28	20.40	25.30	31.68	37.76	45.60	62.27	81.49	127.39			26.00	23.40	20.80		
70		3.53	5.00	7.35	9.81	12.26	15.10	18.93	23.54	29.42	35.01	42.36	57.76	75.61	118.37	170.17	213.78	28.00	25.20	22.40		
75		3.24	4.71	6.86	9.12	11.47	14.12	17.65	21.87	27.46	32.66	39.52	53.94	70.61	110.42			30.00	27.00	24.00		
80		3.04	4.41	6.47	8.53	10.79	13.24	16.57	20.59	25.79	30.69	37.07	50.50	66.19	103.56	148.86	186.33	32.00	28.80	25.60		
90			3.92	5.69	7.55	9.61	11.77	14.71	18.24	22.85	27.26	32.95	44.91	58.84	91.99	132.39	165.73	36.00	32.40	28.80		
100					6.86	8.63	10.49	13.24	16.48	20.59	24.52	29.62	40.40	52.96	82.87	119.15	149.06	40.00	36.00	32.00		
125						6.86	8.43	10.59	13.14	16.48	19.61	23.73	32.36	42.36	66.29	95.32	119.64	50.00	45.00	40.00		
150								8.83	10.98	13.73	16.38	19.71	26.97	36.30	55.21	79.43	100.03	60.00	54.00	48.00		
175									11.77	14.02	16.87	23.05	30.20	47.27	68.06	85.42		70.00	63.00	56.00		
200										10.30	12.26	14.81	20.20	26.48	41.38	59.53	74.73	80.00	72.00	64.00		
225														23.54	36.77	52.96		90.00	81.00	72.00		
250															21.18	33.15	47.66	59.82	100.00	90.00	80.00	
275																19.22	30.11	3.35	110.00	99.00	88.00	
300																	17.65	27.56	39.72	120.00	108.00	96.00
内径 Inside Diameter	3	4	5	6	7	8	9	10	11	12.5	13.5	15	17.5	20	25	30	38.5					

在表中: 弹簧刚度 (N/mm)
Table Ref: Spring Constant (N/mm)

负荷 N (kgf) Load N (kgf)																	使用次数 Using Times		压缩量(自由高度%) Deflection (percentage of free length)	
30万次 300,000 times	78.0 (8)	98.1 (10)	137.3 (14)	205.9 (21)	274.6 (28)	343.2 (35)	421.7 (43)	529.6 (54)	657.0 (67)	823.8 (84)	980.7 (100)	1186.6 (121)	1618.1 (165)	2118.2 (216)	3314.6 (338)	4766.0 (486)	5978.0 (610)	30万次 300,000 times	40.0%	
50万次 500,000 times	71.0 (7)	88.3 (9)	127.5 (13)	186.3 (19)	245.2 (25)	313.8 (32)	382.5 (39)	470.7 (48)	588.4 (60)	735.5 (75)	882.6 (90)	1068.9 (109)	1461.2 (149)	1902.5 (194)	2981.2 (304)	4285.5 (437)	5380.0 (549)	50万次 500,000 times	36.0%	
100万次 1,000,000 times	63.0 (6)	78.5 (8)	107.9 (11)	166.7 (17)	215.7 (22)	274.6 (28)	333.4 (34)	421.7 (43)	529.6 (54)	657.0 (67)	784.5 (80)	951.2 (97)	1294.5 (132)	1696.6 (173)	2647.8 (270)	3814.8 (389)	4782.0 (488)	100万次 1,000,000 times	32.0%	

Tel: (024) 7300.1868

轻负荷(TL) Light Load(TL)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ^{*1}	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
6	3	15	13.04	1.33	8.60	6.00	78.00	5.40	71.00	4.80	63.00	BLU	6-15
		20	9.81	1.00	11.50	8.00	(8)	7.20	(7.2)	6.40	(6.4)		20
		25	7.85	0.80	14.40	10.00		9.00		8.00			25
		30	6.57	0.67	17.30	12.00		10.80		9.60			30
		35	5.59	0.57	20.10	14.00		12.60		11.20			35
		40	4.90	0.50	23.00	16.00		14.40		12.80			40
8	4	15	16.38	1.67	8.100	6.00	98.10 (10)	5.40	88.30 (9)	4.80	78.50 (8)	BLU	8-15
		20	12.26	1.25	10.80	8.00		7.20		6.40		20	
		25	9.81	1.00	13.50	10.00		9.00		8.00		25	
		30	8.14	0.83	16.20	12.00		10.80		9.60		30	
		35	6.96	0.71	18.90	14.00		12.60		11.20		35	
		40	6.18	0.63	21.60	16.00		14.40		12.80		40	
		45	5.49	0.56	24.30	18.00		16.20		14.40		45	
		50	4.90	0.50	27.00	20.00		18.00		16.00		50	
		55	4.51	0.46	29.70	22.00		19.80		17.60		55	
		60	4.12	0.42	32.40	24.00		21.60		19.20		60	
		65	3.73	0.38	37.30	26.00		23.40		20.80		65	
		70	3.53	0.36	40.20	28.00		25.20		22.40		70	
75	3.24	0.33	43.10	30.00	27.00	24.00	75						
80	3.04	0.31	45.90	32.00	28.80	25.60	80						
10	5	15	22.85	2.33	8.10	6.00	137.30 (14)	5.40	127.50 (13)	4.80	107.90 (11)	BLU	10-15
		20	17.75	1.81	10.80	8.00		7.20		6.40		20	
		25	14.22	1.45	13.50	10.00		9.00		8.00		25	
		30	11.87	1.21	16.20	12.00		10.80		9.60		30	
		35	10.10	1.03	18.90	14.00		12.60		11.20		35	
		40	8.83	0.90	21.60	16.00		14.40		12.80		40	
		45	7.85	0.80	24.30	18.00		16.20		14.40		45	
		50	7.16	0.73	27.00	20.00		18.00		16.00		50	
		55	6.47	0.66	29.70	22.00		19.80		17.60		55	
		60	5.88	0.60	32.40	24.00		21.60		19.20		60	
		65	5.39	0.55	35.10	26.00		23.40		20.80		65	
		70	5.00	0.51	37.80	28.00		25.20		22.40		70	
		75	4.71	0.48	40.50	30.00		27.00		24.00		75	
		80	4.41	0.45	43.20	32.00		28.80		25.60		80	
90	3.92	0.40	48.60	36.00	32.40	28.80	90						
12	6	15	34.32	3.50	8.10	6.00	205.90 (21)	5.40	186.30 (19)	4.80	166.70 (17)	BLU	12-15
		20	25.79	2.63	10.80	8.00		7.20		6.40		20	
		25	20.59	2.10	13.50	10.00		9.00		8.00		25	
		30	17.16	1.75	16.20	12.00		10.80		9.60		30	
		35	14.71	1.50	18.90	14.00		12.60		11.20		35	
		40	12.94	1.32	21.60	16.00		14.40		12.80		40	
		45	11.47	1.17	24.30	18.00		16.20		14.40		45	
		50	10.30	1.05	27.00	20.00		18.00		16.00		50	
		55	9.41	0.96	29.70	22.00		19.80		17.60		55	
		60	8.63	0.88	32.40	24.00		21.60		19.20		60	
		65	7.94	0.81	35.10	26.00		23.40		20.80		65	
		70	7.35	0.75	37.80	28.00		25.20		22.40		70	
		75	6.86	0.70	40.50	30.00		27.00		24.00		75	
		80	6.47	0.66	43.20	32.00		28.80		25.60		80	
90	5.69	0.58	48.60	36.00	32.40	28.80	90						

轻负荷(TL) Light Load(TL)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ^{±1}	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
14	7	20	34.32	3.50	10.80	8.00	274.60 (28)	7.20	245.20 (25)	6.40	215.70 (22)	BLU	14-20
		25	27.46	2.80	13.50	10.00		9.00		8.00			
		30	22.95	2.34	16.20	12.00		10.80		9.60			
		35	19.61	2.00	18.90	14.00		12.60		11.20			
		40	17.16	1.75	21.60	16.00		14.40		12.80			
		45	15.30	1.56	24.30	18.00		16.20		14.40			
		50	13.73	1.40	27.00	20.00		18.00		16.00			
		55	12.45	1.27	29.70	22.00		19.80		17.60			
		60	11.47	1.17	32.40	24.00		21.60		19.20			
		65	10.59	1.08	35.10	26.00		23.40		20.80			
		70	9.81	1.00	37.80	28.00		25.20		22.40			
		75	9.12	0.93	40.50	30.00		27.00		24.00			
		80	8.53	0.87	43.20	32.00		28.80		25.60			
16	8	20	42.95	4.38	10.80	8.00	343.20 (35)	7.20	313.80 (32)	6.40	274.60 (28)	BLU	16-20
		25	34.32	3.50	13.50	10.00		9.00		8.00			
		30	28.64	2.92	16.20	12.00		10.80		9.60			
		35	24.52	2.50	18.90	14.00		12.60		11.20			
		40	21.48	2.19	21.60	16.00		14.40		12.80			
		45	19.12	1.95	24.30	18.00		16.20		14.40			
		50	17.16	1.75	27.00	20.00		18.00		16.00			
		55	15.69	1.60	29.70	22.00		19.80		17.60			
		60	14.32	1.46	32.40	24.00		21.60		19.2			
		65	13.24	1.35	35.10	26.00		23.40		20.80			
		70	12.26	1.25	37.80	28.00		25.20		22.40			
		75	11.47	1.17	40.50	30.00		27.00		24.00			
		80	10.79	1.10	43.20	32.00		28.80		25.60			
18	9	20	52.76	5.38	10.80	8.00	421.70 (43)	7.20	382.50 (39)	6.40	333.40 (34)	BLU	18-20
		25	42.17	4.30	13.50	10.00		9.00		8.00			
		30	35.11	3.58	16.20	12.00		10.80		9.60			
		35	30.11	3.07	18.90	14.00		12.60		11.20			
		40	26.38	2.69	21.60	16.00		14.40		12.80			
		45	23.44	2.39	24.30	18.00		16.20		14.40			
		50	21.08	2.15	27.00	20.00		18.00		16.00			
		55	19.22	1.96	29.70	22.00		19.80		17.60			
		60	17.55	1.79	32.40	24.00		21.60		19.20			
		65	16.28	1.66	35.10	26.00		23.40		20.80			
		70	15.10	1.54	37.80	28.00		25.20		22.40			
		75	14.12	1.44	40.50	30.00		27.00		24.00			
		80	13.24	1.35	43.20	32.00		28.80		25.60			
90	11.77	1.20	48.60	36.00	32.40	28.80							
100	10.49	1.07	54.00	40.00	36.00	32.00							
125	8.43	0.86	67.50	50.00	45.00	40.00							

轻负荷(TL) Light Load(TL)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm*	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
20	10	20	66.19	6.75	10.80	8.00	529.60 (54)	7.20	470.70 (48)	6.40	421.70 (43)	BLU	20-20
		25	52.96	5.40	13.50	10.00		9.00		8.00			
		30	44.13	4.50	16.20	12.00		10.80		9.60			
		35	37.85	3.86	18.90	14.00		12.60		11.20			
		40	33.15	3.38	21.60	16.00		14.40		12.80			
		45	29.42	3.00	24.30	18.00		16.20		14.40			
		50	26.48	2.70	27.00	20.00		18.00		16.00			
		55	24.03	2.45	29.70	22.00		19.80		17.60			
		60	22.06	2.25	32.40	24.00		21.60		19.20			
		65	20.40	2.08	35.10	26.00		23.40		20.80			
		70	18.93	1.93	37.80	28.00		25.20		22.40			
		75	17.65	1.80	40.50	30.00		27.00		24.00			
		80	16.57	1.69	43.20	32.00		28.80		25.60			
		90	14.71	1.50	48.60	36.00		32.40		28.80			
		100	13.24	1.35	54.00	40.00		36.00		32.00			
22	11	25	65.70	6.70	13.50	10.00	657.00 (67)	9.00	588.40 (60)	8.00	529.60 (54)	BLU	22-25
		30	54.92	5.60	16.20	12.00		10.80		9.60			
		35	47.07	4.80	18.90	14.00		12.60		11.20			
		40	41.19	4.20	21.60	16.00		14.40		12.80			
		45	36.48	3.72	24.30	18.00		16.20		14.40			
		50	32.85	3.35	27.00	20.00		18.00		16.00			
		55	29.91	3.05	29.70	22.00		19.80		17.60			
		60	27.46	2.80	32.40	24.00		21.60		19.20			
		65	25.30	2.58	35.10	26.00		23.40		20.80			
		70	23.54	2.40	37.80	28.00		25.20		22.40			
		75	21.87	2.23	40.50	30.00		27.00		24.00			
		80	20.59	2.10	43.20	32.00		28.80		25.60			
		90	18.24	1.86	48.60	36.00		32.40		28.80			
		100	16.48	1.68	54.00	40.00		36.00		32.00			
		125	13.14	1.34	67.50	50.00		45.00		40.00			
25	12.5	25	82.38	8.40	13.50	10.00	823.80 (84)	9.00	735.50 (75)	8.00	657.00 (67)	BLU	25-25
		30	68.65	7.00	16.20	12.00		10.80		9.60			
		35	58.84	6.00	18.90	14.00		12.60		11.20			
		40	51.48	5.25	21.60	16.00		14.40		12.80			
		45	45.80	4.67	24.30	18.00		16.20		14.40			
		50	41.19	4.20	27.00	20.00		18.00		16.00			
		55	37.46	3.82	29.70	22.00		19.80		17.60			
		60	34.32	3.50	32.40	24.00		21.60		19.20			
		65	31.68	3.23	35.10	26.00		23.40		20.80			
		70	29.42	3.00	37.80	28.00		25.20		22.40			
		75	27.46	2.80	40.50	30.00		27.00		24.00			
		80	25.79	2.63	43.20	32.00		28.80		25.60			
		90	22.85	2.33	48.60	36.00		32.40		28.80			
		100	20.59	2.10	54.00	40.00		36.00		32.00			
		125	16.48	1.68	67.50	50.00		45.00		40.00			
		150	13.73	1.40	81.00	60.00	54.00	48.00				150	
		175	11.77	1.20	94.50	70.00	63.00	56.00				175	
		200	10.30	1.05	108.00	80.00	72.00	64.00				200	

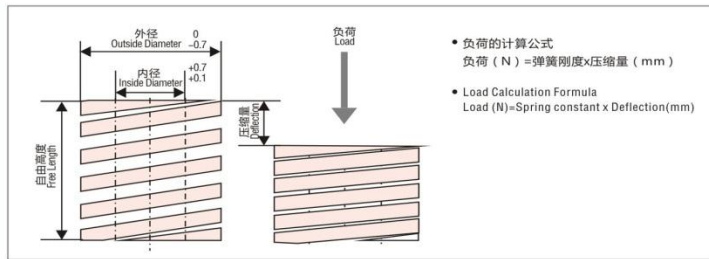
轻负荷(TL) Light Load(TL)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm**	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
27	13.5	25	98.07	10.00	13.50	10.00		9.00		8.00		BLU	27-25	
		30	81.69	8.33	16.20	12.00		10.80		9.60			30	
		35	70.02	7.41	18.90	14.00		12.60		11.20			35	
		40	61.29	6.25	21.60	16.00		14.40		12.80			40	
		45	54.52	5.56	24.30	18.00		16.20		14.40			45	
		50	49.03	5.00	27.00	20.00		18.00		16.00			50	
		55	44.62	4.55	29.70	22.00		19.80		17.60			55	
		60	40.89	4.17	32.40	24.00		21.60		19.20			60	
		65	37.76	3.85	35.10	26.00	980.70	23.40	882.60	20.80	784.50			65
		70	35.01	3.57	37.80	28.00	(100)	25.20	(90)	22.40	(80)			70
		75	32.66	3.33	40.50	30.00		27.00		24.00				75
		80	30.69	3.13	43.20	32.00		28.80		25.60				80
		90	27.26	2.78	48.60	36.00		32.40		28.80				90
		100	24.52	2.50	54.00	40.00		36.00		32.00				100
		125	19.61	2.00	67.50	50.00		45.00		40.00				125
		150	16.38	1.67	81.00	60.00		54.00		48.00				150
175	14.02	1.43	94.50	70.00		63.00		56.00				175		
200	12.26	1.25	108.00	80.00		72.00		64.00				200		
30	15	25	118.76	12.11	13.50	10.00		9.00		8.00		BLU	30-25	
		30	98.85	10.08	16.20	12.00		10.80		9.60			30	
		35	84.83	8.65	18.90	14.00		12.60		11.20			35	
		40	74.14	7.56	21.60	16.00		14.40		12.80			40	
		45	66.00	6.73	24.30	18.00		16.20		14.40			45	
		50	59.33	6.05	27.00	20.00		18.00		16.00			50	
		55	53.94	5.50	29.70	22.00		19.80		17.60			55	
		60	49.43	5.04	32.40	24.00		21.60		19.20			60	
		65	45.60	4.65	35.10	26.00	1186.60	23.40	1068.90	20.80	951.20			65
		70	42.36	4.32	37.80	28.00	(121)	25.20	(109)	22.40	(97)			70
		75	39.52	4.03	40.50	30.00		27.00		24.00				75
		80	37.07	3.78	43.20	32.00		28.80		25.60				80
		90	32.95	3.36	48.60	36.00		32.40		28.80				90
		100	29.62	3.02	54.00	40.00		36.00		32.00				100
		125	23.73	2.42	67.50	50.00		45.00		40.00				125
		150	19.71	2.01	81.00	60.00		54.00		48.00				150
175	16.87	1.72	94.50	70.00		63.00		56.00				175		
200	14.81	1.51	108.00	80.00		72.00		64.00				200		
35	17.5	40	101.11	10.31	21.60	16.00		14.40		12.80		BLU	35-40	
		45	89.93	9.17	24.30	18.00		16.20		14.40			45	
		50	80.90	8.25	27.00	20.00		18.00		16.00			50	
		55	73.55	7.50	29.70	22.00		19.80		17.60			55	
		60	67.37	6.87	32.40	24.00		21.60		19.20			60	
		65	62.27	6.35	35.10	26.00		23.40		20.80			65	
		70	57.76	5.89	37.80	28.00		25.20		22.40			70	
		75	53.94	5.50	40.50	30.00		27.00		24.00			75	
		80	50.50	5.15	43.20	32.00		28.80		25.60			80	
		90	44.91	4.58	48.60	36.00		32.40		28.80			90	
		100	40.40	4.12	54.00	40.00		36.00		32.00			100	
		125	32.36	3.30	67.50	50.00		45.00		40.00			125	
		150	26.97	2.75	81.00	60.00		54.00		48.00			150	
		175	23.05	2.35	94.50	70.00		63.00		56.00			175	
		200	20.20	2.06	108.00	80.00		72.00		64.00			200	

轻负荷(TL) Light Load(TL)

外径 Outside Diameter	内径 Inside Diameter	自由高度 Free Length	弹簧刚度 Spring Constant		密着高度 Solid Length mm**	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
40	20	40	132.39	13.50	21.60	16.00		14.40		12.80		BLU	40-40	
		45	117.68	12.00	24.30	18.00		16.20		14.40			45	
		50	105.91	10.80	27.00	20.00		18.00		16.00			50	
		55	96.30	9.82	29.70	22.00		19.80		17.60			55	
		60	88.26	9.00	32.40	24.00		21.60		19.20			60	
		65	81.49	8.31	35.10	26.00		23.40		20.80			65	
		70	75.61	7.71	37.80	28.00		25.20		22.40			70	
		75	70.61	7.20	40.50	30.00		27.00		24.00			75	
		80	66.19	6.75	43.20	32.00		28.80		25.60			80	
		90	58.84	6.00	48.60	36.00	2118.20 (216)	32.40	1902.50 (194)	28.80	28.80	1696.60 (173)		90
		100	52.96	5.40	54.00	40.00		36.00		32.00			100	
		125	42.36	4.32	67.50	50.00		45.00		40.00			125	
		150	35.30	3.60	81.00	60.00		54.00		48.00			150	
		175	30.20	3.08	94.50	70.00		63.00		56.00			175	
		200	26.48	2.70	108.00	80.00		72.00		64.00			200	
		225	23.54	2.40	122.00	90.00		81.00		72.00			225	
		250	21.18	2.16	135.00	100.00		90.00		80.00			250	
275	19.22	1.96	149.00	110.00		99.00		88.00			275			
300	17.65	1.80	172.20	120.00		108.00		96.00			300			
50	25	50	165.63	16.89	27.00	20.00		18.00		16.00		BLU	50-50	
		55	150.53	15.35	29.70	22.00		19.80		17.60			55	
		60	138.08	14.08	32.40	24.00		21.60		19.20			60	
		65	127.39	12.99	35.10	26.00		23.40		20.80			65	
		70	118.37	12.07	37.80	28.00		25.20		22.40			70	
		75	110.42	11.26	40.50	30.00		27.00		24.00			75	
		80	103.56	10.56	43.20	32.00		28.80		25.60			80	
		90	91.99	9.38	48.60	36.00	3314.60 (338)	32.40	2981.20 (304)	28.80	28.80	2647.80 (270)		90
		100	82.87	8.45	54.00	40.00		36.00		32.00			100	
		125	66.29	6.76	67.50	50.00		45.00		40.00			125	
		150	55.21	5.63	81.00	60.00		54.00		48.00			150	
		175	47.27	4.82	94.50	70.00		63.00		56.00			175	
		200	41.38	4.22	108.00	80.00		72.00		64.00			200	
		225	36.77	3.75	122.00	90.00		81.00		72.00			225	
		250	33.15	3.38	135.00	100.00		90.00		80.00			250	
		275	30.11	3.07	149.00	110.00		99.00		88.00			275	
		300	27.56	2.81	162.00	120.00		108.00		96.00			300	
60	30	60	198.58	20.25	32.40	24.00		21.60		19.20		BLU	60-60	
		70	170.14	17.35	37.80	28.00		25.20		22.40			70	
		80	148.86	15.18	43.20	32.00		28.80		25.60			80	
		90	132.39	13.50	48.60	36.00		32.40		28.80			90	
		100	119.15	12.15	54.00	40.00		36.00		32.00			100	
		125	95.32	9.72	67.50	50.00	4766.00 (486)	45.00	4285.50 (437)	40.00	40.00	3814.80 (389)		125
		150	79.43	8.10	81.00	60.00		54.00		48.00			150	
		175	68.06	6.94	94.50	70.00		63.00		56.00			175	
		200	59.53	6.07	108.00	80.00		72.00		64.00			200	
		225	52.96	5.40	121.50	90.00		81.00		72.00			225	
		250	47.66	4.86	135.00	100.00		90.00		80.00			250	
		275	43.35	4.42	148.50	110.00		99.00		88.00			275	
		300	39.72	4.05	162.00	120.00		108.00		96.00			300	
70	38.5	70	213.78	21.80	40.20	28.00		25.20		22.40		BLU	70-70	
		80	186.33	19.00	45.90	32.00		28.80		25.60			80	
		90	165.73	16.90	51.70	36.00		32.40		28.80			90	
		100	149.06	15.20	57.40	40.00		36.00		32.00			100	
		125	119.64	12.20	71.80	50.00	5978.00 (610)	45.00	5380.00 (549)	40.00	40.00	4782.00 (488)		125
		150	100.03	10.20	86.10	60.00		54.00		48.00			150	
		175	85.42	8.71	100.50	70.00		63.00		56.00			175	
		200	74.73	7.62	114.80	80.00		72.00		64.00			200	
		250	59.82	6.10	143.50	100.00		90.00		80.00			250	
		300	49.82	5.08	172.20	120.00		108.00		96.00			300	

中负荷(TM) Medium Load(TM)



- 负荷的计算公式
负荷 (N) = 弹簧刚度 × 压缩量 (mm)
- Load Calculation Formula
Load (N) = Spring constant × Deflection (mm)

材料的性质: SWOSC-V同等
Material: Equivalent to SWOSC-V

型号: 中负荷
Type: Medium Load

涂沫色: 红色
Color: Blue

最大压缩量的计算公式
最大压缩量 (mm) = 自由高度 - 密着高度

Maximum Deflection Calculation Formula
Maximum deflection (mm) = Free length - Solid length

MINGLI Spring的公差 Allowable Tolerance of MINGLI Spring

外径 Outside Diameter		内径 Inside Diameter		自由高度 Free Length		负荷 Load	垂直度 Squareness	旋向 Winding Direction
60mm 以下 60mm or less	70mm 以上 70mm or more	33mm 以下 33mm or less	38.5mm 以上 38.5mm or more	50mm 以下 50mm or less	55mm 以上 55mm or more			
+0.0mm -0.7mm	+0.0mm -1.0mm	+0.7mm +0.1mm	-0.0mm +1.0mm	± 0.5mm	± 1%	± 10%	2° 以下 Angle 2° or less	右旋 Right Hand Coil

中负荷的弹簧刚度以及使用次数和负荷的关系 Relation of Spring Constant and Using Times to Load (Medium Load)

自由高度 Free Length	外径 Outside Diameter															压缩量 Deflection (mm)				
	6	8	10	12	14	16	18	20	22	25	27	30	35	40	50	60	70	30万次 300,000 times	50万次 500,000 times	100万次 1,000,000 times
15	20.40	28.34	40.89	59.23														4.80	4.30	3.80
20	15.30	21.28	30.69	44.42	59.72	78.16	99.64	122.58										6.40	5.80	5.10
25	12.26	17.06	24.52	35.50	47.76	62.66	79.63	98.07	118.95	153.28	178.97	220.65						8.00	7.20	6.40
30	10.20	14.22	20.40	29.62	39.81	52.17	66.39	81.69	99.05	127.68	149.06	183.87						9.60	8.60	7.70
35	8.73	12.16	17.46	25.30	34.13	44.62	56.88	70.02	84.83	109.83	127.88	157.89						11.20	10.10	9.00
40	7.65	10.69	15.30	22.26	29.81	39.03	49.72	61.29	74.24	95.71	111.80	137.88	187.70	245.36				12.80	11.50	10.20
45	6.77	9.51	13.53	19.71	26.48	34.72	44.23	54.43	66.10	85.12	99.44	122.58	166.81	218.30				14.40	13.00	11.50
50	6.18	8.53	12.26	17.75	23.83	31.19	39.81	49.03	59.43	76.59	89.44	110.32	150.14	196.13	306.46			16.00	14.40	12.80
55	5.59	7.75	11.08	16.08	21.67	28.34	36.19	44.52	53.94	69.63	81.39	100.32	136.51	177.99	278.61			17.60	15.80	14.10
60	5.10	7.06	10.20	14.81	19.91	25.99	33.15	40.80	49.52	63.84	74.53	91.89	125.31	162.79	255.36	366.77		19.20	17.30	15.40
65		6.57	9.41	13.63	18.34	24.03	30.60	37.66	45.70	58.84	68.65	84.83	115.42	151.02	235.75			20.80	18.70	16.60
70		6.08	8.73	12.65	17.06	22.26	28.44	35.01	42.46	54.72	63.84	78.75	107.19	140.04	218.88	314.79	371.67	22.40	20.20	17.90
75		5.69	8.14	11.77	15.89	20.69	26.48	32.66	39.62	51.09	59.62	73.55	100.03	130.82	204.27			24.00	21.60	19.20
80		5.30	7.65	11.08	14.91	19.52	24.18	30.60	37.07	47.86	55.90	68.94	93.85	122.58	191.52	275.76	325.58	25.60	23.00	20.50
90			6.86	9.90	13.24	17.36	22.06	27.16	32.95	42.56	49.62	61.29	83.36	108.95	170.24	245.17	289.30	28.80	25.90	23.00
100					11.96	15.59	19.81	24.52	29.71	38.25	44.72	55.11	75.02	98.07	153.18	220.65	259.88	32.00	28.80	25.60
125								19.61	23.73	30.60	35.79	44.13	60.02	78.45	122.58	176.52	207.90	40.00	36.00	32.00
150								16.38	19.71	25.50	29.81	36.77	50.01	65.31	102.09	147.10	173.58	48.00	43.20	38.40
175										21.87	25.60	31.48	42.85	56.00	87.47	126.01	149.06	56.00	50.40	44.80
200												27.56	37.46	49.03	76.59	110.32	130.43	64.00	57.60	51.20
225														43.54	68.06	98.07		72.00	64.80	57.60
250														39.23	61.29	88.16	103.95	80.00	72.00	64.00
275														35.70	55.70	80.22		88.00	79.20	70.40
300														32.66	50.99	73.45	86.79	96.00	86.40	76.80
内径 Inside Diameter	3	4	5	6	7	8	9	10	11	12.5	13.5	15	17.5	20	25	30	38.5			

在表中: 弹簧刚度 (N/mm)
Table Ref: Spring Constant(N/mm)

	负荷N (kgf) Load N (kgf)																	使用次数 Using Times		压缩量(自由高度%) Deflection(percentage of free length)
	30万次 300,000 times	98.0 (10)	137.3 (14)	196.1 (20)	284.4 (29)	382.5 (39)	500.1 (51)	637.4 (65)	784.5 (80)	951.2 (97)	1225.8 (125)	1431.8 (146)	1765.2 (180)	2402.6 (245)	3138.1 (320)	4903.3 (500)	7060.8 (720)	8330.0 (850)	30万次 300,000 times	
50万次 500,000 times	88.0 (9)	127.5 (13)	176.5 (18)	255.0 (26)	343.2 (35)	451.1 (46)	568.8 (58)	706.1 (72)	853.2 (83)	1098.3 (112)	1284.7 (131)	1578.9 (161)	2157.5 (220)	2824.3 (288)	4413.0 (450)	6354.7 (648)	7497.0 (764)	50万次 500,000 times	28.8%	
100万次 1,000,000 times	79.0 (8)	107.9 (11)	156.9 (16)	225.6 (23)	304.0 (31)	402.1 (41)	509.9 (52)	627.6 (64)	755.1 (77)	980.7 (100)	1147.4 (117)	1412.2 (144)	1912.3 (195)	2510.5 (256)	3922.7 (400)	5638.8 (575)	6664.0 (680)	100万次 1,000,000 times	25.6%	

中负荷(TM) Medium Load(TM)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm**	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
6	3	15	20.40	2.08	9.80	4.80	98.00 (10)	4.30	88.00 (9)	3.80	79.00 (8)	RED	6-15
		20	15.30	1.56	13.10	6.40		5.80		5.10			
		25	12.26	1.25	16.40	8.00		7.20		6.40			
		30	10.20	1.04	19.60	9.60		8.60		7.70			
		35	8.73	0.89	22.90	11.20		10.10		9.00			
		40	7.65	0.78	26.20	12.80		11.50		10.20			
		45	6.77	0.69	29.40	14.40		13.00		11.50			
		50	6.18	0.63	32.70	16.00		14.40		12.80			
		55	5.59	0.57	36.00	17.60		15.80		14.10			
60	5.10	0.52	39.20	19.20	17.30	15.40							
8	4	15	28.34	2.89	9.400	4.80	137.30 (14)	4.30	127.50 (13)	3.80	107.90 (11)	RED	8-15
		20	21.28	2.17	12.50	6.40		5.80		5.10			
		25	17.06	1.74	15.70	8.00		7.20		6.40			
		30	14.22	1.45	18.80	9.60		8.60		7.70			
		35	12.16	1.24	21.90	11.20		10.10		9.00			
		40	10.69	1.09	25.00	12.80		11.50		10.20			
		45	9.51	0.97	28.20	14.40		13.00		11.50			
		50	8.53	0.87	31.30	16.00		14.40		12.80			
		55	7.75	0.79	34.40	17.60		15.80		14.10			
		60	7.06	0.72	37.60	19.20		17.30		15.40			
		65	6.57	0.67	42.50	20.80		18.70		16.60			
		70	6.08	0.62	45.80	22.40		20.20		17.90			
		75	5.69	0.58	49.10	24.00		21.60		19.20			
80	5.30	0.54	52.30	25.60	23.00	20.50							
10	5	15	40.89	4.17	9.40	4.80	196.10 (20)	4.30	176.50 (18)	3.80	156.90 (16)	RED	10-15
		20	30.69	3.13	12.50	6.40		5.80		5.10			
		25	24.52	2.50	15.70	8.00		7.20		6.40			
		30	20.40	2.08	18.80	9.60		8.60		7.70			
		35	17.46	1.78	21.90	11.20		10.10		9.00			
		40	15.30	1.56	25.00	12.80		11.50		10.20			
		45	13.53	1.38	28.20	14.40		13.00		11.50			
		50	12.26	1.25	31.30	16.00		14.40		12.80			
		55	11.08	1.13	34.40	17.60		15.80		14.10			
		60	10.20	1.04	37.60	19.20		17.30		15.40			
		65	9.41	0.96	40.70	20.80		18.70		16.60			
		70	8.73	0.89	43.80	22.40		20.20		17.90			
		75	8.14	0.83	47.00	24.00		21.60		19.20			
		80	7.65	0.78	50.10	25.60		23.00		20.50			
90	6.86	0.70	56.30	28.80	25.90	23.00							
12	6	15	59.23	6.04	9.40	4.80	284.40 (29)	4.30	255.00 (26)	3.80	225.60 (23)	RED	12-15
		20	44.42	4.53	12.50	6.40		5.80		5.10			
		25	35.50	3.62	15.70	8.00		7.20		6.40			
		30	29.62	3.02	18.80	9.60		8.60		7.70			
		35	25.30	2.58	21.90	11.20		10.10		9.00			
		40	22.26	2.27	25.00	12.80		11.50		10.20			
		45	19.71	2.01	28.20	14.40		13.00		11.50			
		50	17.75	1.81	31.30	16.00		14.40		12.80			
		55	16.08	1.64	34.40	17.60		15.80		14.10			
		60	14.81	1.51	37.60	19.20		17.30		15.40			
		65	13.63	1.39	40.70	20.80		18.70		16.60			
		70	12.65	1.29	43.80	22.40		20.20		17.90			
		75	11.77	1.20	47.00	24.00		21.60		19.20			
		80	11.08	1.13	50.10	25.60		23.00		20.50			
90	9.90	1.01	56.30	28.80	25.90	23.00							

中负荷(TM) Medium Load(TM)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm*	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
14	7	20	59.72	6.09	12.50	6.40		5.80		5.10		RED	14-20	
		25	47.76	4.87	15.70	8.00		7.20		6.40			25	
		30	39.81	4.06	18.80	9.60		8.60		7.70			30	
		35	34.13	3.48	21.90	11.20		10.10		9.00			35	
		40	29.81	3.04	25.00	12.80		11.50		10.20			40	
		45	26.48	2.70	28.20	14.40		13.00		11.50			45	
		50	23.83	2.43	31.30	16.00		14.40		12.80			50	
		55	21.67	2.21	34.40	17.60	382.50 (39)	15.80	343.20 (35)	14.10	304.00 (31)			55
		60	19.91	2.03	37.60	19.20		17.30		15.40				60
		65	18.34	1.87	40.70	20.80		18.70		16.60				65
		70	17.06	1.74	43.80	22.40		20.20		17.90				70
		75	15.89	1.62	47.00	24.00		21.60		19.20				75
		80	14.91	1.52	50.10	25.60		23.00		20.50				80
90	13.24	1.35	56.30	28.8		25.90		23.00				90		
100	11.96	1.22	62.60	32.00		28.80		25.60				100		
16	8	20	78.16	7.97	12.50	6.400		5.800		5.10		RED	16-20	
		25	62.66	6.39	15.70	8.000		7.200		6.40			25	
		30	52.17	5.32	18.80	9.600		8.600		7.70			30	
		35	44.62	4.55	21.90	11.20		10.10		9.00			35	
		40	39.03	3.98	25.00	12.80		11.50		10.20			40	
		45	34.72	3.54	28.20	14.40		13.00		11.50			45	
		50	31.19	3.18	31.30	16.00		14.40		12.80			50	
		55	28.34	2.89	34.40	17.60	500.10 (51)	15.80	451.10 (46)	14.10	402.10 (41)			55
		60	25.99	2.65	37.60	19.20		17.30		15.40				60
		65	24.03	2.45	40.70	20.80		18.70		16.60				65
		70	22.26	2.27	43.80	22.40		20.20		17.90				70
		75	20.69	2.11	47.00	24.00		21.60		19.20				75
		80	19.52	1.99	50.10	25.60		23.00		20.50				80
90	17.36	1.77	56.30	28.80		25.90		23.00				90		
100	15.59	1.59	62.60	32.00		28.80		25.60				100		
18	9	20	99.64	10.16	12.50	6.400		5.800		5.10		RED	18-20	
		25	79.63	8.12	15.70	8.000		7.200		6.40			25	
		30	66.39	6.77	18.80	9.600		8.600		7.70			30	
		35	56.88	5.80	21.90	11.20		10.10		9.00			35	
		40	49.72	5.07	25.00	12.80		11.50		10.20			40	
		45	44.23	4.51	28.20	14.40		13.00		11.50			45	
		50	39.81	4.06	31.30	16.00		14.40		12.80			50	
		55	36.19	3.69	34.40	17.60	637.40 (65)	15.80	568.80 (58)	14.10	509.90 (52)			55
		60	33.15	3.38	37.60	19.20		17.30		15.40				60
		65	30.60	3.12	40.70	20.80		18.70		16.60				65
		70	28.44	2.90	43.80	22.40		20.20		17.90				70
		75	26.48	2.70	47.00	24.00		21.60		19.20				75
		80	24.81	2.53	50.10	25.60		23.00		20.50				80
90	22.06	2.25	56.30	28.80		25.90		23.00				90		
100	19.81	2.02	62.60	32.00		28.80		25.60				100		

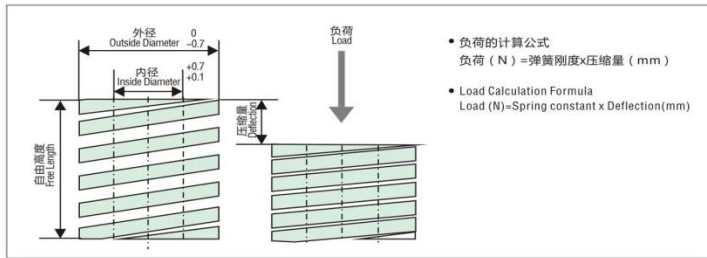
中负荷(TM) Medium Load(TM)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ⁻¹	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
20	10	20	122.58	12.50	12.50	6.40	784.50 (80)	5.80	706.10 (72)	5.10	627.60 (64)	RED	20-20
		25	98.07	10.00	15.70	8.00		7.20		6.40			
		30	81.69	8.33	18.80	9.60		8.60		7.70			
		35	70.02	7.14	21.90	11.20		10.10		9.00			
		40	61.29	6.25	25.00	12.80		11.50		10.20			
		45	54.43	5.55	28.20	14.40		13.00		11.50			
		50	49.03	5.00	31.30	16.00		14.40		12.80			
		55	44.52	4.54	34.40	17.60		15.80		14.10			
		60	40.80	4.16	37.60	19.20		17.30		15.40			
		65	37.66	3.84	40.70	20.80		18.70		16.60			
		70	35.01	3.57	43.80	22.40		20.20		17.90			
		75	32.66	3.33	47.00	24.00		21.60		19.20			
		80	30.60	3.12	50.10	25.60		23.00		20.50			
		90	27.16	2.77	56.30	28.80		25.90		23.00			
		100	24.52	2.50	62.60	32.00		28.80		25.60			
125	19.61	2.00	78.30	40.00	36.00	32.00							
150	16.38	1.67	93.90	48.00	43.20	37.40							
22	11	25	118.95	12.13	15.70	8.00	951.20 (97)	7.20	853.20 (87)	6.40	755.10 (77)	RED	22-25
		30	99.05	10.10	18.80	9.60		8.60		7.70			
		35	84.83	8.65	21.90	11.20		10.10		9.00			
		40	74.24	7.57	25.00	12.80		11.50		10.20			
		45	66.10	6.74	28.20	14.40		13.00		11.50			
		50	59.43	6.06	31.30	16.00		14.40		12.80			
		55	53.94	5.50	34.40	17.60		15.80		14.10			
		60	49.52	5.05	37.60	19.20		17.30		15.40			
		65	45.70	4.66	40.70	20.80		18.70		16.60			
		70	42.46	4.33	43.80	22.40		20.20		17.90			
		75	39.62	4.04	47.00	24.00		21.60		19.20			
		80	37.07	3.78	50.10	25.60		23.00		20.50			
		90	32.95	3.36	56.30	28.80		25.90		23.00			
		100	29.71	3.03	62.60	32.00		28.80		25.60			
		125	23.73	2.42	78.30	40.00		36.00		32.00			
150	19.71	2.01	93.90	48.00	43.20	38.40							
25	12.5	25	153.28	15.63	15.70	8.00	1225.80 (125)	7.20	1098.3 (112)	6.40	980.70 (100)	RED	25-25
		30	127.68	13.02	18.80	9.60		8.60		7.70			
		35	109.83	11.20	21.90	11.20		10.10		9.00			
		40	95.71	9.76	25.00	12.80		11.50		10.20			
		45	85.12	8.68	28.20	14.40		13.00		11.50			
		50	76.59	7.81	31.30	16.00		14.40		12.80			
		55	69.63	7.10	34.40	17.60		15.80		14.10			
		60	63.84	6.51	37.60	19.20		17.30		15.40			
		65	58.84	6.00	40.70	20.80		18.70		16.60			
		70	54.72	5.58	43.80	22.40		20.20		17.90			
		75	51.09	5.21	47.00	24.00		21.60		19.20			
		80	47.86	4.88	50.10	25.60		23.00		20.50			
		90	42.56	4.34	56.30	28.80		25.90		23.00			
		100	38.25	3.90	62.60	32.00		28.80		25.60			
		125	30.60	3.12	78.30	40.00		36.00		32.00			
150	25.50	2.60	93.90	48.00	43.20	38.40							
175	21.87	2.23	109.60	56.00	50.40	44.80							

中负荷(TM) Medium Load(TM)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm**1	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.			
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)				
40	20	40	245.36	25.02	25.00	12.80		11.50		10.20		RED	40-40		
		45	218.30	22.26	29.40	14.40		13.00		11.50			45		
		50	196.13	20.00	31.30	16.00		14.40		12.80			50		
		55	177.99	18.15	36.00	17.60		15.80		14.10			55		
		60	162.79	16.60	37.60	19.20		17.30		15.40			60		
		65	151.02	15.40	42.50	20.80		18.70		16.60			65		
		70	140.04	14.28	43.80	22.00		20.20		17.90			70		
		75	130.82	13.34	49.10	24.00		21.60		19.20			75		
		80	122.58	12.50	50.10	25.60	3138.10 (320)	23.00	2824.30 (288)	20.50	2510.50 (256)		80		
		90	108.95	11.11	56.30	28.80		25.90		23.00			90		
		100	98.07	10.00	62.60	32.00		28.80		25.60			100		
		125	78.45	8.00	78.30	40.00		36.00		32.00			125		
		150	65.31	6.66	93.90	48.00		43.20		38.40			150		
		175	56.00	5.71	109.60	56.00		50.40		44.80			175		
		200	49.03	5.00	125.20	64.00		57.60		51.20			200		
		225	43.54	4.44	140.90	72.00		64.80		57.60			225		
		250	39.23	4.00	156.50	80.00		72.00		64.00			250		
		275	35.70	3.64	172.20	88.00		79.20		70.40			275		
		300	32.66	3.33	187.80	96.00		86.40		76.80			300		
		50	25	50	306.46	31.25	31.30	16.00		14.40		12.80		RED	50-50
55	278.61			28.41	34.40	17.60		15.80		14.10			55		
60	255.36			26.04	37.60	19.20		17.30		15.40			60		
65	235.75			24.04	40.70	20.80		18.70		16.60			65		
70	218.88			22.32	43.80	22.40		20.20		17.90			70		
75	204.27			20.83	47.00	24.00		21.60		19.20			75		
80	191.52			19.53	50.10	25.60		23.00		20.50			80		
90	170.24			17.36	56.30	28.80	4903.30 (500)	25.90	4413.00 (450)	23.00	3922.70 (400)		90		
100	153.18			15.62	62.60	32.00		28.80		25.60			100		
125	122.58			12.50	78.30	40.00		36.00		32.00			125		
150	102.09			10.41	93.90	48.00		43.20		38.40			150		
175	87.47			8.92	109.60	56.00		50.40		44.80			175		
200	76.59			7.81	125.20	64.00		57.60		51.20			200		
225	68.06			6.94	140.90	72.00		64.80		57.60			225		
250	61.29			6.25	156.50	80.00		72.00		64.00			250		
275	55.70			5.68	172.20	88.00		79.20		70.40			275		
300	50.99			5.20	187.80	96.00		86.40		76.80			300		
60	30			60	366.77	37.40	37.60	19.20		17.30		15.40		RED	60-60
				70	314.79	32.10	43.80	22.40		20.20		17.90			70
				80	275.76	28.12	50.10	25.60		23.00		20.50			80
		90	245.17	25.00	56.30	28.80		25.90		23.50			90		
		100	220.65	22.50	62.60	32.00		28.80		25.60			100		
		125	176.52	18.00	78.30	40.00	7060.80 (720)	36.00	6354.70 (648)	32.00	5638.80 (575)		125		
		150	147.10	15.00	93.90	48.00		43.20		38.40			150		
		175	126.01	12.85	109.60	56.00		50.40		44.80			175		
		200	110.32	11.25	125.20	64.00		57.60		51.20			200		
		225	98.07	10.00	140.90	72.00		64.80		57.60			225		
		250	88.16	8.99	156.50	80.00		72.00		64.00			250		
		275	80.22	8.18	172.20	88.00		79.20		70.40			275		
		300	73.45	7.49	187.80	96.00		86.40		76.80			300		
		70	38.5	70	371.67	37.90	45.80	22.40		20.20		20.20		RED	70-70
80	325.58			33.20	52.30	25.60		23.20		23.00			80		
90	289.30			29.50	58.90	28.80		25.90		25.90			90		
100	259.88			26.50	65.40	32.00		28.80		28.80			100		
125	207.90			21.20	81.80	40.00	8330.00 (850)	36.00	7497.00 (764)	36.00	6664.00 (680)		125		
150	173.58			17.70	98.10	48.00		43.20		43.20			150		
175	149.06			15.20	114.50	56.00		50.40		50.40			175		
200	130.43			13.30	130.80	64.00		57.60		57.60			200		
250	103.95			10.60	163.50	80.00		72.00		72.00			250		
300	86.79			8.85	196.20	96.00		86.40		86.40			300		

重负荷(TH) Heavy Load(TH)



- 负荷的计算公式
负荷 (N) = 弹簧刚度 x 压缩量 (mm)
- Load Calculation Formula
Load (N) = Spring constant x Deflection (mm)

材料的性质 : SWOSC-V同等
Material: Equivalent to SWOSC-V

型号 : 重负荷
Type: Heavy Load

涂抹色 : 绿色
Color: Green

最大压缩量的计算公式
最大压缩量 (mm) = 自由高度 - 密着高度

Maximum Deflection Calculation Formula
Maximum deflection(mm) = Free length — Solid length

MINGLI Spring的公差 Allowable Tolerance of MINGLI Spring

外径 Outside Diameter	内径 Inside Diameter	自由高度 Free Length		负荷 Load	垂直度 Squareness	旋向 Winding Direction
		50mm 以下 50mm or less	55mm 以上 55mm or more			
+0.0mm -0.7mm	+0.7mm -0.1mm	± 0.5mm	± 1%	± 10%	2° 以下 Angle 2° or less	右旋 Right Hand Coil

重负荷的弹簧刚度以及使用次数和负荷的关系 Relation of Spring Constant and Using Times to Load (Medium Load)

自由高度 Free Length	外径 Outside Diameter														压缩量 Deflection (mm)				
	6	8	10	12	14	16	18	20	22	25	27	30	35	40	50	60	30万次 300,000 times	50万次 500,000 times	100万次 1,000,000 times
	15	38.25	57.47	81.39	116.70													3.60	3.20
20	28.44	43.15	61.29	87.28	120.52	157.30	198.19	245.17									4.80	4.30	3.80
25	22.56	34.52	49.03	69.63	96.40	125.82	158.47	196.13	236.93	305.97	356.96	441.30					6.00	5.40	4.80
30	18.63	28.73	40.80	58.55	80.32	104.83	132.10	163.38	197.41	254.68	298.22	367.75					7.20	6.50	5.80
35	16.67	24.61	35.01	50.11	68.84	89.83	113.17	140.04	169.65	219.47	256.93	316.36					8.40	7.60	6.70
40	14.71	21.57	30.89	43.84	60.21	78.65	99.05	122.58	148.08	190.93	223.69	275.76	374.81	490.33			9.60	8.60	7.70
45	12.75	19.12	27.16	39.03	53.54	69.82	88.06	108.95	131.41	170.64	199.07	245.17	333.23	435.81			10.80	9.70	8.60
50	11.77	17.26	24.52	35.11	48.15	62.86	79.24	98.07	118.46	152.79	178.97	220.65	299.89	392.26	612.91		12.00	10.80	9.60
55	10.79	15.69	22.26	31.87	43.74	57.17	71.98	89.14	107.28	139.25	161.81	200.05	272.62	356.57	557.21		13.20	11.90	10.60
60	9.81	14.42	20.40	29.22	40.11	52.37	66.00	81.69	98.65	127.29	149.06	183.87	249.87	326.85	510.73	735.50	14.40	13.00	11.50
65		13.24	18.83	26.87	37.07	48.35	60.90	75.41	91.01	117.68	137.29	169.65	230.75	301.75	471.50		15.60	14.00	12.50
70		12.36	17.55	24.91	34.42	44.91	56.58	70.02	84.63	109.15	127.78	157.59	214.18	280.17	437.77	630.37	16.80	15.10	13.40
75		11.47	16.38	23.24	32.07	41.97	52.86	65.41	78.85	101.99	118.66	147.10	199.96	261.54	408.64		18.00	16.20	14.40
80		10.79	15.30	21.67	30.11	39.32	49.52	61.29	74.04	95.42	111.80	137.88	187.40	245.17	383.05	551.62	19.20	17.30	15.40
90			13.63	19.42	26.67	35.01	44.13	54.43	65.08	84.83	99.34	122.58	166.61	217.90	340.49	490.33	21.60	19.40	17.30
100				24.12	31.48	39.62	49.03	59.23	76.39	89.44	110.32	149.94	196.13	306.46	441.30		24.00	21.60	19.20
125							39.23	47.37	61.10	71.59	88.26	119.93	156.91	245.17	353.04		30.00	27.00	24.00
150							32.66	39.42	50.99	59.62	73.55	99.93	130.72	204.27	294.20		36.00	32.40	28.80
175									43.74	51.09	62.96	85.61	111.99	175.05	252.13		42.00	37.80	33.60
200												55.11	74.92	98.07	153.18	220.65	48.00	43.20	38.40
225														87.28	136.21	196.33	54.00	48.60	43.20
250														78.55	122.58	176.62	60.00	54.00	48.00
275														71.39	111.40	160.63	66.00	59.40	52.80
300														65.41	102.18	147.20	72.00	64.80	57.60

在表中 : 弹簧刚度 (N/mm)
Table Ref: Spring Constant(N/mm)

		负荷N (kgf) Load N (kgf)										使用次数 Using Times		压缩量(自由高度%) Deflection(percentage of free length)				
30万次 300,000 times	137.0 (14)	205.9 (21)	294.2 (30)	421.7 (43)	578.6 (59)	755.1 (77)	951.2 (97)	1176.8 (120)	1422.0 (145)	1833.8 (187)	2147.7 (219)	2647.8 (270)	3599 (367)	4707.2 (480)	7355.0 (750)	10591.2 (1080)	24.0%	
50万次 500,000 times	123.0 (13)	186.3 (19)	246.8 (27)	372.7 (38)	519.8 (53)	676.7 (69)	853.2 (87)	1059.1 (108)	1274.9 (130)	1657.3 (169)	1931.9 (197)	2383.0 (243)	3236.2 (330)	4236.5 (432)	6619.5 (675)	9541.9 (973)		21.6%
100万次 1,000,000 times	110.0 (11)	166.7 (17)	235.4 (24)	333.4 (34)	460.9 (47)	608.0 (62)	764.9 (78)	941.4 (96)	1137.6 (116)	1471.0 (150)	1716.2 (175)	2118.3 (216)	2873.3 (293)	3765.8 (384)	5884.0 (600)	8472.9 (864)		19.2%

重负荷(TH) Heavy Load(TH)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm*	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
6	3	15	38.25	3.90	11.00	3.60	137.00	3.20	123.00	2.90	110.00	GRE	6-15
		20	28.44	2.90	14.70	4.80	4.30	4.30	3.80	20			
		25	22.56	2.30	18.40	6.00	5.40	5.40	4.80	25			
		30	18.63	1.90	22.00	7.20	6.50	6.50	5.80	30			
		35	16.67	1.70	25.70	8.40	7.60	7.60	6.70	35			
		40	14.71	1.50	29.40	9.60	8.60	8.60	7.70	40			
		45	12.75	1.30	33.00	10.80	9.70	9.70	8.60	45			
		50	11.77	1.20	36.70	12.00	10.80	10.80	9.60	50			
		55	10.79	1.10	40.40	13.20	11.90	11.90	10.60	55			
		60	9.81	1.00	44.00	14.40	13.00	13.00	11.50	60			
8	4	15	57.47	5.86	10.80	3.60	205.90	3.20	186.30	2.90	166.70	GRE	8-15
		20	43.15	4.40	14.40	4.80	4.30	4.30	3.80	20			
		25	34.52	3.52	18.00	6.00	5.40	5.40	4.80	25			
		30	28.73	2.93	21.60	7.20	6.50	6.50	5.80	30			
		35	24.61	2.51	25.20	8.40	7.60	7.60	6.70	35			
		40	21.57	2.20	28.80	9.60	8.60	8.60	7.70	40			
		45	19.12	1.95	32.40	10.80	9.70	9.70	8.60	45			
		50	17.26	1.76	36.00	12.00	10.80	10.80	9.60	50			
		55	15.69	1.60	39.60	13.20	11.90	11.90	10.60	55			
		60	14.42	1.47	43.20	14.40	13.00	13.00	11.50	60			
		65	13.24	1.35	47.70	15.60	14.00	14.00	12.50	65			
		70	12.36	1.26	51.40	16.80	15.10	15.10	13.40	70			
		75	11.47	1.17	55.10	18.00	16.20	16.20	14.40	75			
		80	10.79	1.10	58.70	19.20	17.30	17.30	15.40	80			
10	5	15	81.39	8.30	10.80	3.60	294.20	3.20	264.80	2.90	235.40	GRE	10-15
		20	61.29	6.25	14.40	4.80	4.30	4.30	3.80	20			
		25	49.03	5.00	18.00	6.00	5.40	5.40	4.80	25			
		30	40.80	4.16	21.60	7.20	6.50	6.50	5.80	30			
		35	35.01	3.57	25.20	8.40	7.60	7.60	6.70	35			
		40	30.89	3.15	28.80	9.60	8.60	8.60	7.70	40			
		45	27.16	2.77	32.40	10.80	9.70	9.70	8.60	45			
		50	24.52	2.50	36.00	12.00	10.80	10.80	9.60	50			
		55	22.26	2.27	39.60	13.20	11.90	11.90	10.60	55			
		60	20.40	2.08	43.20	14.40	13.00	13.00	11.50	60			
		65	18.83	1.92	46.80	15.60	14.00	14.00	12.50	65			
		70	17.55	1.79	50.40	16.80	15.10	15.10	13.40	70			
		75	16.38	1.67	54.00	18.00	16.20	16.20	14.40	75			
		80	15.30	1.56	57.60	19.20	17.30	17.30	15.40	80			
90	13.63	1.39	64.80	21.60	19.40	19.40	17.30	90					
12	6	15	116.70	11.90	10.80	3.60	421.70	3.20	372.70	2.90	333.40	GRE	12-15
		20	87.28	8.90	14.40	4.80	4.30	4.30	3.80	20			
		25	69.63	7.10	18.00	6.00	5.40	5.40	4.80	25			
		30	58.55	5.97	21.60	7.20	6.50	6.50	5.80	30			
		35	50.11	5.11	25.20	8.40	7.60	7.60	6.70	35			
		40	43.84	4.47	28.80	9.60	8.60	8.60	7.70	40			
		45	39.03	3.98	32.40	10.80	9.70	9.70	8.60	45			
		50	35.11	3.58	36.00	12.00	10.80	10.80	9.60	50			
		55	31.87	3.25	39.60	13.20	11.90	11.90	10.60	55			
		60	29.22	2.98	43.20	14.40	13.00	13.00	11.50	60			
		65	26.87	2.74	46.80	15.60	14.00	14.00	12.50	65			
		70	24.91	2.37	50.40	16.80	15.10	15.10	13.40	70			
		75	23.24	2.54	54.00	18.00	16.20	16.20	14.40	75			
		80	21.67	2.21	57.60	19.20	17.30	17.30	15.40	80			
		90	19.42	1.98	64.80	21.60	19.40	19.40	17.30	90			

重负荷(TH) Heavy Load(TH)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
14	7	20	120.52	12.29	14.40	4.80	578.60 (59)	4.30	519.80 (53)	3.80	460.90 (47)	GRE	14-20
		25	96.40	9.83	18.00	6.00		5.40		4.80			
		30	80.32	8.19	21.60	7.20		6.50		5.80			
		35	68.84	7.02	25.20	8.40		7.60		6.70			
		40	60.21	6.14	28.80	9.60		8.60		7.70			
		45	53.54	5.46	32.40	10.80		9.70		8.60			
		50	48.15	4.91	36.00	12.00		10.80		9.60			
		55	43.74	4.46	39.60	13.20		11.90		10.60			
		60	40.11	4.09	43.20	14.40		13.00		11.50			
		65	37.07	3.78	46.80	15.60		14.00		12.50			
		70	34.42	3.51	50.40	16.80		15.10		13.40			
		75	32.07	3.27	54.00	18.00		16.20		14.40			
		80	30.11	3.07	57.60	19.20		17.30		15.40			
		90	26.67	2.72	64.80	21.60	19.40	17.30					90
		100	24.12	2.46	72.00	24.00	21.60	19.20					100
16	8	20	157.30	16.04	14.40	4.80	755.10 (77)	4.30	676.70 (69)	3.80	608.00 (62)	GRE	16-20
		25	125.82	12.83	18.00	6.00		5.40		4.80			
		30	104.83	10.69	21.60	7.20		6.50		5.80			
		35	89.83	9.16	25.20	8.40		7.60		6.70			
		40	78.65	8.02	28.80	9.60		8.60		7.70			
		45	69.82	7.12	32.40	10.80		9.70		8.60			
		50	62.86	6.41	36.00	12.00		10.80		9.60			
		55	57.17	5.83	39.60	13.20		11.90		10.60			
		60	52.37	5.34	43.20	14.40		13.00		11.50			
		65	48.35	4.93	46.80	15.60		14.00		12.50			
		70	44.91	4.58	50.40	16.80		15.10		13.40			
		75	41.97	4.28	54.00	18.00		16.20		14.40			
		80	39.32	4.01	57.60	19.20		17.30		15.40			
		90	35.01	3.57	64.80	21.60	19.40	17.30					90
		100	31.48	3.21	72.00	24.00	21.60	19.20					100
18	9	20	198.19	20.21	14.40	4.80	951.20 (97)	4.30	853.20 (87)	3.80	764.90 (78)	GRE	18-20
		25	158.47	16.16	18.00	6.00		5.40		4.80			
		30	132.10	13.47	21.60	7.20		6.50		5.80			
		35	113.17	11.54	25.20	8.40		7.60		6.70			
		40	99.05	10.10	28.80	9.60		8.60		7.70			
		45	88.06	8.98	32.40	10.80		9.70		8.60			
		50	79.24	8.08	36.00	12.00		10.80		9.60			
		55	71.98	7.34	39.60	13.20		11.90		10.60			
		60	66.00	6.73	43.20	14.40		13.00		11.50			
		65	60.90	6.21	46.80	15.60		14.00		12.50			
		70	56.58	5.77	50.40	16.80		15.10		13.40			
		75	52.86	5.39	54.00	18.00		16.20		14.40			
		80	49.52	5.05	57.6	19.20		17.30		15.40			
		90	44.13	4.50	64.80	21.60	19.40	17.30					90
		100	39.62	4.04	72.00	24.00	21.60	19.20					100

重负荷(TH) Heavy Load(TH)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ¹⁾	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
20	10	20	245.17	25.00	14.40	4.80		4.30		3.80		GRE	20-20	
		25	196.13	20.00	18.00	6.00		5.40		4.80			25	
		30	163.38	16.66	21.60	7.20		6.50		5.80			30	
		35	140.04	14.28	25.20	8.40		7.60		6.70			35	
		40	122.58	12.50	28.80	9.60		8.60		7.70			40	
		45	108.95	11.11	32.40	10.80		9.70		8.60			45	
		50	98.07	10.00	36.00	12.00		10.80		9.60			50	
		55	89.14	9.09	39.60	13.20	1176.80		11.90	1059.10	10.60	941.40		55
		60	81.69	8.33	43.20	14.40	(120)		13.00	(108)	11.50	(96)		60
		65	75.41	7.69	46.80	15.60			14.00		12.50			65
		70	70.02	7.14	50.40	16.80			15.10		13.40			70
		75	65.41	6.67	54.00	18.00			16.20		14.40			75
		80	61.29	6.25	57.60	19.20			17.30		15.40			80
		90	54.43	5.55	64.80	21.60			19.40		17.30			90
		100	49.03	5.00	72.00	24.00			21.60		19.20			100
125	39.23	4.00	90.00	30.00			27.00		24.00			125		
150	32.66	3.33	108.00	36.00			32.40		28.80			150		
22	11	25	236.93	24.16	18.00	6.00		5.40		4.80		GRE	22-25	
		30	197.41	20.13	21.60	7.20		6.50		5.80			30	
		35	169.65	17.30	25.20	8.40		7.60		6.70			35	
		40	148.08	15.10	28.80	9.60		8.60		7.70			40	
		45	131.41	13.40	32.40	10.80		9.70		8.60			45	
		50	118.46	12.08	36.00	12.00		10.80		9.60			50	
		55	107.28	10.94	39.60	13.20		11.90		10.60			55	
		60	98.65	10.06	43.20	14.40	1422.00		13.00	1274.90	11.50	1137.60		60
		65	91.01	9.28	46.80	15.60	(145)		14.00	(130)	12.50	(116)		65
		70	84.63	8.63	50.40	16.80			15.10		13.40			70
		75	78.85	8.04	54.00	18.00			16.20		14.40			75
		80	74.04	7.55	57.60	19.20			17.30		15.40			80
		90	65.80	6.71	64.80	21.60			19.40		17.30			90
		100	59.23	6.04	72.00	24.00			21.60		19.20			100
		125	47.37	4.83	90.00	30.00			27.00		24.00			125
150	39.42	4.02	108.00	36.00			32.40		28.80			150		
25	12.5	25	305.97	31.20	18.00	6.00		5.40		4.80		GRE	25-25	
		30	254.68	25.97	21.60	7.20		6.50		5.80			30	
		35	219.47	22.38	25.20	8.40		7.60		6.70			35	
		40	190.93	19.47	28.80	9.60		8.60		7.70			40	
		45	170.64	17.40	32.40	10.80		9.70		8.60			45	
		50	152.79	15.58	36.00	12.00		10.80		9.60			50	
		55	139.25	14.20	39.60	13.20		11.90		10.60			55	
		60	127.29	12.98	43.20	14.40		13.00		11.50			60	
		65	117.68	12.00	46.80	15.60	1833.80		14.00	1657.30	12.50	1471.00		65
		70	109.15	11.13	50.40	16.80	(187)		15.10	(169)	13.40	(150)		70
		75	101.99	10.40	54.00	18.00			16.20		14.40			75
		80	95.42	9.73	57.60	19.20			17.30		15.40			80
		90	84.83	8.65	64.80	21.60			19.40		17.30			90
		100	76.39	7.79	72.00	24.00			21.60		19.20			100
		125	61.10	6.23	90.00	30.00			27.00		24.00			125
150	50.99	5.20	108.00	36.00			32.40		28.80			150		
175	43.74	4.46	126.00	42.00			37.80		33.60			175		

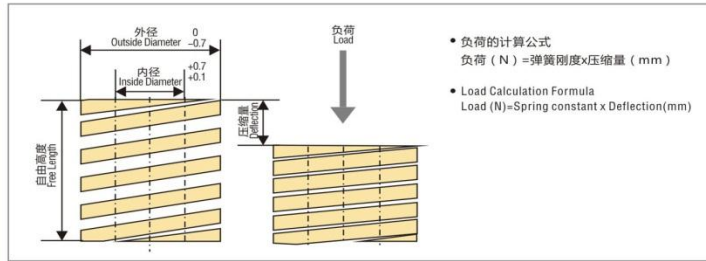
重负荷(TH) Heavy Load(TH)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ^{±1}	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
27	13.5	25	356.96	36.40	18.00	6.00		5.40		4.80		GRE 27-25	
		30	298.22	30.41	21.60	7.20		6.50		5.80		30	
		35	256.93	26.20	25.20	8.40		7.60		6.70		35	
		40	223.69	22.81	28.80	9.60		8.60		7.70		40	
		45	199.07	20.30	32.40	10.80		9.70		8.60		45	
		50	178.97	18.25	36.00	12.00		10.80		9.60		50	
		55	161.81	16.50	39.60	13.20	2147.70 (219)	11.90	1931.90 (197)	10.60	1716.20 (175)		55
		60	149.06	15.20	43.20	14.40		13.00		11.50		60	
		65	137.29	14.00	46.80	15.60		14.00		12.50		65	
		70	127.78	13.03	50.40	16.80		15.10		13.40		70	
		75	118.66	12.10	54.00	18.00		16.20		14.40		75	
		80	111.80	11.40	57.60	19.20		17.30		15.40		80	
		90	99.34	10.13	64.80	21.60		19.40		17.30		90	
		100	89.44	9.12	72.00	24.00		21.60		19.20		100	
		125	71.59	7.30	90.00	30.00		27.00		24.00		125	
		150	59.62	6.08	108.00	36.00		32.40		28.80		150	
		175	51.09	5.21	126.00	42.00		37.80		33.60		175	
30	15	25	441.30	45.00	18.00	6.00		5.40		4.80		GRE 30-25	
		30	367.75	37.50	21.60	7.20		6.50		5.80		30	
		35	316.36	32.26	25.20	8.40		7.60		6.70		35	
		40	275.76	28.12	28.80	9.60		8.60		7.70		40	
		45	245.17	25.00	32.40	10.80	2647.80 (270)	9.70	2383.00 (243)	8.60	2118.20 (216)		45
		50	220.65	22.50	36.00	12.00		10.80		9.60		50	
		55	200.05	20.40	39.60	13.20		11.90		10.60		55	
		60	183.87	18.75	43.20	14.40		13.00		11.50		60	
		65	169.65	17.30	46.80	15.60		14.00		12.50		65	
		70	157.59	16.07	50.40	16.80		15.10		13.40		70	
		75	147.10	15.00	54.00	18.00		16.20		14.40		75	
		80	137.88	14.06	57.60	19.20		17.30		15.40		80	
		90	122.58	12.50	64.80	21.60		19.40		17.30		90	
		100	110.32	11.25	72.00	24.00		21.60		19.20		100	
		125	88.26	9.00	90.00	30.00		27.00		24.00		125	
		150	73.55	7.50	108.00	36.00		32.40		28.80		150	
		175	62.96	6.42	126.00	42.00		37.80		33.60		175	
200	55.11	5.62	144.00	48.00		43.20		38.40		200			
35	17.5	40	374.81	38.22	28.80	9.60		8.60		7.70		GRE 35-40	
		45	333.23	33.98	32.40	10.80		9.70		8.60		45	
		50	299.89	30.58	36.00	12.00		10.80		9.60		50	
		55	272.62	27.80	39.60	13.20		11.90		10.60		55	
		60	249.87	25.48	43.20	14.40		13.00		11.50		60	
		65	230.75	23.53	46.80	15.60		14.00		12.50		65	
		70	214.18	21.84	50.40	16.80		15.10		13.40		70	
		75	199.96	20.39	54.00	18.00	3599.00 (367)	16.20	3236.20 (330)	14.40	2873.30 (293)		75
		80	187.40	19.11	57.60	19.20		17.30		15.40		80	
		90	166.61	16.99	64.80	21.60		19.40		17.30		90	
		100	149.94	15.29	72.00	24.00		21.60		19.20		100	
		125	119.93	12.23	90.00	30.00		27.00		24.00		125	
		150	99.93	10.19	108.00	36.00		32.40		28.80		150	
		175	85.61	8.73	126.00	42.00		37.80		33.60		175	
		200	74.92	7.64	144.00	48.00		43.20		38.40		200	

重负荷(TH) Heavy Load(TH)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm ⁺	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
40	20	40	490.33	50.00	28.80	9.60		8.60		7.700		GRE	40-40
		45	435.81	44.44	33.00	10.80		9.70		8.60			45
		50	392.26	40.00	36.00	12.00		10.80		9.60			50
		55	356.57	36.36	40.40	13.20		11.90		10.50			55
		60	326.85	33.33	43.20	14.40		13.00		11.50			60
		65	301.75	30.77	47.70	15.60		14.00		12.50			65
		70	280.17	28.57	50.40	16.80		15.10		13.40			70
		75	261.54	26.67	55.10	18.00		16.20		14.40			75
		80	245.17	25.00	57.60	19.20	4707.20 (480)	17.30	4236.00 (432)	15.40	3765.80 (384)		80
		90	217.90	22.22	64.80	21.60		19.40		17.30			90
		100	196.13	20.00	72.00	24.00		21.60		19.20			100
		125	156.91	16.00	90.00	30.00		27.00		24.00			125
		150	130.72	13.33	108.00	36.00		32.40		28.80			150
		175	111.99	11.42	126.00	42.00		37.80		33.60			175
		200	98.07	10.00	144.00	48.00		43.20		38.40			200
		225	87.28	8.9	162.00	54.00		48.60		43.20			225
		250	78.55	8.01	180.00	60.00		54.00		48.00			250
275	71.39	7.28	198.00	66.00		59.40		52.80			275		
300	65.41	6.67	216.00	72.00		64.80		57.60			300		
50	25	50	612.91	62.50	36.00	12.00		10.80		9.60		GRE	50-50
		55	557.21	56.82	39.60	13.20		11.90		10.50			55
		60	510.73	52.08	43.20	14.40		13.00		11.50			60
		65	471.50	48.08	46.80	15.60		14.00		12.50			65
		70	437.77	44.64	50.40	16.80		15.10		13.40			70
		75	408.64	41.67	54.00	18.00		16.20		14.40			75
		80	383.05	39.06	57.60	19.20	7355.00 (750)	17.30	6619.50 (675)	15.40	5884.00 (600)		80
		90	340.49	34.72	64.80	21.60		19.40		17.30			90
		100	306.46	31.25	72.00	24.00		21.60		19.20			100
		125	245.17	25.00	90.00	30.00		27.00		24.00			125
		150	204.27	20.83	108.00	36.00		32.40		28.80			150
		175	175.05	17.85	126.00	42.00		37.80		33.60			175
		200	153.18	15.62	144.00	48.00		43.20		38.40			200
		225	136.21	13.89	162.00	54.00		48.60		43.20			225
250	122.58	12.50	180.00	60.00		54.00		48.00			250		
275	111.40	11.36	198.00	66.00		59.40		52.80			275		
300	102.18	10.42	216.00	72.00		64.80		57.60			300		
60	30	60	735.50	75.00	43.20	14.40		13.00		11.50		GRE	60-60
		70	630.37	64.28	50.40	16.80		15.10		13.40			70
		80	551.62	56.25	57.60	19.20		17.30		15.40			80
		90	490.33	50.00	64.80	21.60		19.40		17.30			90
		100	441.30	45.00	72.00	24.00		21.60		19.20			100
		125	353.04	36.00	90.00	30.00		27.00		24.00			125
		150	294.20	30.00	108.00	36.00	10591.20 (1080)	32.40	9541.90 (973)	28.80	8472.90 (864)		150
		175	252.13	25.71	126.00	42.00		37.80		33.60			175
		200	220.65	22.50	144.00	48.00		43.20		38.40			200
		225	196.33	20.02	162.00	54.00		48.60		43.20			225
		250	176.62	18.01	180.00	60.00		54.00		48.00			250
		275	160.63	16.38	198.00	66.00		59.40		52.80			275
300	147.20	15.01	216.00	72.00		64.80		57.60			300		

极重负荷(TB) Super Heavy Load(TB)



材料的性质: SWOSC-V同等
Material: Equivalent to SWOSC-V

型号: 极重负荷
Type: Super Heavy Load
涂沫色: 茶色
Color: Brown

最大压缩量的计算公式
最大压缩量 (mm) = 自由高度 - 密着高度

Maximum Deflection Calculation Formula
Maximum deflection(mm) = Free length - Solid length

MINGLI Spring的公差 Allowable Tolerance of MINGLI Spring

外径 Outside Diameter	内径 Inside Diameter	自由高度 Free Length		负荷 Load	直角度 Squareness	旋向 Winding Direction
		50mm 以下 50mm or less	55mm 以上 55mm or more			
+0.0mm -0.7mm	+0.7mm -0.1mm	± 0.5mm	± 1%	± 10%	2° 以下 Angle 2° or less	右旋 Right Hand Coil

极重负荷的弹簧刚度以及使用次数和负荷的关系 Relation of Spring Constant and Using Times to Load (Medium Load)

自由高度 Free Length	外径 Outside Diameter														压缩量 Deflection (mm)				
	6	8	10	12	14	16	18	20	22	25	27	30	35	40	50	60	30万次 300,000 times	50万次 500,000 times	100万次 1,000,000 times
	15	58.84	110.81	147.10	189.27													3.00	2.70
20	44.13	83.06	110.32	142.20	183.87	245.17	306.46	392.26									4.00	3.60	3.20
25	35.30	66.49	88.26	113.76	147.10	196.13	245.17	313.81	382.46	480.52	568.78	706.08					5.00	4.50	4.00
30	29.42	55.41	73.55	94.83	122.58	163.48	204.37	261.54	318.71	400.11	473.95	588.40					6.00	5.40	4.80
35	25.50	47.46	63.06	81.30	105.13	140.14	175.15	224.18	273.21	343.23	406.29	504.35					7.00	6.30	5.60
40	22.56	41.59	55.21	71.10	91.99	122.58	153.28	196.13	239.09	300.08	355.49	441.30	600.66	784.53			8.00	7.20	6.40
45	19.61	36.99	49.03	63.15	81.79	108.95	136.21	174.36	212.51	266.74	315.97	392.26	533.87	697.35			9.00	8.10	7.20
50	17.65	30.20	44.13	56.88	73.55	98.07	122.58	156.91	191.23	240.26	284.39	353.04	480.52	627.62	980.66		10.00	9.00	8.00
55	15.69	27.65	40.11	51.68	66.88	89.14	111.50	142.69	173.87	218.89	258.50	320.87	436.79	570.55	891.52		11.00	9.90	8.80
60	14.71	25.60	36.77	47.37	61.29	81.79	102.18	130.72	159.36	200.05	237.03	294.20	400.40	522.99	817.19	1176.79	12.00	10.80	9.60
65		23.73	34.03	43.54	56.58	75.41	94.34	120.72	147.10	184.36	218.79	271.55	369.61	482.78	754.32		13.00	11.70	10.40
70		22.16	31.48	40.50	52.56	70.02	87.57	112.09	136.61	171.62	203.09	252.13	343.23	448.26	700.39	1008.71	14.00	12.60	11.20
75		20.79	29.42	37.76	49.03	65.41	81.79	104.64	127.49	159.85	189.56	235.36	320.38	418.45	653.81		15.00	13.50	12.00
80			27.65	35.40	45.99	61.29	76.69	98.07	119.54	150.04	177.79	22.65	300.28	392.26	612.91	882.60	16.00	14.40	12.80
90			24.52	31.58	40.89	54.52	68.16	87.18	106.21	133.37	157.98	196.13	266.94	348.63	544.76	784.53	18.00	16.20	14.40
100				36.77	49.03	61.39	78.45	95.61	120.62	142.20	176.52	240.26	313.81	490.33	706.08		20.00	18.00	16.00
125							62.76	76.49	96.10	113.76	141.22	192.21	251.05	392.26	564.86		25.00	22.50	20.00
150							52.27	63.74	80.12	94.83	117.68	160.14	209.18	326.85	470.72		30.00	27.00	24.00
175									68.65	81.20	100.81	137.29	179.26	280.17	403.44		35.00	31.50	28.00
200											88.26	120.13	156.91	245.17	353.04		40.00	36.00	32.00
225													139.55	218.00	313.81		45.00	40.50	36.00
250													125.52	196.23	282.43		50.00	45.00	40.00
275													114.15	178.38	256.74		55.00	49.50	44.00
300													104.64	163.48	235.36		60.00	54.00	48.00
内径 Inside Diameter	3	4	5	6	7	8	9	10	11	12.5	13.5	15	17.5	20	25	30			

在表中: 弹簧刚度 (N/mm)
Table Ref: Spring Constant(N/mm)

	负荷N (kgf) Load N (kgf)															
30万次 300,000 times	177.0 (18)	323.6 (33)	441.3 (45)	568.8 (58)	735.5 (75)	980.7 (100)	1225.8 (125)	1569.1 (160)	1912.3 (195)	2402.6 (245)	2843.9 (290)	3530.4 (360)	4805.3 (490)	6276.3 (640)	9807.7 (1000)	14121.6 (1440)
50万次 500,000 times	159.0 (16)	294.2 (30)	402.1 (41)	509.9 (52)	666.9 (68)	882.6 (90)	1108.2 (113)	1412.2 (144)	1726.0 (176)	2167.3 (221)	2559.5 (261)	3177.4 (324)	4324.7 (441)	5648.6 (576)	8826.0 (900)	12709.4 (1296)
100万次 1,000,000 times	142.0 (14)	255.0 (26)	353.0 (36)	451.1 (46)	588.4 (60)	784.5 (80)	980.7 (100)	1255.3 (128)	1529.8 (156)	1922.1 (196)	2275.1 (232)	2824.3 (288)	3844.2 (392)	5021.0 (512)	7854.3 (800)	11297.3 (1152)

使用次数 Using Times	压缩量(自由高度%) Deflection(percentage of free length)
30万次 300,000 times	20.0%
50万次 500,000 times	18.0%
100万次 1,000,000 times	16.0%

Tel: (024) 7300.1868

极重负荷(TB) Super Heavy Load(TB)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
6	3	15	58.84	6.00	11.60	3.00	177.00 (18)	2.70	159.00 (16)	2.40	142.00 (14)	BRO	6-15
		20	44.13	4.50	15.50	4.00		3.60		3.20			
		25	35.30	3.60	19.40	5.00		4.50		4.00			
		30	29.42	3.00	23.20	6.00		5.40		4.80			
		35	25.50	2.60	27.10	7.00		6.30		5.60			
		40	22.56	2.30	31.00	8.00		7.20		6.40			
		45	19.61	2.00	34.80	9.00		8.10		7.20			
		50	17.65	1.80	38.70	10.00		9.00		8.00			
		55	15.69	1.60	42.60	11.00		9.00		8.80			
60	14.71	1.50	46.40	12.00	10.80	9.60							
8	4	15	110.81	11.30	11.40	3.00	323.60 (33)	2.70	294.20 (30)	2.40	255.00 (26)	BRO	8-15
		20	83.06	8.47	15.20	4.00		3.60		3.20			
		25	66.49	6.78	19.00	5.00		4.50		4.00			
		30	55.41	5.65	22.80	6.00		5.40		4.80			
		35	47.46	4.84	26.60	7.00		6.30		5.60			
		40	41.58	4.24	30.40	8.00		7.20		6.40			
		45	36.97	3.77	34.20	9.00		8.10		7.20			
		50	33.24	3.39	38.00	10.00		9.00		8.00			
		55	30.20	3.08	41.80	11.00		9.00		8.80			
		60	27.65	2.82	45.60	12.00		10.80		9.60			
		65	25.60	2.61	50.30	13.00		11.70		10.40			
		70	23.73	2.42	54.20	14.00		12.60		11.20			
		75	22.16	2.26	58.10	15.00		13.50		12.00			
80	20.79	2.12	61.90	16.00	14.40	12.80							
10	5	15	147.10	15.00	11.40	3.00	441.30 (45)	2.70	402.10 (41)	2.40	353.00 (36)	BRO	10-15
		20	110.32	11.25	15.20	4.00		3.60		3.20			
		25	88.26	9.00	19.00	5.00		4.50		4.00			
		30	73.55	7.50	22.80	6.00		5.40		4.80			
		35	63.06	6.43	26.60	7.00		6.30		5.60			
		40	55.21	5.63	30.40	8.00		7.20		6.40			
		45	49.03	5.00	34.20	9.00		8.10		7.20			
		50	44.13	4.50	38.00	10.00		9.00		8.00			
		55	40.11	4.09	41.80	11.00		9.00		8.80			
		60	36.77	3.75	45.60	12.00		10.80		9.60			
		65	34.03	3.47	49.40	13.00		11.70		10.40			
		70	31.48	3.21	53.20	14.00		12.60		11.20			
		75	29.42	3.00	57.00	15.00		13.50		12.00			
		80	27.65	2.82	60.80	16.00		14.40		12.80			
90	24.52	2.50	68.40	18.00	16.20	14.40							
12	6	15	189.27	19.30	11.40	3.00	568.80 (58)	2.70	509.90 (52)	2.40	451.10 (46)	BRO	12-15
		20	142.20	14.50	15.20	4.00		3.60		3.20			
		25	113.76	11.60	19.00	5.00		4.50		4.00			
		30	94.83	9.67	22.80	6.00		5.40		4.80			
		35	81.30	8.29	26.60	7.00		6.30		5.60			
		40	71.10	7.25	30.40	8.00		7.20		6.40			
		45	63.15	6.44	34.20	9.00		8.10		7.20			
		50	56.88	5.80	38.00	10.00		9.00		8.00			
		55	51.68	5.27	41.80	11.00		9.00		8.80			
		60	47.37	4.83	45.60	12.00		10.80		9.60			
		65	43.54	4.44	49.40	13.00		11.70		10.40			
		70	40.50	4.13	53.20	14.00		12.60		11.20			
		75	37.76	3.85	57.00	15.00		13.50		12.00			
		80	35.40	3.61	60.80	16.00		14.40		12.80			
90	31.58	3.22	68.40	18.00	16.20	14.40							

极重负荷(TB) Super Heavy Load(TB)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm*	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
14	7	20	183.87	18.75	15.20	4.00		3.60		3.20		BRO	14-20
		25	147.10	15.00	19.00	5.00		4.30		4.00			25
		30	122.58	12.50	22.80	6.00		5.40		4.80			30
		35	105.13	10.72	26.60	7.00		6.30		5.60			35
		40	91.99	9.38	30.40	8.00		7.20		6.40			40
		45	81.79	8.34	34.20	9.00		8.10		7.20			45
		50	73.55	7.50	38.00	10.00	735.50 (75)	9.00	666.90 (68)	8.00	588.40 (60)		50
		55	66.88	6.82	41.80	11.00		9.90		8.80			55
		60	61.29	6.25	45.60	12.00		10.80		9.60			60
		65	56.58	5.77	49.40	13.00		11.70		10.40			65
		70	52.56	5.36	53.20	14.00		12.60		11.20			70
		75	49.03	5.00	57.00	15.00		13.50		12.00			75
		80	45.99	4.69	60.80	16.00		14.40		12.80			80
90	40.89	4.17	68.40	18.00		16.20		14.40			90		
100	36.77	3.75	76.00	20.00		18.00		16.00			100		
16	8	20	245.17	25.00	15.20	4.00		3.60		3.20		BRO	16-20
		25	196.13	20.00	19.00	5.00		4.30		4.00			25
		30	163.48	16.67	22.80	6.00		5.40		4.80			30
		35	140.14	14.29	26.60	7.00		6.30		5.60			35
		40	122.58	12.50	30.40	8.00		7.20		6.40			40
		45	108.95	11.11	34.20	9.00		8.10		7.20			45
		50	98.07	10.00	38.00	10.00	980.70 (100)	9.00	882.60 (90)	8.00	784.50 (80)		50
		55	89.14	9.09	41.80	11.00		9.90		8.80			55
		60	81.79	8.34	45.60	12.00		10.80		9.60			60
		65	75.41	7.69	49.40	13.00		11.70		10.40			65
		70	70.02	7.14	53.20	14.00		12.60		11.20			70
		75	65.41	6.67	57.00	15.00		13.50		12.00			75
		80	61.29	6.25	60.80	16.00		14.40		12.80			80
90	54.52	5.56	68.40	18.00		16.20		14.40			90		
100	49.03	5.00	76.00	20.00		18.00		16.00			100		
18	9	20	306.46	31.25	15.20	4.00		3.60		3.20		BRO	18-20
		25	245.17	25.00	19.00	5.00		4.30		4.00			25
		30	204.37	20.84	22.80	6.00		5.40		4.80			30
		35	175.15	17.86	26.60	7.00		6.30		5.60			35
		40	153.28	15.63	30.40	8.00		7.20		6.40			40
		45	136.21	13.89	34.20	9.00		8.10		7.20			45
		50	122.58	12.50	38.00	10.00	1225.80 (125)	9.00	1108.20 (113)	8.00	980.70 (100)		50
		55	111.50	11.37	41.80	11.00		9.90		8.80			55
		60	102.18	10.42	45.60	12.00		10.80		9.60			60
		65	94.34	9.62	49.40	13.00		11.70		10.40			65
		70	87.57	8.93	53.20	14.00		12.60		11.20			70
		75	81.79	8.34	57.00	15.00		13.50		12.00			75
		80	76.69	7.82	60.80	16.00		14.40		12.80			80
90	68.16	6.95	68.40	18.00		16.20		14.40			90		
100	61.39	6.26	76.00	20.00		18.00		16.00			100		

极重负荷(TB) Super Heavy Load(TB)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm**	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.	
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)		
20	10	20	392.26	40.00	15.20	4.00		3.60		3.20		BRO	20-20
		25	313.81	32.00	19.00	5.00		4.50		4.00			25
		30	261.54	26.67	22.80	6.00		5.40		4.80			30
		35	224.18	22.86	26.60	7.00		6.30		5.60			35
		40	196.13	20.00	30.40	8.00		7.20		6.40			40
		45	174.36	17.78	34.20	9.00		8.10		7.20			45
		50	156.91	16.00	38.00	10.00		9.00		8.00			50
		55	142.69	14.55	41.80	11.00		9.90		8.80			55
		60	130.72	13.33	45.60	12.00	1569.10 (160)	10.80	1412.20 (144)	9.60	1255.30 (128)		60
		65	120.72	12.31	49.40	13.00		11.70		10.40			65
		70	112.09	11.43	53.20	14.00		12.60		11.20			70
		75	104.64	10.67	57.00	15.00		13.50		12.00			75
		80	98.07	10.00	60.80	16.00		14.40		12.80			80
		90	87.18	8.89	68.40	18.00		16.20		14.40			90
		100	78.45	8.00	76.00	20.00		18.00		16.00			100
125	62.76	6.40	95.00	25.00		22.50		20.00			125		
150	52.27	5.33	114.00	30.00		27.00		24.00			150		
22	11	25	382.46	39.00	19.00	5.00		4.50		4.00		BRO	22-25
		30	318.71	32.50	22.80	6.00		5.40		4.80			30
		35	273.21	27.86	26.60	7.00		6.30		5.60			35
		40	239.09	24.38	30.40	8.00		7.20		6.40			40
		45	212.51	21.67	34.20	9.00		8.10		7.20			45
		50	191.23	19.50	38.00	10.00		9.00		8.00			50
		55	173.87	17.73	41.80	11.00		9.90		8.80			55
		60	159.36	16.25	45.60	12.00	1912.30 (195)	10.80	1726.00 (176)	9.60	1529.80 (156)		60
		65	147.10	15.00	49.40	13.00		11.70		10.40			65
		70	136.61	13.93	53.20	14.00		12.60		11.20			70
		75	127.49	13.00	57.00	15.00		13.50		12.00			75
		80	119.54	12.19	60.80	16.00		14.40		12.80			80
		90	106.21	10.83	68.40	18.00		16.20		14.40			90
		100	95.61	9.75	76.00	20.00		18.00		16.00			100
		125	76.49	7.80	95.00	25.00		22.50		20.00			125
150	63.74	6.50	114.00	30.00		27.00		24.00			150		
25	12.5	25	480.52	49.00	19.00	5.00		4.50		4.00		BRO	25-25
		30	400.11	40.80	22.80	6.00		5.40		4.80			30
		35	343.23	35.00	26.60	7.00		6.30		5.60			35
		40	300.08	30.60	30.40	8.00		7.20		6.40			40
		45	266.74	27.20	34.20	9.00		8.10		7.20			45
		50	240.26	24.50	38.00	10.00		9.00		8.00			50
		55	218.69	22.30	41.80	11.00		9.90		8.80			55
		60	200.05	20.40	45.60	12.00		10.80		9.60			60
		65	184.36	18.80	49.40	13.00	2402.60 (245)	11.70	2167.30 (221)	10.40	1922.10 (196)		65
		70	171.62	17.50	53.20	14.00		12.60		11.20			70
		75	159.85	16.30	57.00	15.00		13.50		12.00			75
		80	150.04	15.30	60.80	16.00		14.40		12.80			80
		90	133.37	13.60	68.40	18.00		16.20		14.40			90
		100	120.62	12.30	76.00	20.00		18.00		16.00			100
		125	96.10	9.80	95.00	25.00		22.50		20.00			125
150	80.12	8.17	114.00	30.00		27.00		24.00			150		
175	68.65	7.00	133.00	35.00		31.50		28.00			175		

极重负荷(TB) Super Heavy Load(TB)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	
27	13.5	25	568.78	58.00	19.00	5.00	2843.90 (290)	4.50	2559.50 (261)	4.8	2275.10 (232)	GRE 27-25
		30	473.95	48.33	22.80	6.00		5.40		5.80		
		35	406.29	41.43	26.60	7.00		6.30		6.70		
		40	355.49	36.25	30.40	8.00		7.20		7.70		
		45	315.97	32.22	34.20	9.00		8.10		8.60		
		50	284.39	29.00	38.00	10.00		9.00		9.60		
		55	258.50	26.36	41.80	11.00		9.90		10.60		
		60	237.03	24.17	45.60	12.00		10.80		11.50		
		65	218.79	22.31	49.40	13.00		11.70		12.50		
		70	203.09	20.71	53.20	14.00		12.60		13.40		
		75	189.56	19.33	57.00	15.00		13.50		14.40		
		80	177.79	18.13	60.80	16.00		14.40		15.40		
		90	157.98	16.11	68.40	18.00		16.20		17.30		
		100	142.20	14.50	76.00	20.00		18.00		19.20		
		125	113.76	11.60	95.00	25.00		22.50		24.00		
		150	94.83	9.67	114.00	30.00		27.00		28.80		
		175	81.20	8.28	133.00	35.00		31.50		33.60		
30	15	25	706.08	72.00	19.00	5.00	3530.40 (360)	4.50	3177.40 (324)	4.80	2824.30 (288)	GRE 30-25
		30	588.40	60.00	22.80	6.00		5.40		5.80		
		35	504.35	51.43	26.60	7.00		6.30		6.70		
		40	441.30	45.00	30.40	8.00		7.20		7.70		
		45	392.26	40.00	34.20	9.00		8.10		8.60		
		50	353.04	36.00	38.00	10.00		9.00		9.60		
		55	320.87	32.72	41.80	11.00		9.90		10.60		
		60	294.20	30.00	45.60	12.00		10.80		11.50		
		65	271.55	27.69	49.40	13.00		11.70		12.50		
		70	252.13	25.71	53.20	14.00		12.60		13.40		
		75	235.36	24.00	57.00	15.00		13.50		14.40		
		80	220.65	22.50	60.80	16.00		14.40		15.40		
		90	196.13	20.00	68.40	18.00		16.20		17.30		
		100	176.52	18.00	76.00	20.00		18.00		19.20		
		125	141.22	14.40	95.00	25.00		22.50		24.00		
		150	117.68	12.00	114.00	30.00		27.00		28.80		
		175	100.81	10.28	133.00	35.00		31.50		33.60		
200	88.26	9.00	152.00	40.00	36.00	38.40						
35	17.5	40	600.66	61.25	30.40	8.00	4805.30 (490)	7.20	4324.70 (441)	7.70	3844.20 (392)	GRE 35-40
		45	533.87	54.44	34.20	9.00		8.10		8.60		
		50	480.52	49.00	38.00	10.00		9.00		9.60		
		55	436.79	44.54	41.80	11.00		9.90		10.60		
		60	400.40	40.83	45.60	12.00		10.80		11.50		
		65	369.61	37.69	49.40	13.00		11.70		12.50		
		70	343.23	35.00	53.20	14.00		12.60		13.40		
		75	320.38	32.67	57.00	15.00		13.50		14.40		
		80	300.28	30.62	60.80	16.00		14.40		15.40		
		90	266.94	27.22	68.40	18.00		16.20		17.30		
		100	240.26	24.50	76.00	20.00		18.00		19.20		
		125	192.21	19.60	95.00	25.00		22.50		24.00		
		150	160.14	16.33	114.00	30.00		27.00		28.80		
		175	137.29	14.00	133.00	35.00		31.50		33.60		
		200	120.13	12.25	152.00	40.00		36.00		38.40		

极重负荷(TB) Super Heavy Load(TB)

外径 Outside Diameter mm	内径 Inside Diameter mm	自由高度 Free Length mm	弹簧刚度 Spring Constant		密着高度 Solid Length mm**	30万次 300,000 times		50万次 500,000 times		100万次 1,000,000 times		代码号 Code No.		
			N/mm	kgf/mm		压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)	压缩量 Deflection(mm)	负荷 Load N(kgf)			
40	20	40	784.53	80.00	30.40	8.00		6.40		7.20		BRO	40-40	
		45	697.35	71.11	34.20	9.00		7.20		8.10			45	
		50	627.62	64.00	38.00	10.00		8.00		9.00			50	
		55	570.55	58.18	42.60	11.00		8.80		9.90			55	
		60	522.99	53.33	45.60	12.00		9.60		10.80			60	
		65	482.78	49.23	50.30	13.00		10.40		11.70			65	
		70	448.26	45.71	53.20	14.00		11.20		12.60			70	
		75	418.45	42.67	58.10	15.00		12.00		13.50			75	
		80	392.26	40.00	60.80	16.00	6276.30 (640)	12.80	5648.60 (576)	14.40	5021.00 (512)			80
		90	348.63	35.55	68.40	18.00		14.40		16.20			90	
		100	313.81	32.00	76.00	20.00		16.00		18.00			100	
		125	251.05	25.60	95.00	25.00		20.00		22.50			125	
		150	209.18	21.33	114.00	30.00		24.00		27.00			150	
		175	179.26	18.28	133.00	35.00		28.00		31.50			175	
		200	156.91	16.00	152.00	40.00		32.00		36.00			200	
		225	139.55	14.23	171.00	45.00		36.00		40.50			225	
250	125.52	12.80	190.00	50.00		40.00		45.00			250			
275	114.15	11.64	209.00	55.00		44.00		49.50			275			
300	104.64	10.67	228.00	60.00		48.00		54.00			300			
50	25	50	980.66	100.00	38.00	10.00		8.00		9.00		BRO	50-50	
		55	891.52	90.91	41.80	11.00		8.80		9.90			55	
		60	817.52	83.33	45.60	12.00		9.60		10.80			60	
		65	754.32	76.92	49.40	13.00		10.40		11.70			65	
		70	700.39	71.42	53.20	14.00		11.20		12.60			70	
		75	653.81	66.67	57.00	15.00		12.00		13.50			75	
		80	612.91	62.50	60.80	16.00		12.80		14.40			80	
		90	544.76	55.55	68.40	18.00	9806.70 (1000)	14.40	8826.00 (900)	16.20	7845.30 (800)			90
		100	490.33	50.00	76.00	20.00		16.00		18.00			100	
		125	392.26	40.00	95.00	25.00		20.00		22.50			125	
		150	326.85	33.33	114.00	30.00		24.00		27.00			150	
		175	280.17	28.57	133.00	35.00		28.00		31.50			175	
		200	245.17	25.00	152.00	40.00		32.00		36.00			200	
		225	218.00	22.23	171.00	45.00		36.00		40.50			225	
		250	196.23	20.01	190.00	50.00		40.00		45.00			250	
		275	178.38	18.19	209.00	55.00		44.00		49.50			275	
300	163.48	16.67	228.00	60.00		48.00		54.00			300			
60	30	60	1176.79	120.00	45.60	12.00		9.60		10.80		BRO	60-60	
		70	1008.71	102.86	53.20	14.00		11.20		12.60			70	
		80	882.60	90.00	60.80	16.00		12.80		14.40			80	
		90	784.53	80.00	68.40	18.00		14.40		16.20			90	
		100	706.08	72.00	76.00	20.00		16.00		18.00			100	
		125	564.86	57.60	95.00	25.00	14121.60 (1440)	20.00	12709.40 (1296)	22.50	11297.30 (1152)			125
		150	470.72	48.00	114.00	30.00		24.00		27.00			150	
		175	403.44	41.14	133.00	35.00		28.00		31.50			175	
		200	353.04	36.00	152.00	40.00		32.00		36.00			200	
		225	313.81	32.00	171.00	45.00		36.00		40.50			225	
		250	282.43	28.80	190.00	50.00		40.00		45.00			250	
		275	256.74	26.18	209.00	55.00		44.00		49.50			275	
		300	235.36	24.00	228.00	60.00		48.00		54.00			300	