

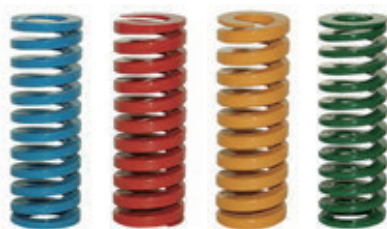
模具弹簧

DIE SPRING

热线:400-008-3858



JIS日标



US美标



ISO国际标准

上海敏硕机电科技有限公司
Shanghai Mascot Industrial Co., Ltd

公司简介 Company Profile



敏硕科技是一家中外合资具有研发、生产、销售综合实力于一体的各类精密弹簧、密封产品、制冷配件及单向阀系列等精密五金产品专业制造商。公司拥有四个分厂（江苏、上海、浙江、美国）及天津分公司，二万多平方米的标准厂房。公司创始人及研发技术骨干拥有欧美同行业丰富的管理及领先的技术经验。

公司现有员工598名，其中专业工程技术人员、管理人员268名，各种设备1000多台，形成了从产品研发、生产、销售到售后服务的完整现代化企业管理体系。公司通过IATF16949:2016质量体系等一系列技术认证，获得多项国家实用新型及发明专利。公司始终秉承“客户第一，质量至上”为宗旨，为客户提供全方位综合性弹簧、密封、制冷五金产品解决方案。我们承诺，无论您在何时何地，我们都将为您提供特殊需求的定制服务，专业、优质、安心、快捷、高效是我们十年如一日的服务宗旨。多年来，我们以诚信经营，踏实做产品，持续受到国内外客户的认可，业务遍布全球各地。

Mascot industrial group is a Sino foreign joint venture with comprehensive strength of R & D, production and sales. We are a professional manufacturer of all kinds of precision springs and seal ring, refrigeration accessories and check valve series and other precision hardware products. We have four branches (Jiangsu, Shanghai, Zhejiang, Dallas) and Tianjin Branch, more than 20000 square meters of standard workshop. As well as, We have 598 employees, including 268 professional engineering and technical personnel and management personnel, and more than 1000 sets of various equipment. The founder and R & D technical backbone of the company have rich management and technical experience in the same industry in Europe and America. It has formed a complete modern enterprise management system with product development, production, sales to after-sales service. The company has passed a series of quality technology certification such as IATF 16949:2016 quality system, and obtained a number of national utility model and invention patents. The company always adheres to the tenet of "customer first, quality first" to provide customers with comprehensive spring, seal ring, refrigeration hardware products solutions. We promise that no matter when and where you are, we will provide you with customized services with special needs. Our ten-year service tenet is professional, high-quality, reassuring, fast and efficient. Over the years, We focus on making good products for our customers. We are recognized by plenty of customers, and also our business all over the world.

弹簧事业部 Spring division

拥有各式压拉扭弹簧机160台和CNC弹簧机60台及检测设备20套；能精密制造各种标准和非标准压簧、拉簧、扭簧、高温弹簧（600°）&低温弹簧（-260°）、碟形弹簧（外径范围：3mm~900mm，厚度范围：0.08~60mm）、波形弹簧（外径范围：1mm~500mm，厚度范围：0.1~10mm）、热卷弹簧（材料直径16~80mm）、冷卷弹簧（材料直径：02mm~20mm）、发条、恒力弹簧（厚度范围：0.1mm~10mm）、密封弹簧（外径范围：2mm~500mm；厚度范围：0.1~10mm）螺旋叶片弹簧、阻尼器、气杆、悬架弹簧、涡卷弹簧、模具弹簧、卡簧、蛇形弹簧、异型弹簧、螺旋弹簧加工件、弹簧垫圈、孔用弹性挡圈、轴用弹性挡圈、止动环、缓冲器等精密五金。通过严格的疲劳测试实验，我们的弹簧最高耐疲劳1亿次以上。

常用材料：各类碳素钢、合金钢材料、琴钢线、Hastelloy哈氏合金、Elgiloy、SAE6150、SAE9254、50CrV4、60Si2CrA、62Si2MnA、SK4、SK5、CK55、CK67、CK70、CK75、65Mn、SUS301、SUS304、SUS316、SUS631、17-7、InconelX-718、InconelX-750、GH145等。

表面处理：发蓝、发黑、磷化、电镀、电泳和喷塑、喷漆、达克罗、焦美特等。

We have all kinds of press-pull torsion spring machine 160 sets and CNC spring machine 60 sets and 20 sets of testing equipment; Precision manufacturing various standard and non-standard high temperature spring (600 °) & low temperature spring (- 260 °) and compression spring, tension spring, torsion spring, disc springs (Outer diameter range:1mm~500mm,thickness range:0.1~10mm), spiral leaf spring, damper, gas pole, suspension spring, hot coil spring, constant force spring(thickness range: 0.1~10mm), Seal Spring(Outer diameter range:2mm~500mm,thickness range:0.1~10mm), vortex coil spring, die spring, snap ring, serpentine spring, shaped spring, screw, spring washer, hole, Axis with elastic retaining ring, stop ring, buffer and other precision hardware.Through rigorous fatigue testing experiments, our spring can withstand more than 100 million times of maximum fatigue.

Common materials: all kinds of carbon steel, alloy steel, piano steel wire, Hastelloy Hastelloy, Elgiloy, sae6150, sae9254, 50CrV4, 60si2cra, 62si2mna, SK4, SK5, ck55, ck67, ck70, ck75, 65Mn, SUS301, SUS304, SUS316, sus631, 17-7, inconelx-718, inconelx-750, gh145, etc.

Surface treatment: bluing, blackening, phosphating, electroplating, electrophoresis and plastic spraying, painting, Dacromet, jiaomeite, etc.

密封事业部 Seal Division

面对客户多元化需求,立足公司自有的先进弹簧的制造经验,公司于2016.6成立密封事业部,专门攻克了多家500强企业需要国产化但多年并不成功国产的泛塞封项目,帮助客户节省了大批成本。经过多年的发展,公司密封事业部现能精密制造各种弹簧储能圈,孔用泛塞封,轴用泛塞封,端面内向泛塞封,旋转泛塞封,PTFE翻唇骨架油封、翻唇式油封、格来圈、斯特封、尘封、AQ封、高压旋转油封、挡圈、导向环等各种非标定制密封产品。

本司氟塑密封件,均采用优质PTFE树脂生产,全都具备极低的摩擦阻力、无爬行现象、自润滑性能好、在缺乏润滑的情况下仍可正常工作等出色的优点。材料的化学性能和物理性能非常稳定,耐腐蚀性能优异、不粘性突出。工作温度范围达-60℃~+250℃。同时,具有极佳的动态和静态密封特点,耐磨性好、使用寿命长。产品应用范围广泛,尤其是在高压、高温、高速的工况下,以及强酸、强碱、强腐蚀的环境中,仍能保持良好的密封性能。

Facing the diversified needs of customers and based on the company's own manufacturing experience of advanced springs, We established a seal ring business department in June 2016, which has specially conquered the pan plug sealing projects that many top 500 enterprises need to be localized but have not been successfully localized for many years, we helped them save a large number of costs. After years of development, our seal division is now able to manufacture various kinds of non-standard customized sealing products, such as spring energy storage ring, hole pan plug seal, shaft pan plug seal, end face inward pan plug seal, rotary pan plug seal, PTFE lip framework oil seal, lip type oil seal, grid ring, stern seal, dust seal, AQ seal, high pressure rotary oil seal, retaining ring, guide ring, etc.

Our fluoroplastic seals are all made of high-quality PTFE resin. They all have excellent advantages such as extremely low friction resistance, no crawling phenomenon, good self-lubricating performance, and can still work normally in the absence of lubrication. The chemical and physical properties of the material are very stable, with excellent corrosion resistance and outstanding non stickiness. The working temperature ranges from - 60 °C to +250 °C. At the same time, it has excellent dynamic and static sealing characteristics, good wear resistance and long service life. Products are widely used, especially in high pressure, high temperature, high speed conditions, as well as strong acid, strong alkali, strong corrosion environment, still can maintain good sealing performance.

五金制冷事业部 Hardware Refrigeration Division

拥有各类先进的精密五金制冷加工设备,主导产品包括过滤器(干燥过滤器,吸气过滤器)单向阀,空调阀,黄铜及紫铜等制冷配件系类产品和精密五金系列配件。

We have all kinds of advanced precision hardware refrigeration processing equipment, leading products include filter (dry filter, suction filter) check valve, air conditioning valve, brass and copper and other refrigeration accessories series products and precision hardware series accessories.



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敏硕梯形/矩形模具弹簧主要用于冲压模具、汽车模具、铸造模具、陶瓷模具、精密模具、塑料模具、五金模具、注塑模具等模具加工企业或使用模具公司以及结构精密的机械设备等。它具有安装体积小、弹性好、刚度大、精密度高、制作材料呈矩形及表面分色喷涂（镀），外表美观等特点。

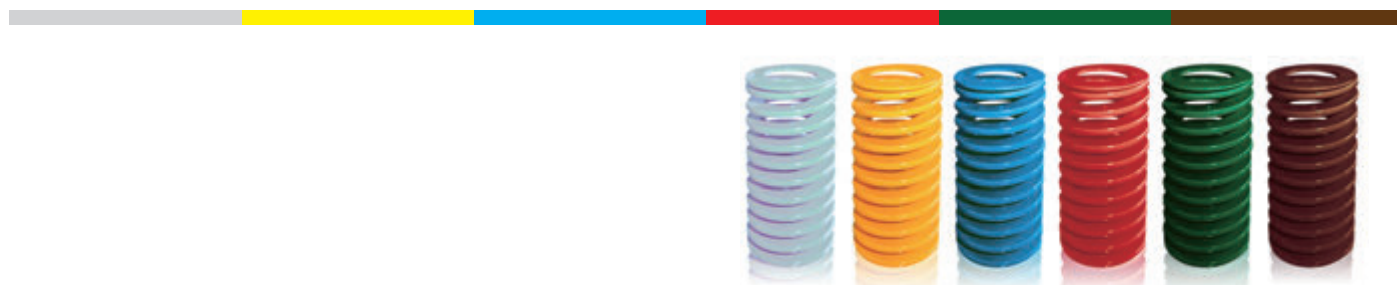
MASCOT trapezoidal / rectangular die spring is mainly used in stamping mold, automobile mold, casting mold, ceramic mold, precision mold, plastic mold, hardware mold, injection mold, mold processing enterprises or using mold companies, as well as mechanical equipment with precision structure. It has the characteristics of small installation volume, good elasticity, large rigidity, high precision, rectangular material, color separation spraying (plating) on the surface, and beautiful appearance.

敏硕模具弹簧目前标准化产品主要参照：

The standardized products of MASCOT die spring mainly refer to the followings:

日标JIS（6种色彩：银色、黄色、蓝色、红色、绿色、茶色）

JIS (7 colors: silver, yellow, blue, red, green, Tan)



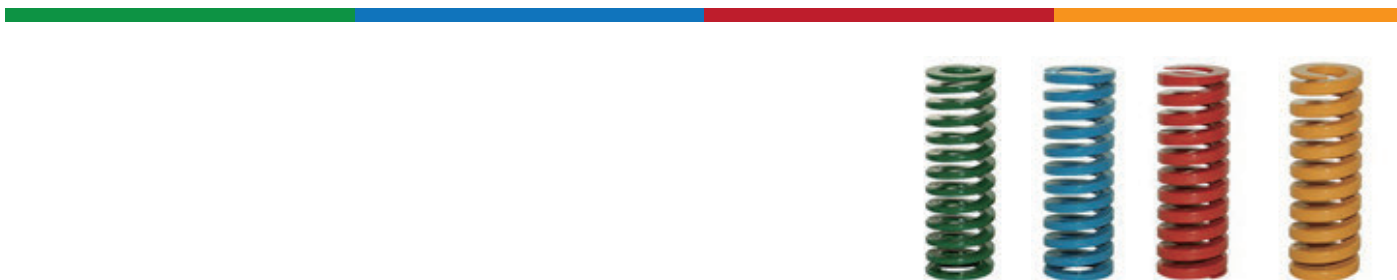
美标US（4种色彩：蓝色、红色、金色、绿色）

US (4 colors: blue, red, gold and green)



国际标准ISO（4种色彩：绿色、蓝色、红色、黄色）

ISO (4 colors: green, blue, red, yellow)



Product introduction

模具弹簧的特性和优点:

- 弹簧材料:选用高级优质铬钒钢 (50CrVA) 制作,耐疲劳、耐温度、韧性好。
- 材料实体:呈矩形截面园角园边形状,与一般的矩形直角边不同,弹簧在高速运行时可以减少应力集中。
- 强压处理:弹簧做到三次以上强压处理,消除了使用前的应力,不会再发生弹簧变形、缩短断裂现象。
- 喷丸处理:弹簧经过表面强化喷丸处理,其表面组织结实,提高了应力集中的强度,使弹簧疲劳寿命延长。
- 使用寿命:根据模具行程长度决定P1的寿命为一百万次以上,P2为五十万次以上,P3为极限。
- 弹簧使用频率:最高频率达千次/分,现代的模具设计,必须要有高品质的模具弹簧,MSC弹簧能满足您的要求。

正确选择和使用价值观念:

- 弹簧在模具中所占的成本比例极小,但功能极大。为了一只弹簧去节省成本,这将浪费时间和效率,得不偿失。
- 在设计模具时必须事先考虑模具弹簧的负荷、尺寸和安装位置的选择。
- 模具在设计P值受力时,尽量选择中等负荷,避免选择最大负荷值。
- 以设计加工完好的模具,选择弹簧不适宜时,只有重新选择弹簧,不允许磨削弹簧的内外径和两端面。

正确的安装方法:

模具弹簧的安装尤为重要,为达到最佳效果,必须注意两点:

- 弹簧安装在平底孔而无导杆时,孔的深度至少达到弹簧的二圈。
- 弹簧安装有导杆时,导杆长度必须大于弹簧的长度。



Characteristics and advantages of die spring:

- 1) .Spring material: made of high quality chrome vanadium steel (50CrVA), with good fatigue resistance, temperature resistance and toughness.
- 2) .Material entity: it is in the shape of corner and edge of rectangular section, which is different from the general rectangular edge. The spring can reduce the stress concentration at high speed.
- 3) . strong pressure treatment: the spring is forced for more than three times to eliminate the stress before use, and the spring deformation and fracture will not occur again.
- 4) .Shot Peening: after surface strengthening shot peening, the surface structure of the spring is firm, which improves the strength of stress concentration and prolongs the fatigue life of the spring.
- 5) .Service life: according to the die stroke length, the service life of P1 is more than one million times, P2 is more than 500000 times, and P3 is the limit.
- 6) . spring frequency: the highest frequency is 1000 times / min, modern mold design, must have high quality mold spring, MSC spring can meet your requirements.

Values correctly selected and used:

- 1) The cost proportion of spring in the mold is very small, but the function is very large. In order to save the cost of a spring, it will waste time and efficiency.
- 2) The size and load of the die must be considered in the design of the die.
- 3) When designing the p value of the die, the medium load should be selected as far as possible, and the maximum load should be avoided.
- 4) When the spring is not suitable for the designed and processed die, the spring can only be re selected, and the inner and outer diameters and two end faces of the spring are not allowed to be ground.

Correct installation method:

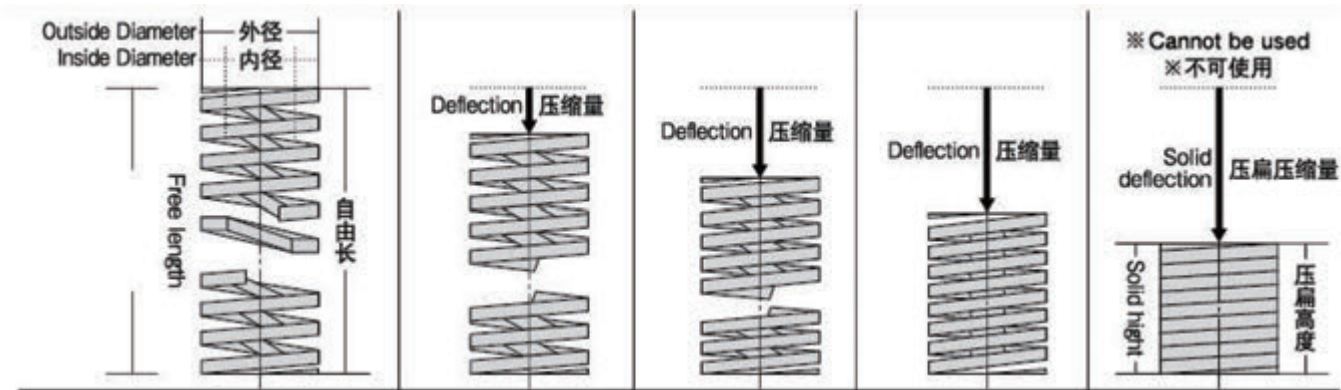
The installation of die spring is particularly important. In order to achieve the best effect, we must pay attention to two points

1. When the spring is installed in a flat bottom hole without a guide rod, the depth of the hole shall reach at least two turns of the spring.
2. When the spring is installed with a guide rod, the length of the guide rod must be greater than the length of the spring.

弹簧种类、材料、耐热温度

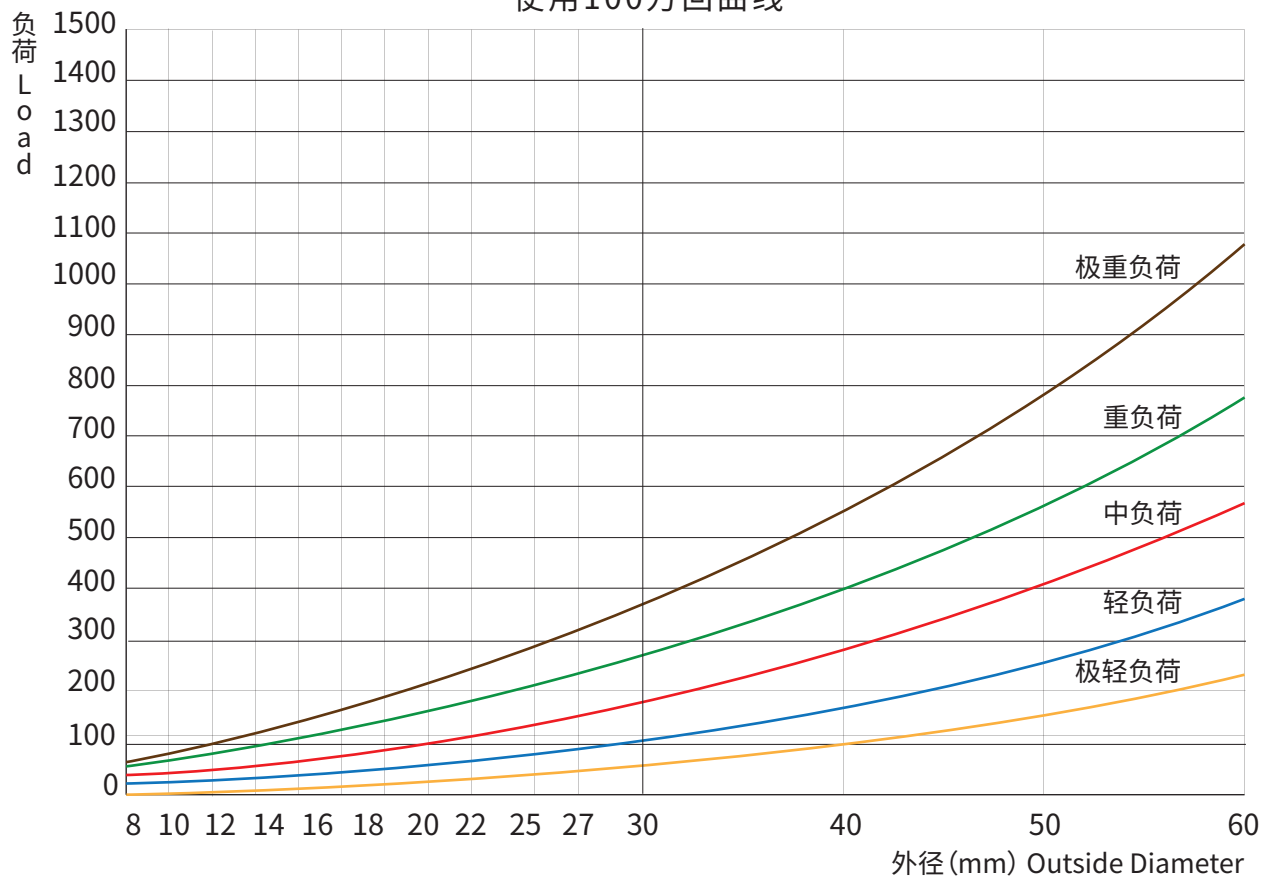
Die spring type, material and heat resistant temperature

种类 Description	材料 Material	耐热温度 Heat resistant temperature	使用回数 Working times			最大压缩数 自由长 Max Deflection of free length	识别颜色 color
			100万回 自由长 1 million of free length	50万回 自由长 0.5 million of free length	30万回 自由长 0.3 million of free length		
超轻负荷 Extra light load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	40.0%	45.0%	50.0%	Approx.60.0%	银色 Silver
较轻负荷 Smaller light load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	40.0%	45.0%	50.0%	Approx.58.0%	黄色 Yellow
轻负荷 Light load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	32.0%	36.0%	40.0%	Approx.48.0%	蓝色 Blue
中负荷 Medium load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	25.6%	28.8%	32.0%	Approx.38.0%	红色 Red
重负荷 Heavy load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	19.2%	21.6%	24.0%	Approx.28.0%	绿色 Green
超重负荷 Super load	弹簧用硅铬钢 Silicon chromium steel for spring	-30°C~150°C	16.0%	18.0%	20.0%	Approx.24.0%	褐色 Brown

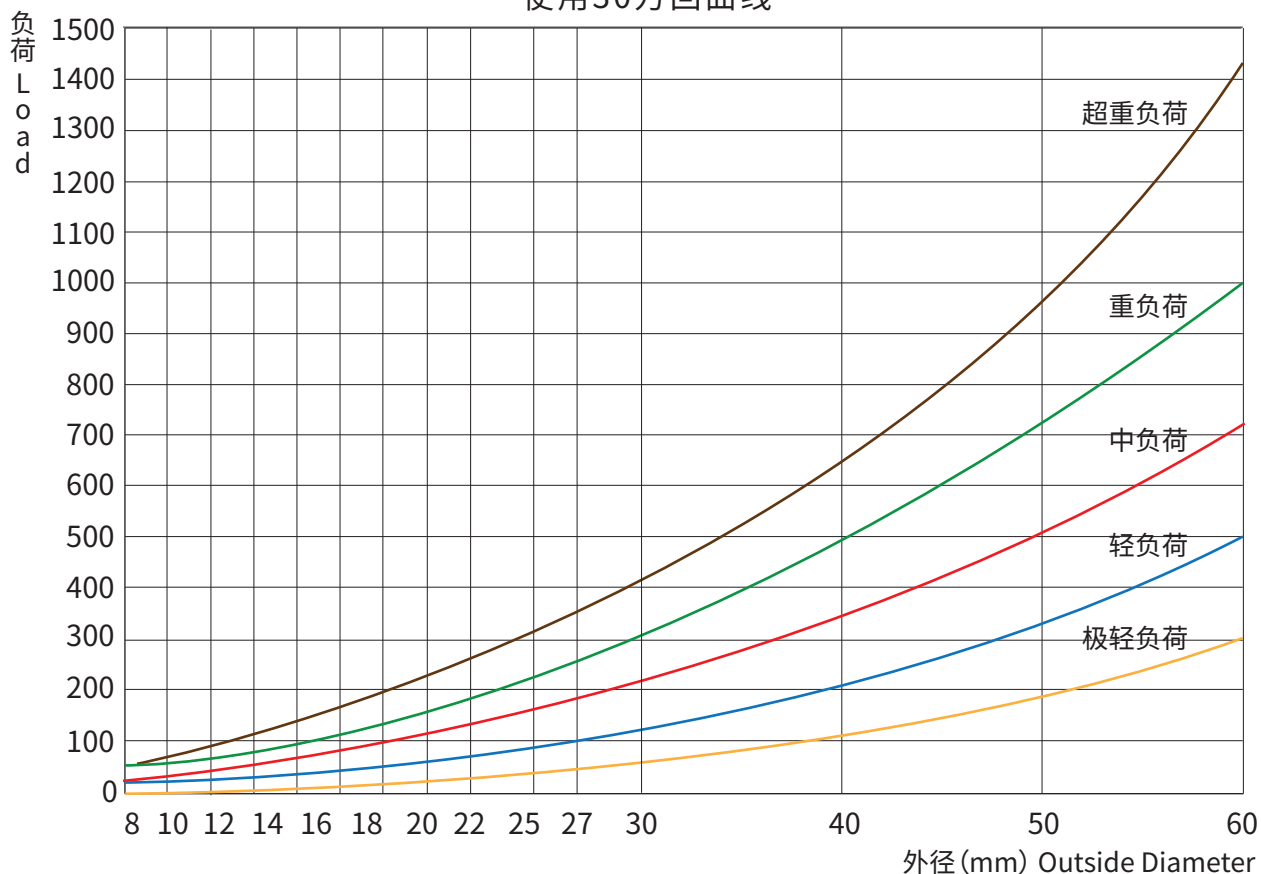


外径 Outside Diammer		内径 Inside Diammer		自由长 Free Length		负荷 load	旋向 Direction of rotation
Below 60mm 以下	Over 70mm 以上	Below 33mm 以下	Over 38.5mm 以上	Below 50mm 以下	Over 55mm 以上		
0mm	0mm	+0.7mm	+0.1mm	±0.5mm	±1%	±10%	右 Right
-0.7mm	-1.0mm	+0.1mm	+0.0mm				

使用100万回曲线



使用30万回曲线





超轻负荷
EXTRA
LIGHT
LOAD



较轻负荷
SMALLER
LIGHT
LOAD



轻负荷
LIGHT
LOAD



中负荷
MEDIUM
LOAD



重负荷
HEAVY
LOAD



超重负荷
EXTRA
HEAVY
LOAD



JIS日标 超轻负荷/Extra Light Load 银色/Silver											
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	实体长 Solid Length (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 45% Free Length X 45%		自由长 X 50% Free Length X 50%	
						Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MR14.5*20	14.5	9.0	20	8.0	1.10	8.0	9.0 (88.3)	9.0	10.0 (98.1)	10.0	11.0 (107.9)
MR14.5*25			25	10.0	0.88	10.0		11.3		12.5	
MR14.5*30			30	12.0	0.73	12.0		13.5		15.0	
MR14.5*35			35	14.0	0.63	14.0		15.8		17.5	
MR14.5*40			40	16.0	0.55	16.0		18.0		20.0	
MR14.5*45			45	18.0	0.49	18.0		20.3		22.5	
MR14.5*50			50	20.0	0.44	20.0		22.5		25.0	
MR14.5*55			55	22.0	0.40	22.0		24.8		27.5	
MR14.5*60			60	24.0	0.37	24.0		27.0		30.0	
MR14.5*65			65	26.0	0.34	26.0		29.3		32.5	
MR14.5*70			70	28.0	0.31	28.0		31.5		35.0	
MR14.5*75			75	30.0	0.29	30.0		33.8		37.5	
MR14.5*80			80	32.0	0.28	32.0		36.0		40.0	
MR14.5*90			90	36.0	0.24	36.0		40.5		45.0	
MR14.5*100			100	40.0	0.22	40.0		45.0		50.0	
MR14.5*125			125	50.0	0.18	50.0		56.3		62.5	
MR17*25	17.0	11.0	25	10.0	1.52	10.0	15.0 (147.1)	11.3	17.0 (166.7)	12.5	19.0 (186.3)
MR17*30			30	12.0	1.27	12.0		13.5		15.0	
MR17*35			35	14.0	1.09	14.0		15.8		17.5	
MR17*40			40	16.0	0.95	16.0		18.0		20.0	
MR17*45			45	18.0	0.84	18.0		20.3		22.5	
MR17*50			50	20.0	0.76	20.0		22.5		25.0	
MR17*55			55	22.0	0.69	22.0		24.8		27.5	
MR17*60			60	24.0	0.63	24.0		27.0		30.0	
MR17*65			65	26.0	0.58	26.0		29.3		32.5	
MR17*70			70	28.0	0.54	28.0		31.5		35.0	
MR17*75			75	30.0	0.51	30.0		33.8		37.5	
MR17*80			80	32.0	0.48	32.0		36.0		40.0	
MR17*90			90	36.0	0.42	36.0		40.5		45.0	
MR17*100			100	40.0	0.38	40.0		45.0		50.0	
MR17*125			125	50.0	0.30	50.0		56.3		62.5	
MR17*150			150	60.0	0.25	60.0		67.5		75.0	
MR21*30	21.0	13.0	30	12.0	1.40	12.0	17.0 (166.7)	13.5	19.0 (186.3)	15.0	21.0 (205.9)
MR21*35			35	14.0	1.20	14.0		15.8		17.5	
MR21*40			40	16.0	1.05	16.0		18.0		20.0	
MR21*45			45	18.0	0.93	18.0		20.3		22.5	
MR21*50			50	20.0	0.84	20.0		22.5		25.0	
MR21*55			55	22.0	0.76	22.0		24.8		27.5	
MR21*60			60	24.0	0.70	24.0		27.0		30.0	
MR21*65			65	26.0	0.65	26.0		29.3		32.5	
MR21*70			70	28.0	0.60	28.0		31.5		35.0	
MR21*75			75	30.0	0.56	30.0		33.8		37.5	
MR21*80			80	32.0	0.53	32.0		36.0		40.0	
MR21*90			90	36.0	0.47	36.0		40.5		45.0	
MR21*100			100	40.0	0.42	40.0		45.0		50.0	
MR21*125			125	50.0	0.34	50.0		56.3		62.5	
MR21*150			150	60.0	0.28	60.0		67.5		75.0	

超轻负荷



EXTRA LIGHT LOAD



JIS日标

超轻负荷/Extra Light Load

银色/Silver

型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	实体长 Solid Length (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 45% Free Length X 45%		自由长 X 50% Free Length X 50%	
						Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MR26*30	26.0	16.5	30	12.0	2.73	12.0	33.0 (323.0)	13.5	37.0 (362.8)	15.0	41.0 (402.1)
MR26*35			35	14.0	2.34	14.0		15.8		17.5	
MR26*40			40	16.0	2.05	16.0		18.0		20.0	
MR26*45			45	18.0	1.82	18.0		20.3		22.5	
MR26*50			50	20.0	1.64	20.0		22.5		25.0	
MR26*55			55	22.0	1.49	22.0		24.8		27.5	
MR26*60			60	24.0	1.37	24.0		27.0		30.0	
MR26*65			65	26.0	1.26	26.0		29.3		32.5	
MR26*70			70	28.0	1.17	28.0		31.5		35.0	
MR26*75			75	30.0	1.09	30.0		33.8		37.5	
MR26*80			80	32.0	1.03	32.0		36.0		40.0	
MR26*90			90	36.0	0.91	36.0		40.5		45.0	
MR26*100			100	40.0	0.82	40.0		45.0		50.0	
MR26*110			110	44.0	0.75	44.0		49.5		55.0	
MR26*125			125	50.0	0.66	50.0		56.3		62.5	
MR26*150			150	60.0	0.55	60.0		67.5		75.0	
MR26*175			175	70.0	0.47	70.0		78.8		87.5	
MR26*200			200	80.0	0.41	80.0		90.0		100.0	
MR32*40	32.0	21.0	40	16.0	2.55	16.0	41.0 (402.1)	18.0	46.0 (451.1)	20.0	51.0 (500.1)
MR32*45			45	18.0	2.27	18.0		20.3		22.5	
MR32*50			50	20.0	2.04	20.0		22.5		25.0	
MR32*60			60	24.0	1.70	24.0		27.0		30.0	
MR32*70			70	28.0	1.46	28.0		31.5		35.0	
MR32*80			80	32.0	1.28	32.0		36.0		40.0	
MR32*90			90	36.0	1.13	36.0		40.5		45.0	
MR32*100			100	40.0	1.02	40.0		45.0		50.0	
MR32*110			110	44.0	0.93	44.0		49.5		55.0	
MR32*125			125	50.0	0.82	50.0		56.3		62.5	
MR32*150			150	60.0	0.68	60.0		67.5		75.0	
MR32*175			175	70.0	0.58	70.0		78.8		87.5	
MR32*200			200	80.0	0.51	80.0		90.0		100.0	
MR32*250			250	100.0	0.41	100.0		112.5		125.0	
MR32*300			300	120.0	0.34	120.0		135.0		150.0	
MR39*40	39.0	26.0	40	16.0	2.75	16.0	44.0 (431.5)	18.0	50.0 (409.3)	20.0	55.0 (539.4)
MR39*45			45	18.0	2.44	18.0		20.3		22.5	
MR39*50			50	20.0	2.20	20.0		22.5		25.0	
MR39*60			60	24.0	1.83	24.0		27.0		30.0	
MR39*70			70	28.0	1.57	28.0		31.5		35.0	
MR39*80			80	32.0	1.38	32.0		36.0		40.0	
MR39*90			90	36.0	1.22	36.0		40.5		45.0	
MR39*100			100	40.0	1.10	40.0		45.0		50.0	
MR39*110			110	44.0	1.00	44.0		49.5		55.0	
MR39*125			125	50.0	0.88	50.0		56.3		62.5	
MR39*150			150	60.0	0.73	60.0		67.5		75.0	
MR39*175			175	70.0	0.63	70.0		78.8		87.5	
MR39*200			200	80.0	0.55	80.0		90.0		100.0	
MR39*250			250	100.0	0.44	100.0		112.5		125.0	
MR39*300			300	120.0	0.37	120.0		135.0		150.0	

超轻负荷

EXTRA LIGHT LOAD

JIS
日
标

JIS日标		超轻负荷/Extra Light Load				银色/Silver					
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	实体长 Solid Length (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 45% Free Length X 45%		自由长 X 50% Free Length X 50%	
						Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MR46*50	46.0	32.0	50	20.0	2.48	20.0	50.0 (490.3)	22.5	56.0 (549.2)	25.0	62.0 (608.0)
MR46*60			60	24.0	2.07	24.0		27.0		30.0	
MR46*70			70	28.0	1.77	28.0		31.5		35.0	
MR46*80			80	32.0	1.55	32.0		36.0		40.0	
MR46*90			90	36.0	1.38	36.0		40.5		45.0	
MR46*100			100	40.0	1.24	40.0		45.0		50.0	
MR46*110			110	44.0	1.13	44.0		49.5		55.0	
MR46*125			125	50.0	0.99	50.0		56.3		62.5	
MR46*150			150	60.0	0.83	60.0		67.5		75.0	
MR46*175			175	70.0	0.71	70.0		78.8		87.5	
MR46*200			200	80.0	0.62	80.0		90.0		100.0	
MR46*250			250	100.0	0.50	100.0		112.5		125.0	
MR46*300			300	120.0	0.41	120.0		135.0		150.0	

超轻负荷



EXTRA LIGHT LOAD

JIS
日
标

JIS日标

较轻负荷/ smaller Light Load

黄色/Yellow



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 50% Free Length X 50%		自由长 X 45% Free Length X 45%		自由长 X 40% Free Length X 40%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MF 8*10	8	4	10	1.56	5.00	8(78.5)	4.50	7(68.6)	4.00	6(58.8)
MF 8*15			15	1.04	7.50		6.80		6.00	
MF 8*20			20	0.78	10.00		9.00		8.00	
MF 8*25			25	0.62	12.50		11.20		10.00	
MF 8*30			30	0.52	15.00		13.50		12.00	
MF 8*35			35	0.44	17.50		15.70		14.00	
MF 8*40			40	0.39	20.00		18.00		16.00	
MF 8*45			45	0.35	22.50		20.20		18.00	
MF 8*50			50	0.31	25.00		22.50		20.00	
MF 8*55			55	0.28	27.50		24.70		22.00	
MF 8*60			60	0.26	30.00		27.00		24.00	
MF 10*20	10	5	20	1.00	10.00	10(98.1)	9.00	9(88.3)	8.00	8(78.5)
MF 10*25			25	0.80	12.50		11.20		10.00	
MF 10*30			30	0.67	15.00		13.50		12.00	
MF 10*35			35	0.57	17.50		15.70		14.00	
MF 10*40			40	0.50	20.00		18.00		16.00	
MF 10*45			45	0.44	22.50		20.20		18.00	
MF 10*50			50	0.40	25.00		22.50		20.00	
MF 10*55			55	0.36	27.50		24.70		22.00	
MF 10*60			60	0.33	30.00		27.00		24.00	
MF 10*65			65	0.31	32.50		29.20		26.00	
MF 10*70			70	0.29	35.00		31.50		28.00	
MF 10*75			75	0.27	37.50		33.70		30.00	
MF 10*80			80	0.25	40.00		36.00		32.00	
MF 12*20	12	6	20	1.40	10.00	14(137.3)	9.00	12.5(122.6)	8.00	11(107.9)
MF 12*25			25	1.12	12.50		11.20		10.00	
MF 12*30			30	0.93	15.00		13.50		12.00	
MF 12*35			35	0.80	17.50		15.70		14.00	
MF 12*40			40	0.70	20.00		18.00		16.00	
MF 12*45			45	0.62	22.50		20.20		18.00	
MF 12*50			50	0.56	25.00		22.50		20.00	
MF 12*55			55	0.51	27.50		24.70		22.00	
MF 12*60			60	0.47	30.00		27.00		24.00	
MF 12*65			65	0.43	32.50		29.20		26.00	
MF 12*70			70	0.40	35.00		31.50		28.00	
MF 12*75			75	0.37	37.50		33.70		30.00	
MF 12*80			80	0.35	40.00		36.00		32.00	
MF 14*25	14	7	25	1.44	12.50	18(176.5)	11.20	16(156.9)	10.00	14.5(142.2)
MF 14*30			30	1.20	15.00		13.50		12.00	
MF 14*35			35	1.03	17.50		15.70		14.00	
MF 14*40			40	0.90	20.00		18.00		16.00	
MF 14*45			45	0.80	22.50		20.20		18.00	
MF 14*50			50	0.72	25.00		22.50		20.00	
MF 14*55			55	0.65	27.50		24.70		22.00	
MF 14*60			60	0.60	30.00		27.00		24.00	
MF 14*65			65	0.55	32.50		29.20		26.00	
MF 14*70			70	0.51	35.00		31.50		28.00	
MF 14*75			75	0.48	37.50		33.70		30.00	
MF 14*80			80	0.45	40.00		36.00		32.00	
MF 14*90			90	0.40	45.00		40.50		36.00	

较轻负荷



SMALLER LIGHT LOAD

JIS
日
标

JIS日标

较轻负荷/ smaller Light Load

黄色/Yellow



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 50% Free Length X 50%		自由长 X 45% Free Length X 45%		自由长 X 40% Free Length X 40%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MF 16*25	16	8	25	1.68	12.50	21(206)	11.20	19(186.3)	10.00	17(166.7)
MF 16*30			30	1.40	15.00		13.50		12.00	
MF 16*35			35	1.20	17.50		15.70		14.00	
MF 16*40			40	1.05	20.00		18.00		16.00	
MF 16*45			45	0.94	22.50		20.20		18.00	
MF 16*50			50	0.84	25.00		22.50		20.00	
MF 16*55			55	0.77	27.50		24.70		22.00	
MF 16*60			60	0.70	30.00		27.00		24.00	
MF 16*65			65	0.65	32.50		29.20		26.00	
MF 16*70			70	0.60	35.00		31.50		28.00	
MF 16*75			75	0.56	37.50		33.70		30.00	
MF 16*80			80	0.53	40.00		36.00		32.00	
MF 16*90			90	0.47	45.00		40.50		36.00	
MF 16*100			100	0.42	50.00		45.00		40.00	
MF 18*25	18	9	25	2.08	12.50	26(255)	11.20	23(256)	10.00	21(206)
MF 18*30			30	1.74	15.00		13.50		12.00	
MF 18*35			35	1.49	17.50		15.70		14.00	
MF 18*40			40	1.30	20.00		18.00		16.00	
MF 18*45			45	1.16	22.50		20.20		18.00	
MF 18*50			50	1.04	25.00		22.50		20.00	
MF 18*55			55	0.95	27.50		24.70		22.00	
MF 18*60			60	0.87	30.00		27.00		24.00	
MF 18*65			65	0.80	32.50		29.20		26.00	
MF 18*70			70	0.74	35.00		31.50		28.00	
MF 18*75			75	0.70	37.50		33.70		30.00	
MF 18*80			80	0.65	40.00		36.00		32.00	
MF 18*90			90	0.58	45.00		40.50		36.00	
MF 18*100			100	0.52	50.00		45.00		40.00	
MF 20*25	20	11	25	2.56	12.50	32(314)	11.20	29(284)	10.00	26(255)
MF 20*30			30	2.13	15.00		13.50		12.00	
MF 20*35			35	1.83	17.50		15.70		14.00	
MF 20*40			40	1.60	20.00		18.00		16.00	
MF 20*45			45	1.42	22.50		20.20		18.00	
MF 20*50			50	1.28	25.00		22.50		20.00	
MF 20*55			55	1.16	27.50		24.70		22.00	
MF 20*60			60	1.07	30.00		27.00		24.00	
MF 20*65			65	0.98	32.50		29.20		26.00	
MF 20*70			70	0.91	35.00		31.50		28.00	
MF 20*75			75	0.85	37.50		33.70		30.00	
MF 20*80			80	0.80	40.00		36.00		32.00	
MF 20*90			90	0.71	45.00		40.50		36.00	
MF 20*100			100	0.64	50.00		45.00		40.00	
MF 20*125			125	0.51	62.50		56.20		50.00	
MF 20*150			150	0.43	75.00		67.50		60.00	
MF 22*25	22	11	25	3.20	12.50	40(392)	11.20	36(353)	10.00	32(314)
MF 22*30			30	2.67	15.00		13.50		12.00	
MF 22*35			35	2.29	17.50		15.70		14.00	
MF 22*40			40	2.00	20.00		18.00		16.00	
MF 22*45			45	1.78	22.50		20.20		18.00	
MF 22*50			50	1.60	25.00		22.50		20.00	

较轻负荷



SMALLER LIGHT LOAD

JIS日标

较轻负荷/ smaller Light Load

黄色/Yellow



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 50% Free Length X 50%		自由长 X 45% Free Length X 45%		自由长 X 40% Free Length X 40%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MF 22*55	22	11	55	1.46	27.50	40(392)	24.70	36(353)	22.00	32(314)
MF 22*60			60	1.33	30.00		27.00		24.00	
MF 22*65			65	1.23	32.50		29.20		26.00	
MF 22*70			70	1.14	35.00		31.50		28.00	
MF 22*75			75	1.07	37.50		33.70		30.00	
MF 22*80			80	1.00	40.00		36.00		32.00	
MF 22*90			90	0.89	45.00		40.50		36.00	
MF 22*100			100	0.80	50.00		45.00		40.00	
MF 22*125			125	0.64	62.50		56.20		50.00	
MF 22*150			150	0.53	75.00		67.50		60.00	
MF 25*25	25	13.5	175	4.00	12.50	50(450)	11.20	45(441)	10.00	40(392)
MF 25*30			200	3.33	15.00		13.50		12.00	
MF 25*35			40	2.85	17.50		15.70		14.00	
MF 25*40			45	2.50	20.00		18.00		16.00	
MF 25*45			50	2.22	22.50		20.20		18.00	
MF 25*50			55	2.00	25.00		22.50		20.00	
MF 25*55			60	1.82	27.50		24.70		22.00	
MF 25*60			65	1.67	30.00		27.00		24.00	
MF 25*65			70	1.54	32.50		29.20		26.00	
MF 25*70			75	1.43	35.00		31.50		28.00	
MF 25*75			80	1.33	37.50		33.70		30.00	
MF 25*80			90	1.25	40.00		36.00		32.00	
MF 25*90			100	1.11	45.00		40.50		36.00	
MF 25*100			125	1.00	50.00		45.00		40.00	
MF 25*125			150	0.80	62.50		56.20		50.00	
MF 25*150			175	0.67	75.00		67.50		60.00	
MF 25*175			200	0.57	87.50		78.70		70.00	
MF 27*25	27	13.5	40	4.80	12.50	60(588)	11.20	54(530)	10.00	48(471)
MF 27*30			50	4.00	15.00		13.50		12.00	
MF 27*35			60	3.43	17.50		15.70		14.00	
MF 27*40			70	3.00	20.00		18.00		16.00	
MF 27*45			80	2.67	22.50		20.20		18.00	
MF 27*50			90	2.40	25.00		22.50		20.00	
MF 27*55			100	2.18	27.50		24.70		22.00	
MF 27*60			125	2.00	30.00		27.00		24.00	
MF 27*65			150	1.85	32.50		29.20		26.00	
MF 27*70			175	1.71	35.00		31.50		28.00	
MF 27*75			200	1.60	37.50		33.70		30.00	
MF 27*80			250	1.50	40.00		36.00		32.00	
MF 27*90			50	1.33	45.00		40.50		36.00	
MF 27*100			60	1.20	50.00		45.00		40.00	
MF 27*125			70	0.96	62.50		56.20		50.00	
MF 27*150			80	0.80	75.00		67.50		60.00	
MF 27*175			90	0.69	87.50		78.70		70.00	
MF 30*25	30	16	100	5.80	12.50	72(706)	11.20	65(637)	10.00	58(569)
MF 30*30			125	4.80	15.00		13.50		12.00	
MF 30*35			150	4.13	17.50		15.70		14.00	
MF 30*40			175	3.60	20.00		18.00		16.00	
MF 30*45			200	3.21	22.50		20.20		18.00	
MF 30*50			250	2.88	25.00		22.50		20.00	

较轻负荷



SMALLER LIGHT LOAD

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较轻负荷/ smaller Light Load

黄色/Yellow



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 50% Free Length X 50%		自由长 X 45% Free Length X 45%		自由长 X 40% Free Length X 40%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MF 30*55	30	16	55	2.63	27.50	72(706)	24.70	65(637)	22.00	58(569)
MF 30*60			60	2.40	30.00		27.00		24.00	
MF 30*65			65	2.22	32.50		29.20		26.00	
MF 30*70			70	2.05	35.00		31.50		28.00	
MF 30*75			75	1.93	37.50		33.70		30.00	
MF 30*80			80	1.80	40.00		36.00		32.00	
MF 30*90			90	1.60	45.00		40.50		36.00	
MF 30*100			100	1.44	50.00		45.00		40.00	
MF 30*125			125	1.15	62.50		56.20		50.00	
MF 30*150			150	0.96	75.00		67.50		60.00	
MF 30*175			175	0.82	87.50		78.70		70.00	
MF 30*200			200	0.72	100.00		90.00		80.00	
MF 35*40	35	19	40	4.90	20.00	98(961)	18.00	88(963)	16.00	78(765)
MF 35*45			45	4.36	22.50		20.20		18.00	
MF 35*50			50	3.92	25.00		22.50		20.00	
MF 35*55			55	3.56	27.50		24.70		22.00	
MF 35*60			60	3.26	30.00		27.00		24.00	
MF 35*65			65	3.02	32.50		29.20		26.00	
MF 35*70			70	2.80	35.00		31.50		28.00	
MF 35*75			75	2.61	37.50		33.70		30.00	
MF 35*80			80	2.45	40.00		36.00		32.00	
MF 35*90			90	2.17	45.00		40.50		36.00	
MF 35*100			100	1.96	50.00		45.00		40.00	
MF 35*125			125	1.57	62.50		56.20		50.00	
MF 35*150			150	1.30	75.00		67.50		60.00	
MF 35*175			175	1.12	87.50		78.70		70.00	
MF 35*200			200	0.98	100.00		90.00		80.00	
MF 40*40	40	22	40	6.38	20.00	128(1255)	18.00	115(1128)	16.00	102(1000)
MF 40*50			50	5.12	25.00		22.50		20.00	
MF 40*60			60	4.26	30.00		27.00		24.00	
MF 40*70			70	3.65	35.00		31.50		28.00	
MF 40*80			80	3.20	40.00		36.00		32.00	
MF 40*90			90	2.84	45.00		40.50		36.00	
MF 40*100			100	2.56	50.00		45.00		40.00	
MF 40*125			125	2.04	62.50		56.20		50.00	
MF 40*150			150	1.70	75.00		67.50		60.00	
MF 40*175			175	1.46	87.50		78.70		70.00	
MF 40*200			200	1.28	100.00		90.00		80.00	
MF 40*250			250	1.02	125.00		112.50		100.00	
MF 50*50	50	25	50	8.00	25.00	200(1961)	22.50	180(1765)	20.00	160(1569)
MF 50*60			60	6.66	30.00		27.00		24.00	
MF 50*70			70	5.71	35.00		31.50		28.00	
MF 50*80			80	5.00	40.00		36.00		32.00	
MF 50*90			90	4.44	45.00		40.50		36.00	
MF 50*100			100	4.00	50.00		45.00		40.00	
MF 50*125			125	3.20	62.50		56.20		50.00	
MF 50*150			150	2.66	75.00		67.50		60.00	
MF 50*175			175	2.28	87.50		78.70		70.00	
MF 50*200			200	2.00	100.00		90.00		80.00	
MF 50*250			250	1.60	125.00		112.50		100.00	

较轻负荷



SMALLER LIGHT LOAD

JIS日标

较轻负荷/ smaller Light Load

黄色/Yellow



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 50% Free Length X 50%		自由长 X 45% Free Length X 45%		自由长 X 40% Free Length X 40%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MF 50*300	50	25	300	1.33	150.00	200(1961)	135.00	180(1765)	120.00	160(1569)
MF 50*350			350	1.14	175.00		157.50		140.00	
MF 50*400			400	1.00	200.00		180.00		160.00	
MF 50*450			450	0.89	225.00		202.50		180.00	
MF 50*500			500	0.80	250.00		225.00		200.00	
MF 60*60	60	33	60	9.59	30.00	288(2820)	27.00	259(2540)	24.00	230(2260)
MF 60*70			70	8.22	35.00		31.50		28.00	
MF 60*80			80	7.19	40.00		36.00		32.00	
MF 60*90			90	6.40	45.00		40.50		36.00	
MF 60*100			100	5.76	50.00		45.00		40.00	
MF 60*125			125	4.60	62.50		56.20		50.00	
MF 60*150			150	3.84	75.00		67.50		60.00	
MF 60*175			175	3.29	87.50		78.70		70.00	
MF 60*200			200	2.88	100.00		90.00		80.00	
MF 60*250			250	2.30	125.00		112.50		100.00	
MF 60*300			300	1.92	150.00		135.00		120.00	
MF 60*350			350	1.65	175.00		157.50		140.00	
MF 60*400			400	1.44	200.00		180.00		160.00	
MF 60*450			450	1.28	225.00		202.50		180.00	
MF 60*500			500	1.15	250.00		225.00		200.00	

较轻负荷



SMALLER LIGHT LOAD

JIS
日
标



JIS日标 轻负荷/ Light Load 蓝色/Blue										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 36% Free Length X 36%		自由长 X 32% Free Length X 32%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
ML 8*10	8	4	10	2.50	4.00	10(98.1)	3.60	9(88.3)	3.20	8(78.5)
ML 8*15			15	1.67	6.00		5.40		4.80	
ML 8*20			20	1.25	8.00		7.20		6.40	
ML 8*25			25	1.00	10.00		9.00		8.00	
ML 8*30			30	0.83	12.00		10.80		9.60	
ML 8*35			35	0.71	14.00		12.60		11.20	
ML 8*40			40	0.63	16.00		14.40		12.80	
ML 8*45			45	0.56	18.00		16.20		14.40	
ML 8*50			50	0.50	20.00		18.00		16.00	
ML 8*55			55	0.46	22.00		19.80		17.60	
ML 8*60			60	0.42	24.00		21.60		19.20	
ML 10*20	10	5	20	1.81	8.00	14.5(142.2)	7.20	13(127.5)	6.40	11.5(112.8)
ML 10*25			25	1.45	10.00		9.00		8.00	
ML 10*30			30	1.21	12.00		10.80		9.60	
ML 10*35			35	1.03	14.00		12.60		11.20	
ML 10*40			40	0.90	16.00		14.40		12.80	
ML 10*45			45	0.80	18.00		16.20		14.40	
ML 10*50			50	0.73	20.00		18.00		16.00	
ML 10*55			55	0.66	22.00		19.80		17.60	
ML 10*60			60	0.60	24.00		21.60		19.20	
ML 10*65			65	0.55	26.00		23.40		20.80	
ML 10*70			70	0.51	28.00		25.20		22.40	
ML 10*75			75	0.48	30.00		27.00		24.00	
ML 10*80			80	0.45	32.00		28.80		25.60	
ML 12*20	12	6	20	2.63	8.00	21(206)	7.20	19(186.3)	6.40	17(166.7)
ML 12*25			25	2.10	10.00		9.00		8.00	
ML 12*30			30	1.75	12.00		10.80		9.60	
ML 12*35			35	1.50	14.00		12.60		11.20	
ML 12*40			40	1.32	16.00		14.40		12.80	
ML 12*45			45	1.17	18.00		16.20		14.40	
ML 12*50			50	1.05	20.00		18.00		16.00	
ML 12*55			55	0.96	22.00		19.80		17.60	
ML 12*60			60	0.88	24.00		21.60		19.20	
ML 12*65			65	0.81	26.00		23.40		20.80	
ML 12*70			70	0.75	28.00		25.20		22.40	
ML 12*75			75	0.70	30.00		27.00		24.00	
ML 12*80			80	0.66	32.00		28.80		25.60	
ML 14*25	14	7	25	2.80	10.00	28(275)	9.00	25(245)	8.00	22(216)
ML 14*30			30	2.34	12.00		10.80		9.60	
ML 14*35			35	2.00	14.00		12.60		11.20	
ML 14*40			40	1.75	16.00		14.40		12.80	
ML 14*45			45	1.56	18.00		16.20		14.40	
ML 14*50			50	1.40	20.00		18.00		16.00	
ML 14*55			55	1.27	22.00		19.80		17.60	
ML 14*60			60	1.17	24.00		21.60		19.20	
ML 14*65			65	1.08	26.00		23.40		20.80	
ML 14*70			70	1.00	28.00		25.20		22.40	
ML 14*75			75	0.93	30.00		27.00		24.00	
ML 14*80			80	0.87	32.00		28.80		25.60	
ML 14*90			90	0.77	36.00		32.40		28.80	

轻负荷

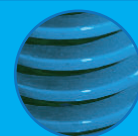


LIGHT LOAD

JIS日标

轻负荷/ Light Load

蓝色/Blue



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 36% Free Length X 36%		自由长 X 32% Free Length X 32%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
ML 16*25	16	8	25	3.50	10.00	35(343)	9.00	32(314)	8.00	28(275)
ML 16*30			30	2.92	12.00		10.80		9.60	
ML 16*35			35	2.50	14.00		12.60		11.20	
ML 16*40			40	2.19	16.00		14.40		12.80	
ML 16*45			45	1.95	18.00		16.20		14.40	
ML 16*50			50	1.75	20.00		18.00		16.00	
ML 16*55			55	1.60	22.00		19.80		17.60	
ML 16*60			60	1.46	24.00		21.60		19.20	
ML 16*65			65	1.35	26.00		23.40		20.80	
ML 16*70			70	1.25	28.00		25.20		22.40	
ML 16*75			75	1.17	30.00		27.00		24.00	
ML 16*80			80	1.10	32.00		28.80		25.60	
ML 16*90			90	0.98	36.00		32.40		28.80	
ML 16*100			100	0.88	40.00		36.00		32.00	
ML 18*25	18	9	25	4.30	10.00	43(422)	9.00	39(382)	8.00	34(333)
ML 18*30			30	3.58	12.00		10.80		9.60	
ML 18*35			35	3.07	14.00		12.60		11.20	
ML 18*40			40	2.69	16.00		14.40		12.80	
ML 18*45			45	2.39	18.00		16.20		14.40	
ML 18*50			50	2.15	20.00		18.00		16.00	
ML 18*55			55	1.96	22.00		19.80		17.60	
ML 18*60			60	1.79	24.00		21.60		19.20	
ML 18*65			65	1.66	26.00		23.40		20.80	
ML 18*70			70	1.54	28.00		25.20		22.40	
ML 18*75			75	1.44	30.00		27.00		24.00	
ML 18*80			80	1.35	32.00		28.80		25.60	
ML 18*90			90	1.20	36.00		32.40		28.80	
ML 18*100			100	1.07	40.00		36.00		32.00	
ML 20*25	20	10	25	5.40	10.00	54(530)	9.00	49(481)	8.00	43(422)
ML 20*30			30	4.50	12.00		10.80		9.60	
ML 20*35			35	3.86	14.00		12.60		11.20	
ML 20*40			40	3.38	16.00		14.40		12.80	
ML 20*45			45	3.00	18.00		16.20		14.40	
ML 20*50			50	2.70	20.00		18.00		16.00	
ML 20*55			55	2.45	22.00		19.80		17.60	
ML 20*60			60	2.25	24.00		21.60		19.20	
ML 20*65			65	2.08	26.00		23.40		20.80	
ML 20*70			70	1.93	28.00		25.20		22.40	
ML 20*75			75	1.80	30.00		27.00		24.00	
ML 20*80			80	1.69	32.00		28.80		25.60	
ML 20*90			90	1.50	36.00		32.40		28.80	
ML 20*100			100	1.35	40.00		36.00		32.00	
ML 20*125			125	1.08	50.00		45.00		40.00	
ML 20*150			150	0.90	60.00		54.00		48.00	
ML 22*25	22	11	25	6.70	10.00	67(657)	9.00	60(588)	8.00	54(530)
ML 22*30			30	5.60	12.00		10.80		9.60	
ML 22*35			35	4.80	14.00		12.60		11.20	
ML 22*40			40	4.20	16.00		14.40		12.80	
ML 22*45			45	3.72	18.00		16.20		14.40	
ML 22*50			50	3.35	20.00		18.00		16.00	

轻负荷

LIGHT LOAD

JIS
日
标

JIS日标 轻负荷/ Light Load 蓝色/Blue										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 36% Free Length X 36%		自由长 X 32% Free Length X 32%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
ML 22*60	22	11	60	2.80	24.00	67(657)	21.60	60(588)	19.20	54(530)
ML 22*65			65	2.58	26.00		23.40		20.80	
ML 22*70			70	2.40	28.00		25.20		22.40	
ML 22*75			75	2.23	30.00		27.00		24.00	
ML 22*80			80	2.10	32.00		28.80		25.60	
ML 22*90			90	1.86	36.00		32.40		28.80	
ML 22*100			100	1.68	40.00		36.00		32.00	
ML 22*125			125	1.34	50.00		45.00		40.00	
ML 22*150			150	1.12	60.00		54.00		48.00	
ML 25*25	25	12.5	25	8.40	10.00	84(824)	9.00	76(745)	8.00	67(657)
ML 25*30			30	7.00	12.00		10.80		9.60	
ML 25*35			35	6.00	14.00		12.60		11.20	
ML 25*40			40	5.25	16.00		14.40		12.80	
ML 25*45			45	4.67	18.00		16.20		14.40	
ML 25*50			50	4.20	20.00		18.00		16.00	
ML 25*55			55	3.82	22.00		19.80		17.60	
ML 25*60			60	3.50	24.00		21.60		19.20	
ML 25*65			65	3.23	26.00		23.40		20.80	
ML 25*70			70	3.00	28.00		25.20		22.40	
ML 25*75			75	2.80	30.00		27.00		24.00	
ML 25*80			80	2.63	32.00		28.80		25.60	
ML 25*90			90	2.33	36.00		32.40		28.80	
ML 25*100			100	2.10	40.00		36.00		32.00	
ML 25*125			125	1.68	50.00		45.00		40.00	
ML 25*150			150	1.40	60.00		54.00		48.00	
ML 25*175			175	1.20	70.00		63.00		56.00	
ML 27*25	27	13.5	25	10.00	10.00	100(981)	9.00	90(883)	8.00	80(795)
ML 27*30			30	8.33	12.00		10.80		9.60	
ML 27*35			35	7.14	14.00		12.60		11.20	
ML 27*40			40	6.25	16.00		14.40		12.80	
ML 27*45			45	5.56	18.00		16.20		14.40	
ML 27*50			50	5.00	20.00		18.00		16.00	
ML 27*55			55	4.55	22.00		19.80		17.60	
ML 27*60			60	4.17	24.00		21.60		19.20	
ML 27*65			65	3.85	26.00		23.40		20.80	
ML 27*70			70	3.57	28.00		25.20		22.40	
ML 27*75			75	3.33	30.00		27.00		24.00	
ML 27*80			80	3.13	32.00		28.80		25.60	
ML 27*90			90	2.78	36.00		32.40		28.80	
ML 27*100			100	2.50	40.00		36.00		32.00	
ML 27*125			125	2.00	50.00		45.00		40.00	
ML 27*150			150	1.67	60.00		54.00		48.00	
ML 27*175			175	1.43	70.00		63.00		56.00	
ML 30*25	30	15	25	12.11	10.00	121(1187)	9.00	109(1069)	8.00	97(951)
ML 30*30			30	10.08	12.00		10.80		9.60	
ML 30*35			35	8.65	14.00		12.60		11.20	
ML 30*40			40	7.56	16.00		14.40		12.80	
ML 30*45			45	6.73	18.00		16.20		14.40	
ML 30*50			50	6.05	20.00		18.00		16.00	
ML 30*55			55	5.50	22.00		19.80		17.60	

轻负荷

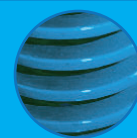


LIGHT LOAD

JIS日标

轻负荷/ Light Load

蓝色/Blue



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 36% Free Length X 36%		自由长 X 32% Free Length X 32%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
ML 30*60	30	15	60	5.04	24.00	121(1187)	21.60	109(1069)	19.20	97(951)
ML 30*65			65	4.65	26.00		23.40		20.80	
ML 30*70			70	4.32	28.00		25.20		22.40	
ML 30*75			75	4.03	30.00		27.00		24.00	
ML 30*80			80	3.78	32.00		28.80		25.60	
ML 30*90			90	3.36	36.00		32.40		28.80	
ML 30*100			100	3.02	40.00		36.00		32.00	
ML 30*125			125	2.42	50.00		45.00		40.00	
ML 30*150			150	2.01	60.00		54.00		48.00	
ML 30*175			175	1.72	70.00		63.00		56.00	
ML 30*200			200	1.51	80.00		72.00		64.00	
ML 35*40	35	17.5	40	10.31	16.00	165(1618)	14.40	149(1461)	12.80	132(1295)
ML 35*45			45	9.17	18.00		16.20		14.40	
ML 35*50			50	8.25	20.00		18.00		16.00	
ML 35*55			55	7.50	22.00		19.80		17.60	
ML 35*60			60	6.87	24.00		21.60		19.20	
ML 35*65			65	6.35	26.00		23.40		20.80	
ML 35*70			70	5.89	28.00		25.20		22.40	
ML 35*75			75	5.50	30.00		27.00		24.00	
ML 35*80			80	5.15	32.00		28.80		25.60	
ML 35*90			90	4.58	36.00		32.40		28.80	
ML 35*100			100	4.12	40.00		36.00		32.00	
ML 35*125			125	3.30	50.00		45.00		40.00	
ML 35*150			150	2.75	60.00		54.00		48.00	
ML 35*175			175	2.35	70.00		63.00		56.00	
ML 35*200			200	2.06	80.00		72.00		64.00	
ML 40*40	40	20	40	13.50	16.00	216(2120)	14.40	194(1903)	12.80	173(1697)
ML 40*50			50	10.80	20.00		18.00		16.00	
ML 40*60			60	9.00	24.00		21.60		19.20	
ML 40*70			70	7.71	28.00		25.20		22.40	
ML 40*80			80	6.75	32.00		28.80		25.60	
ML 40*90			90	6.00	36.00		32.40		28.80	
ML 40*100			100	5.40	40.00		36.00		32.00	
ML 40*125			125	4.32	50.00		45.00		40.00	
ML 40*150			150	3.60	60.00		54.00		48.00	
ML 40*175			175	3.08	70.00		63.00		56.00	
ML 40*200			200	2.70	80.00		72.00		64.00	
ML 40*250			250	2.16	100.00		90.00		80.00	
ML 50*50	50	25	50	16.89	20.00	338(3310)	18.00	304(2980)	16.00	270(2650)
ML 50*60			60	14.08	24.00		21.60		19.20	
ML 50*70			70	12.07	28.00		25.20		22.40	
ML 50*80			80	10.56	32.00		28.80		25.60	
ML 50*90			90	9.38	36.00		32.40		28.80	
ML 50*100			100	8.45	40.00		36.00		32.00	
ML 50*125			125	6.76	50.00		45.00		40.00	
ML 50*150			150	5.63	60.00		54.00		48.00	
ML 50*175			175	4.82	70.00		63.00		56.00	
ML 50*200			200	4.22	80.00		72.00		64.00	
ML 50*250			250	3.38	100.00		90.00		80.00	
ML 50*300			300	2.81	120.00		108.00		96.00	

轻负荷



LIGHT LOAD

JIS
日标

JIS日标 轻负荷/ Light Load 蓝色/Blue										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 40% Free Length X 40%		自由长 X 36% Free Length X 36%		自由长 X 32% Free Length X 32%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
ML 50*350	50	25	350	2.41	140.00	338(3310)	126.00	304(2980)	112.00	270(2650)
ML 50*400			400	2.11	160.00		144.00		128.00	
ML 50*450			450	1.88	180.00		162.00		144.00	
ML 50*500			500	1.69	200.00		180.00		160.00	
ML 60*60	60	30	60	20.25	24.00	486(4770)	21.60	437(4290)	19.20	389(3810)
ML 60*70			70	17.35	28.00		25.20		22.40	
ML 60*80			80	15.18	32.00		28.80		25.60	
ML 60*90			90	13.50	36.00		32.40		28.80	
ML 60*100			100	12.15	40.00		36.00		32.00	
ML 60*125			125	9.72	50.00		45.00		40.00	
ML 60*150			150	8.10	60.00		54.00		48.00	
ML 60*175			175	6.94	70.00		63.00		56.00	
ML 60*200			200	6.07	80.00		72.00		64.00	
ML 60*250			250	4.86	100.00		90.00		80.00	
ML 60*300			300	4.05	120.00		108.00		96.00	
ML 60*350			350	3.47	140.00		126.00		112.00	
ML 60*400			400	3.04	160.00		144.00		128.00	
ML 60*450			450	2.70	180.00		162.00		144.00	
ML 60*500			500	2.43	200.00		180.00		160.00	

轻负荷



LIGHT LOAD



JIS日标

中负荷/ Medium Load

红色/Red



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 32% Free Length X 32%		自由长 X 29% Free Length X 29%		自由长 X 26% Free Length X 26%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MM 8*10	8	4	10	4.34	3.20	14(137.3)	2.90	12.5(122.5)	2.6	11(107.9)
MM 8*15			15	2.89	4.80		4.30		3.8	
MM 8*20			20	2.17	6.40		5.80		5.1	
MM 8*25			25	1.74	8.00		7.20		6.4	
MM 8*30			30	1.45	9.60		8.60		7.7	
MM 8*35			35	1.24	11.20		10.10		9	
MM 8*40			40	1.09	12.80		11.50		10.2	
MM 8*45			45	0.97	14.40		13.00		11.5	
MM 8*50			50	0.87	16.00		14.40		12.8	
MM 8*55			55	0.79	17.60		15.80		14.1	
MM 8*60			60	0.72	19.20		17.30		15.4	
MM 10*20	10	5	20	3.13	6.40	20(196.1)	5.80	18(176.5)	5.1	16(156.9)
MM 10*25			25	2.50	8.00		7.20		6.4	
MM 10*30			30	2.08	9.60		8.60		7.7	
MM 10*35			35	1.78	11.20		10.10		9	
MM 10*40			40	1.56	12.80		11.50		10.2	
MM 10*45			45	1.38	14.40		13.00		11.5	
MM 10*50			50	1.25	16.00		14.40		12.8	
MM 10*55			55	1.13	17.60		15.80		14.1	
MM 10*60			60	1.04	19.20		17.30		15.4	
MM 10*65			65	0.96	20.80		18.70		16.60	
MM 10*70			70	0.89	22.40		20.20		17.90	
MM 10*75			75	0.83	24.00		21.60		19.20	
MM 10*80			80	0.78	25.60		23.00		20.50	
MM 12*20	12	6	20	4.53	6.40	29(284)	5.80	26(255)	5.1	16(156.9)
MM 12*25			25	3.62	8.00		7.20		6.4	
MM 12*30			30	3.02	9.60		8.60		7.7	
MM 12*35			35	2.58	11.20		10.10		9	
MM 12*40			40	2.27	12.80		11.50		10.2	
MM 12*45			45	2.01	14.40		13.00		11.5	
MM 12*50			50	1.81	16.00		14.40		12.8	
MM 12*55			55	1.64	17.60		15.80		14.1	
MM 12*60			60	1.51	19.20		17.30		15.4	
MM 12*65			65	1.39	20.80		18.70		16.60	
MM 12*70			70	1.29	22.40		20.20		17.90	
MM 12*75			75	1.20	24.00		21.60		19.20	
MM 12*80			80	1.13	25.60		23.00		20.50	
MM 14*25	14	7	25	4.87	8.00	39(383)	7.20	35(343)	6.4	31(304)
MM 14*30			30	4.06	9.60		8.60		7.7	
MM 14*35			35	3.48	11.20		10.10		9	
MM 14*40			40	3.04	12.80		11.50		10.2	
MM 14*45			45	2.70	14.40		13.00		11.5	
MM 14*50			50	2.43	16.00		14.40		12.8	
MM 14*55			55	2.21	17.60		15.80		14.1	
MM 14*60			60	2.03	19.20		17.30		15.4	
MM 14*65			65	1.87	20.80		18.70		16.60	
MM 14*70			70	1.74	22.40		20.20		17.90	
MM 14*75			75	1.62	24.00		21.60		19.20	
MM 14*80			80	1.52	25.60		23.00		20.50	
MM 14*90			90	1.35	28.80		25.9		23.00	

中
负
荷



MEDIUM LOAD

JIS
日
标

JIS日标

中负荷/ Medium Load

红色/Red



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 32% Free Length X 32%		自由长 X 29% Free Length X 29%		自由长 X 26% Free Length X 26%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MM 16*25	16	8	25	6.39	8.00	51(500)	7.20	46(451)	6.4	41(402)
MM 16*30			30	5.32	9.60		8.60		7.7	
MM 16*35			35	4.65	11.20		10.10		9	
MM 16*40			40	3.98	12.80		11.50		10.2	
MM 16*45			45	3.54	14.40		13.00		11.5	
MM 16*50			50	3.18	16.00		14.40		12.8	
MM 16*55			55	2.89	17.60		15.80		14.1	
MM 16*60			60	2.65	19.20		17.30		15.4	
MM 16*65			65	2.45	20.80		18.70		16.60	
MM 16*70			70	2.27	22.40		20.20		17.90	
MM 16*75			75	2.11	24.00		21.60		19.20	
MM 16*80			80	1.99	25.60		23.00		20.50	
MM 16*90			90	1.77	28.80		25.9		23.00	
MM 16*100			100	1.59	32.00		28.80		25.60	
MM 18*25	18	9	25	8.12	8.00	65(637)	7.20	58(569)	6.4	52(510)
MM 18*30			30	6.77	9.60		8.60		7.7	
MM 18*35			35	5.80	11.20		10.10		9	
MM 18*40			40	5.07	12.80		11.50		10.2	
MM 18*45			45	4.51	14.40		13.00		11.5	
MM 18*50			50	4.06	16.00		14.40		12.8	
MM 18*55			55	3.69	17.60		15.80		14.1	
MM 18*60			60	3.38	19.20		17.30		15.4	
MM 18*65			65	3.12	20.80		18.70		16.60	
MM 18*70			70	2.90	22.40		20.20		17.90	
MM 18*75			75	2.70	24.00		21.60		19.20	
MM 18*80			80	2.53	25.60		23.00		20.50	
MM 18*90			90	2.25	28.80		25.9		23.00	
MM 18*100			100	2.02	32.00		28.80		25.60	
MM 20*25	20	10	25	10.00	8.00	80(785)	7.20	72(706)	6.4	64(628)
MM 20*30			30	8.33	9.60		8.60		7.7	
MM 20*35			35	7.14	11.20		10.10		9	
MM 20*40			40	6.25	12.80		11.50		10.2	
MM 20*45			45	5.55	14.40		13.00		11.5	
MM 20*50			50	5.00	16.00		14.40		12.8	
MM 20*55			55	4.54	17.60		15.80		14.1	
MM 20*60			60	4.16	19.20		17.30		15.4	
MM 20*65			65	3.84	20.80		18.70		16.60	
MM 20*70			70	3.57	22.40		20.20		17.90	
MM 20*75			75	3.33	24.00		21.60		19.20	
MM 20*80			80	3.12	25.60		23.00		20.50	
MM 20*90			90	2.77	28.80		25.9		23.00	
MM 20*100			100	2.50	32.00		28.80		25.60	
MM 20*125			125	2.00	40.00		36.00		32.00	
MM 20*150			150	1.67	48.00		43.20		38.40	
MM 22*25	22	11	25	12.13	8.00	97(951)	7.20	87(853)	6.4	78(765)
MM 22*30			30	10.10	9.60		8.60		7.7	
MM 22*35			35	8.65	11.20		10.10		9	
MM 22*40			40	7.57	12.80		11.50		10.2	
MM 22*45			45	6.74	14.40		13.00		11.5	
MM 22*50			50	6.06	16.00		14.40		12.8	

中负荷



MEDIUM LOAD

JIS目标

中负荷/ Medium Load

红色/Red



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 32% Free Length X 32%		自由长 X 29% Free Length X 29%		自由长 X 26% Free Length X 26%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MM 22*55	22	11	55	5.50	17.60	97(951)	15.80	87(853)	14.1	78(765)
MM 22*60			60	5.05	19.20		17.30		15.4	
MM 22*65			65	4.66	20.80		18.70		16.60	
MM 22*70			70	4.33	22.40		20.20		17.90	
MM 22*75			75	4.04	24.00		21.60		19.20	
MM 22*80			80	3.78	25.60		23.00		20.50	
MM 22*90			90	3.36	28.80		25.9		23.00	
MM 22*100			100	3.03	32.00		28.80		25.60	
MM 22*125			125	2.42	40.00		36.00		32.00	
MM 22*150			150	2.01	48.00		43.20		38.40	
MM 25*25	25	12.5	25	15.63	8.00	125(1226)	7.20	112(1098)	6.4	100(981)
MM 25*30			30	13.02	9.60		8.60		7.7	
MM 25*35			35	11.20	11.20		10.10		9	
MM 25*40			40	9.76	12.80		11.50		10.2	
MM 25*45			45	8.68	14.40		13.00		11.5	
MM 25*50			50	7.81	16.00		14.40		12.8	
MM 25*55			55	7.10	17.60		15.80		14.1	
MM 25*60			60	6.51	19.20		17.30		15.4	
MM 25*65			65	6.00	20.80		18.70		16.60	
MM 25*70			70	5.58	22.40		20.20		17.90	
MM 25*75			75	5.21	24.00		21.60		19.20	
MM 25*80			80	4.88	25.60		23.00		20.50	
MM 25*90			90	4.34	28.80		25.9		23.00	
MM 25*100			100	3.90	32.00		28.80		25.60	
MM 25*125			125	3.12	40.00		36.00		32.00	
MM 25*150			150	2.60	48.00		43.20		38.40	
MM 25*175			175	2.23	56.00		50.40		44.80	
MM 27*25	27	13.5	25	18.25	8.00	146(1432)	7.20	131(1285)	6.4	117(1147)
MM 27*30			30	15.20	9.60		8.60		7.7	
MM 27*35			35	13.04	11.20		10.10		9	
MM 27*40			40	11.40	12.80		11.50		10.2	
MM 27*45			45	10.14	14.40		13.00		11.5	
MM 27*50			50	9.12	16.00		14.40		12.8	
MM 27*55			55	8.30	17.60		15.80		14.1	
MM 27*60			60	7.60	19.20		17.30		15.4	
MM 27*65			65	7.00	20.80		18.70		16.60	
MM 27*70			70	6.51	22.40		20.20		17.90	
MM 27*75			75	6.08	24.00		21.60		19.20	
MM 27*80			80	5.70	25.60		23.00		20.50	
MM 27*90			90	5.06	28.80		25.9		23.00	
MM 27*100			100	4.56	32.00		28.80		25.60	
MM 27*125			125	3.65	40.00		36.00		32.00	
MM 27*150			150	3.04	48.00		43.20		38.40	
MM 27*175			175	2.61	56.00		50.40		44.80	
MM 30*25	30	15	25	22.50	8.00	180(1765)	7.20	161(1579)	6.4	144(1412)
MM 30*30			30	18.75	9.60		8.60		7.7	
MM 30*35			35	16.10	11.20		10.10		9	
MM 30*40			40	14.06	12.80		11.50		10.2	
MM 30*45			45	12.50	14.40		13.00		11.5	
MM 30*50			50	11.25	16.00		14.40		12.8	

中
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荷

MEDIUM
LOAD

JIS
目
标

JIS日标										
中负荷/ Medium Load										
红色/Red										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 32% Free Length X 32%		自由长 X 29% Free Length X 29%		自由长 X 26% Free Length X 26%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MM 30*55	30	15	55	10.23	17.60	180(1765)	15.80	161(1579)	14.1	144(1412)
MM 30*60			60	9.37	19.20		17.30		15.4	
MM 30*65			65	8.65	20.80		18.70		16.60	
MM 30*70			70	8.03	22.40		20.20		17.90	
MM 30*75			75	7.50	24.00		21.60		19.20	
MM 30*80			80	7.03	25.60		23.00		20.50	
MM 30*90			90	6.25	28.80		25.9		23.00	
MM 30*100			100	5.63	32.00		28.80		25.60	
MM 30*125			125	4.50	40.00		36.00		32.00	
MM 30*150			150	3.75	48.00		43.20		38.40	
MM 30*175			175	3.21	56.00		50.40		44.80	
MM 30*200			200	2.81	64.00		57.60		51.20	
MM 35*40	35	17.5	40	19.14	12.80	245(2400)	11.50	220(2160)	10.2	195(1912)
MM 35*45			45	17.01	14.40		13.00		11.5	
MM 35*50			50	15.31	16.00		14.40		12.8	
MM 35*55			55	13.92	17.60		15.80		14.1	
MM 35*60			60	12.76	19.20		17.30		15.4	
MM 35*65			65	11.77	20.80		18.70		16.60	
MM 35*70			70	10.93	22.40		20.20		17.90	
MM 35*75			75	10.20	24.00		21.60		19.20	
MM 35*80			80	9.57	25.60		23.00		20.50	
MM 35*90			90	8.50	28.80		25.9		23.00	
MM 35*100			100	7.65	32.00		28.80		25.60	
MM 35*125			125	6.12	40.00		36.00		32.00	
MM 35*150			150	5.10	48.00		43.20		38.40	
MM 35*175			175	4.37	56.00		50.40		44.80	
MM 35*200			200	3.82	64.00		57.60		51.20	
MM 40*40	40	20	40	25.02	12.80	320(3140)	11.50	288(2820)	10.20	256(2510)
MM 40*50			50	20.00	16.00		14.40		12.80	
MM 40*60			60	16.60	19.20		17.30		15.40	
MM 40*70			70	14.28	22.40		20.20		17.90	
MM 40*80			80	12.50	25.60		23.00		20.50	
MM 40*90			90	11.11	28.80		25.90		23.00	
MM 40*100			100	10.00	32.00		28.80		25.60	
MM 40*125			125	8.00	40.00		36.00		32.00	
MM 40*150			150	6.66	48.00		43.20		38.40	
MM 40*175			175	5.71	56.00		50.40		44.80	
MM 40*200			200	5.00	64.00		57.60		51.20	
MM 40*250			250	4.00	80.00		72.00		64.00	
MM 50*50	50	25	50	31.25	16.00	500(4900)	14.40	450(4410)	12.8	400(3920)
MM 50*60			60	26.04	19.20		17.30		15.40	
MM 50*70			70	22.32	22.40		20.20		17.90	
MM 50*80			80	19.53	25.60		23.00		20.50	
MM 50*90			90	17.36	28.80		25.90		23.00	
MM 50*100			100	15.62	32.00		28.80		25.60	
MM 50*125			125	12.50	40.00		36.00		32.00	
MM 50*150			150	10.41	48.00		43.20		38.40	
MM 50*175			175	8.92	56.00		50.40		44.80	
MM 50*200			200	7.81	64.00		57.60		51.20	
MM 50*250			250	6.25	80.00		72.00		64.00	

中负荷



MEDIUM LOAD

JIS日标

中负荷/ Medium Load

红色/Red



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 32% Free Length X 32%		自由长 X 29% Free Length X 29%		自由长 X 26% Free Length X 26%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MM 50*300	50	25	300	5.20	96.00	500(4900)	86.40	450(4410)	76.80	400(3920)
MM 60*60	30	15	60	37.40	19.20	180(1765)	17.30	161(1579)	15.40	144(1412)
MM 60*70			70	32.10	22.40		20.20		17.90	
MM 60*80			80	28.12	25.60		23.00		20.50	
MM 60*90			90	25.00	28.80		25.90		23.00	
MM 60*100			100	22.50	32.00		28.80		25.60	
MM 60*125			125	18.00	40.00		36.00		32.00	
MM 60*150			150	15.00	48.00		43.20		38.40	
MM 60*175			175	12.85	56.00		50.40		44.80	
MM 60*200			200	11.25	64.00		57.60		51.20	
MM 60*250			250	9.00	80.00		72.00		64.00	
MM 60*300			300	7.50	96.00		86.40		76.80	

中
负
荷



MEDIUM LOAD



JIS
日
标

JIS日标 重负荷/ Heavy Load 绿色/Green										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 24% Free Length X 24%		自由长 X 22% Free Length X 22%		自由长 X 19% Free Length X 19%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MH 8*10	8	4	10	8.80	2.40	21(206)	2.20	19(186.3)	1.90	17(166.7)
MH 8*15			15	5.86	3.60		3.20		2.90	
MH 8*20			20	4.40	4.80		4.30		3.80	
MH 8*25			25	3.52	6.00		5.40		4.80	
MH 8*30			30	2.93	7.20		6.50		5.80	
MH 8*35			35	2.51	8.40		7.50		6.70	
MH 8*40			40	2.20	9.60		8.60		7.70	
MH 8*45			45	1.95	10.80		9.70		8.60	
MH 8*50			50	1.76	12.00		10.80		9.60	
MH 8*55			55	1.60	13.20		11.80		10.60	
MH 8*60			60	1.47	14.40		13.00		11.50	
MH 10*20	10	5	20	6.25	4.80	30(294)	4.30	27(265)	3.80	24(235)
MH 10*25			25	5.00	6.00		5.40		4.80	
MH 10*30			30	4.16	7.20		6.50		5.80	
MH 10*35			35	3.57	8.40		7.50		6.70	
MH 10*40			40	3.15	9.60		8.60		7.70	
MH 10*45			45	2.77	10.80		9.70		8.60	
MH 10*50			50	2.50	12.00		10.80		9.60	
MH 10*55			55	2.27	13.20		11.80		10.60	
MH 10*60			60	2.08	14.40		13.00		11.50	
MH 10*65			65	1.92	15.60		14.00		12.50	
MH 10*70			70	1.79	16.80		15.10		13.40	
MH 10*75			75	1.67	18.00		16.20		14.40	
MH 12*20	12	6	20	8.90	4.80	43(422)	4.30	38(373)	3.80	34(333)
MH 12*25			25	7.10	6.00		5.40		4.80	
MH 12*30			30	5.97	7.20		6.50		5.80	
MH 12*35			35	5.11	8.40		7.50		6.70	
MH 12*40			40	4.47	9.60		8.60		7.70	
MH 12*45			45	3.98	10.80		9.70		8.60	
MH 12*50			50	3.58	12.00		10.80		9.60	
MH 12*55			55	3.25	13.20		11.80		10.60	
MH 12*60			60	2.98	14.40		13.00		11.50	
MH 12*65			65	2.74	15.60		14.00		12.50	
MH 12*70			70	2.54	16.80		15.10		13.40	
MH 12*75			75	2.37	18.00		16.20		14.40	
MH 12*80			80	2.21	19.20		17.30		15.40	
MH 14*25	14	7	25	9.83	6.00	59(579)	5.40	53(520)	4.80	47(461)
MH 14*30			30	8.19	7.20		6.50		5.80	
MH 14*35			35	7.02	8.40		7.50		6.70	
MH 14*40			40	6.14	9.60		8.60		7.70	
MH 14*45			45	5.46	10.80		9.70		8.60	
MH 14*50			50	4.91	12.00		10.80		9.60	
MH 14*55			55	4.46	13.20		11.80		10.60	
MH 14*60			60	4.09	14.40		13.00		11.50	
MH 14*65			65	3.78	15.60		14.00		12.50	
MH 14*70			70	3.51	16.80		15.10		13.40	
MH 14*75			75	3.27	18.00		16.20		14.40	
MH 14*80			80	3.07	19.20		17.30		15.40	
MH 14*90			90	2.72	21.60		19.4		17.30	

重负荷

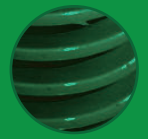


HEAVY LOAD

JIS日标

重负荷/ Heavy Load

绿色/Green



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 24% Free Length X 24%		自由长 X 22% Free Length X 22%		自由长 X 19% Free Length X 19%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MH 16*25	16	8	25	12.83	6.00	77(755)	5.40	69(608)	4.80	62(608)
MH 16*30			30	10.69	7.20		6.50		5.80	
MH 16*35			35	9.16	8.40		7.50		6.70	
MH 16*40			40	8.02	9.60		8.60		7.70	
MH 16*45			45	7.12	10.80		9.70		8.60	
MH 16*50			50	6.41	12.00		10.80		9.60	
MH 16*55			55	5.83	13.20		11.80		10.60	
MH 16*60			60	5.34	14.40		13.00		11.50	
MH 16*65			65	4.93	15.60		14.00		12.50	
MH 16*70			70	4.58	16.80		15.10		13.40	
MH 16*75			75	4.28	18.00		16.20		14.40	
MH 16*80			80	4.01	19.20		17.30		15.40	
MH 16*90			90	3.57	21.60		19.4		17.30	
MH 16*100			100	3.21	24.00		21.60		19.20	
MH 18*25	18	9	25	16.16	6.00	97(951)	5.40	87(853)	4.80	78(765)
MH 18*30			30	13.57	7.20		6.50		5.80	
MH 18*35			35	11.54	8.40		7.50		6.70	
MH 18*40			40	10.10	9.60		8.60		7.70	
MH 18*45			45	8.98	10.80		9.70		8.60	
MH 18*50			50	8.08	12.00		10.80		9.60	
MH 18*55			55	7.34	13.20		11.80		10.60	
MH 18*60			60	6.73	14.40		13.00		11.50	
MH 18*65			65	6.21	15.60		14.00		12.50	
MH 18*70			70	5.77	16.80		15.10		13.40	
MH 18*75			75	5.39	18.00		16.20		14.40	
MH 18*80			80	5.05	19.20		17.30		15.40	
MH 18*90			90	4.50	21.60		19.4		17.30	
MH 18*100			100	4.04	24.00		21.60		19.20	
MH 20*25	20	10	25	20.00	6.00	120(1177)	5.40	108(1059)	4.80	96(941)
MH 20*30			30	16.66	7.20		6.50		5.80	
MH 20*35			35	14.28	8.40		7.50		6.70	
MH 20*40			40	12.50	9.60		8.60		7.70	
MH 20*45			45	11.11	10.80		9.70		8.60	
MH 20*50			50	10.00	12.00		10.80		9.60	
MH 20*55			55	9.09	13.20		11.80		10.60	
MH 20*60			60	8.33	14.40		13.00		11.50	
MH 20*65			65	7.69	15.60		14.00		12.50	
MH 20*70			70	7.14	16.80		15.10		13.40	
MH 20*75			75	6.67	18.00		16.20		14.40	
MH 20*80			80	6.25	19.20		17.30		15.40	
MH 20*90			90	5.55	21.60		19.4		17.30	
MH 20*100			100	5.00	24.00		21.60		19.20	
MH 20*125			125	4.00	30.00		27.00		24.00	
MH 20*150			150	3.33	36.00		32.40		28.80	
MH 22*25	22	11	25	24.16	6.00	145(1422)	5.40	130(1275)	4.80	116(1138)
MH 22*30			30	20.13	7.20		6.50		5.80	
MH 22*35			35	17.30	8.40		7.50		6.70	
MH 22*40			40	15.10	9.60		8.60		7.70	
MH 22*45			45	13.40	10.80		9.70		8.60	

重
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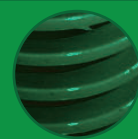
HEAVY
LOAD

JIS
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标

JIS日标

重负荷/ Heavy Load

绿色/Green



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 24% Free Length X 24%		自由长 X 22% Free Length X 22%		自由长 X 19% Free Length X 19%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MH 22*50	22	11	25	12.83	6.00	145(1422)	5.40	130(1275)	4.80	116(1138)
MH 22*55			30	10.69	7.20		6.50		5.80	
MH 22*60			35	9.16	8.40		7.50		6.70	
MH 22*65			40	8.02	9.60		8.60		7.70	
MH 22*70			45	7.12	10.80		9.70		8.60	
MH 22*75			50	6.41	12.00		10.80		9.60	
MH 22*80			55	5.83	13.20		11.80		10.60	
MH 22*90			60	5.34	14.40		13.00		11.50	
MH 22*100			65	4.93	15.60		14.00		12.50	
MH 22*125			70	4.58	16.80		15.10		13.40	
MH 22*150			75	4.28	18.00		16.20		14.40	
MH 25*25	25	12.5	80	4.01	19.20	187(1834)	17.30	169(1657)	15.40	150(1471)
MH 25*30			90	3.57	21.60		19.4		17.30	
MH 25*35			100	3.21	24.00		21.60		19.20	
MH 25*40			25	16.16	6.00		5.40		4.80	
MH 25*45			30	13.57	7.20		6.50		5.80	
MH 25*50			35	11.54	8.40		7.50		6.70	
MH 25*55			40	10.10	9.60		8.60		7.70	
MH 25*60			45	8.98	10.80		9.70		8.60	
MH 25*65			50	8.08	12.00		10.80		9.60	
MH 25*70			55	7.34	13.20		11.80		10.60	
MH 25*75			60	6.73	14.40		13.00		11.50	
MH 25*80			65	6.21	15.60		14.00		12.50	
MH 25*90			70	5.77	16.80		15.10		13.40	
MH 25*100			75	5.39	18.00		16.20		14.40	
MH 25*125			80	5.05	19.20		17.30		15.40	
MH 25*150			90	4.50	21.60		19.4		17.30	
MH 25*175			100	4.04	24.00		21.60		19.20	
MH 27*25	27	13.5	25	20.00	6.00	219(2150)	5.40	197(1932)	4.80	175(1716)
MH 27*30			30	16.66	7.20		6.50		5.80	
MH 27*35			35	14.28	8.40		7.50		6.70	
MH 27*40			40	12.50	9.60		8.60		7.70	
MH 27*45			45	11.11	10.80		9.70		8.60	
MH 27*50			50	10.00	12.00		10.80		9.60	
MH 27*55			55	9.09	13.20		11.80		10.60	
MH 27*60			60	8.33	14.40		13.00		11.50	
MH 27*65			65	7.69	15.60		14.00		12.50	
MH 27*70			70	7.14	16.80		15.10		13.40	
MH 27*75			75	6.67	18.00		16.20		14.40	
MH 27*80			80	6.25	19.20		17.30		15.40	
MH 27*90			90	5.55	21.60		19.4		17.30	
MH 27*100			100	5.00	24.00		21.60		19.20	
MH 27*125			125	4.00	30.00		27.00		24.00	
MH 27*150			150	3.33	36.00		32.40		28.80	
MH 27*175			25	24.16	6.00		5.40		4.80	
MH 30*25	30	15	30	20.13	7.20	270(2550)	6.50	243(2380)	5.80	216(2120)
MH 30*30			35	17.30	8.40		7.50		6.70	
MH 30*35			40	15.10	9.60		8.60		7.70	
MH 30*40			45	13.40	10.80		9.70		8.60	

重负荷

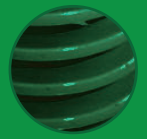


HEAVY LOAD

JIS日标

重负荷/ Heavy Load

绿色/Green



重
负
荷



HEAVY LOAD

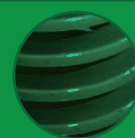
JIS
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型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 24% Free Length X 24%		自由长 X 22% Free Length X 22%		自由长 X 19% Free Length X 19%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MH 30*45	30	15	45	25.00	10.80	270(2550)	9.70	243(2380)	8.60	216(2120)
MH 30*50			50	22.50			10.80		9.60	
MH 30*55			55	20.40			11.80		10.60	
MH 30*60			60	18.75			13.00		11.50	
MH 30*65			65	17.30			14.00		12.50	
MH 30*70			70	16.07			15.10		13.40	
MH 30*75			75	15.00			16.20		14.40	
MH 30*80			80	14.06			17.30		15.40	
MH 30*90			90	12.50			19.4		17.30	
MH 30*100			100	11.25			21.60		19.20	
MH 30*125			125	9.00			27.00		24.00	
MH 30*150			150	7.50			32.40		28.80	
MH 30*175			175	6.42			37.80		33.60	
MH 30*200			200	5.62			43.20		38.40	
MH 35*40	35	17.5	40	38.22	9.60	367(3600)	8.60	330(3240)	7.70	293(2870)
MH 35*50			50	30.58			10.80		9.60	
MH 35*55			55	27.80			11.90		10.60	
MH 35*60			60	25.48			13.00		11.50	
MH 35*65			65	23.53			14.00		12.50	
MH 35*70			70	21.84			15.10		13.40	
MH 35*75			75	20.39			16.20		14.40	
MH 35*80			80	19.11			17.30		15.40	
MH 35*90			90	16.99			19.4		17.30	
MH 35*100			100	15.29			21.60		19.20	
MH 35*125			125	12.23			27.00		24.00	
MH 35*150			150	10.19			32.40		28.80	
MH 35*175			175	8.73			37.80		33.60	
MH 35*200			200	7.64			43.20		38.40	
MH 40*40	40	22	40	50.00	9.60	480(4170)	9.60	432(4240)	7.70	384(3770)
MH 40*50			50	40.00			12.00		9.60	
MH 40*60			60	33.33			14.40		11.50	
MH 40*70			70	28.57			16.80		13.40	
MH 40*80			80	25.00			19.20		15.40	
MH 40*90			90	22.22			21.60		17.30	
MH 40*100			100	20.00			24.00		19.20	
MH 40*125			125	16.00			30.00		24.00	
MH 40*150			150	13.33			36.00		28.80	
MH 40*175			175	11.42			42.00		33.60	
MH 40*200			200	10.00			48.00		38.40	
MH 40*250			250	8.00			60.00		48.00	
MH 50*50	50	25	50	62.50	12.00	750(7360)	10.80	675(6620)	9.60	600(5880)
MH 50*60			60	52.08			13.00		11.50	
MH 50*70			70	44.64			15.10		13.40	
MH 50*80			80	39.06			17.30		15.40	
MH 50*90			90	34.72			19.40		17.30	
MH 50*100			100	31.25			21.60		19.20	
MH 50*125			125	25.00			27.00		24.00	
MH 50*150			150	20.83			32.40		28.80	
MH 50*175			175	17.85			37.80		33.60	

JIS日标

重负荷/ Heavy Load

绿色/Green



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 24% Free Length X 24%		自由长 X 22% Free Length X 22%		自由长 X 19% Free Length X 19%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MH 50*200	50	25	200	15.62	48.00	750(7360)	43.20	675(6620)	38.40	600(5880)
MH 50*250			250	12.50	60.00		54.00		48.00	
MH 50*300			300	10.41	72		64.80		57.60	
MH 60*60	60	33	60	75.00	14.40	1080 (10590)	13.00	973(9540)	11.50	864(8470)
MH 60*70			70	64.28	16.80		15.10		13.40	
MH 60*80			80	56.25	19.20		17.30		15.40	
MH 60*90			90	50.00	21.60		19.40		17.30	
MH 60*100			100	45.00	24.00		21.60		19.20	
MH 60*125			125	36.00	30.00		27.00		24.00	
MH 60*150			150	30.00	36.00		32.40		28.80	
MH 60*175			175	25.71	42.00		37.80		33.60	
MH 60*200			200	22.50	48.00		43.20		38.40	
MH 60*250			250	18.00	60.00		54.00		48.00	
MH 60*300			300	15.00	72		64.80		57.60	

重
负
荷

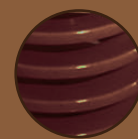
HEAVY LOAD



JIS日标

超重负荷/ Extra heavy load

棕色/Brown



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 20% Free Length X 20%		自由长 X 18% Free Length X 18%		自由长 X 16% Free Length X 16%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MB 8*10	8	4	10	16.94	2.00	35(343)	1.80	30.5(299)	1.60	26(255)
MB 8*15			15	11.30	3.00		2.70		2.40	
MB 8*20			20	8.47	4.00		3.60		3.20	
MB 8*25			25	6.78	5.00		4.50		4.00	
MB 8*30			30	5.65	6.00		5.40		4.80	
MB 8*35			35	4.84	7.00		6.30		5.60	
MB 8*40			40	4.20	8.00		7.20		6.40	
MB 8*45			45	3.77	9.00		8.10		7.20	
MB 8*50			50	3.39	10.00		9.00		8.00	
MB 8*55			55	3.08	11.00		9.90		8.80	
MB 8*60			60	2.82	12.00		10.80		9.60	
MB 10*20	10	5	20	11.25	4.00	45(441)	3.60	41(402)	3.20	36(353)
MB 10*25			25	9.00	5.00		4.50		4.00	
MB 10*30			30	7.50	6.00		5.40		4.80	
MB 10*35			35	6.43	7.00		6.30		5.60	
MB 10*40			40	5.63	8.00		7.20		6.40	
MB 10*45			45	5.00	9.00		8.10		7.20	
MB 10*50			50	4.50	10.00		9.00		8.00	
MB 10*55			55	4.09	11.00		9.90		8.80	
MB 10*60			60	3.75	12.00		10.80		9.60	
MB 10*65			65	3.47	13.00		11.70		10.40	
MB 10*70			70	3.21	14.00		12.60		11.20	
MB 10*75			75	3.00	15.00		13.50		12.00	
MB 10*80			80	2.82	16.00		14.40		12.80	
MB 12*20	12	6	20	14.50	4.00	58(569)	3.60	52(510)	3.20	46(451)
MB 12*25			25	11.60	5.00		4.50		4.00	
MB 12*30			30	9.67	6.00		5.40		4.80	
MB 12*35			35	8.29	7.00		6.30		5.60	
MB 12*40			40	7.25	8.00		7.20		6.40	
MB 12*45			45	6.44	9.00		8.10		7.20	
MB 12*50			50	5.80	10.00		9.00		8.00	
MB 12*55			55	5.27	11.00		9.90		8.80	
MB 12*60			60	4.83	12.00		10.80		9.60	
MB 12*65			65	4.44	13.00		11.70		10.40	
MB 12*70			70	4.13	14.00		12.60		11.20	
MB 12*75			75	3.85	15.00		13.50		12.00	
MB 12*80			80	3.61	16.00		14.40		12.80	
MB 14*25	14	7	25	15.00	5.00	75(736)	4.50	68(667)	4.00	60(588)
MB 14*30			30	12.50	6.00		5.40		4.80	
MB 14*35			35	10.72	7.00		6.30		5.60	
MB 14*40			40	9.38	8.00		7.20		6.40	
MB 14*45			45	8.34	9.00		8.10		7.20	
MB 14*50			50	7.50	10.00		9.00		8.00	
MB 14*55			55	6.82	11.00		9.90		8.80	
MB 14*60			60	6.25	12.00		10.80		9.60	
MB 14*65			65	5.77	13.00		11.70		10.40	
MB 14*70			70	5.36	14.00		12.60		11.20	
MB 14*75			75	5.00	15.00		13.50		12.00	
MB 14*80			80	4.69	16.00		14.40		12.80	
MB 14*90			90	4.17	18.00		16.20		14.40	

超重负荷



EXTRA HEAVY LOAD

JIS
日
标

JIS日标 超重负荷/ Extra heavy load 棕色/Brown										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 20% Free Length X 20%		自由长 X 18% Free Length X 18%		自由长 X 16% Free Length X 16%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MB 16*25	16	8	25	20.00	5.00	100(981)	4.50	90(883)	4.00	80(785)
MB 16*30			30	16.67			5.40		4.80	
MB 16*35			35	14.29			6.30		5.60	
MB 16*40			40	12.50			7.20		6.40	
MB 16*45			45	11.11			8.10		7.20	
MB 16*50			50	10.00			9.00		8.00	
MB 16*55			55	9.09			9.90		8.80	
MB 16*60			60	8.34			10.80		9.60	
MB 16*65			65	7.69			11.70		10.40	
MB 16*70			70	7.14			12.60		11.20	
MB 16*75			75	6.67			13.50		12.00	
MB 16*80			80	6.25			14.40		12.80	
MB 16*90			90	5.56			16.20		14.40	
MB 16*100			100	5.00			18.00		16.00	
MB 18*25	18	9	25	25.00	5.00	125(1226)	4.50	113(1108)	4.00	100(981)
MB 18*30			30	20.84			5.40		4.80	
MB 18*35			35	17.86			6.30		5.60	
MB 18*40			40	15.63			7.20		6.40	
MB 18*45			45	13.89			8.10		7.20	
MB 18*50			50	12.50			9.00		8.00	
MB 18*55			55	11.37			9.90		8.80	
MB 18*60			60	10.42			10.80		9.60	
MB 18*65			65	9.62			11.70		10.40	
MB 18*70			70	8.93			12.60		11.20	
MB 18*75			75	8.34			13.50		12.00	
MB 18*80			80	7.82			14.40		12.80	
MB 18*90			90	6.95			16.20		14.40	
MB 18*100			100	6.26			18.00		16.00	
MB 20*25	20	11(10)	25	32.00	5.00	160(1569)	4.50	144(1412)	4.00	128(1255)
MB 20*30			30	26.67			5.40		4.80	
MB 20*35			35	22.86			6.30		5.60	
MB 20*40			40	20.00			7.20		6.40	
MB 20*45			45	17.78			8.10		7.20	
MB 20*50			50	16.00			9.00		8.00	
MB 20*55			55	14.55			9.90		8.80	
MB 20*60			60	13.33			10.80		9.60	
MB 20*65			65	12.31			11.70		10.40	
MB 20*70			70	11.43			12.60		11.20	
MB 20*75			75	10.67			13.50		12.00	
MB 20*80			80	10.00			14.40		12.80	
MB 20*90			90	8.89			16.20		14.40	
MB 20*100			100	8.00			18.00		16.00	
MB 20*125			125	6.40			22.50		20.00	
MB 20*150			150	5.33			27.00		24.00	
MB 22*25	22	11	25	39.00	5.00	195(1912)	4.50	176(1726)	4.00	156(1530)
MB 22*30			30	32.50			5.40		4.80	
MB 22*35			35	27.86			6.30		5.60	
MB 22*40			40	24.38			7.20		6.40	
MB 22*45			45	21.67			8.10		7.20	
MB 22*50			50	19.50			9.00		8.00	

超重负荷

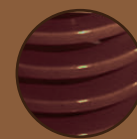


EXTRA HEAVY LOAD

JIS日标

超重负荷/ Extra heavy load

棕色/Brown



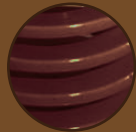
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 20% Free Length X 20%		自由长 X 18% Free Length X 18%		自由长 X 16% Free Length X 16%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MB 22*55	22	11	55	17.73	11.00	195(1912)	9.90	176(1726)	8.80	156(1530)
MB 22*60			60	16.25	12.00		10.80		9.60	
MB 22*65			65	15.00	13.00		11.70		10.40	
MB 22*70			70	13.93	14.00		12.60		11.20	
MB 22*75			75	13.00	15.00		13.50		12.00	
MB 22*80			80	12.19	16.00		14.40		12.80	
MB 22*90			90	10.83	18.00		16.20		14.40	
MB 22*100			100	9.75	20.00		18.00		16.00	
MB 22*125			125	7.80	25.00		22.50		20.00	
MB 22*150			150	6.50	30.00		27.00		24.00	
MB 25*25	25	13.5 (12.5)	25	49.00	5.00	245 (2400)	4.50	221(2170)	4.00	196(1922)
MB 25*30			30	40.80	6.00		5.40		4.80	
MB 25*35			35	35.00	7.00		6.30		5.60	
MB 25*40			40	30.60	8.00		7.20		6.40	
MB 25*45			45	27.20	9.00		8.10		7.20	
MB 25*50			50	24.50	10.00		9.00		8.00	
MB 25*55			55	22.30	11.00		9.90		8.80	
MB 25*60			60	20.40	12.00		10.80		9.60	
MB 25*65			65	18.80	13.00		11.70		10.40	
MB 25*70			70	17.50	14.00		12.60		11.20	
MB 25*75			75	16.30	15.00		13.50		12.00	
MB 25*80			80	15.30	16.00		14.40		12.80	
MB 25*90			90	13.60	18.00		16.20		14.40	
MB 25*100			100	12.30	20.00		18.00		16.00	
MB 25*125			125	9.80	25.00		22.50		20.00	
MB 25*150			150	8.17	30.00		27.00		24.00	
MB 25*175			175	7.00	35.00		31.50		28.00	
MB 27*25	27	13.5	25	58.00	5.00	290(2840)	4.50	261(2560)	4.00	232(2280)
MB 27*30			30	48.33	6.00		5.40		4.80	
MB 27*35			35	41.43	7.00		6.30		5.60	
MB 27*40			40	36.25	8.00		7.20		6.40	
MB 27*45			45	32.22	9.00		8.10		7.20	
MB 27*50			50	29.00	10.00		9.00		8.00	
MB 27*55			55	26.36	11.00		9.90		8.80	
MB 27*60			60	24.17	12.00		10.80		9.60	
MB 27*65			65	22.31	13.00		11.70		10.40	
MB 27*70			70	20.71	14.00		12.60		11.20	
MB 27*75			75	19.33	15.00		13.50		12.00	
MB 27*80			80	18.13	16.00		14.40		12.80	
MB 27*90			90	16.11	18.00		16.20		14.40	
MB 27*100			100	14.50	20.00		18.00		16.00	
MB 27*125			125	11.60	25.00		22.50		20.00	
MB 27*150			150	9.67	30.00		27.00		24.00	
MB 27*175			175	8.28	35.00		31.50		28.00	
MB 30*25	30	16(15)	25	72.00	5.00	360(3530)	4.50	324(3180)	4.00	288(2820)
MB 30*30			30	60.00	6.00		5.40		4.80	
MB 30*35			35	51.43	7.00		6.30		5.60	
MB 30*40			40	45.00	8.00		7.20		6.40	
MB 30*45			45	40.00	9.00		8.10		7.20	
MB 30*50			50	36.00	10.00		9.00		8.00	

超重负荷



EXTRA HEAVY LOAD

JIS
日
标

JIS日标 超重负荷/ Extra heavy load 棕色/Brown 										
型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 20% Free Length X 20%		自由长 X 18% Free Length X 18%		自由长 X 16% Free Length X 16%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MB 30*55	30	16(15)	55	32.72	11.00	360(3530)	9.90	324(3180)	8.80	288(2820)
MB 30*60			60	30.00						
MB 30*65			65	27.69						
MB 30*70			70	25.71						
MB 30*75			75	24.00						
MB 30*80			80	22.50						
MB 30*90			90	20.00						
MB 30*100			100	18.00						
MB 30*125			125	14.40						
MB 30*150			150	12.00						
MB 30*175			175	10.28						
MB 30*200			200	9.00						
MB 35*40	35	19 (17.5)	40	61.20	8.00	490(4810)	7.20	441(4320)	6.40	392(3840)
MB 35*45			45	54.44						
MB 35*50			50	49.00						
MB 35*55			55	44.54						
MB 35*60			60	40.83						
MB 35*65			65	37.69						
MB 35*70			70	35.00						
MB 35*75			75	32.67						
MB 35*80			80	30.62						
MB 35*90			90	27.22						
MB 35*100			100	24.50						
MB 35*125			125	19.60						
MB 35*150			150	16.33						
MB 35*175			175	14.00						
MB 35*200			200	12.25						
MB 40*40	40	22(20)	40	80.00	8.00	640(6280)	7.20	576(5650)	6.40	512(5020)
MB 40*50			50	64.00						
MB 40*60			60	53.33						
MB 40*70			70	45.71						
MB 40*80			80	40.00						
MB 40*90			90	35.55						
MB 40*100			100	32.00						
MB 40*125			125	25.60						
MB 40*150			150	21.33						
MB 40*175			175	18.28						
MB 40*200			200	15.00						
MB 40*250			250	12.80						
MB 50*50	50	25	50	100.00	10.00	1000(9810)	9.00	900(8830)	8.00	800(7850)
MB 50*60			60	83.33						
MB 50*70			70	71.42						
MB 50*80			80	62.50						
MB 50*90			90	55.55						
MB 50*100			100	50.00						
MB 50*125			125	40.00						
MB 50*150			150	33.33						
MB 50*175			175	27.57						
MB 50*200			200	25.00						
MB 50*250			250	20.00						

超重负荷

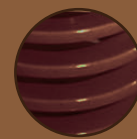


EXTRA HEAVY LOAD

JIS日标

超重负荷/ Extra heavy load

棕色/Brown



型号 Part Number	外径 Outer Dia. (mm)	内径 Inner Dia. (mm)	自由长 Free Length 长度 (mm)	弹簧定数 Spring Constant 定数 (kgf/mm)	自由长 X 20% Free Length X 20%		自由长 X 18% Free Length X 18%		自由长 X 16% Free Length X 16%	
					Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)	Deflection 压缩数 (mm)	荷重 Load kgf(N)
MB 50*300	50	25	300	16.66	60.00	1000(9810)	54.00	900(8830)	48.00	800(7850)
MB 60*60	60	33	60	120.00	12.00	1440 (14122)	10.80	1296 (12710)	9.60	1152 (11300)
MB 60*70			70	102.00	14.00		12.60		11.20	
MB 60*80			80	90.00	16.00		14.40		12.80	
MB 60*90			90	80.00	18.00		16.20		14.40	
MB 60*100			100	72.00	20.00		18.00		16.00	
MB 60*125			125	57.60	25.00		22.50		20.00	
MB 60*150			150	48.00	30.00		27.00		24.00	
MB 60*175			175	41.14	35.00		31.50		28.00	
MB 60*200			200	36.00	40.00		36.00		32.00	
MB 60*250			250	28.80	50.00		45.00		40.00	
MB 60*300			300	24.00	60.00		54.00		48.00	

超重负荷



EXTRA HEAVY LOAD



JIS
日
标

US
美
标

中负荷
MEDIUM
LOAD

超重负荷
EXTRA
HEAVY
LOAD

中等重负荷
MEDIUM
HEAVY
LOAD

重负荷
HEAVY
LOAD



US美标(英制)

中负荷/ Medium Load

蓝色/Blue



中负荷

MEDIUM LOAD

US
美
标

型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的35% 35% of free length		自由长L的40% 40% of free length		自由长L的50% 50% of free length
					负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USB001	3/8	3/16	1	6.0	15.0	0.25	21.0	0.35	0.35	24.0	0.40
USB002			1 1/4	5.4	16.9	0.31	23.6	0.44	0.44	27.0	0.50
USB003			1 1/2	4.0	15.0	0.38	21.0	0.53	0.53	24.0	0.60
USB004			1 3/4	3.4	14.9	0.44	20.8	0.61	0.61	23.8	0.70
USB005			2	2.8	14.0	0.50	19.6	0.70	0.70	22.4	0.80
USB006			2 1/2	2.4	15.0	0.63	21.0	0.88	0.88	24.0	1.00
USB007			3	2.1	15.8	0.75	22.0	1.05	1.05	25.2	1.20
USB008			12	0.6	18.0	3.00	25.2	4.20	4.20	28.8	4.80
USB009	1/2	9/32	1	11.0	27.5	0.25	38.5	0.35	0.35	44.0	0.40
USB010			1 1/4	8.2	25.6	0.31	35.9	0.44	0.44	41.0	0.50
USB011			1 1/2	6.8	25.5	0.38	35.7	0.53	0.53	40.8	0.60
USB012			1 3/4	6.0	26.3	0.44	36.8	0.61	0.61	42.0	0.70
USB013			2	5.5	27.5	0.50	38.5	0.70	0.70	44.0	0.80
USB014			2 1/2	4.5	28.1	0.63	39.4	0.88	0.88	45.0	1.00
USB015			3	3.5	26.3	0.75	36.8	1.05	1.05	42.0	1.20
USB016			3 1/2	3.0	26.3	0.88	36.8	1.23	1.23	42.0	1.40
USB017			4 1/2	2.5	28.1	1.13	39.4	1.58	1.58	45.0	1.80
USB018			5 1/2	2.1	28.9	1.38	40.4	1.93	1.93	46.2	2.20
USB019			6 1/2	1.4	22.8	1.63	31.9	2.28	2.28	36.4	2.60
USB020			7 1/2	1.2	22.5	1.88	31.5	2.63	2.63	36.0	3.00
USB021	12	0.7	21.0	3.00	29.4	4.20	4.20	33.6	4.80		
USB022	5/8	11/32	1	16.4	41.0	0.25	57.4	0.35	0.35	65.6	0.40
USB023			1 1/4	12.8	40.0	0.31	56.0	0.44	0.44	64.0	0.50
USB024			1 1/2	10.8	40.5	0.38	56.7	0.53	0.53	64.8	0.60
USB025			1 3/4	9.6	42.0	0.44	58.8	0.61	0.61	67.2	0.70
USB026			2	8.8	44.0	0.50	61.6	0.70	0.70	70.4	0.80
USB027			2 1/2	6.0	37.5	0.63	52.5	0.88	0.88	60.0	1.00
USB028			3	5.6	42.0	0.75	58.8	1.05	1.05	67.2	1.20
USB029			3 1/2	4.8	42.0	0.88	58.8	1.23	1.23	67.2	1.40
USB030			4	4.4	44.0	1.00	61.6	1.40	1.40	70.4	1.60
USB031			12	1.6	48.0	3.00	67.2	4.20	4.20	76.8	4.80
USB032	3/4	3/8	1	31.2	78.0	0.25	109.2	0.35	0.35	124.8	0.40
USB033			1 1/4	25.6	80.0	0.31	112.0	0.44	0.44	128.0	0.50
USB034			1 1/2	20.0	75.0	0.38	105.0	0.53	0.53	120.0	0.60
USB035			1 3/4	17.6	77.0	0.44	107.8	0.61	0.61	123.2	0.70
USB036			2	14.4	72.0	0.50	100.8	0.70	0.70	115.2	0.80
USB037			2 1/2	12.0	75.0	0.63	105.0	0.88	0.88	120.0	1.00
USB038			3	9.6	72.0	0.75	100.8	1.05	1.05	115.2	1.20
USB039			3 1/2	8.0	70.0	0.88	98.0	1.23	1.23	112.0	1.40
USB040			4	7.2	72.0	1.00	100.8	1.40	1.40	115.2	1.60
USB041			4 1/2	6.4	72.0	1.13	100.8	1.58	1.58	115.2	1.80
USB042			5	6.0	75.0	1.25	105.0	1.75	1.75	120.0	2.00
USB043			5 1/2	5.5	75.6	1.38	105.9	1.93	1.93	121.0	2.20
USB044			6	5.0	75.0	1.50	105.0	2.10	2.10	120.0	2.40
USB045			6 1/2	4.5	73.1	1.63	102.4	2.28	2.28	117.0	2.60
USB046			7 1/2	3.8	71.3	1.88	99.8	2.63	2.63	114.0	3.00
USB047			12	2.4	72.0	3.00	100.8	4.20	4.20	115.2	4.80
USB048	1	1/2	1	55.0	137.5	0.25	192.5	0.35	0.35	220.0	0.40
USB049			1 1/4	45.0	140.6	0.31	196.9	0.44	0.44	225.0	0.50
USB050			1 1/2	35.0	131.3	0.38	183.8	0.53	0.53	210.0	0.60
USB051			1 3/4	30.0	131.3	0.44	183.8	0.61	0.61	210.0	0.70
USB052			2	26.0	130.0	0.50	182.0	0.70	0.70	208.0	0.80

US美标(英制)

中负荷/ Medium Load

蓝色/Blue



型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的35% 35% of free length		自由长L的40% 40% of free length		自由长L的50% 50% of free length
					负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USB053	1	1/2	2 1/2	20.0	125.0	0.63	175.0	0.88	200.0	1.00	1.25
USB054			3	16.5	123.8	0.75	173.3	1.05	198.0	1.20	1.50
USB055			3 1/2	15.0	131.3	0.88	183.8	1.23	210.0	1.40	1.75
USB056			4	12.0	120.0	1.00	168.0	1.40	192.0	1.60	2.00
USB057			4 1/2	10.4	117.0	1.13	163.8	1.58	187.2	1.80	2.25
USB058			5	9.6	120.0	1.25	168.0	1.75	192.0	2.00	2.50
USB059			5 1/2	8.8	121.0	1.38	169.4	1.93	193.6	2.20	2.75
USB060			6	8.0	120.0	1.50	168.0	2.10	192.0	2.40	3.00
USB061			7	7.2	126.0	1.75	176.4	2.45	201.6	2.80	3.50
USB062			8	6.0	120.0	2.00	168.0	2.80	192.0	3.20	4.00
USB063			12	4.0	120.0	3.00	168.0	4.20	192.0	4.80	6.00
USB064	1 1/4	5/8	1 1/2	49.6	186.0	0.38	260.4	0.53	297.6	0.60	0.75
USB065			1 3/4	42.4	185.5	0.44	259.7	0.61	296.8	0.70	0.88
USB066			2	35.2	176.0	0.50	246.4	0.70	281.6	0.80	1.00
USB067			2 1/2	28.8	180.0	0.63	252.0	0.88	288.0	1.00	1.25
USB068			3	24.0	180.0	0.75	252.0	1.05	288.0	1.20	1.50
USB069			3 1/2	20.0	175.0	0.88	245.0	1.23	280.0	1.40	1.75
USB070			4	17.6	176.0	1.00	246.0	1.40	281.6	1.60	2.00
USB071			4 1/2	16.0	180.0	1.13	252.0	1.58	288.0	1.80	2.25
USB072			5	13.6	170.0	1.25	238.0	1.75	272.0	2.00	2.50
USB073			5 1/2	12.8	176.0	1.38	246.4	1.93	281.6	2.20	2.75
USB074			6	12.0	180.0	1.50	252.0	2.10	288.0	2.40	3.00
USB075			7	10.4	182.0	1.75	254.8	2.45	291.2	2.80	3.50
USB076			8	8.8	176.0	2.00	246.4	2.80	281.6	3.20	4.00
USB077			10	7.2	180.0	2.50	252.0	3.50	288.0	4.00	5.00
USB078			12	6.0	180.0	3.00	252.0	4.20	288.0	4.80	6.00
USB079	1 1/2	3/4	2	53.0	265.0	0.50	371.0	0.70	424.0	0.80	1.00
USB080			2 1/2	45.0	281.3	0.63	393.8	0.88	450.0	1.00	1.25
USB081			3	36.0	270.0	0.75	378.0	1.05	432.0	1.20	1.50
USB082			3 1/2	30.0	262.5	0.88	367.0	1.23	420.0	1.40	1.75
USB083			4	27.0	270.0	1.00	378.0	1.40	432.0	1.60	2.00
USB084			4 1/2	23.0	258.8	1.13	362.3	1.58	414.0	1.80	2.25
USB085			5	21.0	262.5	1.25	367.5	1.75	420.0	2.00	2.50
USB086			5 1/2	18.5	254.4	1.38	356.1	1.93	407.0	2.20	2.75
USB087			6	17.0	255.0	1.50	357.0	2.10	408.0	2.40	3.00
USB088			7	14.5	253.8	1.75	355.3	2.45	406.0	2.80	3.50
USB089			8	12.8	256.0	2.00	358.4	2.80	409.6	3.20	4.00
USB090			10	10.0	250.0	2.50	350.0	3.50	400.0	4.00	5.00
USB091	12	8.0	240.0	3.00	336.0	4.20	384.0	4.80	6.00		
USB092	2	1	2 1/2	100.0	625.0	0.63	875.0	0.88	1000.0	1.00	1.25
USB093			3	83.0	622.5	0.75	871.5	1.05	996.0	1.20	1.50
USB094			3 1/2	64.8	567.0	0.88	793.8	1.23	907.2	1.40	1.75
USB095			4	60.0	600.0	1.00	840.0	1.40	960.0	1.60	2.00
USB096			4 1/2	53.0	596.3	1.13	834.0	1.58	954.0	1.80	2.25
USB097			5	47.0	587.5	1.25	822.5	1.75	940.0	2.00	2.50
USB098			5 1/2	39.2	539.0	1.38	754.6	1.93	862.4	2.20	2.75
USB099			6	39.0	585.0	1.50	819.0	2.10	936.0	2.40	3.00
USB100			7	31.2	546.0	1.75	764.4	2.45	873.6	2.80	3.50
USB101			8	28.5	570.0	2.00	798.0	2.80	912.0	3.20	4.00
USB102			10	20.8	520.0	2.50	728.0	3.50	832.0	4.00	5.00
USB103			12	17.5	525.0	3.00	735.0	4.20	840.0	4.80	6.00

中负荷



MEDIUM LOAD

US美标(英制) 中等重负荷/ Medium Heavy Load 红色/Red



型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的20%		自由长L的25%		自由长L的30%		自由长L的37%
					20% of free length	25% of free length	30% of free length	37% of free length	20% of free length	25% of free length	30% of free length
	A	B	C		负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USM001	3/8	3/16	1	9.0	18.0	0.20	22.5	0.25	27.0	0.30	0.37
USM002			1 1/4	7.3	18.3	0.25	22.8	0.31	27.4	0.38	0.46
USM003			1 1/2	6.7	20.1	0.30	25.1	0.38	30.2	0.45	0.56
USM004			1 3/4	5.8	20.3	0.35	25.4	0.44	30.5	0.53	0.65
USM005			2	5.0	20.0	0.40	25.0	0.50	30.0	0.60	0.74
USM006			2 1/2	4.2	21.0	0.50	26.3	0.63	31.5	0.75	0.93
USM007			3	3.0	18.0	0.60	22.5	0.75	27.0	0.90	1.11
USM008			12	0.9	21.6	2.40	27.0	3.00	32.4	3.60	4.44
USM009	1/2	9/32	1	16.8	33.6	0.20	42.0	0.25	50.4	0.30	0.37
USM010			1 1/4	13.0	32.5	0.25	40.6	0.31	48.8	0.38	0.46
USM011			1 1/2	9.5	28.5	0.30	35.6	0.38	42.8	0.45	0.56
USM012			1 3/4	8.5	29.8	0.35	37.2	0.44	44.6	0.53	0.65
USM013			2	7.5	30.0	0.40	37.5	0.50	45.0	0.60	0.74
USM014			2 1/2	6.0	30.0	0.50	37.5	0.63	45.0	0.75	0.93
USM015			3	5.7	34.2	0.60	42.8	0.75	51.3	0.90	1.11
USM016			3 1/2	4.0	28.0	0.70	35.0	0.88	42.0	1.05	1.30
USM017	5/8	11/32	12	1.2	28.8	2.40	36.0	3.00	43.2	3.60	4.44
USM018			1	30.0	60.0	0.20	75.0	0.25	90.0	0.30	0.37
USM019			1 1/4	21.5	53.8	0.25	67.2	0.31	80.6	0.38	0.46
USM020			1 1/2	19.0	57.0	0.30	71.3	0.38	85.5	0.45	0.56
USM021			1 3/4	16.8	58.8	0.35	73.5	0.44	88.2	0.53	0.65
USM022			2	14.8	59.2	0.40	74.0	0.50	88.8	0.60	0.74
USM023			2 1/2	11.5	57.5	0.50	71.9	0.63	86.3	0.75	0.93
USM024			3	10.0	60.0	0.60	75.0	0.75	90.0	0.90	1.11
USM025	3/4	3/8	3 1/2	8.5	59.5	0.70	74.4	0.88	89.3	1.05	1.30
USM026			4	7.6	60.8	0.80	76.0	1.00	91.2	1.20	1.48
USM027			12	2.7	64.8	2.40	81.0	3.00	97.2	3.60	4.44
USM028			1	50.0	100.0	0.20	125.0	0.25	150.0	0.30	0.37
USM029			1 1/4	38.0	95.0	0.25	118.8	0.31	142.5	0.38	0.46
USM030			1 1/2	32.0	96.0	0.30	120.0	0.38	144.0	0.45	0.56
USM031			1 3/4	28.8	100.8	0.35	126.0	0.44	151.2	0.53	0.65
USM032			2	24.8	99.2	0.40	124.0	0.50	148.8	0.60	0.74
USM033	1	1/2	2 1/2	19.2	96.0	0.50	120.0	0.63	144.0	0.75	0.93
USM034			3	14.4	86.4	0.60	108.0	0.75	129.6	0.90	1.11
USM035			3 1/2	12.8	89.6	0.70	112.0	0.88	134.4	1.05	1.30
USM036			4	12.0	96.0	0.80	120.0	1.00	144.0	1.20	1.48
USM037			4 1/2	11.2	100.8	0.90	126.0	1.13	151.2	1.35	1.67
USM038			5	9.0	90.0	1.00	112.5	1.25	135.0	1.50	1.85
USM039			5 1/2	8.0	88.0	1.10	110.0	1.38	132.0	1.65	2.04
USM040			6	7.5	90.0	1.20	112.5	1.50	135.0	1.80	2.22
USM041	1	1/2	12	3.6	86.4	2.40	108.0	3.00	129.6	3.60	4.44
USM042			1	76.0	152.0	0.20	190.0	0.25	228.0	0.30	0.37
USM043			1 1/4	62.4	156.0	0.25	195.0	0.31	234.0	0.38	0.46
USM044			1 1/2	49.6	148.8	0.30	186.0	0.38	223.2	0.45	0.56
USM045			1 3/4	44.0	154.0	0.35	192.5	0.44	231.0	0.53	0.65
USM046			2	40.0	160.0	0.40	200.0	0.50	240.0	0.60	0.74
USM047			2 1/2	31.0	155.0	0.50	193.8	0.63	232.5	0.75	0.93
USM048			3	25.0	150.0	0.60	187.5	0.75	225.0	0.90	1.11
USM049			3 1/2	21.6	151.2	0.70	189.0	0.88	226.8	1.05	1.30

中等重负荷



MEDIUM HEAVY LOAD

US
美
标

US美标(英制) 中等重负荷/ Medium Heavy Load 红色/Red



型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的20% 20% of free length		自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的37% 37% of free length
					负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USM050	1	1/2	4	18.4	147.2	0.80	184.0	1.00	220.8	1.20	1.48
USM051			4 1/2	17.0	153.0	0.90	191.3	1.13	229.5	1.35	1.67
USM052			5	14.4	144.0	1.00	180.0	1.25	216.0	1.50	1.85
USM053			5 1/2	12.8	140.8	1.10	176.0	1.38	211.2	1.65	2.04
USM054			6	12.0	144.0	1.20	180.0	1.50	216.0	1.80	2.22
USM055			7	10.0	140.0	1.40	175.0	1.75	210.0	2.10	2.59
USM056			8	8.8	140.8	1.60	176.0	2.00	211.2	2.40	2.96
USM057			12	6.2	148.8	2.40	186.0	3.00	223.2	3.60	4.44
USM058	1 1/4	5/8	1 1/2	114.4	343.2	0.30	429.0	0.38	514.8	0.45	0.56
USM059			1 3/4	100.8	352.8	0.35	441.0	0.44	529.2	0.53	0.65
USM060			2	86.4	345.6	0.40	432.0	0.50	518.4	0.60	0.74
USM061			2 1/2	62.4	312.0	0.50	390.0	0.63	468.0	0.75	0.93
USM062			3	51.2	307.2	0.60	384.0	0.75	460.8	0.90	1.11
USM063			3 1/2	44.0	308.0	0.70	385.0	0.88	462.0	1.05	1.30
USM064			4	36.8	294.4	0.80	368.0	1.00	441.6	1.20	1.48
USM065			4 1/2	32.0	288.0	0.90	360.0	1.13	432.0	1.35	1.67
USM066			5	29.0	290.0	1.00	362.5	1.25	435.0	1.50	1.85
USM067			5 1/2	26.4	290.4	1.10	363.0	1.38	435.6	1.65	2.04
USM068			6	25.0	300.0	1.20	375.0	1.50	450.0	1.80	2.22
USM069			7	20.0	280.0	1.40	350.0	1.75	420.0	2.10	2.59
USM070			8	18.4	294.4	1.60	368.0	2.00	441.6	2.40	2.96
USM071			10	14.5	290.0	2.00	362.5	2.50	435.0	3.00	3.70
USM072			12	12.4	297.6	2.40	372.0	3.00	446.4	3.60	4.44
USM073	1 1/2	3/4	2	108.0	432.0	0.40	540.0	0.50	648.0	0.60	0.74
USM074			2 1/2	85.6	428.0	0.50	535.0	0.63	642.0	0.75	0.93
USM075			3	62.4	374.4	0.60	468.0	0.75	561.6	0.90	1.11
USM076			3 1/2	52.8	369.6	0.70	462.0	0.88	554.4	1.05	1.30
USM077			4	48.0	384.0	0.80	480.0	1.00	576.0	1.20	1.48
USM078			4 1/2	43.2	388.0	0.90	486.0	1.13	583.2	1.35	1.67
USM079			5	36.8	368.0	1.00	460.0	1.25	552.0	1.50	1.85
USM080			5 1/2	34.4	378.4	1.10	473.0	1.38	567.6	1.65	2.04
USM081			6	30.4	364.8	1.20	456.0	1.50	547.2	1.80	2.22
USM082			7	26.4	369.6	1.40	462.0	1.75	554.4	2.10	2.59
USM083			8	22.0	352.0	1.60	440.0	2.00	528.0	2.40	2.96
USM084			10	17.6	352.0	2.00	440.0	2.50	528.0	3.00	3.70
USM085			12	14.4	345.6	2.40	432.0	3.00	518.4	3.60	4.44
USM086	2	1	2 1/2	118.4	592.0	0.50	740.0	0.63	888.0	0.75	0.93
USM087			3	96.0	576.0	0.60	720.0	0.75	864.0	0.90	1.11
USM088			3 1/2	80.0	560.0	0.70	700.0	0.88	840.0	1.05	1.30
USM089			4	66.4	531.2	0.80	664.0	1.00	796.8	1.20	1.48
USM090			4 1/2	60.0	540.0	0.90	675.0	1.13	810.0	1.35	1.67
USM091			5	56.0	560.0	1.00	700.0	1.25	840.0	1.50	1.85
USM092			5 1/2	50.4	554.4	1.10	693.0	1.38	831.6	1.65	2.04
USM093			6	47.2	566.4	1.20	708.0	1.50	849.6	1.80	2.22
USM094			7	40.0	560.0	1.40	700.0	1.75	840.0	2.10	2.59
USM095			8	35.2	563.2	1.60	704.0	2.00	844.8	2.40	2.96
USM096			10	26.0	520.0	2.00	650.0	2.50	780.0	3.00	3.70
USM097			12	22.4	537.6	2.40	672.0	3.00	806.4	3.60	4.44

中等重负荷



MEDIUM HEAVY LOAD

US美标(英制)

重负荷/ Heavy Load 金色/Gold



重负荷



HEAVY LOAD

US
美
标

型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)					
					自由长L的15%		自由长L的20%		自由长L的25%	
					15% of free length	20% of free length	25% of free length	30% of free length	15% of free length	20% of free length
	A	B	C		负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)
USG001	3/8	3/16	1	11.0	16.5	0.15	22.0	0.20	27.5	0.25
USG002			1 1/4	9.8	18.4	0.19	24.5	0.25	30.6	0.31
USG003			1 1/2	8.0	18.0	0.23	24.0	0.30	30.0	0.38
USG004			1 3/4	8.4	22.1	0.26	29.4	0.35	36.8	0.44
USG005			2	7.2	21.6	0.30	28.8	0.40	36.0	0.50
USG006			2 1/2	5.5	20.6	0.38	27.5	0.50	34.4	0.63
USG007			3	4.2	18.9	0.45	25.2	0.60	31.5	0.75
USG008			12	1.2	21.6	1.80	28.8	2.40	36.0	3.00
USG009	1/2	9/32	1	23.6	35.4	0.15	47.2	0.20	59.0	0.25
USG010			1 1/4	18.6	34.9	0.19	46.5	0.25	58.1	0.31
USG011			1 1/2	15.5	34.9	0.23	46.5	0.30	58.1	0.38
USG012			1 3/4	13.8	36.2	0.26	48.3	0.35	60.4	0.44
USG013			2	11.0	33.0	0.30	44.0	0.40	55.0	0.50
USG014			2 1/2	8.4	31.5	0.38	42.0	0.50	52.5	0.63
USG015			3	7.4	33.3	0.45	44.4	0.60	55.5	0.75
USG016			3 1/2	6.0	31.5	0.53	42.0	0.70	52.5	0.88
USG017			12	1.6	28.8	1.80	38.4	2.40	48.0	3.00
USG018	5/8	11/32	1	42.4	63.6	0.15	84.8	0.20	106.0	0.25
USG019			1 1/4	29.6	55.5	0.19	74.0	0.25	92.5	0.31
USG020			1 1/2	27.2	61.2	0.23	81.6	0.30	102.0	0.38
USG021			1 3/4	24.0	63.0	0.26	84.0	0.35	105.0	0.44
USG022			2	20.8	62.4	0.30	83.2	0.40	104.0	0.50
USG023			2 1/2	17.0	63.8	0.38	85.0	0.50	106.3	0.63
USG024			3	14.4	64.8	0.45	86.4	0.60	108.0	0.75
USG025			3 1/2	12.2	64.1	0.53	85.4	0.70	106.8	0.88
USG026			4	10.8	64.8	0.60	86.4	0.80	108.0	1.00
USG027			12	3.0	54.0	1.80	72.0	2.40	90.0	3.00
USG028	3/4	3/8	1	108.0	162.0	0.15	216.0	0.20	270.0	0.25
USG029			1 1/4	88.0	165.0	0.19	220.0	0.25	275.0	0.31
USG030			1 1/2	65.6	147.6	0.23	196.8	0.30	246.0	0.38
USG031			1 3/4	60.0	157.5	0.26	210.0	0.35	262.5	0.44
USG032			2	49.6	148.8	0.30	198.4	0.40	248.0	0.50
USG033			2 1/2	40.0	150.0	0.38	200.0	0.50	250.0	0.63
USG034			3	34.0	153.0	0.45	204.0	0.60	255.0	0.75
USG035			3 1/2	28.0	147.0	0.53	196.0	0.70	245.0	0.88
USG036			4	25.0	150.0	0.60	200.0	0.80	250.0	1.00
USG037			4 1/2	22.0	148.5	0.68	198.0	0.90	247.5	1.13
USG038			5	19.5	146.3	0.75	195.0	1.00	243.8	1.25
USG039			5 1/2	17.0	140.3	0.83	187.0	1.10	233.8	1.38
USG040			6	16.0	144.0	0.90	192.0	1.20	240.0	1.50
USG041			12	8.0	144.0	1.80	192.0	2.40	240.0	3.00
USG042	1	1/2	1	208.0	312.0	0.15	416.0	0.20	520.0	0.25
USG043			1 1/4	171.2	321.0	0.19	428.0	0.25	535.0	0.31
USG044			1 1/2	118.4	266.4	0.23	355.2	0.30	444.0	0.38
USG045			1 3/4	104.0	273.0	0.26	364.0	0.35	455.0	0.44
USG046			2	90.0	270.0	0.30	360.0	0.40	450.0	0.50
USG047			2 1/2	68.0	255.0	0.38	340.0	0.50	425.0	0.63
USG048			3	54.4	244.8	0.45	326.4	0.60	408.0	0.75
USG049			3 1/2	45.6	239.4	0.53	319.2	0.70	399.0	0.88

US美标(英制) 系列参数表

US(Inch)Product series specification

US美标(英制)

重负荷/ Heavy Load 金色/Gold



型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的15%		自由长L的20%		自由长L的25%		自由长L的30%
					15% of free length	15% of free length	20% of free length	20% of free length	25% of free length	25% of free length	30% of free length
	A	B	C		负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USG050	1	1/2	4	40.0	240.0	0.60	320.0	0.80	400.0	1.00	1.20
USG051			4 1/2	35.2	237.6	0.68	316.8	0.90	396.0	1.13	1.35
USG052			5	31.2	234.0	0.75	312.0	1.00	390.0	1.25	1.50
USG053			5 1/2	28.8	237.6	0.83	316.8	1.10	396.0	1.38	1.65
USG054			6	25.6	230.4	0.90	307.2	1.20	384.0	1.50	1.80
USG055			7	22.4	235.2	1.05	313.6	1.40	392.0	1.75	2.10
USG056			8	19.2	230.4	1.20	307.2	1.60	384.0	2.00	2.40
USG057			12	12.0	216.0	1.80	288.0	2.40	360.0	3.00	3.60
USG058	1 1/4	5/8	1 1/2	212.0	477.0	0.23	636.0	0.30	795.0	0.38	0.45
USG059			1 3/4	181.6	476.7	0.26	635.6	0.35	794.5	0.44	0.53
USG060			2	149.6	448.8	0.30	598.4	0.40	748.0	0.50	0.60
USG061			2 1/2	117.6	441.0	0.38	588.0	0.50	735.0	0.63	0.75
USG062			3	95.2	428.4	0.45	571.2	0.60	714.0	0.75	0.90
USG063			3 1/2	75.2	394.8	0.53	526.4	0.70	658.0	0.88	1.05
USG064			4	66.4	398.4	0.60	531.2	0.80	664.0	1.00	1.20
USG065			4 1/2	58.4	394.2	0.68	525.6	0.90	657.0	1.13	1.35
USG066			5	53.0	397.5	0.75	530.0	1.00	662.5	1.25	1.50
USG067			5 1/2	47.2	389.4	0.83	519.2	1.10	649.0	1.38	1.65
USG068			6	42.4	381.6	0.90	508.8	1.20	636.0	1.50	1.80
USG069			7	36.8	386.4	1.05	515.2	1.40	644.0	1.75	2.10
USG070			8	32.8	393.6	1.20	524.8	1.60	656.0	2.00	2.40
USG071			10	25.6	384.0	1.50	512.0	2.00	640.0	2.50	3.00
USG072			12	20.8	374.4	1.80	499.2	2.40	624.0	3.00	3.60
USG073	1 1/2	3/4	2	190.4	571.2	0.30	761.6	0.40	952.0	0.50	0.60
USG074			2 1/2	155.0	581.3	0.38	775.0	0.50	968.8	0.63	0.75
USG075			3	130.0	585.0	0.45	780.0	0.60	975.0	0.75	0.90
USG076			3 1/2	106.4	558.6	0.53	744.8	0.70	931.0	0.88	1.05
USG077			4	91.2	547.2	0.60	729.6	0.80	912.0	1.00	1.20
USG078			4 1/2	78.4	529.2	0.68	705.6	0.90	882.0	1.13	1.35
USG079			5	71.2	534.0	0.75	712.0	1.00	890.0	1.25	1.50
USG080			5 1/2	64.0	528.0	0.83	704.0	1.10	880.0	1.38	1.65
USG081			6	58.4	525.6	0.90	700.8	1.20	876.0	1.50	1.80
USG082			7	49.6	520.8	1.05	694.4	1.40	868.0	1.75	2.10
USG083			8	43.2	518.4	1.20	691.2	1.60	864.0	2.00	2.40
USG084			10	34.4	516.0	1.50	688.0	2.00	860.0	2.50	3.00
USG085			12	28.8	518.4	1.80	691.2	2.40	864.0	3.00	3.60
USG086	2	1	2 1/2	260.0	975.0	0.38	1300.0	0.50	1625.0	0.63	0.75
USG087			3	200.0	900.0	0.45	1200.0	0.60	1500.0	0.75	0.90
USG088			3 1/2	170.0	892.5	0.53	1190.0	0.70	1487.5	0.88	1.05
USG089			4	150.0	900.0	0.60	1200.0	0.80	1500.0	1.00	1.20
USG090			4 1/2	120.0	810.0	0.68	1080.0	0.90	1350.0	1.13	1.35
USG091			5	110.0	825.0	0.75	1100.0	1.00	1375.0	1.25	1.50
USG092			5 1/2	100.0	825.0	0.83	1100.0	1.10	1375.0	1.38	1.65
USG093			6	94.0	846.0	0.90	1128.0	1.20	1410.0	1.50	1.80
USG094			7	82.0	861.0	1.05	1148.0	1.40	1435.0	1.75	2.10
USG095			8	73.0	876.0	1.20	1168.0	1.60	1460.0	2.00	2.40
USG096			10	55.0	825.0	1.50	1100.0	2.00	1375.0	2.50	3.00
USG097			12	42.0	756.0	1.80	1008.0	2.40	1260.0	3.00	3.60

重负荷



HEAVY LOAD



US美标(英制)

超重负荷/ Extra Heavy Load 绿色/Green

超重负荷
EXTRA HEAVY LOAD



US
美
标

型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25%		自由长L的35%		自由长L的40%		自由长L的50%
					25% of free length		35% of free length		40% of free length		50% of free length
	A	B	C		负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USH001	3/8	3/16	1	22.0	33.0	0.15	37.4	0.17	44.0	0.20	0.25
USH002			1 1/4	16.0	30.0	0.19	34.0	0.21	40.0	0.25	0.31
USH003			1 1/2	12.5	28.1	0.23	31.9	0.26	37.5	0.30	0.38
USH004			1 3/4	11.5	30.2	0.26	34.2	0.30	40.3	0.35	0.44
USH005			2	9.0	27.0	0.30	30.6	0.34	36.0	0.40	0.50
USH006			2 1/2	7.0	26.3	0.38	29.8	0.43	35.0	0.50	0.63
USH007			3	6.5	29.3	0.45	33.2	0.51	39.0	0.60	0.75
USH008	1/2	9/32	12	1.5	27.0	1.80	30.6	2.04	36.0	2.40	3.00
USH009			1	32.0	48.0	0.15	54.4	0.17	64.0	0.20	0.25
USH010			1 1/4	24.0	45.0	0.19	51.0	0.21	60.0	0.25	0.31
USH011			1 1/2	20.0	45.0	0.23	51.0	0.26	60.0	0.30	0.38
USH012			1 3/4	17.0	44.6	0.26	50.6	0.30	59.5	0.35	0.44
USH013			2	14.0	42.0	0.30	47.6	0.34	56.0	0.40	0.50
USH014			2 1/2	11.5	43.1	0.38	48.9	0.43	57.5	0.50	0.63
USH015			3	9.0	40.5	0.45	45.9	0.51	54.0	0.60	0.75
USH016			3 1/2	8.0	42.0	0.53	47.6	0.60	56.0	0.70	0.88
USH017			12	2.5	45.0	1.80	51.0	2.04	60.0	2.40	3.00
USH018	5/8	11/32	1	63.0	94.5	0.15	107.1	0.17	126.0	0.20	0.25
USH019			1 1/4	47.0	88.1	0.19	99.9	0.21	117.5	0.25	0.31
USH020			1 1/2	38.0	85.5	0.23	96.9	0.26	114.0	0.30	0.38
USH021			1 3/4	32.0	84.0	0.26	95.2	0.30	112.0	0.35	0.44
USH022			2	29.0	87.0	0.30	98.6	0.34	116.0	0.40	0.50
USH023			2 1/2	22.0	82.5	0.38	93.5	0.43	110.0	0.50	0.63
USH024			3	19.0	85.5	0.45	96.9	0.51	114.0	0.60	0.75
USH025			3 1/2	16.0	84.0	0.53	95.2	0.60	112.0	0.70	0.88
USH026			4	13.5	81.0	0.60	91.8	0.68	108.0	0.80	1.00
USH027			12	4.5	81.0	1.80	91.8	2.04	108.0	2.40	3.00
USH028	3/4	3/8	1	140.0	210.0	0.15	238.0	0.17	280.0	0.20	0.25
USH029			1 1/4	110.0	206.3	0.19	233.8	0.21	275.0	0.25	0.31
USH030			1 1/2	89.0	200.3	0.23	227.0	0.26	267.0	0.30	0.38
USH031			1 3/4	75.0	196.9	0.26	223.1	0.30	262.5	0.35	0.44
USH032			2	68.0	204.0	0.30	231.2	0.34	272.0	0.40	0.50
USH033			2 1/2	50.0	187.5	0.38	212.5	0.43	250.0	0.50	0.63
USH034			3	40.5	182.3	0.45	206.6	0.51	243.0	0.60	0.75
USH035			3 1/2	34.5	181.1	0.53	205.3	0.60	241.5	0.70	0.88
USH036			4	30.0	180.0	0.60	204.0	0.68	240.0	0.80	1.00
USH037			4 1/2	26.5	178.9	0.68	202.7	0.77	238.5	0.90	1.13
USH038			5	23.5	176.3	0.75	199.8	0.85	235.0	1.00	1.25
USH039			5 1/2	21.5	177.4	0.83	201.0	0.94	236.5	1.10	1.38
USH040			6	19.5	175.5	0.90	198.9	1.02	234.0	1.20	1.50
USH041			12	9.5	171.0	1.80	193.8	2.04	228.0	2.40	3.00



US美标(英制)

超重负荷/ Extra Heavy Load 绿色/Green

型号 Part Number	外径 Hole Dia (in)	内径 Rod Dia (in)	自由长度 Free Length (in)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (lb)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的35% 35% of free length		自由长L的40% 40% of free length		自由长L的50% 50% of free length
					负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	负荷 Load (ld)	长度变位值 Deflection (in)	长度变位值 Deflection (in)
USH042			1 1/2	160.0	360.0	0.23	408.0	0.26	480.0	0.30	0.38
USH043			2	116.0	348.0	0.30	394.4	0.34	464.0	0.40	0.50
USH044			2 1/2	89.6	336.0	0.38	380.8	0.43	448.0	0.50	0.63
USH045			3	73.6	331.2	0.45	375.4	0.51	441.6	0.60	0.75
USH046			3 1/2	62.4	327.6	0.53	371.3	0.60	436.8	0.70	0.88
USH047			4	55.2	331.2	0.60	375.4	0.68	441.6	0.80	1.00
USH048			4 1/2	48.8	329.4	0.68	373.3	0.77	439.2	0.90	1.13
USH049			5	43.2	324.0	0.75	367.2	0.85	432.0	1.00	1.25
USH050			6	36.0	324.0	0.90	367.2	1.02	432.0	1.20	1.50
USH051			12	17.6	316.8	1.80	359.0	2.04	422.4	2.40	3.00
USH052			2	192.0	576.0	0.30	652.8	0.34	768.0	0.40	0.50
USH053			2 1/2	144.0	540.0	0.38	612.0	0.43	720.0	0.50	0.63
USH054			3	118.4	532.8	0.45	603.8	0.51	710.4	0.60	0.75
USH055			3 1/2	100.8	529.2	0.53	599.8	0.60	705.6	0.70	0.88
USH056			4	84.0	504.0	0.60	571.2	0.68	672.0	0.80	1.00
USH057			4 1/2	78.4	529.2	0.68	599.8	0.77	705.6	0.90	1.13
USH058			5	68.0	510.0	0.75	578.0	0.85	680.0	1.00	1.25
USH059			6	56.0	504.0	0.90	571.2	1.02	672.0	1.20	1.50
USH060			8	41.6	499.2	1.20	565.8	1.36	665.6	1.60	2.00
USH061			10	33.6	504.0	1.50	571.2	1.70	672.0	2.00	2.50
USH062			12	26.4	475.2	1.80	538.6	2.04	633.6	2.40	3.00
USH063			2	376.0	1128.0	0.30	1278.4	0.34	1504.0	0.40	0.50
USH064			2 1/2	294.4	1104.0	0.38	1251.2	0.43	1472.0	0.50	0.63
USH065			3	231.2	1040.4	0.45	1179.1	0.51	1387.2	0.60	0.75
USH066			3 1/2	196.0	1029.0	0.53	1166.2	0.60	1372.0	0.70	0.88
USH067			4	171.2	1027.2	0.60	1164.2	0.68	1369.6	0.80	1.00
USH068	1 1/2	3/4	4 1/2	148.0	999.0	0.68	1132.2	0.77	1332.0	0.90	1.13
USH069			5	136.0	1020.0	0.75	1156.0	0.85	1360.0	1.00	1.25
USH070			6	110.4	993.6	0.90	1126.1	1.02	1324.8	1.20	1.50
USH071			8	80.8	969.6	1.20	1098.9	1.36	1282.8	1.60	2.00
USH072			10	67.2	1008.0	1.50	1142.4	1.70	1344.0	2.00	2.50
USH073			12	54.4	979.2	1.80	1109.8	2.04	1305.6	2.40	3.00
USH074			2 1/2	381.6	1431.0	0.38	1621.8	0.43	1908.0	0.50	0.63
USH075			3	312.0	1404.0	0.45	1591.2	0.51	1872.0	0.60	0.75
USH076			3 1/2	254.4	1335.6	0.53	1513.7	0.60	1780.8	0.70	0.88
USH077			4	220.0	1320.0	0.60	1496.0	0.68	1760.0	0.80	1.00
USH078	2	1	4 1/2	188.8	1274.4	0.68	1444.3	0.77	1699.2	0.90	1.13
USH079			5	172.8	1296.0	0.75	1468.8	0.85	1728.0	1.00	1.25
USH080			6	141.6	1274.4	0.90	1444.3	1.02	1699.2	1.20	1.50
USH081			8	100.0	1200.0	1.20	1360.0	1.36	1600.0	1.60	2.00
USH082			10	84.0	1260.0	1.50	1428.0	1.70	1680.0	2.00	2.50
USH083			12	71.2	1281.6	1.80	1452.5	2.04	1708.8	2.40	3.00

超重负荷



EXTRA HEAVY LOAD

超重负荷
EXTRA
HEAVY
LOAD

轻负荷
LIGHT
LOAD

中负荷
MEDIUM
LOAD

重负荷
HEAVY
LOAD



ISO
国际
标准

ISO国际标准

轻负荷/Light Load

绿色/Green



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISL 10*25	10.0	5.0	25	10.0	62.5	6.3	75.0	7.5	87.5	8.8	10.3
ISL 10*32			32	8.5	68.0	8.0	81.6	9.6	95.2	11.2	13.1
ISL 10*38			38	6.8	64.6	9.5	77.5	11.4	90.4	13.3	15.6
ISL 10*44			44	6.0	66.0	11.0	79.2	13.2	92.4	15.4	18.0
ISL 10*51			51	5.0	63.8	12.8	76.5	15.3	89.3	17.9	20.9
ISL 10*64			64	4.3	68.8	16.0	82.6	19.2	96.3	22.4	26.0
ISL 10*76			76	3.2	60.8	19.0	73.0	22.8	85.1	26.6	31.2
ISL 10*305			305	1.1	83.9	76.3	100.7	91.5	117.4	106.8	125.0
ISL 12.5*25	12.5	6.3	25	17.9	111.9	6.3	134.3	7.5	156.6	8.8	10.3
ISL 12.5*32			32	16.4	131.2	8.0	157.4	9.6	183.7	11.2	13.1
ISL 12.5*38			38	13.6	129.2	9.5	155.0	11.4	180.9	13.3	15.6
ISL 12.5*44			44	12.1	133.1	11.0	159.7	13.2	186.3	15.4	18.0
ISL 12.5*51			51	11.4	145.4	12.8	174.4	15.3	203.5	17.9	20.9
ISL 12.5*64			64	9.3	148.8	16.0	178.6	19.2	208.3	22.4	26.0
ISL 12.5*76			76	7.1	134.9	19.0	161.9	22.8	188.9	26.6	31.2
ISL 12.5*89			89	5.4	120.2	22.3	144.2	26.7	168.2	31.2	36.5
ISL 12.5*305			305	1.4	106.8	76.3	128.1	91.5	149.5	106.8	125.0
ISL 16*25	16.0	8.0	25	23.4	146.3	6.3	175.5	7.5	204.8	8.8	10.3
ISL 16*32			32	22.9	183.2	8.0	219.8	9.6	256.5	11.2	13.1
ISL 16*38			38	19.3	183.4	9.5	220.0	11.4	256.7	13.3	15.6
ISL 16*44			44	17.1	188.1	11.0	225.7	13.2	263.3	15.4	18.0
ISL 16*51			51	15.7	200.2	12.8	240.2	15.3	280.2	17.9	20.9
ISL 16*64			64	10.7	171.2	16.0	205.4	19.2	239.7	22.4	26.0
ISL 16*76			76	10.0	190.0	19.0	228.0	22.8	266.0	26.6	31.2
ISL 16*89			89	8.6	191.4	22.3	229.6	26.7	267.9	31.2	36.5
ISL 16*102			102	7.8	198.9	25.5	238.7	30.6	278.5	35.7	41.8
ISL 16*305			305	2.5	190.6	76.3	228.8	91.5	266.9	106.8	125.0
ISL 20*25	20.0	10.0	25	55.8	348.8	6.3	418.5	7.5	488.3	8.8	10.2
ISL 20*32			32	45.0	360.0	8.0	432.0	9.6	504.0	11.2	12.5
ISL 20*38			38	33.3	316.4	9.5	379.6	11.4	442.9	13.3	15.0
ISL 20*44			44	30.0	330.0	11.0	396.0	13.2	462.0	15.4	18.0
ISL 20*51			51	24.5	312.4	12.8	374.9	15.3	437.3	17.9	20.0
ISL 20*64			64	20.0	320.0	16.0	384.0	19.2	448.0	22.4	25.0
ISL 20*76			76	16.0	304.0	19.0	364.8	22.8	425.6	26.6	30.0
ISL 20*89			89	14.0	311.5	22.3	373.8	26.7	436.1	31.2	35.0
ISL 20*102			102	12.0	306.0	25.5	367.2	30.6	428.4	35.7	41.0
ISL 20*115			115	10.9	313.4	28.8	376.1	34.5	438.7	40.3	46.0
ISL 20*127			127	9.5	301.6	31.8	362.0	38.1	422.3	44.5	51.0
ISL 20*139			139	8.4	291.9	34.8	350.3	41.7	408.7	48.7	56.0
ISL 20*152			152	7.5	285.0	38.0	342.0	45.6	399.0	53.2	61.0
ISL 20*305			305	4.0	305.0	76.3	366.0	91.5	427.0	106.8	122.0
ISL 25*25	25.0	12.5	25	100.0	625.0	6.3	750.0	7.5	875.0	8.8	10.2
ISL 25*32			32	80.3	642.4	8.0	770.9	9.6	899.4	11.2	12.5
ISL 25*38			38	62.0	589.0	9.5	706.8	11.4	824.6	13.3	15.0
ISL 25*44			44	52.9	581.9	11.0	698.3	13.2	814.7	15.4	18.0
ISL 25*51			51	44.0	561.0	12.8	673.2	15.3	785.4	17.9	20.0
ISL 25*64			64	35.2	563.2	16.0	675.8	19.2	788.5	22.4	25.0
ISL 25*76			76	28.0	532.0	19.0	638.4	22.8	744.8	26.6	30.0
ISL 25*89			89	24.0	534.0	22.3	640.8	26.7	747.6	31.2	35.0
ISL 25*102			102	21.1	538.1	25.5	645.7	30.6	753.3	35.7	41.0
ISL 25*115			115	18.7	537.6	28.8	645.2	34.5	752.7	40.3	46.0
ISL 25*127			127	16.7	530.2	31.8	636.3	38.1	742.3	44.5	51.0
ISL 25*139			139	15.3	531.7	34.8	638.0	41.7	744.3	48.7	56.0
ISL 25*152			152	14.0	532.0	38.0	638.4	45.6	744.8	53.2	61.0

轻负荷



LIGHT LOAD

ISO国际标准

轻负荷/Light Load

绿色/Green



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25%		自由长L的30%		自由长L的35%		最大值
					25% of free length		30% of free length		35% of free length		长度变位值 Deflection (mm)
	A	B	C		负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISL 25*178	25.0	12.5	178	12.5	556.3	44.5	667.5	53.4	778.8	62.3	53.4
ISL 25*203			203	10.4	527.8	50.8	633.4	60.9	738.9	71.1	60.9
ISL 25*305			305	7.0	533.8	76.3	640.5	91.5	747.3	106.8	91.5
ISL 32*38	32.0	16.0	38	94.0	893.0	9.5	1071.6	11.4	1250.2	13.3	11.4
ISL 32*44			44	79.5	874.5	11.0	1049.4	13.2	1224.3	15.4	13.2
ISL 32*51			51	67.0	854.3	12.8	1025.1	15.3	1196.0	17.9	15.3
ISL 32*64			64	53.0	848.0	16.0	1017.6	19.2	1187.2	22.4	19.2
ISL 32*76			76	44.0	836.0	19.0	1003.2	22.8	1170.4	26.6	22.8
ISL 32*89			89	37.2	827.7	22.3	993.2	26.7	1158.8	31.2	26.7
ISL 32*102			102	32.0	816.0	25.5	979.2	30.6	1142.4	35.7	30.6
ISL 32*115			115	29.0	833.8	28.8	1000.5	34.5	MS117.3	40.3	34.5
ISL 32*127			127	25.0	793.8	31.8	952.5	38.1	1111.3	44.5	38.1
ISL 32*139			139	23.0	799.3	34.8	959.1	41.7	1119.0	48.7	41.7
ISL 32*152			152	21.5	817.0	38.0	980.4	45.6	1143.8	53.2	45.6
ISL 32*178			178	18.2	809.9	44.5	971.9	53.4	1133.9	62.3	53.4
ISL 32*203			203	15.8	801.9	50.8	962.2	60.9	1122.6	71.1	60.9
ISL 32*254			254	12.5	793.8	63.5	952.5	76.2	1111.3	88.9	76.2
ISL 32*305			305	10.3	785.4	76.3	942.5	91.5	1099.5	106.8	91.5
ISL 40*51	40.0	20.0	51	92.0	1173.0	12.8	1407.6	15.3	1642.2	17.9	15.3
ISL 40*64			64	73.0	MS118.0	16.0	1401.6	19.2	1635.2	22.4	19.2
ISL 40*76			76	63.0	1197.0	19.0	1436.4	22.8	1675.8	26.6	22.8
ISL 40*89			89	51.0	1134.8	22.3	1361.7	26.7	1588.7	31.2	26.7
ISL 40*102			102	43.0	1096.5	25.5	1315.8	30.6	1535.1	35.7	30.6
ISL 40*115			115	39.6	1138.5	28.8	1366.2	34.5	1593.9	40.3	34.5
ISL 40*127			127	37.0	1174.8	31.8	1409.7	38.1	1644.7	44.5	38.1
ISL 40*139			139	32.0	1112.0	34.8	1334.4	41.7	1556.8	48.7	41.7
ISL 40*152			152	28.0	1064.0	38.0	1276.8	45.6	1489.6	53.2	45.6
ISL 40*178			178	25.2	1121.4	44.5	1345.7	53.4	1570.0	62.3	53.4
ISL 40*203			203	22.7	1152.0	50.8	1382.4	60.9	1612.8	71.1	60.9
ISL 40*254			254	17.0	1079.5	63.5	1295.4	76.2	1511.3	88.9	76.2
ISL 40*305			305	14.8	1128.5	76.3	1354.2	91.5	1579.9	106.8	91.5
ISL 50*64	50.0	25.0	64	156.0	2496.0	16.0	2995.2	19.2	3494.4	22.4	19.2
ISL 50*76			76	125.0	2375.0	19.0	2850.0	22.8	3325.0	26.6	22.8
ISL 50*89			89	109.0	2425.3	22.3	2910.3	26.7	3395.4	31.2	26.7
ISL 50*102			102	94.0	2379.0	25.5	2876.4	30.6	3355.8	35.7	30.6
ISL 50*115			115	81.0	2328.8	28.8	2794.5	34.5	3260.3	40.3	34.5
ISL 50*127			127	71.0	2254.3	31.8	2705.1	38.1	3156.0	44.5	38.1
ISL 50*139			139	66.5	2310.9	34.8	2773.1	41.7	3235.2	48.7	41.7
ISL 50*152			152	60.0	2280.0	38.0	2736.0	45.6	3192.0	53.2	45.6
ISL 50*178			178	52.0	2314.0	44.5	2776.8	53.4	3239.6	62.3	53.4
ISL 50*203			203	44.0	2233.0	50.8	2679.6	60.9	3126.2	71.1	60.9
ISL 50*254			254	35.0	2222.5	63.5	2667.0	76.2	3111.5	88.9	76.2
ISL 50*305			305	28.5	2173.1	76.3	2607.8	91.5	3042.4	106.8	91.5
ISL 63*76	63.0	38.0	76	189.0	3591.0	19.0	4309.2	22.8	5027.4	26.6	22.8
ISL 63*89			89	158.0	3515.5	22.3	4218.6	26.7	4921.7	31.2	26.7
ISL 63*102			102	131.0	3340.5	25.5	4008.6	30.6	4676.7	35.7	30.6
ISL 63*115			115	MS11.0	3335.0	28.8	4002.0	34.5	4669.0	40.3	34.5
ISL 63*127			127	103.0	3270.3	31.8	3924.3	38.1	4578.4	44.5	38.1
ISL 63*152			152	84.3	3203.4	38.0	3844.1	45.6	4484.8	53.2	45.6
ISL 63*178			178	71.5	3181.8	44.5	3818.1	53.4	4454.5	62.3	53.4
ISL 63*203			203	61.7	3131.3	50.8	3757.5	60.9	4383.8	71.1	60.9
ISL 63*254			254	47.0	2984.5	63.5	3581.4	76.2	4178.3	88.9	76.2
ISL 63*305			305	38.2	2912.8	76.3	3495.3	91.5	4077.9	106.8	91.5

轻负荷



LIGHT LOAD

ISO
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标准

ISO国际标准

中负荷/Medium Load

蓝色/Blue



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISM 10*25	10.0	5.0	25	16.0	80.0	5.0	100.0		120.0	7.5	9.5
ISM 10*32			32	13.0	83.2	6.4	104.0	8.0	124.8	9.6	12.2
ISM 10*38			38	11.9	90.4	7.6	113.1	9.5	135.7	11.4	14.4
ISM 10*44			44	10.3	90.6	8.8	113.3	11.0	136.0	13.2	16.7
ISM 10*51			51	8.9	90.8	10.2	113.5	12.8	136.2	15.3	19.4
ISM 10*64			64	7.5	96.0	12.8	120.0	16.0	144.0	19.2	24.3
ISM 10*76			76	5.3	80.6	15.2	100.7	19.0	120.8	22.8	28.9
ISM 10*305			305	1.6	97.6	61.0	122.0	76.3	146.4	91.5	116.0
ISM 12.5*25	12.5	6.3	25	30.0	150.0	5.0	187.5	6.3	225.0	7.5	9.5
ISM 12.5*32			32	24.8	158.7	6.4	198.4	8.0	238.1	9.6	12.2
ISM 12.5*38			38	21.4	162.6	7.6	203.3	9.5	244.0	11.4	14.4
ISM 12.5*44			44	18.5	162.8	8.8	203.5	11.0	244.2	13.2	16.7
ISM 12.5*51			51	15.5	158.1	10.2	197.6	12.8	237.2	15.3	19.4
ISM 12.5*64			64	12.1	154.9	12.8	193.6	16.0	232.3	19.2	24.3
ISM 12.5*76			76	10.2	155.0	15.2	193.8	19.0	232.6	22.8	28.9
ISM 12.5*89			89	8.4	149.5	17.8	186.9	22.3	224.3	26.7	33.8
ISM 12.5*305			305	2.1	128.1	61.0	160.1	76.3	192.2	91.5	116.0
ISM 16*25	16.0	8.0	25	49.4	247.0	5.0	308.8	6.3	370.5	7.5	9.5
ISM 16*32			32	37.1	237.4	6.4	296.8	8.0	356.2	9.6	12.2
ISM 16*38			38	33.9	257.6	7.6	322.1	9.5	386.5	11.4	14.4
ISM 16*44			44	30.0	264.0	8.8	330.0	11.0	396.0	13.2	16.7
ISM 16*51			51	26.4	269.3	10.2	336.6	12.8	403.9	15.3	19.4
ISM 16*64			64	20.5	262.4	12.8	328.0	16.0	393.6	19.2	24.3
ISM 16*76			76	17.8	270.6	15.2	338.2	19.0	405.8	22.8	28.9
ISM 16*89			89	15.2	270.6	17.8	338.2	22.3	405.8	26.7	33.8
ISM 16*102			102	13.5	275.4	20.4	344.3	25.5	413.1	30.6	38.8
ISM 16*305			305	4.8	292.8	61.0	366.0	76.3	439.2	91.5	116.0
ISM 20*25	20.0	10.0	25	98.0	490.0	5.0	612.5	6.3	735.0	7.5	9.4
ISM 20*32			32	72.6	464.6	6.4	580.8	8.0	697.0	9.6	12.0
ISM 20*38			38	56.0	425.6	7.6	532.0	9.5	638.4	11.4	14.0
ISM 20*44			44	47.5	418.0	8.8	522.5	11.0	627.0	13.2	16.5
ISM 20*51			51	41.7	425.3	10.2	531.7	12.8	638.0	15.3	19.0
ISM 20*64			64	32.3	413.4	12.8	516.8	16.0	620.2	19.2	24.0
ISM 20*76			76	25.1	381.5	15.2	476.9	19.0	572.3	22.8	28.0
ISM 20*89			89	22.0	391.6	17.8	489.5	22.3	587.4	26.7	33.0
ISM 20*102			102	19.8	403.9	20.4	504.9	25.5	605.9	30.6	38.0
ISM 20*115			115	18.1	416.3	23.0	520.4	28.8	624.5	34.5	43.0
ISM 20*127			127	16.6	421.6	25.4	527.1	31.8	632.5	38.1	48.0
ISM 20*139			139	15.1	419.8	27.8	524.7	34.8	629.7	41.7	52.0
ISM 20*152			152	13.2	401.3	30.4	501.6	38.0	601.9	45.6	57.0
ISM 20*305			305	6.1	372.1	61.0	465.1	76.3	558.2	91.5	114.0
ISM 25*25	25.0	12.5	25	147.0	735.0	5.0	918.8	6.3	1102.5	7.5	9.4
ISM 25*32			32	118.0	755.2	6.4	944.0	8.0	1132.8	9.6	12.0
ISM 25*38			38	93.0	706.8	7.6	883.5	9.5	1060.2	11.4	14.0
ISM 25*44			44	80.8	711.0	8.8	888.8	11.0	1066.6	13.2	16.5
ISM 25*51			51	68.6	699.7	10.2	874.7	12.8	1049.6	15.3	19.0
ISM 25*64			64	53.0	678.4	12.8	848.0	16.0	1017.6	19.2	24.0
ISM 25*76			76	43.2	656.6	15.2	820.8	19.0	985.0	22.8	28.0
ISM 25*89			89	38.2	680.0	17.8	850.0	22.3	1019.9	26.7	33.0
ISM 25*102			102	33.0	673.2	20.4	841.5	25.5	1009.8	30.6	38.0
ISM 25*115			115	28.0	644.0	23.0	805.0	28.8	966.0	34.5	43.0
ISM 25*127			127	25.9	657.9	25.4	822.3	31.8	986.8	38.1	48.0
ISM 25*139			139	23.2	645.0	27.8	806.2	34.8	967.4	41.7	52.0
ISM 25*152			152	20.8	632.3	30.4	790.4	38.0	948.5	45.6	57.0

中负荷

MEDIUM LOAD

ISO国际标准

中负荷/Medium Load

蓝色/Blue



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISM 25*178	25.0	12.5	178	17.8	633.7	35.6	792.1	44.5	950.5	53.4	67.0
ISM 25*203			203	15.8	641.5	40.6	801.9	50.8	962.2	60.9	76.0
ISM 25*305			305	10.2	622.2	61.0	777.8	76.3	933.3	91.5	114.0
ISM 32*38	32.0	16.0	38	185.0	1406.0	7.6	1757.5	9.5	2109.0	11.4	14.0
ISM 32*44			44	158.0	1390.4	8.8	1738.0	11.0	2085.6	13.2	16.5
ISM 32*51			51	134.0	1366.8	10.2	1708.5	12.8	2050.2	15.3	19.0
ISM 32*64			64	99.0	1267.2	12.8	1584.0	16.0	1900.8	19.2	24.0
ISM 32*76			76	80.5	1223.6	15.2	1529.5	19.0	1835.4	22.8	28.0
ISM 32*89			89	69.1	1230.0	17.8	1537.5	22.3	1845.0	26.7	33.0
ISM 32*102			102	58.8	1199.5	20.4	1499.4	25.5	1799.3	30.6	38.0
ISM 32*115			115	51.5	1184.5	23.0	1480.6	28.8	1776.8	34.5	43.0
ISM 32*127			127	44.8	1137.9	25.4	1422.4	31.8	1706.9	38.1	48.0
ISM 32*139			139	42.3	1175.9	27.8	1469.9	34.8	1763.9	41.7	52.0
ISM 32*152			152	37.8	1149.1	30.4	1436.4	38.0	1723.7	45.6	57.0
ISM 32*178			178	32.5	1157.0	35.6	1446.3	44.5	1735.5	53.4	67.0
ISM 32*203			203	28.9	1173.3	40.6	1466.7	50.8	1760.0	60.9	76.0
ISM 32*254			254	21.4	1087.1	50.8	1358.9	63.5	1630.7	76.2	95.0
ISM 32*305			305	18.3	1116.3	61.0	1395.4	76.3	1674.5	91.5	114.0
ISM 40*51	40.0	20.0	51	181.6	1852.3	10.2	2315.4	12.8	2778.5	15.3	19.0
ISM 40*64			64	140.0	1792.0	12.8	2240.0	16.0	2688.0	19.2	24.0
ISM 40*76			76	108.0	1641.6	15.2	2052.0	19.0	2462.4	22.8	28.0
ISM 40*89			89	90.7	1614.5	17.8	2018.1	22.3	2421.7	26.7	33.0
ISM 40*102			102	81.0	1652.4	20.4	2065.5	25.5	2478.6	30.6	38.0
ISM 40*115			115	71.8	1651.4	23.0	2064.3	28.8	2477.1	34.5	43.0
ISM 40*127			127	62.7	1592.6	25.4	1990.7	31.8	2388.9	38.1	48.0
ISM 40*139			139	57.5	1598.5	27.8	1998.1	34.8	2397.8	41.7	52.0
ISM 40*152			152	51.6	1598.6	30.4	1960.8	38.0	2353.0	45.6	57.0
ISM 40*178			178	44.1	1570.0	35.6	1962.5	44.5	2354.9	53.4	67.0
ISM 40*203			203	36.7	1490.0	40.6	1862.5	50.8	2235.0	60.9	76.0
ISM 40*254			254	30.1	1529.1	50.8	1911.4	63.5	2293.6	76.2	95.0
ISM 40*305			305	24.6	1500.6	61.0	1875.8	76.3	2250.9	91.5	114.0
ISM 50*64	50.0	25.0	64	209.0	2675.2	12.8	3344.0	16.0	4012.8	19.2	24.0
ISM 50*76			76	168.0	2553.6	15.2	3192.0	19.0	3830.4	22.8	28.0
ISM 50*89			89	140.0	2492.0	17.8	3115.0	22.3	3738.0	26.7	33.0
ISM 50*102			102	119.0	2427.6	20.4	3034.5	25.5	3641.4	30.6	38.0
ISM 50*115			115	106.0	2438.0	23.0	3047.5	28.8	3657.0	34.5	43.0
ISM 50*127			127	97.0	2463.8	25.4	3079.8	31.8	3695.7	38.1	48.0
ISM 50*139			139	87.0	2418.6	27.8	3023.3	34.8	3627.9	41.7	52.0
ISM 50*152			152	80.0	2432.0	30.4	3040.0	38.0	3648.0	45.6	57.0
ISM 50*178			178	69.5	2474.2	35.6	3092.8	44.5	3711.3	53.4	67.0
ISM 50*203			203	59.8	2427.9	40.6	3034.9	50.8	3641.8	60.9	76.0
ISM 50*229			229	50.9	2331.2	45.8	2914.0	57.3	3496.8	68.7	86.0
ISM 50*254			254	43.9	2230.1	50.8	2787.7	63.5	3345.2	76.2	95.0
ISM 50*305			305	38.6	2354.6	61.0	2943.3	76.3	3531.9	91.5	114.0
ISM 63*76	63.0	38.0	76	312.0	4742.4	15.2	5928.0	19.0	7113.6	22.8	28.0
ISM 63*89			89	260.0	4628.0	17.8	5785.0	22.3	6942.0	26.7	33.0
ISM 63*102			102	221.0	4508.4	20.4	5635.5	25.5	6762.6	30.6	38.0
ISM 63*115			115	187.0	4301.0	23.0	5376.3	28.8	6451.5	34.5	43.0
ISM 63*127			127	168.0	4267.2	25.4	5334.0	31.8	6400.8	38.1	48.0
ISM 63*152			152	136.0	4134.4	30.4	5168.0	38.0	6201.6	45.6	57.0
ISM 63*178			178	114.0	4058.4	35.6	5073.0	44.5	6087.6	53.4	67.0
ISM 63*203			203	100.0	4060.0	40.6	5075.0	50.8	6090.0	60.9	76.0
ISM 63*229			229	89.2	4085.4	45.8	5106.0	57.3	6128.0	68.7	86.0
ISM 63*254			254	78.4	3982.7	50.8	4978.4	63.5	5974.1	76.2	95.0
ISM 63*305			305	64.7	3946.7	61.0	4933.4	76.3	5920.1	91.5	114.0

中负荷



MEDIUM LOAD

ISO
国际
标准

ISO国际标准

重负荷/Heavy Load

红色/Red



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISH 10*25	10.0	5.0	25	22.1	82.9	3.8	110.5	5.0	138.1	6.3	7.5
ISH 10*32			32	17.5	84.0	4.8	112.0	6.4	140.0	8.0	9.6
ISH 10*38			38	17.1	97.5	5.7	130.0	7.6	162.5	9.5	11.4
ISH 10*44			44	15.0	99.0	6.6	132.0	8.8	165.0	11.0	13.2
ISH 10*51			51	12.8	97.9	7.7	130.6	10.2	163.2	12.8	15.3
ISH 10*64			64	10.7	102.7	9.6	137.0	12.8	171.2	16.0	19.2
ISH 10*76			76	7.5	85.5	11.4	114.0	15.2	142.5	19.0	22.8
ISH 10*305			305	2.1	96.1	45.8	128.1	61.0	160.1	76.3	91.5
ISH 12.5*25	12.5	6.3	25	42.1	157.9	3.8	210.5	5.0	263.1	6.3	7.5
ISH 12.5*32			32	33.2	159.4	4.8	212.5	6.4	265.6	8.0	9.6
ISH 12.5*38			38	29.3	167.0	5.7	222.7	7.6	278.4	9.5	11.4
ISH 12.5*44			44	24.6	162.4	6.6	216.5	8.8	270.6	11.0	13.2
ISH 12.5*51			51	19.6	149.9	7.7	199.9	10.2	249.9	12.8	15.3
ISH 12.5*64			64	15.0	144.0	9.6	192.0	12.8	240.0	16.0	19.2
ISH 12.5*76			76	13.2	150.5	11.4	200.6	15.2	250.8	19.0	22.8
ISH 12.5*89			89	11.4	152.2	13.4	202.9	17.8	253.7	22.3	26.7
ISH 12.5*305			305	2.8	128.1	45.8	170.8	61.0	213.5	76.3	91.5
ISH 16*25	16.0	8.0	25	75.7	283.9	3.8	378.5	5.0	473.1	6.3	7.5
ISH 16*32			32	52.8	253.4	4.8	337.9	6.4	422.4	8.0	9.6
ISH 16*38			38	48.5	276.5	5.7	368.6	7.6	460.8	9.5	11.4
ISH 16*44			44	42.8	282.5	6.6	376.6	8.8	470.8	11.0	13.2
ISH 16*51			51	37.1	283.8	7.7	378.4	10.2	473.0	12.8	15.3
ISH 16*64			64	30.3	290.9	9.6	387.8	12.8	484.8	16.0	19.2
ISH 16*76			76	25.7	293.0	11.4	390.6	15.2	488.3	19.0	22.8
ISH 16*89			89	21.7	289.7	13.4	386.3	17.8	482.8	22.3	26.7
ISH 16*102	16.0	8.0	102	19.3	295.3	15.3	393.7	20.4	492.2	25.5	30.6
ISH 16*305			305	7.1	324.8	45.8	433.1	61.0	541.4	76.3	91.5
ISH 20*25	20.0	10.0	25	216.0	810.0	3.8	1080.0	5.0	1350.0	6.3	7.5
ISH 20*32			32	168.0	806.4	4.8	1075.2	6.4	1344.0	8.0	9.6
ISH 20*38			38	129.0	735.3	5.7	980.4	7.6	1225.5	9.5	11.0
ISH 20*44			44	112.0	739.2	6.6	985.6	8.8	1232.0	11.0	13.0
ISH 20*51			51	94.0	719.1	7.7	958.8	10.2	1198.0	12.8	15.0
ISH 20*64			64	72.1	692.2	9.6	922.9	12.8	1153.6	16.0	19.0
ISH 20*76			76	59.7	680.6	11.4	907.4	15.2	1134.3	19.0	23.0
ISH 20*89			89	50.5	674.2	13.4	898.9	17.8	1123.6	22.3	27.0
ISH 20*102			102	44.2	676.3	15.3	901.7	20.4	1127.1	25.5	31.0
ISH 20*115			115	38.4	662.4	17.3	883.2	23.0	1104.0	28.8	35.0
ISH 20*127			127	34.1	649.6	19.1	866.1	25.4	1082.7	31.8	38.0
ISH 20*139			139	31.0	646.4	20.9	861.8	27.8	1077.3	34.8	42.0
ISH 20*152			152	28.2	643.0	22.8	857.3	30.4	1071.6	38.0	46.0
ISH 20*305			305	15.0	686.3	45.8	915.0	61.0	1143.8	76.3	91.0
ISH 25*25	25.0	12.5	25	375.0	1406.3	3.8	1875.0	5.0	2343.8	6.3	7.5
ISH 25*32			32	297.0	1425.6	4.8	1900.8	6.4	2376.0	8.0	9.6
ISH 25*38			38	219.0	1248.3	5.7	1664.4	7.6	2080.5	9.5	11.0
ISH 25*44			44	187.0	1234.2	6.6	1645.6	8.8	2057.0	11.0	13.0
ISH 25*51			51	156.0	1193.4	7.7	1591.2	10.2	1989.0	12.8	15.0
ISH 25*64			64	123.0	MS130.8	9.6	1574.4	12.8	1968.0	16.0	19.0
ISH 25*76			76	99.0	1128.6	11.4	1504.8	15.2	1881.0	19.0	23.0
ISH 25*89			89	84.0	1121.4	13.4	1495.2	17.8	1869.0	22.3	27.0

重负荷

HEAVY LOAD

ISO国际标准

重负荷/Heavy Load

红色/Red



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISH 25*102	25.0	12.5	102	73.0	1116.9	15.3	1489.2	20.4	1861.5	25.5	31.0
ISH 25*115			115	65.0	1121.3	17.3	1495.0	23.0	1868.8	28.8	35.0
ISH 25*127			127	57.7	1099.2	19.1	1465.6	25.4	1832.0	31.8	38.0
ISH 25*139			139	52.7	1098.8	20.9	1465.1	27.8	1831.3	34.8	42.0
ISH 25*152			152	47.8	1089.8	22.8	1453.1	30.4	1816.4	38.0	46.0
ISH 25*178			178	41.0	1094.7	26.7	1459.6	35.6	1824.5	44.5	53.0
ISH 25*203			203	35.8	1090.1	30.5	1453.5	40.6	1816.9	50.8	61.0
ISH 25*305			305	22.9	1047.7	45.8	1396.9	61.0	1746.1	76.3	91.0
ISH 32*38	32.0	16.0	38	388.0	2211.6	5.7	2948.8	7.6	3686.0	9.5	11.0
ISH 32*44			44	324.0	2138.4	6.6	2851.2	8.8	3564.0	11.0	13.0
ISH 32*51			51	272.0	2080.8	7.7	2774.4	10.2	3468.0	12.8	15.0
ISH 32*64			64	212.0	2035.2	9.6	2713.6	12.8	3392.0	16.0	19.0
ISH 32*76			76	172.0	1960.8	11.4	2614.4	15.2	3268.0	19.0	23.0
ISH 32*89			89	141.0	1882.4	13.4	2509.8	17.8	3137.3	22.3	27.0
ISH 32*102			102	122.0	1866.6	15.3	2488.8	20.4	3111.0	25.5	31.0
ISH 32*115			115	107.0	1845.8	17.3	2461.0	23.0	3076.3	28.8	35.0
ISH 32*127			127	93.0	1771.7	19.1	2362.2	25.4	2952.8	31.8	38.0
ISH 32*139			139	86.0	1793.1	20.9	2390.8	27.8	2988.5	34.8	42.0
ISH 32*152			152	78.0	1778.4	22.8	2371.2	30.4	2964.0	38.0	46.0
ISH 32*178			178	67.2	1794.2	26.7	2392.3	35.6	2990.4	44.5	53.0
ISH 32*203			203	59.1	1799.6	30.5	2399.5	40.6	2999.3	50.8	61.0
ISH 32*254			254	46.4	1767.8	38.1	2357.1	50.8	2946.4	63.5	76.0
ISH 32*305			305	38.0	1738.5	45.8	2318.0	61.0	2897.5	76.3	91.0
ISH 40*51	40.0	20.0	51	350.0	2677.5	7.7	3570.0	10.2	4462.5	12.8	15.0
ISH 40*64			64	269.0	2582.4	9.6	3443.2	12.8	4304.0	16.0	19.0
ISH 40*76			76	219.0	2496.6	11.4	3328.8	15.2	4161.0	19.0	23.0
ISH 40*89			89	190.0	2536.5	13.4	3382.0	17.8	4227.5	22.3	27.0
ISH 40*102			102	163.0	2493.9	15.3	3325.2	20.4	4156.5	25.5	31.0
ISH 40*115			115	142.0	2449.5	17.3	3266.0	23.0	4082.5	28.8	35.0
ISH 40*127			127	128.0	2438.4	19.1	3251.0	25.4	4064.0	31.8	38.0
ISH 40*139			139	115.0	2397.8	20.9	3197.0	27.8	3996.3	34.8	42.0
ISH 40*152			152	105.0	2394.0	22.8	3192.0	30.4	3990.0	38.0	46.0
ISH 40*178			178	89.0	2376.3	26.7	3168.4	35.6	3960.5	44.5	53.0
ISH 40*203			203	77.0	2344.7	30.5	3126.2	40.6	3907.8	50.8	61.0
ISH 40*254			254	61.0	2324.1	38.1	3098.8	50.8	3873.5	63.5	76.0
ISH 40*305			305	51.0	2333.3	45.8	3111.0	61.0	3888.8	76.3	91.0
ISH 50*64	50.0	25.0	64	413.0	3964.8	9.6	5286.4	12.8	6608.0	16.0	19.0
ISH 50*76			76	339.0	3864.6	11.4	5152.8	15.2	6441.0	19.0	23.0
ISH 50*89			89	288.0	3844.8	13.4	5126.4	17.8	6408.0	22.3	27.0
ISH 50*102			102	245.0	3748.5	15.3	4998.0	20.4	6247.5	25.5	31.0
ISH 50*115			115	215.0	3708.8	17.3	4945.0	23.0	6181.3	28.8	35.0
ISH 50*127			127	192.0	3657.6	19.1	4876.8	25.4	6096.0	31.8	38.0
ISH 50*139			139	168.0	3502.8	20.9	4670.4	27.8	5838.0	34.8	42.0
ISH 50*152			152	154.0	3511.2	22.8	4681.6	30.4	5852.0	38.0	46.0
ISH 50*178			178	134.0	3577.8	26.7	4770.4	35.6	5963.0	44.5	53.0
ISH 50*203			203	117.0	3562.7	30.5	4750.2	40.6	5937.8	50.8	61.0
ISH 50*254			254	89.0	3390.9	38.1	4521.2	50.8	5651.5	63.5	76.0
ISH 50*305			305	73.0	3339.8	45.8	4453.0	61.0	5566.3	76.3	91.0

重负荷



HEAVY LOAD

ISO
国际
标准

ISO国际标准

超重负荷/Extra Heavy Load

黄色/Yellow



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	长度变位值 Deflection (mm)
ISY 10*25	10.0	5.0	25	36.8	138.0	3.8	156.4	4.3	184.0	5.0	6.2
ISY 10*32			32	27.9	133.9	4.8	151.8	5.4	178.6	6.4	8.0
ISY 10*38			38	23.7	135.1	5.7	153.1	6.5	180.1	7.6	9.5
ISY 10*44			44	19.2	126.7	6.6	143.6	7.5	169.0	8.8	11.0
ISY 10*51			51	16.5	126.2	7.7	143.1	8.7	168.3	10.2	13.0
ISY 10*64			64	13.2	126.7	9.6	143.6	10.9	169.0	12.8	16.0
ISY 10*76			76	10.9	124.3	11.4	140.8	12.9	165.7	15.2	19.0
ISY 10*305			305	2.6	MS14.0	45.8	134.8	51.9	158.6	61.0	76.0
ISY 12.5*25	12.5	6.3	25	58.5	219.4	3.8	248.6	4.3	292.5	5.0	6.2
ISY 12.5*32			32	43.9	210.7	4.8	238.8	5.4	281.0	6.4	8.0
ISY 12.5*38			38	36.0	205.2	5.7	232.6	6.5	273.6	7.6	9.5
ISY 12.5*44			44	30.3	200.0	6.6	226.6	7.5	266.6	8.8	11.0
ISY 12.5*51			51	26.2	200.4	7.7	227.2	8.7	267.2	10.2	13.0
ISY 12.5*64			64	21.2	203.5	9.6	230.7	10.9	271.4	12.8	16.0
ISY 12.5*76			76	17.1	194.9	11.4	220.9	12.9	259.9	15.2	19.0
ISY 12.5*89			89	14.5	193.6	13.4	219.4	15.1	258.1	17.8	22.0
ISY 12.5*305			305	4.3	196.7	45.8	223.0	51.9	262.3	61.0	76.0
ISY 16*25	16.0	8.0	25	118.0	442.5	3.8	501.5	4.3	590.0	5.0	6.2
ISY 16*32			32	89.0	427.2	4.8	484.2	5.4	596.6	6.4	8.0
ISY 16*38			38	72.1	411.0	5.7	465.8	6.5	548.0	7.6	9.5
ISY 16*44			44	60.9	401.9	6.6	455.5	7.5	535.9	8.8	11.0
ISY 16*51			51	52.3	400.1	7.7	453.4	8.7	533.5	10.2	13.0
ISY 16*64			64	41.2	395.5	9.6	448.3	10.9	527.4	12.8	16.0
ISY 16*76			76	34.1	388.7	11.4	440.6	12.9	518.3	15.2	19.0
ISY 16*89			89	29.5	393.8	13.4	446.3	15.1	525.1	17.8	22.0
ISY 16*102			102	25.6	391.7	15.3	443.9	17.3	522.2	20.4	26.0
ISY 16*305			305	8.4	384.3	45.8	435.5	51.9	512.4	61.0	76.0
ISY 20*25	20.0	10.0	25	293.0	1098.8	3.8	1245.3	4.3	1465.0	5.0	6.2
ISY 20*32			32	224.0	1075.2	4.8	1218.6	5.4	1433.6	6.4	8.0
ISY 20*38			38	177.0	1008.9	5.7	1143.4	6.5	1345.2	7.6	9.5
ISY 20*44			44	149.0	983.4	6.6	1114.5	7.5	1311.2	8.8	11.0
ISY 20*51			51	128.0	979.2	7.7	1109.8	8.7	1305.6	10.2	13.0
ISY 20*64			64	99.0	950.4	9.6	1077.1	10.9	1267.2	12.8	16.0
ISY 20*76			76	81.7	931.4	11.4	1055.6	12.9	1241.8	15.2	19.0
ISY 20*89			89	69.5	927.8	13.4	1051.5	15.1	1237.1	17.8	22.0
ISY 20*102			102	60.6	927.2	15.3	1050.8	17.3	1236.2	20.4	26.0
ISY 20*115			115	53.0	914.3	17.3	1036.2	19.6	1219.0	23.0	29.0
ISY 20*127			127	47.5	904.9	19.1	1025.5	21.6	1206.5	25.4	32.0
ISY 20*139			139	43.0	896.6	20.9	1016.1	23.6	MS145.4	27.8	35.0
ISY 20*152			152	39.0	889.2	22.8	1007.8	25.8	1185.6	30.4	38.0
ISY 20*305			305	21.2	969.9	45.8	1099.2	51.9	1293.2	61.0	76.0
ISY 25*32	25.0	12.5	32	374.4	1797.1	4.8	2036.7	5.4	2396.2	6.4	8.0
ISY 25*38			38	346.0	1972.2	5.7	2235.2	6.5	2629.6	7.6	9.5
ISY 25*44			44	244.0	1610.4	6.6	1825.1	7.5	2147.2	8.8	11.0
ISY 25*51			51	207.5	1587.4	7.7	1799.0	8.7	2116.5	10.2	13.0

超重负荷



EXTRA HEAVY LOAD

ISO国际标准

超重负荷/Extra Heavy Load

黄色/Yellow



型号 Part Number	外径 Hole Dia (mm)	内径 Rod Dia (mm)	自由长度 Free Length (mm)	1/10长度 变位下的 负荷 Load at 1/10 in. Def (N)	对于最佳使用寿命 (for Optimum service life)						
					自由长L的25% 25% of free length		自由长L的30% 30% of free length		自由长L的35% 35% of free length		最大值
					负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	负荷 Load (N)	长度变位值 Deflection (mm)	
ISY 25*64	20.0	10.0	64	161.0	1545.6	9.6	1751.7	10.9	2060.8	12.8	16.0
ISY 25*76			76	130.8	1491.1	11.4	1689.9	12.9	1988.2	15.2	19.0
ISY 25*89			89	110.5	1475.2	13.4	1671.9	15.1	1966.9	17.8	22.0
ISY 25*102			102	96.3	1473.4	15.3	1669.8	17.3	1964.5	20.4	26.0
ISY 25*115			115	85.7	1478.3	17.3	1675.4	19.6	1971.1	23.0	29.0
ISY 25*127			127	76.3	1453.5	19.1	1647.3	21.6	1938.0	25.4	32.0
ISY 25*152			152	63.5	1447.8	22.8	1640.8	25.8	1930.4	30.4	38.0
ISY 25*178			178	53.9	1439.1	26.7	1631.0	30.3	1918.8	35.6	44.0
ISY 25*203	25.0	12.5	203	47.0	1431.2	30.5	1622.0	34.5	1908.2	40.6	51.0
ISY 25*305			305	30.9	1413.7	45.8	1602.2	51.9	1884.9	61.0	76.0
ISY 32*38			38	528.2	3010.7	5.7	3412.2	6.5	4014.3	7.6	9.5
ISY 32*44			44	424.4	2801.0	6.6	3174.5	7.5	3734.7	8.8	11.0
ISY 32*51			51	353.0	2700.5	7.7	3060.5	8.7	3600.6	10.2	13.0
ISY 32*64			64	269.2	2584.3	9.6	2928.9	10.9	3445.8	12.8	16.0
ISY 32*76			76	218.5	2490.9	11.4	2823.0	12.9	3321.2	15.2	19.0
ISY 32*89			89	180.3	2407.0	13.4	2727.9	15.1	3209.3	17.8	22.0
ISY 32*102	32.0	16.0	102	155.0	2371.5	15.3	2687.7	17.3	3162.0	20.4	26.0
ISY 32*115			115	140.0	2415.0	17.3	2737.0	19.6	3220.0	23.0	29.0
ISY 32*127			127	124.0	2362.2	19.1	2677.2	21.6	3149.6	25.4	32.0
ISY 32*152			152	102.0	2325.6	22.8	2635.7	25.8	3100.8	30.4	38.0
ISY 32*178			178	88.2	2354.9	26.7	2668.9	30.3	3139.9	35.6	44.0
ISY 32*203			203	76.0	2314.2	30.5	2622.8	34.5	3085.6	40.6	51.0
ISY 32*254			254	60.8	2316.5	38.1	2625.3	43.2	3088.6	50.8	64.0
ISY 32*305			305	49.0	2241.8	45.8	2540.7	51.9	2989.0	61.0	76.0
ISY 40*51	40.0	20.0	51	628.0	4804.2	7.7	5444.8	8.7	6405.6	10.2	13.0
ISY 40*64			64	487.0	4675.2	9.6	5298.6	10.9	6233.6	12.8	16.0
ISY 40*76			76	379.0	4320.6	11.4	4896.7	12.9	5760.8	15.2	19.0
ISY 40*89			89	321.0	4285.4	13.4	4856.7	15.1	5713.8	17.8	22.0
ISY 40*102			102	281.0	4299.3	15.3	4872.5	17.3	5732.4	20.4	26.0
ISY 40*115			115	245.0	4226.3	17.3	4789.8	19.6	5635.0	23.0	29.0
ISY 40*127			127	221.0	4210.1	19.1	4771.4	21.6	5613.4	25.4	32.0
ISY 40*152			152	168.0	3830.4	22.8	4341.1	25.8	5107.2	30.4	38.0
ISY 40*203	50.0	25.0	203	132.0	4019.4	30.5	4555.3	34.5	5359.2	40.6	51.0
ISY 40*254			254	107.0	4076.7	38.1	4620.3	43.2	5435.6	50.8	64.0
ISY 40*305			305	87.8	4016.9	45.8	4552.4	51.9	5355.8	61.0	76.0
ISY 50*64			64	709.0	6806.4	9.6	7713.9	10.9	9075.2	12.8	16.0
ISY 50*76			76	572.0	6520.8	11.4	7390.2	12.9	8694.4	15.2	19.0
ISY 50*89			89	475.0	6341.3	13.4	7186.8	15.1	8455.0	17.8	22.0
ISY 50*102			102	405.0	6196.5	15.3	7022.7	17.3	8262.0	20.4	26.0
ISY 50*115			115	352.0	6072.0	17.3	6881.6	19.6	8096.0	23.0	29.0
ISY 50*127	50.0	25.0	127	316.0	6019.8	19.1	6822.4	21.6	8026.4	25.4	32.0
ISY 50*152			152	239.0	5449.2	22.8	6175.8	25.8	7265.6	30.4	38.0
ISY 50*203			203	187.0	5694.2	30.5	6453.4	34.5	7592.2	40.6	51.0
ISY 50*254			254	153.0	5829.3	38.1	6606.5	43.2	7772.4	50.8	64.0
ISY 50*305			305	127.0	5810.3	45.8	6585.0	51.9	7747.0	61.0	76.0

超重负荷



EXTRA HEAVY LOAD

ISO
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波形弹簧的种类：单层波形弹簧和多层波形弹簧

单层波形弹簧分为单层圆环型波形弹簧; 单层开口型波形弹簧; 单层搭口型波形弹簧; 单层圆线波形弹簧。

多层波形弹簧分为多层串联式波形弹簧（又分成平端面型和波端面型）; 多层叠峰式波形弹簧。

Types of wave springs: single wave spring and multi-layer wave spring

The single wave spring is divided into single layer ring type wave spring; Single layer open wave spring; Single layer joint type wave spring; Single layer circular wire wave spring. The multi-layer wave spring is divided into multi-layer series wave spring (also divided into flat end type and wave end type); Multi layer stacked wave spring.

绕制型挡圈

是用扁丝通过卷绕而加工的挡圈，没有突耳影响装配，易于安装与拆卸。分为定位卡圈和波圈。

retaining ring

It is a retaining ring made of flat wire by winding. It has no lug to affect the assembly and is easy to install and disassemble. It is divided into positioning ring and wave ring.

常用材料 碳钢: 65Mn: ASTM (1074, 1095)-A684; AISI 1070 Carbon Steel; 不锈钢: SUS 304; 17-7-PH/C, SUS631; SUS 302; 高温合金钢: Inconel X-750; GH145; Inconel X-718

加工范围 丝宽0.1mm~20mm, 丝厚0.1~6mm, 外径1mm~500mm, 力值根据客户要求

表面处理 发蓝、发黑、磷化、电镀、电泳和喷塑、达克罗、焦美特等...

应用温度范围 根据材料的不同, 可在常温-800°C之间使用。

应用行业 电机、轴承、球阀、泄压阀、安全阀、离合器、旋转接头、汽车离合器用分离轴承、齿轮传动和机械密封; 重型机械、压缩机、机床和石油机械; 液压传动、轴承预压预紧装置、园林工具等场合。

Common materials: carbon steel: 65Mn: ASTM (1074, 1095) - a684; AISI 1070 Carbon Steel; Stainless steel: SUS 304; 17-7-PH/C, SUS631; SUS 302; High temperature alloy steel: Inconel X-750; GH145; Inconel X-718

Processing range: wire width 0.1 mm ~ 20 mm, wire thickness 0.1 ~ 6 mm, outer diameter 1 mm ~ 500 mm, force value according to customer requirements

Surface treatment methods: bluing, blackening, phosphating, electroplating, electrophoresis and spray, Dacromet, jiaomeite, etc

The application temperature range is - 800 °C according to different materials ° C.

Applications: motor, bearing, ball valve, pressure relief valve, safety valve, clutch, rotary joint, release bearing for automobile clutch, gear transmission and mechanical seal; Heavy machinery, compressors, machine tools and petroleum machinery; Hydraulic transmission, bearing preloading device, garden tools and other occasions.



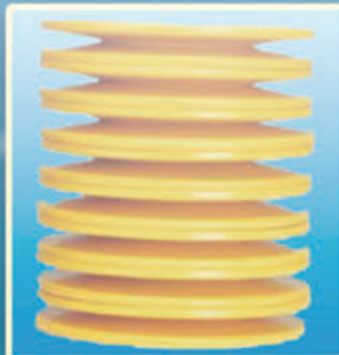
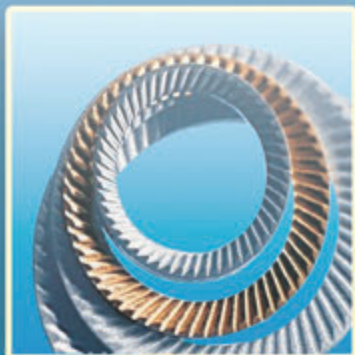
发条弹簧的种类：恒力弹簧、涡卷弹簧、碳刷弹簧、塔形弹簧

用 SUS301 不锈钢和 62Si2MnA、SK4、SK5 碳钢等原材料，厚度 0.10mm-10.0mm，层数为 1-3 层的各种收线类发条、恒力发条、游丝发条，恒力弹簧、涡卷弹簧，发条、定时器发条、升降发条、回卷发条、油锯发条、伸宿发条、玩具发条 卷尺发条、平衡器（机）发条、健身器发条、不锈钢发条、统机走闹条、机械发条、电风扇升降发条、玩具发条、汽车安全带发条、发动机启动发条、电线拉线发条、耳机收线发条、电刷发条、自动售货机发条音乐发条、电话线发条、电熨斗发条、电饭煲发条、吸尘器发条等。

主要应用于各种汽车、电子电器，马达、玩具、仪表仪器、电力机械、环保除尘设备、启动机械设备、压缩机等工业领域。

Types of spring: constant force spring, scroll spring, carbon brush spring, tower spring

Common materials: SUS301 stainless steel, 62Si2MnA, SK4, SK5 carbon steel and other raw materials, thickness 0.10mm-10.0mm, with layers of 1-3 layers, various types of winding, constant force and wandering wire, Constant force spring, scroll spring, hairpin, timer hair strip, lifting strip, rewind strip, oil saw hair strip, extended hair strip, toy hair tape, balancer (machine) hair strip, fitness machine hair strip, noRusty steel hair strip, unified machine running noise strip, mechanical hair strip, electric fan lifting hair strip, toy hair strip, automobile Belt hair, engine start, wire and cable, headset, brush Note, music, telephone line, iron, rice cooker, etc Dust cleaner hair, etc. It is mainly used in various automobiles, electronic appliances, motors, toys, instruments, electric machinery, etc Environmental protection dust removal equipment, starting machinery equipment, compressors and other industrial fields.



敏硕采用欧美的钢材生产各类标准和非标的减震碟形弹簧、防松碟形弹簧垫圈、盘簧、碟形垫圈、碟形弹簧、膜片弹簧、开槽型碟形弹簧、V型碟形弹簧、弹簧垫圈、贝勒维尔弹簧垫圈 (Belleville washer)。从原材料源头上已经保证了产品的优质性，再加上我们独特的热处理工艺，使我们生产的各类减震弹簧都能达到200万次以上的疲劳寿命。

按用途分类：高温碟簧（最高耐 1000 摄氏度）、低温碟簧（最低抗零下 200 摄氏度）、常温碟簧、法兰预警碟簧、阀门预警碟簧、无磁预紧碟簧、缓冲拉伸碟簧、震动防松碟簧、液压用碟簧、风力发电碟簧、特种设备碟簧等。）

按标准分类：DIN2093 碟形弹簧、DIN9250 防松垫圈、DIN6796 碟形垫圈、美标 20813 高扭矩碟形垫圈、美标 693F 碟形垫圈碟簧。

常用材料有：SAE6150、SAE9254、50CrV4、60Si2CrA、CK55、CK67、CK70、CK75、17/7Ph、SUS301、SUS304、INCONEL718、INCONEL750 和各种防腐、耐高（低）温不锈钢材料。

表面处理：发蓝、发黑、磷化、电镀、电泳和喷塑、达克罗、焦美特。

外径范围：3mm-900mm

厚度范围：0.08mm-60mm

MASCOT use European and American steel to produce all kinds of standard and non-standard damping disc springs, locking disc spring-washer, disc spring, disc washer, disc spring, diaphragm spring, slotted disc spring, V disc spring, spring washer and Belleville washer. The high quality of the products has been guaranteed from the source of raw materials. With our unique heat treatment process, the fatigue life of all kinds of shock absorption springs can reach more than 2 million times.

Classification by purpose: high temperature disc spring (maximum resistance to 1000 °C), low temperature disc spring (200 °C below minimum resistance), normal temperature disc spring; flange warning disc spring, valve warning disc spring, magnetic free pre tightening disc spring, buffer tensile disc spring, vibration and anti loose disc spring, hydraulic disc spring, wind power dish spring, special equipment disc spring, etc.)

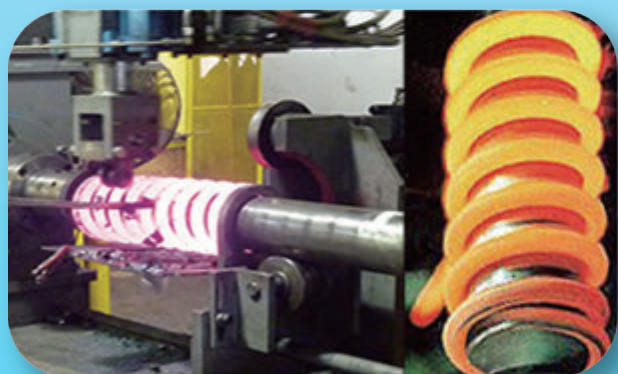
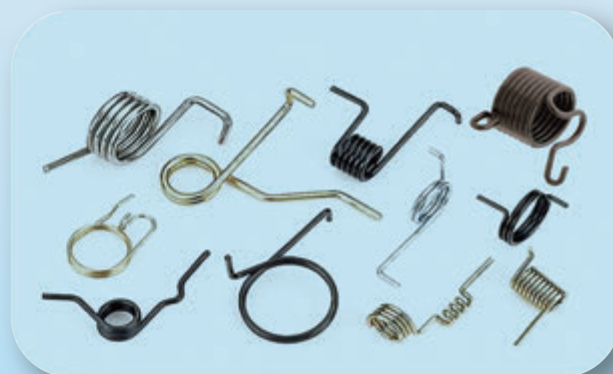
According to the standard classification: din2093 disc spring, din9250 lock washer, din6796 disc washer, American Standard 20813 high torque disc washer, American Standard 693f disc washer disc spring.

Commonly used materials are: sae6150, sae9254, 50CrV4, 60si2cra, ck55, ck67, ck70, ck75, 17 / 7PH, SUS301, SUS304, Inconel718, inconel750 and various anti-corrosion and high (low) temperature resistant stainless steel materials.

Surface treatment: bluing, blackening, phosphating, electroplating, electrophoresis and plastic spraying, Dacromet, jiaomeite.

Outer diameter range: 3mm-900mm

Thickness range: 0.08mm-60mm



各类精密弹簧
ALL KINDS OF PRECISION SPRING

冷卷弹簧线径范围：0.1mm-20mm
Cold coil spring wire diameter range: 0.1mm-20mm

热卷弹簧线径范围：16mm-100mm
Hot coil spring wire diameter range: 16mm-100mm



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